List of Publications – Halim Yanikomeroglu
(updated on 15 Feb 2022)

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

DBLP
Google Scholar

Breakdown of 225 Published Journal Papers

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Earlier publications (non-IEEE)

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Submissions under Review

under review in *IEEE Open Journal of the Communications Society* (submission: 13 Feb 2022) [arXiv] [ResearchGate]


[JS14] Omid Abbasi and Halim Yanikomeroglu, “UxNB-Enabled cell-free massive MIMO with HAPS-assisted sub-THz backhauling”, under review in *IEEE Transactions on Wireless Communications* (submission: 05 Dec 2021). [arXiv] [ResearchGate]


Refereed Publications

2022


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] [ResearchGate] [Xplore]

2021 (47 IEEE journal papers + 20 conference papers)

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] [ResearchGate] [Xplore]

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]


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] [Xplore]

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] [Xplore]


[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] [ResearchGate] [Xplore]


[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] [ResearchGate] [Xplore]


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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]

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] [Xplore]

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] [ResearchGate] [Xplore]


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] [Xplore]

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] [Xplore]

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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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]

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Qi Qi 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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]

Safwan Alfattani, Wael Jaaifar, 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] [ResearchGate] [Xplore]

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] [Xplore]


Qi Qi Ren, Omid Abbasi, Gunes Karabulut Kurt, Halim Yanikomeroglu, and Jian Chen, “High altitude platform station (HAPS) assisted computing for intelligent transportation systems”, [C282]
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] [ResearchGate] [Xplore]

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] [Xplore]

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] [ResearchGate] [Xplore]

Musa Otaru, Abdulkareem Adinoyi, Mohammed Ajiya, Mohammed Aljlal 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] [Xplore]


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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]

Mohammed Younis Abdelsadek, Halim Yanikomeroglu, and Gunes Karabulut Kurt, “Future ultra-dense LEO satellite networks: A cell-free massive MIMO approach”, *IEEE
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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]

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]

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] [ResearchGate] [Xplore]

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]


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] [Xplore]
2020 (21 IEEE journal papers + 12 conference papers)


[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] [ResearchGate] [Xplore]
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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]


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] [Xplore]

Cihan Tugrul Cicek, Hakan Gultekin, Bülent Tavlı, 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] [ResearchGate] [Xplore]

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] [Xplore]


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] [Xplore]

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] [ResearchGate] [Xplore]

Michel Kulhandjian, Ebrahim Bedeer, D’Amours, Claude Kulhandjian, 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] [ResearchGate] [Xplore]


[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]

[C260] Halim Yanikomeroglu, “Wireless access architecture: The next 20+ years”, ACM International Conference on Future Networks and Distributed Systems (ICFNDSD), November 2020, Article No: 40, Pages 1, 26–27 November 2020, St. Petersburg, Russia. [ResearchGate] [ACM]

[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 (online). [ResearchGate] [Xplore]


[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 (online). [HAL] [ResearchGate] [Xplore]


[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 (online). [ResearchGate] [Xplore]


2019 (21 IEEE journal papers + 18 conference papers)


[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] [ResearchGate] [Xplore]


[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] [Xplore]


[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] [ResearchGate] [Xplore]


[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] [Xplore]
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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]


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] [Xplore]


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Vitaly Petrov, Konstantin Mikhailov, 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] [ResearchGate] [Xplore]

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] [Xplore]

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]

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]


[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] [Xplore]


[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] [ResearchGate] [Xplore]

2018 (15 IEEE journal papers + 10 conference papers)


[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] [Xplore]


networks”, *IEEE Transactions on Wireless Communications*, vol. 17, no. 2, pp. 1226-1241, February 2018. [ResearchGate] [Xplore]


[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] [Xplore]

networks", IEEE Wireless Communications and Networking Conference (WCNC) 2018, 15–18 April 2018, Barcelona, Spain. [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]

[C223] Fatima Ezzahra Airod, Houda Chafnaoui, 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] [ResearchGate] [Xplore]

2017 (23 IEEE journal papers + 16 conference papers)


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