Breakdown of 262 Published Journal Papers (254 IEEE + 8 others)

<table>
<thead>
<tr>
<th>No of papers</th>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>IEEE Transactions on Wireless Communications</td>
<td>8.346</td>
</tr>
<tr>
<td>29</td>
<td>IEEE Transactions on Vehicular Technology</td>
<td>6.239</td>
</tr>
<tr>
<td>29</td>
<td>IEEE Access</td>
<td>3.476</td>
</tr>
<tr>
<td>25</td>
<td>IEEE Wireless Communications Letters</td>
<td>5.281</td>
</tr>
<tr>
<td>24</td>
<td>IEEE Communications Letters</td>
<td>3.553</td>
</tr>
<tr>
<td>19</td>
<td>IEEE Communications Magazine</td>
<td>9.030</td>
</tr>
<tr>
<td>17</td>
<td>IEEE Transactions on Communications</td>
<td>6.166</td>
</tr>
<tr>
<td>10</td>
<td>IEEE Open Journal of the Communications Society</td>
<td>N/A</td>
</tr>
<tr>
<td>8</td>
<td>IEEE Internet of Things Journal</td>
<td>10.238</td>
</tr>
<tr>
<td>8</td>
<td>IEEE Transactions on Mobile Computing</td>
<td>6.075</td>
</tr>
<tr>
<td>5</td>
<td>IEEE Vehicular Technology Magazine</td>
<td>13.609</td>
</tr>
<tr>
<td>5</td>
<td>IEEE Journal on Selected Areas in Communications</td>
<td>13.081</td>
</tr>
<tr>
<td>5</td>
<td>IEEE Wireless Communications Magazine</td>
<td>12.777</td>
</tr>
<tr>
<td>4</td>
<td>IEEE Communications Surveys &amp; Tutorials</td>
<td>39.973</td>
</tr>
<tr>
<td>4</td>
<td>IEEE Transactions on Information Theory</td>
<td>2.978</td>
</tr>
<tr>
<td>3</td>
<td>IEEE Consumer Electronics Magazine</td>
<td>4.135</td>
</tr>
<tr>
<td>3</td>
<td>IEEE Open Journal of Vehicular Technology</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>IEEE Transactions on Green Communications and Networking</td>
<td>3.525</td>
</tr>
<tr>
<td>2</td>
<td>IEEE Transactions on Aerospace and Electronic Systems</td>
<td>3.491</td>
</tr>
<tr>
<td>2</td>
<td>IEEE Photonics Journal</td>
<td>2.250</td>
</tr>
<tr>
<td>2</td>
<td>IEEE Journal of Radio Frequency Identification</td>
<td>N/A</td>
</tr>
<tr>
<td>1</td>
<td>IEEE, Proceedings of the</td>
<td>14.910</td>
</tr>
<tr>
<td>1</td>
<td>IEEE Network Magazine</td>
<td>10.294</td>
</tr>
<tr>
<td>1</td>
<td>IEEE Transactions on Cognitive Communications and Networking</td>
<td>6.359</td>
</tr>
<tr>
<td>1</td>
<td>IEEE Transaction on Broadcasting</td>
<td>5.194</td>
</tr>
<tr>
<td>1</td>
<td>IEEE Transactions on Signal Processing</td>
<td>4.875</td>
</tr>
<tr>
<td>1</td>
<td>IEEE Sensors Journal</td>
<td>4.325</td>
</tr>
<tr>
<td>1</td>
<td>IEEE Antennas and Wireless Propagation Letters</td>
<td>3.825</td>
</tr>
<tr>
<td>1</td>
<td>IEEE Networking Letters</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Earlier publications (non-IEEE)

<table>
<thead>
<tr>
<th>No of papers</th>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Eurasip Journal on Wireless Communications Networking (Springer)</td>
<td>2.455</td>
</tr>
<tr>
<td>2</td>
<td>IET Communications</td>
<td>1.542</td>
</tr>
<tr>
<td>1</td>
<td>Pervasive and Mobile Computing Journal (Elsevier)</td>
<td>4.410</td>
</tr>
<tr>
<td>1</td>
<td>Transactions on Emerging Telecommunications Technologies (Wiley)</td>
<td>3.310</td>
</tr>
<tr>
<td>1</td>
<td>Wireless Communications and Mobile Computing (Hindawi)</td>
<td>2.336</td>
</tr>
</tbody>
</table>
**Submissions under Review**


[JS25] Omid Abbasi and Halim Yanikomeroglu, “UxNB-enabled cell-free massive MIMO with HAPS-assisted sub-THz backhauling”, under review in IEEE Transactions on Vehicular Technology (submission: 20 Oct 2022). [arXiv] [ResearchGate]


4G to 5G and Beyond: Protocol flow, regulation, ecosystem, economic”, under review in IEEE Open Journal of the Communications Society (submission: 13 Oct 2022) [arXiv] [ResearchGate]


Refereed Publications

2022 (12 IEEE journal papers accepted + 37 IEEE journal papers published + 21 conference papers)


Omid Abbasi and Halim Yanikomeroglu, “Transmission scheme, detection and power allocation for uplink user cooperation with NOMA and RSMA”, *IEEE Transactions on Wireless Communications* (acceptance: 19 Jul 2022). [arXiv] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]

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] [Xplore]

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] [ResearchGate] [Xplore]


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] [ResearchGate] [Xplore]

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] [ResearchGate] [Xplore]


[J224] Atefeh Hajjamali 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] [Xplore]


[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]


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] [ResearchGate]

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] [ResearchGate]

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] [arXiv] [ResearchGate]


Ammar Abdel Samie, 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]

Dong Chu, Wael Jaafer, 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] [ResearchGate]


Safwan Alfattani, Wael Jaafer, Halim Yanikomeroglu, and Abbas Yongacoglu, “Multi-mode high altitude platform station (HAPS) for future wireless networks”, *IEEE Competition on


[C288] 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. [Xplore]


2021 (47 IEEE journal papers + 20 conference papers)


[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] [Xplore]


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]


[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]


[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]


configurations and opportunities”, *IEEE Open Journal of Vehicular Technology*, vol. 2, pp. 45-53, 2021. [TechRxiv] [arXiv] [ResearchGate] [Xplore]

[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.


[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] [Xplore]

[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] [ResearchGate] [Xplore]

[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] [Xplore]


Conference on Communications Workshops (ICCW) 2021, 14–18 June 2021, Montreal, Quebec, Canada || Virtual Conference. [Xplore]

[C273] Mohammed Younis 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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]

[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]

[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] [ResearchGate] [Xplore]


[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]

[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] [Xplore]

[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] [Xplore]

2020 (21 IEEE journal papers + 12 conference papers)


[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] [ResearchGate] [Xplore]
[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]

[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] [ResearchGate] [Xplore]

[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] [ResearchGate] [Xplore]


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

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] [Xplore]


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] [Xplore]

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]

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]

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

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] [Xplore]


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] [Xplore]

[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] [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. [ResearchGate] [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 (GCloT)*, 04–07 December 2019, Dubai, UAE. [ResearchGate]

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] [Xplore]


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]


[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)

[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] [ResearchGate] [Xplore]
[J123] Xianbin Cao, Peng Yang, Mohamed Alzenad, Xing Xi, Dalpeng 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] [Xplore]


[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] [Xplore]


[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] [Xplore]

[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] [ResearchGate] [Xplore]


[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] [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]


[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 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] [ResearchGate] [Xplore]

2017 (23 IEEE journal papers + 16 conference papers)


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] [Xplore]

[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] [ResearchGate] [Xplore]


[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] [Xplore]

[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] [ResearchGate] [Xplore]


[J98] Quoc-Nam Le-The, Tamer Beitelmal, Faraj Lagum, Sebastian S. Szyszkwicz, 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] [Xplore]


decode-and-forward relaying”, *IEEE Transactions on Vehicular Technology*, vol. 66, no. 5, pp. 4500-4506, May 2017. [ResearchGate] [Xplore]


[J92] Faraj Lagum, Quoc-Nam Le-The, Tamer Beitelmal, Sebastian S. Szyszkwowicz, 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] [Xplore]

[J91] Nima Palizban, Sebastian Szyszkwowicz, 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] [Xplore]


[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] [Xplore]


[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] [Xplore]


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] [Xplore]

[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] [Xplore]

[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] [Xplore]

[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] [Xplore]


[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] [Xplore]

[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] [Xplore]

[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] [ResearchGate] [Xplore]


[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] [ResearchGate] [Xplore]


2016 (15 IEEE journal papers + 11 conference papers)


[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] [arXiv] [Xplore]


[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] [Xplore]

[J80] Sebastian Szyszkoicz, 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] [Xplore]

[J79] Faraj Lagum, Sebastian S. S. Szyszkoicz, 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]


[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] [Xplore]


[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] [arXiv] [Xplore]


[C206] Ziwen Zhao, Sebastian Szyszkoicz, Tamer Beitalmal, and Halim Yanikomeroglu, “Spatial clustering in slotted ALOHA two-hop random access for machine type communication”,
Amr El-Keyi and Halim Yanikomeroglu, “Interference alignment for heterogeneous full-duplex cellular networks”, *IEEE Global Communications Conference (Globecom)*, 4–8 December 2016, Washington, DC, USA.

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.

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.


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.


2015 (9 IEEE journal papers + 14 conference papers)


[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.


2014 (6 IEEE journal papers + 15 conference papers)


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.

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.


2013 (6 IEEE journal papers + 9 conference papers)


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]


2012 (6 IEEE journal papers + 16 conference papers)


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]


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.


Tamer Beitelmal, Rainer Schoenen, and Halim Yanikomeroglu, “On the impact of


2011 (8 IEEE journal papers + 15 conference papers)


[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]


2010


[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]


[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.


[C111] Mahmudur Rahman and Halim Yanikomeroglu, “Inter-cell interference coordination in


[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.


[C100] Mohamed Salem, Abdulkareem Adinoyi, Halim Yanikomeroglu, and Young-Doo Kim,

2009


[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]


[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]


2008


Akram Bin Sediq and Halim Yanikomeroglu, “Diversity combining of signals with different


[C72] Stefan Valentin, Tobias Volkhausen, Furuzan Atay Onat, Halim Yanikomeroglu, and Holger Karl, “Enabling partial forwarding by decoding-based one and two-stage selective


2007


[C64] Furuzan Atay Onat, Abdulkareem Adinoyi, Yijia Fan, Halim Yanikomeroglu, and John


2006


[C57] Keivan Navaie, Yanjian Liu, Muhammad Abaïi, Adrian Florea, Halim Yanikomeroglu,


2005


[C48] Adrian Florea and Halim Yanikomeroglu, "On the optimal number of hops in infrastructure-


2004


[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]


[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]


2003
**2003**


[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]


**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]


[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]


2001


2000


1999


1998


1997


[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


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


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.
