



### IEEE Journal Papers – Under Review

(768) <http://www.sce.carleton.ca/faculty/yanikomeroglu/cv/publications.pdf>

M. Alzenad, H. Yanikomeroglu, “**Coverage and rate analysis for vertical heterogeneous networks (VHetNets)**”, under review in *IEEE Transactions on Wireless Communications*.

C.T. Cicek, T. Kutlu, H. Gultekin, B. Tavli, H. Yanikomeroglu, “**Backhaul-aware placement of a UAV-BS with bandwidth allocation for user-centric operation and profit maximization**”, under review in *IEEE Transactions on Vehicular Technology*. (01)

M. Gapeyenko, V. Petrov, D. Moltchanov, S. Andreev, Y. Koucheryavy, M. Valmaka, H. Yanikomeroglu, “**Mission-critical UAV applications over integrated terrestrial and non-terrestrial 5G/5G+ networks**”, under review in *IEEE Vehicular Technology Magazine*.

A. Azizi, S. Parsaeefard, M.R. Javan, N. Mokhari, H. Yanikomeroglu, “**Profit maximization in beyond-5G with heterogeneous aerial and ground base stations**”, under review in *IEEE Transactions on Mobile Computing*.

S. Enayati, H. Saeedi, H. Pishro-Nik, H. Yanikomeroglu, “**Moving aerial base station networks: Stochastic geometry analysis and design perspectives**”, under review in *IEEE Trans. Wireless Commun.* (01)

S. Andreev, V. Petrov, M. Dohler, H. Yanikomeroglu, “**Future of ultra-dense mmWave networks beyond 5G: Harnessing heterogeneous moving cells**”, under review in *IEEE Communications Magazine*. (06)



### IEEE Journal Papers – Accepted

I. Bor-Yaliniz, M. Salem, G. Senerath, H. Yanikomeroglu, “**Is 5G ready for drones?: A look into contemporary and prospective wireless networks from a standardization perspective**”, to appear in *IEEE Wireless Communications Magazine*.

X. Zhou, J. Guo, S. Durrani, H. Yanikomeroglu, “**Underlay drone cell for temporary events: Impact of drone height and aerial channel environments**”, to appear in *IEEE Internet of Things Journal*. (01)

I. Bor-Yaliniz, A. El-Keyi, H. Yanikomeroglu, “**Spatial configuration of agile wireless networks with drone-BSs and user-in-the-loop**”, to appear in *IEEE Transactions on Wireless Communications*. (04)

## IEEE Journal Papers – Published

X. Cao, P. Yang, M. Alzenad, X. Xi, D. Wu, H. Yanikomeroglu, “**Airborne communication networks: A survey**”, *IEEE Journal on Selected Areas in Communications*, September 2018. (05)

I. Bor-Yaliniz, S.S. Szyszkowicz, H. Yanikomeroglu, “**Environment aware drone-base-station placements in modern metropolitans**”, *IEEE Wireless Communications Letters*, June 2018. (10)

F. Lagum, I. Bor-Yaliniz, H. Yanikomeroglu, “**Strategic densification with UAV-BSs for cellular networks**”, *IEEE Wireless Communications Letters*, June 2018. (19)

M. Alzenad, A. El-Keyi, H. Yanikomeroglu, “**3D placement of an unmanned aerial vehicle BS for maximum coverage of users with different QoS requirements**”, *IEEE Wireless Commun. Letters*, Feb. 2018. (40)

M. Alzenad, M.Z. Shakir, H. Yanikomeroglu, M.-S. Alouini, “**FSO-based vertical backhaul/fronthaul framework for 5G+ wireless networks**”, *IEEE Communications Magazine*, January 2018. (54)

M. Alzenad, A. El-Keyi, F. Lagum, H. Yanikomeroglu, “**3D placement of unmanned aerial vehicle base station (UAV-BS) for energy-efficient maximal coverage**”, *IEEE Wireless Commun. Letters*, Aug. 2017. (104)

I. Bor-Yaliniz, H. Yanikomeroglu, “**The new frontier in RAN heterogeneity: Multi-tier drone-cells**”, *IEEE Communications Magazine*, November 2016. (131)



### IEEE Conference Papers – Accepted

M. Khoshkholgh, K. Navaie, H. Yanikomeroglu, V.C.M. Leung, K.G. Shin, “**How do non-ideal UAV antennas affect air-to-ground communications?**”, accepted to *IEEE ICC 2019*.

A. Farajzadeh, O. Ercetin, H. Yanikomeroglu, “**UAV data collection over NOMA backscatter networks: UAV altitude and trajectory optimization**”, accepted to *IEEE ICC 2019*.

M. Khoshkholgh, K. Navaie, H. Yanikomeroglu, V.C.M. Leung, K.G. Shin, “**Coverage performance in aerial-terrestrial HetNets**”, accepted to *IEEE VTC2019-Spring*.

M. Khoshkholgh, K. Navaie, V.C.M. Leung, H. Yanikomeroglu, “**Cooperative edge caching in UAV-enabled fog-RAN**”, accepted to *IEEE WCNC 2019*.

C.T. Cicek, H. Gultekin, B. Tavli, H. Yanikomeroglu, “**UAV Base station location optimization for next generation wireless networks: Overview and future research directions**”, accepted to *IEEE UVS-Oman 2019*.



### IEEE Conference Papers – Published

M. Alzenad, H. Yanikomeroglu, “Coverage and rate analysis for downlink unmanned aerial vehicles base stations with LoS/NLoS propagation”, *IEEE Globecom Workshops 2018*. (03)

X. Zhou, J. Guo, S. Durrani, H. Yanikomeroglu, “Uplink coverage performance of an underlay drone cell for temporary events”, Invited Paper, *IEEE Int’l Conf. in Communications Workshops (ICCW) 2018*. (08)

M. Gapeyenko, I. Bor-Yaliniz, S. Andreev, H. Yanikomeroglu, Y. Koucheryavy, “Effect of blockage in deploying mmWave drone base stations for beyond-5G networks”, Invited Paper, *IEEE Int’l Conf. in Communications Workshops (ICCW) 2018*. (01)

R. Ghanavi, E. Kalantari, M. Sabbaghian, H. Yanikomeroglu, A. Yongacoglu, “Efficient 3D aerial base station considering users mobility by reinforcement learning”, *IEEE WCNC 2018*. (05)

E. Kalantari, I. Bor-Yaliniz, A. Yongacoglu, H. Yanikomeroglu, “User association and bandwidth allocation for terrestrial and aerial base stations with backhaul considerations”, *IEEE PIMRC 2017*. (22)

E. Kalantari, M.Z. Shakir, H. Yanikomeroglu, A. Yongacoglu, “Backhaul-aware robust 3D drone placement in 5G+ wireless networks”, *IEEE Int’l Conf. in Commun. Workshops (ICCW) 2017*. (54)

E. Kalantari, H. Yanikomeroglu, A. Yongacoglu, “On the number and 3D placement of drone base stations in wireless cellular networks”, *IEEE Vehicular Technology Conference (VTC2016-Fall)*. (87)

I. Bor Yaliniz, A. El-Keyi, H. Yanikomeroglu, “Efficient 3-D placement of an aerial base station in next generation cellular networks”, *IEEE Int’l Conf. in Communications (ICC) 2016*. (212)

## Aerial Networks Research Team

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