List of Publications – Halim Yanikomeroglu
(updated on 07 March 2019)

[DBLP]
[Google Scholar]
[ResearchGate]
[Elsevier Mendeley]
[Guide2Research]

Submissions under Review


**Refereed Publications**

2019


[J130] 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* (acceptance: 02 October 2018). [arXiv] [ResearchGate] [Xplore]


[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*, vol. 26, no. 1, pp. 18-27, February 2019. [ResearchGate] [Xplore]


[J126] Irem Bor-Yaliniz, Amr El-Keyi, and Halim Yanikomeroglu, “Spatial configuration of agile wireless networks with drone-BSSs and user-in-the-loop”, *IEEE Transactions on Wireless Communications*, vol. 18, no. 2, pp. 753-768, February 2019. [arXiv] [ResearchGate] [Xplore]

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]


2018

[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] [Xplore]

[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] [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]


[C228] Margarita Gapeyenko, Irem Bor-Yaliniz, Sergey Andreev, Halim, Yanikomeroglu, and Yevgeni Koucheryavy, “Effects of blockage in deploying mmWave drone base stations for 5G


[C225] 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]


2017


[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] [Xplore]


[J100] Mohamed Alzenad, Amr El-Keyi, Faraj Lagum, and Halim Yanikomeroglu, “3-D 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] [Xplore]


[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. [Xplore]


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] [PresentationSlides]


2016


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. [arXiv] [Xplore]


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. [Xplore]


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


[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. [arXiv] [Xplore]


through the multiple-antenna Gaussian multiple access channel”, *IEEE Transactions on Information Theory*, vol. 62, no. 1, pp. 230-243, January 2016. [arXiv] [Xplore]

[C206] Ziwen Zhao, Sebastian Szyszczowiec, Tamer Beitalmal, and Halim Yanikomeroglu, “Spatial clustering in slotted ALOHA two-hop random access for machine type communication”, *IEEE Global Communications Conference (Globecom) 2016*, 4–8 December 2016, Washington, DC, USA. [PresentationSlides]


[C204] Faraj Lagum, Sebastian Szyszczowiec, and Halim Yanikomeroglu, “Quantifying the regularity of perturbed triangular lattices using CoV-based metrics for modeling the locations of Base Stations in HetNets”, *IEEE Vehicular Technology Conference (VTC2016-Fall)*, 18–21 September 2016, Montreal, QC, Canada. [PresentationSlides]


[C202] Elham Kalantari, Halim Yanikomeroglu, and Abbas Yongacoglu, “On the number and 3D placement of drone base stations in wireless cellular networks”, *IEEE Vehicular Technology Conference (VTC2016-Fall)*, 18–21 September 2016, Montreal, QC, Canada. [arXiv] [ResearchGate] [PresentationSlides]


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


2015


[J64] Shengrong Bu, F. Richard Yu, and Halim Yanikomeroglu, “Interference-aware energy-efficient resource allocation for heterogeneous wireless networks with imperfect dynamics
information”, *IEEE Transactions on Vehicular Technology*, vol. 64, no. 3, pp. 1036-1050, March 2015. [pdf]


[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


2014


[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. [pdf]


[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. [pdf] [PresentationSlides]

[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. [pdf] [PresentationSlides]

[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. [pdf]


[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 Workshop on Small Cell and 5G Networks, 10–14 June 2014, Sydney, Australia. [pdf] [PresentationSlides]


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. [pdf]


**[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. [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] [PresentationSlides]


2012


[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]


2011


[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]


2010


[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), 6 – 9 September 2010, Ottawa, ON, Canada. [pdf] [PresentationSlides]


[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), 6 – 9 September 2010, Ottawa, ON, Canada.


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]


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]

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.

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] [PresentationSlides]


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Mohamed Hossam Ahmed and Halim Yanikomeroglu, “Throughput fairness and


[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]


[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]


[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


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[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]


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2004


[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


[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


[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]

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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

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

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. [pdf]
**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.
