



IEEE Magazine Papers – under review

[M55] M.A. Jamshed, M.M. Saad, M.A. Mohsin, D. Kim, O.A. Dobre, H. Yanikomeroglu, L. Mohjazi, “**Net-zero 6G from Earth to orbit: Sustainable design of integrated terrestrial and non-terrestrial networks**”, under review in *IEEE Communications Magazine*, 2025.

[M54] E. Erdogan, M. Elamassie, I. Altunbas, G. Karabulut Kurt, M. Uysal, H. Yanikomeroglu, “**A novel piecewise atmospheric attenuation model for free space optical links in vertical heterogeneous networks**”, under review in *IEEE Vehicular Technology Magazine*, 2025.

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[M52] Z. Zhang, M. Yuksel, S. Li, G. Guvensen, H. Yanikomeroglu, “**Pushing the limits: Unlocking the potential of faster than Nyquist signaling**”, under review in *IEEE Communications Magazine*, 2025.

[M51] W. Shang, Y. Liao, V. Friderikos, H. Yanikomeroglu, “**Anchor-and-connect: Robotic aerial base stations transforming 6G infrastructure**”, under review in *IEEE Communications Standards Magazine*, 2025.

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[M47] F. Khennoufa, K. Abdellatif, H. Yanikomeroglu, M. Ozturk, T. Elganimi, F. Kara, K. Rabie, “A Multi-layer non-terrestrial networks architecture for 6G and beyond under realistic conditions and with practical limitations”, *IEEE Internet of Things Magazine (Early Access)*, 2025.



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[M45] A. Farajzadeh, A. Yadav, H. Yanikomeroglu, “**Federated learning in NTN: Design, architecture, and challenges**”, *IEEE Communications Magazine*, June 2025.

[M44] B. Ciloglu, G.B. Koc, A. Alidadi Shamsabadi, M. Ozturk, H. Yanikomeroglu, “**Strategic demand-planning in wireless networks: Can generative-AI save spectrum and energy?**”, *IEEE Communications Magazine*, May 2025.

[M43] A. Alidadi Shamsabadi, A. Yadav, Y. Gadallah, H. Yanikomeroglu, “**Exploring the 6G potentials: Immersive, hyper reliable, and low-latency communication**”, *IEEE Vehicular Technology Magazine*, Mar 2025.

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[M37] H. Yu, Z. Hua, X. Miao, S. Wang, G. Pan, J. An, T. Svensson, H. Yanikomeroglu, “**Computer vision-based joint space sensing and communication systems: Non-source, autonomy, and low latency**”, *IEEE Wireless Communications Magazine*, Dec 2023.

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[M33] Z. Akusta Dagdeviren, V.K. Akram, O. Dagdeviren, B. Tavli, H. Yanikomeroglu, “**k-Connectivity in wireless sensor networks: Overview and future research directions**”, *IEEE Network Magazine*, May/Jun 2023.

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[M30] A.M. Demirtas, M.S. Seyfioglu, I. Bor-Yaliniz, B. Tavli, and Halim Yanikomeroglu, “**Deep learning based autonomous UAV-BSs for NGWNs: Overview and a novel architecture**”, *IEEE Consumer Electronics Magazine*, 01 Jan 2023.



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[M20] A.B. Ozyurt, M. Basaran, M. Ardanuc, L. Durak-Ata, H. Yanikomeroglu, “**Intracell frequency band exiling for green wireless networks: Implementation, performance metrics, and use cases**”, *IEEE Vehicular Technology Magazine*, Jun 2021.

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