Evgeny Khorov, D.Sc.

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COMMON INFORMATION

Researcher and consultant in wireless networks.

Areas of interest: Future Wi-Fi, 5G&6G Cellular Systems, Wireless Internet of things, dense deployment, MTC, routing, multiple access, AR/VR streaming, QoS, mathematical modeling& optimization.

Over 160 papers. Google Scholar: h-index 22, 2.9K citations. Scopus: h-index 17, 1.6K citations.

Russian Government Prize in Science and Technology for Young Scientists (2016), Scopus Award Russia (2018), Moscow Government Prize for young scientists (2013), multiple Best Paper Awards.

Contributor and Voting Member of IEEE 802.11 (develops next generation Wi-Fi).

Editor of the Year "Ad hoc Networks", 2020, Reviewer of many international journals.

TPC Chair of Globecom'18 WS on CA5GS, IEEE BlackSeaCom'19, IAB WS on Network Quality 2021. Executive Chair of WiFlex 2013, Inform. Technologies & systems (ITaS) Conf. & School 2014-2016.

Keynote/Tutorial/Panel speaker at a number of international scientific conferences, incl.: IEEE CSCN 2021, IEEE PIMRC 2017&2019, NEW2AN 2018&2021, IEEE BlackSeaCom 2017, IEEE Globecom 2017, IEEE ICC 2016, IEEE ICACCI 2014, IEEE ISWCS 2014.

Experience in applying and leading research grants and industry projects. Leader of projects funded by Russian Science Foundation, Russian Foundation for Basic Research, Ministry of Education and Science, British Council, Huawei, Quantenna Communications, etc.

Expert of the Russian Science Foundation, Russian Academy of Sciences, FWO (Belgium). Member of Academic Councils of IITP RAS, NRU HSE, and DREC MIPT.

WORK EXPERIENCE

Head of Wireless Networks Lab & Acting Deputy Director
(early positions: Junior Researcher, Researcher, Senior Researcher)   **2008 – present time**

Institute for Information Transmission Problems (Kharkevich Institute), Russian Academy of Sciences

Has built a growing team of above 40 researchers.

Has developed new algorithms, protocols, mathematical models and simulation tools of various WLANs, cellular, sensor networks; found drawbacks and improved their efficiency,

Scopus Award Russia, 2018, Russian Government Prize in Science and Technology for Young Scientists, 2016).

Being a voting member of IEEE 802.11 has contributed to IEEE 802.11ax (Wi-Fi 6)

Has proposed Time Sensitive Communications in Wi-Fi and designed several methods for massive wireless TSN (IEEE PIMRC 2019 Best Paper Award)

Has developed pioneering approaches to model IEEE 802.11ah aka Wi-Fi HaLow (for IoT). For the paper on 802.11ah, received Best Cited Review Paper Award from Elsevier Computer Communications.

Together with Prof. I. F. Akyildiz prepared a project proposal and won a Megagrant. Has supervised the development of the first-ever prototype NOMA Wi-Fi (ACM Mobihoc'22 Best Demo Award)

Proposed and designed the xStream platform for cross-layer cooperation which manifold increases the number of users with high QoE in a cellular network. Has designed pioneering methods to improve QoE in cellular networks. (Best Cooperation Project awards from industrial partners)

Has introduced and studied a new type of queuing systems to model multimedia streaming via periodic reservations (Moscow Government Prize for young scientists).

Has designed and studied performance of the Scalable MESH and Proximity Based Groupcast in MANET routing protocols for QoS sensitive multimedia streaming. Has developed a theory of link management in multihop ad hoc networks (ISWCS 2012 Best Paper Award).

Has successfully led academic and industrial projects of total budget USD 8M.

Head of Telecommunication Systems Lab	**2017 – present time**

Higher School of Economics

Has established a lab, designed a research program, and prepared project proposals, one of which won a grant from RSF.

Deputy Head of Department & Associate Professor	**2012 – present time**
(early position: Assistant Professor)	

Moscow Institute of Physics and Technology.

Has significantly improved curriculum in *telecommunications*. Developed novel courses.

Lectures on 4 courses, supervises BS and MS students. Supervises 4 PhD students.

Some students won prizes at the Student Olympiad "Infotelecom".

Associate Professor	**2017 – present time**

Moscow State University

Lectures on *Mathematical fundamentals of wireless networks protocols*

Deputy Head of Lab	**2016 – 2017**
(early position: Senior Research Scientist)	

Skolkovo Institute of Science and Technology

Center for Computational and Data-Intensive Science and Engineering

Has designed an MS educational program on the Internet of Things and new courses.

Visiting Research Fellow	**July 2015 – October 2015**

King's College London, Department of Mathematics and Natural Science

Has developed a method for performance evaluation of Wi-Fi networks in IoT scenarios.

Developer, Team Leader	**2007 – 2008**

NetCracker

Has created 2 modules for NetCracker OSS. Has implemented Netcracker OSS in MTS, Sprint.

Tutor	**2007 – 2008**

Moscow Institute of Physics and Technology

Kalashnikov Centre for Research and Innovation in Telecommunication

Has lectured on *Java Advance*. Was responsible for preparing learning material for courses and devising relevant practical activities.

EDUCATION

Moscow School of Management SKOLKOVO	**2021**
(Advanced Training Courses)	

School of Research Program Management: Introduction.

Moscow Institute of Physics and Technology	**2022**
(Doctor of Science)	

Thesis: *Research and Development of Wi-Fi Multiple Access Methods for IMT-2020 Scenarios*.

Specialization: *Telecommunication Systems, Networks and Devices*.

Moscow Institute of Physics and Technology &	2010 – 2012
Institute for Information Transmission Problems	
(PhD Student)	

Ph.D. (Candidate of Science). Thesis: *Performance evaluation of data transmission methods, which meet QoS requirements in wireless ad hoc networks.* Early defense at the second year.

Specialization: *Telecommunication Systems, Networks and Devices*.

Moscow Institute of Physics and Technology	2008 – 2010
(Master Student)	

MS in Applied Physics and Mathematics. Graduated with honors. GPA 5.00 out of 5.00.

Thesis: *Multiple metrics usage in mesh networking*.

Moscow Institute of Physics and Technology	2004 – 2008
(Bachelor Student)	

BS in Applied Physics and Mathematics. Graduated with honors. GPA 4.93 out of 5.00.

Thesis: *Channel Switch Time Distribution in ECMA-368 Networks*.

Evgeny Khorov received his BS and MS degrees with honors from Moscow Institute of Physics and Technology (MIPT) in 2008 and 2010, respectively, the Ph.D. degree in Telecommunications from Institute for Information Transmission Problems of the Russian Academy of Sciences (IITP RAS) in 2012, and the D.Sc. degree in Telecommunications from MIPT in 2022. In 2015 he studied Wireless Internet of Things as a Visiting Research Fellow in King's College London. Currently, Evgeny Khorov is the Head of Wireless Networks Lab established within a Megagrant Project and Acting Deputy Director at IITP RAS. Also, he leads the Telecommunication Systems Lab at Higher School of Economics (HSE).

Evgeny Khorov has developed numerous mathematical models of networking protocols and designed several algorithms and protocols described in over 160 papers, some of which received Best Demo Award from ACM Mobihoc (2022), Best Paper Awards from IEEE ISWCS (2012), Elsevier Computer Communications (2018), and IEEE PIMRC (2019). Evgeny Khorov has also received the Moscow Government Prize for Young Scientists (2013), Russian Government Prize in Science and Technology for Young Scientists (2016), and Scopus Award Russia (2018).

Evgeny has led many national and international projects sponsored by academia foundations (RSF, RFBR, Ministry of Science and Higher Education) and industry. For breakthrough results of the joint industrial projects, he was awarded as the Best Cooperation Project Leader many times. Evgeny Khorov is also a voting member and contributor of IEEE 802.11 that develops and standardizes Wi-Fi. He designed several improvements included in the 802.11ax standard, aka Wi-Fi 6. He also initiated activities in 802.11 towards the support of real-time applications, which is currently a target for 802.11be, aka Wi-Fi 7.

As a Deputy Chair and Associate Professor at MIPT, Evgeny Khorov is responsible for the Telecommunication Program. He is also an Associate Professor at Moscow State University and NRU HSE. He supervises BS, MS, and Ph.D. students. Two of his students, V. Loginov and A. Kureev, have received awards at telecommunication Olympiads. Apart from that, Evgeny Khorov has developed new courses on Wireless Networking Protocols. Three his Ph.D. students received Ph.D. degrees.

Evgeny Khorov gives keynotes & tutorials and participates in panels at large conferences (incl. IEEE PIMRC 2019 and 2017, IEEE Globecom 2017, IEEE ICC 2016, ISWCS 2014, NEW2AN 2018 and 2021). He is a TPC Chair of the IEEE Globecom 2018 Workshop on Cloudified Architectures for 5G and beyond Systems, IEEE BlackSeaCom 2019, Executive Chair of WiFlex 2013. He serves as an expert of Russian Academy of Sciences, Russian Science Foundation, and Research Foundation - Flanders (FWO). Apart from that, he was elected as a Member of Academic Council of IITP RAS and NRU HSE Also, he is a recipient of the Ad Hoc Networks Editor ot the Year 2020 Award.

INVITED TALKS, KEYNOTES & TUTORIALS

T1.   Evgeny Khorov. Challenges and Open Issues in Wi-Fi 6 and Wi-Fi 7 (Keynote), New2an, Saint-Petersburg, 2021.

T2.   Evgeny Khorov, A very brief introduction to Wi-Fi 7 (Tutorial), IEEE CSCN 2021

T3.   Evgeny Khorov. Wi-Fi in the 2020s, IEEE PIMRC, Istanbul, 2019.

T4.   Evgeny Khorov. Youth as the Main Resource for Achieving National Goals (Panel), Moscow Financial Forum, Moscow, Russia, 2019.

T5.   Evgeny Khorov. How to successfully Develop Technologies for Wireless Networks in Russia? (Keynote) School of key researchers, Tomsk, Russia, 2019.

T6.   Evgeny Khorov. Communication between Applications and Networks for QoE-aware Slicing in 5G Systems (Keynote). NEW2AN, Saint-Petersburg, 2018.

T7.   Evgeny Khorov. Can 5G kill Wi-Fi? (Invited Talk). 5G Summit, Thessaloniki, Greece, 2018.

T8.   Evgeny Khorov. xStream: a new platform for Application-aware Adaptive Network Slicing in 5G Systems (Tutorial). IEEE Global Information Infrastructure and Networking Symposium (GIIS 2018), Thessaloniki, Greece, 2018.

T9.   Evgeny Khorov. Wi-Fi in the world of 5G. NI Summit, Moscow, 2018.

T10.   Evgeny Khorov. xStream: a novel protocol for cross-layer cooperation, Shanghai, 2018.

T11.   Latest advances of Low Power Wide Area networking technologies towards IoT. Panel at IEEE Globecom. Singapore, 2017.

T12.   Future Wi-fi (Tutorial). IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, Montreal, Canada, 2017.

T13.   Wi-Fi for 5G: Faster and Smarter (Tutorial). IEEE BlackSeaCom, Istanbul, Turkey, 2017.

T14.   xStream: Communication between the Application and the Network, ICT Algorithm Design, 2017.

T15.   IEEE 802.11 in a 5G Landscape. Industrial panel at IEEE International Conference on Communications 2016. Kuala Lumpur, Malaysia, 2016.

T16.   Can we meet 5G requirements with the current protocol stack? ICT Algorithm Design, 2015.

T17.   Low Power Wi-Fi – How IEEE 802.11ah is transforming M2M (Tutorial, 2h). IEEE International Symposium on Wireless Communication Systems, Barcelona, Spain, August 2014.

T18.   IEEE 802.11ah, an Enabling Technology for the Internet of Things. How Does it Work? (Tutorial, 3.5h). IEEE International Conference on Advances in Computing, Communications and Informatics. Delhi, India, September 2014.

T19.   Are you ready for the ICT revolution? (Keynote) The LVI Conference of Moscow Institute of Physics and Technology, Dolgoprudny, Russia, November 2013.

MAIN PAPERS

Journals Papers

J1.   **E. Khorov**, A. Kureev, I. Levitsky and I. F. Akyildiz. A Phase Noise Resistant Constellation Rotation Method and Its Experimental Validation for NOMA Wi-Fi, in IEEE Journal on Selected Areas in Communications, vol. 40, no. 4, pp. 1346-1354, April 2022.

J2.   V. Loginov, **E. Khorov**, A. Lyakhov and I. F. Akyildiz, "CR-LBT: Listen-Before-Talk With Collision Resolution for 5G NR-U Networks," in IEEE Transactions on Mobile Computing, vol. 21, no. 9, pp. 3138-3149, 1 Sept. 2022, doi: 10.1109/TMC.2021.3055028.

J3.   N. Korolev, I. Levitsky and **E. Khorov**. Analytical Model of Multi-link Operation in Saturated Heterogeneous Wi-Fi 7 Networks. IEEE Wireless Communications Letters, 2022, doi: 10.1109/LWC.2022.3207946.

J4.   D. Shamsimukhametov, A. Kurapov, M. Liubogoshchev and **E. Khorov**. Is Encrypted ClientHello a Challenge for Traffic Classification? IEEE Access, vol. 10, pp. 77883-77897, 2022, doi: 10.1109/ACCESS.2022.3191431.

J5.   E. Endovitskiy, A. Kureev and **E. Khorov**. Reducing Computational Complexity for the 3GPP TR 38.901 MIMO Channel Model. IEEE Wireless Communications Letters, 2022.

J6.   V. Torgunakov, V. Loginov and **E. Khorov**. A Study of Channel Bonding in IEEE 802.11bd Networks. IEEE Access, vol. 10, pp. 25514-25533, 2022.

J7.   **E. Khorov** and I. Levitsky. Current Status and Challenges of Li-Fi: IEEE 802.11bb. IEEE Communications Standards Magazine, vol. 6, no. 2, pp. 35-41, June 2022, doi: 10.1109/MCOMSTD.0001.2100104.

J8.   Glinskiy, K.; Kureev, A.; Krasilov, A.; **Khorov, E.** PABAFT: Channel Prediction Approach Based on Autoregression and Flexible TDD for 5G Systems. Electronics 2022, 11, 1853. https://doi.org/10.3390/electronics11121853

J9.   Chemrov, K.; Bankov, D.; **Khorov, E**.; Lyakhov, A. Smart Preliminary Channel Access to Support Real-Time Traffic in Wi-Fi Networks. Future Internet 2022, 14, 296. https://doi.org/10.3390/fi14100296

J10.   I. A. Levistky, A. A. Tretiakov, and **E. M. Khorov**. A Study of Bandwidth Selection Algorithm with Allowed Preamble Puncturing in IEEE 802.11ax and IEEE 802.11be Networks. in Journal of Communications Technology and Electronics, 2022, Vol. 67, No. 6, pp. 742–750.

J11.   Endovitskiy, E.O., Kureev, A.A., Levitsky, I.A. and **E. M. Khorov**. Performance Evaluation of Downlink Non-Orthogonal Multiple Access in Wi-Fi Networks. J. Commun. Technol. Electron. 66, 1485–1490 (2021). https://doi.org/10.1134/S106422692112007X

J12.   D.V. Bankov, A.I. Lyakhov, **E.M. Khorov** et al. On the Use of Multilink Access Methods to Support Real-Time Applications in Wi-Fi Networks. J. Commun. Technol. Electron. 66, 1476–1484 (2021). https://doi.org/10.1134/S1064226921120056

J13.   Bankov, D.V., Levchenko, P.A., Lyakhov, A.I., **Khorov E.M.** Performance Evaluation of Channel Access in NB-Fi Networks. J. Commun. Technol. Electron. 67, 747–754 (2022). https://doi.org/10.1134/S1064226922060055

J14.   S. Tutelian, D., Bankov, D., Shmelkin, **E., Khorov**. IEEE 802.11ax OFDMA resource allocation with frequency-selective fading. Sensors, 21 (18), № 6099, 2021

J15.   **E. Khorov**, A. Krasilov, I. Selnitskiy, I. F. Akyildiz. A Framework to Maximize the Capacity of 5G Systems for Ultra-Reliable Low-Latency Communications in IEEE Transactions on Mobile Computing, vol. 20, no. 6, pp. 2111-2123, 1 June 2021

J16.   V. Molodtsov, A. Kureev and **E. Khorov**, Experimental Study of Smoothing Modifications of the MUSIC Algorithm for Direction of Arrival Estimation in Indoor Environments, in IEEE Access, vol. 9, pp. 153767-153774, 2021

J17.   M. Liubogoshchev, E. Korneev, **E. Khorov**. EVeREst: Bitrate Adaptation for Cloud VR. Electronics 10 (6), 678, 2021

J18.   V. Loginov, A. Troegubov, A. Lyakhov and **E. Khorov**, Enhanced Collision Resolution Methods With Mini-Slot Support for 5G NR-U, in IEEE Access, vol. 9, pp. 146137-146152, 2021

J19.   M. Liubogoshchev, K. Ragimova, A. Lyakhov, S. Tang and **E. Khorov**, Adaptive Cloud-Based Extended Reality: Modeling and Optimization, in IEEE Access, vol. 9, pp. 35287-35299, 2021

J20.   E. Zazhigina, R. Yusupov, **E. Khorov**, A. Lyakhov. Analytical Study of Periodic Restricted Access Window Mechanism for Short Slots. Electronics 10 (5), 549, 2021

J21.   A.A. Kureev, I.A. Levitsky, **E.M. Khorov**, Experimental Study of Constellation Rotation in NOMA Wi-Fi Networks. Journal of Communications Technology and Electronics 65 (12), 1525-1530

J22.   A.A. Belogaev, A.A. Elokhin, A.N. Krasilov, **E.M. Khorov**. Cost Optimization for Computing Resource Management in Intelligent Transportation Systems, Journal of Communications Technology and Electronics 65 (12), 1517-1524, 2020.

J23.   D. Bankov, **E. Khorov**, K. Kosek-Szott, M. Trebunia. Super Fast Link Set-up in Wi-Fi HaLow Networks. IEEE Communication Letters, 2020.

J24.   A. Karamyshev, **E. Khorov**, A. Krasilov, Ian F. Akyildiz, Fast and Accurate Analytical Tools to Estimate Capacity for URLLC in 5G Systems // Computer Networks, 2020, doi: https://doi.org/10.1016/j.comnet.2020.107331.

J25.   **E. Khorov**, A. Kureev, I. Levitsky, I. F. Akyildiz. Prototyping and Experimental Study of Non-Orthogonal Multiple Access in Wi-Fi Networks. IEEE Networks, 34 (4), pp. 210-217, 2020.

J26.   A. Kak, A. Kureev, **E. Khorov**, I. F. Akyildiz, "Radio access network design with software-defined mobility management," Wireless Networks, 1-14. 2020.

J27.   S. A. Tutelian, **E.M. Khorov**. Nonorthogonal Multiple Access for Servicing the Internet of Things and Web Traffic in Wi-Fi Networks. Journal of Communications Technology and Electronics 65(6), pp. 741-749, 2020.

J28.   Gerasin I.S., Krasilov A.N., **E.M. Khorov**. Dynamic Multiplexing of URLLC and eMBB Traffic in Uplink using Non-Orthogonal Multiple Access, Journal of Communications Technology and Electronics, Vol. 65, No. 6, 2020.

J29.   D. Bankov, **E. Khorov**, A. Lyakhov, and J. Famaey. Resource Allocation for Machine-Type Communication of Energy-Harvesting Devices in Wi-Fi HaLow Networks. Sensors, vol. 20, no. 9, 2020.

J30.   A.N. Krasilov, M.V. Susloparov, O.O. Filatov, **E.M. Khorov**, Performance Evaluation of TCP Data Transmission in 5G mmWave Networks, Journal of Communications Technology and Electronics, Vol. 65, No. 6, 2020

J31.   E Stepanova, D Bankov, **E Khorov**, A Lyakhov. On the Joint Usage of Target Wake Time and 802.11 ba Wake-Up Radio, IEEE Access 8, 221061-22107, 2020

J32.	A. Belogaev, A. Elokhin, A. Krasilov, **E. Khorov**, I.F. Akyildiz. Cost-effective V2X task offloading in MEC-assisted intelligent transportation systems, IEEE Access 8, 169010-169023, 2020

J33.	A. Krotov, A. Kiryanov, **E. Khorov**, Rate Control With Spatial Reuse for Wi-Fi 6 Dense Deployments. IEEE Access 8, 168898-168909, 2020

J34.	**E. Khorov**, I. Levitsky, I. F. Akyildiz. Current Status and Directions of IEEE 802.11be, the Future (Wi-Fi 7). IEEE Access, 2020.

J35.	**E. Khorov**, A. Lyakhov, A. Ivanov and I. F. Akyildiz. Modeling of Real-Time Multimedia Streaming in Wi-Fi Networks With Periodic Reservations. IEEE Access, vol. 8, pp. 55633-55653, 2020.

J36.	A.G. Kiryanov, A. V. Krotov, **E.M. Khorov**, I. F. Akyildiz. Enhancing the Energy Efficiency of Dense Wi-Fi Networks Using Cloud Technologies // Automation and Remote Control. 2020. Vol. 81, No. 1, pp. 82-95.

J37.	**E. Khorov**, A. Lyakhov, I. Nasedkin, R. Yusupov, J. Famaey and I. F. Akyildiz. Fast and Reliable Alert Delivery in Mission-Critical Wi-Fi HaLow Sensor Networks. IEEE Access, vol. 8, pp. 14302-14313, 2020.

J38.	**E. Khorov**, A. Kiryanov, A. Lyakhov, G. Bianchi. A Tutorial on IEEE 802.11ax High Efficiency WLANs. IEEE Communications Surveys & Tutorials, Vol. 21, Issue 1, Firstquarter 2019

J39.	A. Krasilov, **E. Khorov**, M. Tsaritsyn. On the Capacity of a 5G Network for URLLC. Journal of Communications Technology and Electronics 64(12), c. 1513-1516, 2019.

J40.	D. Bankov, **E. Khorov**, A. Lyakhov. LoRaWAN Modeling and MCS Allocation to Satisfy Heterogeneous QoS Requirements. Sensors 2019. Vol. 19. No. 19. P. 1-23.

J41.	**E. Khorov**, A. Krotov, A. Lyakhov, R. Yusupov, M. Condoluci, M. Dohler, I. F. Akyildiz. Enabling the Internet of Things With Wi-Fi Halow—Performance Evaluation of the Restricted Access Window. IEEE Access, Vol. 7, pp. 127402-127415, 2019.

J42.	D. Bankov, **E. Khorov**, A. Lyakhov, and M. Sandal. Enabling Real-Time Applications in Wi-Fi Networks. International Journal of Distributed Sensor Networks 2019, Vol. 15(5)

J43.	D. Bankov, **E. Khorov**, A. Lyakhov, M. Sandal. Approach to Real-Time Communications in Wi-Fi Networks. Journal of Communications Technology and Electronics, 64(8), pp. 880-889, 2019

J44.	S. Santi, L. Tian, **E. Khorov**, J. Famaey. Accurate Energy Modeling and Characterization of IEEE 802.11ah RAW and TWT, Sensors, 19(11), 2614, 2019

J45.	P.N. Kutsevol, V.A. Loginov, A.I. Lyakhov, and **E.M. Khorov**. Mathematical Modeling of Joint Operation of Wireless Local Area Networks and Fifth Generation Cellular Networks. // Automation and Remote Control, 2019, Vol. 80, No. 12, pp. 2163–2177

J46.	**E. Khorov**, A. Lyakhov, I. Nasedkin, R. Yusupov. Emergency Alert Delivery in a Heterogeneous Wi-Fi HaLow Network. Journal of Communications Technology and Electronics 64(12), c. 1517-1522, 2019

J47.	N. Zhirnov, A. Lyakhov, **E. Khorov**. Mathematical Model of a Network Slicing Approach for Video and Web Traffic. Journal of Communications Technology and Electronics, 64(8), pp. 890-899, 2019.

J48.   A. Kiryanov, A. Krotov, A. Lyakhov, E. Khorov. Algorithm for Dynamic Power Control and Scheduling in IEEE 802.11ax Infrastructure Networks. Journal of Communications Technology and Electronics 64(8), pp. 900-909, 2019.

J49.   E. Guzha, A. Ivanov, E. Kuznetsov, A. Lyakhov**, E. Khorov.** Generalized Mathematical Model of Reliable Multicast Transmission in Modern Wi-Fi Networks, Journal of Communications Technology and Electronics, 64(8), pp. 870-879, 2019

J50.   I.F. Akyildiz, A. Kak, **E. Khorov**, A. Krasilov, A. Kureev. ARBAT: A Flexible Network Architecture for QoE-aware Communications in 5G Systems. Computer Networks, 2018

J51.   Bankov, D.; **Khorov, E.**; Lyakhov, A.; Stepanova, E.; Tian, L.; Famaey, J. What Is the Fastest Way to Connect Stations to a Wi-Fi HaLow Network? Sensors 2018, 18, 2744.

J52.   V.A. Loginov, A.I. Lyakhov, **E.M. Khorov**. Coexistence of Wi-Fi and LTE-LAA Networks: Open Issues // Journal of Communications Technology and Electronics, 2018, Vol. 63, No. 12, pp. 1530–1537.

J53.   A.A. Belogaev, A.N. Krasilov, A.I. Lyakhov, **E.M. Khorov**. Analysis of the Differential Update Method for Control Information Dissemination in Wireless Networks // Journal of Communications Technology and Electronics, 2018, Vol. 63, No. 12, pp. 1538–1544.

J54.   **E. Khorov**, A. Krasilov, A. Krotov, A. Lyakhov. Will MCCA Revive Wireless Multihop Networks? //Computer Communications. Volume 104, May 2017, Pages 159–174.

J55.   A.G. Kiryanov, A.I. Lyakhov, **E.M. Khorov.** Analysis of Algorithms for Decentralized Dynamic Channel Resource Reservation for Data Streaming in Wi-Fi Networks. Journal of Communications Technology and Electronics, 2017, Vol. 62, No. 6, pp. 694–700

J56.   A.S. Ivanov, A.I. Lyakhov, **E.M. Khorov**. A mathematical model of transmitting a non-ordinary flow with periodic reservations and block acknowledgements in a channel with correlated noise, Automation and Remote Control, Volume 78, Issue 11, Pages 1978-1990, 2017.

J57.   L. Tian, **E. Khorov**, S. Latré, J. Famaey. Real-Time Station Grouping under Dynamic Traffic for IEEE 802.11ah. Sensors 2017, 17, 1559.

J58.   **Evgeny Khorov**, Anton Kiryanov, Alexander Krotov, Pierluigi Gallo, Domenico Garlisi, Ilenia Tinnirello. Joint Usage of Dynamic Sensitivity Control and Time Division Multiple Access in Dense 802.11ax Networks. // Lecture Notes in Computer Science, Vol. 10121, pp. 57 –71. Springer, Nov 2016.

J59.   Alexander Ivanov, **Evgeny Khorov,** Andrey Lyakhov, Ilya Solomatin. Mathematical Model of QoS-aware Streaming with Heterogeneous Channel Access in Wi-Fi Networks // Lecture Notes in Computer Science, 9870, Springer, Sep. 2016.

J60.   Dmitry Bankov, **Evgeny Khorov**, Alexey Kureev, Andrey Lyakhov. Improving Efficiency of Heterogeneous Wi-Fi Networks with Energy-Limited Devices// Lecture Notes in Computer Science, 9870, Springer, Sep. 2016.

J61.   I. S. Kargin, **E. M. Khorov**, A. I. Lyakhov. A mathematical method for packet loss ratio estimation for a multipath route in the presence of correlated errors. //Problems of Information Transmission. July 2015, Volume 51, Issue 3, pp. 299-305

J62.   **E. Khorov**, A. Lyakhov, A. Krotov, A. Guschin. A survey on IEEE 802.11ah: an Enabling Networking Technology for Smart Cities. //Computer Communications, Volume 58, March 2015, pp. 53–69, 2015. (Best Cited Review Paper Award)

J63.   **E.M. Khorov**. Choosing the channel reservation period in self-organizing wireless networks. //Journal of Communications Technology and Electronics, 2015, Vol. 60, No. 12, pp. 1372-1378.

J64.   A.G. Kiryanov, A.A. Kureev, A.I. Lyakhov, **E.M. Khorov**. Analysis of Logical Topology Construction Mechanisms in MANET. //Journal of Communications Technology and Electronics, 2015, Vol. 60, No. 12, pp. 1379–1388.

J65.   A.G. Kiryanov, V.A. Loginov, A.I. Lyakhov, **E.M. Khorov**. Analytical Model of a P-Persistent Method of Queue Management for Multimedia Streaming over Wireless Networks. //Journal of Communications Technology and Electronics, 2015, Vol. 60, No. 12, pp. 1389–1402.

J66.   Ivanov A.S. Lyakhov A.I. and **Khorov E.M.** Analytical Model of Batch Flow Multihop Transmission in Wireless Networks with Channel Reservations. //Automation and Remote Control. July 2015, Volume 76, Issue 7, pp. 1179-1192.

J67.   A. G. Kiryanov, A. I. Lyakhov, and **E. M. Khorov**, Modeling of RealTime Multimedia Streaming with Deterministic Access. //Journal of Communications Technology and Electronics, 2014, Vol. 59, No. 12, pp. 1501–1511.

J68.   **E. Khorov**, A. Krasilov, A. Lyakhov, D. Ostrovsky. Dynamic Resource Allocation for MCCA-Based Streaming in Wi-Fi Mesh Networks. //Lecture Notes in Computer Science, 2013, v. 8072, pp. 94-113.

J69.   A. Guschin, **E. Khorov**, A. Kiryanov, A. Lyakhov, A. Safonov. P-persistent Queue Management to Overcome Channel Failures in IEEE 802.11 Networks for Real-time Multimedia Streaming. //Lecture Notes in Computer Science, 2013, v. 8072, pp. 70-80.

J70.   A. Krasilov, A. Lyakhov, D. Ostrovsky, and **E. Khorov.** A Dynamic Channel Reservation Method for Multimedia Streaming in Wi-Fi Mesh Networks. //Automation and Remote Control, Volume 74, Issue 9, pp. 1460-1473, 2013.

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J72.   Lyakhov, A. I., Ostrovsky, D. M., **Khorov E.M.** Analytical study of the quality of links established by the neighborhood discovery protocol. //Journal of Communications Technology and Electronics, 2012, Vol. 57, no 12. pp. 1314-1321.

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