**List of Publications – Halim Yanikomeroglu** (updated on 02 May 2024)

 (Please report incorrect or incomplete information to halim@sce.carleton.ca)

[DBLP](https://dblp.uni-trier.de/search?q=yanikomeroglu)
[Google Scholar](https://scholar.google.ca/citations?user=C2iee4YAAAAJ&hl=en&oi=ao)

**Breakdown of 313 Published Journal Papers (305 IEEE + 8 others)**

|  |  |  |
| --- | --- | --- |
| **No of papers** | **Journal** | **Impact Factor** |
| 43 | IEEE Transactions on Wireless Communications | 10.4 |
| 37 | IEEE Access | 3.9 |
| 31 | IEEE Transactions on Vehicular Technology  | 6.8 |
| 28 | IEEE Wireless Communications Letters  | 6.3 |
| 27 | IEEE Communications Letters | 4.1 |
| 20 | IEEE Communications Magazine | 11.2 |
| 20 | IEEE Transactions on Communications | 8.3 |
| 18 | IEEE Open Journal of the Communications Society | 7.9 |
| 11 | IEEE Internet of Things Journal | 10.6 |
| 8 | IEEE Transactions on Mobile Computing  | 7.9 |
| 8 | IEEE Open Journal of Vehicular Technology | 6.4 |
| 7 | IEEE Wireless Communications Magazine | 12.9 |
| 6 | IEEE Vehicular Technology Magazine  | 8.1 |
| 5 | IEEE Journal on Selected Areas in Communications | 16.4 |
| 4 | IEEE Communications Surveys & Tutorials  | 35.6 |
| 4 | IEEE Journal of Radio Frequency Identification  | 3.1 |
| 4 | IEEE Transactions on Information Theory | 2.5 |
| 3 | IEEE Transactions on Green Communications and Networking | 4.8 |
| 3 | IEEE Consumer Electronics Magazine | 4.5 |
| 2 | IEEE Network Magazine | 9.3 |
| 2 | IEEE Transactions on Cognitive Communications and Networking | 8.6 |
| 2 | IEEE Sensors Journal  | 4.3 |
| 2 | IEEE Transactions on Aerospace and Electronic Systems  | 4.4 |
| 2 | IEEE Photonics Journal | 2.4 |
| 2 | IEEE Networking Letters | N/A |
| 1 | IEEE, Proceedings of the | 20.6 |
| 1 | IEEE Transactions on Signal Processing | 5.4 |
| 1 | IEEE Transactions on Network and Service Managament | 5.3 |
| 1 | IEEE Transaction on Broadcasting | 4.5 |
| 1 | IEEE Antennas and Wireless Propagation Letters | 4.2 |
| 1 | IEEE Aerospace and Electronic Systems Magazine | 3.6 |
| Earlier publications (non-IEEE) |
| 3 | Eurasip Journal on Wireless Communications Networking (Springer) | 2.6 |
| 2 | IET Communications | 1.3 |
| 1 | Pervasive and Mobile Computing Journal (Elsevier) | 3.8 |
| 1 | Transactions on Emerging Telecommunications Technologies (Wiley) | 3.3 |
| 1 | Wireless Communications and Mobile Computing (Hindawi) | 2.1 |

**Submissions under Review** (18 IEEE journal papers + 6 conference paper)

**[JS18]** Reza Ghasemi Alavicheh, S. Mohammad Razavizadeh, and Halim Yanikomeroglu, “Integrated access and backhaul on low altitude platforms”, under review in *IEEE Open Journal of the Communications Society* (submission: 19 Apr 2024).

**[JS17]** Rahman Saadat Yeganeh, Mohammad Javad Omidi, Farshad Zeinali, Mohammad Robat Mili, Mohammad Ghavami, and Halim Yanikomeroglu, “Sum throughput maximization in symbiotic radio NOMA network assisted by active-STAR-RIS”, under review in *IEEE Transactions on Vehicular Technology* (submission: 11 Apr 2024, unsubmission: 18 Apr 2024, submission: 20 Apr 2024).

**[JS16]** Hui Xu, Benjamin K. Ng, Chan-Tong Lam, and Halim Yanikomeroglu, “The ergodic capacity of the SWIPT-cooperative NOMA-FTN system”, under reiew in *IEEE Open Journal of the Communications Society* (submission: 09 Apr 2024).

**[JS15]** Eylem Erdogan, Mohammed Elamassie, Ibrahim Altunbas, Gunes Karabulut Kurt, Murat Uysal, and Halim Yanikomeroglu, “A novel piecewise atmospheric attenuation model for free space optical links in vertical heterogeneous networks”, under review in *IEEE Communications Magazine* (submission: 22 Mar 2024).

**[JS14]** Zahra Khodadadi, Foroogh S. Tabataba, Mohammad Sadegh Fazel, Mehdi Naderi Soorki, and Halim Yanikomeroglu, “Improving IoRT networks: Cross-tier resource allocation for multi-antenna UAV relays in SAGIN”, under review in *IEEE Transactions on Communications* (submission: 11 Mar 2024).

**[JS13]** Yekaterina Sadovaya, Olga Vikhrova, Sergey Andreev, and Halim Yanikomeroglu, “NTN-assisted multi-connectivity offloading for improved service continuity”, under review *IEEE Communications Letters* (submission: 07 Mar 2024, unsubmission: 08 Mar 2024, submission: 18 Mar 2024, 1st results: 19 Apr 2024).

**[JS12]** Yujie Liu, Yong Liang Guan, David Gonzalez G., and Halim Yanikomeroglu, “DFT-Chirp-s-OFDM: A promising single-carrier chirping waveform for 6G”, under review in *IEEE Wireless Communications Magazine* (submission: 15 Feb 2024).

**[JS11]** Rozita Shafie, Mohammad Javad Omidi, Omid Abbasi, and Halim Yanikomeroglu, “MIMO-NOMA enabled sectorized cylindrical massive antenna array for HAPS with spatially correlated channels”, under review in *IEEE Transactions on Wireless Communications* (submission: 23 Jan 2024, unsubmitted: 24 Jan 2024, submitted: 25 Jan 2024, 1st results: 16 Mar 2024 [due: 15 May 2024]).

**[JS10]** Mohammad Reza Abedi, Nader Mokari, Mohammad Reza Javan, Hamid Saeedi, Eduard A. Jorswieck, and H. Yanikomeroglu, “Safety-aware value of information (S-VoI) for collision risk minimization in vehicular networks”, under review in *IEEE Transactions on Wireless Communications* (submission: 15 Jan 2024, 1st results: 26 Mar 2024 [due: 21 May 2024]).

**[JS09]** Elham Younesian, Ethan Fettes, Pablo G. Madoery, Jiri Hosek, and Halim Yanikomeroglu, “Guardians of connectivity: Navigating and mitigating non-malicious disruptions in satellite networks”, under review in *IEEE Aerospace and Electronic Systems Magazine* (submission: 10 Jan 2024, 1st results: 24 Apr 2024 [due: 08 Jun 2024).

**[JS08]** Animesh Yadav and Halim Yanikomeroglu, “Cell-edge capacity improvement via FD-HAPS”, under review in *IEEE Transactions on Communications* (submission: 31 Dec 2023, 1st results: 03 Mar 2024 [due: 01 May 2024]).

**[JS07]** G. Bagherian, N. Mokari, B. Abbasi Arand, K. C. Ho, and Halim Yanikomeroglu, “A low-sensitivity closed-form method for moving source location with known altitude in high and moderate noise levels”, under review in *IEEE Transactions on on Aerospace and Electronic Systems* (submission: 18 Dec 2023, unsubmission: 22 Dec 2023, submission: 24 Dec 2023, 1st results: 24 Mar 2024 [due: 08 May 2024]).

**[JS06]** Berk Ciloglu, Gorkem Berkay Koc, Metin Ozturk, and Halim Yanikomeroglu, “Cell switching in HAPS-aided networking: How the obscurity of traffic loads affects the decision”, under review in *IEEE Transactions on Vehicular Technology* (submission: 15 Dec 2023, 1st results: 28 Feb 2024, 1st revision: 29 Apr 2024).

**[JS05]** Omid Abbasi, Halim Yanikomeroglu, and Georges Kaddoum, “Hemispherical antenna array architecture for high-altitude platform stations (HAPS) for uniform capacity provision”, under review in *IEEE Transactions on Wireless Communications* (submission: 15 Nov 2023, unsubmission: 16 Nov 2023, submission: 17 Nov 2023, 1st results: 25 Mar 2024 [due: 20 May 2024]).

**[JS04]** Hongzhao Zheng, Mohamed Atia, and Halim Yanikomeroglu, “Realistic channel and delay coefficient generation for dual mobile space-ground links – A tutorial”, under review in *IEEE Open Journal of Vehicular Technology* (submission: 10 Oct 2023, 1st results: 18 Feb 2024, 1st revision: 27 April 2024).

**[JS03]** Dhiraj Bhattacharjee, Pablo G. Madoery, Aizaz U. Chaudhry, Halim Yanikomeroglu, Gunes Karabulut Kurt, Peng Hu, Khaled Ahmed, and Stephane Martel, “On-demand routing in LEO mega-constellations with dynamic laser inter-satellite links”, under review in *IEEE Transactions on Aerospace and Electronic Systems* (submission: 29 Sep 2023, 1st results: 09 Dec 2023, 1st revision: 23 Jan 2024, 2nd results: 18 Mar 2024 [due: 02 May 2024]).

**[JS02]** Esraa M. Ghourab, Wael Jaafar, Lina Bariah, Shimaa Naser, Sami Muhaidat, and Halim Yanikomeroglu, “Interplay between physical layer security and blockchain technology for 5G and beyond: A comprehensive survey”, under review in *Proceedings of the IEEE* (submission: 24 Mar 2023). [[TechRxiv](https://www.techrxiv.org/articles/preprint/Interplay_between_Physical_Layer_Security_and_Blockchain_Technology_for_5G_and_Beyond_A_Comprehensive_Survey/21601848)]

**[JS01]** Elham Kalantari, Sergey Loyka, and Halim Yanikomeroglu, “Optimal location of cellular base stations via convex optimization: An analytical framework and numerical algorithms”, under review in *IEEE Access* (submission: 26 Nov 2022, 1st results: 08 Dec 2022, 1st revision: 30 Dec 2023, unsubmission: 10 Jan 2024, submission: 13 Jan 2024, 2nd results: 23 Feb 2024, 2nd revision: 19 Apr 2024).

**[CS07]** Rozita Shafie, Omid Abbasi, Halim Yanikomeroglu, and Mohammad Javad Omidi, “Spatial resource allocation for massive MIMO-enabled hexagonal antenna array for HAPS with spatially correlated channels”, *IEEE Globecom 2024*, 8–12 December 2024, Cape Town, South Africa.

**[CS06]** Mojtaba Amiri, Elaheh Vaezpour, Sepideh Javadi, Mohammad Robat Mili, Halim Yanikomeroglu, and Mehdi Bennis, “Resource allocation in STAR-RIS-aided SWIPT with RSMA via meta-learning”, *IEEE Globecom 2024*, 8–12 December 2024, Cape Town, South Africa.

**[CS05]** Wen Shang, Yuan Liao, Vasilis Friderikos, Halim Yanikomeroglu, “Joint robotic aerial base station deployment and wireless backhauling in 6G multi-hop networks”, *IEEE Globecom 2024*, 8–12 December 2024, Cape Town, South Africa.

**[CS04]** Zichao Zhang, Melda Yuksel, Halim Yanikomeroglu, Benjamin Ng, and Chan-Tong Lam, “Maximum channel coding rate of finite block length MIMO faster-than-Nyquist signaling”, *IEEE Globecom 2024*, 8–12 December 2024, Cape Town, South Africa.

**[CS03]** Faical Khennoufa, Abdellatif Khelil, Halim Yanikomeroglu, Metin Ozurk, Taissir Y. Elganimi, and Ferdi Kara, “Multi-layer network formation through HAPS base station and transmissive RIS-equipped UAV”, *IEEE Globecom 2024*, 8–12 December 2024, Cape Town, South Africa.

**[CS02]** Maryam Salamatmoghadasi, Metin Ozturk, and Halim Yanikomeroglu, “Addressing the load estimation problem: Cell switching in HAPS-assisted sustainable 6G networks”, *IEEE Globecom 2024*, 8–12 December 2024, Cape Town, South Africa.

**[CS01]** Mohanad Obeed, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Decentralized federated learning over satellite networks (Dec-FLSat): A LEO-structure based learning scheme”, *IEEE Globecom 2024*, 8–12 December 2024, Cape Town, South Africa.

**Refereed Publications**

**2024** (19 IEEE journal papers + 11 conference paper)

**[J313]** Ahmadreza Salehi, Maryam Imani, Amir Zaimbashi, and Halim Yanikomeroglu, “Learning and model-based approaches for radar target detection”, *IEEE Transactions on Cognitive Communications and Networking* (acceptance: 07 April 2024),

DOI: 10.1109/TCCN.2024.3391327. [[Xplore](https://ieeexplore.ieee.org/document/10505931)]

**[J312]** Mohammad Reza Abedi, Nader Mokari, Mohammad Reza Javan, Hamid Saeedi, Eduard A. Jorswieck, and H. Yanikomeroglu, “Safety-aware age-of-information (S-AoI) for collision risk minimization in cell-free mMIMO platooning networks”, *IEEE Transactions on Network and Service Management* (acceptance: 21 Mar 2024),

DOI: 10.1109/TNSM.2024.3382301. [[Xplore](https://ieeexplore.ieee.org/document/10480716)]

**[J311]** Afsoon Alidadi Shamsabadi, Animesh Yadav, and Halim Yanikomeroglu, “Enhancing next-generation urban connectivity: Is integrated HAPS-terrestrial network a solution?”, *IEEE Communications Letters* (acceptance: 24 Feb 2024),

DOI: 10.1109/LCOMM.2024.3370698. [[arXiv](http://arxiv.org/abs/2307.08202)] [[ResearchGate](https://www.researchgate.net/publication/372410576_Enhancing_Next-Generation_Urban_Connectivity_Is_the_Integrated_HAPS-Terrestrial_Network_a_Solution)] [[Xplore](https://ieeexplore.ieee.org/document/10445467)]

**[J310]** Amir Mehrabian, Maryam Sabbaghian, and Halim Yanikomeroglu, “RL-based hyperparameter selection for spectrum sensing with CNNs”, *IEEE Transactions on Communications* (acceptance: 06 Jan 2024),

DOI: 10.1109/TCOMM.2024.3354204. [[arXiv](https://arxiv.org/abs/2401.16530)] [[ResearchGate](https://www.researchgate.net/publication/377431007_RL-Based_Hyperparameter_Selection_for_Spectrum_Sensing_With_CNNs)] [[Xplore](https://ieeexplore.ieee.org/document/10399938)]

**[J309]** Weili Wang, Omid Abbasi, Halim Yanikomeroglu, Chengchao Liang, Lun Tang, and Qianbin Chen, “VHetNets for AI and AI for VHetNets: An anomaly detection case study for ubiquitous IoT”, *IEEE Network Magazine* (acceptance: 27 Dec 2023),

DOI: 10.1109/MNET.2023.3349309. [[arXiv](https://arxiv.org/abs/2210.08132)] [[ResearchGate](https://www.researchgate.net/publication/377103963_VHetNets_for_AI_and_AI_for_VHetNets_An_Anomaly_Detection_Case_Study_for_Ubiquitous_IoT)] [[Xplore](https://ieeexplore.ieee.org/document/10379614)]

**[J308]** Omid Abbasi and Halim Yanikomeroglu, “UxNB-enabled cell-free massive MIMO with HAPS-assisted sub-THz backhauling”, *IEEE Transactions on Vehicular Technology* (acceptance: 05 Dec 2023),

DOI: 10.1109/TVT.2023.3347140. [[arXiv](https://arxiv.org/abs/2201.07379)] [[ResearchGate](https://www.researchgate.net/publication/357952943)] [[Xplore](https://ieeexplore.ieee.org/document/10387578)]

**[J307]** Nesrine Cherif, Wael Jaafar, Halim Yanikomeroglu, and Abbas Yongacoglu, “RL-based cargo-UAV trajectory planning and cell association for minimum handoffs, disconnectivity, and energy consumption”, *IEEE Transactions on Vehicular Technology* (acceptance: 28 Nov 2023),

DOI: 10.1109/TVT.2023.3340177. [[arXiv](https://arxiv.org/abs/2312.02478)] [[ResearchGate](https://www.researchgate.net/publication/376348105_RL-Based_Cargo-UAV_Trajectory_Planning_and_Cell_Association_for_Minimum_Handoffs_Disconnectivity_and_Energy_Consumption)] [[Xplore](https://ieeexplore.ieee.org/document/10347516)].

**[J306]** Omid Abbasi, Animesh Yadav, Halim Yanikomeroglu, Ngoc-Dung Dao, Gamini Senarath, and Peiying Zhu, “HAPS for 6G networks: Potential use cases, open challenges, and possible solutions”, *IEEE Wireless Communications Magazine* (acceptance: 10 May 2023),

DOI: 10.1109/MWC.012.2200365. [[arXiv](https://arxiv.org/abs/2301.08863)] [[ResearchGate](https://www.researchgate.net/publication/367359782_HAPS_for_6G_Networks_Potential_Use_Cases_Open_Challenges_and_Possible_Solutions)] [[Xplore](https://ieeexplore.ieee.org/document/10417095)]

**[J305]** Maede Hojjati, Arian Arabnouri, Alireza Shafieinejad, and Halim Yanikomeroglu, “A blockchain-based approach for USIM management in mobile networks”, *IEEE Open Journal of the Communications Society*, vol. 5, pp. 2401–2417, 2024,

DOI: 10.1109/OJCOMS.2024.3381546. [[Xplore](https://ieeexplore.ieee.org/document/10478737)]

**[J304]** Faical Khennoufa, Khelil Abdellatif, Ferdi Kara, Halim Yanikomeroglu, Khaled Rabie, Taissir Y. Elganimi, and Safia Beddiaf, “Error performance analysis of UAV-mounted RIS for NOMA systems with practical constraints”, *IEEE Communications Letters*, vol. 28, no. 4, pp. 887–891, April 2024,

DOI: 10.1109/LCOMM.2024.3361378. [[ResearchGate](https://www.researchgate.net/publication/377915034_Error_Performance_Analysis_of_UAV-Mounted_RIS_for_NOMA_Systems_with_Practical_Constraints)] [[Xplore](https://ieeexplore.ieee.org/document/10418219)]

**[J303]** Yuan Liao, Vasilis Friderikos, and Halim Yanikomeroglu, “Swarm of robotic aerial base stations for mmWave multi-hop backhauling”, *IEEE Wireless Communications Letters*, vol. 13, no. 3, pp. 666–670, March 2024,

DOI: 10.1109/LWC.2023.3338865. [[arXiv](https://arxiv.org/abs/2312.10373)] [[ResearchGate](https://www.researchgate.net/publication/376218741_Swarm_of_Robotic_Aerial_Base_Stations_for_mmWave_Multi-Hop_Backhauling)] [[Xplore](https://ieeexplore.ieee.org/document/10339395)]

**[J302]** Maryam Salamatmoghadasi, Amir Mehrabian, and Halim Yanikomeroglu, “Energy sustainability in dense radio access networks via high altitude platform stations”, *IEEE Networking Letters*, vol. 6, no. 1, pp. 21–25, March 2024,

DOI: 10.1109/LNET.2023.3328918. [[arXiv](https://arxiv.org/abs/2312.10027)] [[ResearchGate](https://www.researchgate.net/publication/375226207_Energy_Sustainability_in_Dense_Radio_Access_Networks_via_High_Altitude_Platform_Stations)] [[Xplore](https://ieeexplore.ieee.org/document/10304250)]

**[J301]** Jintao Liang, Aizaz U. Chaudhry, Eylem Erdogan, Halim Yanikomeroglu, Gunes Karabulut Kurt, Peng Hu, Khaled Ahmed, and Stephane Martel, “Free-space optical (FSO) satellite networks performance analysis: Transmission power, latency, and outage probability”, *IEEE Open Journal of the Vehicular Technology*, vol. 5, 244–261, 2024,

DOI: 10.1109/OJVT.2023.3341409. [[arXiv](https://arxiv.org/abs/2312.04788)] [[ResearchGate](https://www.researchgate.net/publication/376309540_Free-Space_Optical_FSO_Satellite_Networks_Performance_Analysis_Transmission_Power_Latency_and_Outage_Probability)] [[Xplore](https://ieeexplore.ieee.org/document/10354376)]

**[J300]** Mohsen Tajallifar, Ahmad R. Sharafat, and Halim Yanikomeroglu, “Robust and feasible QoS-aware mmWave massive MIMO hybrid beamforming”, *IEEE Transactions on Wireless Communications*, vol. 23, no. 2, pp. 1520–1534, February 2024,

DOI: 10.1109/TWC.2023.3290141. [[ResearchGate](https://www.researchgate.net/publication/372149969_Robust_and_Feasible_QoS-Aware_mmWave_Massive_MIMO_Hybrid_Beamforming)] [[Xplore](https://ieeexplore.ieee.org/document/10173757)]

**[J299]** Amin Farajzadeh, Animesh Yadav, Omid Abbasi, Wael Jaafar, and Halim Yanikomeroglu, “FLSTRA: Federated learning in stratosphere”, *IEEE Transactions on Wireless Communications*, vol. 23, no. 2, pp. 1052–1067, February 2024,

DOI: 10.1109/TWC.2023.3285435. [[arXiv](https://arxiv.org/abs/2302.00163)] [[ResearchGate](https://www.researchgate.net/publication/367645941_FLSTRA_Federated_Learning_in_Stratosphere?channel=doi&linkId=63d9b919c465a873a2723e88&showFulltext=true)] [[Xplore](https://ieeexplore.ieee.org/document/10155658)]

**[J298]** Ziad Elkhatib, Firuz Kamalov, Sherif Moussa, Adel Ben Mnaouer, Mustapha C.E. Yagoub, and Halim Yanikomeroglu, “Radio modulation classification optimization using combinatorial deep learning technique”, *IEEE Access*, vol. 12, pp. 17552–17570, 2024,

DOI: 10.1109/ACCESS.2024.3357628. [[ResearchGate](https://www.researchgate.net/publication/377653823_Radio_Modulation_Classification_Optimization_Using_Combinatorial_Deep_Learning_Technique)] [[Xplore](https://ieeexplore.ieee.org/document/10412062)]

**[J297]** Weihao Wang, Zesong Fei, Jing Guo, Salman Durrani, and Halim Yanikomeroglu, “Outage performance of multi-tier UAV communication with random beam misalignment”, *IEEE Internet of Things Journal*, vol. 11, no. 3, pp. 4163–4178, 01 February 2024,

DOI: 10.1109/JIOT.2023.3299279. [[arXiv](https://arxiv.org/abs/2307.12799)] [[ResearchGate](https://www.researchgate.net/publication/372584051_Outage_Performance_of_Multi-tier_UAV_Communication_with_Random_Beam_Misalignment)] [[Xplore](https://ieeexplore.ieee.org/document/10195979)]

**[J296]** Weili Wang, Omid Abbasi, Halim Yanikomeroglu, Chengchao Liang, Lun Tang, and Qianbin Chen, “A vertical heterogeneous network (VHetNet)–enabled asynchronous federated learning-based anomaly detection framework for ubiquitous IoT”, *IEEE Open Journal of the Communications Society*, vol. 5, pp. 332–348, 2024,

DOI: https://ieeexplore.ieee.org/document/10354443. [[arXiv](https://arxiv.org/abs/2303.02948)] [[ResearchGate](https://www.researchgate.net/publication/376462745_A_Vertical_Heterogeneous_Network_VHetNet-Enabled_Asynchronous_Federated_Learning-Based_Anomaly_Detection_Framework_for_Ubiquitous_IoT)] [[Xplore](https://ieeexplore.ieee.org/document/10354443)]

**[J295]** Youssra Cheriguene, Wael Jaafar, Halim Yanikomeroglu, and Chaker Abdelaziz Kerrache, “Towards reliable participation in UAV-enabled federated edge learning on non-IID data”, *IEEE Open Journal of Vehicular Technology*, vol. 5, pp. 125–141, 2024,

DOI: 10.1109/OJVT.2023.3341304. [[arXiv](https://arxiv.org/abs/2312.10411)] [[ResearchGate](https://www.researchgate.net/publication/376516951_Towards_Reliable_Participation_in_UAV-Enabled_Federated_Edge_Learning_on_Non-IID_Data)] [[Xplore](https://ieeexplore.ieee.org/document/10360280)]

**[C325]** Ethan A Fettes, Pablo Madoery, Halim Yanikomeroglu, Gunes Karabulut Kurt, Colin Bellinger, Stéphane Martel, Khaled Ahmed, and Sameera Siddiqui, “Next-generation satellite IoT networks: A HAPS-enabled solution to enhance optical data transfer”, *IEEE 35th Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, 2–5 September 2024, Valencia, Spain.

**[C324]** Khaled Humadi, Gunes Karabulut Kurt, and Halim Yanikomeroglu, and “Distributed massive MIMO system with dynamic clustering in LEO satellite networks”, *The 6th International Conference on Communications, Signal Processing, and their Applications (ICCSPA)*, 08–11 July 2024, Istanbul, Türkiye. [[arXiv](https://arxiv.org/abs/2404.06024)]

**[C323]** Ahmet Melih Ince, Elif Ayse Canbilen, and Halim Yanikomeroglu, “HAPS-enabled V2X architecture for hyper reliable and low-latency communication (HRLLC) in 6G networks”, *The 6th International Conference on Communications, Signal Processing, and their Applications (ICCSPA)*, 08–11 July 2024, Istanbul, Türkiye.

**[C322]** Gorkem Berkay Koc, Berk Ciloglu, Metin Ozturk, and Halim Yanikomeroglu, “A lightweight machine learning approach for delay-aware cell-switching in 6G HAPS networks”, *IEEE International Conference in Communications (ICC) 2024 6th Workshop on Ultra High Data Rate enabled Next Generation Hyper-Reliable and Low-Latency Communications for Futuristic 6G Networks*, 09–13 June 2024, Denver, Colorado, USA. [[arXiv](https://arxiv.org/abs/2402.13096)] [[ResearchGate](https://www.researchgate.net/publication/378334149_A_Lightweight_Machine_Learning_Approach_for_Delay-Aware_Cell-Switching_in_6G_HAPS_Networks)]

**[C321]** Michel Kulhandjian, Hovannes K. Kulhandjian, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Delay-Doppler domain pulse design for OTFS-NOMA”, *IEEE International Conference in Communications (ICC) 2024 The 4th Workshop on OTFS and Delay-Doppler Multi-Carrier Communications for 6G*, 09–13 June 2024, Denver, Colorado, USA.

**[C320]** Afsoon Alidadi Shamsabadi, Animesh Yadav, and Halim Yanikomeroglu, “Impact of objective function on spectral efficiency in integrated HAPS-terrestrial networks”, *IEEE International Conference in Communications (ICC) 2024 Workshop on Emerging Technologies in Aerial and Space Networks*, 09–13 June 2024, Denver, Colorado, USA. [[arXiv](https://arxiv.org/abs/2403.09817)]

**[C319]** Pablo Madoery, Juan Fraire, Jorge M. Finochietto, Halim Yanikomeroglu, and Gunes Karabulut Kurt, “A novel non-terrestrial networks architecture: All optical LEO constellations with high-altitude ground stations”, *IEEE International Conference in Communications (ICC) 2024 4th Workshop on Satellite Mega-Constellations in the 6G Era*, 09–13 June 2024, Denver, Colorado, USA.

**[C318]** Hongzhao Zheng, Mohamed Atia, Halim Yanikomeroglu, and Paulo S. R. Diniz, “Synthetic waveform generation for satellite, HAPS, and 5G base station signals using QuaDRiGa”, *IEEE ICC 2024*, 09–13 June 2024, Denver, USA.

**[C317]** Adem Cicek, Ian Marsland, Enver Cavus, Ebrahim Bedeer, and Halim Yanikomeroglu, “Low complexity lookup table aided soft output semidefinite relaxation based faster-than-Nyquist signaling detector”, *IEEE ICC 2024*, 09–13 June 2024, Denver, USA.

**[C316]** Metin Ozturk, Berk Ciloglu, Gorkem B. Koc, and Halim Yanikomeroglu, “Multi-tier non-terrestrial networking for disaster communications: A layered clustering approach”, *The 32nd IEEE Conference on Signal Processing and Communications Applications (SIU) 2024*, 15–18 May 2024, Tarsus, Türkiye. [[arXiv](https://arxiv.org/abs/2404.15229)]

**[C315]** Omid Abbasi, Halim Yanikomeroglu, and Georges Kaddoum, “Hemispherical massive antenna architecture for high altitude platform stations (HAPS)”, *IEEE WCNC 2024*, 21–21 April 2024, Dubai, United Arab Emirates.

**2023** (42 IEEE journal papers + 10 conference paper)

**[J294]** Han Yu, Zizheng Hua, Xiaqing Miao, Shuai Wang, Gaofeng Pan, Jianping An, Tommy Svensson, and Halim Yanikomeroglu, “Computer vision-based joint space sensing and communication systems: Non-source, autonomy, and low latency”, *IEEE Wireless Communications Magazine*, vol. 30, no. 6, pp. 60–68, December 2023. [[ResearchGate](https://www.researchgate.net/publication/374417098_Computer_Vision-Based_Joint_Space_Sensing_and_Communication_Systems_Non-Source_Autonomy_and_Low_Latency)] [[Xplore](https://ieeexplore.ieee.org/document/10355093)]

**[J293]** Qiqi Ren, Omid Abbasi, Gunes Karabulut Kurt, Halim Yanikomeroglu, and Jian Chen, “Handoff-aware distributed computing in high altitude platform station (HAPS)-assisted vehicular networks”, *IEEE Transactions on Wireless Communications*, vol. 22, no. 12, pp. 8814–8827, December 2023. [[arXiv](https://arxiv.org/abs/2305.04196)] [[ResearchGate](https://www.researchgate.net/publication/370604808_Handoff-Aware_Distributed_Computing_in_High_Altitude_Platform_Station_HAPS-Assisted_Vehicular_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/10103832)]

**[J292]** Jintao Liang, Aizaz U. Chaudhry, John W. Chinneck, Halim Yanikomeroglu, Gunes Karabulut Kurt, Peng Hu, Khaled Ahmed, and Stephane Martel, “Latency versus transmission power trade-off in free-space optical (FSO) satellite networks with multiple inter-continental connections”, *IEEE Open Journal of the Communications Society*, vol. 4, pp. 3014–3029, 2023. [[arXiv](https://arxiv.org/abs/2312.04795)] [[ResearchGate](https://www.researchgate.net/publication/374698293_Latency_versus_Transmission_Power_Trade-off_in_Free-Space_Optical_FSO_Satellite_Networks_with_Multiple_Inter-Continental_Connections)] [[Xplore](https://ieeexplore.ieee.org/document/10287103)].

**[J291]** Semiha Kosu, Mohammadreza Babaei, Serdar Ozgur Ata, Lutfiye Durak-Ata, and Halim Yanikomeroglu, “Linear/non-linear energy harvesting models via multi-antenna relay cooperation in V2V communications”, *IEEE Transactions on Green Communications and Networking*, vol. 7, no. 4, pp. 1725–1738, December 2023. [[arXiv](https://arxiv.org/abs/2305.12428)] [[ResearchGate](https://www.researchgate.net/publication/370928186_LinearNon-Linear_Energy_Harvesting_Models_via_Multi-Antenna_Relay_Cooperation_in_V2V_Communications)] [[Xplore](https://ieeexplore.ieee.org/document/10148067)].

**[J290]** Tuheen Ahmmed, Adnan Kiayani, Raed M. Shubair, and Halim Yanikomeroglu, “Overview of passive intermodulation in modern wireless networks: Concepts and cancellation techniques”, *IEEE Access*, vol. 11, pp. 128337–128353, 2023. [[Xplore](https://ieeexplore.ieee.org/document/10318119)]

**[J289]** Safia Beddiaf, Khelil Abdellatif, Faical Khennoufa, Ferdi Kara, Khaled Rabie, Lixing Wang, Hakan Kaya, Ahmet Emir, and Halim Yanikomeroglu, “Impact of hardware impairment on the uplink SIMO cooperative NOMA with selection relay under imperfect CSI”, *IEEE Access*, vol. 11, pp. 106706–106721, 2023. [[Xplore](https://ieeexplore.ieee.org/document/10262001)]

**[J288]** Weili Wang, Chengchao Liang, Lun Tang, Halim Yanikomeroglu, and Qianbin Chen, “Federated multi-discriminator BiWGAN-GP based collaborative anomaly detection for virtualized network slicing”, *IEEE Transactions on Mobile Computing*, vol. 22, no. 11, pp. 6445–6459, 01 November 2023. [[arXiv](https://arxiv.org/abs/2208.07985)] [[ResearchGate](https://www.researchgate.net/publication/362760510_Federated_Multi-Discriminator_BiWGAN-GP_based_Collaborative_Anomaly_Detection_for_Virtualized_Network_Slicing)] [[Xplore](https://ieeexplore.ieee.org/document/9863661)]

**[J287]** Yuan Liao, Vasilis Friderikos, and Halim Yanikomeroglu, “Robust deployment and resource allocation for robotic aerial base station enabled OFDM integrated sensing and communication”, *IEEE Wireless Communications Letters*,vol. 12, no. 10, pp. 1766–1770, October 2023. [[arXiv](https://arxiv.org/abs/2307.02896)] [[ResearchGate](https://www.researchgate.net/publication/372162836_Robust_Deployment_and_Resource_Allocation_for_Robotic_Aerial_Base_Station_Enabled_OFDM_Integrated_Sensing_and_Communication)] [[Xplore](https://ieeexplore.ieee.org/document/10176320)]

**[J286]** Sanjeev Gurugopinath, Lina Bariah, Sami Muhaidat, Rajaleksmi Kishore, Paschalis C. Sofotasios, Faissal El Bouanani, and Halim Yanikomeroglu, “Interplay of NOMA and GSSK: Detection strategies and performance analysis”, *IEEE Open Journal of Vehicular Technology*, vol. 4, pp. 681–692, 2023. [[arXiv](https://arxiv.org/abs/2105.11186)] [[ResearchGate](https://www.researchgate.net/publication/351840735)] [[Xplore](https://ieeexplore.ieee.org/document/10164216)]

**[J285]** Ayoub Sassi, Wael Jaafar, Safa Cherif, Jihene Ben Abderrazak, and Halim Yanikomeroglu, “Video traffic analysis for real-time emotion recognition and visualization in online learning”, *IEEE Access*, vol. 11, pp. 99376–99386, 2023. [[ResearchGate](https://www.researchgate.net/publication/373835233_Video_Traffic_Analysis_for_Real-Time_Emotion_Recognition_and_Visualization_in_Online_Learning)] [[Xplore](https://ieeexplore.ieee.org/document/10247051)]

**[J284]** Ferdi Kara, Hakan Kaya, Halim Yanikomeroglu, Benjamin K. Ng, and Chan-Tong Lam, “Bit-interleaved multiple access: Improved fairness, reliability, and latency for massive IoT networks”, *IEEE Internet of Things Journal*, vol. 10, no. 18, pp. 16006–16027, 15 September 2023 [[arXiv](https://arxiv.org/abs/2304.05599)] [[ResearchGate](https://www.researchgate.net/publication/370037765_Bit-Interleaved_Multiple_Access_Improved_Fairness_Reliability_and_Latency_for_Massive_IoT_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/10102660)]

**[J283]** Safwan Alfattani, Wael Jaafar, Halim Yanikomeroglu, and Abbas Yongacoglu, “Multi-mode high-altitude platform stations (HAPS) for next generation wireless networks: Selection mechanism, benefits, and potential challenges”, *IEEE Vehicular Technology Magazine*, vol. 18, no. 3, pp. 20–28, September 2023. [[TechRxiv](https://www.techrxiv.org/articles/preprint/Multi-Mode_High_Altitude_Platform_Stations_HAPS_for_Next_Generation_Wireless_Networks/21273651)] [[ResearchGate](https://www.researchgate.net/publication/364483081_Multi-Mode_High_Altitude_Platform_Stations_HAPS_for_Next_Generation_Wireless_Networks)] [[arXiv](https://arxiv.org/abs/2210.11423)] [[Xplore](https://ieeexplore.ieee.org/document/10186454)]

**[J282]** Siqiang Wang, Zesong Fei, Jing Guo, Qimei Cui, Salman Durrani, and Halim Yanikomeroglu, “Energy efficiency optimization for multiple access in NOMA-enabled space-air-ground networks”, *IEEE Internet of Things Journal*, vol. 10, no. 17, pp. 15652–15665, 01 September 2023. [[ResearchGate](https://www.researchgate.net/publication/369868110_Energy_Efficiency_Optimization_for_Multiple_Access_in_NOMA-Enabled_Space-Air-Ground_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/10093957)]

**[J281]** Nesrine Cherif, Wael Jaafar, Evgenii Vinogradov, Halim Yanikomeroglu, Sofie Pollin, and Abbas Yongacoglu, “iTUAVs: Intermittently tethered UAVs for future wireless networks”, *IEEE Wireless Communications Magazine*, vol. 30, no. 4, pp. 124–130, August 2023. [[arXiv](https://arxiv.org/abs/2211.08401)] [[ResearchGate](https://www.researchgate.net/publication/365415025_iTUAVs_Intermittently_Tethered_UAVs_for_Future_Wireless_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/9921200)]

**[J280]** Faical Khennoufa, Khelil Abdellatif, Safia Beddiaf, Ferdi Kara, Khaled Rabie, Hakan Kaya, Ahmet Emir, Salama Ikki, and Halim Yanikomeroglu, “Wireless powered cooperative communication network for two-way uplink NOMA with IQI and SIC imperfections”, *IEEE Access*, vol. 11, pp. 76506–76523, 2023. [[Xplore](https://ieeexplore.ieee.org/document/10188818)]

**[J279]** Cihan Emre Kement, Ferdi Kaya, Wael Jaafar, Halim Yanikomeroglu, Gamini Senarath, Ngoc-Dung Dao, and Peiying Zhu, “Sustaining dynamic traffic in dense urban areas with high altitude platform stations (HAPS)”, *IEEE Communications Magazine*, vol. 61, no. 7, 150–156, July 2023. [[arXiv](https://arxiv.org/abs/2209.05127)] [[ResearchGate](https://www.researchgate.net/publication/363501310_Sustaining_Dynamic_Traffic_in_Dense_Urban_Areas_with_High_Altitude_Platform_Stations_HAPS)] [[Xplore](https://ieeexplore.ieee.org/document/10192297)]

**[J278]** Hongzhao Zheng, Mohamed Atia, and Halim Yanikomeroglu, “A positioning system in an urban vertical heterogeneous network (VHetNet)”, *IEEE Journal of Radio Frequency Identification*, vol. 7, no. 7, pp. 352–363, July 2023. [[arXiv](https://arxiv.org/abs/2301.10287)] [[ResearchGate](https://www.researchgate.net/publication/369830728_A_Positioning_System_in_an_Urban_Vertical_Heterogeneous_Network_VHetNet)] [[Xplore](https://ieeexplore.ieee.org/document/10092810)]

**[J277]** Pablo Madoery, Gunes Karabulut Kurt, Halim Yanikomeroglu, Peng Hu, Khaled Ahmed, Stephane Martel, and Guillaume Lamontagne, “Routing heterogeneous traffic in delay-tolerant satellite networks”, *IEEE Journal of Radio Frequency Identification*, vol. 7, no. 7, pp. 390–401, July 2023. [[arXiv](https://arxiv.org/abs/2304.13501)] [[ResearchGate](https://www.researchgate.net/publication/370268802_Routing_Heterogeneous_Traffic_in_Delay-Tolerant_Satellite_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/10108903)]

**[J276]** Zichao Zhang, Melda Yuksel, Gokhan Guvensen, and Halim Yanikomeroglu, “Capacity region of asynchronous multiple access channels with FTN”, *IEEE Communications Letters*, vol. 27, no. 7, pp. 1719–1723, July 2023. [[arXiv](https://arxiv.org/abs/2301.02334)] [[ResearchGate](https://www.researchgate.net/publication/370236882_Capacity_Region_of_Asynchronous_Multiple_Access_Channels_with_FTN)] [[Xplore](https://ieeexplore.ieee.org/document/10107483)]

**[J275]** Omar Maraqa, Saad Al-Ahmadi, Aditya S. Rajasekaran, Hamza U. Sokun, Halim Yanikomeroglu, and Sadiq M. Sait, “Energy-efficient optimization of multi-user NOMA-assisted cooperative THz-SIMO MEC systems”, *IEEE Transactions on Communications*, vol. 71, no. 6, pp. 3763–3779, 679–683, June 2023. [[arXiv](https://arxiv.org/abs/2304.04094)] [[ResearchGate](https://www.researchgate.net/publication/369864865_Energy-Efficient_Optimization_of_Multi-User_NOMA-Assisted_Cooperative_THz-SIMO_MEC_Systems)] [[Xplore](https://ieeexplore.ieee.org/document/10093902)]

**[J274]** Zuleyha Akusta Dagdeviren, Vahid Khalilpour Akram, Orhan Dagdeviren, Bulent Tavli, and Halim Yanikomeroglu, “*k*-Connectivity in wireless sensor networks: Overview and future research directions”, *IEEE Network Magazine*, vol. 37, no. 3, pp. 140–145, May/June 2023. [[ResearchGate](https://www.researchgate.net/publication/365115099_k-Connectivity_in_Wireless_Sensor_Networks_Overview_and_Future_Research_Directions)] [[Xplore](https://ieeexplore.ieee.org/document/9928077)]

**[J273]** Mine Ardanuc, Mehmet Basaran, Yassine Hmamouche, Lutfiye Durak-Ata, and Halim Yanikomeroglu, “Energy efficiency analysis in heterogeneous networks: A stochastic geometry perspective”, *IEEE Open Journal of the Vehicular Technology*, vol. 4, pp. 438–443, 2023. [[ResearchGate](https://www.researchgate.net/publication/370680781_Energy_Efficiency_Analysis_in_Heterogeneous_Networks_A_Stochastic_Geometry_Perspective)] [[Xplore](https://ieeexplore.ieee.org/document/10122552)]

**[J272]** Mohammad Javad Sobouti, Amir Hossein Mohajerzadeh, Seyed Amin Hosseini Seno, and Halim Yanikomeroglu, “Managing sets of flying base stations using energy efficient 3D trajectory planning in cellular networks”, *IEEE Sensors Journal*, vol. 23, no. 10, pp. 10983–10997, 15 May 2023. [[arXiv](https://arxiv.org/abs/2202.03834)] [[ResearchGate](https://www.researchgate.net/publication/369632137_Managing_Sets_of_Flying_Base_Stations_Using_Energy_Efficient_3D_Trajectory_Planning_in_Cellular_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/10087271)]

**[J271]** Aditya S. Rajasekaran and Halim Yanikomeroglu, “Neural network aided user clustering in mmWave-NOMA systems with user decoding capability constraints”, *IEEE Access*, vol. 11, pp. 45672–45687, 2023. [[ResearchGate](https://www.researchgate.net/publication/370675975_Neural_Network_Aided_User_Clustering_in_mmWave-NOMA_Systems_with_User_Decoding_Capability_Constraints)] [[Xplore](https://ieeexplore.ieee.org/document/10121680)]

**[J270]** Nahid Amani, Saeedeh Parsaeefard, and Halim Yanikomeroglu, “Multi-objective energy efficient resource allocation in massive multi input multi output-aided heterogeneous cloud radio access networks”, *IEEE Access*, vol. 11, pp. 33480–33497, 2023. [[ResearchGate](https://www.researchgate.net/publication/369770466_Multi-Objective_Energy_Efficient_Resource_Allocation_in_Massive_Multiple_Input_Multiple_Output-Aided_Heterogeneous_Cloud_Radio_Access_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/10090930)]

**[J269]** Safwan Alfattani, Animesh Yadav, Halim Yanikomeroglu, and Abbas Yongacoglu, “Resource-efficient HAPS-RIS enabled beyond-cell communications”, *IEEE Wireless Communications Letters*, vol. 12, no. 4, pp. 679–683, April 2023. [[TechRxiv](https://www.techrxiv.org/articles/preprint/Resource-Efficient_HAPS-RIS_Enabled_Beyond-Cell_Communications/20363646/1)] [[arXiv](https://arxiv.org/abs/2207.11576)] [[ResearchGate](https://www.researchgate.net/publication/362252514_Resource-Efficient_HAPS-RIS_Enabled_Beyond-Cell_Communications)] [[Xplore](https://ieeexplore.ieee.org/document/10024826)]

**[J268]** Zichao Zhang, Melda Yuksel, and Halim Yanikomeroglu, “Faster-than-Nyquist signaling for MIMO communications”, *IEEE Transactions on Wireless Communications*, vol. 22, no. 4, pp. 2379–2392, April 2023. [[arXiv](https://arxiv.org/abs/2111.07867)] [[ResearchGate](https://www.researchgate.net/publication/356249775)] [[Xplore](https://ieeexplore.ieee.org/document/9915298)]

**[J267]** Aizaz Chaudhry, Guillaume Lamontagne, and Halim Yanikomeroglu, “Laser inter-satellite link range in free-space optical satellite networks: Impact on latency”, *IEEE Aerospace and Electronic Systems Magazine*, vol. 38, no. 4, pp. 4-13, 01 April 2023. [[ResearchGate](https://www.researchgate.net/publication/367660821_Laser_Inter-Satellite_Link_Range_in_Free-Space_Optical_Satellite_Networks_Impact_on_Latency)] [[Xplore](https://ieeexplore.ieee.org/document/10032696)]

**[J266]** Ammar Abdelsamie, Ian Marsland, Ahmed Ibrahim, and Halim Yanikomeroglu, “MetNet: A novel low-complexity neural network aided detection for faster-than-Nyquist (FTN) signalling in ISI channels”, *IEEE Open Journal of the Communications Society*, vol. 4, pp. 798-809, 2023. [[ResearchGate](https://www.researchgate.net/publication/369276533_MetNet_A_Novel_Low-complexity_Neural_Network_Aided_Detection_for_Faster-Than-Nyquist_FTN_Signalling_in_ISI_Channels)] [[Xplore](https://ieeexplore.ieee.org/document/10071549)]

**[J265]** Mohammed Y. Abdelsadek, Gunes Karabulut-Kurt, Halim Yanikomeroglu, Peng Hu, Guillaume Lamontagne, and Khaled Ahmed, “Broadband connectivity for handheld devices via LEO satellites: Is distributed massive MIMO the answer?”, *IEEE Open Journal of the Communications Society*, vol. 4, pp. 713-726, 2023. [[ResearchGate](https://www.researchgate.net/publication/369075739_Broadband_Connectivity_for_Handheld_Devices_via_LEO_Satellites_Is_Distributed_Massive_MIMO_the_Answer)] [[Xplore](https://ieeexplore.ieee.org/document/10061620)]

**[J264]** Ali Fazeli, Ha Nguyen, and Halim Yanikomeroglu, “Bit-interleaved coded energy-based modulation with iterative decoding”, *IEEE Transactions on Communications*, vol. 71, no. 3, pp. 1243-1258, March 2023. [[TechRxiv](https://www.techrxiv.org/articles/preprint/Bit-Interleaved_Coded_Energy-Based_Modulation_with_Iterative_Decoding/21568656)] [[arXiv](https://arxiv.org/abs/2211.12655)] [[ResearchGate](https://www.researchgate.net/publication/365869361_Bit-Interleaved_Coded_Energy-Based_Modulation_with_Iterative_Decoding)] [[Xplore](https://ieeexplore.ieee.org/document/10006824)]

**[J263]** Irem Cumali, Berna Ozbek, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “User selection and codebook design for NOMA-based high altitude platform station (HAPS) communications”, *IEEE Transactions on Vehicular Technology*, vol. 72, no. 3, pp. 3636-3446, March 2023. [[ResearchGate](https://www.researchgate.net/publication/365223457_User_Selection_and_Codebook_Design_for_NOMA-Based_High_Altitude_Platform_Station_HAPS_Communications)] [[Xplore](https://ieeexplore.ieee.org/document/9942358)]

**[J262]** Amin Farajzadeh, Mohammad G. Khoshkholgh, Halim Yanikomeroglu, and Ozgur Ercetin, “Self-evolving integrated vertical heterogeneous networks”, *IEEE Open Journal of the Communications Society*, vol. 4, pp. 552-580, 2023. [[arXiv](https://arxiv.org/abs/2106.13950)] [[ResearchGate](https://www.researchgate.net/publication/352761231)] [[Xplore](https://ieeexplore.ieee.org/document/10041126)]

**[J261]** Mohammad Parvini, Amir Hossein Zarif, Ali Nouruzi, Nader Mokari, Mohammad Reza Javan, Bijan Abbasi, Amir Ghasemi, and Halim Yanikomeroglu, “Spectrum sharing schemes from 4G to 5G and Beyond: Protocol flow, regulation, ecosystem, economic”, *IEEE Open Journal of the Communications Society*, vol. 4, pp. 464-517, 2023. [[arXiv](https://arxiv.org/abs/2203.11125)] [[ResearchGate](https://www.researchgate.net/publication/359391431)] [[Xplore](https://ieeexplore.ieee.org/document/10026262)]

**[J260]** Mohammed Y. Abdelsadek, Aizaz U. Chaudhry, Tasneem Darwish, Eylem Erdogan, Gunes Karabulut-Kurt, Pablo G. Madoery, Olfa Ben Yahia, and Halim Yanikomeroglu, “Future space networks: Toward the next giant leap for humankind”, Invited Paper, *IEEE Transactions on Communications*, vol. 71, no. 2, pp. 949-1007, February 2023. [[arXiv](https://arxiv.org/abs/2212.05668)] [[Xplore](https://ieeexplore.ieee.org/document/9982444)]

**[J259]** Amir Mehrabian, Maryam Sabbaghian, and Halim Yanikomeroglu, “CNN-based detector for spectrum sensing with general noise models”, *IEEE Transactions on Wireless Communications*, vol. 22, no. 2, pp. 1235-1249, February 2023. [[ResearchGate](https://www.researchgate.net/publication/363496083_CNN-based_Detector_for_Spectrum_Sensing_with_General_Noise_Models)] [[Xplore](https://ieeexplore.ieee.org/document/9887821)]

**[J258]** Hakan Alakoca, Mustafa Namdar, Sultan Aldirmaz-Colak, Mehmet Basaran, Arif Basgumus, Lutfiye Durak-Ata, and Halim Yanikomeroglu, “Metasurface manipulation attacks: Potential security threat of RIS-aided 6G communications”, *IEEE Communications Magazine*, vol. 61, no. 1, pp. 24-30, January 2023. [[Xplore](https://ieeexplore.ieee.org/document/9941040)]

**[J257]** Hongzhao Zheng, Mohamed Atia, and Halim Yanikomeroglu, “Analysis of a HAPS-aided GNSS in urban areas using a RAIM algorithm”, *IEEE Open Journal of the Communications Society*, vol. 4, pp. 226-238, 2023. [[arXiv](https://arxiv.org/abs/2301.00758)] [[ResearchGate](https://www.researchgate.net/publication/366811145_Analysis_of_a_HAPS-Aided_GNSS_in_Urban_Areas_using_a_RAIM_Algorithm)] [[Xplore](https://ieeexplore.ieee.org/document/10008023)]

**[J256]** Eylem Erdogan, Olfa Ben Yahia, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Optical HAPS eavesdropping in vertical heterogeneous networks”, *IEEE Open Journal of Vehicular Technology*, vol. 4, pp. 208-216, 2023. [[Xplore](https://ieeexplore.ieee.org/document/10004986)]

**[J255]** Omid Abbasi and Halim Yanikomeroglu, “Transmission scheme, detection and power allocation for uplink user cooperation with NOMA and RSMA”, *IEEE Transactions on Wireless Communications*, vol. 22, no. 1, pp. 471-485, January 2023 [[arXiv](https://arxiv.org/abs/2201.04572)] [[ResearchGate](https://www.researchgate.net/publication/357791226)] [[Xplore](https://ieeexplore.ieee.org/document/9852986)]

**[J254]** Adem Cicek, Enver Cavus, Ebrahim Bedeer, and Halim Yanikomeroglu, “Coordinate interleaved faster-than-Nyquist signaling”, *IEEE Communications Letters*, vol. 27, no. 1, pp. 229-233, January 2023. [[arXiv](https://arxiv.org/abs/2210.01786)] [[ResearchGate](https://www.researchgate.net/publication/364107429_Coordinate_Interleaved_Faster-than-Nyquist_Signaling)] [[Xplore](https://ieeexplore.ieee.org/document/9911634)]

**[J253]** Ali Murat Demirtas, Mehmet Saygin Seyfioglu, Irem Bor-Yaliniz, Bulent Tavli, and Halim Yanikomeroglu, “Deep learning based autonomous UAV-BSs for NGWNs: Overview and a novel architecture”, *IEEE Consumer Electronics Magazine*, vol. 12, no. 1, pp. 32-42, 01 January 2023. [[ResearchGate](https://www.researchgate.net/publication/362921954_Deep_Learning_Based_Autonomous_UAV-BSs_for_NGWNs_Overview_and_A_Novel_Architecture)] [[Xplore](https://ieeexplore.ieee.org/document/9866110)]

**[C314]** Zichao Zhang, Melda Yuksel, Halim Yanikomeroglu, Benjamin Ng, and Chan-Tong Lam, “MIMO asynchronous MAC with faster-than-Nyquist (FTN) signaling”, *IEEE Globecom 2023*, 04–08 December 2023, Kuala Lumpur, Malaysia. [[arXiv](https://arxiv.org/abs/2305.12261)] [[ResearchGate](https://www.researchgate.net/publication/370924542_MIMO_Asynchronous_MAC_with_Faster-than-Nyquist_FTN_Signaling)]

**[C313]** Maximiliano Rivera, Wael Jaafar, and Halim Yanikomeroglu, “Optimization of RIS-assisted RSMA-enabled tethered-UAV communications”, *IEEE Globecom Workshops 2023*, 04 December 2023, Kuala Lumpur, Malaysia.

**[C312]** Janaki Parekh, E. Yackoboski, Amir Ghasemi, and Halim Yanikomeroglu, “Modeling local demand for mobile spectrum using large crowdsourced datasets”, *IEEE Future Networks World Forum (FNWF) 2023*, 13–15 November 2023, Baltimore, MD, USA. [[ResearchGate](https://www.researchgate.net/publication/374778258_Modeling_Local_Demand_for_Mobile_Spectrum_using_Large_Crowdsourced_Datasets)]

**[C311]** Janaki Parekh, Amir Ghasemi, and Halim Yanikomeroglu, “Data-driven modelling of mobile network demand for efficient spectrum management”, *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2023*, 05–08 September 2023, Toronto, Ontario, Canada. [[ResearchGate](https://www.researchgate.net/publication/374777534_Data-Driven_Modelling_of_Mobile_Network_Demand_for_Efficient_Spectrum_Management)] [[Xplore](https://ieeexplore.ieee.org/document/10294042)]

**[C310]** Youssra Cheriguene, Wael Jaafar, Chaker Abdelaziz Kerrache, Halim Yanikomeroglu, Fatima Zohra Bousbaa, and Nasreddine Lagraa, “Data-efficient energy-aware participant selection for UAV-enabled federated learning”, *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2023*, 05–08 September 2023, Toronto, Ontario, Canada. [[arXiv](https://arxiv.org/abs/2308.07273)] [[ResearchGate](https://www.researchgate.net/publication/373116833_Data-Efficient_Energy-Aware_Participant_Selection_for_UAV-Enabled_Federated_Learning)] [[Xplore](https://ieeexplore.ieee.org/document/10293775)]

**[C309]** Gorkem Berkay Koc, Berk Ciloglu, Metin Ozturk, and Halim Yanikomeroglu, “HAPS-enabled sustainability provision in cellular networks through cell-switching”, *IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom) 2023*, 04–07 July 2023, Istanbul, Turkiye. [[arXiv](https://arxiv.org/abs/2304.08620)] [[ResearchGate](https://www.researchgate.net/publication/370103080_HAPS-Enabled_Sustainability_Provision_in_Cellular_Networks_through_Cell-Switching)] [[Xplore](https://ieeexplore.ieee.org/document/10299797)]

**[C308]** Qiqi Ren, Omid Abbasi, Gunes Karabulut Kurt, Halim Yanikomeroglu, and Jian Chen, “High altitude platform station (HAPS)-enabled parallel computing for handoff control in vehicular networks”, *IEEE International Conference on Communications (ICC) 2023*, 28 May – 01 June 2023, Rome, Italy. [[Xplore](https://ieeexplore.ieee.org/document/10279432)]

**[C307]** Ali Nourouzi, Ata Khalili, Atefeh Rezaei, Nader Mokari, Mohammad Reza Javan, Eduard A Jorswieck, and Halim Yanikomeroglu, “Smart resource allocation framework via artificial intelligence in software-defined 6G networks”, *IEEE International Conference on Communications (ICC) 2023*, 28 May – 01 June 2023, Rome, Italy. [[arXiv](https://arxiv.org/abs/2302.04655)] [[Xplore](https://ieeexplore.ieee.org/document/10279230)]

**[C306]** Lina Bariah, Fouzi Boukhalfa, Wael Jaafar, Sami Muhaidat, and Halim Yanikomeroglu, “On the performance of RIS-enabled NOMA for aerial networks”, *IEEE Wireless Communications and Networking Conference Workshops (WCNCW) 2023*, 26–29 March 2023, Glasgow, UK. [[ResearchGate](https://www.researchgate.net/publication/370747265_On_the_Performance_of_RIS-enabled_NOMA_for_Aerial_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/10118693)]

**[C305]** Dhiraj Bhattacharjee, Aizaz U. Chaudhry, Halim Yanikomeroglu, Peng Hu, and Guillaume Lamontagne, “Laser inter-satellite link setup delay: Quantification, impact, and tolerable value”, *IEEE Wireless Communications and Networking Conference (WCNC) 2023*, 26–29 March 2023, Glasgow, UK. [[arXiv](https://arxiv.org/abs/2301.05285)] [[ResearchGate](https://www.researchgate.net/publication/367076537_Laser_Inter-Satellite_Link_Setup_Delay_Quantification_Impact_and_Tolerable_Value)] [[Xplore](https://ieeexplore.ieee.org/document/10119016)]

**2022** (39 IEEE journal papers + 22 conference papers)

**[J252]** Safia Beddiaf, Abdellatif Khelil, Faical Khennoufa, Ferdi Kara, Hakan Kaya, Xingwang Li, Khaled Rabie, and Halim Yanikomeroglu, “A unified performance analysis of cooperative NOMA with practical constraints: Hardware impairment, imperfect SIC and CSI”, *IEEE Access*, vol. 10, pp. 132931-132948, 2022. [[ResearchGate](https://www.researchgate.net/publication/366423148_A_Unified_Performance_Analysis_of_Cooperative_NOMA_with_Practical_Constraints_Hardware_Impairment_Imperfect_SIC_and_CSI)] [[Xplore](https://ieeexplore.ieee.org/document/9991954)]

**[J251]** Poorya Aghaomidi, Amir Mohammadisarab, Jalil Mazloum, Mohammad Ali Akbarzadeh, Mahdi Orooji, Nader Mokari, and Halim Yanikomeroglu, “DeepRTSNet: Deep robust two-stage networks for ECG denoising in practical use case”, *IEEE Access*, vol. 10, pp. 128232-128249, 2022. [[ResearchGate](https://www.researchgate.net/publication/365983588_DeepRTSNet_Deep_Robust_Two-Stage_Networks_for_ECG_Denoising_in_Practical_Use_Case)] [[Xplore](https://ieeexplore.ieee.org/document/9969597)]

**[J250]** Afsoon Alidadi Shamsabadi, Animesh Yadav, Omid Abbasi, and Halim Yanikomeroglu, “Handling interference in integrated HAPS-terrestrial networks through radio resource management”, *IEEE Wireless Communications Letters*, vol. 11, no. 12, pp. 2585-2589, December 2022. [[arXiv](https://arxiv.org/abs/2208.06971)] [[ResearchGate](https://www.researchgate.net/publication/363940023_Handling_Interference_in_Integrated_HAPS-Terrestrial_Networks_through_Radio_Resource_Management)] [[Xplore](https://ieeexplore.ieee.org/document/9904854)]

**[J249]** Zhitong Xing, Yun Li, Aditya S. Rajasekaran, Deyi Peng, and Halim Yanikomeroglu, “Variation approach-based nonlinear companding scheme for PAPR reduction in OFDM systems”, *IEEE Transactions on Broadcasting*. vol. 68, no. 4, pp. 916-926, December 2022 [[ResearchGate](https://www.researchgate.net/publication/362461379_Variation_Approach-Based_Nonlinear_Companding_Scheme_for_PAPR_Reduction_in_OFDM_Systems)] [[Xplore](https://ieeexplore.ieee.org/document/9849424)]

**[J248]** Kursat Tekbiyik, Gunes Karabulut Kurt, Ali Riza Ekti, and Halim Yanikomeroglu, “Reconfigurable intelligent surface empowered THz communication in LEO satellite networks”, *IEEE Access*, vol. 10, pp. 121957-121969, 2022. [[arXiv](https://arxiv.org/abs/2007.04281)] [[ResearchGate](https://www.researchgate.net/publication/342801743)] [[Xplore](https://ieeexplore.ieee.org/document/9954397)]

**[J247]** Mohammed Y. Abdelsadek, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Distributed massive MIMO for LEO satellite networks”, *IEEE Open Journal of the Communications Society*, vol. 3, pp. 2162-2177, 2022. [[arXiv](https://arxiv.org/abs/2211.00832)] [[ResearchGate](https://www.researchgate.net/publication/365142909_Distributed_Massive_MIMO_for_LEO_Satellite_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/9939157)]

**[J246]** Weili Wang, Chengchao Liang, Qianbin Chen, Lun Tang, Halim Yanikomeroglu, and Tong Liu. “Distributed online anomaly detection for virtualized network slicing environment”, *IEEE Transactions on Vehicular Technology*, vol. 71, no. 11, pp. 12235-12249, November 2022. [[arXiv](https://arxiv.org/abs/2201.01900)] [[ResearchGate](https://www.researchgate.net/publication/357645993)] [[Xplore](https://ieeexplore.ieee.org/document/9837465)]

**[J245]** Qiqi Ren, Omid Abbasi, Gunes Karabulut Kurt, Halim Yanikomeroglu, and Jian Chen, “Caching and computation offloading in high altitude platform station (HAPS) assisted intelligent transportation systems”, *IEEE Transactions on Wireless Communications*, vol. 21, no. 11, pp. 9010-9024, November 2022. [[arXiv](https://arxiv.org/abs/2106.14928)] [[ResearchGate](https://www.researchgate.net/publication/353063011)] [[Xplore](https://ieeexplore.ieee.org/document/9772280)]

**[J244]** Tolga Ovatman, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “An accurate model for computation offloading and a HAPS-based case study”, *IEEE Open Journal of the Communications Society*, vol. 3, pp. 1963-1977, 2022. [[ResearchGate](https://www.researchgate.net/publication/365099925_An_Accurate_Model_for_Computation_Offloading_in_6G_Networks_and_a_HAPS-based_Case_Study)] [[Xplore](https://ieeexplore.ieee.org/document/9931920)]

**[J243]** Wael Jaafar and Halim Yanikomeroglu, “HAPS-ITS: Enabling future ITS services in trans-continental highways”, *IEEE Communications Magazine*, vol. 60, no. 10, pp. 80-86, October 2022. [[arXiv](https://arxiv.org/abs/2105.04756)] [[ResearchGate](https://www.researchgate.net/publication/351475360)] [[Xplore](https://ieeexplore.ieee.org/document/9815183)]

**[J242]** Najmeh Banitalebi, Paeiz Azmi, Nader Mokari, Atefeh Hajijamali Arani, and Halim Yanikomeroglu, “Distributed learning based resource allocation for self-organizing C-V2X communication in cellular networks”, *IEEE Open Journal of the Communications Society*, vol. 3, pp. 1719-1736, 2022. [[ResearchGate](https://www.researchgate.net/publication/364146623_Distributed_Learning_Based_Resource_Allocation_for_Self-Organizing_C-V2X_Communication_in_Cellular_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/9908149)]

**[J241]** Aizaz U. Chaudhry and Halim Yanikomeroglu, “When to crossover from Earth to space for lower latency data communications?”, *IEEE Transactions on Aerospace and Electronic Systems*, vol. 58, no. 5, pp. 3962-3978, October 2022. [[arXiv](https://arxiv.org/abs/2203.00154)] [[ResearchGate](https://www.researchgate.net/publication/358915311)] [[Xplore](https://ieeexplore.ieee.org/document/9726866)]

**[J240]** Lina Bariah, Wael Jaafar, Sami Muhaidat, Hany Elgala, and Halim Yanikomeroglu, “On the error performance of LoRa-enabled aerial networks over shadowed Rician fading channels”, *IEEE Communications Letters*, vol. 26, no. 10, pp. 2322-2326, October 2022. [[TechRxiv](https://www.techrxiv.org/articles/preprint/On_the_Error_Performance_of_LoRa-Enabled_Aerial_Networks_over_Shadowed_Rician_Fading_Channels/19603339)] [[ResearchGate](https://www.researchgate.net/publication/360118969_On_the_Error_Performance_of_LoRa-Enabled_Aerial_Networks_over_Shadowed_Rician_Fading_Channels)] [[Xplore](https://ieeexplore.ieee.org/document/9837920)]

**[J239]** Pouya M. Ghari, Maryam Sabbaghian, and Halim Yanikomeroglu, “Moving aerial anchors assisted network localization”, *IEEE Transactions on Wireless Communications*, vol. 21, no. 10, pp. 7839-7851, October 2022. [[ResearchGate](https://www.researchgate.net/publication/356369256)] [[Xplore](https://ieeexplore.ieee.org/document/9619929)]

**[J238]** Jalal Khamse-Ashari, Gamini Senarath, Irem Bor-Yaliniz, and Halim Yanikomeroglu, “An agile and distributed mechanism for inter-domain network slicing in next-generation mobile networks”, *IEEE Transactions on Mobile Computing*, vol. 21, no. 10, pp. 3486-3501, October 2022. [[arXiv](https://arxiv.org/abs/2102.10687)] [[ResearchGate](https://www.researchgate.net/publication/349540046)] [[Xplore](https://ieeexplore.ieee.org/document/9361144)]

**[J237]** Olfa Ben Yahia, Eylem Erdogan, Gunes Karabulut Kurt, Ibrahim Altunbas, and Halim Yanikomeroglu, “Optical satellite eavesdropping”, *IEEE Transactions on Vehicular Technology*, vol. 71, no. 9, pp. 10126-10131, September 2022. [[arXiv](https://arxiv.org/abs/2112.04932)] [[ResearchGate](https://www.researchgate.net/publication/356904298)] [[Xplore](https://ieeexplore.ieee.org/document/9779543)]

**[J236]** Kursat Tekbiyik, Gunes Karabulut Kurt, Ali Riza Ekti, and Halim Yanikomeroglu, “Reconfigurable intelligent surfaces in action for nonterrestrial networks”, *IEEE Vehicular Technology Magazine*, vol. 17, no. 3, pp. 45-53, September 2022. [[arXiv](https://arxiv.org/abs/2012.00968)] [[ResearchGate](https://www.researchgate.net/publication/346578227_Reconfigurable_Intelligent_Surfaces_in_Action_for_Non-Terrestrial_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/9779261)]

**[J235]** Aizaz U. Chaudhry and H. Yanikomeroglu, “Temporary laser inter-satellite links in free-space optical satellite networks”, *IEEE Open Journal of the Communications Society*, vol. 3, pp. 1413-1427, 2022. [[arXiv](https://arxiv.org/abs/2208.11225)] [[ResearchGate](https://www.researchgate.net/publication/362875939)] [[Xplore](https://ieeexplore.ieee.org/document/9855659)]

**[J234]** Selen Gecgel Cetin, Caner Goztepe, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “A glimpse of physical layer decision mechanisms: Facts, challenges, and remedies”, *IEEE Open Journal of the Communications Society*, vol. 3, pp. 1280-1294, 2022. [[arXiv](https://arxiv.org/abs/2102.07258)] [[ResearchGate](https://www.researchgate.net/publication/349311915)] [[Xplore](https://ieeexplore.ieee.org/document/9845678)]

**[J233]** Kursat Tekbiyik, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Energy-efficient RIS-assisted satellites for IoT networks”, *IEEE Internet of Things Journal*, vol. 9, no. 16, pp. 14891-14899, August 15, 2022. [[arXiv](https://arxiv.org/abs/2101.07166)] [[ResearchGate](https://www.researchgate.net/publication/348590114_Energy-Efficient_RIS-assisted_Satellites_for_IoT_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/9539541)]

**[J232]** Wael Jaafar, Lina Bariah, Sami Muhaidat, and Halim Yanikomeroglu, “Time-switching and phase-shifting control for RIS-assisted SWIPT communications”, *IEEE Wireless Communications Letters*, vol. 11, no. 8, pp. 1728-1732, August 2022. [[ResearchGate](https://www.researchgate.net/publication/360906778)] [[Xplore](https://ieeexplore.ieee.org/document/9783020)]

**[J231]** Hichem Semira, Ferdi Kara, Hakan Kaya, and Halim Yanikomeroglu, “Error performance analysis of multi-user detection in uplink-NOMA with adaptive M-QAM”, *IEEE Wireless Communications Letters*, vol. 11, no. 8, pp. 1654-1658, August 2022. [[arXiv](https://arxiv.org/abs/2204.11460)] [[ResearchGate](http://www.researchgate.net/publication/360186433)] [[Xplore](https://ieeexplore.ieee.org/document/9763842)]

**[J230]** Olfa Ben Yahia, Eylem Erdogan, Gunes Karabulut Kurt, Ibrahim Altunbas, and Halim Yanikomeroglu, “HAPS selection for hybrid RF/FSO satellite networks”, *IEEE Transactions on Aerospace and Electronic Systems*, vol. 58, no. 4, pp. 2855-2867, August 2022. [[arXiv](https://arxiv.org/abs/2107.12638)] [[ResearchGate](https://www.researchgate.net/publication/353510591)] [[Xplore](https://ieeexplore.ieee.org/document/9678060)]

**[J229]** Islam Abu Mahady, Ebrahim Bedeer, Salama Ikki, and Halim Yanikomeroglu, “Energy efficiency maximization of full-duplex NOMA systems with improper Gaussian signaling under imperfect self-interference cancellation”, *IEEE Communications Letters*, vol. 26, no. 7, pp. 1613-1617, July 2022. [[ResearchGate](https://www.researchgate.net/publication/360046019)] [[Xplore](https://ieeexplore.ieee.org/document/9758736)]

**[J228]** Tasneem Darwish, Gunes Karabulut Kurt, Halim Yanikomeroglu, Guillaume Lamontagne, and Michel Bellemare, “Location management in Internet protocol-based future LEO satellite networks: A review”, *IEEE Open Journal of the Communications Society*, vol. 3, pp. 1035-1062, 2022. [[arXiv](https://arxiv.org/abs/2101.08336)] [[ResearchGate](https://www.researchgate.net/publication/348675552)] [[Xplore](https://ieeexplore.ieee.org/document/9804811)]

**[J227]** Ferdi Kara, Hakan Kaya, and H. Yanikomeroglu, “Power-time channel diversity (PTCD): A novel resource efficient diversity technique for 6G and Beyond”, *IEEE Wireless Communications Letters*, vol. 11, no. 7, pp. 1453-1457, July 2022. [[arXiv](https://arxiv.org/abs/2205.03085)] [[ResearchGate](https://www.researchgate.net/publication/360462627)] [[Xplore](https://ieeexplore.ieee.org/document/9771185)]

**[J226]** Tuheen Ahmmed, Afsoon Alidadi, Zichao Zhang, Aizaz U. Chaudhry, and Halim Yanikomeroglu, “The digital divide in Canada and the role of LEO satellites in bridging the gap”, *IEEE Communications Magazine*, vol. 60, no. 6, pp. 24-30, June 2022. [[arXiv](https://arxiv.org/abs/2203.08933)] [[ResearchGate](https://www.researchgate.net/publication/359218184)] [[Xplore](https://ieeexplore.ieee.org/document/9800119)]

**[J225]** Yucel Aydin, Gunes Karabulut Kurt, Enver Ozdemir, and Halim Yanikomeroglu, “Authentication and handover challenges and methods for drone swarms”, *IEEE Journal of Radio Frequency Identification*, vol. 6, pp. 220-228, 2022. [[arXiv](https://arxiv.org/abs/2201.05657)] [[ResearchGate](https://www.researchgate.net/publication/357836252)] [[Xplore](https://ieeexplore.ieee.org/document/9732345)]

**[J224]** Atefeh Hajijamali Arani, M. Mahdi Azari, Peng Hu, Yeying Zhu, Halim Yanikomeroglu, and Safieddin Safavi-Naeini, “Reinforcement learning for energy-efficient trajectory design of UAVs”, *IEEE Internet of Things Journal*, vol. 9, no. 11, pp. 9060-9070, June 1, 2022. [[ResearchGate](https://www.researchgate.net/publication/354478117)] [[Xplore](https://ieeexplore.ieee.org/document/9560149)]

**[J223]** Michel Kulhandjian, Hovannes Kulhandjian, Claude D’Amours, Halim Yanikomeroglu, Dimitris A. Pados, and Gurgen Khachatrian, “Low-complexity decoder for overloaded uniquely decodable synchronous CDMA”, *IEEE Access*, vol. 10, pp. 46255-46275, 2022. [[arXiv](https://arxiv.org/abs/1806.03958)] [[ResearchGate](https://www.researchgate.net/publication/333555032)] [[Xplore](https://ieeexplore.ieee.org/document/9762979)]

**[J222]** Elaheh Vaezpour, Layla Majzoobi, Mohammad Akbari, Saeedeh Parsaeefard, and Halim Yanikomeroglu, “A deep learning-based approach for cell outage compensation in NOMA networks”, *IEEE Open Journal of Vehicular Technology*, vol. 3, pp. 149-166, 2022. [[arXiv](https://arxiv.org/abs/2204.03477)] [[ResearchGate](https://www.researchgate.net/publication/359813911)] [[Xplore](https://ieeexplore.ieee.org/document/9749853)]

**[J221]** Talal A. Edwan, Ashraf Tahat, Halim Yanikomeroglu, and Jon Crowcroft, “An analysis of a Stochastic ON-OFF queueing mobility model for software-defined vehicle networks”, *IEEE Transactions on Mobile Computing*, vol. 21, no. 5, pp. 1552-1565, May 1, 2022. [[ResearchGate](https://www.researchgate.net/publication/346239510)] [[Xplore](https://ieeexplore.ieee.org/document/9224747)]

**[J220]** Tasneem Darwish, Gunes Karabulut Kurt, Halim Yanikomeroglu, Michel Bellemare, and Guillaume Lamontagne, “LEO satellites in 5G and beyond networks: A review from a standardization perspective”, *IEEE Access*, vol. 10, pp. 35040-35060, 2022. [[arXiv](https://arxiv.org/abs/2110.08654)] [[ResearchGate](https://www.researchgate.net/publication/355391402)] [[Xplore](https://ieeexplore.ieee.org/document/9741772)]

**[J219]** Eylem Erdogan, Ibrahim Altunbas, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Cooperation in space: HAPS-aided optical inter-satellite connectivity with opportunistic scheduling”, *IEEE Communications Letters*, vol. 26, no. 4, pp. 882-886, April 2022. [[arXiv](https://arxiv.org/abs/2112.14212)] [[ResearchGate](https://www.researchgate.net/publication/357417723)] [[Xplore](https://ieeexplore.ieee.org/document/9668940)]

**[J218]** Goldwyn Millar, Michel Kulhandjian, Ayse Alaca, Saban Alaca, Claude D’Amours, and Halim Yanikomeroglu, “Low-density spreading design based on an algebraic scheme for NOMA systems”, *IEEE Wireless Communications Letters*, vol. 11, no. 4, pp. 68-702, April 2022. [[arXiv](https://arxiv.org/abs/2201.00204)] [[ResearchGate](https://www.researchgate.net/publication/357599631)] [[Xplore](https://ieeexplore.ieee.org/document/9669190)]

**[J217]** Sepehr Rezvani, Eduard A. Jorswieck, Roghayeh Joda, and Halim Yanikomeroglu, “Optimal power allocation in downlink multicarrier NOMA systems: Theory and fast algorithms”, *IEEE Journal on Selected Areas in Communications*, vol. 40, no. 4, pp. 1162-1189, April 2022. [[arXiv](https://arxiv.org/abs/2107.06678)] [[ResearchGate](https://www.researchgate.net/publication/353258124_Optimal_Power_Allocation_in_Downlink_Multicarrier_NOMA_Systems_Theory_and_Fast_Algorithms)] [[Xplore](https://ieeexplore.ieee.org/document/9682500)]

**[J216]** Olfa Ben Yahia, Eylem Erdogan, Gunes Karabulut Kurt, Ibrahim Altunbas, and Halim Yanikomeroglu, “A weather-dependent hybrid RF/FSO satellite communication for improved power efficiency”, *IEEE Wireless Communications Letters*, vol. 11, no. 3, pp. 573-577, March 2022. [[arXiv](https://arxiv.org/abs/2106.15858)] [[ResearchGate](https://www.researchgate.net/publication/352901326)] [[Xplore](https://ieeexplore.ieee.org/document/9655260)]

**[J215]** Eylem Erdogan, Ibrahim Altunbas, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “The secrecy comparison of RF and FSO eavesdropping attacks in mixed RF-FSO relay networks”, *IEEE Photonics Journal*, vol. 14, no. 1, February 2022, Art. no. 7901508. [[ResearchGate](https://www.researchgate.net/publication/356152439)] [[Xplore](https://ieeexplore.ieee.org/document/9612067)]

**[J214]** Zahra Rahimi, Mohammad Javad Sobouti, Reza Ghanbari, Seyed Amin Hosseini Seno, Amir Hossein Mohajerzadeh, Hamed Ahmadi, and Halim Yanikomeroglu, “An efficient 3D positioning approach to minimize required UAVs for IoT network coverage”, *IEEE Internet of Things Journal*, vol. 9, no. 1, pp. 558-571, Jan. 1, 2022. [[ResearchGate](https://www.researchgate.net/publication/350995403)] [[Xplore](https://ieeexplore.ieee.org/document/9442809)]

**[C304]** Sarosh Ahmad, Hichem Boubakar, Wael Jaafar, and Halim Yanikomeroglu, “A novel tri-band antenna design for Wireless LAN applications”, *IEEE Conference on Antenna Measurements & Applications (CAMA)*, 14–17 December 2022, Guangzhou, China. [[Xplore](https://ieeexplore.ieee.org/document/10002525)]

**[C303]** Rozita Shafie, Mohammad Javad Omidi, Omid Abbasi, and Halim Yanikomeroglu, “Power allocation for a HAPS-enabled MIMO-NOMA system with spatially correlated channels”, *IEEE Globecom Workshops 2022*, 04–08 December 2022, Rio de Janeiro, Brazil. [[arXiv](https://arxiv.org/abs/2209.13174)] [[ResearchGate](https://www.researchgate.net/publication/363889217_Power_Allocation_for_a_HAPS-Enabled_MIMO-NOMA_System_with_Spatially_Correlated_Channels)] [[Xplore](https://ieeexplore.ieee.org/document/10008738)]

**[C302]** Mohamed Hozayen, Tasneem Darwish, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “A graph-based customizable handover framework for LEO satellite networks”, *IEEE Globecom Workshops 2022*, 04–08 December 2022, Rio de Janeiro, Brazil. [[arXiv](https://arxiv.org/abs/2211.07872)] [[ResearchGate](https://www.researchgate.net/publication/365415558_A_Graph-Based_Customizable_Handover_Framework_for_LEO_Satellite_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/10008514)]

**[C301]** Safwan Alfattani, Animesh Yadav, Halim Yanikomeroglu, and Abbas Yongacoglu, “Beyond-cell communications via HAPS-RIS”, *IEEE Globecom Workshops 2022*, 04–08 December 2022, Rio de Janeiro, Brazil. [[TechrXiv](https://www.techrxiv.org/articles/preprint/Beyond-Cell_Communications_via_HAPS-RIS/19919732/1)] [[arXiv](https://arxiv.org/abs/2206.07005)] [[ResearchGate](https://www.researchgate.net/publication/364482722_Beyond-Cell_Communications_via_HAPS-RIS)] [[Xplore](https://ieeexplore.ieee.org/document/10008789)]

**[C300]** Sarosh Ahmad, Wael Jaafar, and Halim Yanikomeroglu, “Designing a broadband MIMO antenna for next generation wireless communication systems”, *IEEE Globecom 2022*, 04–08 December 2022, Rio de Janeiro, Brazil. [[Xplore](https://ieeexplore.ieee.org/document/10000683)]

**[C299]** Ammar Abdelsamie, Ian Marsland, Ahmed Ibrahim, and Halim Yanikomeroglu, “Neural network aided Viterbi detectors for FTN signalling in ISI channel”, *IEEE Globecom 2022*, 04–08 December 2022, Rio de Janeiro, Brazil. [[ResearchGate](https://www.researchgate.net/search/publication?q=Neural+network+aided+Viterbi+detectors+for+FTN+signalling+in+ISI+channel)] [[Xplore](https://ieeexplore.ieee.org/document/10000602)]

**[C298]** Dong Chu, Wael Jaafar, and Halim Yanikomeroglu, “On the design of communication-efficient federated learning for health monitoring”, *IEEE Globecom 2022*, 04–08 December 2022, Rio de Janeiro, Brazil. [[arXiv](https://arxiv.org/abs/2211.16952)] [[ResearchGate](https://www.researchgate.net/publication/365889736_On_the_Design_of_Communication-Efficient_Federated_Learning_for_Health_Monitoring)][[Xplore](https://ieeexplore.ieee.org/document/10001077)]

**[C297]** Cihan Emre Kement, Ferdi Kaya, Wael Jaafar, Halim Yanikomeroglu, Gamini Senarath, Ngoc-Dung Dao, and Peiying Zhu, “Sustaining dynamic traffic in dense urban areas with high altitude platform stations (HAPS)”, *IEEE Competition on Non-Terrestrial Networks for B5G and 6G*, 08–10 November 2022, Riyadh, Saudi Arabia & virtual.

**[C296]** Weili Wang, Omid Abbasi, Halim Yanikomeroglu, Chengchao Liang, Tang Lun, and Qianbin Chen, “VHetNets for AI and AI for VHetNets: An anomaly detection case study for ubiquitous IoT”, *IEEE Competition on Non-Terrestrial Networks for B5G and 6G*, 08–10 November 2022, Riyadh, Saudi Arabia & virtual.

**[C295]** Safwan Alfattani, Wael Jaafar, Halim Yanikomeroglu, and Abbas Yongacoglu, “Multi-mode high altitude platform station (HAPS) for future wireless networks”, *IEEE Competition on Non-Terrestrial Networks for B5G and 6G*, 08–10 November 2022, Riyadh, Saudi Arabia & virtual.

**[C294]** Nesrine Cherif, Wael Jaafar, Evgenii Vinogradov, Halim Yanikomeroglu, Sofie Pollin, and Abbas Yongacoglu, “iTUAVs: Intermittently tethered UAVs for future wireless networks”, *IEEE Competition on Non-Terrestrial Networks for B5G and 6G*, 08–10 November 2022, Riyadh, Saudi Arabia & virtual.

**[C293]** Amir Mohammadisrab, Poorya Aghaomidi, Jalil Mazloum, Mohammad Ali Akbarzadeh, Mahdi Orooji, Nader Mokari, and Halim Yanikomeroglu, “Deep adaptive denoising auto-encoder networks for ECG noise cancelation via time-frequency domain”, *Asia Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2022)*, 07–10 November 2022, Chiang Mai, Thailand. [[Xplore](https://ieeexplore.ieee.org/document/9980058)]

**[C292]** Wael Jaafar, Koutoua Jean Romeo Beyara, Imen Aouini, Jihene Ben Abderrazek, and Halim Yanikomeroglu, “On the deployment of blockchain in edge computing wireless networks”, *IEEE International Conference on Cloud Networking (CloudNet)*, 07–10 November 2022, Paris, France. [[Xplore](https://ieeexplore.ieee.org/abstract/document/9978739/authors#authors)]

**[C291]** Isam Eddine Lamri, Sarosh Ahmad, Wael Jaafar, Mohammad Alibakhshikenari, and Halim Yanikomeroglu, “Circularly polarized dielectric resonator antenna for the Terahertz band applications”, *IEEE International Symposium on Space THz Technology (ISSTT 2022)*, 16–20 October 2022, Baeza, Andalusia, Spain.

**[C290]** Pablo Madoery, Gunes Karabulut Kurt, Halim Yanikomeroglu, Peng Hu, Guillaume Lamontagne, and Khaled Ahmed, “Routing heterogeneous traffic in delay tolerant satellite networks”, *IEEE International Conference on Wireless for Space and Extreme Environments (WISEE 2022)*, 12–14 October 2022, Winnipeg, Manitoba, Canada. [[arXiv](https://arxiv.org/abs/2209.06324)] [[Xplore](https://ieeexplore.ieee.org/document/9926911)]

**[C289]** Hongzhao Zheng, Mohamed Atia, and Halim Yanikomeroglu, “High altitude platform station (HAPS)-aided GNSS for urban areas”, *IEEE International Conference on Wireless for Space and Extreme Environments (WISEE 2022)*, 12–14 October 2022, Winnipeg, Manitoba, Canada. [[arXiv](https://arxiv.org/abs/2301.00762)] [[Xplore](https://ieeexplore.ieee.org/abstract/document/9926812)]

**[C288]** Sastri Kota, Giovanni Giambene, Mohammed Abdelsadek, Mohamed-Slim Alouini, Sarath Babu, Joan Bas, Sachin Chaudhari, Debabrata Dalai, Tasneem Darwish, Tomaso de Cola, Thomas Delamotte, Ashutosh Dutta, Ayush Dwivedi, Michael Enright, Marco Giordani, Alberto Gotta, Eman Hammad, Tamer Khattab, Andreas Knopp, Gunes Karabulut Kurt, BS Manoj, Jean-Daniel Medjo Me Biomo, Prashant Pillai, Pramud Rawat, Paresh Saxena, Pat Scanlan, Avinash Sharma, Ray Sperber, Zhili Sun, Daniele Tarchi, Neeraj Varshney, Seema Verma, Halim Yanikomeroglu, Kanglian Zhao, and Liang Zhao, “Satellite”, *IEEE Future Networks World Forum (FNWF)*, 12–14 October 2022, Montreal, Canada. [[Xplore](https://ieeexplore.ieee.org/abstract/document/10056654)]

**[C287]** Aizaz U. Chaudhry and Halim Yanikomeroglu, “On crossover distance for optical wireless satellite networks and optical fiber terrestrial networks”, *IEEE Future Networks World Forum (FNWF)*, 12–14 October 2022, Montreal, Canada. [[arXiv](https://arxiv.org/abs/2206.02763)] [[ResearchGate](http://www.researchgate.net/publication/361136172)] [[Xplore](https://ieeexplore.ieee.org/document/10056385)]

**[C286]** Aditya Rajasekaran, Hamza Sokun, Omar Maraqa, Saad Al-Ahmadi, and Halim Yanikomeroglu, “Vision-assisted user clustering for robust mmWave-NOMA systems”, *IEEE Future Networks World Forum (FNWF)*, 12–14 October 2022, Montreal, Canada. [[Xplore](https://ieeexplore.ieee.org/document/10056647)]

**[C285]** Jintao Liang, Aizaz U. Chaudhry, Eylem Erdogan, and Halim Yanikomeroglu, “Link budget analysis for optical links in free-space optical satellite networks”, *IEEE WoWMoM Workshop on Non-Terrestrial Networks in 6G Wireless (NTN-6G)*, 14–17 June 2022, Belfast, Northern Ireland, UK. [[arXiv](https://arxiv.org/abs/2204.13177)] [[ResearchGate](http://www.researchgate.net/publication/359985348)] [[Xplore](https://ieeexplore.ieee.org/document/9842823)]

**[C284]** Omid Abbasi and Halim Yanikomeroglu, “A cell-free scheme for UAV base stations with

HAPS-assisted backhauling in terahertz band”, *IEEE International Conference on Communications (ICC 2022)*, 16–20 May 2022, Seoul, Korea. [[Xplore](https://ieeexplore.ieee.org/document/9838511)]

**[C283]** Maximiliano Rivera, Mohammad Chegini, Wael Jaafar, Safwan Alfattani, and Halim Yanikomeroglu, “Optimization of quantized phase shifts for reconfigurable smart surfaces assisted communications”, *IEEE Consumer Communications & Networking Conference (CCNC) 2022*, 8–11 January 2022, Virtual Event (Las Vegas, NV, USA). [[arXiv](http://arxiv.org/abs/2111.10319)] [[ResearchGate](https://www.researchgate.net/publication/356428365)] [[Xplore](https://ieeexplore.ieee.org/document/9700508)]

**2021** (47 IEEE journal papers + 20 conference papers)

**[J213]** Mohammad Hossein Bahonar, Mohammad Javad Omidi, and Halim Yanikomeroglu, “Low-complexity resource allocation for dense cellular vehicle-to-everything (C-V2X) communications”, *IEEE Open Journal of the Communications Society*, vol. 2, pp. 2695-2713, 2021. [[arXiv](https://arxiv.org/abs/2112.10499)] [[ResearchGate](https://www.researchgate.net/publication/356997726)] [[Xplore](https://ieeexplore.ieee.org/document/9650522)]

**[J212]** Mohsen Tajallifar, Ahmad R. Sharafat, and Halim Yanikomeroglu, “QoS-aware hybrid beamforming with minimal power in mmWave massive MIMO systems”, *IEEE Access*, vol. 9, pp. 164668-164680, 2021. [[Xplore](https://ieeexplore.ieee.org/document/9648164)]

**[J211]** Nizar Masmoudi, Wael Jaafar, Safa Cherif, Jihene Ben Abderrazak, and Halim Yanikomeroglu, “UAV-based crowd surveillance in post COVID-19 era”, *IEEE Access*, vol. 9, pp. 162276-162290, 2021. [[arXiv](https://arxiv.org/abs/2111.14176)] [[Xplore](https://ieeexplore.ieee.org/document/9641812)]

**[J210]** Zhaleh Sadreddini, Erkan Guler, Mohsen Khalily, and Halim Yanikomeroglu, “MRIRS: Mobile ad hoc routing assisted with intelligent reflecting surfaces”, *IEEE Transactions on Cognitive Communications and Networking*, vol. 7, no. 4, pp. 1333-1346, December 2021. [[ResearchGate](https://www.researchgate.net/publication/351921751)] [[Xplore](https://ieeexplore.ieee.org/document/9442822)]

**[J209]** Ahmed Ibrahim, Ebrahim Bedeer, and Halim Yanikomeroglu, “A novel low complexity faster-than-Nyquist (FTN) signaling detector for ultra high-order QAM”, *IEEE Open Journal of the Communications Society*, vol. 2, pp. 2566-2580, 2021. [[arXiv](https://arxiv.org/abs/2107.00805)] [[ResearchGate](https://www.researchgate.net/publication/350055275)] [[Xplore](https://ieeexplore.ieee.org/document/9610117)]

**[J208]** Oussama Ghdiri, Wael Jaafar, Safwan Alfattani, Jihene Ben Abderrazak, and Halim Yanikomeroglu, “Offline and online UAV-enabled data collection in time-constrained IoT networks”, *IEEE Transactions on Green Communications and Networking*, vol. 5, no. 4, pp. 1918-1933, December 2021. [[Xplore](https://ieeexplore.ieee.org/document/9513250)]

**[J207]** Michel Kulhandjian, Gunes Karabulut Kurt, Hovannes Kulhandjian, Halim Yanikomeroglu, and Claude D’Amours, “NOMA computation over multi-access channels for multimodal sensing”, *IEEE Wireless Communications Letters*, vol. 10, no. 11, pp. 2577-2581, November 2021. [[arXiv](https://arxiv.org/abs/2201.00203)] [[Xplore](https://ieeexplore.ieee.org/document/9523513)]

**[J206]** Hichem Semira, Ferdi Kara, Hakan Kaya, and Halim Yanikomeroglu, “Multi-user joint maximum-likelihood detection in uplink IoT NOMA networks: Removing the error floor”, *IEEE Wireless Communications Letters*, vol. 10, no. 11, pp. 2459-2463, November 2021. [[arXiv](https://arxiv.org/abs/2108.05881)] [[Xplore](https://ieeexplore.ieee.org/document/9509752)]

**[J205]** Aizaz U. Chaudhry and Halim Yanikomeroglu, “Free space optics for next-generation satellite networks”, *IEEE Consumer Electronics Magazine*, vol. 10, no. 6, pp. 21-31, 01 November 2021. [[arXiv](https://arxiv.org/abs/2010.03098)] [[ResearchGate](https://www.researchgate.net/publication/344504634)] [[Xplore](https://ieeexplore.ieee.org/document/9219130)]

**[J204]** Ferdi Kara, Hakan Kaya, and Halim Yanikomeroglu, “A lightweight machine learning assisted power optimization for minimum error in NOMA-CRS over Nakagami-m channels”, *IEEE Transactions on Vehicular Technology*, vol. 70, no. 10, pp. 11067-11072, October 2021. [[arXiv](https://arxiv.org/abs/2108.12591)] [[Xplore](https://ieeexplore.ieee.org/document/9527075)]

**[J203]** Nesrine Cherif, Wael Jaafar, Halim Yanikomeroglu, and Abbas Yongacoglu, “3D Aerial highway: The key enabler of the retail industry transformation”, *IEEE Communications Magazine*, vol. 25, no. 9, pp. 2790-2794, September 2021. [[arXiv](https://arxiv.org/abs/2009.09477)] [[ResearchGate](https://www.researchgate.net/publication/344329605)] [[Xplore](https://ieeexplore.ieee.org/document/9566514)]

**[J202]** Caner Goztepe, Saliha Büyükçorak, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Localization threats in next-generation wireless networks”, *IEEE Communications Magazine*, vol. 59, no. 9, pp. 65-71, September 2021. [[arXiv](https://arxiv.org/abs/2106.04468)] [[ResearchGate](https://www.researchgate.net/publication/352244287)] [[Xplore](https://ieeexplore.ieee.org/document/9566485)]

**[J201]** Md Sahabul Alam, Bassant Selim, Imtiaz Ahmed, Georges Kaddoum, and Halim Yanikomeroglu, “Bursty impulsive noise mitigation in NOMA: A MAP receiver-based approach”, *IEEE Communications Letters*, vol. 25, no. 9, pp. 2790-2794, September 2021. [[ResearchGate](https://www.researchgate.net/publication/352475918)] [[Xplore](https://ieeexplore.ieee.org/document/9456927)]

**[J200]** Yucel Aydin, Gunes Karabulut Kurt, Enver Ozdemir, and Halim Yanikomeroglu, “Group handover for drone base stations”, *IEEE Internet of Things Journal*, vol. 8, no. 18, pp. 13876-13887, 15 September 2021. [[arXiv](https://arxiv.org/abs/2012.09221)] [[ResearchGate](https://www.researchgate.net/publication/347381751)] [[Xplore](https://ieeexplore.ieee.org/document/9383780)]

**[J199]** Safwan Alfattani, Wael Jaafar, Yassine Hmamouche, Halim Yanikomeroglu, and Abbas Yongacoglu, “Link budget analysis for reconfigurable smart surfaces in aerial platforms”, *IEEE Open Journal of the Communications Society*, vol. 2, pp. 1980-1995, 2021. [[TechRxiv](https://www.techrxiv.org/articles/preprint/Link_Budget_Analysis_for_Reconfigurable_Smart_Surfaces_in_Aerial_Platforms/12885044)] [[arXiv](https://arxiv.org/abs/2008.12334)] [[ResearchGate](https://www.researchgate.net/publication/350527782)] [[Xplore](https://ieeexplore.ieee.org/document/9518388)]

**[J198]** Ozan Alp Topal, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Securing the inter-spacecraft links: Physical layer key generation from Doppler frequency shift”, *IEEE Journal of Radio Frequency Identification*, vol. 5, no. 3, pp. 232-243, September 2021. [[arXiv](https://arxiv.org/abs/2008.13396)] [[ResearchGate](https://www.researchgate.net/publication/351308551)] [[Xplore](https://ieeexplore.ieee.org/document/9424143)]

**[J197]** Abdulla Mahmoud, Sami Muhaidat, Paschalis Sofotasios, Ibrahim Abualhaol, Octavia A. Dobre, and Halim Yanikomeroglu, “Intelligent reflecting surfaces assisted UAV communications for IoT networks: Performance analysis”, *IEEE Transactions on Green Communications and Networking*, vol. 5, no. 3, pp. 1029-1040, September 2021. [[ResearchGate](https://www.researchgate.net/publication/350409016)] [[Xplore](https://ieeexplore.ieee.org/document/9386233)]

**[J196]** Rawan Alkurd, Ibrahim Abualhaol, and Halim Yanikomeroglu, “Preserving user privacy in personalized networks”, *IEEE Networking Letters*, vol. 3, no. 3, pp. 124-128, September 2021. [[Xplore](https://ieeexplore.ieee.org/document/9474505)]

**[J195]** Gunes Karabulut Kurt and Halim Yanikomeroglu, “Communication, computing, caching, and sensing for next-generation aerial delivery networks: Using a high-altitude platform station as an enabling technology”, *IEEE Vehicular Technology Magazine*, vol. 16, no. 3, pp. 108-117, September 2021. [[arXiv](https://arxiv.org/abs/2011.13224)] [[ResearchGate](https://www.researchgate.net/publication/346475467)] [[Xplore](https://ieeexplore.ieee.org/document/9462712)]

**[J194]** Tasneem Darwish, Gunes Karabulut Kurt, Halim Yanikomeroglu, Gamini Senarath, and Peiying Zhu, “A vision of self-evolving network management for future intelligent vertical HetNet”, *IEEE Wireless Communications Magazine*, vol. 28, no. 4, pp. 96-105, August 2021. [[arXiv](https://arxiv.org/abs/2009.02771)] [[ResearchGate](https://www.researchgate.net/publication/344159829)] [[Xplore](https://ieeexplore.ieee.org/document/9535454)]

**[J193]** Amir Mehrabian, Maryam Sabbaghian, and Halim Yanikomeroglu, “Spectrum sensing for symmetric α-stable noise model with convolutional neural networks”, *IEEE Transactions on Communications*, vol. 69, no. 8, pp. 5121-5135, August 2021. [[ResearchGate](https://www.researchgate.net/publication/350666063)] [[Xplore](https://ieeexplore.ieee.org/document/9395335)]

**[J192]** Ahmed Ibrahim, Ebrahim Bedeer, and Halim Yanikomeroglu, “A novel low complexity faster-than-Nyquist signaling detector based on the primal-dual predictor-corrector interior point method”, *IEEE Communications Letters*, vol. 25, no. 7, pp. 2370-2374, July 2021. [[ResearchGate](https://www.researchgate.net/publication/350055203)] [[Xplore](https://ieeexplore.ieee.org/document/9398944)]

**[J191]** Wael Jaafar and Halim Yanikomeroglu, “Dynamics of laser-charged UAVs: A battery perspective”, *IEEE Internet of Things Journal*, vol. 8, no. 13, pp. 10573-10582, July 1, 2021. [[arXiv](https://arxiv.org/abs/2008.13316)] [[ResearchGate](https://www.researchgate.net/publication/333160133)] [[Xplore](https://ieeexplore.ieee.org/document/9310251)]

**[J190]** Yassine Hmamouche, Mustapha Benjillali, Samir Saoudi, Halim Yanikomeroglu, and Marco Di Renzo, “New trends in Stochastic geometry for wireless networks: A tutorial and survey”, *Proceedings of the IEEE*, vol. 107, no. 7, pp. 1200-1252, July 2021. [[ResearchGate](https://www.researchgate.net/publication/349698737)] [[Xplore](https://ieeexplore.ieee.org/document/9378781)]

**[J189]** Atefeh Rezaei, Paeiz Azmi, Nader Mokari Yamchi, Mohammad Reza Javan, and Halim Yanikomeroglu, “Robust resource allocation for cooperative MISO-NOMA-based heterogeneous networks”, *IEEE Transactions on Communications*, vol. 69, no. 6, pp. 3864-3878, June 2021. [[ResearchGate](https://www.researchgate.net/publication/349740777)] [[Xplore](https://ieeexplore.ieee.org/document/9367172)]

**[J188]** Mehmet Cagri Ilter, Risto Wichman, Jyri Hamalainen, Halim Yanikomeroglu, and Hong-Chuan Yang, “Data-oriented view for convolutional coding with adaptive irregular constellations”, *IEEE Communications Letters*, vol. 25, no. 6, pp. 1771-1775, June 2021. [[ResearchGate](https://www.researchgate.net/publication/349229535)] [[Xplore](https://ieeexplore.ieee.org/document/9352771)]

**[J187]** Haitham S. Khallaf, Murat Uysal, Kazutoshi Kato, Ehab Mahmoud Mohamed, Sadiq M. Sait, and Halim Yanikomeroglu, “Composite fading model for aerial MIMO FSO links in the presence of atmospheric turbulence and pointing errors”, *IEEE Wireless Communications Letters*, vol. 10, no. 6, pp. 1295-1299, June 2021. [[ResearchGate](https://www.researchgate.net/publication/349962199)] [[Xplore](https://ieeexplore.ieee.org/document/9373635)]

**[J186]** Aizaz U. Chaudhry and Halim Yanikomeroglu, “Laser inter-satellite links in a Starlink constellation: A classification and analysis”, *IEEE Vehicular Technology Magazine*, vol. 16, no. 2, pp. 48-56, June 2021. [[arXiv](https://arxiv.org/abs/2103.00056)] [[ResearchGate](https://www.researchgate.net/publication/349641367)] [[Xplore](https://ieeexplore.ieee.org/document/9393372)]

**[J185]** Ahmet Burak Ozyurt, Mehmet Basaran, Mine Ardanuc, Lutfiye Durak-Ata, and Halim Yanikomeroglu, “Intracell frequency band exiling for green wireless networks: Implementation, performance metrics, and use cases”, *IEEE Vehicular Technology Magazine*, vol. 16, no. 2, pp. 31-39, June 2021. [[ResearchGate](https://www.researchgate.net/publication/349823088)] [[Xplore](https://ieeexplore.ieee.org/document/9369980)]

**[J184]** Gunes Karabulut Kurt, Mohammad G. Khoshkholgh, Safwan Alfattani, Ahmed Ibrahim, Tasneem S. J. Darwish, Md Sahabul Alam, Halim Yanikomeroglu, and Abbas Yongacoglu, “A vision and framework for the high altitude platform station (HAPS) networks of the future”, *IEEE Communications Surveys and Tutorials*, vol. 23, no. 2, pp. 729-779, Secondquarter 2021. [[arXiv](https://arxiv.org/abs/2007.15088)] [[ResearchGate](https://www.researchgate.net/publication/343333840)] [[Xplore](https://ieeexplore.ieee.org/document/9380673)]

**[J183]** Medhat Elsayed, Melike Erol-Kantarci, and Halim Yanikomeroglu, “Transfer reinforcement learning for 5G-NR mm-wave networks”, *IEEE Transactions on Wireless Communications*, vol. 20, no. 5, pp. 2838-2849, May 2021. [[arXiv](https://arxiv.org/abs/2012.04840)] [[ResearchGate](https://www.researchgate.net/publication/344227473)] [[Xplore](https://ieeexplore.ieee.org/document/9303466)]

**[J182]** Ahmet Emir, Ferdi Kara, Hakan Kaya, and Halim Yanikomeroglu, “DeepMuD: Multi-user detection for uplink grant-free NOMA IoT networks via deep learning”, *IEEE Wireless Communications Letters*, vol. 10, no. 5, pp. 1133-1137, May 2021. [[arXiv](https://arxiv.org/abs/2102.09196)] [[ResearchGate](https://www.researchgate.net/publication/349450801)] [[Xplore](https://ieeexplore.ieee.org/document/9359664)]

**[J181]** Zhaleh Sadreddini and Halim Yanikomeroglu, “A novel centralized cloud-based mobile data rollover management”, *IEEE Wireless Communications Magazine*, vol. 28, no. 2, pp. 166-171, April 2021. [[ResearchGate](https://www.researchgate.net/publication/350202124)] [[Xplore](https://ieeexplore.ieee.org/document/9382019)]

**[J180]** Cihan Emre Kement, Bulent Tavli, Hakan Gultekin, and Halim Yanikomeroglu, “Holistic privacy for electricity, water, and natural gas metering in next generation smart homes”, *IEEE Communications Magazine*, vol. 59, no. 3, pp. 24-29, March 2021. [[arXiv](https://arxiv.org/abs/2004.13363)] [[ResearchGate](https://www.researchgate.net/publication/340952876)] [[Xplore](https://ieeexplore.ieee.org/document/9422335)]

**[J179]** Ahmet Emir, Ferdi Kara, Hakan Kaya, and Halim Yanikomeroglu, “Deep learning empowered semi-blind joint detection in cooperative NOMA”, *IEEE Access*, vol. 9, pp. 61565-61576, 2021. [[ResearchGate](https://www.researchgate.net/publication/351031776)] [[Xplore](https://ieeexplore.ieee.org/document/9409081)]

**[J178]** Zhitong Xing, Kaiming Liu, Aditya S. Rajasekaran, Halim Yanikomeroglu, and Yuanan Liu, “A hybrid companding and clipping scheme for PAPR reduction in OFDM systems”, *IEEE Access*, vol. 9, pp. 61832-61852, 2021. [[ResearchGate](https://www.researchgate.net/publication/351004402)] [[Xplore](https://ieeexplore.ieee.org/document/9406788)]

**[J177]** Zhaleh Sadreddini, Ilknur Donmez, and Halim Yanikomeroglu, “Cancel-for-any-reason insurance recommendation using customer transaction-based clustering”, *IEEE Access*, vol. 9, pp. 39363-39374, 2021. [[ResearchGate](https://www.researchgate.net/publication/349930829)] [[Xplore](https://ieeexplore.ieee.org/document/9373358)]

**[J176]** Nesrine Cherif, Mohamed Alzenad, Halim Yanikomeroglu, and Abbas Yongacoglu, “Downlink coverage and rate analysis of an aerial user in vertical heterogeneous networks (VHetNets)”, *IEEE Transactions on Wireless Communications*, vol. 20, no. 3, pp. 1501-1516, March 2021. [[arXiv](https://arxiv.org/abs/1905.11934)] [[ResearchGate](https://www.researchgate.net/publication/329197079)] [[Xplore](https://ieeexplore.ieee.org/document/9250029)]

**[J175]** Mohammad G. Khoshkholgh and Halim Yanikomeroglu, “Faded-experience trust region policy optimization for model-free power allocation in interference channel”, *IEEE Wireless Communications Letters*, vol. 10, no. 3, pp. 659-663, March 2021. [[arXiv](https://arxiv.org/abs/2008.01705)] [[ResearchGate](https://www.researchgate.net/publication/347639386)] [[Xplore](https://ieeexplore.ieee.org/document/9295396)]

**[J174]** Mohammad G. Khoshkholgh and Halim Yanikomeroglu, “Learning power control from a fixed batch of data”, *IEEE Wireless Communications Letters*, vol. 10, no. 3, pp. 512-516, March 2021. [[arXiv](https://arxiv.org/abs/2008.02669)] [[ResearchGate](https://www.researchgate.net/publication/343524015)] [[Xplore](https://ieeexplore.ieee.org/document/9249408)]

**[J173]** Fatima Ezzahra Airod, Houda Chafnaji, and Halim Yanikomeroglu, “HARQ in full-duplex relay-assisted transmissions for URLLC”, *IEEE Open Journal of the Communications Society*, vol. 2, pp. 409-422, 2021. [[arXiv](https://arxiv.org/abs/2010.08455)] [[ResearchGate](https://www.researchgate.net/publication/348906263)] [[Xplore](https://ieeexplore.ieee.org/document/9340256)]

**[J172]** Eylem Erdogan, Ibrahim Altunbas, Gunes Karabulut Kurt, Michel Bellemare, Guillaume Lamontagne, and Halim Yanikomeroglu, “Site diversity in downlink optical satellite networks through ground station selection”, *IEEE Access*, vol. 9, pp. 31179-31190, 2021. [[arXiv](https://arxiv.org/abs/2010.02176)] [[ResearchGate](https://www.researchgate.net/publication/344486354)] [[Xplore](https://ieeexplore.ieee.org/document/9354784)]

**[J171]** Qiqi Ren, Jian Chen, Omid Abbasi, Gunes Karabulut Kurt, Halim Yanikomeroglu, and F. Richard Yu, “An application-driven non-orthogonal multiple access enabled computation offloading scheme”, *IEEE Internet of Things Journal*, vol. 8, no. 3, pp. 1453-1466, February 1, 2021. [[arXiv](https://arxiv.org/abs/2008.05510)] [[ResearchGate](https://www.researchgate.net/publication/343564051)] [[Xplore](https://ieeexplore.ieee.org/document/9163164)]

**[J170]** Md Sahabul Alam, Gunes Karabulut Kurt, Halim Yanikomeroglu, Peiying Zhu, and Ngoc Dung Dao, “High altitude platform station based super macro base station constellations”, *IEEE Communications Magazine*, vol. 59, no. 1, pp. 103-109, January 2021. [[arXiv](https://arxiv.org/abs/2007.08747)] [[ResearchGate](https://www.researchgate.net/publication/343063090)] [[Xplore](https://ieeexplore.ieee.org/document/9356529)]

**[J169]** Safwan Alfattani, Wael Jaafar, Yassine Hmamouche, Halim Yanikomeroglu, Abbas Yongacoglu, Ngoc Dung Dao, and Peiying Zhu, “Aerial platforms with reconfigurable smart surfaces for 5G and beyond”, *IEEE Communications Magazine*, vol. 59, no. 1, pp. 96-102, January 2021. [[arXiv](https://arxiv.org/abs/2006.09328)] [[ResearchGate](https://www.researchgate.net/publication/342134547)] [[Xplore](https://ieeexplore.ieee.org/document/9356531)]

**[J168]** Monirosharieh Vameghestahbanati, Ian D. Marsland, Ramy H. Gohary, and Halim Yanikomeroglu, “Hypercube-based SNR-adaptive multidimensional constellation design for uplink SCMA systems”, *IEEE Transactions on Communications*, vol. 69, no. 1, pp. 121-132, January 2021. [[ResearchGate](https://www.researchgate.net/publication/344619251)] [[Xplore](https://ieeexplore.ieee.org/document/9226439)]

**[J167]** Eylem Erdogan, Ibrahim Altunbas, Nihat Kabaoglu, and Halim Yanikomeroglu, “A cognitive radio enabled RF/FSO communication model for aerial relay networks: Possible configurations and opportunities”, *IEEE Open Journal of Vehicular Technology*, vol. 2, pp. 45-53, 2021. [[TechRxiv](https://doi.org/10.36227/techrxiv.13252238.v1)] [[arXiv](https://arxiv.org/abs/2012.00092)] [[ResearchGate](https://www.researchgate.net/publication/346005186)] [[Xplore](https://ieeexplore.ieee.org/document/9296829)]

**[C282]** Qiqi Ren, Omid Abbasi, Gunes Karabulut Kurt, Halim Yanikomeroglu, and Jian Chen, “High altitude platform station (HAPS) assisted computing for intelligent transportation systems”, *IEEE Global Communications Conference (Globecom) 2021*, 7–11 December 2021, Madrid, Spain. [[Xplore](https://ieeexplore.ieee.org/document/9685074)]

**[C281]** Jintao Liang, Aizaz U. Chaudhry, and Halim Yanikomeroglu, “Phasing parameter analysis for satellite collision avoidance in Starlink and Kuiper constellations”, *IEEE 5G World Forum 2021*, 13–15 October 2021, Virtual Event (Montreal, Canada). [[arXiv](https://arxiv.org/abs/2109.13994)] [[ResearchGate](https://www.researchgate.net/publication/354903123)] [[Xplore](https://ieeexplore.ieee.org/document/9604973)]

**[C280]** Nadir Adam, Cristiano Tapparello, Wendi Heinzelman, and Halim Yanikomeroglu, “Utilizing ground nodes with multi-hop capabilities to extend the range of UAV-BSs”, *IEEE 5G World Forum 2021*, 13–15 October 2021, Virtual Event (Montreal, Canada). [[ResearchGate](https://www.researchgate.net/publication/354872656)] [[Xplore](https://ieeexplore.ieee.org/document/9604962)]

**[C279]** Yucel Aydin, Gunes Karabulut Kurt, Enver Ozdemir, and Halim Yanikomeroglu, “Group authentication for drone swarms”, *IEEE International Conference on Wireless for Space and Extreme Environments (WiSEE 2021)*, 12–14 October 2021, Virtual Event (Cleveland, Ohio, USA). [[arXiv](https://arxiv.org/abs/2108.11445)] [[ResearchGate](https://www.researchgate.net/publication/356446793)] [[Xplore](https://ieeexplore.ieee.org/abstract/document/9613831)]

**[C278]** Musa Otaru, Abdulkareem Adinoyi, Mohammed Ajiya, Mohammed Aljlayl and Halim Yanikomeroglu, “Modified ARQ-based cooperative relaying scheme for a delay tolerant network”, *International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME 2021)*, 07–08 October 2021, Mauritius. [[ResearchGate](https://www.researchgate.net/publication/354209625)] [[Xplore](https://ieeexplore.ieee.org/document/9591002)]

**[C277]** Omar Maraqa, Aditya S. Rajasekaran, Hamza U. Sokun, Saad Al-Ahmadi, Halim Yanikomeroglu, and Sadiq M. Sait, “Energy-efficient coverage enhancement of indoor THz-MISO systems: An FD-NOMA approach”, *IEEE* *International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2021*, 13–16 September 2021 || Virtual Conference. [[arXiv](https://arxiv.org/abs/2104.05391)] [[ResearchGate](https://www.researchgate.net/publication/350834392)] [[Xplore](https://ieeexplore.ieee.org/document/9569475)]

**[C276]** Emre Cerci, Adem Cicek, Enver Cavus, Ebrahim Bedeer, and Halim Yanikomeroglu, “Coded faster-than-Nyquist signaling for short packet communications”, *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2021*, 13–16 September 2021 || Virtual Conference. [[arXiv](https://arxiv.org/abs/2106.10574)] [[ResearchGate](https://www.researchgate.net/publication/352519031)] [[Xplore](https://ieeexplore.ieee.org/document/9569719)]

**[C275]** Aizaz U. Chaudhry and Halim Yanikomeroglu, “Optical wireless satellite networks versus optical fiber terrestrial networks: The latency perspective”, Invited Paper, *Biennial Symposium on Communications (BSC) 2021*, 28–30 June 2021, Saskatoon, Saskatchewan, Canada || Virtual. [[arXiv](https://arxiv.org/abs/2106.07737)] [[ResearchGate](https://www.researchgate.net/publication/352383984)]

**[C274]** Rawan Alkurd, Ibrahim Abualhaol, and Halim Yanikomeroglu, “User satisfaction prediction framework for personalized wireless networks: A DNN approach”, *IEEE International Conference on Communications Workshops (ICCW) 2021*, 14–18 June 2021, Montreal, Quebec, Canada || Virtual Conference. [[Xplore](https://ieeexplore.ieee.org/document/9473754)]

**[C273]** Mohammed Y. Abdelsadek, Halim Yanikomeroglu, and Gunes Karabulut Kurt, “Future ultra-dense LEO satellite networks: A cell-free massive MIMO approach”, *IEEE International Conference on Communications Workshops (ICCW) 2021*, 14–18 June 2021, Montreal, Quebec, Canada || Virtual Conference. [[arXiv](https://arxiv.org/abs/2106.09837)] [[ResearchGate](https://www.researchgate.net/publication/352558922)] [[Xplore](https://ieeexplore.ieee.org/document/9473753)]

### **[C272]** Nesrine Cherif, Wael Jaafar, Halim Yanikomeroglu, and Abbas Yongacoglu, “Disconnectivity-aware energy-efficient cargo-UAV trajectory planning with minimum handoffs”, *IEEE International Conference on Communications (ICC) 2021*, 14–18 June 2021, Montreal, Quebec, Canada || Virtual Conference. [[arXiv](https://arxiv.org/abs/2106.14276)] [[ResearchGate](https://www.researchgate.net/publication/352780875)] [[Xplore](https://ieeexplore.ieee.org/document/9500982)]

### **[C271]** Mohammad G. Khoshkholgh and Halim Yanikomeroglu, “RSS-based UAV-BS 3-D mobility management via policy gradient deep reinforcement learning”, *IEEE International Conference on Communications (ICC) 2021*, 14–18 June 2021, Montreal, Quebec, Canada || Virtual Conference. [[arXiv](https://arxiv.org/abs/2103.08034)] [[ResearchGate](https://www.researchgate.net/publication/350087693)] [[Xplore](https://ieeexplore.ieee.org/document/9500827)]

**[C270]** Kursat Tekbıyık, Gunes Karabulut Kurt, Chongwen Huang, Ali Rıza Ekti, Halim Yanikomeroglu, “Channel estimation for full-duplex RIS-assisted HAPS backhauling with graph attention networks”, *IEEE International Conference on Communications (ICC) 2021*, 14–18 June 2021, Montreal, Quebec, Canada || Virtual Conference. [[arXiv](https://arxiv.org/abs/2010.12004)] [[ResearchGate](https://www.researchgate.net/publication/344878008_Channel_Estimation_for_Full-Duplex_RIS-assisted_HAPS_Backhauling_with_Graph_Attention_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/9500697)]

**[C269]** Islam Abu Mahady, Ebrahim Bedeer, Salama Ikki, and Halim Yanikomeroglu, “NOMA spectral efficiency maximization with improper Gaussian signaling and SIC imperfection”, *IEEE International Conference on Communications (ICC) 2021*, 14–18 June 2021, Montreal, Quebec, Canada || Virtual Conference. [[Xplore](https://ieeexplore.ieee.org/document/9500779)]

**[C268]** Mohammad G. Khoshkholgh and Halim Yanikomeroglu, “Power control in spectrum sharing systems with almost-zero inter-system signaling overhead”, *IEEE International Conference on Communications (ICC) 2021*, 14–18 June 2021, Montreal, Quebec, Canada || Virtual Conference. [[arXiv](https://arxiv.org/abs/2103.08036)] [[ResearchGate](https://www.researchgate.net/publication/350087474)] [[Xplore](https://ieeexplore.ieee.org/document/9501005)]

**[C267]** Aybuke Cengiz, Semiha Tedik Basaran, Berna Ozbek, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Approximation of correlation matrix for high altitude platform stations”, *The 29th IEEE Conference on Signal Processing and Communications Applications (SIU 2021)*, 9–11 June 2021 || Virtual Conference. [[Xplore](https://ieeexplore.ieee.org/document/9477792)]

**[C266]** Olfa Ben Yahia, Eylem Erdogan, Gunes Karabulut Kurt, Ibrahim Altunbas, and Halim Yanikomeroglu, “Physical layer security framework for optical non-terrestrial networks”, Invited Paper, *28th International Conference on Telecommunications (ICT 2021)*, 1-3 June 2021 || Virtual Conference. [[arXiv](https://arxiv.org/abs/2106.08197)] [[ResearchGate](https://www.researchgate.net/publication/352410750)] [[Xplore](https://ieeexplore.ieee.org/document/9511459)]

**[C265]** Inci Umakoglu, Mustafa Namdar, Arif Basgumus, Ferdi Kara, Hakan Kaya, and Halim Yanikomeroglu, “BER performance comparison of AF and DF assisted relay selection schemes in cooperative NOMA systems”, *IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom) 2021*, 24–28 May 2021 || Virtual Conference. [[Xplore](https://ieeexplore.ieee.org/document/9527771)]

**[C264]** Omid Abbasi and Halim Yanikomeroglu, “Rate-splitting and NOMA-enabled uplink user cooperation”, *IEEE Wireless Communications and Networking Conference Workshops (WCNCW) 2021*, 29 March – 01 April 2021, Nanjing, China | hybrid. [[ResearchGate](https://www.researchgate.net/publication/351418888)] [[Xplore](https://ieeexplore.ieee.org/document/9419994)]

**[C263]** Nadir Adam, Cristiano Tapparello, Wendi Heinzelman, and Halim Yanikomeroglu, “Placement optimization of multiple UAV base stations”, *IEEE Wireless Communications and Networking Conference (WCNC) 2021*, 29 March – 01 April 2021, Nanjing, China | hybrid. [[ResearchGate](https://www.researchgate.net/publication/351418888)] [[Xplore](https://ieeexplore.ieee.org/document/9417488)]

**2020** (21 IEEE journal papers + 12 conference papers)

**[J166]** Wael Jaafar, Shimaa Naser, Sami Muhaidat, Paschalis C. Sofotasios, and Halim Yanikomeroglu, “On the downlink performance of RSMA-based UAV communications”, *IEEE Transactions on Vehicular Technology*, vol. 69, no. 12, pp. 16258-16263, December 2020. [[arXiv](https://arxiv.org/abs/2011.05019)] [[ResearchGate](https://www.researchgate.net/publication/345742306)] [[Xplore](https://ieeexplore.ieee.org/document/9258414)]

**[J165]** Maedeh Hojjati, Alireza Shafieinejad, and Halim Yanikomeroglu, “A blockchain-based authentication and key agreement (AKA) protocol for 5G networks”, *IEEE Access*, vol. 8, pp. 216461-216476, 2020. [[ResearchGate](https://www.researchgate.net/publication/347625901)] [[Xplore](https://ieeexplore.ieee.org/document/9276451)]

**[J164]** Aditya S. Rajasekaran, Omar Maraqa, Hamza Umit Sokun, Halim Yanikomeroglu, and Saad Al-Ahmadi, “User clustering in mmWave-NOMA systems with user decoding capability constraints”, *IEEE Access*, vol. 8, pp. 209949-209963, 2020. [[arXiv](https://arxiv.org/abs/2011.08670)] [[ResearchGate](https://www.researchgate.net/publication/345690490)] [[Xplore](https://ieeexplore.ieee.org/document/9264161)]

**[J163]** Kursat Tekbiyik, Ali Riza Ekti, Gunes Karabulut Kurt, Ali Gorcin, and Halim Yanikomeroglu, “A holistic investigation on terahertz propagation and channel modeling toward vertical heterogeneous networks”, *IEEE Communications Magazine*, vol. 58, no. 11, pp. 14-20, November 2020. [[arXiv](https://arxiv.org/abs/2005.00509)] [[ResearchGate](https://www.researchgate.net/publication/341118624)] [[Xplore](https://ieeexplore.ieee.org/document/9269928)]

**[J162]** Omar Maraqa, Aditya S. Rajasekaran, Saad Al-Ahmadi, Halim Yanikomeroglu, and Sadiq M. Sait, “A survey of rate-optimal power domain NOMA with enabling technologies of future wireless networks”, *IEEE Communications Surveys & Tutorials*, vol. 22, no. 4, pp. 2192-2235, Fourthquarter 2020. [[arXiv](https://arxiv.org/abs/1909.08011)] [[ResearchGate](https://www.researchgate.net/publication/335870252)] [[Xplore](https://ieeexplore.ieee.org/document/9154358)]

**[J161]** Wael Jaafar, Shimaa Ayman Naser, Sami Muhaidat, Paschalis C. Sofotasios, and Halim Yanikomeroglu, “Multiple access in aerial networks: From orthogonal and non-orthogonal to rate-splitting”, Invited Paper, *IEEE Open Journal of Vehicular Technology*, vol. 1, pp. 372-392, 2020. [[arXiv](https://arxiv.org/abs/2005.13122)] [[ResearchGate](https://www.researchgate.net/publication/341663297)] [[Xplore](https://ieeexplore.ieee.org/document/9234747)]

**[J160]** Elham Kalantari, Halim Yanikomeroglu, and Abbas Yongacoglu, “Wireless networks with cache-enabled and backhaul-limited aerial base stations”, *IEEE Transactions on Wireless Communications*, vol. 19, no. 11, pp. 7363-7376, November 2020. [[arXiv](https://arxiv.org/abs/2009.03746)] [[ResearchGate](https://www.researchgate.net/publication/337009884)] [[Xplore](https://ieeexplore.ieee.org/document/9151401)]

**[J159]** Omid Abbasi, Halim Yanikomeroglu, Afshin Ebrahimi, and Nader Mokari, “Trajectory design and power allocation for drone-assisted NR-V2X network with dynamic NOMA/OMA”, *IEEE Transactions on Wireless Communications*, vol. 19, no. 11, pp. 7153-7168, November 2020. [[arXiv](https://arxiv.org/abs/2007.09097)] [[ResearchGate](https://www.researchgate.net/publication/343063025)] [[Xplore](https://ieeexplore.ieee.org/document/9143491)]

**[J158]** Yucel Aydin, Enver Ozdemir, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “A flexible and lightweight group authentication scheme”, *IEEE Internet of Things Journal*, vol. 7, no. 10, pp. 10277-10287, October 2020. [[arXiv](https://arxiv.org/abs/1909.06371)] [[ResearchGate](https://www.researchgate.net/publication/335855144)] [[Xplore](https://ieeexplore.ieee.org/document/9122600)]

**[J157]** Lina Bariah, Sami Muhaidat, Paschalis Sofotasios, Sanjeev Gurugopinath, Walaa Hamouda, and Halim Yanikomeroglu, “Non-orthogonal multiple access in the presence of additive generalized Gaussian noise”, *IEEE Communications Letters*, vol. 24, no. 10, pp. 2137-2141, October 2020. [[arXiv](https://arxiv.org/abs/2005.04891)] [[ResearchGate](https://www.researchgate.net/publication/341529200)] [[Xplore](https://ieeexplore.ieee.org/document/9097184)]

**[J156]** Lina Bariah, Lina Mohjazi, Sami Muhaidat, Paschalis C. Sofotasios, Gunes Karabulut Kurt, Halim Yanikomeroglu, and Octavia A. Dobre, “A prospective look: Key enabling technologies, applications and open research topics in 6G networks”, *IEEE Access*, vol. 8, pp. 174792-174820, 2020. [[arXiv](https://arxiv.org/abs/2004.06049)] [[ResearchGate](https://www.researchgate.net/publication/340618822)] [[Xplore](https://ieeexplore.ieee.org/document/9178307)]

**[J155]** Arman Azizi, Saeedeh Parsaeefard, Mohammad Reza Javan, Nader Mokari, and Halim Yanikomeroglu, “Profit maximization in 5G+ networks with heterogeneous aerial and ground base stations”, *IEEE Transactions on Mobile Computing*, vol. 19, no. 10, pp. 2445-2460, October 2020. [[ResearchGate](https://www.researchgate.net/publication/334286850)] [[Xplore](https://ieeexplore.ieee.org/document/8756087)]

**[J154]** Cihan Tugrul Cicek, Hakan Gultekin, Bulent Tavli, and Halim Yanikomeroglu, “Backhaul-aware optimization of a UAV base station location and bandwidth allocation for profit maximization”, *IEEE Access*, vol. 8, pp. 154573-154588, 2020. [[arXiv](https://arxiv.org/abs/1810.12395)] [[ResearchGate](https://www.researchgate.net/publication/338884879)] [[Xplore](https://ieeexplore.ieee.org/document/9174722)]

**[J153]** Mohammad Reza Abedi, Mohammad Reza Javan, Nader Mokari Yamchi, and Halim Yanikomeroglu, “3D-MIMO dual communications in SCMA-based secure HetNets”, *IEEE* *Transactions on Vehicular Technology*, vol. 69, no. 8, pp. 8499-8513, August 2020. [[ResearchGate](https://www.researchgate.net/publication/341528213)] [[Xplore](https://ieeexplore.ieee.org/document/9097453)]

**[J152]** Rawan Alkurd, Ibrahim Y. Abualhaol, and Halim Yanikomeroglu, “Personalized resource allocation in wireless networks: An AI-enabled and big data-driven multi-objective optimization”, *IEEE Access*, vol. 8, pp. 144592-144609, 2020. [[ResearchGate](https://www.researchgate.net/publication/343461395)] [[Xplore](https://ieeexplore.ieee.org/document/9159116)]

**[J151]** Hossein Vaezy, Mehdi Salehi Heydar Abad, Ozgur Ercetin, Halim Yanikomeroglu, Mohammad Javad Omidi, and Mohammad Mahdi Naghsh, “Beamforming for maximal coverage in mmWave drones: A reinforcement learning approach”, *IEEE Communications Letters*, vol. 24, no. 5, pp. 1033-1037, May 2020. [[ResearchGate](https://www.researchgate.net/publication/339385880)] [[Xplore](https://ieeexplore.ieee.org/document/9001042)]

**[J150]** Amin Farajzadeh, Ozgur Ercetin, and Halim Yanikomeroglu, “Mobility-assisted over-the-air computation for backscatter sensor networks”, *IEEE Wireless Communications Letters*, vol. 9, no. 5, pp. 675-678, May 2020. [[arXiv](https://arxiv.org/abs/2001.03977)] [[ResearchGate](https://www.researchgate.net/publication/338521575)] [[Xplore](https://ieeexplore.ieee.org/document/8956046)]

**[J149]** Michel Kulhandjian, Ebrahim Bedeer, Hovannes Kulhandjian, Claude D’Amours, and Halim Yanikomeroglu, “Low-complexity detection for faster-than-Nyquist signaling based on probabilistic data association”, *IEEE Communications Letters*, vol. 24, no: 4, pp. 762-766, April 2020. [[arXiv](https://arxiv.org/abs/1912.10315)] [[ResearchGate](https://www.researchgate.net/publication/338103570)] [[Xplore](https://ieeexplore.ieee.org/document/8941122)]

**[J148]** Rawan Alkurd, Ibrahim Abualhaol, and Halim Yanikomeroglu, “Big data and AI-based framework to enable personalization in wireless networks”, *IEEE Communications Magazine*, vol. 58, no. 3, pp. 18-24, March 2020. [[ResearchGate](https://www.researchgate.net/publication/340010736)] [[Xplore](https://ieeexplore.ieee.org/document/9040257)]

**[J147]** Eylem Erdogan, Nihat Kabaoglu, Ibrahim Altunbas, and Halim Yanikomeroglu, “On the error probability of cognitive RF-FSO relay networks over Rayleigh/EW fading channels with primary-secondary interference”, *IEEE Photonics Journal*, vol. 12, no. 1, pp. 1-13, February 2020. [[ResearchGate](https://www.researchgate.net/publication/337523735)] [[Xplore](https://ieeexplore.ieee.org/document/8911487)]

**[J146]** Saeede Enayati, Hamid Saeedi, Hossein Pishro-Nik, and Halim Yanikomeroglu, “Optimal altitude selection of aerial base stations to maximize coverage and energy harvesting probabilities: A stochastic geometry analysis”, *IEEE Transactions on Vehicular Technology*, vol. 69, no. 1, pp. 1096-1100, January 2020. [[ResearchGate](https://www.researchgate.net/publication/336951572)] [[Xplore](https://ieeexplore.ieee.org/document/8888216)]

**[C262]** Nesrine Cherif, Wael Jaafar, Halim Yanikomeroglu, and Abbas Yongacoglu, “On the optimal 3D placement of a UAV base station for maximal coverage of UAV users”, *IEEE Global Communications Conference (Globecom) 2020*, 07–11 December 2020, Taipei, Taiwan. [[arXiv](https://arxiv.org/abs/2008.09262)] [[ResearchGate](https://www.researchgate.net/publication/343783417)] [[Xplore](https://ieeexplore.ieee.org/document/9322569)]

**[C261]** Oussama Ghdiri, Wael Jaafar, Safwan Alfattani, Jihene Ben Abderrazak, and Halim Yanikomeroglu, “Energy-efficient multi-UAV data collection for IoT networks with time deadlines”, *IEEE Global Communications Conference (Globecom) 2020*, 07–11 December 2020, Taipei, Taiwan. [[arXiv](https://arxiv.org/abs/2009.06838)] [[ResearchGate](https://www.researchgate.net/publication/344244152)] [[Xplore](https://ieeexplore.ieee.org/document/9322626)]

**[C260]** Halim Yanikomeroglu, “Wireless access architecture: The next 20+ years”, *ACM International Conference on Future Networks and Distributed Systems (ICFNDS)*, November 2020, Article No: 40, Pages 1, 26–27 November 2020, St. Petersburg, Russia. [[ResearchGate](https://www.researchgate.net/publication/351573131)] [[ACM](https://dl.acm.org/doi/abs/10.1145/3440749.3442647)]

**[C259]** Ozan Alp Topal, Gunes Karabulut Kurt, and Halim Yanikomeroglu, “Securing the inter-spacecraft links: Doppler frequency shift based physical layer key generation”, *The 8th Annual IEEE International Conference on Wireless for Space and Extreme Environments (WISEE 2020)*, 12–14 October 2020, Venice, Italy (virtual). [[ResearchGate](https://www.researchgate.net/publication/344013416)] [[Xplore](https://ieeexplore.ieee.org/document/9262620)]

**[C258]** Omid Abbasi, Halim Yanikomeroglu, Afshin Ebrahimi, Nader Mokari, and Mohamed Alzenad, “Dynamic NOMA/OMA for V2X networks with UAV relaying”, *IEEE 92th Vehicular Technology Conference (VTC2020-Fall) Workshops*, 04–07 October 2020, Victoria, BC, Canada (virtual). [[ResearchGate](https://www.researchgate.net/publication/349381981)] [[Xplore](https://ieeexplore.ieee.org/document/9348520)]

**[C257]** Rawan Alkurd, Ibrahim Y. Abualhaol, and Halim Yanikomeroglu, “User persona in personalized wireless networks: A big data-driven prediction framework”, *IEEE 92th Vehicular Technology Conference* (*VTC2020-Fall*)*,* 4–7 October 2020, Victoria, BC, Canada (virtual). [[ResearchGate](https://www.researchgate.net/publication/349381971)] [[Xplore](https://ieeexplore.ieee.org/document/9348836)]

**[C256]** Yassine Hmamouche, Mustapha Benjillali, Samir Saudi, and Halim Yanikomeroglu, “Uplink coverage and handoff rate with realistic power control models and blind cell search”, *2020 IEEE 31st Annual International Symposium on Personal, Indoor and Mobile Radio Communications* (*PIMRC*), 31 August – 03 September 2020, London, UK (virtual). [[HAL](https://hal-imt-atlantique.archives-ouvertes.fr/hal-02876545/)] [[ResearchGate](https://www.researchgate.net/publication/344688760)] [[Xplore](https://ieeexplore.ieee.org/document/9217209)]

**[C255]** Monirosharieh Vameghestahbanati, Ian Marsland, Ramy H. Gohary, and Halim Yanikomeroglu, “Hypercube-based multidimensional constellation design for uplink SCMA systems”, *IEEE International Conference on Communications Workshops* (*ICCW*) *2020*, 07–11 June 2020, Dublin, Ireland (virtual). [[ResearchGate](https://www.researchgate.net/publication/343118612)] [[Xplore](https://ieeexplore.ieee.org/document/9145403)]

**[C254]** Irem Bor-Yaliniz, Gamini Senarath, and Halim Yanikomeroglu, “Aerial access nodes and virtual wireless access: A look into integration strategies”, *IEEE International Conference on Communications* (*ICC*) *2020*, 07–11 June 2020, Dublin, Ireland (virtual). [[ResearchGate](https://www.researchgate.net/publication/337499125)] [[Xplore](https://ieeexplore.ieee.org/document/9149020)]

**[C253]** Elham Kalantari, Sergey Loyka, Halim Yanikomeroglu, and Abbas Yongacoglu, “Optimal location of cellular base stations via convex optimization”, *2020 IEEE International Black Sea Conference on Communications and Networking* (*BlackSeaCom*), 26–29 May 2020, Odesa, Ukraine (virtual). [[arXiv](https://arxiv.org/abs/2005.03099)] [[ResearchGate](https://www.researchgate.net/publication/341030705)] [[Xplore](https://ieeexplore.ieee.org/document/9234988)]

**[C252]** Abdulsamet Caglan, Adem Cicek, Enver Cavus, Ebrahim Bedeer, and Halim Yanikomeroglu, “Polar coded faster-than-Nyquist (FTN) signaling with symbol-by-symbol detection”, *IEEE Wireless Communications and Networking Conference* (*WCNC*) *2020*, 25–28 May 2020, Seoul, South Korea (virtual). [[arXiv](https://arxiv.org/abs/2003.00724)] [[ResearchGate](https://www.researchgate.net/publication/339617107)] [[Xplore](https://ieeexplore.ieee.org/document/9120701)]

**[C251]** Monirosharieh Vameghestahbanati, Ian D. Marsland, Ramy Gohary, Halim Yanikomeroglu, and Javad Abdoli, “How does channel coding affect the design of uplink SCMA multidimensional constellations?”, *IEEE Wireless Communications and Networking Conference* (*WCNC*) *2020*, 25–28 May 2020, Seoul, South Korea (virtual). [[ResearchGate](https://www.researchgate.net/publication/339137628)] [[Xplore](https://ieeexplore.ieee.org/document/9120782)]

**2019** (21 IEEE journal papers + 18 conference papers)

**[J145]** Mohamed Alzenad and Halim Yanikomeroglu, “Coverage and rate analysis for vertical heterogeneous networks (VHetNets)”, *IEEE Transactions on Wireless Communications*, vol. 18, no. 12, pp. 5643-5657, December 2019. [[ResearchGate](https://www.researchgate.net/publication/329197079)] [[Xplore](https://ieeexplore.ieee.org/document/8833522)]

**[J144]** Cankal Altun, Bulent Tavli, and Halim Yanikomeroglu, “Liberalization of digital twins of IoT enabled home appliances via blockchains and absolute ownership rights”, *IEEE Communications Magazine*, vol. 57, no. 12, pp. 65-71, December 2019. [[ResearchGate](https://www.researchgate.net/publication/334811806)] [[Xplore](https://ieeexplore.ieee.org/document/8930829)]

**[J143]** Aditya S. Rajasekaran, Monirosharieh Vameghestahbanati, Mohammad Farsi, Halim Yanikomeroglu, and Hamid Saeedi, “Resource allocation based PAPR analysis in uplink SCMA-OFDM systems”, *IEEE Access*, vol. 7, pp. 162803-162817, 2019. [[ResearchGate](https://www.researchgate.net/publication/331824474)] [[Xplore](https://ieeexplore.ieee.org/document/8894086)]

**[J142]** Hatem Abou-Zeid, Farhan Pervez, Abdulkareem Adinoyi, Mohammed Aljlayl, and Halim Yanikomeroglu, “Cellular V2X transmission for connected and autonomous vehicles: Standardization, applications, and enabling technologies”, *IEEE Consumer Electronics Magazine*, vol. 8, no. 6, pp. 91-98, November–December 2019. [[ResearchGate](https://www.researchgate.net/publication/332947205)] [[Xplore](https://ieeexplore.ieee.org/document/8889542)]

**[J141]** Monirosharieh Vameghestahbanati, Ian Marsland, Ramy Gohary, and Halim Yanikomeroglu, “A novel SD-based detection for generalized SCMA constellations”, *IEEE Transactions on Vehicular Technology*, vol. 68, no. 10, pp. 10278-10282, October 2019. [[ResearchGate](https://www.researchgate.net/publication/334806439)] [[Xplore](https://ieeexplore.ieee.org/document/8786244)]

**[J140]** Hossein Khoshnevis, Ian Marsland, Hamid Jafarkhani, and Halim Yanikomeroglu, “Space-time signal design for multilevel polar coding in slow fading broadcast channels”, *IEEE Transactions on Communications*, vol. 67, no. 9, pp. 5940-5952, September 2019. [[arXiv](https://arxiv.org/abs/1905.07876)] [[ResearchGate](https://www.researchgate.net/publication/333206511)] [[Xplore](https://ieeexplore.ieee.org/document/8720194)]

**[J139]** Mehmet Cagri Ilter, Hamza Umit Sokun, Halim Yanikomeroglu, Risto Wichman, and Jyri Hamalainen, “The joint impact of fading severity, irregular constellation, and non-Gaussian noise on signal space diversity-based relaying networks”, *IEEE Access*, vol. 7, pp. 116162-116171, 2019. [[ResearchGate](https://www.researchgate.net/publication/335200735)] [[Xplore](https://ieeexplore.ieee.org/document/8801841)]

**[J138]** Monirosharieh Vameghestahbanati, Ian Marsland, Ramy H. Gohary, and Halim Yanikomeroglu, “Multidimensional constellations for uplink SCMA systems – A comparative study”, *IEEE Communications Surveys & Tutorials*, vol. 21, no. 3, pp. 2169-2194, Third Quarter 2019. [[arXiv](https://arxiv.org/abs/1804.05814)] [[ResearchGate](https://www.researchgate.net/publication/324558180)] [[Xplore](https://ieeexplore.ieee.org/document/8688492)]

**[J137]** Hossein Vaezy, Mohammad Javad Omidi, Mohammad Mahdi Naghsh, and Halim Yanikomeroglu, “Energy efficient transceiver design in MIMO interference channels: The selfish, unselfish, worst-case, and robust methods”, *IEEE Transactions on Communications*, vol. 67, no. 8, pp. 5377-5389, August 2019. [[ResearchGate](https://www.researchgate.net/publication/332658740)] [[Xplore](https://ieeexplore.ieee.org/document/8695039)]

**[J136]** Sepehr Rezvani, Saeedeh Parsaeefard, Nader Mokari, Mohammad R. Javan, and Halim Yanikomeroglu, “Cooperative multi-bitrate video caching and transcoding in multicarrier NOMA-assisted heterogeneous virtualized MEC networks”, *IEEE Access*, vol. 7, pp. 93511-93536, 2019. [[arXiv](https://arxiv.org/abs/1805.07132)] [[ResearchGate](https://www.researchgate.net/publication/334385338)] [[Xplore](https://ieeexplore.ieee.org/document/8758862)]

**[J135]** Hossein Vaezy, Mohammad Javad Omidi, and Halim Yanikomeroglu, “Energy efficient precoder design in multi-user MIMO systems with imperfect channel state information”, *IEEE Wireless Communications Letters*, vol. 8, no. 3, pp. 669-672, June 2019. [[arXiv](https://arxiv.org/abs/1811.06442)] [[ResearchGate](https://www.researchgate.net/publication/328954704_Energy_Efficient_Precoder_in_Multi-User_MIMO_Systems_with_Imperfect_Channel_State_Information#fullTextFileContent)] [[Xplore](https://ieeexplore.ieee.org/document/8540930)]

**[J134]** Sergey Andreev, Vitaly Petrov, Mischa Dohler, and Halim Yanikomeroglu, “Future of ultra-dense networks beyond 5G: Harnessing heterogeneous moving cells”, *IEEE Communications Magazine*, vol. 57, no. 6, pp. 86-92, June 2019. [[arXiv](https://arxiv.org/abs/1706.05197)] [[ResearchGate](https://www.researchgate.net/publication/317660727)] [[Xplore](https://ieeexplore.ieee.org/document/8722593)]

**[J133]** Saeede Enayati, Hamid Saeedi, Hossein Pishro-Nik, and Halim Yanikomeroglu, “Moving aerial base station networks: Stochastic geometry analysis and design perspectives”, *IEEE Transactions on Wireless Communications*, vol. 18, no. 6, pp. 2977-2988, June 2019. [[ResearchGate](https://www.researchgate.net/publication/332205651)] [[Xplore](https://ieeexplore.ieee.org/document/8681266)]

**[J132]** Xiaohui Zhou, Jing Guo, Salman Durrani, and Halim Yanikomeroglu, “Underlay drone cell for temporal events: Impact of drone height and aerial channel environments”, *IEEE Internet of Things Journal*, vol. 6, no. 2, pp. 1704-1718, April 2019. [[arXiv](https://arxiv.org/abs/1809.06699)] [[ResearchGate](https://www.researchgate.net/publication/327742551_Underlay_Drone_Cell_for_Temporary_Events_Impact_of_Drone_Height_and_Aerial_Channel_Environments)] [[Xplore](https://ieeexplore.ieee.org/document/8488493)]

**[J131]** Hossein Khoshnevis, Ian Marsland, and Halim Yanikomeroglu, “Throughput-based design for polar coded-modulation”, *IEEE Transactions on Communications*, vol. 67, no. 3, pp. 1770-1782, March 2019. [[arXiv](https://arxiv.org/abs/1811.02053)] [[ResearchGate](https://www.researchgate.net/publication/328781536)] [[Xplore](https://ieeexplore.ieee.org/document/8531672)]

**[J130]** Islam Abu Mahady, Ebrahim Bedeer, Salama Ikki, and Halim Yanikomeroglu, “Sum-rate maximization of NOMA systems under imperfect successive interference cancellation”, *IEEE Communications Letters*, vol. 23, no. 3, pp. 474-477, March 2019. [[ResearchGate](https://www.researchgate.net/publication/330547058_Sum-Rate_Maximization_of_NOMA_Systems_under_Imperfect_Successive_Interference_Cancellation)] [[Xplore](https://ieeexplore.ieee.org/document/8621012)]

**[J129]** Ramy H. Gohary and Halim Yanikomeroglu, “Noncoherent MIMO signaling for block-fading channels: Approaches and challenges”, *IEEE Vehicular Technology Magazine*, vol. 14, no. 1, pp. 80-88, March 2019. [[ResearchGate](https://www.researchgate.net/publication/330151785)] [[Xplore](https://ieeexplore.ieee.org/document/8602450)]

**[J128]** Irem Bor-Yaliniz, Mohamed Salem, Gamini Senarath, and Halim Yanikomeroglu, “Is 5G ready for drones?: A look into contemporary and prospective wireless networks from a standardization perspective”, *IEEE Wireless Communications Magazine*, vol. 26, no. 1, pp. 18-27, February 2019. [[ResearchGate](https://www.researchgate.net/publication/328940624)] [[Xplore](https://ieeexplore.ieee.org/document/8641421)]

**[J127]** Eylem Erdogan, Ali Afana, Hamza Umit Sokun, Salama Ikki, Lutfiye Durak-Ata, and Halim Yanikomeroglu, “Signal space cognitive cooperation”, *IEEE Transactions on Vehicular Technology*, vol. 68, no. 2, pp. 1953-1957, February 2019. [[arXiv](https://arxiv.org/abs/1901.02934)] [[ResearchGate](https://www.researchgate.net/publication/329415580)] [[Xplore](https://ieeexplore.ieee.org/document/8567976)]

**[J126]** Irem Bor-Yaliniz, Amr El-Keyi, and Halim Yanikomeroglu, “Spatial configuration of agile wireless networks with drone-BSs and user-in-the-loop”, *IEEE Transactions on Wireless Communications*, vol. 18, no. 2, pp. 753-768, February 2019. [[arXiv](https://arxiv.org/abs/1809.05315)] [[ResearchGate](https://www.researchgate.net/publication/327687709)] [[Xplore](https://ieeexplore.ieee.org/document/8506622)]

**[J125]** Vitaly Petrov, Konstantin Mikhaylov, Dmitri Moltchanov, Sergey Andreev, Gabor Fodor, Johan Torsner, Halim Yanikomeroglu, Markku Juntti, and Yevgeni Koucheryavy, “When IoT keeps people in the loop: A path towards a new global utility”, *IEEE Communications Magazine*, vol. 57, no. 1, pp. 114-121, January 2019. [[arXiv](https://arxiv.org/abs/1703.00541)] [[ResearchGate](https://www.researchgate.net/publication/314181979_When_IoT_Keeps_People_in_the_Loop_A_Path_Towards_a_New_Global_Utility)] [[Xplore](https://ieeexplore.ieee.org/document/8558501)]

**[C250]** Safwan Alfattani, Wael Jaafar, Halim Yanikomeroglu, and Abbas Yongacoglu, “Multi-UAV data collection framework for wireless sensor networks”, *IEEE Global Communications Conference* (*Globecom*) *2019*, 09–13 December 2019, Waikoloa, Hawaii, USA. [[ResearchGate](https://www.researchgate.net/publication/336796611)] [[Xplore](https://ieeexplore.ieee.org/document/9014306)]

**[C249]** Nesrine Cherif, Mohamed Alzenad, Halim Yanikomeroglu, and Abbas Yongacoglu, “Downlink coverage analysis of an aerial user in vertical heterogeneous networks”, *IEEE Global Communications Conference* (*Globecom*) *2019*, 09–13 December 2019, Waikoloa, Hawaii, USA. [[Xplore](https://ieeexplore.ieee.org/document/9013981)]

**[C248]** Musa Usman Otaru, Mohammed Ajiya, Abdulkareem Adinoyi, Mohammed Aljlayl, and Halim Yanikomeroglu, “An ARQ-based cooperative relaying scheme for 5G IoT slice”, *IEEE Global Conference on Internet of Things* (*GCIoT*), 04–07 December 2019, Dubai, UAE. [[ResearchGate](https://www.researchgate.net/publication/336891985)]

**[C247]** Rozhina Ghanavi, Maryam Sabbaghian, and Halim Yanikomeroglu, “Q-Learning based aerial base station placement for fairness enhancement in mobile networks”, *IEEE Global Conference on Signal Processing and Information Processing* (*GlobalSIP*) *2019*, Ottawa, Ontario, Canada, 11–14 November 2019. [[ResearchGate](https://www.researchgate.net/publication/335908271)] [[Xplore](https://ieeexplore.ieee.org/document/8969198)]

**[C246]** Mohammad R. Abedi, Mohammad R. Javan, Nader Mokari, and Halim Yanikomeroglu, “Dual communications in MIMO SCMA-based secure HetNets”, *2019 IEEE 30th International Symposium on Personal, Indoor and Mobile Radio Communications* (*PIMRC*), 08–11 September 2019, Istanbul, Turkey. [[ResearchGate](https://www.researchgate.net/publication/337518104)] [[Xplore](https://ieeexplore.ieee.org/document/8904342)]

**[C245]** Recep Ozdag and Halim Yanikomeroglu, “A new meta-heuristic approach for 3D placement of multiple unmanned aerial vehicle base stations in wireless networks”, *International Conference on Data Science, Machine Learning and Statistics* (*DMS*) 2019, Van, Turkey, 26–29 June 2019. [[pdf](file:///C%3A%5CUsers%5Chalim%5CPub%5CDMS2019.pdf)] [[ResearchGate](https://www.researchgate.net/profile/Metin_Turan3/publication/336414245_Sentiment_Analysis_of_Tweets_Using_Machine_Learning_2019_Turkey_Van_pages_85-87/links/5da066e0a6fdcc8fc347436a/Sentiment-Analysis-of-Tweets-Using-Machine-Learning-2019-Turkey-Van-pages-85-87.pdf#page=67)]

**[C244]** Zakaria El-Moutaouakkil, Kamel Tourki, Samir Saoudi, and Halim Yanikomeroglu, “Optimal TAS for cross-interference mitigation in cognitive MIMO MRC systems”, *2019 15th International Wireless Communications & Mobile Computing Conference (IWCMC)*, Tangiers, Morocco, 24–28 June 2019. [[ResearchGate](https://www.researchgate.net/publication/332767082)] [[Xplore](https://ieeexplore.ieee.org/document/8766445)]

**[C243]** Monirosharieh Vameghestahbanati, Ian Marsland, Ramy H. Gohary, and Halim Yanikomeroglu, “Key performance indicators in multidimensional constellations for uplink SCMA systems”, *16th Canadian Workshop on Information Theory* (*CWIT*), 02–05 June 2019, Hamilton, Ontario, Canada. [[Xplore](https://ieeexplore.ieee.org/document/8929897)]

**[C242]** Rawan Alkurd, Ibrahim Abualhaol, and Halim Yanikomeroglu, “A synthetic user behaviour dataset design for data-driven AI-based personalized wireless networks”, *IEEE International Conference in Communications (ICC) Workshops 2019*, Shanghai, China, 20–24 May 2019. [[ResearchGate](https://www.researchgate.net/publication/331987705)] [[Xplore](https://ieeexplore.ieee.org/document/8756804)]

**[C241]** Rawan Alkurd, Ibrahim Abualhaol, and Halim Yanikomeroglu, “Dataset modeling for data-driven AI-based personalized wireless networks”, *IEEE International Conference in Communications (ICC) 2019*, Shanghai, China, 20–24 May 2019. [[ResearchGate](https://www.researchgate.net/publication/331482365)] [[Xplore](https://ieeexplore.ieee.org/document/8761211)]

**[C240]** Amin Farajzadeh, Ozgur Ercetin, and Halim Yanikomeroglu, “UAV data collection over NOMA backscatter networks: UAV altitude and trajectory optimization”, *IEEE International Conference in Communications (ICC) 2019*, Shanghai, China, 20–24 May 2019. [[ResearchGate](https://www.researchgate.net/publication/331008797)] [[Xplore](https://ieeexplore.ieee.org/document/8761125)]

**[C239]** Mohammad G. Khoshkholgh, Keivan Navaie, Halim Yanikomeroglu, Victor C.M. Leung, and Kang G. Shin, “How do non-ideal UAV antennas affect air-to-ground communications?”, *IEEE International Conference in Communications (ICC) 2019*, Shanghai, China, 20–24 May 2019. [[ResearchGate](https://www.researchgate.net/publication/331318302)] [[Xplore](https://ieeexplore.ieee.org/document/8761330)]

**[C238]** Ebrahim Bedeer, Halim Yanikomeroglu, and Mohamed Hossam Ahmed, “Low-complexity detection of M-ary PSK faster-than-Nyquist (FTN) signaling”, *IEEE Wireless Communications and Networking Conference (WCNC) Workshops 2019*, 15–18 April 2019, Marrakech, Morocco. [[arXiv](https://arxiv.org/abs/1810.05443)] [[ResearchGate](https://www.researchgate.net/publication/328233381)] [[Xplore](https://ieeexplore.ieee.org/document/8902619)]

**[C237]** Mohammad G. Khoshkholgh, Keivan Navaie, Kang G. Shin, Victor C.M. Leung, and Halim Yanikomeroglu, “Caching or no caching in dense HetNets?”, *IEEE Wireless Communications and Networking Conference (WCNC) 2019*, 15–18 April 2019, Marrakech, Morocco. [[ResearchGate](https://www.researchgate.net/publication/330776133)] [[Xplore](https://ieeexplore.ieee.org/document/8885724)]

**[C236]** Mohammad G. Khoshkholgh, Keivan Navaie, Halim Yanikomeroglu, Victor C.M. Leung, and Kang G. Shin, “Randomized caching in cooperative UAV-enabled fog-RAN”, *IEEE Wireless Communications and Networking Conference (WCNC) 2019*, 15–18 April 2019, Marrakech, Morocco. [[ResearchGate](https://www.researchgate.net/publication/331318720)] [[Xplore](https://ieeexplore.ieee.org/document/8885486)]

**[C235]** Michel Kulhandjian, Hovannes Kulhandjian, Claude D’Amours, Halim Yanikomeroglu, and Gurgen Khachatrian, “Fast decoder for overloaded uniquely decodable synchronous optical CDMA”, *IEEE Wireless Communications and Networking Conference (WCNC) 2019*, 15–18 April 2019, Marrakech, Morocco. [[arXiv](https://arxiv.org/abs/1902.09525)] [[ResearchGate](https://www.researchgate.net/publication/333555032)] [[Xplore](https://ieeexplore.ieee.org/document/8885608)]

**[C234]** Mohammad G. Khoshkholgh, Keivan Navaie, Halim Yanikomeroglu, Victor C.M. Leung, and Kang G. Shin, “Coverage performance in aerial-terrestrial HetNets”, *IEEE Vehicular Technology Conference (VTC2019-Spring)*, 28 April – 01 May 2019, Kuala Lumpur, Malaysia. [[ResearchGate](https://www.researchgate.net/publication/331318100)] [[Xplore](https://ieeexplore.ieee.org/document/8746581)]

**[C233]** Cihan Tugrul Cicek, Hakan Gultekin, Bulent Tavli, and Halim Yanikomeroglu, “UAV Base station location optimization for next generation wireless networks: Overview and future research directions”, *IEEE UVS-Oman 2019*, Muscat, Oman, 5–7 February 2019. [[arXiv](https://arxiv.org/abs/1812.11826)] [[ResearchGate](https://www.researchgate.net/publication/330036079)] [[Xplore](https://ieeexplore.ieee.org/document/8658363)]

**2018** (15 IEEE journal papers + 10 conference papers)

**[J124]** Jing Guo, Xiangyun Zhou, Salman Durrani, and Halim Yanikomeroglu, “Design of non-orthogonal multiple access enhanced backscatter communication”, *IEEE Transactions on Wireless Communications*, vol. 17, no. 10, pp. 6837-6852, October 2018. [[arXiv](https://arxiv.org/abs/1711.11193)] [[ResearchGate](https://www.researchgate.net/publication/321374411)] [[Xplore](https://ieeexplore.ieee.org/document/8439079)]

**[J123]** Xianbin Cao, Peng Yang, Mohamed Alzenad, Xing Xi, Dapeng Wu, and Halim Yanikomeroglu, “Airborne communication networks: A survey”, *IEEE Journal on Selected Areas in Communications*, vol. 36, no. 9, pp. 1907-1926, September 2018. [[ResearchGate](https://www.researchgate.net/publication/327062769)] [[Xplore](https://ieeexplore.ieee.org/document/8438489)]

**[J122]** Mehmet Cagri Ilter and Halim Yanikomeroglu, “Convolutionally coded SNR-adaptive transmission for low-latency communications”, *IEEE Transactions on Vehicular Technology*, vol. 67, no. 9, pp. 8964-8968, September 2018. [[arXiv](https://arxiv.org/abs/1901.03641)] [[ResearchGate](https://www.researchgate.net/publication/330357929)] [[Xplore](https://ieeexplore.ieee.org/document/8371634)]

**[J121]** Faraj Lagum, Irem Bor-Yaliniz, and Halim Yanikomeroglu, “Strategic densification with UAV-BSs in cellular networks”, *IEEE Wireless Communications Letters*, vol. 7, no. 3, pp. 384-387, June 2018. [[ResearchGate](https://www.researchgate.net/publication/321371957)] [[Xplore](https://ieeexplore.ieee.org/document/8128487)]

**[J120]** Irem Bor-Yaliniz, Sebastian S. Szyszkowicz, and Halim Yanikomeroglu, “Environment-aware drone-base-station placements in modern metropolitans”, *IEEE Wireless Communications Letters*, vol. 7, no. 3, pp. 372-375, June 2018. [[ResearchGate](https://www.researchgate.net/publication/321304009)] [[Xplore](https://ieeexplore.ieee.org/document/8123922)]

**[J119]** Zakaria El-Moutaouakkil, Kamel Tourki, Halim Yanikomeroglu, and Samir Saoudi, “TAS strategies for incremental cognitive MIMO relaying: New results and accurate comparison”, *IEEE Access*, vol. 6, pp. 23480-23499, 2018. [[ResearchGate](https://www.researchgate.net/publication/324761423)] [[Xplore](https://ieeexplore.ieee.org/document/8347207)]

**[J118]** Taimour Aldalgamouni, Mehmet Cagri Ilter, and Halim Yanikomeroglu, “Joint power allocation and constellation design for cognitive radio systems”, *IEEE Transactions on Vehicular Technology*, vol. 67, no. 5, pp. 4661-4665, May 2018. [[ResearchGate](https://www.researchgate.net/publication/322283521)] [[Xplore](https://ieeexplore.ieee.org/document/8247293)]

**[J117]** Meisam Mirahsan, Gamini Senarath, Hamid Farmanbar, Ngoc Dung Dao, and Halim Yanikomeroglu, “Admission control and wireless virtual networks in HetHetNets”, *IEEE Transactions on Vehicular Technology*, vol. 67, no. 5, pp. 4565-4576, May 2018. [[ResearchGate](https://www.researchgate.net/publication/322512729)] [[Xplore](https://ieeexplore.ieee.org/document/8259347)]

**[J116]** Yaser M. M. Fouad, Ramy H. Gohary, and Halim Yanikomeroglu, “Chinese remainder theorem based sequence design for resource block assignment in relay-assisted internet-of-things communications”, *IEEE Transactions on Wireless Communications*, vol. 17, no. 5, pp. 3401-3416, May 2018. [[ResearchGate](https://www.researchgate.net/publication/323669148)] [[Xplore](https://ieeexplore.ieee.org/document/8310928)]

**[J115]** Tamer Beitalmal, Sebastian S. Szyszkowicz, David Gonzalez G., and Halim Yanikomeroglu, “Sector and site switch-off regular patterns for energy saving in cellular networks”, *IEEE Transactions on Wireless Communications*, vol. 17, no. 5, pp. 2932-2945, May 2018. [[ResearchGate](https://www.researchgate.net/publication/323154306)] [[Xplore](https://ieeexplore.ieee.org/document/8291022)]

**[J114]** Rozita Rashtchi, Ramy H. Gohary, and Halim Yanikomeroglu, “Conjoint routing and resource allocation in OFDMA-based D2D wireless networks”, *IEEE Access*, vol. 6, pp. 18,868-18,882, 2018. [[ResearchGate](https://www.researchgate.net/publication/324053453)] [[Xplore](https://ieeexplore.ieee.org/document/8326694)]

**[J113]** Mohamed Alzenad, Amr El-Keyi, and Halim Yanikomeroglu, “3D placement of an unmanned aerial vehicle base station for maximum coverage of users with different QoS requirements”, *IEEE Wireless Communications Letters*, vol. 7, no. 1, pp. 38-41, February 2018. [[arXiv](https://arxiv.org/abs/1709.05235)] [[ResearchGate](https://www.researchgate.net/publication/319631727)] [[Xplore](https://ieeexplore.ieee.org/document/8038014)]

**[J112]** Mehmet Cagri Ilter, Pawel A. Dmochowski, and Halim Yanikomeroglu, “Revisiting error analysis in convolutionally coded systems: The irregular constellation case”, *IEEE Transactions on Communications*, vol. 66, no. 2, pp. 465-477, February 2018. [[ResearchGate](https://www.researchgate.net/publication/320291658)] [[Xplore](https://ieeexplore.ieee.org/document/8063432)]

**[J111]** Salime Bameri, Siamak Talebi, Ramy H. Gohary, and Halim Yanikomeroglu, “A novel self-interference cancellation scheme for channel-unaware differential space-time two-way relay networks”, *IEEE Transactions on Wireless Communications*, vol. 17, no. 2, pp. 1226-1241, February 2018. [[ResearchGate](https://www.researchgate.net/publication/321638258)] [[Xplore](https://ieeexplore.ieee.org/document/8166797)]

**[J110]** Mohamed Alzenad, Muhammad Z. Shakir, Halim Yanikomeroglu, and Mohamed-Slim Alouini, “FSO-based vertical backhaul/fronthaul framework for 5G+ wireless networks”, *IEEE Communications Magazine*, vol. 56, no. 1, pp. 218-224, January 2018. [[arXiv](https://arxiv.org/abs/1607.01472)] [[ResearchGate](https://www.researchgate.net/publication/294729297)] [[Xplore](https://ieeexplore.ieee.org/document/8255764)]

**[C232]** Mohamed Alzenad and Halim Yanikomeroglu, “Coverage and rate analysis for unmanned aerial vehicle base stations with LoS/NLoS propagation”, *IEEE Globecom 2018 Workshops*, 9–13 December 2018, Abu Dhabi, UAE. [[arXiv](https://arxiv.org/abs/1812.01722)] [[ResearchGate](https://www.researchgate.net/publication/324595044)] [[Xplore](https://ieeexplore.ieee.org/document/8644511)]

**[C231]** Halim Yanikomeroglu, “Integrated terrestrial/non-terrestrial 6G networks for ubiquitous 3D super-connectivity”, *21st ACM International Conference on Modeling, Analysis, and Simulation of Wireless and Mobile Systems (MSWIM)*, 28 October – 02 November 2018, Montreal, Quebec, Canada. [[ResearchGate](file:///C%3A%5CUsers%5Chalim%5CDownloads%5Cresearchgate.net%5Cpublication%5C328546945)] [[ACM](https://dl.acm.org/doi/abs/10.1145/3242102.3242148)]

**[C230]** Jing Guo, Xiangyun Zhou, Salman Durrani, and Halim Yanikomeroglu, “Backscatter communications with NOMA”, Invited Paper, *15th International Symposium on Wireless Communication Systems (ISWCS) 2018*, 28–31 August 2018, Lisbon, Portugal. [[ResearchGate](https://www.researchgate.net/publication/328401679)] [[Xplore](https://ieeexplore.ieee.org/document/8491248)]

**[C229]** Mehmet Cagri Ilter, Risto Wichman, Jyri Hamalainen, and Halim Yanikomeroglu, “A convolutionally encoded OSTBC system with SNR-adaptive constellations for low-latency and low-complexity communications”, *19th IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC 2018)*, 25–28 June 2018, Kalamata, Greece. [[ResearchGate](https://www.researchgate.net/publication/327263762)] [[Xplore](https://ieeexplore.ieee.org/document/8445954)]

**[C228]** Xiaohui Zhou, Jing Guo, Salman Durrani, and Halim Yanikomeroglu, “Uplink coverage performance of an underlay drone cell for temporary events”, Invited Paper, *IEEE International Conference on Communications Workshops (ICCW) 2018*, 20–24 May 2018, Kansas City, MO, USA. [[arXiv](https://arxiv.org/abs/1801.05948)] [[ResearchGate](https://www.researchgate.net/publication/322569180)] [[Xplore](https://ieeexplore.ieee.org/document/8403634)]

**[C227]** Margarita Gapeyenko, Irem Bor-Yaliniz, Sergey Andreev, Halim Yanikomeroglu, and Yevgeni Koucheryavy, “Effects of blockage in deploying mmWave drone base stations for 5G networks and beyond”, Invited Paper, *IEEE International Conference on Communications Workshops (ICCW) 2018*, 20–24 May 2018, Kansas City, MO, USA. [[ResearchGate](https://www.researchgate.net/publication/326218547)] [[Xplore](https://ieeexplore.ieee.org/document/8403671)]

**[C226]** Taimour Aldalgamouni, Mehmet Cagri Ilter, Osamah S. Badarneh, and Halim Yanikomeroglu, “Performance analysis of Fisher-Snedecor F composite fading channels”, *IEEE Middle East and North Africa Communications Conference (MENACOMM) 2018*, 18–20 April 2018, Jounieh, Lebanon. [[ResearchGate](https://www.researchgate.net/publication/325558454)] [[Xplore](https://ieeexplore.ieee.org/document/8371018)]

**[C225]** Hamza Umit Sokun, Ebrahim Bedeer, Ramy H. Gohary, and Halim Yanikomeroglu, “Fairness-oriented resource allocation for energy efficiency optimization in uplink OFDMA networks”, *IEEE Wireless Communications and Networking Conference (WCNC) 2018*, 15–18 April 2018, Barcelona, Spain. [[ResearchGate](https://www.researchgate.net/publication/323019597)] [[Xplore](https://ieeexplore.ieee.org/document/8377327)]

**[C224]** Rozhina Ghanavi, Elham Kalantari, Maryam Sabbaghian, Halim Yanikomeroglu, and Abbas Yongacoglu, “Efficient 3D aerial base station placement considering users mobility by reinforcement learning”, *IEEE Wireless Communications and Networking Conference (WCNC) 2018*, 15–18 April 2018, Barcelona, Spain. [[arXiv](https://arxiv.org/abs/1801.07472)] [[ResearchGate](https://www.researchgate.net/publication/325706064_Efficient_3D_aerial_base_station_placement_considering_users_mobility_by_reinforcement_learning)] [[Xplore](https://ieeexplore.ieee.org/document/8377340)]

**[C223]** Fatima Ezzahra Airod, Houda Chafnaji, and Halim Yanikomeroglu, “Performance analysis of low latency multiple full-duplex selective decode and forward relays”, *IEEE Wireless Communications and Networking Conference (WCNC) 2018*, 15–18 April 2018, Barcelona, Spain. [[arXiv](https://arxiv.org/abs/1802.04076)] [[ResearchGate](https://www.researchgate.net/publication/323142348)] [[Xplore](https://ieeexplore.ieee.org/document/8377217)]

**2017** (23 IEEE journal papers + 16 conference papers)

 **[J109]** Hossein Khoshnevis, Ian Marsland, and Halim Yanikomeroglu, “Design of high-SNR multidimensional constellations for orthogonal transmission in a Nakagami-m fading channel”, *IEEE Access*, vol. 5, pp 26623-26638, 2017. [[ResearchGate](https://www.researchgate.net/publication/321056805)] [[Xplore](https://ieeexplore.ieee.org/document/8104955)]

**[J108]** Monirosharieh Vameghestahbanati, Ebrahim Bedeer, Ian Marsland, Ramy H. Gohary, and Halim Yanikomeroglu, “Enabling sphere decoding for SCMA”, *IEEE Communications Letters*, vol. 21, no. 12, pp. 2750-2753, December 2017. [[arXiv](https://arxiv.org/abs/1708.08801)] [[ResearchGate](https://www.researchgate.net/publication/319350118)] [[Xplore](https://ieeexplore.ieee.org/document/8023836)]

**[J107]** Hamza Umit Sokun, Ramy H. Gohary, and Halim Yanikomeroglu, “A novel approach for QoS-aware joint user association, resource block and discrete power allocation in HetNets”, *IEEE Transactions on Wireless Communications*, vol. 16, no. 11, pp. 7603-7618, November 2017. [[ResearchGate](https://www.researchgate.net/publication/319859208)] [[Xplore](https://ieeexplore.ieee.org/document/8038863)]

**[J106]** Philip R. Balogun, Ian D. Marsland, Ramy H. Gohary, and Halim Yanikomeroglu, “Polar code design for irregular multidimensional constellations”, *IEEE Access*, vol. 5, pp. 21941-21953, 2017. [[ResearchGate](https://www.researchgate.net/publication/320461765)] [[Xplore](https://ieeexplore.ieee.org/document/8070116)]

**[J105]** Amr El-Keyi, Oktay Ureten, Halim Yanikomeroglu, and Trevor Yensen, “LTE for public safety networks: Synchronization in the presence of jamming”, Invited Paper in Special Section on Mission Critical Public-Safety Communications: Architectures, Enabling Technologies, and Future Applications, *IEEE Access*, vol. 5, pp. 20800-20813, 2017. [[ResearchGate](https://www.researchgate.net/publication/319697649)] [[Xplore](https://ieeexplore.ieee.org/document/8036181)]

**[J104]** Yaser M. M. Fouad, Ramy H. Gohary, and Halim Yanikomeroglu, “Number-theoretic sequence design for uncoordinated autonomous multiple access in relay-assisted machine-type communications”, *IEEE Transactions on Vehicular Technology*, vol. 66, no. 10, pp. 9018-9034, October 2017. [[ResearchGate](https://www.researchgate.net/publication/317043750)] [[Xplore](https://ieeexplore.ieee.org/document/7937902)]

**[J103]** Jing Guo, Salman Durrani, Xiangyun Zhou, and Halim Yanikomeroglu, “Massive machine type communication with data aggregation and resource scheduling”, *IEEE Transactions on Communications*, vol. 65, no. 9, pp. 4012-4026, September 2017. [[arXiv](https://arxiv.org/abs/1611.03183)] [[ResearchGate](https://www.researchgate.net/publication/316228440)] [[Xplore](https://ieeexplore.ieee.org/document/7937902)]

**[J102]** Ebrahim Bedeer, Mohamed Hossam Ahmed, and Halim Yanikomeroglu, “Low-complexity detection of high-order QAM faster-than-Nyquist signaling”, *IEEE Access*, vol. 5, pp. 14579-14588, 2017. [[ResearchGate](https://www.researchgate.net/publication/317741391)] [[Xplore](https://ieeexplore.ieee.org/document/7990502)]

**[J101]** Karim G. Seddik, Ramy H. Gohary, Mohammad T. Hussein, Mohammad Shaqfeh, Hussein Alnuweiri, and Halim Yanikomeroglu, “Multi-resolution multicasting over the Grassmann and Stiefel manifolds”, *IEEE Transactions on Wireless Communications*, vol. 16, no. 8, pp. 5296-5310, August 2017. [[ResearchGate](https://www.researchgate.net/publication/317248753)] [[Xplore](https://ieeexplore.ieee.org/document/7935418)]

**[J100]** Mohamed Alzenad, Amr El-Keyi, Faraj Lagum, and Halim Yanikomeroglu, “3D placement of an unmanned aerial vehicle base station (UAV-BS) for energy-efficient maximal coverage”, *IEEE Wireless Communications Letters*, vol. 6, no. 3, pp. 434-437, August 2017. [[arXiv](https://arxiv.org/abs/1705.03415)] [[ResearchGate](https://www.researchgate.net/publication/316552820)] [[Xplore](https://ieeexplore.ieee.org/document/7918510)]

**[J99]** Hamza Umit Sokun, Mehmet Cagri Ilter, Salama Ikki, and Halim Yanikomeroglu, “A spectrally efficient signal space diversity-based two-way relaying system”, *IEEE Transactions on Vehicular Technology*, vol. 66, no. 7, pp. 6215-6230, July 2017. [[ResearchGate](https://www.researchgate.net/publication/312414035)] [[Xplore](https://ieeexplore.ieee.org/document/7805302)]

**[J98]** Quoc-Nam Le-The, Tamer Beitelmal, Faraj Lagum, Sebastian S. Szyszkowicz, and Halim Yanikomeroglu, “Cell switch-off algorithms for spatially irregular base station deployments”, *IEEE Wireless Communications Letters*, vol. 6, no. 3, pp. 354-357, June 2017. [[ResearchGate](https://www.researchgate.net/publication/315971152)] [[Xplore](https://ieeexplore.ieee.org/document/7891958)]

**[J97]** Hamza Umit Sokun, Ebrahim Bedeer, Ramy H. Gohary, and Halim Yanikomeroglu, “Optimization of discrete power and resource block allocation for achieving maximum energy efficiency in OFDMA networks”, *IEEE Access*, vol. 5, pp. 8648-8658, 2017. [[ResearchGate](https://www.researchgate.net/publication/316688111)] [[Xplore](https://ieeexplore.ieee.org/document/7924379)]

**[J96]** Dmitrii Solomitckii, Margarita Gapeyenko, Sebastian S. Szyszkowicz, Sergey Andreev, Halim Yanikomeroglu, and Yevgeni Koucheryavy, “Toward massive ray-based simulations of mmWave small cells on open urban maps”, *IEEE Antennas and Wireless Propagation Letters*, vol. 16, pp. 1435-1438, 2017. [[ResearchGate](https://www.researchgate.net/publication/312435498)] [[Xplore](https://ieeexplore.ieee.org/document/7786917)]

**[J95]** Ebrahim Bedeer, Mohamed Hossam Ahmed, and Halim Yanikomeroglu, “A very low complexity successive symbol-by-symbol sequence estimator for binary faster-than-Nyquist signaling”, *IEEE Access*, vol. 5, pp. 7414-7422, 2017. [[arXiv](https://arxiv.org/abs/1612.08137)] [[ResearchGate](https://www.researchgate.net/publication/311925859)] [[Xplore](https://ieeexplore.ieee.org/document/7886296)]

**[J94]** Hamza Umit Sokun and Halim Yanikomeroglu, “On the spectral efficiency of selective decode-and-forward relaying”, *IEEE Transactions on Vehicular Technology*, vol. 66, no. 5, pp. 4500-4506, May 2017. [[ResearchGate](https://www.researchgate.net/publication/307946491)] [[Xplore](https://ieeexplore.ieee.org/document/7563361)]

**[J93]** Eylem Erdogan, Ali Afana, Salama Ikki, and Halim Yanikomeroglu, “Antenna selection in MIMO cognitive AF relaying networks with mutual interference and limited feedback”, *IEEE Communications Letters*, vol. 21, no. 5, pp. 1111-1114, May 2017. [[ResearchGate](https://www.researchgate.net/publication/312544672)] [[Xplore](https://ieeexplore.ieee.org/document/7822975)]

**[J92]** Faraj Lagum, Quoc-Nam Le-The, Tamer Beitelmal, Sebastian S. Szyszkowicz, and Halim Yanikomeroglu, “Cell switch-off for networks deployed with variable spatial regularity”, *IEEE Wireless Communications Letters*, vol. 6, no. 2, pp. 234-237, April 2017. [[ResearchGate](https://www.researchgate.net/publication/313454075)] [[Xplore](https://ieeexplore.ieee.org/document/7845656)]

**[J91]** Nima Palizban, Sebastian Szyszkowicz, and Halim Yanikomeroglu, “Automation of millimeter wave network planning for outdoor coverage in dense urban areas using wall-mounted base stations”, *IEEE Wireless Communications Letters*, vol. 6, no. 2, pp. 206-209, April 2017. [[ResearchGate](https://www.researchgate.net/publication/312956955)] [[Xplore](https://ieeexplore.ieee.org/document/7835138)]

**[J90]** Gurhan Bulu, Talha Ahmed, Ramy H. Gohary, Cenk Toker, and Halim Yanikomeroglu, “Antenna port selection in a coordinated cloud radio access network”, *IEEE Communications Letters*, vol. 21, no. 3, pp. 588-591, March 2017. [[ResearchGate](https://www.researchgate.net/publication/310396396)] [[Xplore](https://ieeexplore.ieee.org/document/7742941)]

**[J89]** Mohammad Reza Abedi, Nader Mokari, Mohammad Reza Javan, and Halim Yanikomeroglu, “Secure communication in OFDMA-based cognitive radio networks: An incentivized secondary network coexistence approach”, *IEEE Transactions on Vehicular Technology*, vol. 66, no. 2, pp. 1171-1185, February 2017. [[ResearchGate](https://www.researchgate.net/publication/301579613)] [[Xplore](https://ieeexplore.ieee.org/document/7456319)]

**[J88]** Mohammad Reza Abedi, Nader Mokari, Hamid Saeedi, and Halim Yanikomeroglu, “Robust resource allocation to enhance physical layer security in systems with full-duplex receivers: Active adversary”, *IEEE Transactions on Wireless Communications*, vol. 16, no. 2, pp. 885-899, February 2017. [[ResearchGate](https://www.researchgate.net/publication/311163416)] [[Xplore](https://ieeexplore.ieee.org/document/7762210)]

**[J87]** Jing Guo, Salman Durrani, Xiangyun Zhou, and Halim Yanikomeroglu, “Device-to-device communication underlaying a finite cellular network region”, *IEEE Transactions on Wireless Communications*, vol. 16, no. 1, pp. 332-347, January 2017. [[arXiv](https://arxiv.org/abs/1510.03162)] [[ResearchGate](https://www.researchgate.net/publication/282844008)] [[Xplore](https://ieeexplore.ieee.org/document/7728080)]

**[C222]** Jing Guo, Salman Durrani, Xiangyun Zhou, and Halim Yanikomeroglu, “Machine-type communication with random access and data aggregation: A stochastic geometry approach”, *IEEE Global Communications Conference (Globecom) 2017*, 4–8 December 2017, Singapore. [[ResearchGate](https://www.researchgate.net/publication/322511673)] [[Xplore](https://ieeexplore.ieee.org/document/8254950)]

**[C221]** Elham Kalantari, Irem Bor-Yaliniz, Abbas Yongacoglu, and Halim Yanikomeroglu, “User association and bandwidth allocation for terrestrial and aerial base stations with backhaul considerations”, Invited Paper, *IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC) 2017*, 08–13 October 2017, Montreal, Quebec, Canada. [[arXiv](https://arxiv.org/abs/1709.07356)] [[ResearchGate](https://www.researchgate.net/publication/319760121_User_Association_and_Bandwidth_Allocation_for_Terrestrial_and_Aerial_Base_Stations_with_Backhaul_Considerations)] [[Xplore](https://ieeexplore.ieee.org/document/8292783)]

**[C220]** Farhan Pervez, Abdulkareem Adinoyi, and Halim Yanikomeroglu, “Efficient resource allocation for video streaming for 5G network-to-vehicle communications”, *IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC)*, 08–13 October 2017, Montreal, Quebec, Canada. [[ResearchGate](https://www.researchgate.net/publication/323209808)] [[Xplore](https://ieeexplore.ieee.org/document/8292728)]

**[C219]** Hossein Khoshnevis, Ian Marsland, Hamid Jafarkhani, and Halim Yanikomeroglu, “Joint optimization of polar codes and STBCs”, *IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC) 2017*, 08–13 October 2017, Montreal, Quebec, Canada. [[ResearchGate](https://www.researchgate.net/publication/323209597)] [[Xplore](https://ieeexplore.ieee.org/document/8292551)]

**[C218]** Hossein Khoshnevis, Ian Marsland, and Halim Yanikomeroglu, “Polar coded multi-antenna multidimensional constellations in partially coherent channels”, *IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC) 2017*, 08–13 October 2017, Montreal, Quebec, Canada. [[ResearchGate](https://www.researchgate.net/publication/323211706)] [[Xplore](https://ieeexplore.ieee.org/document/8292554)]

**[C217]** Amr El-Keyi, Hamza Umit Sokun, Tu Ngoc Nguyen, Qiubo Ye, Haiying Julie Zhu, and Halim Yanikomeroglu, “A novel probabilistic path loss model for simulating coexistence between 802.11 and 802.15.4 networks in smart home environments”, *IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC) 2017*, 08–13 October 2017, Montreal, Quebec, Canada. [[ResearchGate](https://www.researchgate.net/publication/323206066)] [[Xplore](https://ieeexplore.ieee.org/document/8292343)]

**[C216]** Monirosharieh Vameghestahbanati, Ian Marsland, Ramy H. Gohary, and Halim Yanikomeroglu, “Polar codes for SCMA systems”, *IEEE Vehicular Technology Conference (VTC2017-Fall)*, 24–27 September 2017, Toronto, Canada. [[arXiv](https://arxiv.org/abs/1707.00735)] [[ResearchGate](https://www.researchgate.net/publication/318205910)] [[Xplore](https://ieeexplore.ieee.org/document/8287917)]

**[C215]** Jing Guo, Salman Durrani, Xiangyun Zhou, and Halim Yanikomeroglu, “Underlay D2D communication in a finite cellular network with exclusion zone”, *IEEE Vehicular Technology Conference (VTC2017-Fall)*, 24–27 September 2017, Toronto, Canada. [[ResearchGate](https://www.researchgate.net/publication/323136322)] [[Xplore](https://ieeexplore.ieee.org/document/8288054)]

**[C214]** Ebrahim Bedeer, Jeff Pugh, Colin Brown, and Halim Yanikomeroglu, “A measurement-based path loss and delay spread propagation models in VHF/UHF bands for IoT communications”, *IEEE Vehicular Technology Conference (VTC2017-Fall)*, 24–27 September 2017, Toronto, Canada. [[ResearchGate](https://www.researchgate.net/publication/317037694)] [[Xplore](https://ieeexplore.ieee.org/document/8287901)]

**[C213]** Amr El-Keyi, Oktay Ureten, Trevor Yensen, and Halim Yanikomeroglu, “LTE physical-layer identity detection in the presence of jamming”, *IEEE Vehicular Technology Conference (VTC2017-Fall)*, 24–27 September 2017, Toronto, Canada. [[ResearchGate](https://www.researchgate.net/publication/323135855)] [[Xplore](https://ieeexplore.ieee.org/document/8288216)]

**[C212]** Hossein Khoshnevis, Ian Marsland, and Halim Yanikomeroglu, "Throughput-based design of polar codes", *IEEE Vehicular Technology Conference (VTC2017-Fall)*, 24–27 September 2017, Toronto, Canada. [[ResearchGate](https://www.researchgate.net/publication/323130986)] [[Xplore](https://ieeexplore.ieee.org/document/8287918)]

**[C211]** Salime Bameri, Siamak Talebi, Ramy Gohary, and Halim Yanikomeroglu, “Self-interference cancellation for channel-unaware differential space-time two-way relay networks”, *IEEE International Workshop on Signal Processing in Wireless Communications (SPAWC) 2017*, 3–6 July 2017, Sapporo, Japan. [[ResearchGate](https://www.researchgate.net/publication/322001722)] [[Xplore](https://ieeexplore.ieee.org/document/8227775)]

**[C210]** Elham Kalantari, Muhammad Zeeshan Shakir, Halim Yanikomeroglu, and Abbas Yongacoglu, “Backhaul-aware robust 3D drone placement in 5G+ wireless networks”, *IEEE International Conference on Communications (ICC) Workshops 2017 – Workshop on Flexible Networks (FlexNets)*, 21 May 2017, Paris, France. [[arXiv](https://arxiv.org/abs/1702.08395)] [[ResearchGate](https://www.researchgate.net/publication/318125625_Backhaul-aware_robust_3D_drone_placement_in_5G_wireless_networks)] [[Xplore](https://ieeexplore.ieee.org/document/7962642)]

**[C209]** Meisam Mirahsan, Hamid Farmanbar, and Halim Yanikomeroglu, “Joint backhaul and access optimization for service-segment-based VN admission control”, *IEEE International Conference on Communications (ICC) 2017*, 21–25 May 2017, Paris, France. [[ResearchGate](https://www.researchgate.net/publication/314206230)] [[Xplore](https://ieeexplore.ieee.org/document/7997298)]

**[C208]** Ebrahim Bedeer, Halim Yanikomeroglu, and Mohamed Hossam Ahmed, “Reduced complexity optimal detection of binary faster-than-Nyquist signaling”, *IEEE International Conference on Communications (ICC) 2017*, 21–25 May 2017, Paris, France. [[arXiv](https://arxiv.org/abs/1703.02400)] [[ResearchGate](https://www.researchgate.net/publication/313082007)] [[Xplore](https://ieeexplore.ieee.org/document/7997456)]

**[C207]** Kareem M. Attiah, Karim Seddik, Ramy H. Gohary, and Halim Yanikomeroglu, “Non-coherent multi-layer constellations for unequal error protection”, *IEEE International Conference on Communications (ICC) 2017*, 21–25 May 2017, Paris, France. [[ResearchGate](https://www.researchgate.net/publication/313026003)] [[Xplore](https://ieeexplore.ieee.org/document/7997060)]

**2016** (15 IEEE journal papers + 11 conference papers)

**[J86]** David Gonzalez G, Jyri Hamalainen, Halim Yanikomeroglu, Mario Garcia-Lozano, and Gamini Senarath, “A novel multiobjective cell switch-off framework for cellular networks”, *IEEE Access*, vol. 4, pp. 7883-7898, 2016. [[ResearchGate](https://www.researchgate.net/publication/309757344)] [[Xplore](https://ieeexplore.ieee.org/document/7736976)]

**[J85]** Irem Bor-Yaliniz and Halim Yanikomeroglu, “The new frontier in RAN heterogeneity: Multi-tier drone-cells”, *IEEE Communications Magazine*, vol. 54, no. 11, pp. 48-55, November 2016. [[ResearchGate](https://www.researchgate.net/publication/301879834)] [[arXiv](https://arxiv.org/abs/1604.00381)] [[Xplore](https://ieeexplore.ieee.org/document/7744808)]

**[J84]** Jorge Cabrejas, Sandra Rogers, Daniel Calabuig, Yaser M. M. Fouad, Ramy H. Gohary, Jose F. Monserrat, and Halim Yanikomeroglu, “Non-coherent open-loop MIMO communications over temporally-correlated channels”, *IEEE Access*, vol. 4, pp. 6161-6170, 2016. [[ResearchGate](https://www.researchgate.net/publication/303982357)] [[Xplore](https://ieeexplore.ieee.org/document/7491253)]

**[J83]** Hakim Ghazzai, Elias Yaacoub, Abdullah Kadri, Halim Yanikomeroglu, and Mohamed-Slim Alouini, “Next-generation environment-aware cellular networks: Modern green techniques and implementation challenges”, *IEEE Access*, vol. 4, pp. 5010-5029, 2016. [[ResearchGate](https://www.researchgate.net/publication/309083811)] [[Xplore](https://ieeexplore.ieee.org/document/7570259)]

**[J82]** Meisam Mirahsan, Halim Yanikomeroglu, Gamini Senarath, and Ngoc-Dung Dao, “Analytic modeling of SIR in cellular networks with heterogeneous traffic”, *IEEE Communications Letters*, vol. 20, no. 8, pp. 1627-1630, August 2016. [[ResearchGate](https://www.researchgate.net/publication/303533014)] [[Xplore](https://ieeexplore.ieee.org/document/7478615)]

**[J81]** Sergey Andreev, Olga Galinina, Alexander Pyattaev, Jiri Hosek, Pavel Masek, Halim Yanikomeroglu, and Yevgeni Koucheryavy, “Exploring synergy between communications, caching, and computing in 5G-grade deployments”, *IEEE Communications Magazine*, vol. 54, no. 8, pp. 60-69, August 2016. [[ResearchGate](https://www.researchgate.net/publication/306087879)] [[Xplore](https://ieeexplore.ieee.org/document/7537178)]

**[J80]** Sebastian Szyszkowicz, Andres Lou, and Halim Yanikomeroglu, “Automated placement of individual millimeter-wave wall-mounted base stations for line-of-sight coverage of outdoor urban areas”, *IEEE Wireless Communications Letters*, vol. 5, no. 3, pp. 316-319, June 2016. [[ResearchGate](https://www.researchgate.net/publication/300081134)] [[Xplore](https://ieeexplore.ieee.org/document/7450185)]

**[J79]** Faraj Lagum, Sebastian S. Szyszkowicz, and Halim Yanikomeroglu, “CoV-based metrics to quantify the regularity of hard-core point processes for modeling the locations of base stations”, *IEEE Wireless Communications Letters*, vol. 5, no. 3, pp. 276-279, June 2016. [[Xplore](https://ieeexplore.ieee.org/document/7425184)]

**[J78]** Alireza Sharifian, Rainer Schoenen, and Halim Yanikomeroglu, “Joint realtime and nonrealtime flows packet scheduling and resource block allocation in wireless OFDMA networks”, *IEEE Transactions on Vehicular Technology*, vol. 65, no. 4, pp. 2589-2607, April 2016. [[ResearchGate](https://www.researchgate.net/publication/276175085)] [[Xplore](https://ieeexplore.ieee.org/document/7093185)]

**[J77]** Mohammad Reza Abedi, Nader Mokari, Mohammad Reza Javan, and Halim Yanikomeroglu, “Limited rate feedback scheme for resource allocation in secure relay-assisted OFDMA networks”, *IEEE Transactions on Wireless Communications*, vol. 15, no. 4, pp. 2604-2618, April 2016. [[ResearchGate](https://www.researchgate.net/publication/285779670)] [[Xplore](https://ieeexplore.ieee.org/document/7347459)]

**[J76]** Mehmet Cagri Ilter, Halim Yanikomeroglu, and Pawel Dmochowski, “BER upper bound expressions in coded two-transmission schemes with arbitrarily spaced signal constellations”, *IEEE Communications Letters*, vol. 20, no. 2, pp. 248-251, February 2016. [[ResearchGate](https://www.researchgate.net/publication/288887998)] [[Xplore](https://ieeexplore.ieee.org/document/7369938)]

**[J75]** Rozita Rashtchi, Ramy H. Gohary, and Halim Yanikomeroglu, “Generalized cross-layer designs for generic half-duplex multicarrier wireless networks with frequency reuse”, *IEEE Transactions on Wireless Communications*, vol. 15, no. 1, pp. 458-471, January 2016. [[ResearchGate](https://www.researchgate.net/publication/281262185)] [[arXiv](https://arxiv.org/abs/1508.05896)] [[Xplore](https://ieeexplore.ieee.org/document/7230304)]

**[J74]** Huseyin Ugur Yildiz, Bulent Tavli, and Halim Yanikomeroglu, “Transmission power control for link level handshaking in wireless sensor networks”, *IEEE Sensors Journal*, vol. 16, no. 2, pp. 561-576, 15 January 2016. [[ResearchGate](https://www.researchgate.net/publication/282337823)] [[Xplore](https://ieeexplore.ieee.org/document/7289353)]

**[J73]** Kevin Luo, Ramy H. Gohary, and Halim Yanikomeroglu, “Exploiting the N-to-1 mapping in compress-and-forward relaying”, *IEEE Transactions on Information Theory*, vol. 62, no. 1, pp. 290-308, January 2016. [[ResearchGate](https://www.researchgate.net/publication/283709910)] [[Xplore](https://ieeexplore.ieee.org/document/7299673)]

**[J72]** Daniel Calabuig, Ramy H. Gohary, and Halim Yanikomeroglu, “Optimum transmission through the multiple-antenna Gaussian multiple access channel”, *IEEE Transactions on Information Theory*, vol. 62, no. 1, pp. 230-243, January 2016. [[ResearchGate](https://www.researchgate.net/publication/261121900)] [[arXiv](https://arxiv.org/abs/1511.05012)] [[Xplore](https://ieeexplore.ieee.org/document/7332762)]

**[C206]** Ziwen Zhao, Sebastian Szyszkowicz, Tamer Beitalmal, and Halim Yanikomeroglu, “Spatial clustering in slotted ALOHA two-hop random access for machine type communication”, *2016 IEEE Global Communications Conference (Globecom)*, 4–8 December 2016, Washington, DC, USA. [[Xplore](https://ieeexplore.ieee.org/document/7842279)]

**[C205]** Amr El-Keyi and Halim Yanikomeroglu, “Interference alignment for heterogeneous full-duplex cellular networks”, *2016 IEEE Global Communications Conference (Globecom)*, 4–8 December 2016, Washington, DC, USA. [[Xplore](https://ieeexplore.ieee.org/document/7841908)]

**[C204]** Faraj Lagum, Sebastian Szyszkowicz, and Halim Yanikomeroglu, “Quantifying the regularity of perturbed triangular lattices using CoV-based metrics for modeling the locations of Base Stations in HetNets”, *IEEE 84th Vehicular Technology Conference (VTC2016-Fall)*, 18–21 September 2016, Montreal, QC, Canada. [[Xplore](https://ieeexplore.ieee.org/document/7881184)]

**[C203]** Rainer Schoenen, Hamza Umit Sokun, and Halim Yanikomeroglu, “Green cellular demand control with user-in-the-loop enabled by smart data pricing using an effective quantum (eBit) tariff”, *IEEE 84th Vehicular Technology Conference (VTC2016-Fall)*, Invited Paper, 18–21 September 2016, Montreal, QC, Canada. [[Xplore](https://ieeexplore.ieee.org/document/7881031)]

**[C202]** Elham Kalantari, Halim Yanikomeroglu, and Abbas Yongacoglu, “On the number and 3D placement of drone base stations in wireless cellular networks”, *IEEE 84th Vehicular Technology Conference (VTC2016-Fall)*, 18–21 September 2016, Montreal, QC, Canada. [[arXiv](https://arxiv.org/abs/1804.08415)] [[ResearchGate](https://www.researchgate.net/publication/324717561_On_the_Number_and_3D_Placement_of_Drone_Base_Stations_in_Wireless_Cellular_Networks)] [[Xplore](https://ieeexplore.ieee.org/document/7881122)]

**[C201]** Tamer Beitelmal, Sebastian Szyszkowicz, and Halim Yanikomeroglu, “Regular and static sector-based cell switch-off patterns”, *IEEE 84th Vehicular Technology Conference (VTC2016-Fall)*, 18–21 September 2016, Montreal, QC, Canada. [[Xplore](https://ieeexplore.ieee.org/document/7881194)]

**[C200]** Mehmet Cagri Ilter, Pawel A. Dmochowski, and Halim Yanikomeroglu, “Arbitrary constellations with coded maximum rate transmission over downlink Nakagami-m fading channels”, *IEEE 84th Vehicular Technology Conference (VTC2016-Fall)*, 18–21 September 2016, Montreal, QC, Canada. [[Xplore](https://ieeexplore.ieee.org/document/7880908)]

**[C199]** Amr El-Keyi and Halim Yanikomeroglu, “Cooperative versus full-duplex communication in cellular networks: A comparison of the total degrees of freedom”, *IEEE 84th Vehicular Technology Conference (VTC2016-Fall)*, 18–21 September 2016, Montreal, QC, Canada. [[Xplore](https://ieeexplore.ieee.org/document/7880944)]

**[C198]** Kareem Attiah, Karim Seddik, Ramy Gohary, and Halim Yanikomeroglu, “A systematic design approach for non-coherent Grassmannian constellations”, *2016 IEEE International Symposium on Information Theory (ISIT)*, 10–15 July 2016, Barcelona, Spain. [[Xplore](https://ieeexplore.ieee.org/document/7541839)]

**[C197]** Philip R. Balogun, Ian Marsland, Ramy Gohary, and Halim Yanikomeroglu, “Polar codes for noncoherent MIMO signalling”, *2016 IEEE International Conference on Communications (ICC) 2016*, 23–27 May 2016, Kuala Lumpur, Malaysia. [[Xplore](https://ieeexplore.ieee.org/document/7511290)]

**[C196]** Irem Bor-Yaliniz, Amr El-Keyi, and Halim Yanikomeroglu, “Efficient 3-D placement of an aerial base station in next generation cellular networks”, *2016 IEEE International Conference on Communications (ICC)*, 23–27 May 2016, Kuala Lumpur, Malaysia. [[arXiv](https://arxiv.org/abs/1603.00300)] [[Xplore](https://ieeexplore.ieee.org/document/7510820)]

**2015** (9 IEEE journal papers + 14 conference papers)

**[J71]** Meisam Mirahsan, Rainer Schoenen, Halim Yanikomeroglu, Gamini Senarath, and Ngoc-Dung Dao, “User-in-the-loop for HetHetNets with backhaul capacity constraints”, *IEEE Wireless Communications Magazine,* vol. 22, no. 5, pp. 50-57, October 2015. [[Xplore](https://ieeexplore.ieee.org/document/7306537)]

**[J70]** Ramy Gohary and Halim Yanikomeroglu, “On the accuracy of the high-SNR approximation of the differential entropy of signals in additive Gaussian noise: Real and complex cases”, *IEEE Transactions on Vehicular Technology*, vol. 64, no. 10, pp. 4845-4850, October 2015. [[Xplore](https://ieeexplore.ieee.org/document/6945329)]

**[J69]** Meisam Mirahsan, Rainer Schoenen, and Halim Yanikomeroglu, “HetHetNets: Heterogeneous traffic distribution in heterogeneous wireless cellular networks”, *IEEE Journal on Selected Areas in Communications*, vol. 33, no. 10, pp. 2252-2265, October 2015. [arXiv:1505.00076] [[Xplore](https://ieeexplore.ieee.org/document/7110500)]

**[J68]** Jing Guo, Salman Durrani, Xiangyun Zhou, and Halim Yanikomeroglu, “Outage probability of ad hoc networks with wireless information and power transfer”, *IEEE Wireless Communications Letters*, vol. 4, no. 4, pp. 409-412, August 2015. [arXiv:1506.05595] [[Xplore](https://ieeexplore.ieee.org/document/7096963)]

**[J67]** Hamza Umit Sokun, Akram Bin Sediq, Salama Ikki, and Halim Yanikomeroglu, “Power allocation optimization in selective DF relaying with different modulation levels in the presence of imperfect channel estimations”, *IEEE Communications Letters,* vol. 19, no. 5, pp. 867-870, May 2015. [[Xplore](https://ieeexplore.ieee.org/document/7054442)]

**[J66]** Mohammad G. Khoshkholgh, Nader Mokari Yamchi, Keivan Navaie, Halim Yanikomeroglu, Victor C. M. Leung, and Kang G. Shin, “Radio resource allocation for OFDM-based dynamic spectrum sharing: Duality gap and time averaging”, *IEEE Journal on Selected Areas in Communications*, vol. 33, no. 5, pp. 848-864, May 2015. [[Xplore](https://ieeexplore.ieee.org/document/6914590)]

**[J65]** Yaser M. M. Fouad, Ramy H. Gohary, Jorge Cabrejas, Halim Yanikomeroglu, Daniel Calabuig, Sandra Roger, and Jose F. Monserrat, “Time-frequency Grassmannian signalling for MIMO multi-channel-frequency-flat systems”, *IEEE Communications Letters*, vol. 19, no. 3, pp. 475-478, March 2015. [[Xplore](https://ieeexplore.ieee.org/document/7000538)]

**[J64]** Shengrong Bu, F. Richard Yu, and Halim Yanikomeroglu, “Interference-aware energy-efficient resource allocation for OFDMA-based heterogeneous networks with incomplete channel state information”, *IEEE Transactions on Vehicular Technology*, vol. 64, no. 3, pp. 1036-1050, March 2015. [[Xplore](https://ieeexplore.ieee.org/document/6824265)]

**[J63]** Akram Bin Sediq, Rainer Schoenen, Halim Yanikomeroglu, and Gamini Senarath, “Optimized distributed inter-cell interference coordination (ICIC) scheme using projected subgradient and network flow optimization”, *IEEE Transactions on Communications*, vol. 63, no. 1, pp. 107-124, January 2015. [arXiv:1410.8633] [[Xplore](https://ieeexplore.ieee.org/document/6945909)]

**[C195]** Hossein Khoshnevis, Ian Marsland, and Halim Yanikomeroglu, “Irregular multidimensional constellations for orthogonal STBCs”, *IEEE Global Communications Conference (Globecom) 2015*, 6–10 December 2015, San Diego, CA, USA.

**[C194]** Hamza Umit Sokun, Mehmet Cagri Ilter, Salama Ikki, and Halim Yanikomeroglu, “A signal space diversity based time division broadcast protocol in two-way relay systems”, *IEEE Global Communications Conference (Globecom) 2015*, 6–10 December 2015, San Diego, CA, USA.

**[C193]** Mohammad T. Hussien, Karim G. Seddik, Ramy H. Gohary, Mohammad Shaqfeh, Hussein Alnuweiri, and Halim Yanikomeroglu, “Space-time block codes over the Stiefel manifolds”, *IEEE Global Communications Conference (Globecom) 2015*, 6–10 December 2015, San Diego, CA, USA.

**[C192]** Ramy H. Gohary and Halim Yanikomeroglu, “The ergodic high SNR capacity of the spatially-correlated non-coherent MIMO channel within an SNR-independent gap”, *IEEE Information Theory Workshop (ITW) 2015*, 11–15 October 2015, Jeju Island, Korea.

**[C191]** Kevin Luo, Ramy H. Gohary, and Halim Yanikomeroglu, “The capacity of a broadcast channel with Gaussian jamming and a friendly eavesdropper”, *IEEE Information Theory Workshop (ITW) 2015*, 11–15 October 2015, Jeju Island, Korea.

**[C190]** Mohammad R. Abedi, Nader Mokari, Hamid Saeedi, and Halim Yanikomeroglu, “Secure robust resource allocation in the presence of active eavesdroppers using full-duplex receivers”, *IEEE Vehicular Technology Conference (VTC2015-Fall)*, 6–9 September 2015, Boston, MA, USA.

**[C189]** Hamza Umit Sokun, Ramy H. Gohary, and Halim Yanikomeroglu, “QoS-guaranteed user association in HetNets via semidefinite relaxation”, *IEEE Vehicular Technology Conference (VTC2015-Fall)*, 6–9 September 2015, Boston, MA, USA.

**[C188]** Ibrahim Aydin, Halim Yanikomeroglu, and Umit Aygolu, “User-aware cell switch-off algorithms”, *11th International Wireless Communications & Mobile Computing Conference (IWCMC)*, 24–27 August 2015, Dubrovnik, Croatia.

**[C187]** Baris Yuksekkaya, Hazer Inaltekin, Cenk Toker, and Halim Yanikomeroglu, “Near-optimum power control for two-tier SIMO uplink under power and interference constraints”, *16th IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC) 2015*, 28 June – 1 July 2015, Stockholm, Sweden.

**[C186]** Ziyang Wang, Rainer Schoenen, Halim Yanikomeroglu, and Marc St.Hilaire, “Load balancing in cellular networks with user-in-the-loop: A spatial traffic shaping approach”, *IEEE International Conference on Communications (ICC) 2015*, 8–12 June 2015, London, UK.

**[C185]** Meisam Mirahsan, Rainer Schoenen, Sebastian Szyszkowicz, and Halim Yanikomeroglu, “Spatial heterogeneity of users in wireless cellular networks based on open urban maps”, *IEEE International Conference on Communications (ICC) 2015*, 8–12 June 2015, London, UK.

**[C184]** Mohammad R. Abedi, Nader Mokari, Hamid Saeedi, and Halim Yanikomeroglu, “Secure robust resource allocation using full-duplex receivers”, *IEEE ICC 2015 Workshop on Physical Layer Security*, 8–12 June 2015, London, UK.

**[C183]** Baris Yuksekkaya, Hazer Inaltekin, Cenk Toker, and Halim Yanikomeroglu, “Power control for two-tier SIMO-MIMO uplink under interference constraints”, *IEEE 23rd Signal Processing and Communications Applications Conference (SIU 2015)*, 16–19 May 2015, Malatya, Turkey. [[Xplore](https://ieeexplore.ieee.org/document/7129983)]

**[C182]** Ramy Gohary, Rozita Rashtchi, and Halim Yanikomeroglu, “Optimal design and power allocation for multicarrier decode-and-forward relays”, *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2015*, 4–9 May 2015, Florence, Italy.

**2014** (6 IEEE journal papers + 15 conference papers)

**[J62]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Optimal design of the spectrum sensing parameters in the overlay spectrum sharing”, *IEEE Transactions on Mobile Computing*, vol. 13, no. 9, pp. 2071-2085, September 2014. [[Xplore](https://ieeexplore.ieee.org/document/6560027)]

**[J61]** Sebastian S. Szyszkowicz and Halim Yanikomeroglu, “A simple approximation of the aggregate interference from a cluster of many interferers with correlated shadowing”, *IEEE Transactions on Wireless Communications*, vol. 13, no. 8, pp. 4415-4423, August 2014. [[Xplore](https://ieeexplore.ieee.org/document/6798678)]

**[J60]** Mohsen Nader Tehrani, Murat Uysal, and Halim Yanikomeroglu, “Device-to-device communication in 5G cellular networks: Challenges, solutions, and future directions”, *IEEE Communications Magazine*, vol. 52, no. 5, pp. 86-92, May 2014. [[Xplore](https://ieeexplore.ieee.org/document/6815897)]

**[J59]** Ramy Gohary and Halim Yanikomeroglu, “Grassmannian signalling achieves tight bounds on the ergodic high-SNR capacity of the noncoherent MIMO full-duplex relay channel", *IEEE Transactions on Information Theory*, vol. 60, no. 5, pp. 2480-2494, May 2014. [[Xplore](https://ieeexplore.ieee.org/document/6763058)]

**[J58]** Rozita Rashtchi, Ramy Gohary, and Halim Yanikomeroglu, “Routing, scheduling and power allocation in generic OFDMA wireless networks: Optimal design and efficiently computable bounds”, *IEEE Transactions on Wireless Communications*, vol. 13, no. 4, pp. 2034-2046, April 2014. [[Xplore](https://ieeexplore.ieee.org/document/6733250)]

**[J57]** Rainer Schoenen and Halim Yanikomeroglu, “User-in-the-loop: Spatial and temporal demand shaping for sustainable wireless networks”, *IEEE Communications Magazine*, vol. 52, no. 2, pp. 196-203, February 2014. [[Xplore](https://ieeexplore.ieee.org/document/6736762)]

**[C181]** Ziyang Wang, Rainer Schoenen, Halim Yanikomeroglu, and Marc St-Hilaire, “The impact of user spatial heterogeneity in heterogeneous cellular networks”, *IEEE Globecom 2014 Workshops*, 12 December 2014, Austin, TX, USA.

**[C180]** Meisam Mirahsan, Rainer Schoenen, and Halim Yanikomeroglu, “Statistical modeling of spatial traffic distribution with adjustable heterogeneity and BS-correlation in wireless cellular networks”, *IEEE Global Communications Conference (Globecom) 2014*, 8–12 December 2014, Austin, TX, USA.

**[C179]** Davut Incebacak, Bulent Tavli, and Halim Yanikomeroglu, “Trade-offs in sum-rate maximization and fairness in relay-enhanced OFDMA-based cellular networks”, *IEEE Global Communications Conference (Globecom) 2014*, 8–12 December 2014, Austin, TX, USA.

**[C178]** Rainer Schoenen and Halim Yanikomeroglu, “Resource pooling in network virtualization and heterogeneous scenarios using stochastic Petri nets”, *IEEE Global Communications Conference (Globecom) 2014*, 8–12 December 2014, Austin, TX, USA.

**[C177]** Omer Haliloglu, Cenk Toker, Gurhan Bulu, and Halim Yanikomeroglu, “Energy efficient radio resource management in a coordinated multi-cell distributed antenna system”, *IEEE 25th International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC) 2014*, 2–5 September 2014, Washington, DC, USA.

**[C176]** Mehmet Cagri Ilter and Halim Yanikomeroglu, “An upper bound on BER in a coded two-transmission scheme with same-size arbitrary 2D constellations”, *IEEE 25th International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC) 2014*, 2–5 September 2014, Washington, DC, USA.

**[C175]** Mohammad T. Hussien, Karim G. Seddik, Ramy H. Gohary, Mohammad Shaqfeh, Hussein Alnuweiri, and Halim Yanikomeroglu, “Multi-resolution broadcasting over the Grassmann and Stiefel manifolds”, *IEEE International Symposium on Information Theory 2014*, 29 June – 4 July 2014, Honolulu, Hawaii, USA.

**[C174]** Daniel Calabuig, Ramy Gohary, and Halim Yanikomeroglu, “Optimization of a class of non-convex objectives on the Gaussian MIMO multiple access channel: Algorithm development and convergence analysis”, *15th IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC) 2014*, 22–25 June 2014, Toronto, Canada.

**[C173]** Yaser Fouad, Ramy Gohary, and Halim Yanikomeroglu, “An efficient greedy-based autonomous resource block assignment scheme for beyond 4G cellular networks with self-organizing relaying terminal”, *15th IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC) 2014*, 22–25 June 2014, Toronto, Canada.

**[C172]** Rozita Rashtchi, Ramy Gohary, and Halim Yanikomeroglu, “A cross-layer design for generic half-duplex interference-limited multicarrier networks”, *15th IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC) 2014*, 22–25 June 2014, Toronto, Canada.

**[C171]** David Gonzalez G, Halim Yanikomeroglu, Mario Garcia-Lozano, and Silvia Ruiz Boque, “A novel multiobjective framework for cell switch-off in dense networks”, *IEEE International Conference on Communications (ICC) 2014*, 10–14 June 2014, Sydney, Australia.

**[C170]** Hamza Umit Sokun, Akram Bin Sediq, Salama Ikki, and Halim Yanikomeroglu, “Selective DF relaying in multi-relay networks with different modulation levels”, *IEEE International Conference on Communications (ICC) 2014*, 10–14 June 2014, Sydney, Australia.

**[C169]** Meisam Mirahsan, Ziyang Wang, Rainer Schoenen, Halim Yanikomeroglu, and Marc St.Hilaire, “Unified and non-parameterized statistical modeling of temporal and spatial traffic heterogeneity in wireless cellular networks”, *IEEE International Conference on Communications (ICC) 2014 Workshops*, 10–14 June 2014, Sydney, Australia.

**[C168]** Tamer Beitalmal and Halim Yanikomeroglu, “A set cover based algorithm for cell switch-off with different cell sorting criteria”, *IEEE International Conference on Communications (ICC) 2014 Workshops*, 10–14 June 2014, Sydney, Australia.

**[C167]** Ramy Gohary and Halim Yanikomeroglu, “On the accuracy of the high SNR approximation of the differential entropy of signals in additive Gaussian noise”, *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2014*, 4–9 May 2014, Florence, Italy.

**2013** (6 IEEE journal papers + 9 conference papers)

**[J56]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Outage performance of the primary service in spectrum sharing networks”, *IEEE Transactions on Mobile Computing*, vol. 12, no. 10, pp. 1955-1971, October 2013.

**[J55]** Ramy Gohary and Halim Yanikomeroglu, “Joint optimization of the transmit covariance and the relay precoder in general Gaussian amplify-and-forward relay channels”, *IEEE Transactions on Information Theory*, vol. 59, no. 9, pp. 5331-5351, September 2013.

**[J54]** Akram Bin Sediq, Ramy Gohary, Rainer Schoenen, and Halim Yanikomeroglu, “Optimal tradeoff between sum-rate efficiency and Jain’s fairness index in resource allocation”, *IEEE Transactions on Wireless Communications*, vol. 12, no. 7, pp. 3496-3509, July 2013.

**[J53]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Interference management in underlay spectrum sharing using indirect power control signalling”, *IEEE Transactions on Wireless Communications*, vol. 12, no. 7, pp. 3264-3277, July 2013.

**[J52]** Kevin Luo, Ramy Gohary, and Halim Yanikomeroglu, “Analysis of the generalized DF-CF for Gaussian relay channels: decode or compress?”, *IEEE Transactions on Communications*, vol. 61, no. 5, pp. 1810-1821, May 2013.

**[J51]** Soumitra Dixit, Shalini Periyalwar, and Halim Yanikomeroglu, “Secondary user access in LTE architecture based on a base-station-centric framework with dynamic pricing”, *IEEE Transactions on Vehicular Technologies*, vol. 62, no. 1, pp. 284-296, January 2013.

**[C166]** Rozita Rashtchi, Ramy Gohary, and Halim Yanikomeroglu, “An efficient cross layer design for OFDMA-based wireless networks with channel reuse”, IEEE Globecom 2013, 9–13 December 2013, Atlanta, GA, USA. [pdf]

**[C165]** Rainer Schoenen and Halim Yanikomeroglu, “Erlang analysis of cellular networks using stochastic Petri nets and user-in-the-loop extension for demand control”, IEEE Globecom 2013 Workshops, 9–13 December 2013, Atlanta, GA, USA. [pdf]

**[C164]** Gurhan Bulu, Talha Ahmad, Ramy Gohary, Halim Yanikomeroglu, and Cenk Toker, “Generalized coordinated port selection in a multi-cell distributed antenna system using semidefinite relaxation”, IEEE International Symposium on Personal, Indoor and Mobile Communications (PIMRC) 2013, 8–11 September 2013, London, UK. [pdf]

**[C163]** Gencer Cili, Halim Yanikomeroglu, and Richard Yu, “Energy efficiency and capacity evaluation of LTE-Advanced downlink CoMP schemes subject to channel estimation errors and system delay”, IEEE VTC2013-Fall, 2–5 September 2013, Las Vegas, USA. [pdf]

**[C162]** Daniel Calabuig, Ramy Gohary, and Halim Yanikomeroglu, “Optimum transmission through the Gaussian multiple access channel”, IEEE International Symposium on Information Theory (ISIT) 2013, 7–12 July 2013, Istanbul, Turkey. [pdf]

**[C161]** Gencer Cili, Halim Yanikomeroglu, and Richard Yu, “Coordinated multi-point (CoMP) adaptive estimation and prediction schemes using superimposed and decomposed channel tracking”, IEEE International Conference on Communications (ICC) 2013 – Beyond LTE-A Workshop, 9–13 June 2013, Budapest, Hungary. [pdf]

**[C160]** Omer Haliloglu, Cenk Toker, Gurhan Bulu, and Halim Yanikomeroglu, “Radio resource management in a coordinated cellular distributed antenna system using particle swarm optimization”, IEEE Vehicular Technology Conference (VTC2013-Spring), 2–5 June 2013, Dresden, Germany. [pdf]

**[C159]** Ali Yildiz, Tolga Girici, and Halim Yanikomeroglu, “A pricing based algorithm for cell switching off in green cellular networks”, IEEE Vehicular Technology Conference (VTC2013-Spring), 2–5 June 2013, Dresden, Germany. [pdf]

**[C158]** Rainer Schoenen and Halim Yanikomeroglu, “Dynamic demand control with differentiated QoS in user-in-the-loop controlled cellular networks”, Workshop on Mobile and Wireless Communication Systems for 2020 and beyond co-located with IEEE Vehicular Technology Conference (VTC2013-Spring), 2–5 June 2013, Dresden, Germany. [pdf]

**2012** (6 IEEE journal papers + 16 conference papers)

**[J50]** Arshdeep Kahlon, Sebastian Szyszkowicz, Shalini Periyalwar, and Halim Yanikomeroglu, “Separating the effect of independent interference sources with Rayleigh faded signal link: Outage analysis and applications”, *IEEE Wireless Communications Letters*, vol. 1, no. 5, pp. 409-411, October 2012. [pdf] [arXiv:1201.5434]

**[J49]** Houda Chafnaji, Tarik Ait-Idir, Halim Yanikomeroglu, and Samir Saoudi, “Turbo packet combining for relaying schemes over multi-antenna broadband channels”, *IEEE Transactions on Vehicular Technology*, vol. 61, no. 7, pp. 2965-2977, September 2012. [pdf]

**[J48]** Talha Ahmad, Ramy Gohary, Halim Yanikomeroglu, Saad Al-Ahmadi, and Gary Boudreau, “Coordinated port selection and beam steering optimization in a multi-cell distributed antenna system using semidefinite relaxation”, *IEEE Transactions on Wireless Communications*, vol. 11, no. 5, pp. 1861-1871, May 2012. [pdf]

**[J47]** Akram Bin Sediq and Halim Yanikomeroglu, “Selection combining of signals with different modulation levels in Nakagami-m fading”, *IEEE Communications Letters*, vol. 16, no. 5, pp. 752-755, May 2012. [pdf]

**[J46]** Ramy Gohary and Halim Yanikomeroglu, “Convergence of iterative water-filling with quantized feedback: A sufficient condition”, *IEEE Transactions on Signal Processing*, vol. 60, no. 5, pp. 2688-2693, May 2012. [pdf]

**[J45]** Yaser M. M. Fouad, Ramy H. Gohary, and Halim Yanikomeroglu, “An autonomous resource block assignment scheme for OFDMA-based relay-assisted cellular networks", *IEEE Transactions on Wireless Communications*, vol. 11, no. 2, pp. 637-647, February 2012. [pdf]

**[C157]** Zakaria El-Moutaouakkil, Tarik Ait-Idir, Samir Saoudi, Halim Yanikomeroglu, and Mounir Ghogho, “Turbo receiver design for MIMO relay ARQ transmissions”, IEEE Global Communications Conference (Globecom) 2012, 3–7 December 2012, Anaheim, CA, USA. [pdf]

**[C156]** Furkan Alaca, Akram Bin Sediq, and Halim Yanikomeroglu, “A genetic algorithm based cell switch-off scheme for energy saving in dense cell deployments”, IEEE Global Communications Conference (Globecom) Workshops 2012, 3–7 December 2012, Anaheim, CA, USA. [pdf]

**[C155]** Rozita Rashtchi, Ramy Gohary, and Halim Yanikomeroglu, “Efficiently computable bounds on the rates achieved by a cross layer design with binary scheduling in generic OFDMA wireless networks”, IEEE Global Communications Conference (Globecom) Workshops 2012, 3–7 December 2012, Anaheim, CA, USA. [pdf]

**[C154]** Kevin Luo, Ramy Gohary, and Halim Yanikomeroglu, “A decoding procedure for compress-and-forward and quantize-and-forward relaying”, 50th Annual Allerton Conference on Communications, Control, and Computing (Allerton 2012), 1–5 October 2012, Monticello, IL, USA. [pdf]

**[C153]** Rainer Schoenen and Halim Yanikomeroglu, "Economics of user-in-the-loop demand control with differentiated QoS in cellular networks", IEEE International Symposium on Personal, Indoor and Mobile Communications (PIMRC 2012), 9–12 September 2012, Sydney, Australia. [pdf]

**[C152]** Akram Bin Sediq, Ramy Gohary, and Halim Yanikomeroglu, "On the optimal tradeoff between efficiency and Jain’s fairness index in resource allocation”, IEEE International Symposium on Personal, Indoor and Mobile Communications (PIMRC 2012), 9–12 September 2012, Sydney, Australia. [pdf]

**[C151]** Ramy Gohary and Halim Yanikomeroglu, "Grassmannian decode-and-forward achieves the ergodic high SNR capacity of the non-coherent MIMO relay channel within a constant gap", IEEE Information Theory Workshop (ITW 2012), 3–7 September 2012, Lausanne, Switzerland. [pdf]

**[C150]** Rainer Schoenen, Gurhan Bulu, Amir Mirtaheri, Tamer Beitelmal, and Halim Yanikomeroglu, “First survey results of quantified user behavior in user-in-the-loop scenarios for sustainable wireless networks”, IEEE Vehicular Technology Conference (VTC2012-Fall), 3–6 September 2012, Quebec City, QC, Canada. [pdf]

**[C149]** Rainer Schoenen, Halim Yanikomeroglu, Gamini Senerath, Zhijun Cao, and Ho Ting Cheng, “Spectral efficiency and fairness tradeoffs in cellular networks with realtime+nonrealtime traffic mix using stochastic Petri nets”, IEEE Vehicular Technology Conference (VTC2012-Fall), 3–6 September 2012, Quebec City, QC, Canada. [pdf]

**[C148]** Ramy Gohary and Halim Yanikomeroglu, “Joint optimization of the transmit covariance and the relay precoder in general Gaussian amplify-and-forward relay channels”, International Symposium on Information Theory (ISIT 2012), 1–6 July 2012, Cambridge, MA, USA.

**[C147]** Ramy Gohary and Halim Yanikomeroglu, “A sufficient convergence condition for the quantized iterative water-filling algorithm”, 13th IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC 2012), 17–20 June 2012, Cesme, Turkey.

**[C146]** Talha Ahmad, Ramy Gohary, Halim Yanikomeroglu, Saad Al-Ahmadi, and Gary Boudreau, “Coordinated max-min fair port selection in a multi-cell distributed antenna system using semidefinite relaxation”, IEEE International Conference on Communications (ICC 2012), 10–15 June 2012, Ottawa, ON, Canada.

**[C145]** Rozita Rashtchi, Ramy Gohary, and Halim Yanikomeroglu, “Joint routing, scheduling and power allocation in OFDMA wireless ad hoc networks”, IEEE International Conference on Communications (ICC 2012), 10–15 June 2012, Ottawa, ON, Canada.

**[C144]** Gencer Cili, Halim Yanikomeroglu, and F. Richard Yu, “Cell switch off technique combined with coordinated multi-point (CoMP) transmission for energy efficiency in beyond-LTE cellular networks”, IEEE ICC’12 Workshop on Green Communications and Networking (ICC’12 GCN), IEEE International Conference on Communications (ICC 2012), pp. 5931-5935, 10–15 June 2012, Ottawa, Canada. [pdf]

**[C143]** Tamer Beitelmal, Rainer Schoenen, and Halim Yanikomeroglu, “On the impact of correlated shadowing on the performance of user-in-the-loop for mobility”, 3rd IEEE Workshop on User-Centric Networking (ICC’12 WS – U-NET), collocated with IEEE International Conference on Communications (ICC 2012), 10–15 June 2012, Ottawa, ON, Canada. [pdf]

**[C142]** Rainer Schoenen, Gurhan Bulu, Amir Mirtaheri, Tamer Beitelmal, and Halim Yanikomeroglu, “Quantified user behavior in user-in-the-loop spatially and demand controlled cellular systems”, European Wireless (EW 2012), 18–20 April 2012, Poznan, Poland. [pdf]

**2011** (8 IEEE journal papers + 15 conference papers)

**[J44]** Imran Ansari, Saad Al-Ahmadi, Ferkan Yilmaz, Mohamed-Slim Alouini, and Halim Yanikomeroglu, “A new formula for the BER of binary modulations with dual-branch selection over generalized-K composite fading channels”, *IEEE Transactions on Communications*, vol. 59, no. 10, pp. 2654-2658, October 2011. [pdf] [arXiv:1012.3788]

**[J43]** Muhammad Aljuaid and Halim Yanikomeroglu, “A cumulant-based investigation of the impact of secondary users' field size on spectrum sharing opportunities”, *IEEE Transactions on Vehicular Technology*, vol. 60, no. 7, pp. 3490-3497, September 2011. [pdf]

**[J42]** Sebastian S. Szyszkowicz, Furkan Alaca, Halim Yanikomeroglu, and John Thompson, “Aggregate interference distribution from large wireless networks with correlated shadowing: An analytical-numerical-simulation approach”, *IEEE Transactions on Vehicular Technology*, vol. 60, no. 6, pp. 2752-2764, July 2011. [pdf]

**[J41]** Mohamed Salem, Abdulkareem Adinoyi, Halim Yanikomeroglu, and David Falconer, “Fair resource allocation towards ubiquitous coverage in OFDMA-based cellular relay networks with asymmetric traffic”, *IEEE Transactions on Vehicular Technology*, vol. 60, no. 5, pp. 2280-2292, June 2011. [pdf]

**[J40]** Akram Bin Sediq, Petar Djukic, Halim Yanikomeroglu, and Jietao Zhang, “Optimized non-uniform constellation rearrangement for cooperative relaying”, *IEEE Transactions on Vehicular Technology*, vol. 60, no. 5, pp. 2340-2347, June 2011. [pdf]

**[J39]** Rainer Schoenen, Halim Yanikomeroglu, and Bernhard Walke, “User in the loop: Mobility aware users substantially boost spectral efficiency of cellular OFDMA systems”, *IEEE Communications Letters*, vol. 15, no. 5, pp. 488-490, May 2011. [pdf]

**[J38]** Akram Bin Sediq and Halim Yanikomeroglu, “Performance analysis of selection combining of signals with different modulation levels in cooperative communications”, *IEEE Transactions on Vehicular Technology*, vol. 60, no. 4, pp. 1880-1887, May 2011. [pdf]

**[J37]** Saad Al-Ahmadi and Halim Yanikomeroglu, “On the beamforming optimality range in TIMO channels with common and individual input power constraints”, *IEEE Transaction on Communications*, vol. 59, no. 3, pp. 648-651, March 2011. [pdf]

**[C141]** Rainer Schoenen and Halim Yanikomeroglu, “Wireless hop-by-hop credit-based flow control extended to source for stable best effort traffic”, Australasian Telecommunication Networks and Applications Conference (ATNAC 2011), 9–11 November 2011, Melbourne, Australia. [pdf]

**[C140]** Kevin Luo, Ramy Gohary, and Halim Yanikomeroglu, “On the generalization of decode-and-forward and compress-and-forward for Gaussian relay channels”, IEEE Information Theory Workshop (ITW 2011), 16–20 October 2011, Paraty, Brazil. [pdf]

**[C139]** Houda Chafnaji, Tarik Ait-Idir, Halim Yanikomeroglu, and Samir Saoudi, “Turbo packet combining for hybrid AF/DF multi-relay-assisted systems over multi-antenna broadband channels”, WWRF27 meeting, 18–20 October 2011, Düsseldorf, Germany.

**[C138]** Rainer Schoenen, Gurhan Bulu, Amir Mirtaheri, and Halim Yanikomeroglu, “Green communications by demand shaping and user-in-the-loop tariff-based control”, IEEE Online Conference on Green Communications (GreenCom’11), 26–29 September 2011. [pdf]

**[C137]** Rainer Schoenen, Akram Bin Sediq, Halim Yanikomeroglu, Gamini Senarath, and Zhijun Chao, “Fairness analysis in cellular networks using stochastic Petri nets”, IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2011), 11–14 September 2011, Toronto, ON, Canada. [pdf]

**[C136]** Arshdeep Kahlon, Sebastian Szyszkowicz, Shalini Periyalwar, and Halim Yanikomeroglu, “Identification of spectrum sharing opportunities for a finite field secondary network through an exact outage expression under Rayleigh fading”, IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2011), 11–14 September 2011, Toronto, ON, Canada. [pdf]

**[C135]** Arshdeep Kahlon, Shalini Periyalwar, Halim Yanikomeroglu, and Sebastian Szyszkowicz, “Outage in a cellular network overlaid with an ad hoc network: The uplink case”, IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2011), 11–14 September 2011, Toronto, ON, Canada. [pdf]

**[C134]** Akram Bin Sediq, Rainer Schoenen, Halim Yanikomeroglu, Gamini Senarath, and Zhijun Chao, “A novel distributed inter-cell interference coordination scheme based on projected subgradient and network flow optimization”, IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2011), 11–14 September 2011, Toronto, ON, Canada. [pdf]

**[C133]** Alireza Sharifian and Halim Yanikomeroglu, “On the delay-fairness for OFDMA networks”, IEEE Vehicular Technology Conference (VTC2011-Spring), 15–18 May 2011, Budapest, Hungary.

**[C132]** Yaser Fouad, Ramy Gohary, and Halim Yanikomeroglu, “A resource block assignment scheme for OFDMA-based cellular networks with self-organizing terminal relays", IEEE Vehicular Technology Conference (VTC2011-Spring), 15–18 May 2011, Budapest, Hungary.

**[C131]** Rainer Schoenen, Mohamed Rashad Salem, Akram Bin Sediq, and Halim Yanikomeroglu, “Multihop wireless channel model suitable for stochastic Petri nets and Markov state analysis”, IEEE Vehicular Technology Conference (VTC2011-Spring), 15–18 May 2011, Budapest, Hungary. [pdf]

**[C130]** Imran Shafique Ansari, Saad Al-Ahmadi, Ferkan Yilmaz, Mohamed-Slim Alouini, and Halim Yanikomeroglu, “An exact closed-form expression for the BER of binary modulations with dual-branch selection over generalized-K fading”, IEEE Vehicular Technology Conference (VTC2011-Spring), 15–18 May 2011, Budapest, Hungary.

**[C129]** Talha Ahmad, Saad Al-Ahmadi, Halim Yanikomeroglu, and Gary Boudreau, “Downlink linear transmission schemes in a single-cell distributed antenna system with port selection”, IEEE Vehicular Technology Conference (VTC2011-Spring), 15–18 May 2011, Budapest, Hungary. [pdf]

**[C128]** Frederic Demers, Halim Yanikomeroglu, and Marc St-Hilaire, “A survey of opportunities for free space optics in next generation cellular networks”, Communication Networks and Services Research Conference (CNSR 2011), 2–5 May 2011, Ottawa, ON, Canada. [pdf]

**[C127]** Ramy Gohary and Halim Yanikomeroglu, “An emerging concept for 4G+ wireless cellular networks: Terminal relaying”, 2011 Saudi International Electronics, Communications and Photonics Conference (SIECPC), 24–26 April 2011, Riyadh, Saudi Arabia. [pdf]

**2010**

**[J36]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Access strategies for spectrum sharing in fading environment: Overlay, underlay and mixed”, *IEEE Transactions on Mobile Computing*, vol. 9, no. 12, pp. 1780-1793, December 2010.

**[J35]** Sebastian S. Szyszkowicz, Halim Yanikomeroglu, and John Thompson, “On the feasibility of wireless shadowing correlation models”, *IEEE Transactions on Vehicular Technology*, vol. 59, no. 9, pp. 4222-4236, November 2010.

**[J34]** Muhammad Aljuaid and Halim Yanikomeroglu, “Investigating the Gaussian convergence of the distribution of the aggregate interference power in large wireless networks," *IEEE Transactions on Vehicular Technology*, vol. 59, no. 9, pp. 4418-4424, November 2010.

**[J33]** Mohamed Salem, Abdulkareem Adinoyi, Mahmudur Rahman, Halim Yanikomeroglu, David Falconer, Young-Doo Kim, Eungsun Kim, and Yoon-Chae Cheong, “An overview of radio resource management in relay-enhanced OFDMA-based networks”, *IEEE Communications Surveys & Tutorials*, vol. 12, no. 3, pp. 422-438, Third Quarter 2010. [[Xplore](https://ieeexplore.ieee.org/document/5455787)]

**[J32]** Mohamed Salem, Abdulkareem Adinoyi, Halim Yanikomeroglu, and David Falconer, “Opportunities and challenges in OFDMA-based cellular relay networks: A radio resource management perspective”, *IEEE Transactions on Vehicular Technology*, vol. 59, no. 5, pp. 2496-2510, June 2010.

**[J31]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Achievable capacity in hybrid DS-CDMA/OFDM spectrum-sharing”, *IEEE Transactions on Mobile Computing*, vol. 9, no. 6, pp. 765-777, June 2010.

**[J30]** Mohamed Salem, Abdulkareem Adinoyi, Mahmudur Rahman, Halim Yanikomeroglu, David Falconer, and Young-Doo Kim, “Fairness-aware radio resource management in downlink OFDMA cellular relay networks”, *IEEE Transactions on Wireless Communications*, vol. 9, no. 5, pp. 1628-1639, May 2010.

**[J29]** Mahmudur Rahman and Halim Yanikomeroglu, “Enhancing cell-edge performance: A downlink dynamic interference avoidance scheme with inter-cell coordination”, *IEEE Transactions on Wireless Communications*, vol. 9, no. 4, pp. 1414-1425, April 2010.

**[J28]** Saad Al-Ahmadi and Halim Yanikomeroglu, “On the approximation of the generalized-K distribution by a Gamma distribution for modeling composite fading channels”, *IEEE Transactions on Wireless Communications*, vol. 9, no. 2, pp. 706-713, February 2010.

**[J27]** Furuzan Atay Onat, Yijia Fan, Halim Yanikomeroglu, and Vincent Poor, “Threshold-based relay selection for detect-and-forward relaying in cooperative wireless networks”, *EURASIP Journal on Wireless Communications and Networking*, vol. 2010, article ID 721492, 9 pages, 2010, DOI: 10.1155/2010/721492.

**[C126]** Alireza Sharifian, Petar Djukic, Halim Yanikomeroglu, and Jietao Zhang, “Mixed time-scale generalized fair scheduling for amplify-and-forward relay networks”, IEEE Globecom 2010, 6 -10 December 2010, Miami, FL, USA.

**[C125]** Houda Chafnaji, Tarik Ait-Idir, Halim Yanikomeroglu, and Samir Saoudi, “Signal-level turbo packet combining for multi-rate relay-assisted systems over multi-antenna broadband channels”, IEEE Globecom 2010, 6–10 December 2010, Miami, FL, USA.

**[C124]** Zakaria El-Moutaouakkil, Tarik Ait-Idir, Halim Yanikomeroglu, and Samir Saoudi, “Relay ARQ strategies for single carrier MIMO broadband amplify-and-forward cooperative transmission”, IEEE PIMRC 2010, 26–30 September 2010, Istanbul, Turkey. [pdf]

**[C123]** Muhammad Aljuaid and Halim Yanikomeroglu, “Identifying boundaries of dominant regions dictating spectrum sharing opportunities for large secondary networks”, IEEE PIMRC 2010, 26–30 September 2010, Istanbul, Turkey. [pdf]

**[C122]** Saad Al-Ahmadi and Halim Yanikomeroglu, “The ergodic and outage capacities of distributed antenna systems in generalized-K fading channels”, IEEE PIMRC 2010, 26–30 September 2010, Istanbul, Turkey. [pdf]

**[C121]** Hongcheng Zhuang, Zezhou Luo, Jietao Zhang, and Halim Yanikomeroglu, “Hierarchical and adaptive spectrum sensing in cognitive radio based multi-hop cellular networks”, IEEE Vehicular Technology Conference (VTC2010-Fall), 06–09 September 2010, Ottawa, ON, Canada. [pdf]

**[C120]** Alireza Sharifian, Petar Djukic, Halim Yanikomeroglu, and Jietao Zhang, “Max-min fair resource allocation for multiuser amplify-and-forward relay networks”, IEEE Vehicular Technology Conference (VTC2010-Fall), 06–09 September 2010, Ottawa, ON, Canada. [pdf]

**[C119]** Rui Yin, Yu Zhang, Jietao Zhang, Guanding Yu, Zhaoyang Zhang, and Halim Yanikomeroglu, “Optimal relay location for fading relay channels”, IEEE Vehicular Technology Conference (VTC2010-Fall), 06–09 September 2010, Ottawa, ON, Canada.

**[C118]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Novel approaches to determine the optimal operating point of spectrum sensing in overlay spectrum sharing”, IEEE Vehicular Technology Conference (VTC2010-Fall), 06–09 September 2010, Ottawa, ON, Canada.

**[C117]** Soumitra Dixit, Shalini Periyalwar, and Halim Yanikomeroglu, “A competitive and dynamic pricing model for secondary users in infrastructure based wireless networks”, IEEE Vehicular Technology Conference (VTC2010-Fall), 06–09 September 2010, Ottawa, ON, Canada. [pdf]

**[C116]** Houda Chafnaji, Tarik Ait-Idir, Halim Yanikomeroglu, and Samir Saoudi, “Turbo packet combining techniques for multi-relay-assisted systems over multi-antenna broadband channels”, 6th International Wireless Communications & Mobile Computing Conference (IWCMC 2010), 28 June – 02 July 2010, Caen, France. [pdf]

**[C115]** Houda Chafnaji, Tarik Ait-Idir, Halim Yanikomeroglu, and Samir Saoudi, “Analysis of packet combining for single carrier multi-relay broadband systems”, 11th IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC 2010), 20-23 June 2010, Marrakech, Morocco. [pdf]

**[C114]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Impact of the secondary network on the outage performance of the primary service in spectrum sharing”, IEEE ICC 2010, 23–27 May 2010, Cape Town, South Africa. [pdf]

**[C113]** Saad Al-Ahmadi and Halim Yanikomeroglu, “On the statistics of the sum of correlated generalized-K RVs”, IEEE ICC 2010, 23–27 May 2010, Cape Town, South Africa. [pdf]

**[C112]** Sebastian S. Szyszkowicz, Furkan Alaca, Halim Yanikomeroglu, and John S. Thompson, “Efficient simulation using shadowing fields of many wireless interferers with correlated shadowing”, IEEE Vehicular Technology Conference (VTC2010-Spring), 16–19 May 2010, Taipei, Taiwan. [pdf]

**[C111]** Mahmudur Rahman and Halim Yanikomeroglu, “Inter-cell interference coordination in OFDMA networks: A novel approach based on integer programming”, IEEE Vehicular Technology Conference (VTC2010-Spring), 16–19 May 2010, Taipei, Taiwan. [pdf]

**[C110]** Alireza Sharifian, Petar Djukic, Halim Yanikomeroglu, and Jietao Zhang, “Generalized proportionally fair scheduling for multi-user amplify-and-forward relay networks”, IEEE Vehicular Technology Conference (VTC2010-Spring), 16–19 May 2010, Taipei, Taiwan. [pdf]

**[C109]** Mohamed Salem, Abdulkareem Adinoyi, Halim Yanikomeroglu, and Young-Doo Kim, “Nomadic relay-directed joint power and subchannel allocation in OFDMA-based cellular fixed relay networks”, IEEE Vehicular Technology Conference (VTC2010-Spring), 16 – 19 May 2010, Taipei, Taiwan. [pdf]

**[C108]** Muhammad Aljuaid and Halim Yanikomeroglu, “A cumulant-based characterization of the aggregate interference power in wireless networks”, IEEE Vehicular Technology Conference (VTC2010-Spring), 16 – 19 May 2010, Taipei, Taiwan. [pdf]

**[C107]** Akram Bin Sediq, Petar Djukic, Halim Yanikomeroglu, and Jietao Zhang, “Generalized constellation rearrangement in cooperative relaying”, IEEE Vehicular Technology Conference (VTC2010-Spring), 16 – 19 May 2010, Taipei, Taiwan.

**[C106]** Houda Chafnaji, Tarik Ait-Idir, Halim Yanikomeroglu, and Samir Saoudi, “On the design of turbo packet combining schemes for relay-assisted systems over multi-antenna broadband channels”, IEEE Vehicular Technology Conference (VTC2010-Spring), 16 – 19 May 2010, Taipei, Taiwan. [pdf]

**[C105]** Muhammad Aljuaid and Halim Yanikomeroglu, “Investigating the validity of a Gaussian approximation for the distribution of the aggregate interference power in large wireless networks”, 25th Biennial Symposium on Communications (QBSC 2010), 12 – 14 May 2010, Queen’s University, Kingston, ON, Canada. [pdf]

**[C104]** Akram Bin Sediq, Petar Djukic, Halim Yanikomeroglu, and Jietao Zhang, “Near-optimal non-uniform constellation rearrangement for cooperative relaying”, 25th Biennial Symposium on Communications (QBSC 2010), 12 – 14 May 2010, Queen’s University, Kingston, ON, Canada.

**[C103]** Muhammad Aljuaid and Halim Yanikomeroglu, “Impact of secondary users’ field size on spectrum sharing opportunities”, IEEE WCNC 2010, 18 – 21 April 2010, Sydney, Australia. [pdf]

**[C102]** Saad Al-Ahmadi and Halim Yanikomeroglu, “On the approximation of the PDF of the sum of independent generalized-K RVs by another generalized-K RV with applications to distributed antenna systems”, IEEE WCNC 2010, 18 – 21 April 2010, Sydney, Australia.

**[C101]** Jason Lee and Halim Yanikomeroglu, “A novel architecture for multi-hop WiMAX systems: shared relay segmentation”, IEEE WCNC 2010, 18 – 21 April 2010, Sydney, Australia.

**[C100]** Mohamed Salem, Abdulkareem Adinoyi, Halim Yanikomeroglu, and Young-Doo Kim, “Radio resource management in OFDMA-based cellular networks enhanced with fixed and nomadic relays”, IEEE WCNC 2010, 18 – 21 April 2010, Sydney, Australia. [pdf]

**2009**

**[J26]** Sebastian S. Szyszkowicz and Halim Yanikomeroglu, “Limit theorem on the sum of identically distributed equally and positively correlated joint lognormals”, *IEEE Transactions on Communications*, vol. 57, no. 12, pp. 3538-3542, December 2009. [pdf]

**[J25]** Abdulkareem Adinoyi, Yijia Fan, Halim Yanikomeroglu, H. Vincent Poor, and Furaih Al-Shaalan, “Performance of selection relaying and cooperative diversity”, *IEEE Transactions on Wireless Communications*, vol. 8, no. 12, pp. 5790-5795, December 2009. [pdf]

**[J24]** Akram Bin Sediq and Halim Yanikomeroglu, “Performance analysis of soft-bit maximal ratio combining in cooperative relay networks”, *IEEE Transactions on Wireless Communications*, vol. 8, no. 10, pp. 4934-4939, October 2009. [pdf]

**[J23]** Mohamed Hossam Ahmed and Halim Yanikomeroglu, “Throughput fairness and efficiency of link adaptation techniques in wireless networks”, *IET Communications*, vol. 3, issue 7, pp. 1227-1238, July 2009. [pdf]

**[J22]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “On the impact of the primary network activity on the achievable capacity of spectrum sharing over fading channels”, *IEEE Transactions on Wireless Communications*, vol. 8, no. 4, pp. 2100-2111, April 2009. [pdf]

**[J21]** Yijia Fan, Abdulkareem Adinoyi, John S. Thompson, Halim Yanikomeroglu, and Vincent Poor, “A simple distributed antenna processing scheme for cooperative diversity”, *IEEE Transactions on Communications*, vol. 57, no. 3, pp. 626-629, March 2009. [pdf] [arXiv:0802.2684]

**[J20]** Mohammad Katoozian, Keivan Navaie, and Halim Yanikomeroglu, “Utility-based adaptive radio resource allocation in OFDM wireless networks with traffic prioritization”, *IEEE Transactions on Wireless Communications*, vol. 8, no. 1, pp. 66-71, January 2009. [pdf]

**[J19]** Feroz A. Bokhari, Halim Yanikomeroglu, William K. Wong, and Mahmudur Rahman, “Cross-layer resource scheduling for multimedia traffic in the downlink of 4G wireless multicarrier networks”, *EURASIP Journal on Wireless Communications and Networking, Special Issue on Fairness in Radio Resource Management for Wireless Networks*, vol. 2009, article ID 212783, 10 pages, 2009. doi: 10.1155/2009/212783. [pdf]

**[C99]** Sebastian Szyszkowicz and Halim Yanikomeroglu, “Fitting the modified power-lognormal to the sum of independent lognormals distribution”, IEEE Globecom 2009, 30 November – 4 December 2009, Honolulu, HI, USA. [pdf]

**[C98]** Saad Al-Ahmadi and Halim Yanikomeroglu, “On the use of high-order moment matching to approximate the generalized-K distribution by a Gamma distribution”, IEEE Globecom 2009, 30 November – 4 December 2009, Honolulu, HI, USA. [pdf]

**[C97]** Mohamed Salem, Abdulkareem Adinoyi, Halim Yanikomeroglu, David Falconer, and Young-Doo Kim, “A fair radio resource allocation scheme for ubiquitous high-data-rate coverage in OFDMA-based cellular relay networks”, IEEE Globecom 2009, 30 November – 4 December 2009, Honolulu, HI, USA. [pdf]

**[C96]** Houda Chafnaji, Tarik Ait-Idir, Halim Yanikomeroglu, and Samir Saoudi, “Turbo packet combining for broadband MIMO relay communication”, Mediterranean Microwave Symposium, 15 – 17 November 2009, Tangiers, Morocco. [pdf]

**[C95]** Soumitra Dixit, Shalini Periyalwar, and Halim Yanikomeroglu, “A distributed framework with a novel pricing model for enabling dynamic spectrum access for secondary users”, IEEE Vehicular Technology Conference (VTC2009-Fall), 20 – 23 September 2009, Anchorage, AK, USA. [pdf]

**[C94]** Akram Bin Sediq and Halim Yanikomeroglu, “Performance analysis of SNR-based selection combining and BER-based selection combining of signals with different modulation levels in cooperative communications’, IEEE Vehicular Technology Conference (VTC2009-Fall), 20 – 23 September 2009, Anchorage, AK, USA. [pdf]

**[C93]** Houda Chafnaji, Tarik Ait-Idir, Halim Yanikomeroglu, and Samir Saoudi, “Joint turbo equalization for relaying schemes over frequency-selective fading channels”, International Wireless Communications and Mobile Computing Conference (IWCMC 2009), 21–24 June 2009, Leipzig, Germany. [pdf]

**[C92]** Mohamed Salem, Abdulkareem Adinoyi, Mahmudur Rahman, Halim Yanikomeroglu, David Falconer, Young-Doo Kim, Wonjae Shin, and Eungsun Kim, “Fairness-aware joint routing and scheduling in OFDMA-based multi-cellular fixed relay networks”, IEEE ICC 2009, 14 – 18 June 2009, Dresden, Germany. [pdf]

**[C91]** Saad Al-Ahmadi and Halim Yanikomeroglu, “On the role of the input power constraint in the beamforming optimality range in TIMO channels”, Canadian Workshop on Information Theory (CWIT), 13 – 15 May 2009, Ottawa, ON, Canada. [pdf]

**[C90]** Petar Djukic, Halim Yanikomeroglu, and Jietao Zhang, “User-centric RRM and optimizable protocol design for beyond-4G RANs”, WWRF22 Meeting, 5–7 May 2009, Paris, France. [pdf]

**[C89]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, “Diversity-multiplexing tradeoff bounds for wireless relay networks”, IEEE WCNC 2009, 5 – 8 April 2009, Budapest, Hungary. [pdf]

**[C88]** Mahmudur Rahman, Halim Yanikomeroglu, and William Wong, “Interference avoidance with dynamic inter-cell coordination for downlink LTE systems”, IEEE WCNC 2009, 5 – 8 April 2009, Budapest, Hungary. [pdf]

**[C87]** Saad Al-Ahmadi and Halim Yanikomeroglu, “On the approximation of the generalized-K PDF by a Gamma PDF using the moment matching method”, IEEE WCNC 2009, 5 – 8 April 2009, Budapest, Hungary. [pdf]

**2008**

**[J18]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Impact of the secondary service transmit power constraint on the achievable capacity of spectrum sharing in Rayleigh fading environment”, *IEEE Communications Letters*, vol. 12, no. 12, pp. 865-867, December 2008. [pdf]

**[J17]** Furuzan Atay Onat, Yijia Fan, Halim Yanikomeroglu, and John S. Thompson, “Asymptotic BER analysis of threshold digital relaying schemes in cooperative wireless systems”, *IEEE Transactions on Wireless Communications*, vol. 7, no. 12, pp. 4938-4947, December 2008. [pdf]

**[J16]** Furuzan Atay Onat, Abdulkareem Adinoyi, Yijia Fan, Halim Yanikomeroglu, John S. Thompson, and Ian D. Marsland, “Threshold selection for SNR-based selective digital relaying in cooperative wireless networks”, *IEEE Transactions on Wireless Communications*, vol. 7, no. 11, pp. 4226-4237, November 2008. [pdf]

**[J15]** Mohamed Hossam Ahmed, Imran Syed, and Halim Yanikomeroglu, “On the performance of TDMA-based multihop fixed cellular networks with respect to available frequency channels”, *IET Communications*, vol. 2, no. 9, pp. 1196-1204, October 2008, DOI: 10.1049/iet-com:20070490. [pdf]

**[J14]** Furuzan Atay Onat, Ivan Stojmenovic, and Halim Yanikomeroglu, “Generating random graphs for the simulation of wireless ad hoc, actuator, sensor, and internet networks”, *Pervasive and Mobile Computing Journal (Elsevier)*, no. 4, pp. 597-615, October 2008, DOI: 10.1016/j.pmcj.2008.04.011. [pdf]

**[C86]** Furuzan Atay Onat, Yijia Fan, Halim Yanikomeroglu, and H. Vincent Poor, “Threshold based relay selection in cooperative wireless networks”, IEEE Globecom 2008, 30 November – 4 December 2008, New Orleans, LA, USA. [pdf]

**[C85]** Yijia Fan, Furuzan Atay Onat, Halim Yanikomeroglu, and Vincent Poor, “Threshold based distributed detection that achieves full diversity in wireless sensor networks”, invited paper in Proc. Asilomar Conference on Signals, Systems, and Computers, 26–29 October 2008, USA. [pdf]

**[C84]** Halim Yanikomeroglu and Jietao Zhang, “Beyond-4G cellular networks: advanced radio access network (RAN) architectures, advanced radio resource management (RRM) techniques, and other enabling technologies”, WWRF21 Meeting, 13–15 October 2008, Stockholm, Sweden. [pdf]

**[C83]** Akram Bin Sediq and Halim Yanikomeroglu, “Diversity combining of signals with different modulation levels in cooperative relay networks”, IEEE VTC2008–Fall, 21–24 September 2008, Calgary, AB, Canada. [pdf]

**[C82]** Abdulkareem Adinoyi, Yijia Fan, Halim Yanikomeroglu, and Vincent Poor, “On the performance of selective relaying”, IEEE VTC2008–Fall, 21–24 September 2008, Calgary, AB, Canada. [pdf] [arXiv:0807.2844]

**[C81]** Feroz A. Bokhari, Halim Yanikomeroglu, William K. Wong, and Mahmudur Rahman, “Fairness assessment of the adaptive token bank fair queuing scheduling algorithm”, IEEE VTC2008–Fall, 21–24 September 2008, Calgary, AB, Canada. [pdf]

**[C80]** Muhammad Aljuaid and Halim Yanikomeroglu, “On the asymptotic analysis of average interference power generated by a wireless sensor network”, IEEE VTC2008–Fall, 21–24 September 2008, Calgary, AB, Canada. [pdf]

**[C79]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Impact of the primary network activity on the maximum achievable capacity of DS-CDMA/OFDM spectrum sharing”, IEEE VTC2008–Fall, 21–24 September 2008, Calgary, AB, Canada. [pdf]

**[C78]** Stefan Valentin, Tobias Volkhausen, Furuzan Atay Onat, Halim Yanikomeroglu, and Holger Karl, “Decoding-based channel estimation for selective cooperation diversity protocols”, IEEE PIMRC 2008, 15–18 September 2008, Cannes, France. [pdf]

**[C77]** Wenhao Zhu, J. Tatoian, Halim Yanikomeroglu, and James Wight, "Two-hop multi-antenna relay connecting different fading channels", IEEE International Symposium on Antennas and Propagation (APS) 2008, 5-12 July 2008, San Diego, CA, USA.

**[C76]** Mohammad Katoozian, Keivan Navaie, and Halim Yanikomeroglu, “Optimal utility-based resource allocation for OFDM networks with multiple types of traffic”, IEEE VTC2008–Spring, 11–14 May 2008, Singapore. [pdf]

**[C75]** Feroz A. Bokhari, William K. Wong, and Halim Yanikomeroglu, “Adaptive token bank fair queuing scheduling in the downlink of 4G wireless multicarrier networks”, IEEE VTC2008–Spring, 11–14 May 2008, Singapore. [pdf]

**[C74]** Mahmudur Rahman and Halim Yanikomeroglu, “Interference avoidance through dynamic downlink OFDMA subchannel allocation using intercell coordination”, IEEE VTC2008–Spring, 11–14 May 2008, Singapore. [pdf]

**[C73]** Mohammad G. Khoshkholgh, Keivan Navaie, and Halim Yanikomeroglu, “Adaptive multiple time-scale power allocation for spectrum sharing in DS-CDMA networks”, IEEE CogNet 2008 Workshop collocated with IEEE ICC 2008, 19–23 May 2008, Beijing, China. [pdf]

**[C72]** Stefan Valentin, Tobias Volkhausen, Furuzan Atay Onat, Halim Yanikomeroglu, and Holger Karl, “Enabling partial forwarding by decoding-based one and two-stage selective cooperation”, IEEE Cognitive and Cooperative Wireless Networks (CoCoNET) Workshop collocated with IEEE ICC 2008, 19–23 May 2008, Beijing, China. [pdf]

**[C71]** Akram Bin Sediq and Halim Yanikomeroglu, “Diversity combining of signals with different modulation levels in cooperative relay networks”, WWRF20 Meeting, 22–24 April 2008, Ottawa, ON, Canada.

**[C70]** Furuzan Atay Onat, Yijia Fan, Halim Yanikomeroglu, John Thompson, “Asymptotic BER analysis of threshold digital relaying schemes in cooperative wireless systems”, IEEE WCNC 2008, 31 March – 3 April 2008, Las Vegas, NV, USA. [pdf]

**[C69]** Sebastian S. Szyszkowicz and Halim Yanikomeroglu, “Analysis of interference from large clusters as modeled by the sum of many correlated lognormals”, IEEE WCNC 2008, 31 March – 03 April 2008, Las Vegas, NV, USA. [pdf]

**[C68]** Basak Can, Halim Yanikomeroglu, Furuzan Atay Onat, Elisabeth de Carvalho, and Hiroyuki Yomo, “Efficient cooperative diversity schemes and radio resource allocation for IEEE 802.16j”, IEEE WCNC 2008, 31 March – 3 April 2008, Las Vegas, NV, USA. [pdf]

**2007**

**[J13]** Yijia Fan, Abdulkareem Adinoyi, John Thompson, and Halim Yanikomeroglu, "Antenna combining for multi-antenna multi-relay channels", *European Transactions on Telecommunications*, no. 6, vol. 18, pp. 617-626, 2007, DOI: 10.1002/ett.1231. [pdf]

**[J12]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, "Cooperative connectivity models for wireless relay networks", *IEEE Transactions on Wireless Communications*, vol. 6, no. 6, pp. 1992-2000, June 2007. [pdf]

**[J11]** Abdulkareem Adinoyi and Halim Yanikomeroglu, "Cooperative relaying in multi-antenna fixed relay networks", *IEEE Transactions on Wireless Communications*, vol. 6, no. 2, pp. 533-544, February 2007. [pdf]

**[C67]** Mahmudur Rahman and Halim Yanikomeroglu, “Multicell downlink OFDM subchannel allocations using dynamic intercell coordination”, IEEE Globecom 2007, 26-30 November 2007, Washington, DC, USA. [pdf]

**[C66]** Sebastian S. Szyszkowicz and Halim Yanikomeroglu, “On the tail of the distribution of the sum of lognormals”, IEEE ICC 2007, 24 – 28 June 2007, Glasgow, Scotland, UK. [pdf]

**[C65]** Yijia Fan, John Thompson, Abdulkareem Adinoyi, and Halim Yanikomeroglu, “On the diversity-multiplexing tradeoff for multi-antenna multi-relay channels”, IEEE ICC 2007, 24 – 28 June 2007, Glasgow, Scotland, UK.

**[C64]** Furuzan Atay Onat, Abdulkareem Adinoyi, Yijia Fan, Halim Yanikomeroglu, and John Thompson, “Optimum threshold for SNR-based selective digital relaying schemes in cooperative wireless networks”, IEEE WCNC 2007, 11 – 15 March 2007, Hong Kong. [pdf]

**[C63]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, “Diversity order bounds for wireless relay networks”, IEEE WCNC 2007, 11 – 15 March 2007, Hong Kong. [pdf]

**2006**

**[J10]** Abdulkareem Adinoyi and Halim Yanikomeroglu, "Hybrid macro/microdiversity techniques in the reverse-link wireless communication networks", *IEEE Transactions on Wireless Communications*, vol. 5, no. 12, pp. 3335-3338, December 2006. [pdf]

**[J09]** Mahmudur Rahman, Halim Yanikomeroglu, Mohamed H. Ahmed, and Samy Mahmoud, "Opportunistic non-orthogonal packet scheduling in fixed broadband wireless access networks", *EURASIP Journal on Wireless Communications and Networking*, vol. 2006, article ID 80493, 11 pages, 2006. doi: 10.1155/WCN/2006/80493. [pdf]

**[J08]** Keivan Navaie and Halim Yanikomeroglu, "Optimal downlink resource allocation for elastic traffic in cellular CDMA/TDMA networks", *IEEE Communications Letters*, vol. 10, no. 4, pp. 278-280, April 2006. [pdf]

**[J07]** Mohamed H. Ahmed, Halim Yanikomeroglu, and Samy Mahmoud, "Interference management using basestation coordination in broadband wireless access networks", *Wireless Communications & Mobile Computing*, vol. 6, no. 1, pp. 95-103, February 2006. [pdf]

**[C62]** Furuzan Atay Onat, Halim Yanikomeroglu, and Shalini Periyalwar, “Relay-assisted spatial multiplexing in wireless fixed relay networks”, IEEE Globecom 2006, 27 November – 1 December 2006, San Francisco, USA. [pdf]

**[C61]** Mahmudur Rahman and Halim Yanikomeroglu, “QoS provisioning in the absence of ARQ in cellular fixed relay networks through inter-cell coordination”, IEEE Globecom 2006, 27 November – 1 December 2006, San Francisco, USA. [pdf]

**[C60]** Abdulkareem Adinoyi and Halim Yanikomeroglu, “On the performance of cooperative wireless fixed relays in asymmetric channels”, IEEE Globecom 2006, 27 November – 1 December 2006, San Francisco, USA. [pdf]

**[C59]** Mohamed H. Ahmed and Halim Yanikomeroglu, “Aggregate throughput maximization with fairness constraints in cellular networks”, IEEE Vehicular Technology Conference – Fall 2006 (VTC’F06), 25 – 28 September 2006, Montreal, Canada.

**[C58]** Abdulkareem Adinoyi and Halim Yanikomeroglu, "Spectral efficiency and user diversity gains through cooperative fixed relays”, IEEE Vehicular Technology Conference – Fall 2006 (VTC’F06), 25 – 28 September 2006, Montreal, Canada. [pdf]

**[C57]** Keivan Navaie, Yanjian Liu, Muhammad Abaii, Adrian Florea, Halim Yanikomeroglu, Rahim Tafazolli, “Routing mechanisms for multi-hop cellular communications in the WINNER air interface”, IEEE Vehicular Technology Conference – Fall 2006 (VTC’F06), 25 – 28 September 2006, Montreal, Canada. [pdf]

**[C56]** Keivan Navaie and Halim Yanikomeroglu, "An optimal downlink joint base-station assignment and packet scheduling algorithm for cellular CDMA networks", IEEE ICC 2006, 11-15 June 2006, Istanbul, Turkey. [pdf]

**[C55]** Keivan Navaie and Halim Yanikomeroglu, "Induced multi-user diversity relaying for multi-hop mobile cellular networks", IEEE Vehicular Technology Conference - Spring 2006 (VTC'S06), 7-10 May 2006, Melbourne, Australia. [pdf]

**[C54]** Furuzan Atay Onat, Halim Yanikomeroglu, and Shalini Periyalwar, "Adaptive multi-stream relaying", IEEE Canadian Conf. on Electrical & Computer Engineering (CCECE 2006), 7-10 May 2006, Ottawa, Canada. [pdf]

**[C53]** Sebastian S. Szyszkowicz, Halim Yanikomeroglu, Eman Fituri, and Shalini Periyalwar, "Analytical modeling of interference in cellular fixed relay networks", IEEE Canadian Conf. on Electrical & Computer Engineering (CCECE 2006), 7-10 May 2006, Ottawa, Canada. [pdf]

**[C52]** Adrian Florea and Halim Yanikomeroglu, "On the scalability of relay based wireless networks", IEEE WCNC 2006, 3-6 April 2006, Las Vegas, Nevada, USA. [pdf]

**[C51]** Abdulkareem Adinoyi and Halim Yanikomeroglu, "Multi-antenna aspects of wireless fixed relays", IEEE WCNC 2006, 3-6 April 2006, Las Vegas, Nevada, USA.  [pdf]

**[C50]** Yijia Fan, Abdulkareem Adinoyi, John Thompson, and Halim Yanikomeroglu, "Space diversity for multi-antenna multi-relay channels", 12th European Wireless Conference (EW 2006), 2-5 April 2006, Athens, Greece. [pdf]

**2005**

**[J06]** Abdulkareem Adinoyi and Halim Yanikomeroglu, "Practical capacity calculation for time-hopping ultra-wide band multiple-access communications", *IEEE Communications Letters*, vol. 9, no. 7, pp. 601-603, July 2005. [pdf]

**[J05]** Mohamed H. Ahmed and Halim Yanikomeroglu, "SINR threshold lower bound for SINR-based call admission control in CDMA networks with imperfect power control", *IEEE Communications Letters*, vol. 9, no. 4, pp. 331-333, April 2005. [pdf]

**[C49]** Abdulkareem Adinoyi and Halim Yanikomeroglu, "Practical cooperative communication schemes through wireless fixed relays', World Wireless Research Forum meeting #15 (WWRF15), 8-9 December 2005, Paris, France.

**[C48]** Adrian Florea and Halim Yanikomeroglu, "On the optimal number of hops in infrastructure-based fixed relay networks", IEEE Globecom 2005, 28 November - 2 December 2005, St. Louis, MO, USA. [pdf]

**[C47]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, "Cooperative connectivity models for wireless relaying networks", WICAT Workshop on Cooperative Communications, 21 October 2005, Polytechnic University, Brooklyn, New York.

**[C46]** Keivan Navaie and Halim Yanikomeroglu, "Multi-user diversity in multi-hop cellular networks", Canadian Workshop on Information Theory (CWIT'05), 5-8 June 2005, Montreal, Canada. [pdf]

**[C45]** Omer Mubarek, Halim Yanikomeroglu, and Shalini Periyalwar, "Dynamic frequency hopping in cellular fixed relay networks", IEEE Vehicular Technology Conf. Spring 2005 (VTC'S05), May 30 - June 1, 2005, Stockholm, Sweden. [pdf]

**[C44]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, "On the impact of system resource constraints on wireless relaying channels", IEEE Int.'l Conf. on Communications 2005 (ICC'05), 16-20 May 2005, Seoul, Korea. [pdf]

**[C43]** Mahmudur Rahman, Halim Yanikomeroglu, Mohamed Ahmed, Samy Mahmoud, "Improving base station coordination based packet scheduling schemes in fixed broadband wireless access networks", IEEE Int.'l Conf. on Communications 2005 (ICC'05), 16-20 May 2005, Seoul, Korea. [pdf]

**[C42]** Abdulkareem Adinoyi and Halim Yanikomeroglu, "On the performance of hybrid macro/microdiversity in the reverse-link microcellular networks", IEEE Wireless Communications and Networking Conference 2005 (WCNC'05), 13-17 March 2005, New Orleans, LA, USA. [pdf]

**2004**

**[J04]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, "Multihop diversity in wireless relaying channels", *IEEE Transactions on Communications*, vol. 52, no. 10, pp. 1820-1830, October 2004.

**[J03]** Ralf Pabst, Bernhard H. Walke, Daniel C. Schultz, Patrick Herhold, Halim Yanikomeroglu, Sayandev Mukherjee, Harish Viswanathan, Matthias Lott, Wolfgang Zirwas, Mischa Dohler, Hamid Aghvami, David D. Falconer, and Gerhard P. Fettweis, "Relay-based deployment concepts for wireless and mobile broadband radio", *IEEE Communications Magazine*, vol. 42, no. 9, pp. 80-89, September 2004.

**[C41]** Mohamed H. Ahmed and Halim Yanikomeroglu, "A lower bound on SIR threshold of call admission control in multiple-class CDMA systems with imperfect power-control", IEEE Globecom'04, 29 November - 3 December 2004, Dallas, Texas, USA. [pdf]

**[C40]** Huining Hu, Halim Yanikomeroglu, David D. Falconer, and Shalini Periyalwar, "Range extension without capacity penalty in cellular networks with digital fixed relays", IEEE Globecom'04, 29 November - 3 December 2004, Dallas, Texas, USA. [pdf]

**[C39]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, "On the aggregate signal to noise ratio of amplified relaying channels", IEEE Globecom'04, 29 November - 3 December 2004, Dallas, Texas, USA. [pdf]

**[C38]** Hakan Bolukbasi, Halim Yanikomeroglu, David Falconer, Shalini Periyalwar, "Feasibility of providing high data coverage in cellular fixed relay networks", World Wireless Research Forum (WWRF12) meeting no. 12, 3-4 November 2004, Toronto, Canada.

**[C37]** Adrian Florea and Halim Yanikomeroglu, "On the efficiency of using multiple hops in relay based networks", World Wireless Research Forum (WWRF12) meeting no. 12, 3-4 November 2004, Toronto, Canada.

**[C36]** Abdulkareem Adinoyi, Halim Yanikomeroglu, and Sergey Loyka, "Hybrid macro- and generalized selection combining microdiversity in lognormal shadowed Rayleigh fading channels", IEEE Int.'l Conf. on Communications 2004 (ICC'04), 20-24 June 2004, Paris, France. [pdf]

**[C35]** Halim Yanikomeroglu, "Cellular multihop communications: infrastructure-based relay network architecture for 4G wireless systems", the 22nd Queen's Biennial Symposium on Communications (QBSC'04), 1-3 June 2004, Queen's University, Kingston, Ontario, Canada; invited paper. [doc]

**[C34]** Mohamed H. Ahmed, Halim Yanikomeroglu, and Samy Mahmoud, "Fairness of link adaptation techniques in broadband wireless access networks", IEEE Vehicular Technology Conference Spring 2004 (VTC'S04), 17-19 May 2004, Milan, Italy. [pdf]

**[C33]** Hakan Bolukbasi, Halim Yanikomeroglu, David D. Falconer, and Shalini Periyalwar, "On the capacity of wireless mesh networks", IEEE Canadian Conference on Electrical and Computer Engineering 2004 (CCECE'04), 2-5 May 2004, Niagara Falls, Ontario, Canada. [pdf]

**[C32]** Donald Walsh and Halim Yanikomeroglu, "Reverse-link power allocation in two-hop multimedia CDMA networks", IEEE Canadian Conference on Electrical and Computer Engineering 2004 (CCECE'04), 2-5 May 2004, Niagara Falls, Ontario, Canada. [pdf] [doc]

**[C31]** Imran Syed, Mohamed H. Ahmed, Halim Yanikomeroglu, and Samy Mahmoud, "Impact of multiple frequency channels usage on the performance of TDMA-based broadband fixed cellular multihop networks", IEEE Wireless Communications and Networking Conference 2004 (WCNC'04), 21-25 March 2004, Atlanta, Georgia, USA. [pdf]

**2003**

**[C30]** Shoaev Hares, Halim Yanikomeroglu, and Bassam Hashem, "Diversity- and AMC (adaptive modulation and coding)-aware routing in TDMA peer-to-peer multihop networks", IEEE GLOBECOM 2003, 1-5 December 2003, San Francisco, CA, USA. [pdf]

**[C29]** Mohamed H. Ahmed, Halim Yanikomeroglu, and Samy Mahmoud, "Comparing the performance of inter-sector/intra-sector scheduling and ARQ for multimedia traffic in wireless access networks", IEEE Newfoundland Electrical and Computer Engineering Conference (NECEC'03), 12 November 2003, St. John's, Newfoundland, Canada. [pdf]

**[C28]** Huining Hu and Halim Yanikomeroglu, "Performance Analysis of Cellular Radio Networks with Fixed Relays", World Wireless Research Forum (WWRF10) meeting no. 10, 27-28 October 2003, New York, USA.

**[C27]** Van Sreng, Halim Yanikomeroglu, and David D. Falconer, "Relayer selection strategies in cellular networks with peer-to-peer relaying", IEEE Vehicular Technology Conference Fall 2003 (VTC'F03), 4-9 October 2003, Orlando, Florida, USA. [pdf]

**[C26]** Shoaev Hares, Halim Yanikomeroglu, and Bassam Hashem, "A relaying algorithm for multihop TDMA TDD networks using diversity", IEEE Vehicular Technology Conference Fall 2003 (VTC'F03), 4-9 October 2003, Orlando, Florida, USA. [pdf]

**[C25]** Mohamed H. Ahmed, Halim Yanikomeroglu, and Samy Mahmoud, "Fairness enhancement of link adaptation techniques in wireless access networks", IEEE Vehicular Technology Conference Fall 2003 (VTC'F03), 4-9 October 2003, Orlando, Florida, USA. [pdf]

**[C24]** Shoaev Hares, Halim Yanikomeroglu, and Bassam Hashem, "Multi-hop relaying with diversity in peer-to-peer networks", World Wireless Research Forum (WWRF9) meeting no. 9, 1-2 July 2003, Zurich, Switzerland. [doc]

**[C23]** Mohamed H. Ahmed, Halim Yanikomeroglu, David D. Falconer, and Samy Mahmoud, "Performance enhancement of joint adaptive modulation, coding and power control using cochannel-interferer assistance and channel reallocation", IEEE Wireless Communications and Networking Conference (WCNC'03), 16-20 March 2003, New Orleans, LA, USA. [pdf]

**[C22]** Ehab Armanious, David D. Falconer, and Halim Yanikomeroglu, "Adaptive modulation, adaptive coding, and power control for fixed cellular broadband wireless systems", IEEE Wireless Communications and Networking Conference (WCNC'03), 16-20 March 2003, New Orleans, LA, USA. [pdf]

**2002**

**[J02]** Halim Yanikomeroglu and Elvino S. Sousa, "Antenna gain against interference in CDMA macrodiversity systems", *IEEE Transactions on Communications,* vol. 50, no. 8, pp. 1356-1371, August 2002.

**[C21]** Halim Yanikomeroglu, David D. Falconer, and Van Sreng, "Coverage enhancement through two-hop peer-to-peer relaying in cellular radio networks", World Wireless Research Forum (WWRF7) meeting no. 7, 3-4 December 2002, Eindhoven, the Netherlands. [doc]

**[C20]** Mohamed H. Ahmed, Halim Yanikomeroglu, Samy Mahmoud, and David D. Falconer, "Scheduling of multimedia traffic in interference-limited broadband fixed wireless access networks", the 5th International Symposium on Wireless Personal Multimedia Communications (WPMC'02), 27-30 October 2002, Honolulu, HI, USA. [pdf]

**[C19]** Halim Yanikomeroglu, "Fixed and mobile relaying technologies for cellular networks", Second Workshop on Applications and Services in Wireless Networks (ASWN'02), pp. 75-81, 3-5 July 2002, Paris, France. [pdf]

**[C18]** Mohamed H. Ahmed, Samy Mahmoud, and Halim Yanikomeroglu, "A simulation testbed for radio resource management in broadband fixed wireless access", 21st Queen's Biennial Symposium on Communications (QBSC'02), 2-5 June, 2002, Queen's University, Kingston, ON, Canada. [pdf]

**[C17]** Van Sreng, Halim Yanikomeroglu, and David D. Falconer, "Coverage enhancement through two-hop relaying in cellular radio systems", IEEE Wireless Communications and Networking Conference (WCNC'02), 17-21 March, 2002, Orlando, FL, USA. [pdf]

**2001**

**[C16]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, "A theoretical characterization of the multihop wireless communications channel with diversity", IEEE GLOBECOM'01, 25-29 November 2001, San Antonio, Texas, USA. [pdf]

**[C15]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, "A theoretical characterization of the multihop wireless communications channel without diversity", the 12th IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC'01), September 30 - October 3, 2001, San Diego, CA, USA. [pdf]

**[C14]** John Boyer, David D. Falconer, and Halim Yanikomeroglu, "A characterization of multihop wireless communications channels", Proc. the 7th Canadian Workshop on Information Theory (CWIT'01), 3-6 June 2001, Vancouver, British Columbia, Canada. [pdf]

**2000**

**[C13]** Arif Obaid and Halim Yanikomeroglu, "Reverse-link power control in CDMA distributed antenna systems", Proc. IEEE Wireless Communications and Networking Conference (WCNC'00), vol. 2, pp. 608-612, 23-28 September 2000, Chicago, IL, USA. [pdf]

**[C12]** Salem Salamah, David D. Falconer, and Halim Yanikomeroglu, "Effects of transmit power control in cellular fixed broadband wireless systems", Proc. IEEE Wireless Communications and Networking Conference (WCNC'00), vol. 2, pp. 624-628, 23-28 September 2000, Chicago, IL, USA. [pdf]

**[C11]** Halim Yanikomeroglu and Elvino S. Sousa, "Effects of correlated interference on the potential linear antenna gain in CDMA macrodiversity systems", Proc. IEEE International Conference on Communications (ICC'00), vol. 2, pp. 1009-1014, 18-22 June 2000, New Orleans, LA, USA. [pdf]

**1999**

**[C10]** Bassam Hashem and Halim Yanikomeroglu, "Power control for code-division multiple access cellular systems", Proc. International Congress on Dynamics and Control of Control Systems (DYCONS'99), 5-6 August 1999, Ottawa, ON, Canada. [pdf]

**[C09]** Halim Yanikomeroglu, "On the reverse link capacity of CDMA macrodiversity systems", Proc. the 6th Canadian Workshop on Information Theory (CWIT'99), pp. 99-102, 15-18 June 1999, Kingston, ON, Canada.

**[C08]** Halim Yanikomeroglu and Elvino S. Sousa, "Correlated interference analysis in CDMA multi-antenna systems", Proc. IEEE International Conference on Communications (ICC'99), pp. 23-28, 6-10 June 1999, Vancouver, BC, Canada. [pdf]

**1998**

**[C07]** Halim Yanikomeroglu and Elvino S. Sousa, "SIR-balanced macro power control for CDMA sectorized distributed antenna systems", Proc. the 9th IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC'98), 8-11 September 1998, Boston, Massachusetts, USA. [pdf]

**[C06]** Halim Yanikomeroglu and Elvino S. Sousa, "CDMA sectorized distributed antenna system", Proc. International Symposium on Spread Spectrum Technology and Applications (ISSSTA'98), pp. 792-797, 2-4 September 1998, Sun City, South Africa. [pdf]

**[C05]** Halim Yanikomeroglu and Elvino S. Sousa, "Power control and optimal number of antenna elements in CDMA distributed antenna systems", Proc. IEEE International Conference on Communications (ICC'98), pp. 1040-1045, 8-11 June 1998, Atlanta, Georgia, USA. [pdf]

**1997**

**[J01]** Halim Yanikomeroglu and Elvino S. Sousa, "Antenna interconnection strategies for personal communication systems", *IEEE Journal on Selected Areas in Communications*, vol. 15, no. 7, pp. 1327-1336, September 1997. [pdf]

**[C04]** Halim Yanikomeroglu and Elvino S. Sousa, "Interconnection strategies for wireless access networks", Proc. the 8th IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC'97), vol. 3, pp. 882-886, 1-4 September 1997, Helsinki, Finland. [pdf]

**[C03]** Halim Yanikomeroglu and Elvino S. Sousa, "Steiner minimal tree architectures for the interconnection of wireless access networks", Proc. the 5th Canadian Workshop on Information Theory (CWIT'97), pp. 113-116, 3-6 June 1997, Toronto, ON, Canada.

**1996**

**[C02]** Halim Yanikomeroglu and Elvino S. Sousa, "Wireless access network architectures", in Proc. 3rd International Workshop on Mobile Multimedia Communications (MoMuC'96), 25-27 September 1996, Princeton, NJ, USA.

**1993**

**[C01]** Halim Yanikomeroglu and Elvino S. Sousa, "CDMA distributed antenna system for indoor wireless communications", in Proc. 2nd International Conference on Universal Personal Communications (ICUPC'93), pp. 990-994, October 1993, Ottawa, ON, Canada.

**Book Chapters**

**[B05]** Wael Jaafar, Lina Bariah, Sami Muhaidat, and Halim Yanikomeroglu, “Enhancing UAV-based public safety networks with reconfigurable intelligent surfaces”, in Intelligent Unmanned Air Vehicles Communications for Public Safety Networks, Springer, 2022.

**[B04]** Keivan Navaie, Halim Yanikomeroglu, Mohammad G. Khoshkholgh, Ahmad R. Sharafat, and Hamidreza Nikoofar, “Spectrum sharing in DS-CDMA/OFDM wireless mobile networks”, in Cognitive Radio Mobile Ad Hoc Networks, pp. 91-125, Editor: Richard Yu, Springer, 2011.

**[B03]** Petar Djukic, Mahmudur Rahman, Halim Yanikomeroglu, and Jietao Zhang, “Advanced radio access networks for LTE and beyond”, in Evolved Cellular Network Planning and Optimization for UMTS and LTE, Editors: Lingyang Song and Jia Shen, CRC Press, Taylor & Francis Group, 2010.

**[B02]** Keivan Navaie and Halim Yanikomeroglu, "Multi-route and multi-user diversity in infrastructure-based multi-hop networks" in Cooperation in Wireless Networks: Principles and Applications, pp. 433-454, Editors: Frank H.P. Fitzek and Marcos D. Katz, Springer, 2006.

**[B01]** Keivan Navaie, Delfin Y. Montuno, Halim Yanikomeroglu, and Yiqiang Q. Zhao, "Chapter 9: Optimal Downlink Resource Allocation for Cellular CDMA Networks" in Adaptation Techniques in Wireless Multimedia Networks, Editors: Wei Li and Yang Xiao, Nova Science Publishers, 2006.

**Selected Non-Refereed Publications**

"WWRF WG4 - White Paper: Relay-Based Deployment Concepts for Wireless and Mobile Broadband Cellular Radio", prepared by contributions from thirteen researchers including H. Yanikomeroglu, Joint Workshop IEEE - WWRF, October 2003, New York, USA.

"Relay-Based Deployment Concepts White Paper", prepared by nine researchers including H. Yanikomeroglu, World Wireless Research Forum (WWRF) meeting no. 9, July 2003, Zurich, Switzerland.

"Ad Hoc White Paper", prepared by nine researchers including H. Yanikomeroglu, World Wireless Research Forum (WWRF) meeting no. 6, June 2002, London, UK.

H. Yanikomeroglu, "The Theory of Power Control", CITO/OCRI Tech-Talk Workshop on Radio Resource Management in Wireless Multimedia Systems, April 2000, Ottawa.