Curriculum Vitae
(Full)

Honggang Zhang

(Name)

January 2026

Contact Information

Honggang Zhang, IEEE Fellow, AAIA Fellow, AIIA Fellow

- **Full Professor (9/2025 - present)**

  School of Computer Science and Engineering, Macau University of Science and Technology (MUST), Macau

  Email: hgzhang@must.edu.mo
- **Full Professor (11/2024 – 6/2025)**

  Faculty of Data Science, City University of Macau, Macau
- **Full Professor (3/2008-3/2022) & Adjunct Professor (4/2022 – 5/2025)**

  College of Information Science & Electronic Engineering (ISEE)

  Zhejiang University

  Zheda Road 38, Hangzhou 310027, CHINA

  Mobile: +86-13732295188

  Email: honggangzhang@zju.edu.cn
- **Founding Chief Managing Editor (4/2022-4/2024)**

  Intelligent Computing – Science Partner Journal (SPJ)

  Zhejiang Lab & AAAS (American Association for the Advancement of Science)

  Hangzhou, CHINA
- **International Chair Professor of Excellence (12/2012-12/2014)**

  CominLabs Excellence Center

  Université Européenne de Bretagne (UEB) & Supélec

  CS 47601, 35576 Cesson-Sévigné Cedex

  Rennes, FRANCE
- **Honorary Visiting Professor (08/2010-08/2018)**

  University of York

  United Kingdom

My MUST website: https://fie.must.edu.mo/id-1444/person/view/id-13682.html?locale=zh_M

My Google Scholar website: https://scholar.google.com/citations?user=GoJ_ufAAAAAJ&hl=en&oi=ao

My ORCID website: https://orcid.org/0000-0003-1492-1364

My birthday: January 08, 1967

Curriculum Vitae

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1. ***Professional Experiences and Accomplishments***

(1) September 2025 → Present

Full Professor

School of Computer Science and Engineering

Macau University of Sceince and Technology (MUST), Macau

Email: hgzhang@must.edu.mo

(2) November 2024 → June 2025

Full Professor

Faculty of Data Science

City University of Macau, Macau

(3) March 2008 → March 2022

Full Professor

College of Information Science & Electronic Engineering (ISEE)

Zhejiang University

Hangzhou, Zhejiang Province, China

Co-Director

York-Zhejiang Lab for Cognitive Radio and Green Communications

Zhejiang University & University of York

Honorary Visiting Professor (August 2010 – August 2018)

University of York, United Kingdom

April 2022 → May 2025

Adjunct Professor

College of Information Science & Electronic Engineering (ISEE)

Zhejiang University

Hangzhou, Zhejiang Province, China

(4) April 2022 → April 2024

Founding Chief Managing Editor (4/2022-4/2024)

Intelligent Computing, Science Partner Journal (SPJ),
https://spj.science.org/journal/icomputing

Zhejiang Lab & AAAS (American Association for the Advancement of Science)

Hangzhou, CHINA

(5) December 2012 → December 2014

International Chair Professor of Excellence

ComInLabs Excellence Center

Université Européenne de Bretagne (UEB) & Supélec

Rennes, France

(5) September 2004 → February 2008

Coordinator of Wireless Area, Principle Research Scientist (permanent)

CREATE-NET (https://create-net.fbk.eu/)

Center of REsearch And Telecommunication Experimentations for NETworked communities

Trento, Italy

(Note: In December 2009, **CREATE-NET** was evaluated as in **MIUR's Top 10** of all **Italian** private research institutes. **MIUR**: Italian Ministry of Education, University and Research)

(6) December 2002 → August 2004

Expert Research Fellow

UWB Technology Group

Yokosuka Radio Communications Research Center

National Institute of Information and Communications Technology (NICT)

Japan

(7) April 2002 → November 2002

Researcher

Technology and Development Group

TOYOTA InfoTechnnology (IT) Centre

Tokyo, Japan

(8) October 1999 → March 2002

Research Fellow

Shin-Kawasaki Research Centre (SKRC)

Telecommunications Advancement Organization (TAO) of Japan

Tokyo, Japan

Note: Telecommunications Advancement Organization (**TAO**) of Japan and Communications Research Laboratory (**CRL**) of Japan have been officially merged and reorganized into "National Institute of Information and Communications Technology (**NICT**) of Japan", from April 1, 2004. (Seeing: http://www.nict.go.jp/overview/index.html)

(9) January 1995 → March 1996

Research Assistant, Wireless Communications Laboratory

Department of Electrical and Electronics Engineering

Kagoshima University

Kagoshima, Japan

(10) August 1992 → December 1994

Lecturer, Department of Automatic Control Engineering,

Lanzhou University of Technology, Lanzhou, P.R. China

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2. *Achievements, Honors, Awards and Research Grants*

(1) **IEEE Fellow**, "for contributions to intelligent wireless communications and networks", elevated since November 2023. (see: https://www.comsoc.org/membership/ieee-fellows/2024)

(2) **AAIA (Asia-Pacific Artificial Intelligence Association) Fellow**, elevated since December 2023. (see: https://aaia-ai.org/)

(3) **AIIA (International Artificial Intelligence Industry Alliance) Fellow**, elevated since September 2024. (see: https://www.aiia-ai.org/)

(4) **2021 IEEE Communications Society Outstanding Paper Award**, co-authors: Xianfu Chen, Honggang Zhang, C. Wu, S. Mao, Y. Ji, and M. Bennis, "Optimized Computation Offloading Performance in Virtual Edge Computing Systems via Deep Reinforcement Learning", IEEE Internet of Things Journal, June 2019. (see: https://www.comsoc.org/about/awards/paper-awards/ieee-communications-society-outstanding-paper-award)

(5) **2021 IEEE Internet of Things Journal Best Paper Award**, co-authors: Xianfu Chen, Honggang Zhang, C. Wu, S. Mao, Y. Ji, and M. Bennis, "Optimized Computation Offloading Performance in Virtual Edge Computing Systems via Deep Reinforcement Learning", IEEE Internet of Things Journal, June 2019. (see: https://ieee-iotj.org/awards/)

(6) **Member of ERC (European Research Council) Starting Grant Panel**，ERC Starting Grant Panel (PE7: Systems and Communication Engineering), in 2019, 2021, 2023 and 2025. (see: https://erc.europa.eu/sites/default/files/2025-02/Panel_members_ERC_Starting_Grant_2025.pdf)

(7) **Honorary Visiting Professor**, University of York, United Kingdom (5-year Appointment commenced on 1st August 2010).

Citation: *"…has a worldwide reputation in cognitive radio, green communications and Ultra-WideBand (UWB) systems, including being the Vice Chair of the IEEE Technical Committee on Cognitive Networks, making his appointment of direct relevance to the Communications Research Group in the Department of Electronics..."*

(8) **International Chair Professor of Excellence**, Université Européenne de Bretagne (UEB) & Supélec, France (2-year Appointment from December 2012 to December 2014).

Citation: *"…Yves Louet, professor at Supélec and deputy head of the "Signal, communication and embedded electronics" team praises Honggang Zhang's first-class scientific research which has made him one of the world's most renowned researchers in the field of "smart radio". He describes him as being extremely open minded, with a transversal vision which enables him to apprehend and bring together all of CominLabs's skills and approaches, from hardware to software and from signal treatment through to electronics and energy efficiency..."*

(9) **Outstanding Leadership Award** by IEEE Computer Society, ACM (China Chapter), and IEEE TCSC (IEEE Technical Committee on Scalable Computing), December 2010.

Citation: "…*for outstanding contribution as the General Chair of the 2010 IEEE/ACM International Conference on Green Computing and Communications (GreenCom 2010)…"*

(10) **Best Editor Award**, China Communications (co-sponsored by China Institute of Communications and IEEE Communications Society), December 2017.

(11) **Outstanding Tutorial on AI Award**, IEEE International Conference on Cyber-enabled Distributed Computing and Knowledge Discovery (CyberC) and IEEE Technical Committee on Big Data (TCBD), October 2025.

(12) **Keynote Speech,** CAIT 2025 (2025 6th International Conference on Computers and Artificial Intelligence Technology), December 2025.

(13) **Keynote Speech**, IEEE ICCT 2024 (2024 IEEE 24th International Conference on Communication Technology), Chengdu, China, October 2024.

(14) **Keynote Speech**, ICICSP 2024 (7th International Conference on Information Communication and Signal Processing), Zhoushan, China, September 2024.

(15) **Keynote Speech**, AIIIP 2023 (2nd International Conference on Artificial Intelligence and Intelligent Information Processing), Hangzhou, China, November 2023.

(16) **Invited Talk**, 6G Summit Abu Dhabi 2023, title: "*The Establishment of NetGPT and Its Road to the Futures*", Abu Dhabi, UAE, November 2023. (See: https://www.6gsummitabudhabi.com/)

(17) **Invited Talk**, Global 6G Conference, 6GANA (6G Alliance of Network AI) Task Group Meeting, title: "*On 6G NetGPT and Beyond*", March 22, 2023. (see: https://www.6g-ana.com/)

(18) **Invited Talk**, HUAWEI Workshop on Semantic Information and Communication: Towards a Semantic 6G, title: "*Semantic Coding and Semantic Communication Based on Transformer and Attention Mechanism*", March 3-8, 2023.

(19) **Invited Talk**, IEEE TCCN Seminar, title: "*Rethinking Modern Communication from Semantic Coding to Semantic Communication*", December 1, 2022.

(20) **Invited Talk**, TII Telecom Seminar Series , title: "*Rethinking Modern Communication from Semantic Coding to Semantic Communication*", Technology Innovation Institute (TII), Abu Dhabi, UAE, May 24 2022.

(21) Invited **Plenary Talk**， 2020 International Teletraffic Congress **ITC 32**, Special Session on 6G/AI, title: "*Stigmergic Reinforcement Learning with Multi-Agent Collaboration for 6G Networks***"**, Osaka, Japan, September 2020. (See: https://itc32.org/SpecialSession.html)

(22) **Keynote Speech**, 2019 International Conference on Artificial Intelligence in China (**ChinaAI 2019**), title: "*Brain-Inspired Stigmergy Learning***"**, Urumqi, China, July 2019.

(23) **Keynote Speech**, CrownCom 2016 (11th International Conference on Cognitive Radio Oriented Wireless Networks, Grenoble, France), title："*Big Data & User-behavior Based Radio Resource Controlling: A Revenant for 5G*", May 2016.

(24) **Keynote Speech**, IEEE ISCIT 2012 (12th IEEE International Symposium on Communications & Information Technologies, Gold Coast, Australia) Cognitive Radio Workshop, title: "*Cognitive Green Communications: When Energy Meets Intelligence"*, October 2012.

(25) **Keynote Speech**, IET CCWMC 2011 (2011 IET International Communication Conference on Wireless Mobile & Computing, Shanghai, China), title："*When Green Communications Meet Intelligent Cognition"*, November 2011.

(26) **Keynote Speech**, COMNETS 2008 (3rd International Workshop on Wireless Community Networks 2008, Hangzhou, China), Title: "*Cognitive Radio for Green Communications and Green Spectrum*", August 2008.

(27) **Keynote Speech**, 2008 IEEE Communications Society (Nanjing Chapter) Workshop on Cognitive Networks, title: "*CogMesh: A Bridge from Cognitive Radio towards Cognitive Networks*", September 2008.

(28) **Keynote Speech**, IEEE ISICT 2005 (International Symposium on Communications and Information Technologies 2005, Beijing, China), title: "*Cognitive Ultra-Wideband Radio Evolution for Innovative and Dynamic Spectrum Access Networks*".

(29) **Best Paper Award**, co-authors: Xianfu Chen, C. Wu, Tao Chen, N. Wu, Honggang Zhang, and Y. Ji, "Age of Information-aware Multi-Tenant Resource Orchestration in Network Slicing", 5th IEEE International Conference on Cloud and Big Data Computing (IEEE CBDCom), Fukuoka, Japan, 2019.

(30) **Best Paper Award**, WCSP 2017 (2017 IEEE International Conference on Wireless Communications & Signal Processing).

(31) **Best Paper Award**, WCSP 2010 (2010 IEEE International Conference on Wireless Communications & Signal Processing).

(32) **Best Student Paper Award**, ChinaCom 2012 (2012 International Conference on Communications & Networking in China).

(33) **TAO Research Achievement Awards**, from the Telecommunications Advancement Organization (TAO) of Japan, April 2002.

(34) **TAO Research Fellowship Awards**, from the Telecommunications Advancement Organization (TAO) of Japan, April 2001.

(35) **TAO Research Fellowship Awards**, from the Telecommunications Advancement Organization (TAO) of Japan, April 2000.

(36) **TAO Research Fellowship Awards**, from the Telecommunications Advancement Organization (TAO) of Japan, October 1999.

(37) **TAF Research Grant**, for international conference participation, awarded from the Telecommunications Advancement Foundation (TAF) of Japan, October 1998.

(38) **Research Grant/Scholarship**, from the Ministry of Education, Culture, Sports, Science and Technology of Japan, April 1996 – March 1999.

(39) **National Basic Research Program of China** (973 Program) Grant, "*Fundamental Research on the Energy and Resource Optimized Hyper-Cellular Mobile Communication System",* No. 2012CB316000, January 2012 – December 2016.

(40) **NSFC** (National Natural Science Foundation of China) Research Grant, "*Design and Optimization of Wireless Cognitive Mesh Networks (CogMesh) with Adaption to Networks Heterogeneity and Integration*", No. 61071130, January 2011 – December 2013.

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3. ***Professional Society Activities, Leadership & Editorial Board Membership***

(1) **Associate Editor-in-Chief (AEIC)**, China Communications, co-sponsored by China Institute of Communications (CIC) & IEEE Communications Society (ComSoc), 2013-present. (See: http://www.cic-chinacommunications.cn/EN/home)

(2) **Founding Chief Managing Editor**, Intelligent Computing, Science Partner Journal, Zhejiang Lab & AAAS (American Association for the Advancement of Science), 2022-2024.

(3) **Chair**, Technical Committee on Cognitive Networks (**TCCN**), IEEE Communications Society, 2011-2012.

(4) **Founding Vice-Chair**, Technical Committee on Cognitive Networks (**TCCN**), IEEE Communications Society, 2008-2011.

(5) **Founding Series Editor**, Green Communications and Computing Networks Series, IEEE Communications Magazine (See: http://www.comsoc.org/commag/series-editors).

(6) **General Co-Chair**, IEEE OnlineGreenComm 2015.

(See: http://onlinegreencomm2015.ieee-onlinegreencomm.org/).

(7) **TPC**(Technical Program Committee) **Co-Chair**, IEEE Online-GreenComm 2014 (The 2014 IEEE Online Conference on Green Communications)

(See: http://onlinegreencomm2014.ieee-onlinegreencomm.org/)

(8) **Co-Chair**, IEEE **ICC 2013** Cognitive Radio and Networks Symposium (See: http://www.ieee-icc.org/2013/tpc.html)

(9) **TPC Co-Chair**, IEEE ICUWB 2013 (2013 IEEE International Conference on Ultra-Wideband)

(10) **General Co-Chair**, 2010 IEEE/ACM International Conference on Green Computing and Communications (**GreenCom 2010**).

(11) **Co-Chair**, IEEE **Globecom 2008** Symposium on the Selected Areas in Communications (See: http://www.ieee-globecom.org/2008/sympchairs.html).

(12) **TPC Co-Chair**, IEEE **ISWCS 2010** (The Seventh IEEE International Symposium on Wireless Communication Systems).

(13) **TPC Co-Chair**, IEEE **ISCIT 2011** (The 11th IEEE International Symposium on Communications and Information Technologies).

(14) Publicity Chair, IEEE **DySPAN 2010** (2010 IEEE International Symposia on New Frontiers in Dynamic Spectrum Access Networks).

(15) **Steering Committee Member**, 2011-2014 IEEE International Conference on Green Computing and Communications (IEEE **GreenCom** 2011-2016).

(16) **International Steering Committee Member**, IEEE **ISCIT** 2007-2016 (IEEE International Symposium on Communications and Information Technologies).

(17) **Steering Committee Member**, **ICUFN 2011-2016** (The International Conference on Ubiquitous and Future Networks).

(18) **Founding Steering Committee Member**, **CrownCom** 2006-2009 (International Conference on Cognitive Radio Oriented Wireless Networks and Communications).

(19) Workshop Co-Chair, IEEE **GreenComm 2011** (4th IEEE International Workshop on Green Communications, in conjunction with the IEEE ICC 2011,

(20) Workshop Co-Chair, IEEE **GreenComm 2010** (3rd IEEE International Workshop on Green Communications, in conjunction with the 2010 IEEE Global Communications Conference (Globecom 2010).

(21) Workshop Co-Chair, 1st IEEE International Workshop on Smart Grid Communications (**SmartGridComm 2010**), in conjunction with IEEE ICC 2010, Cape Town, South Africa.

(22) **Founding TPC Co-Chair**, IEEE **CrownCom** 2006, Mykonos Island, Greece.

(23) TPC Co-Chair, IEEE **ISCIT** 2006 (IEEE International Symposium on Communications and Information Technologies 2006), Bangkok, Thailand.

(24) Publicity Chair, IEEE **ICUWB 2010** (2010 IEEE International Conference on Ultra-Wideband).

(25) General Vice Co-Chair, **ChinaCom** 2007 (The Second International Conference on Communications and Networking in China), August 15-17, 2007, Shanghai, China.

(26) Tutorials Chair, **EW 2007** (13th European Wireless Conference), April 1-4, 2007, Paris, France.

(27) Publicity Co-Chair, **ChinaCom** 2006 (The First International Conference on Communications and Networking in China), Beijing, China.

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(1) As one of the 7 **Guest Editors** (Prof. Vijay Bhargava, Dr. Jinsong Wu, Prof. John Thompson, Prof. Honggang Zhang, Prof. Ekram Hossain, Prof. Rod Tucker, and Prof. Dan Kilper), have been involving in selecting and editing the "**IEEE ComSoc Best Readings on Green**

Communications", which has been officially announced and opened on the ComSoc website in March 2013 (See: http://www.comsoc.org/best-readings/green-communications).

(2) **Lead Guest Editor**, IEEE Communications Magazine Special Issue on "***Green Communications***", 2010-2011. (The very first Special Issue of IEEE Communications Magazine on the emerging significant topic of energy-efficient "Green Communications")

(3) Editorial Board Member, (**European) Transactions on Emerging Telecommunications Technologies** (ETT), 2010-2015.

(4) Guest Editor, **EURASIP** Journal on Wireless Communications and Networking Special Issue on "*Green Radio*", 2011-2012.

(5) Guest Editor, **IET** Communications Special Issue on "*Cognitive Communications*", 2010-2011.

(6) Guest Editor, IEEE Transactions on Vehicular Technology (**TVT**) Special Issue on "*Achievements and the Road Ahead: The First Decade of Cognitive Radio*", 2009-2010.

(7) Guest Editor, **Elsevier** Physical Communication Journal Special Issue on "*Cognitive Radio: Algorithms & System Design*", 2008-2009.

(8) Guest Editor, **ACM/Springer** Mobile Networks and Applications Journal (MONET) Special Issue on "*Cognitive Radio Oriented Wireless Networks and Communications*", 2007-2008.

(9) Guest Editor, **ACM/Springer** Wireless Networks Journal (WINET) Special Issue on "*Communications and Networking in China*", 2007-2008.

(10) Guest Editor, IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, Special Issue on Ultra Wideband Systems, 2004-2005.

(11) Editorial Board Member, Springer International Journal of Peer-to-Peer Networking and Applications, 2010-2014. (SCI indexed)

(12) Editorial Board and International Advisory Committee Member, Hungarian Infocommunications Journal. (SCI indexed)

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(1) **Founding Steering Committee Member**, WUN (Worldwide Universities Network, http://www.wun.ac.uk/) Cognitive Communications Consortium (**CogCom**)

(2) **Founding Member**, China-Scotland Signal-Image Processing Research Academy.

(3) **Voting Member and Contributor**, IEEE 802.15 Task Group (TG3a & TG4a), IEEE 802 Standards Association.

(4) Founding Member, UWB Forum.

(5) Director, "Wireless 1394" Ad-hoc Committee, MMAC of Japan, June 2003 – September 2004.

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4. Education

(1) **Ph.D. in Electrical Engineering**, Kagoshima University, Kagoshima, Japan. (March 25, 1999)

Dissertation: "Effects of Aircrafts and Buildings on Radio Wave Propagation in Satellite and Land Mobile Communication Systems"

(2) **M.S. in Electrical Engineering** with Distinction, Lanzhou University of Technology, Lanzhou, China. (July 30, 1992)

(3) **B.S. in Electrical Engineering**, Huazhong University of Science and Technology (HUST), Wuhan, China. (July 30, 1989)

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Publications List

1. *Book & Book Chapters*

[1] Jinsong Wu, Sundeep Rangan, and Honggang Zhang, ***Green Communications -*** Theoretical Fundamentals, Algorithms and Applications, **CRC Press**, ISBN: 9781466501072, October 2012. (Google Scholar citation: 244)

[2] David Grace and Honggang Zhang, ***Cognitive Communications -*** Distributed Artificial Intelligence (DAI), Regulatory Policy & Economics, Implementation**, Wiley Press**, ISBN: 9781119951506, September 2012.

[3] Honggang Zhang, Yuxiu Hua, Chujie Wang, Rongpeng Li, and Zhifeng Zhao, ***Deep Learning Based Traffic and Mobility Prediction*** - Machine Learning for Future Wireless Communications, John Wiley & Sons, ISBN: 9781119562306, December 2019.

[4] Zhilin Lu, Rongpeng Li, Ekram Hossain, Zhifeng Zhao, and Honggang Zhang, ***Reinforcement Learning-based Unicast and Broadcast Semantic Communications*** – Foundations of Semantic Communication Networks (edited by Walid Saad, Christina Chaccour, Christo Thomas, and Merouane Debbah), IEEE and Wiley, ISBN:9781394247882, December 2024.

[5] Fei Ni, B. Wang, Rongpeng Li, Zhifeng Zhao, and Honggang Zhang, ***Interplay of Semantic Communication and Knowledge Learning*** - Wireless Semantic Communications: Concepts, Principles and Challenges (edited by Dusit Niyato, M. Ali Imran, Yao Sun, and Lan Zhang), John Wiley & Sons, September 2024.

[6] Rongpeng Li, Zhifeng Zhao, Chen Qi, and Honggang Zhang, ***Characterizing and Learning the Mobile Data Traffic in Cellular Network*** - 5G Networks: Fundamental Requirements, Enabling Technologies, and Operations Management, John Wiley & Sons, ISBN: 978119333142, September 2018.

[7] Tao Chen, Honggang Zhang, Yang Yang, and Kari Horneman, ***Network Energy Saving Techniques in Wireless Networks -*** Green Radio Communication Networks (edited by Ekram Hossain, V. K. Bhargava, and G. Fettweis), **Cambridge University Press**, ISBN-13: 9781107017542, July 2012.

[8] Tao Chen, Honggang Zhang, and Zhifeng Zhao, ***Control Channel Management in Dynamic Spectrum Access-based Ad Hoc Networks -*** Cognitive Radio Mobile Ad Hoc Networks (edited by F. Richard Yu), **Springer Press**, ISBN: 9781441961716, September 2011.

[9] Honggang Zhang, Xiaofei Zhou, and Tao Chen, **Ultra-Wideband Cognitive Radio for Dynamic Spectrum Accessing Networks** - Cognitive Radio Networks **(**edited by Yang Xiao and Fei Hu), **CRC Press**, ISBN: 978-1-4200-6420-9, September 2008.

[10] Tao Chen, Honggang Zhang, Xiaofei Zhou, Gian Mario Maggio, and Imrich Chlamtac, **CogMesh: A Cluster Based Cognitive Radio Mesh Network** - Cognitive Wireless Networks: Concepts, Methodologies and Visions (edited by Frank Fitzek and Marcos Katz), **Springer Press**, ISBN: 978-1-4020-5978-0, 2007.

[11] Xiaofei Zhou and Honggang Zhang, *Cognitive Radio: Theories and Applications*, BUPT Press, Beijing, ISBN: 7-5635-1358-2, 2007. (in Chinese)

[12] Honggang Zhang, Wireless Broadband Home Networking - Reliability, Survivability and Quality of Large Scale Telecommunication Systems (edited by Peter Stavroulakis), **John Wiley & Sons Press**, 2003.

2. Selected Journal Papers/Articles (in chronological order)

[1] Honggang Zhang, T. Yoshino, S. Ito, Y. Nagasawa, H. Ando, and R. Sato, "The Prediction of Attenuation Due to Aircraft's Flying Across the Earth-Satellite Link at SHF," *IEICE Trans. Communications*, vol. E81-B, no. 8, pp. 1687-1695, August 1998.

[2] Honggang Zhang, T. Hayashida, T. Yoshino, S. Ito, and Y. Nagasawa, "A Deterministic Model for UHF Radio Wave Propagation through Building Windows in Cellular Environments," *IEICE Trans. Communications*, vol. E82-B, no. 6, pp. 234-241, June 1999.

[3] K. Takahashi, T. Udagawa, Honggang Zhang, T. Arita, and Masao Nakagawa, "Intra-Vehicle Wireless 1394 Systems," *IEICE Trans. Communications*, vol. E85-B, no. 5, pp. 938-945, May 2002.

[4] K. Kobayashi, T. Udagawa, Honggang Zhang, T. Arita, and Masao Nakagawa, "Pipeline Repeater for Wireless Homelink," *IEICE Trans. Communications*, vol. E85-B, no. 7, pp. 1283-1292, July 2002.

[5] Masao Nakagawa, Honggang Zhang, and Hideaki Sato, "Ubiquitous Homelinks Based on IEEE 1394 and Ultra Wideband Solutions," *IEEE Communications Magazine*, vol. 41, no. 4, pp. 74-82, April 2003.

[6] Kazuto Usuda, Honggang Zhang, and Masao Nakagawa, "Pre-Rake Scheme for UWB-IR System with Guard-Time in Multipath Fading Channel," *IEICE Trans. Fundamentals of Electronics, Communications and Computer Sciences*, vol.E87-A, no. 10, pp. 2631-2638, October 2004.

[7] Honggang Zhang, Xiaofei Zhou, K. Y. Yazdandoost, and Imrich Chlamtac, "Multiple Signal Waveforms Adaptation in Cognitive Ultra-Wideband Radio Evolution," *IEEE Journal on Selected Areas of Communications* (JSAC), vol. 24, no. 4, pp. 878-884, April 2006.

[8] F. Granelli, Honggang Zhang, Xiaofei Zhou, and S. Maranò, "Research Advances in Cognitive Ultra Wide Band Radio and their Applications to Sensor Networks," *ACM/Springer Mobile Networks and Applications* Journal (MONET), special issue on Ultra Wide Band for Sensor Networks, vol.11, Issue 4, pp. 487-499, August 2006.

[9] Chihong Cho, Honggang Zhang, and Masao Nakagawa, "PSWF-based Direct-Sequence UWB Transmission Using Orthogonal Ternary Code Sets," *IEICE Trans. Fundamentals of Electronics, Communications and Computer Sciences*, E89-A, pp. 3042-3049, November 2006.

[10] Chihong Cho, Honggang Zhang, and Masao Nakagawa, "A Short Delay Relay Scheme Using Shared Frequency Repeater for UWB Impulse Radio," *IEICE Trans. Fundamentals of Electronics, Communications and Computer Sciences*, E90-A, no. 7, pp. 1444-1451, July 2007.

[11] Xianfu Chen, Zhifeng Zhao, Tao Jiang, and David Grace, and Honggang Zhang, "Inter-Cluster Connection in Cognitive Wireless Mesh Networks Based on Intelligent Network Coding," *EURASIP Journal on Advances in Signal Processing*, November 2009.

[12] Xianfu Chen, Zhifeng Zhao, Honggang Zhang, and Tao Chen, "Reinforcement Learning Enhanced Iterative Power Allocation in Stochastic Cognitive Wireless Mesh," *(Springer) Wireless Personal Communications*, Special Issue on "Cognitive Radio Networks and Communications", DOI 10.1007/s11277-010-0008-6, April 2010.

[13] Yun Cui, Zhifeng Zhao, and Honggang Zhang, “An Efficient Filter Banks Based Multicarrier System in Cognitive Radio Networks,” *Journal of Radioengineering*, vol. 19, no. 4, pp. 479-487, December 2010.

[14] Xiao Wang, Zhifeng Zhao, Yu Xia, and Honggang Zhang, “Compressed Sensing for Efficient Random Routing in Multi-hop Wireless Sensor Networks,” *International Journal Communication Networks and Distributed Systems,* January 2011.

[15] Tao Chen, Yang Yang, Honggang Zhang, Haesik Kim, and Kari Horneman,“Network Energy Saving Technologies for Green Wireless Access Network, ” *IEEE Wireless Communications* (Feature Topics Issue on Green Radio Communication Networks), October 2011. (Google Scholar citation: 315)

[16] Xianfu Chen, Zhifeng Zhao, and Honggang Zhang, “Stochastic Power Adaptation with Multi-agent Reinforcement Learning for Cognitive Wireless Mesh Networks,” *IEEE Transactions on Mobile Computing (TMC),* November 2013.

[17] Xuan Zhou, Zhifeng Zhao, Rongpeng Li, Yifan Zhou, Jacques Palicot, and Honggang Zhang, *“*Human Mobility Patterns in Cellular Networks,” *IEEE Communications Letters*, October 2013.

[18] Xin Tao, Zhifeng Zhao, Rongpeng Li, Jacques Palicot, and Honggang Zhang, “Downlink Interference Minimization in Cooperative Cognitive LTE-Femtocell Networks,” *EURASIP Journal on Wireless Communications & Networking*, July 2013.

[19] Jacques Palicot, Honggang Zhang, and Christophe Moy, “On the Road towards Green Radio,” *URSI Radio Science Bulletin*, December 2013. (Invited Article)

[20] Rongpeng Li, Zhifeng Zhao, Xuan Zhou, and Honggang Zhang, “Energy Savings Scheme in Radio Access Network via Compressed Sensing Based Traffic Load Prediction,” (*European) Transactions on Emerging Telecommunications Technologies* (ETT), April 2014.

[21] Rongpeng Li, Zhifeng Zhao, Xianfu Chen, Jacques Palicot, and Honggang Zhang, “TACT: A Transfer Actor-Critic Learning Framework for Energy Saving in Cellular Radio Access Networks,” *IEEE Trans. on Wireless Communications (TWC)*, vol. 13, no. 4, April 2014.

[22] Xuan Zhou, Zhifeng Zhao, Rongpeng Li, Yifan Zhou, Jacques Palicot, and Honggang Zhang, *“*Understanding the Nature of Social Mobile Instant Messaging in Cellular Networks,” *IEEE Communications Letters*, January 2014. (Top 2 among the top 25 most frequently downloaded documents in IEEE Communications Letters, February 2014)

[23] D. Lee, Sheng Zhou, Xuan Zhou, Xiaofeng Zhong, Zhisheng Niu, and Honggang Zhang, “Spatial Modeling of the Traffic Density in Cellular Networks,” *IEEE Wireless Communications*, March 2014. (Google Scholar citation: 241)

[24] Rongpeng Li, Zhifeng Zhao, Xuan Zhou, Jacques Palicot, and Honggang Zhang, “The Predictability Analysis of Cellular Networks Traffic: From Entropy Theory to Networking Practice,” *IEEE Communications Magazine*, June 2014.

[25] Rongpeng Li, Zhifeng Zhao, Yuan Zhang, Jacques Palicot, and Honggang Zhang, “Adaptive Multi-Task Compressive Sensing for Localization in Wireless LANs,” *IET Communications Journal*, July 2014. (Top 5 among the top 25 most frequently downloaded documents in IET Communications, October 2014)

[26] Xianfu Chen, Honggang Zhang, Marko Hoyhtya, Mika Lasanen, and Jacques Palicot, “Reciprocally Opportunistic Spectrum Access,” (*European) Transactions on Emerging Telecommunications Technologies (ETT)*, DOI: 10.1002/ett.2810, March 2014.

[27] Xianfu Chen, Honggang Zhang, A. B. MacKenzie, and M. Matinmikko, “Predicting Spectrum Occupancies Using a Non-stationary Hidden Markov Model,” *IEEE Wireless Communications Letters*, August 2014.

[28] Sumit Darak, A. P. Vinod, E. M-K. Lai, Jacques Palicot, and Honggang Zhang, "Linear Phase VDF Design with Unabridged Bandwidth Control over the Nyquist Band," *IEEE Transactions on Circuits and Systems II*, June 2014.

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