

DONG IN KIM

School of Information & Communication Eng.

Sungkyunkwan University (SKKU)

2066 Seobu-ro, Jangan-gu

Suwon 16419, KOREA

Tel. +82-31-299-4585, Fax. +82-31-299-4673

Home: <http://wireless.skku.edu> E-mail: dikim@skku.ac.kr

OBJECTIVE

A challenging career in the telecommunications institute; in general, cellular wireless communications, mobile communications, energy-harvesting wireless communications, and heterogeneous wireless networks; in particular, signal design and detection, multiple access, interference management, resource allocation, cross-layer design and optimization for wireless information and energy networks.

EDUCATION

Ph.D., Electrical Engineering, December 1990,

University of Southern California, Los Angeles, California.

Dissertation Title: *On the Performance of Common Spreading Code CDMA Packet Radio Systems
With Multiple Capture Capability*

Dissertation Advisor: Professor Robert A. Scholtz

M.S., Electrical Engineering, December 1987,

University of Southern California, Los Angeles, California.

B.S., Electronics Engineering, February 1980,

Seoul National University, Seoul, Korea.

HONOR

Fellow, The Institute of Electrical and Electronics Engineers (IEEE), for contributions to cross-layer design of wireless communications systems, January 1, 2019.

Fellow, The Korean Academy of Science and Technology (KAST), January 1, 2019.

Fellow, The National Academy of Engineering of Korea (NAEK), January 1, 2019.

HAEDONG Scholar Award, Haedong Science & Culture Foundation and The Korean Institute of Communications and Information Sciences (KICS), December 2014.

ERC Excellence Award, Engineering Research Center (ERC), Ministry of Science, ICT & Future Planning of Korea, Energy Harvesting Wireless Communications, May 2014.

ITRC Excellence Award, Information Technology Research Center (ITRC), Ministry of Knowledge Economy of Korea, Cooperative Wireless Communications, June 2008.

SKKU Fellowship, Sungkyunkwan University (SKKU), September 2007.

CFI New Opportunities Fund Award, Canada Foundation for Innovation (CFI), June 2004.

Academic Achievement Award, University of Southern California, April 1990.

Government Doctoral Fellowship, Ministry of Education of Korea, May 1985.

EMPLOYMENT EXPERIENCE

September 2007 - Present

Professor, School of Information & Communication Engineering, Sungkyunkwan University (SKKU), Korea. Leads the Engineering Research Center (ERC) on Energy Harvesting Communications (<http://erc.skku.edu>) as the **Director** appointed by The Ministry of Science, ICT & Future Planning (MSIP), Korea. Currently working on flexible spectrum utilization in future cellular systems, energy harvesting wireless communications, and cross-layer design for interference and energy management.

September 2006 - August 2007

Professor with Tenure, School of Engineering Science, Simon Fraser University (SFU), Canada. Taught courses in digital communications and spread-spectrum communications. Performed research projects on wideband, broadband, and ultra-wideband (UWB) CDMA for high-data-rate wireless multimedia, signal design and diversity techniques for CDMA/UWB, and cross-layer design for CDMA/UWB systems.

September 2002 - August 2006

Associate Professor with Tenure, School of Engineering Science, Simon Fraser University (SFU), Canada.

October 1997 - August 2002

Associate Professor, Dept. of Electrical and Computer Eng., University of Seoul, Korea.

Taught undergraduate courses in communication engineering and information theory, and graduate courses in mobile communications and error control codes. Performed research projects on design of the hybrid multiple-access scheme for 3rd-generation cellular systems, multicode DS/CDMA system for high-rate data transmission, and initial code acquisition for inter-cell asynchronous mode. Also, has given many short courses and lectures on the topics of spread-spectrum and wireless communications at several companies.

March 1997 - February 1999

Department Chair (elected by faculty), Dept. of Electrical and Computer Eng., University of Seoul, Korea. Served for two-year term. Reorganized curriculum at the undergraduate and graduate levels to meet the demands of rapidly growing technologies, hired new faculty members, and established the Institute of Information and Technology through which several research projects have been granted.

April 1991 - September 1997

Assistant Professor, Dept. of Electrical and Computer Eng., University of Seoul, Korea.

September 1988 - December 1990

Research Assistant, Communication Sciences Institute, Dept. of Electrical Engineering-Systems, University of Southern California.

Researched communication and coding theory, packet synchronization, mobile radio techniques, spread-spectrum networks, cellular code-division multiple access (CDMA) and satellite communication systems.

November 1984 - December 1985

Researcher, Korea Telecom Research Laboratories, Seoul, Korea.

Developed a telephone network interface processor for collecting traffic data from local telephone offices, and tested the entire system by connecting the processor with the Vax 11/780 computer through leased line.

VISITING POSITIONS

June 2001 - August 2001 (short-term leave)

Visiting Professor, Dept. of Electrical and Computer Eng., University of Manitoba, Canada.

Collaborated with Prof. Ekram Hossain on CDMA-based wireless multimedia networks.

September 1999 - August 2000 (one-year sabbatical leave)

Visiting Professor, Dept. of Electrical and Computer Eng., University of Victoria, Canada.

Collaborated with Prof. Vijay K. Bhargava on CDMA for wireless multimedia communications.

CONSULTING AND TRAINING

July 1997 - June 1998

Consultant, SAMSUNG Electronics Co. Ltd., Institute of Information and Communication.

Has been involved in '3rd-generation wideband CDMA (WCDMA)' standardization activities together with researchers at the Institute and provided consulting for them to prepare a preliminary SAMSUNG proposal for the IMT-2000 PHY standard meeting, organized by ARIB in Japan and EDGE in Europe.

March 1993 - December 1998

Invited Lecturer, SAMSUNG Electronics Co. Ltd., Advanced Technology Center.

Has developed three new courses on 'Wireless and Mobile Communications' at the Center for practical training purpose: 1) Digital Mobile Communications, 2) Digital Spread Spectrum Communications, 3) Wireless Personal Communications, while teaching from 1993 up to 1998. Teaching evaluations have been performed for my courses taught at the Center, and highly appreciated among the researchers due to which my courses continued to be offered for six consecutive years. The purpose is to provide the researchers with basic understanding and development skills for 'CDMA-based Cellular System Test bed'.

PROFESSIONAL ACTIVITIES

Strategic Planning Committee

January 2016 - December 2016

Has served as Strategic Planning Committee member for the IEEE Publication Services and Products Board (PSPB).

Steering Committee

January 2016 - Present

Currently serving as **Steering Committee Chair** for the IEEE Wireless Communications Letters.

Journal Editor

November 2001 - Present

Editor for Spread Spectrum Transmission and Access, IEEE Transactions on Communications.

Currently serving as **Editor-at-Large** (since 2015) of Wireless Communication I for the IEEE Transactions on Communications.

January 2012 - December 2015

Founding Editor-in-Chief, IEEE Wireless Communications Letters.

Has served as **Founding Editor-in-Chief** for the IEEE Wireless Communications Letters.

January 2002 - December 2011

Editor/Area Editor, IEEE Transactions on Wireless Communications.

Has served as Editor and **Founding Area Editor** (since 2008) of **Cross-layer Design and Optimization** for the IEEE Transactions on Wireless Communications.

February 2001 - December 2001

Editor, IEEE Journal on Selected Areas in Communications (JSAC) - Wireless Communications Series.

Has served as Editor for the IEEE JSAC - Wireless Communications Series.

January 2008 – December 2011

Co-Editor-in-Chief, IEEE/KICS Journal of Communications and Networks (JCN).

Has served as **Co-Editor-in-Chief** for the IEEE/KICS JCN.

January 1999 - December 2005

Editor/Division Editor, IEEE/KICS Journal of Communications and Networks (JCN).

Has served as Editor and **Division Editor** of Wireless Communications for the IEEE/KICS JCN.

July 2017 – September 2018

Guest Editor, IEEE Journal on Selected Areas in Communications (JSAC).

Has served as Guest Editor for Special Issue on “Wireless Transmission of Information and Power” for the IEEE JSAC.

March 2016 - February 2017

Guest Editor, IEEE Communications Magazine.

Has served as Guest Editor for Special Issue on “Practical Perspectives on IoT in 5G Networks: From Theory to Industrial Challenges and Business Opportunities” for the IEEE Communications Magazine.

March 2015 - February 2016

Guest Editor, IEEE Wireless Communications.

Has served as Guest Editor for Special Issue on “Wireless Powered Communications Networks: Architectures, Protocol Designs, and Standardization” for the IEEE Wireless Communications.

June 2011 - May 2012

Guest Editor, IEEE Journal of Selected Topics in Signal Processing (JSTSP).

Has served as Guest Editor for Special Issue on “Signal Processing in Heterogeneous Networks for Future Broadband Wireless Systems” for the IEEE JSTSP.

Conference Executive Chair

IEEE Communications Society, IEEE ICC '22, Seoul, Korea, May 2022

Conference Technical Program Track Co-Chair

IEEE Vehicular Technology Society, IEEE VTC '18 Spring, Porto, Portugal, June 2018

Conference Publication Co-Chair

IEEE Communications Society, IEEE GLOBECOM '16, Washington DC, December 2016.

IEEE Communications Society, IEEE ICC '13, Budapest, Hungary, June 2013.

Conference Tutorials Co-Chair

IEEE Vehicular Technology Society, IEEE VTC '13 Spring, Dresden, Germany, June 2013

Conference Session Chair

IEEE Communications Society, IEEE WCNC '12, Paris, France, April 2012.

IEEE Communications Society, IEEE GLOBECOM '09, Honolulu, Hawaii, November 2009.

IEEE Communications Society, IEEE ICC '06, Istanbul, Turkey, June 2006.

IEEE Vehicular Technology Society, IEEE VTC '02 Fall, Vancouver, Canada, September 2002.

IEEE Communications Society, IEEE WCNC '02, Orlando, Florida, March 2002.

IEEE Communications Society, IEEE ICUPC '98, Florence, Italy, October 1998.

IEEE Communications Society, IEEE GLOBECOM '95, Singapore, December 1995.

Conference Technical Program Committees

IEEE Communications Society, IEEE GLOBECOM '17, Singapore, December 2017.

IEEE Communications Society, IEEE ICC '17, Paris, France, May, 2017.

IEEE Communications Society, IEEE GLOBECOM '11, Houston, Texas, December 2011.

IEEE Communications Society, IEEE ICC '11, Kyoto, Japan, June, 2011.

IEEE Communications Society, IEEE GLOBECOM '10, Miami, Florida, December 2010.

IEEE Communications Society, IEEE ICC '10, Capetown, South Africa, May, 2010.

IEEE Communications Society, IEEE GLOBECOM '09, Honolulu, Hawaii, November 2009.

IEEE Vehicular Technology Society, IEEE VTC '09 Fall, Anchorage, Alaska, September 2009.

IEEE Communications Society, IEEE ICC '09, Dresden, Germany, June 2009.

IEEE Communications Society, IEEE GLOBECOM '08, New Orleans, Louisiana, November 2008.

IEEE Communications Society, IEEE GLOBECOM '07, Washington D.C., November 2007.

IEEE Communications Society, IEEE ICC '06, Istanbul, Turkey, June 2006.

IEEE Communications Society, IEEE ICC '05, Seoul, Korea, May 2005.

IEEE Vehicular Technology Society, IEEE VTC '04 Spring, Milan, Italy, April 2004.
IEEE Vehicular Technology Society, IEEE VTC '03 Fall, Orlando, Florida, September 2003.
IEEE Vehicular Technology Society, IEEE VTC '03 Spring, Jeju Island, Korea, April 2003.
IEEE Vehicular Technology Society, IEEE VTC '02 Fall, Vancouver, Canada, September 2002.

Asia Pacific Board (APB)

IEEE Communications Society, APB, Meetings and Conferences Committee (MCC), *Vice Chair*, 2001 - 2003 (2 Years).

Reviewer

IEEE Transactions on Communications, IEEE Transactions on Wireless Communications, IEEE Journal on Selected Areas in Communications, IEEE Transactions on Vehicular Technology, IEEE Wireless Communications Letters, IEEE Communications Letters, Journal of Communications and Networks

Professional Memberships

IEEE Senior Member (Student Member 1989 - 90, Member 91 - 2001) 2002 - Present
Professional Engineer of British Columbia, Canada, **P.Eng.**, licensed in January 2006

RESEARCH GRANTS

(SKKU)

[19] Dong In Kim (PI), et. al., Energy Harvesting Communications Research Center (EHC-RC), NRF, MSIP (Ministry of Science, ICT & Future Planning), Korea, **\$10,000,000** May 2014 - February 2021.

[18] Dong In Kim, Multi-Time-Scale Optimization for Cloud-Based Next Generation Wireless Communication Networks with Cache Placement, NRF grant funded by the Korean government (MSIP) (NRF-2017R1A2B2003953), \$450,000 March 2017 - February 2020.

[17] Dong In Kim, mmWave/Drone-aided Future Cellular Communications, LG Electronics Co., \$30,000 March 2017 - December 2017.

[16] Dong In Kim, Scale-Free Heterogeneous Networks with Limited Feedback, Resource and Interference, National Research Foundation of Korea (NRF) grant funded by the Korean government (MSIP) (NRF-2013R1A2A2A01067195), \$300,000 December 2013 - November 2016.

[15] Dong In Kim, Coordinated Transmission/Reception Using Multiple Distributed Caches, LG Electronics Co., \$90,000 March 2014 - December 2016.

[14] Dong In Kim (PI), et. al., Wireless Transmission Technology for BS/MS Cooperation, IITA, MKE (Ministry of Knowledge Economy), Korea, **\$5,500,000** June 2008 - December 2013.

[13] Dong In Kim, Cooperative Communication for Relaying with Multiple Antennas, LG Electronics Co., \$300,000 January 2009 - December 2013.

[12] Dong In Kim, Dynamic Coordinated Multipoint Transmission/Reception, Samsung Electronics Co., \$50,000 October 2009 - August 2010.

[11] Dong In Kim, Adaptive SC/MRC in Cooperative Communications with Multiple Relays, LG Electronics Co., \$30,000 June 2008 - December 2008.

[10] Dong In Kim, Hybrid of Spectrum Overlay and Underlay in Cognitive Radios, Samsung Electronics Co., \$50,000 February 2008 - November 2008.

[9] Dong In Kim, Multiuser Cognitive Radio (CR) Networks, *SKKU Startup Funds*, \$100,000 September 2007 - August 2008.

(SFU)

[8] Dong In Kim, Ultra Wideband Spread-Spectrum System Laboratory, *CFI Infrastructure Operating Fund*, \$60,000 April 2006 - March 2011.

[7] Dong In Kim, Dynamic Link Adaptation in Heterogeneous Wireless Networks, *NSERC Discovery Grant*, \$155,000 (Annual **\$31,000**) April 2004 - March 2009 (5 years).

[6] Dong In Kim, UWB Application Systems Technology, *International Joint Research Grant*, Inha University, Korea, \$180,000 (Annual \$45,000) September 2003 - August 2007 (4 years).

[5] Dong In Kim, Ultra Wideband Spread-Spectrum System Laboratory, *CFI New Opportunities Fund*, \$200,000 April 2004 - December 2006.

[4] Dong In Kim, Ultra Wideband Spread-Spectrum System Laboratory, *BCKDF (CFI Matching Funds)*, \$200,000 April 2004 - December 2006.

[3] Dong In Kim, High-Speed Wideband CDMA for Wireless Multimedia Services, *SFU Startup Funds*, \$100,000 September 2002 - March 2006.

[2] Dong In Kim, High-order Modulation for High Speed Multi-code CDMA Systems, *SFU PRG Research Grant*, \$10,000 October 2002 - October 2004.

(University of Seoul)

[1] Dong In Kim, *Brain Korea (BK) 21 Project*, Wireless Communications Research Group.

Has taken the leader of the BK 21 Project on ‘CDMA-based Smart Antenna Systems’, funded by the Ministry of Education, Korea. The fund amounts to about **\$700,000** for three years, Sep. 1999 - Aug. 2002.

PUBLICATIONS

Submitted Journal Articles

[S16] Y. Al-Eryani, E. Hossain, and D. I. Kim, “Generalized Coordinated Multipoint (GCoMP)-Enabled NOMA: Outage, Capacity, and Power Allocation,” submitted, *IEEE Trans. Commun.*, Jan. 2019.

[S15] S. Feng, W. Wang, D. Niyato, D. I. Kim, and P. Wang, “Crowdsensing Market for Wireless-Powered Internet of Things with Scalable Blockchains,” submitted, *IEEE Trans. Wireless Commun.*, Jan. 2019.

[S14] S. Feng, Z. Xiong, D. Niyato, P. Wang, Z. Han, and D. I. Kim, “Joint Traffic Routing and Virtualized Security Function Activation in Wireless Multihop Networks,” submitted, *IEEE Trans. Vehic. Technol.*, Jan. 2019.

[S13] A. A. Aziz, L. Ginting, D. Setiawan, J. H. Park, N. M. Tran, G. Y. Yeon, D. I. Kim, and K. W. Choi, “Battery-Less Location Tracking for Internet of Things: Simultaneous Wireless Power Transfer and Positioning,” submitted, *IEEE Internet of Things Journal*, Jan. 2019.

[S12] Y. Jiao, P. Wang, D. Niyato, B. Lin, and D. I. Kim, “Mechanism Design for Wireless Powered Spatial Crowdsourcing Networks,” submitted, *IEEE Trans. Vehic. Technol.*, Dec. 2018.

[S11] Y. M. Saputra, D. T. Hoang, D. N. Nguyen, E. Dutkiewicz, D. Niyato, and D. I. Kim, “Distributed Deep Learning at the Edge: A Novel Proactive and Cooperative Caching Framework for Mobile Edge Networks,” submitted, *IEEE Wireless Commun. Letters*, Dec. 2018.

[S10] T. T. Anh, N. C. Luong, D. Niyato, D. I. Kim, and L.-C. Wang, “Efficient Training Management for Mobile Crowd-Machine Learning: A Deep Reinforcement Learning Approach,” submitted, *IEEE Wireless Commun. Letters*, Dec. 2018.

- [S9] J. Kang, Z. Xiong, D. Niyato, S. Xie, M. Guizani, and D. I. Kim, "When Vehicular Networks Meet Consortium Blockchain: Reputation Management for Secure Data Sharing," submitted, *IEEE Wireless Communications*, Nov. 2018.
- [S8] J.-M. Kang, C.-J. Chun, I.-M. Kim, and D. I. Kim, "Channel Tracking for Wireless Energy Transfer: A Deep Recurrent Neural Network Approach," submitted, *IEEE Trans. Vehic. Technol.*, Oct. 2018.
- [S7] N. C. Luong, D. T. Hoang, S. Gong, D. Niyato, P. Wang, Y.-C. Liang, and D. I. Kim, "Applications of Deep Reinforcement Learning in Communications and Networking: A Survey," revised, *IEEE Commun. Surveys & Tutorials*, Jan. 2018.
- [S6] J.-M. Kang, C.-J. Chun, I.-M. Kim, and D. I. Kim, "Dynamic Power Splitting for SWIPT with Nonlinear Energy Harvesting in Ergodic Fading Channel," revised, *IEEE Trans. Wireless Commun.*, Jan. 2019.
- [S5] Z. Wei, S. Sun, X. Zhu, D. I. Kim, and D. W. K. Ng, "Resource Allocation for Wireless-Powered Full-Duplex Relaying Systems with Non-Linear Energy Harvesting Efficiency," revised, *IEEE Trans. Vehic. Technol.*, Jan. 2018.
- [S4] J. Kwak, L. B. Le, G. Iosifidis, and D. I. Kim, "Collaboration of Network Operators and Cloud Providers in Software-Controlled 5G Networks," revised, *IEEE Network*, Jan. 2019.
- [S3] P. K. Sharma and D. I. Kim, "Random 3D Mobile UAV Networks: Mobility Modeling and Coverage Probability," revised, *IEEE Trans. Wireless Commun.*, Jan. 2019.
- [S2] S. H. Kim and D. I. Kim, "Traffic-Aware Backscatter Communications in Wireless-Powered Heterogeneous Networks," revised, *IEEE Trans. Mobile Computing*, Jan. 2019.
- [S1] K. W. Choi, L. Ginting, A. A. Aziz, D. Setiawan, J. H. Park, S. I. Hwang, D. S. Kang, M. Y. Chung, and D. I. Kim, "Towards Realization of Long-Range Wireless-Powered Sensor Networks," revised, *IEEE Wireless Communications*, Dec. 2018.

Journal Articles

- [J178] W. Wang, D. T. Hoang, P. Hu, Z. Xiong, D. Niyato, P. Wang, Y. Wen, and D. I. Kim, "A Survey on Consensus Mechanisms and Mining Strategy Management in Blockchain Networks," *IEEE Access*, pp. 1-43, published in IEEE Early Access (DOI: 10.1109/ACCESS.2019.2896108) on Jan. 30, 2019.

- [J177] J. Kang, Z. Xiong, D. Niyato, D. Ye, D. I. Kim, and J. Zhao, "Towards Secure Blockchain-enabled Internet of Vehicles: Optimizing Consensus Management Using Reputation and Contract Theory," *IEEE Trans. Vehic. Technol.*, pp. 1-15, published in IEEE Early Access (DOI: 10.1109/TVT.2019.2894944) on Jan. 23, 2019.
- [J176] J. Kang, Z. Xiong, D. Niyato, P. Wang, D. Ye, and D. I. Kim, "Incentivizing Consensus Propagation in Proof-of-Stake Based Consortium Blockchain Networks," *IEEE Wireless Commun. Letters*, pp. 1-4, published in IEEE Early Access (DOI: 10.1109/LWC.2018.2864758) on Aug. 10, 2018.
- [J175] P. K. Sharma and D. I. Kim, "Coverage Probability of 3D Mobile UAV Networks," accepted for publication, *IEEE Wireless Commun. Letters*, pp. 1-4, published in IEEE Early Access (DOI: 10.1109/LWC.2018.2859923) on July 26, 2018.
- [J174] J.-M. Kang, I.-M. Kim, and D. I. Kim, "Joint Tx Power Allocation and Rx Power Splitting for SWIPT System with Multiple Nonlinear Energy Harvesting Circuits," *IEEE Wireless Commun. Letters*, pp. 1-4, published in IEEE Early Access (DOI: 10.1109/LWC.2018.2851229) on June 28, 2018.
- [J173] T. L. N. Nguyen, Y. Shin, J. Y. Kim, and D. I. Kim, "Signal Detection for Ambient Backscatter Communication with OFDM Carriers," *Sensors*, vol. 19, no. 517, pp. 1-14, Jan. 26, 2019.
- [J172] B. Clerckx, R. Zhang, R. Schober, D. W. K. Ng, D. I. Kim, and H. V. Poor, "Fundamentals of Wireless Information and Power Transfer: From RF Energy Harvester Models to Signal and System Designs," in the special issue on Wireless Transmission of Information and Power of *IEEE J. Select. Areas in Commun.*, vol. 37, no. 1, pp. 4-33, Jan. 2019.
- [J171] Y. Zhang, Z. Xiong, D. Niyato, P. Wang, and D. I. Kim, "Towards a Perpetual IoT System: Wireless Power Management Policy with Threshold Structure," *IEEE Internet of Things Journal*, vol. 5., no. 6, pp. 5254-5270, Dec. 2018.
- [J170] I. Sim, Y. M. Hwang, Y. G. Sun, D. I. Kim, Y. Shin, and J. Y. Kim, "Mitigation of Phase Cancellation for Efficient Decoding and RF Energy Harvesting in Tag-to-Tag Communications," *IEEE Access*, vol. 6, pp. 73724-73732, Dec. 2018.
- [J169] D. Setiawan, A. A. Aziz, D. I. Kim, and K. W. Choi, "Experiment, Modeling, and Analysis of Wireless-Powered Sensor Network for Energy Neutral Power Management," *IEEE Systems Journal*, vol. 12, no. 4, pp. 3381-3392, Dec. 2018.

- [J168] N. V. Huynh, D. T. Hoang, X. Lu, D. Niyato, P. Wang, and D. I. Kim, “Ambient Backscatter Communications: A Contemporary Survey,” *IEEE Commun. Surveys & Tutorials*, vol. 20, no. 4, pp. 2889-2922, Fourth Quarter 2018.
- [J167] T. Y. Kim and D. I. Kim, “Multi-Dimensional Sparse-Coded Ambient Backscatter Communication for Massive IoT Networks,” *Energies*, vol. 11, no. 2855, pp. 1-23, Oct. 2018.
- [J166] H. S. Lee, M. E. Ahmed, and D. I. Kim, “Optimal Spectrum Sensing Policy in RF-Powered Cognitive Radio Networks,” *IEEE Trans. Vehic. Technol.*, vol. 67, pp. 9557-9570, Oct. 2018.
- [J165] N. V. Huynh, D. T. Hoang, D. Niyato, P. Wang, and D. I. Kim, “Optimal Time Scheduling for Wireless-Powered Backscatter Communication Networks,” *IEEE Wireless Commun. Letters*, vol. 7, no. 5, pp. 820-823, Oct. 2018.
- [J164] M. S. Ali, E. Hossain, A. Al-Dweik, and D. I. Kim, “Downlink Power Allocation for CoMP-NOMA in Multi-Cell Networks,” *IEEE Trans. Communications*, vol. 66, pp. 3982-3998, Sep. 2018.
- [J163] W. Wang, D. T. Hoang, D. Niyato, P. Wang, and D. I. Kim, “Stackelberg Game for Distributed Time Scheduling in RF-Powered Backscatter Cognitive Radio Networks,” *IEEE Trans. Wireless Commun.*, vol. 17, pp. 5606-5622, Aug. 2018.
- [J162] K. W. Choi, A. A. Aziz, D. Setiawan, N. M. Tran, L. Ginting, and D. I. Kim, “Distributed Wireless Power Transfer System for Internet-of-Things Devices,” in the special issue on Wireless Energy Harvesting for Internet of Things of *IEEE Internet of Things Journal*, vol. 5, no. 4, pp. 2657-2671, Aug. 2018.
- [J161] T. Y. Kim and D. I. Kim, “Novel Sparse-Coded Ambient Backscatter Communication for Massive IoT Connectivity,” *Energies*, vol. 11, no. 1780, pp. 1-25, July 2018.
- [J160] X. Lu, D. Niyato, H. Jiang, D. I. Kim, Y. Xiao, and Z. Han, “Ambient Backscatter Assisted Wireless Powered Communications,” *IEEE Wireless Communications*, vol. 25, no. 2, pp. 170-177, Apr. 2018.
- [J159] M. S. Ali, E. Hossain, and D. I. Kim, “Coordinated Multipoint Transmission in Downlink Multi-Cell NOMA Systems: Models and Spectral Efficiency Performance,” in the special issue on Non-Orthogonal Multiple Access for 5G of *IEEE Wireless Communications*, vol. 25, no. 2, pp. 24-31, Apr. 2018.

- [J158] J.-M. Kang, I.-M. Kim, and D. I. Kim, “Joint Optimal Mode Switching and Power Adaptation for Nonlinear Energy Harvesting SWIPT System Over Fading Channel,” *IEEE Trans. Commun.*, vol. 66, pp. 1817-1832, Apr. 2018.
- [J157] S. G. Hong, Y. M. Hwang, S. Y. Lee, D. I. Kim, Y. Shin, and J. Y. Kim, “Game-Theoretic Modeling of Backscatter Wireless Sensor Networks under Smart Interference,” *IEEE Commun. Letters*, vol. 22, pp. 804-807, Apr. 2018.
- [J156] Y. Kim, T.-J. Lee, and D. I. Kim, “Joint Information and Power Transfer in SWIPT-enabled CRFID Networks,” *IEEE Wireless Commun. Letters*, vol. 7, no. 2, pp. 186-189, Apr. 2018.
- [J155] J.-M. Kang, I.-M. Kim, and D. I. Kim, “Wireless Information and Power Transfer: Rate-Energy Tradeoff for Nonlinear Energy Harvesting,” *IEEE Trans. Wireless Commun.*, vol.17, pp. 1966-1981, Mar. 2018.
- [J154] X. Lu, H. Jiang, D. Niyato, D. I. Kim, and Z. Han, “Wireless-Powered Device-to-Device Communications with Ambient Backscattering: Performance Modeling and Analysis,” *IEEE Trans. Wireless Commun.*, vol. 17, pp. 1528-1544, Mar. 2018.
- [J153] M. E. Ahmed, D. I. Kim, and K. W. Choi, “Traffic-Aware Optimal Spectral Access in Wireless Powered Cognitive Radio Networks,” *IEEE Trans. Mobile Computing*, vol. 17, pp. 733-745, Mar. 2018.
- [J152] Y. M. Hwang, J. H. Jung, Y. Shin, J. Y. Kim, and D. I. Kim, “Optimal Transmission Policy in Decoupled RF Energy Harvesting Networks,” *IEICE Trans. Fundamentals*, vol. E101-A, no. 2, pp. 516-520, Feb. 2018.
- [J151] K. W. Choi, P. A. Rosyady, L. Ginting, A. A. Aziz, D. Setiawan, and D. I. Kim, “Theory and Experiment for Wireless-Powered Sensor Networks: How to Keep Sensors Alive,” *IEEE Trans. Wireless Commun.*, vol. 17, pp. 430-444, Jan. 2018.
- [J150] D. Niyato, D. I. Kim, M. Maso, and Z. Han, “Wireless Powered Communication Networks: Research Directions and Technological Approaches,” *IEEE Wireless Communications*, vol. 24, no. 6, pp. 88-97, Dec. 2017.
- [J149] I.-M. Kim, D. I. Kim, and J.-M. Kang, “Rate-Energy Tradeoff and Decoding Error Probability-Energy Tradeoff for SWIPT in Finite Code Length,” *IEEE Trans. Wireless Commun.*, vol. 16, pp. 8220-8234, Dec.

2017.

[J148] T. L.N. Nguyen, Y. Shin, J. Y. Kim, and D. I. Kim, "Applicability of Compressive Sensing for Wireless Energy Harvesting Nodes," *Energies*, vol. 10, no. 1776, pp. 1-15, Nov. 2017.

[J147] M. E. Ahmed, D. I. Kim, J. Y. Kim, and Y. Shin, "Energy-Arrival-aware Detection Threshold in Wireless-Powered Cognitive Radio Networks," *IEEE Trans. Vehic. Technol.*, vol. pp. 66, 9201-9213, Oct. 2017.

[J146] J.-M. Kang, I.-M. Kim, and D. I. Kim, "Mode Switching for SWIPT over Fading Channel with Nonlinear Energy Harvesting," *IEEE Wireless Commun. Letters*, vol. 6, pp. 678-681, Oct. 2017.

[J145] S. H. Kim and D. I. Kim, "Hybrid Backscatter Communication for Wireless-Powered Heterogeneous Networks," *IEEE Trans. Wireless Commun.*, vol. 16, pp. 6557-6570, Oct. 2017.

[J144] S. Salari, I.-M. Kim, D. I. Kim, and F. Chan, "Joint EH Time Allocation and Distributed Beamforming in Interference-Limited Two-Way Networks with EH-Based Relays," *IEEE Trans. Wireless Commun.*, vol. 16, pp. 6395-6408, Oct. 2017.

[J143] D. T. Hoang, D. Niyato, P. Wang, D. I. Kim, and Z. Han, "Ambient Backscatter: A New Approach to Improve Network Performance for RF-Powered Cognitive Radio Networks," *IEEE Trans. Commun.*, vol. 65, pp. 3659-3674, Sep. 2017.

[J142] J. W. Choi, B. Shim, Y. Ding, B. Rao, and D. I. Kim, "Compressed Sensing for Wireless Communications: Useful Tips and Tricks," *IEEE Commun. Surveys & Tutorials*, vol. 19, no. 3, pp. 1527-1550, Third Quarter 2017.

[J141] A. Hussain, K. Lee, S.-H. Kim, S.-H. Chang, D. I. Kim, "Performance Analysis of Dual-Hop Variable-Gain Relaying with Beamforming over κ - μ Fading Channels," *IET Communications*, vol. 11, no. 10, pp. 1587-1593, Aug. 2017.

[J140] M. A. Alsheikh, D. Niyato, S. Lin, H.-P. Tan, and D. I. Kim, "Fast Adaptation of Activity Sensing Policies in Mobile Devices," *IEEE Trans. Vehic. Technol.*, vol. 66, pp. 5995-6008, July 2017.

- [J139] Y. M. Hwang, J. H. Park, Y. Shin, J. Y. Kim, and D. I. Kim, "Transmission Power and Antenna Allocation for Energy-Efficient RF Energy Harvesting Networks with Massive MIMO," *Energies*, vol. 10, no. 802, pp. 1-18, June 2017.
- [J138] D. T. Hoang, D. Niyato, P. Wang, D. I. Kim, and L. B. Le, "Optimal Data Scheduling and Admission Control for Backscatter Sensor Networks," *IEEE Trans. Commun.*, vol. 65, pp. 2062-2077, May 2017.
- [J137] Y. Zhang, D. Niyato, P. Wang, D. I. Kim, and Z. Han, "Optimal Wireless Energy Charging for Incentivized Content Transfer in Mobile Publish-Subscribe Networks," *IEEE Trans. Vehic. Technol.*, vol. 66, pp. 3420-3434, Apr. 2017.
- [J136] M. S. Ali, E. Hossain, and D. I. Kim, "Non-Orthogonal Multiple Access (NOMA) for Downlink Multiuser MIMO Systems: User Clustering, Beamforming, and Power Allocation," *IEEE Access*, vol. 5, pp. 565-577, Mar. 2017.
- [J135] K. W. Choi, D. I. Kim, and M. Y. Chung, "Received Power-Based Channel Estimation for Energy Beamforming in Multiple-Antenna RF Energy Transfer System," *IEEE Trans. Signal Processing*, vol. 65, no. 6, pp. 1461-1476, Mar. 2017.
- [J134] D. Hwang, K. C. Hwang, D. I. Kim, and T.-J. Lee, "Self-Energy Recycling for RF Powered Multi-antenna Relay Channels," *IEEE Trans. Wireless Commun.*, vol. 16, pp. 812-824, Feb. 2017.
- [J133] K. W. Choi, L. Ginting, P. A. Rosyady, A. A. Aziz, and D. I. Kim, "Wireless-Powered Sensor Networks: How to Realize," *IEEE Trans. Wireless Commun.*, vol. 16, pp. 221-234, Jan. 2017. (**one among the Top 25 Accessed Articles in IEEE Transactions on Wireless Communications through IEEE Xplore in January, February, and March 2017**)
- [J132] M. S. Ali, E. Hossain, and D. I. Kim, "LTE/LTE-A Random Access for Massive Machine-Type Communications in Smart Cities," in the special issue on Enabling Mobile and Wireless Technologies for Smart Cities of *IEEE Commun. Magazine*, vol. 55, no. 1, pp. 76-83, Jan. 2017.
- [J131] D. I. Kim, J. H. Moon, and J. J. Park, "New SWIPT Using PAPR: How It Works," *IEEE Wireless Commun. Letters*, vol. 5, no. 6, pp. 672-675, Dec. 2016. (**one among the Top 25 Accessed Articles in IEEE Wireless Communications Letters through IEEE Xplore from October 2016 to March 2017**)
- [J130] Y. Dong, J. Wang, B. Shim, and D. I. Kim, "DEARER: A Distance-and-Energy-Aware Routing with

Energy Reservation for Energy Harvesting Wireless Sensor Networks,” *IEEE J. Select. Areas in Commun. - Series on Green Communications and Networking (Issue 3)*, vol. 34, pp. 3798-3813, Dec. 2016.

[J129] S.-Y. Lien, C.-C. Chien, H.-L. Tsai, Y.-C. Liang, and D. I. Kim, “Configurable 3GPP Licensed-Assisted Access to Unlicensed Spectrum,” in the special issue on LTE in Unlicensed Spectrum of *IEEE Wireless Communications*, vol. 23, no. 6, pp. 32-39, Dec. 2016.

[J128] S.-Y. Lien, S.-M. Cheng, K.-C. Chen, and D. I. Kim, “Resource-Optimal Licensed-Assisted Access in Heterogeneous Cloud Radio Access Networks with Heterogeneous Carrier Communications,” *IEEE Trans. Vehic. Technol.*, vol. 65, pp. 9915-9930, Dec. 2016.

[J127] N. C. Luong, D. T. Hoang, P. Wang, D. Niyato, D. I. Kim, and Z. Han, “Data Collection and Wireless Communication in Internet of Things (IoT) Using Economic Analysis and Pricing Models: A Survey,” *IEEE Commun. Surveys & Tutorials*, vol. 18, no. 4, pp. 2546-2590, Fourth Quarter 2016. (**one among the Top 25 Accessed Articles in IEEE Communications Surveys & Tutorials through IEEE Xplore in November 2016, January and February 2017**)

[J126] D. Niyato, X. Lu, P. Wang, D. I. Kim, and Z. Han, “Economics of Internet of Things (IoT): An Information Market Approach,” *IEEE Wireless Communications*, vol. 23, no. 4, pp. 136-145, Aug. 2016. (**one among the Top 25 Accessed Articles in IEEE Wireless Communications through IEEE Xplore in October 2016**)

[J125] A. A. Nasir, H. D. Tuan, D. T. Ngo, S. Durrani, and D. I. Kim, “Path-Following Algorithms for Beamforming and Signal Splitting in RF Energy Harvesting Networks,” *IEEE Commun. Letters*, vol. 20, pp. 1687-1690, Aug. 2016.

[J124] S. H. Choi and D. I. Kim, “Multi-Cell Structure Backscatter Based Wireless-Powered Communication Network (WPCN),” *IEICE Trans. Commun.*, vol. E-99B, pp. 1687-1696, Aug. 2016.

[J123] D. Hwang, D. I. Kim, and T.-J. Lee, “Throughput Maximization for Multiuser MIMO Wireless Powered Communication Networks,” *IEEE Trans. Vehic. Technol.*, vol. 65, pp. 5743-5748, July 2016.

[J122] U. Siddique, H. Tabassum, E. Hossain, and D. I. Kim, “Channel Access-Aware User Association with Interference Coordination in Two-Tier Downlink Cellular Networks,” *IEEE Trans. Vehic. Technol.*, vol. 65, pp. 5579-5594, July 2016.

- [J121] S. Salari, M. Z. Amirani, I.-M. Kim, D. I. Kim, and J. Yang, "Distributed Beamforming in Two-Way Relay Networks with Interference and Imperfect CSI," *IEEE Trans. Wireless Commun.*, vol. 15, pp. 4455-4469, June 2016.
- [J120] I.-M. Kim and D. I. Kim, "Wireless Information and Power Transfer: Rate-Energy Tradeoff for Equiprobable Arbitrary-Shaped Discrete Inputs," *IEEE Trans. Wireless Commun.*, vol. 15, pp. 4393-4407, June 2016.
- [J119] X. Lu, P. Wang, D. Niyato, D. I. Kim, and Z. Han, "Wireless Charging Technologies: Fundamentals, Standards, and Network Applications," *IEEE Commun. Surveys & Tutorials*, vol. 18, no. 2, pp. 1413-1452, Second Quarter 2016. (**one among the Top 25 Accessed Articles in IEEE Communications Surveys & Tutorials through IEEE Xplore from June to November 2016**)
- [J118] S. Wu, Y. Shin, J. Y. Kim, and D. I. Kim, "Probability of Packet Loss in Energy Harvesting Nodes with Cognitive Radio Capabilities," *IEEE Commun. Letters*, vol. 20, pp. 978-981, May 2016.
- [J117] Y. Zhang, D. Niyato, P. Wang, and D. I. Kim, "Optimal Energy Management Policy of Mobile Energy Gateway," *IEEE Trans. Vehic. Technol.*, vol. 65, pp. 3685-3699, May 2016.
- [J116] K. M. Thilina, E. Hossain, and D. I. Kim, "DCCC-MAC: A Dynamic Common Control Channel-Based MAC Protocol for Cellular Cognitive Radio Networks," *IEEE Trans. Vehic. Technol.*, vol. 65, pp. 3597-3613, May 2016.
- [J115] D. Niyato, P. Wang, D. I. Kim, W. Saad, and Z. Han, "Mobile Energy Sharing Networks: Performance Analysis and Optimization," *IEEE Trans. Vehic. Technol.*, vol. 65, pp. 3519-3535, May 2016.
- [J114] D. Niyato, D. T. Hoang, N. C. Luong, P. Wang, D. I. Kim, and Z. Han, "Smart Data Pricing Models for Internet-of-Things (IoT): A Bundling Strategy Approach," in the special issue on Smart Data Pricing of *IEEE Network*, vol. 30, no. 2, pp. 18-25, Mar. 2016.
- [J113] J. Yang, S. Salari, I.-M. Kim, D. I. Kim, S. Kim, and K. Lim, "Asymptotically Optimal Cooperative Jamming for Physical Layer Security," *Journal of Communications and Networks*, vol. 18, no. 1, pp. 84-94, Feb. 2016.
- [J112] K. W. Choi and D. I. Kim, "Stochastic Optimal Control for Wireless Powered Communication Networks," *IEEE Trans. Wireless Commun.*, vol. 15, pp. 686-698, Jan. 2016.

- [J111] D. Hwang, D. I. Kim, S. K. Choi, and T.-J. Lee, "UE Relaying Cooperation over D2D Uplink in Heterogeneous Cellular Networks," *IEEE Trans. Commun.*, vol. 63, pp. 4784-4796, Dec. 2015.
- [J110] P. Liu, S. Gazor, I.-M. Kim, and D. I. Kim, "Noncoherent Relaying in Energy Harvesting Communication Systems," *IEEE Trans. Wireless Commun.*, vol. 14, pp. 6940-6954, Dec. 2015.
- [J109] P. Liu, S. Gazor, I.-M. Kim, and D. I. Kim, "Energy Harvesting Noncoherent Cooperative Communications," *IEEE Trans. Wireless Commun.*, vol. 14, pp. 6722-6737, Dec. 2015.
- [J108] D. T. Hoang, X. Lu, D. Niyato, P. Wang, D. I. Kim, and Z. Han, "Applications of Repeated Games in Wireless Networks: A Survey," *IEEE Commun. Surveys & Tutorials*, vol. 17, no. 4, pp. 2102-2135, Fourth Quarter 2015.
- [J107] D. K. Shin, W. Choi, and D. I. Kim, "The Two-user Gaussian Interference Channel with Energy Harvesting Transmitters: Energy Cooperation and Achievable Rate Region," *IEEE Trans. Commun.*, vol. 63, no. 11, pp. 4551-4564, Nov. 2015.
- [J106] U. Siddique, H. Tabassum, E. Hossain, and D. I. Kim, "Wireless Backhauling of 5G Small Cells: Challenges and Solution Approaches," *IEEE Wireless Communications*, vol. 22, no. 5, pp. 22-31, Oct. 2015.
- [J105] L. B. Le, V. Lau, E. Jorswieck, N.-D. Dao, A. Haghghat, D. I. Kim, and T. Le-Ngoc, "Enabling 5G Mobile Wireless Technologies," *EURASIP J. on Wireless Communications and Networking*, vol. 2015, no. 218, pp. 1-14, Sep. 2015.
- [J104] D. Niyato, P. Wang, T. H. Pink, D. I. Kim, and W. Saad, "Cooperation in Delay Tolerant Networks with Wireless Energy Transfer: Performance Analysis and Optimization," *IEEE Trans. Vehic. Technol.*, vol. 64, pp. 3740-3754, Aug. 2015.
- [J103] E. Hossain, D. Niyato, and D. I. Kim, "Evolution and Future Trends of Research in Cognitive Radio: A Contemporary Survey," *Wireless Communications and Mobile Computing*, vol. 15, no. 11, pp. 1530-1564, Aug. 2015.
- [J102] A. H. Sakr, H. Tabassum, E. Hossain, and D. I. Kim, "Cognitive Spectrum Access in Device-to-Device (D2D)-Enabled Cellular Networks," *IEEE Commun. Magazine*, vol. 53, pp. 126-133, July 2015.

- [J101] D. T. Hoang, D. Niyato, P. Wang, and D. I. Kim, "Performance Optimization for Cooperative Multiuser Cognitive Radio Networks with RF Energy Harvesting Capability," *IEEE Trans. Wireless Commun.*, vol. 14, pp. 3614-3629, July 2015.
- [J100] H. Tabassum, E. Hossain, M. J. Hossain, and D. I. Kim, "On the Spectral Efficiency of Multiuser Scheduling in RF-Powered Uplink Cellular Networks," *IEEE Trans. Wireless Commun.*, vol. 14, pp. 3586-3600, July 2015.
- [J99] E. Zihan, K. W. Choi, and D. I. Kim, "Distributed Random Access Scheme for Collision Avoidance in Cellular Device-to-Device Communication," *IEEE Trans. Wireless Commun.*, vol. 14, pp. 3571-3585, July 2015.
- [J98] D. T. Hoang, D. Niyato, P. Wang, and D. I. Kim, "Performance Analysis of Wireless Energy Harvesting Cognitive Radio Networks Under Smart Jamming Attacks," (**invited**) *IEEE Trans. Cognitive Communications and Networking*, vol. 1, no. 2, pp. 200-216, June 2015.
- [J97] H. Tabassum, A. Ogundipe, E. Hossain, and D. I. Kim, "Wireless-Powered Cellular Networks: Key Challenges and Solution Techniques," *IEEE Commun. Magazine*, vol. 53, pp. 63-71, June 2015.
- [J96] X. Lu, P. Wang, D. Niyato, D. I. Kim, and Z. Han, "Wireless Networks with RF Energy Harvesting: A Contemporary Survey," *IEEE Commun. Surveys & Tutorials*, vol. 17, no. 2, pp. 757-789, Second Quarter 2015. (**one among the Top 25 Accessed Articles in IEEE Communications Surveys & Tutorials through IEEE Xplore from February 2016 to May 2018, and July, August, September 2018**)
- [J95] K. M. Thilina, H. Tabassum, E. Hossain, and D. I. Kim, "Medium Access Control Design for Full-Duplex Wireless Systems: Challenges and Approaches," *IEEE Commun. Magazine*, vol. 53, pp. 112-120, May 2015.
- [J94] X. Lu, D. Niyato, P. Wang, D. I. Kim, and Z. Han, "Wireless Charger Networking for Mobile Devices: Fundamentals, Standards, and Applications," *IEEE Wireless Communications*, vol. 22, no. 2, pp. 126-135, Apr. 2015.
- [J93] A. Abdelnasser, E. Hossain, and D. I. Kim, "Tier-Aware Resource Allocation in OFDMA Macrocell-Small Cell Networks," *IEEE Trans. Commun.*, vol. 63, pp. 695-710, Mar. 2015.
- [J92] J. Y. Ryu, W. Choi, D. I. Kim, and R. Schober, "Beamforming for Cooperative Retransmission via User

Relaying in Multiple Antenna Cellular Systems,” *IEEE Trans. Wireless Commun.*, vol. 14, pp. 854-869, Feb. 2015.

[J91] D. I. Kim, E.-H. Shin, and M. S. Jin, “Hierarchical Power Control with Interference Allowance for Uplink Transmission in Two-Tier Heterogeneous Networks,” *IEEE Trans. Wireless Commun.*, vol. 14, pp. 616-627, Feb. 2015.

[J90] D. T. Hoang, D. Niyato, P. Wang, and D. I. Kim, “Opportunistic Channel Access and RF Energy Harvesting in Cognitive Radio Networks,” *IEEE J. Select. Areas in Commun. - Cognitive Radio Series*, vol. 32, pp. 2039-2052, Nov. 2014.

[J89] J. W. Kang, M. Jang, S.-H. Kim, and D. I. Kim, “Outage Analysis of Multi-Antenna Rate Adaptive Systems With Outdated Feedback,” *IEEE Trans. Wireless Commun.*, vol. 13, pp. 5453-5466, Oct. 2014.

[J88] J. Yang, I.-M. Kim, and D. I. Kim, “Joint Design of Optimal Cooperative Jamming and Power Allocation for Linear Precoding,” *IEEE Trans. Commun.*, vol. 62, pp. 3285-3298, Sep. 2014.

[J87] D. Niyato, P. Wang, and D. I. Kim, “Performance Analysis and Optimization of TDMA Network with Wireless Energy Transfer,” *IEEE Trans. Wireless Commun.*, vol. 13, pp. 4205-4219, Aug. 2014.

[J86] S. S. Nam, H.-C. Yang, M.-S. Alouini, and D. I. Kim, “An MGF-based Unified Framework to Determine the Joint Statistics of Partial Sums of Ordered i.n.d. Random Variables,” *IEEE Trans. Signal Processing*, vol. 62, pp. 4270-4283, Aug. 2014.

[J85] D. Niyato, P. Wang, and D. I. Kim, “Performance Modeling and Analysis of Heterogeneous Machine Type Communications,” *IEEE Trans. Wireless Commun.*, vol. 13, pp. 2836-2849, May 2014.

[J84] D. Hwang, S. S. Nam, T.-J. Lee, and D. I. Kim, “Finite Feedback MIMO Precoding for the Two-Way Amplify-and-Forward Relay Network,” *IEEE Commun. Letters*, vol. 18, pp. 620-623, Apr. 2014.

[J83] M. Hasan, E. Hossain, and D. I. Kim, “Resource Allocation Under Channel Uncertainties for Relay-Aided Device-to-Device Communications Underlying LTE-A Cellular Networks,” *IEEE Trans. Wireless Commun.*, vol. 13, pp. 2322-2338, Apr. 2014.

[J82] A. Abdelnasser, E. Hossain, and D. I. Kim, “Clustering and Resource Allocation for Dense Femtocells in a Two-Tier Cellular OFDMA Network,” *IEEE Trans. Wireless Commun.*, vol. 13, pp. 1628-1641, Mar.

2014.

[J81] S. Guruacharya, D. Niyato, M. Bennis, and D. I. Kim, "Dynamic Coalition Formation for Network MIMO in Small Cell Networks," *IEEE Trans. Wireless Commun.*, vol. 12, pp. 5360-5372, Oct. 2013.

[J80] A. Leith, M.-S. Alouini, D. I. Kim, X. Shen, and Z. Wu, "Flexible Proportional-Rate Scheduling for OFDMA System," *IEEE Trans. Mobile Computing*, vol. 12, pp. 1907-1919, Oct. 2013.

[J79] A. Ramezani-Kebrya, I.-M. Kim, D. I. Kim, F. Chan, and R. Inkol, "Likelihood-Based Modulation Classification for Multiple-Antenna Receiver," *IEEE Trans. Commun.*, vol. 61, pp. 3816-3829, Sep. 2013.

[J78] P. Liu, S. Gazor, I.-M. Kim, and D. I. Kim, "Noncoherent Amplify-and-Forward Cooperative Networks: Robust Detection and Performance Analysis," *IEEE Trans. Commun.*, vol. 61, pp. 3644-3659, Sep. 2013.

[J77] J. Yang, I.-M. Kim, and D. I. Kim, "Power-Constrained Optimal Cooperative Jamming for Multiuser Broadcast Channel," *IEEE Wireless Commun. Letters*, vol. 2, no. 4, pp. 411-414, Aug. 2013.

[J76] P. Phunchongharn, E. Hossain, and D. I. Kim, "Resource Allocation for Device-to-Device Communications Underlying LTE-Advanced Networks," *IEEE Wireless Communications*, vol. 20, no. 4, pp. 91-100, Aug. 2013. **(as one among the Top 25 Accessed Articles in IEEE Wireless Communications through IEEE Xplore in October, November, December 2016, and February 2017)**

[J75] J. Yang, I.-M. Kim, and D. I. Kim, "Optimal Cooperative Jamming for Multiuser Broadcast Channel with Multiple Eavesdroppers," *IEEE Trans. Wireless Commun.*, vol. 12, pp. 2840-2852, June 2013.

[J74] H. ElSawy, E. Hossain, and D. I. Kim, "HetNets with Cognitive Small Cells: User Offloading and Distributed Channel Access Techniques," *IEEE Commun. Magazine*, vol. 51, pp. 28-36, June 2013.

[J73] Y. J. Chun, D. I. Kim, and S. W. Kim, "Optimization of Network Coded MIMO Transmission in Multiple-Access Relay Network," *IEEE Trans. Wireless Commun.*, vol. 12, pp. 2436-2444, May 2013.

[J72] S. Guruacharya, D. Niyato, D. I. Kim, and E. Hossain, "Hierarchical Competition for Downlink Power Allocation in OFDMA Femtocell Networks," *IEEE Trans. Wireless Commun.*, vol. 12, pp. 1543-1553, Apr. 2013.

- [J71] N. Saquib, E. Hossain, and D. I. Kim, “Fractional Frequency Reuse for Interference Management in LTE-Advanced HetNets,” *IEEE Wireless Communications*, vol. 20, pp.113-122, Apr. 2013. (**one among the Top 25 Accessed Articles in IEEE Wireless Communications through IEEE Xplore in June 2013**)
- [J70] L. B. Le, D. Niyato, E. Hossain, D. I. Kim, and D. T. Hoang, “QoS-Aware and Energy-Efficient Resource Management in OFDMA Femtocells,” *IEEE Trans. Wireless Commun.*, vol. 12, pp. 180-194, Jan. 2013.
- [J69] J. Y. Ryu, W. Choi, and D. I. Kim, “Partial Stream Relaying in MIMO Relay Communications,” *IEEE Trans. Vehic. Technol.*, vol. 62, pp. 205-218, Jan. 2013.
- [J68] J. Yang, I.-M. Kim, D. I. Kim, and F. Chan, “Linear Receiver for the Uplink in Distributed Antenna Systems,” *IEEE Trans. Wireless Commun.*, vol. 11, pp. 4161-4171, Nov. 2012.
- [J67] K. W. Choi and D. I. Kim, “Outage Probability Analysis of Macro-Diversity Combining in Poisson Field of Access Points,” *IEEE Commun. Letters*, vol. 16, pp. 1208-1211, Aug. 2012.
- [J66] N. Saquib, E. Hossain, L. B. Le, and D. I. Kim, “Interference Management in OFDMA Femtocell Networks: Issues and Approaches,” *IEEE Wireless Communications*, vol. 19, no. 3, pp. 86-95, June 2012. (**one among the top 25 accessed articles in IEEE Wireless Communications through IEEE Xplore in March and June 2013**)
- [J65] A. Leith, D. I. Kim, M.-S. Alouini, and Z. Wu, “Distributed Optimization of Multi-Subchannel Ad-Hoc Cognitive Radio Network,” *IEEE Trans. Vehic. Technol.*, vol. 61, pp. 1786-1800, May 2012.
- [J64] M. Ju, I.-M. Kim, and D. I. Kim, “Joint Relay Selection and Relay Ordering for DF-Based Cooperative Relay Networks,” *IEEE Trans. Commun.*, vol. 60, pp. 908-915, Apr. 2012.
- [J63] D. T. Ngo, L. B. Le, T. Le-Ngoc, E. Hossain, and D. I. Kim, “Distributed Interference Management in Two-Tier CDMA Femtocell Networks,” *IEEE Trans. Wireless Commun.*, vol. 11, pp. 979-989, Mar. 2012. (**one top accessed journal among all papers published in IEEE Transactions on Wireless Communications through IEEE Xplore in March, April, and May 2012**)

- [J62] S. S. Nam, H.-C. Yang, M.-S. Alouini, and D. I. Kim, “Impact of Interference on the Performance of Selection Based Parallel Multiuser Scheduling,” *IEEE Trans. Wireless Commun.*, vol. 11, pp. 531-536, Feb. 2012.
- [J61] C. Jeong, I.-M. Kim, and D. I. Kim, “Joint Secure Beamforming Design at the Source and the Relay for an Amplify-and-Forward MIMO Untrusted Relay System,” *IEEE Trans. Signal Processing*, vol. 60, pp. 310-325, Jan. 2012.
- [J60] S. C. Park, D. I. Kim, and S. S. Nam, “Adaptive Threshold Based Relay Selection for Minimum Feedback and Channel Usage,” *IEEE Trans. Wireless Commun.*, vol. 10, pp. 3620-3625, Nov. 2011.
- [J59] K. Akkarajitsakul, E. Hossain, D. Niyato, and D. I. Kim, “Game Theoretic Approaches for Multiple Access in Wireless Networks: A Survey,” *IEEE Commun. Surveys & Tutorials*, vol. 13, no. 3, pp. 372-395, Third Quarter 2011.
- [J58] K. W. Choi, E. Hossain, and D. I. Kim, “Downlink Subchannel and Power Allocation in Multi-Cell OFDMA Cognitive Radio Networks,” *IEEE Trans. Wireless Commun.*, vol. 10, pp. 2259-2271, July 2011.
- [J57] K. W. Choi, E. Hossain, and D. I. Kim, “Cooperative Spectrum Sensing Under Random Geometric Primary User Network Model,” *IEEE Trans. Wireless Commun.*, vol. 10, pp. 1932-1944, June 2011.
- [J56] J. N. Bae, Y. H. Choi, J. Y. Kim, J. W. Kwon, and D. I. Kim, “Efficient Interference Cancellation Scheme for Wireless Body Area Network,” in the special issue on Emerging Technologies and Applications of Wireless Communication in Healthcare of *Journal of Communications and Networks*, vol. 13, no. 2, pp. 240-247, Apr. 2011.
- [J55] K. Zhu, D. Niyato, P. Wang, E. Hossain, and D. I. Kim, “Mobility and Handoff Management in Vehicular Networks: A Survey,” (**invited**) *Wireless Communications and Mobile Computing* (Wiley), vol. 11, no. 4, pp. 459-476, Apr. 2011.
- [J54] Z. Yi, I.-M. Kim, and D. I. Kim, “Symbol Rate Upper-Bound on Distributed STBC with Channel Phase Information,” *IEEE Trans. Wireless Commun.*, vol. 10, pp. 745-750, Mar. 2011.
- [J53] M. Ju, I.-M. Kim, and D. I. Kim, “Opportunistic Source/Destination Cooperation in Cooperative Diversity Networks,” *IEEE Trans. Wireless Commun.*, vol. 9, pp. 3822-3837, Dec. 2010.

- [J52] D. I. Kim, W. Choi, H. Seo, and B.-H. Kim, "Partial Information Relaying with Per Antenna Superposition Coding," vol. 58, pp. 3423-3427, *IEEE Trans. Commun.*, Dec. 2010.
- [J51] Y. Ma, D. I. Kim, and Z. Wu, "Optimization of OFDMA-based Cellular Cognitive Radio Networks," *IEEE Trans. Commun.*, vol. 58, pp. 2265-2276, Aug. 2010.
- [J50] S. Hong, Y. Won, and D. I. Kim, "Significance-aware Channel Power Allocation for Wireless Multimedia Streaming," *IEEE Trans. Vehic. Technol.*, vol. 59, pp. 2861-2873, July 2010.
- [J49] H. Keshavarz, E. Hossain, S. Noghianian, and D. I. Kim, "Perturbation Analysis of Spectrum Sharing in Cognitive Radio Networks," *IEEE Trans. Wireless Commun.*, vol. 9, pp. 1564-1570, May 2010.
- [J48] W. Choi, D. I. Kim, and B.-H. Kim, "Adaptive Multi-node Incremental Relaying for Hybrid-ARQ in AF Relay Networks," *IEEE Trans. Wireless Commun.*, vol. 9, pp. 505-511, Feb. 2010.
- [J47] D. Niyato, E. Hossain, D. I. Kim, and Z. Han, "Relay-Centric Radio Resource Management and Network Planning in IEEE 802.16j Mobile Multihop Relay Network," *IEEE Trans. Wireless Commun.*, vol. 8, pp. 3015-3025, Dec. 2009.
- [J46] D. I. Kim, "Near-optimal and Suboptimal Receivers for Multiuser UWB Impulse Radio Systems in Multipath," *IEEE Trans. Commun.*, vol. 57, pp. 3001-3011, Oct. 2009.
- [J45] D. Niyato, E. Hossain, and D. I. Kim, "Joint Admission Control and Antenna Assignment for Multiclass QoS in Spatial Multiplexing MIMO Wireless Networks," *IEEE Trans. Wireless Commun.*, vol. 8, pp. 4855-4865, Sep. 2009.
- [J44] Y. Ma and D. I. Kim, "Rate-Maximization Scheduling Schemes for Uplink OFDMA," *IEEE Trans. Wireless Commun.*, vol. 8, pp. 3193-3205, June 2009.
- [J43] D. I. Kim, "Multiuser Performance of M-ary Orthogonal Coded/Balanced UWB Transmitted-Reference Systems," *IEEE Trans. Commun.*, vol. 57, pp. 1013-1024, Apr. 2009.
- [J42] W. J. Shin, K. Y. Park, D. I. Kim, and J. W. Kwon, "Large-Scale Joint Rate and Power Allocation Algorithm Combined with Admission Control in Cognitive Radio Networks," in the special issue on Cognitive Radio of *Journal of Communications and Networks*, vol. 11, no. 2, pp. 157-165, Apr. 2009.

- [J41] D. I. Kim, L. B. Le, and E. Hossain, "Joint Rate and Power Allocation for Cognitive Radios in Dynamic Spectrum Access Environment," *IEEE Trans. Wireless Commun.*, vol. 7, pp. 5517-5527, Dec. 2008.
- [J40] S. Erkucuk, D. I. Kim, and K. S. Kwak, "Code Shift Keying Impulse Modulation for UWB Communications," *IEEE Trans. Wireless Commun.*, vol. 7, pp. 3285-3291, Sep. 2008.
- [J39] H. Fu and D. I. Kim, "Scheduling Performance in Downlink WCDMA Networks with AMC and Fast Cell Selection," *IEEE Trans. Wireless Commun.*, vol. 7, pp. 2580-2591, July 2008.
- [J38] D. I. Kim, "Multistage Selective ML Decoding for Multidimensional Multicode DS-CDMA with Precoding," *IEEE Trans. Commun.*, vol. 56, pp. 518-522, Apr. 2008.
- [J37] T. Jia and D. I. Kim, "Multiple Access Performance of Balanced Ultra-Wideband Transmitted-Reference Systems in Multipath," *IEEE Trans. Wireless Commun.*, vol. 7, pp. 1084-1094, Mar. 2008.
- [J36] D. I. Kim and T. Jia, " M -ary Orthogonal Coded/Balanced Ultra-Wideband Transmitted-Reference Systems in Multipath," *IEEE Trans. Commun.*, vol. 56, pp. 102-111, Jan. 2008.
- [J35] T. Liu, D. I. Kim, and R. G. Vaughan, "A High-Resolution, Multi-Template Deconvolution Algorithm for Time-Domain UWB Channel Characterization," (**invited**) *Canadian Journal on Electrical and Computer Engineering*, vol. 32, no. 4, pp. 207-213, Fall 2007.
- [J34] T. Jia and D. I. Kim, "Analysis of Channel-Averaged SINR for Indoor UWB Rake and Transmitted Reference Systems," *IEEE Trans. Commun.*, vol. 55, pp. 2022-2032, Oct. 2007.
- [J33] D. I. Kim, "Interaction between Adaptive Modulation and Scheduling for High-Rate Downlink Packet Transmission," *IEEE Trans. Vehic. Technol.*, vol. 56, pp. 1683-1695, July 2007.
- [J32] S. Erkucuk and D. I. Kim, "Spectral Characteristics of M -ary Code Shift Keying Based Impulse Radios: Effects of Code Design," *IEEE Trans. Wireless Commun.*, vol. 6, pp. 2266-2275, June 2007.
- [J31] S. Erkucuk and D. I. Kim, " M -ary Code Shift Keying Impulse Modulation Combined with BPPM for Ultra Wideband Communications," *IEEE Trans. Wireless Commun.*, vol. 6, pp. 2255-2265, June 2007.
- [J30] H. Fu and D. I. Kim, "Analysis of Throughput and Fairness with Downlink Scheduling in WCDMA Networks," *IEEE Trans. Wireless Commun.*, vol. 5, pp. 2164-2174, Aug. 2006.

- [J29] D. I. Kim, "Selective Relative Best Scheduling for Best-Effort Downlink Packet Data," *IEEE Trans. Wireless Commun.*, vol. 5, pp. 1254-1259, June 2006.
- [J28] D. I. Kim, "Selective Maximum-Likelihood Symbol-by-Symbol Detection for Multidimensional Multicode WCDMA with Precoding," *IEEE Trans. Commun.*, vol. 54, pp. 591-595, Apr. 2006.
- [J27] D. I. Kim, E. Hossain, and V. K. Bhargava, "Dynamic Rate and Power Adaptation for Forward Link Transmission Using High-Order Modulation and Multicode Formats in Cellular WCDMA Networks," *IEEE Trans. Wireless Commun.*, vol. 4, pp. 2361-2372, Sep. 2005.
- [J26] W. Choi, C. Yi, J. Y. Kim, and D. I. Kim, "A New Base Station Receiver for Increasing Diversity Order in a CDMA Cellular System," *IEEE Trans. Commun.*, vol. 52, pp. 1851-1856, Nov. 2004.
- [J25] D. I. Kim, E. Hossain, and V. K. Bhargava, "Dynamic Rate and Power Adaptation for Provisioning Class-Based QoS in Cellular Multi-Rate WCDMA Systems," *IEEE Trans. Wireless Commun.*, vol. 3, pp. 1590-1601, Sep. 2004.
- [J24] D. I. Kim, "Analysis of Hybrid Multicode/Variable Spreading Factor DS-CDMA System with Two-Stage Group Detection," *IEEE Trans. Vehic. Technol.*, vol. 53, pp. 611-620, May 2004.
- [J23] E. Hossain, D. I. Kim, and V. K. Bhargava, "Analysis of TCP Performance under Joint Rate and Power Adaptation in Cellular WCDMA Networks," *IEEE Trans. Wireless Commun.*, vol. 3, pp. 865-879, May 2004.
- [J22] D. I. Kim, "Adaptive Selection/Maximal-Ratio Combining Based on Error Detection of Multidimensional Multicode DS-CDMA," *IEEE Trans. Commun.*, vol. 52, pp. 446-456, Mar. 2004.
- [J21] D. I. Kim, "Optimum Packet Data Transmission in Cellular Multi-rate CDMA Systems with Rate-based Slot Allocation," *IEEE Trans. Wireless Commun.*, vol. 3, pp. 165-175, Jan. 2004.
- [J20] D. I. Kim, E. Hossain, and V. K. Bhargava, "Dynamic Rate Adaptation and Integrated Rate and Error Control in Cellular WCDMA Networks," *IEEE Trans. Wireless Commun.*, vol. 3, pp. 35-49, Jan. 2004.
- [J19] T. Issariyakul, E. Hossain, and D. I. Kim, "Medium Access Control Protocols for Wireless Mobile Ad Hoc Networks: Issues and Approaches," *Wiley Wireless Communications and Mobile Computing*, vol. 3, pp. 935-958, Dec. 2003.

- [J18] D. I. Kim, E. Hossain, and V. K. Bhargava, "Dynamic Random Access Code Assignment for Prioritized Packet Data Transmission in WCDMA Networks," *IEEE Trans. Wireless Commun.*, vol. 2, pp. 911-925, Sep. 2003.
- [J17] D. I. Kim, E. Hossain, and V. K. Bhargava, "Dynamic Rate Adaptation Based on Multidimensional Multicode DS-CDMA in Cellular Wireless Networks," *IEEE Trans. Commun.*, vol. 51, pp. 247-260, Feb. 2003.
- [J16] D. I. Kim, E. Hossain, and V. K. Bhargava, "Downlink Joint Rate and Power Allocation in Cellular Multi-Rate WCDMA Systems," *IEEE Trans. Wireless Commun.*, vol. 2, pp. 69-80, Jan. 2003.
- [J15] H. Minn, D. I. Kim, and V. K. Bhargava, "A Reduced Complexity Channel Estimation for OFDM Systems with Transmit Diversity in Mobile Wireless Channels," *IEEE Trans. Commun.*, vol. 50, pp. 799-807, May 2002.
- [J14] D. I. Kim and V. K. Bhargava, "Combined Multidimensional Signaling and Transmit Diversity for High-Rate Wide-band CDMA," *IEEE Trans. Commun.*, vol. 50, pp. 262-275, Feb. 2002.
- [J13] D. I. Kim and V. K. Bhargava, "Performance of Multidimensional Multicode DS-CDMA Using Code Diversity and Error Detection," *IEEE Trans. Commun.*, vol. 49, pp. 875-887, May 2001.
- [J12] D. I. Kim and J. C. Roh, "Performance of Slotted Asynchronous CDMA Using Controlled Time of Arrival," *IEEE Trans. Commun.*, vol. 47, pp. 454-463, Mar. 1999.
- [J11] D. I. Kim, "Multi-user Performance of Direct-Sequence CDMA Using Combined Binary PPM/Orthogonal Modulation," *IEEE Trans. Commun.*, vol. 47, pp. 404-415, Mar. 1999.
- [J10] D. I. Kim, "Combined Binary PPM/Biorthogonal Modulation for Direct-Sequence CDMA," *IEEE Trans. Commun.*, vol. 47, pp. 22-26, Jan. 1999.
- [J9] D. I. Kim and Y. R. Lee, "I/Q Multiplexed Code Assignment for Fast Cell Search in Asynchronous DS/CDMA Cellular Systems," *IEEE Communications Letters*, vol. 2, pp. 159-161, June 1998.
- [J8] D. I. Kim, "Fast Cell Search Using I/Q Multiplexed Code Under Hierarchical Cell Structures," *IEEE Electronics Letters*, vol. 34, pp. 850-851, April 1998.

[J7] D. I. Kim, “Biorthogonal Pulse Position Modulated Direct-Sequence CDMA for Wireless Local Communications,” *IEE Proceedings Part-I*, vol. 144, No. 1, pp. 40-46, Feb. 1997.

[J6] D. I. Kim and J. C. Roh, “Random Assignment/Transmitter-oriented Code Scheme for Centralized DS/SSMA Packet Radio Networks,” in the special issue on CDMA Networks III of *IEEE J. Select. Areas in Commun.*, vol. 14, pp. 1560-1568, Oct. 1996.

[J5] D. I. Kim and R. A. Scholtz, “On the Performance of Centralized DS/SS Packet Radio Networks with Random Spreading Code Assignment,” *IEEE Trans. Commun.*, vol. 43, pp. 2613-2621, Oct. 1995.

[J4] D. I. Kim, “Analysis of a Direct-Sequence CDMA Mobile Radio System with Reduced Set of Code Sequences,” *IEEE Trans. Vehic. Technol.*, vol. 44, pp. 525-534, Aug. 1995.

[J3] D. I. Kim, I. K. Kim, and R. A. Scholtz, “Counting Collision-Free Transmissions in Common-Code SSMA Communications,” *IEEE Trans. Commun.*, vol. 43, pp. 593-602, pt. I of III, Feb./Mar./Apr. 1995.

[J2] D. I. Kim, “Multiple-Capture Performance of DS/SS Packet Radio Systems with Common Spreading Code,” *IEE Proceedings Part-I*, vol. 140, No. 6, pp. 471-480, Dec. 1993.

[J1] D. I. Kim, “Header Detection in a Centralized Packet Radio System with Common DS/BPSK Spread-Spectrum Modulation,” *IEE Proceedings Part-I*, vol. 140, No. 4, pp. 291-300, Aug. 1993.

Invited Talks

[I14] D. I. Kim, “Towards Realization of Long-Range Wireless-Powered Sensor Networks,” *IEEE GLOBECOM 2018 Workshop on Wireless Energy Harvesting Communication Networks*, Abu Dhabi, UAE, Dec. 2018.

[I13] D. I. Kim, “Short-Range/Medium-Range/Long-Range WPT Efficiency Tests with Dual Mode SWIPT,” *IEEE ICC 2018 Workshop on Energy Harvesting Wireless Communications*, Kansas City, MO, USA, May 2018.

[I12] D. I. Kim, “A Massive Antenna Array Testbed for Wireless Power Transfer with Energy Beamforming,” *23rd Asia-Pacific Conference on Communications (APCC) 2017*, Perth, Australia, Dec. 2017.

[I11] D. I. Kim, “A Unified Design of Wireless Information and Power Transmission (WIPT),” *IEEE*

GLOBECOM 2017 Workshop on Wireless Energy Harvesting Communication Networks, Singapore, Dec. 2017.

[I10] D. I. Kim and K. W. Choi, "RF Energy Powered Charging Station for Smartphones," *IEEE ICC 2017 Workshop on Emerging Energy Harvesting Solutions for 5G Networks (5G-NRG)*, Paris, France, May 2017.

[I9] D. I. Kim, "Wireless-Powered Communication Networks: Architectures, Protocols, and Applications," *Advanced Technologies for Communications (ATC 2016)*, Hanoi, Vietnam, Oct. 2016.

[I8] D. I. Kim, "Wireless Powered Communication Networks: Architectures, Protocols, and Applications," *Second Asia-Pacific Workshop on Wireless Networking and Communications (APWNC 2015)*, Changchun, Jilin Province, China, Sep. 2015.

[I7] D. I. Kim, "Flexible Spectrum Utilization in Future Cellular Systems with Small Cells and Device-to-Device Communications," *IEEE ICC 2014 Workshop on Small Cell and 5G Networks (SmallNets)*, Sydney, Australia, June 2014.

[I6] D. I. Kim, "Large-Scale Small Cells via Hierarchical Cooperation: The Evolution Path beyond 4G," *International Conference on Ubiquitous Information Management and Communication (IMCOM 2014)*, Siem Reap, Cambodia, Jan. 2014.

[I5] D. I. Kim, "UE Relay Evolving with D2D for Heterogeneous Cellular Networks (HCNs)," *First Asia-Pacific Workshop on Wireless Networking and Communications (APWNC 2013)*, Changchun, Jilin Province, China, Oct. 2013.

[I4] D. I. Kim, "UE Relay for Heterogeneous Cellular Networks," *Small Cell Networks and Other Heterogeneous Systems Workshop*, Nanyang Technological University (NTU), Singapore, Feb. 1, 2013.

[I3] D. I. Kim, "UE Relay Evolving with D2D for Next-Generation Cellular Networks," *2012 Sendai International Workshop on Advanced Wireless Technologies and Robust Networks*, Tohoko University, Japan, Dec. 21, 2012.

[I2] D. I. Kim and W. Choi, "UE Relay for LTE-Advanced Cellular Standard," *IEEE ICC '12*, Beijing, China, Aug. 2012.

[I1] D. I. Kim, "High Data Rate Multidimensional Multicode DS-CDMA," *2000 IEEE 4th CAS Workshop on*

Emerging Technology in Circuits & Systems: Third Generation Mobile Technologies and Applications, Hong Kong, Nov. 2000.

Book

[B2] D. Niyato, E. Hossain, D. I. Kim, V. K. Bhargava, and L. Shafai, *Wireless-Powered Communication Networks*. Cambridge University Press, ISBN 978-1-107-13569-7, pp. 1-430, Nov. 2016.

[B1] E. Hossain, D. I. Kim, and V. K. Bhargava, *Cooperative Cellular Wireless Networks*. Cambridge University Press, ISBN 978-0-521-76712-5, pp. 1-542, Mar. 2011.

US Patents (Contributions to Cellular LTE Standard and Energy Harvesting for IoT)

[P35] T. Y. Kim and D. I. Kim, "Sparse-Coded Ambient Backscatter Communication Method and System," *US Patent* Application No. 16/232,523, filed on Dec. 26, 2018.

[P34] D. I. Kim, J. J. Park, J. H. Moon, and K. Y. Lee, "Adaptive Mode Switching Method for Simultaneous Wireless Power/Information Transmission Operating in Dual Mode and Apparatus for Performing the Same," *US Patent* Application No. 16/232,460, filed on Dec. 26, 2018.

[P33] K. W. Choi and D. I. Kim, "Energy Transmitting Method and Apparatus, Energy Receiving Method, and Receiving Node," *US Patent* Application No. 16/217,146, filed on Dec. 12, 2018.

[P32] S.-K. Yeo, S.-Y. Kim, J.-S. Park, Y.-H. Ryu, K.-Y. Lee, H. Abbasizadeh, S.-W. Kwon, T. K.N. Truong, D. I. Kim, and S.-B. Park, "Electronic Device for Wirelessly Receiving Power and Method for Operating the Same," *US Patent* Application No. 15/965,274, filed on Apr. 27, 2018.

[P31] T.-Y. Kim, D. I. Kim, W. Choi, and H. Seo, "Cluster-Based Collaborative Transmission Method in Wireless Communication System and Apparatus Therefor," *US Patent* Application No. 15/747,318, filed on Jan. 24, 2018.

[P30] D. I. Kim, J. J. Park, J. H. Moon, and K. Y. Lee, "Wireless Power Transfer Apparatus, Wireless Power Receiving Apparatus, Wireless Power Transfer Method, Wireless Power Receiving Method, Wireless Power Transfer System Using Dual Mode and Recording Medium Thereof," *US Patent* Application No. 15/857,302, filed on Dec. 28, 2017.

[P29] W. Choi, B. Hong, K. Son, D. I. Kim, and H. Seo, "Method and Apparatus for Index-Coded Multicast Transmission in a Wireless Communication System," *US Patent* Application No. 15/678,897, filed on Aug.

16, 2017.

[P28] W. Choi, B. Hong, K. Son, D. I. Kim, and H. Seo, "Method for Multicast Transmission Based on Asynchronous Request in Wireless Communication System and Apparatus for the Same," *US Patent Application No. 15/678,886*, filed on Aug. 16, 2017.

[P27] W.-J Kim, H.-S Lee, D. I. Kim, W. Choi, H. Seo, and B.-H. Kim, "Data Transmission and Reception Method and Device Using Caching in Wireless Communication System Performing CoMP," *US Patent Application No. 15/525,915*, filed on May 10, 2017.

[P26] H. Song, W. Choi, D. I. Kim, H. Seo, and B.-H. Kim, "Method and Apparatus for Transmitting and Receiving Data Using Cache Memory in Wireless Communication System Supporting Relay Node," *US Patent Application No. 15/525,347*, filed on May 9, 2017.

[P25] H. Seo, H. Song, D. I. Kim, W. Choi, and B.-H. Kim, "Method and Device for Transmitting/Receiving Data Using Cache Memory in Wireless Communication System Supporting Relay Node," *US Patent Application No. 15/508,308*, filed on Mar. 2, 2017.

[P24] D. I. Kim, J. H. Moon, J. J. Park, and K. Y. Lee, "Simultaneous Wireless Information and Power Transmission Method, and Transmission Apparatus and Reception Apparatus Using the Same," *US Patent Application No. 15/399,905*, filed on Jan. 6, 2017.

[P23] D. I. Kim, K. C. Hwang, J. H. Moon, and J. J. Park, "Full-duplex Relay Communication Method Using Energy Harvesting, Full-duplex Relay Communication System Based on Energy-Harvesting, Relay Node Device, and Source Node Device," *US Patent Application No. 15/397,130*, filed on Jan. 3, 2017 (*allowed for issuance on Jan. 17, 2019).

[P22] H. Seo, W. Choi, D. I. Kim, B. Hong, H. Song, and T.-Y. Kim, "Method for Receiving Signal Using Distribution Storage Cache Retention Auxiliary Node in Wireless Communication System, and Apparatus Therefor," *US Patent Application No. 15/553,812*, filed on Aug. 25, 2017 (*allowed for issuance on Sep. 26, 2018).

[P21] K. W. Choi and D. I. Kim, "Beamforming Method for Microwave Power Transmission and Apparatus for Sending Microwaves for Power Transmission Based on Beamforming," *US Patent No. 10,158,258*, issued on Dec. 18, 2018.

[P20] T.-J. Lee, D. I. Kim, C. Y. Oh, and M. G. Lee, “Method and Apparatus for Joint Random Access Control and Resource Allocation in Wireless Communication Systems,” *US Patent* No. 10,070,435, issued on Sep. 4, 2018.

[P19] T.-J. Lee, D. I. Kim, M. G. Lee, and H. K. Lee, “Method and Apparatus for Energy Adaptive Resource Allocation in Energy Harvesting Network,” *US Patent* No. 10,070,287, issued on Sep. 4, 2018.

[P18] T.-J. Lee, D. I. Kim, and Y. Kim, “Method of Expanding Transmission Range and Base Station Apparatus Using the Same,” *US Patent* No. 10,045,231, issued on Aug. 7, 2018.

[P17] H. Seo, H. J. Song, J. Y. Ryu, D. I. Kim, B.-H. Kim, and W. Choi, “Power Control Method for Guaranteeing Quality of Service of Device to Device Direct Communication and Apparatus Therefor,” *US Patent* No. 9,883,468, issued on Jan. 30, 2018.

[P16] W. Choi, J. Y. Ryu, D. I. Kim, H. Seo, B.-H. Kim, and H. J. Song, “Broadcasting Method Using Device-to-Device (D2D) Communication in Wireless Communication System,” *US Patent* No. 9,844,067, issued on Dec. 12, 2017.

This patent has led to [LTE standard proposal 3GPP R1-134632, which has been published in the 3GPP TR 36.843 v0.2.0 \(Option 1.3 in Section 4\) Study on LTE D2D proximity service-radio aspects \(Release 12\)](#).

[P15] D. I. Kim, D. Hwang, W. Choi, H. Seo, and B.-H. Kim, “Method for Receiving Coordinated Signal on Basis of Terminal-to-Terminal Direct Communication and Apparatus Therefor,” *US Patent* No. 9,819,461, issued on Nov. 14, 2017.

[P14] D. I. Kim, W. Choi, S. S. Nam, and H. Seo, “Method and Apparatus for Transmitting and Receiving Data in a Wireless Communication System that Supports a Relay Node,” *US Patent* No. 9,571,178, issued on Feb. 14, 2017.

[P13] J. Y. Ryu, W. Choi, D. I. Kim, and H. Seo, “Method for Transmitting and Receiving Data in Wireless Access System and Apparatus for Same,” *US Patent* No. 9,553,707, issued on Jan. 24, 2017.

[P12] S. S. Nam, D. I. Kim, W. Choi, and H. Seo, “Method for Transmitting Downlink Signal at a Relay Node in a Wireless Communication System and Apparatus Therefor,” *US Patent* No. 9,537,637, issued on Jan. 3, 2017.

[P11] J. Y. Ryu, W. Choi, D. I. Kim, and H. Seo, "Method for Transmitting a Downlink Signal in a Base Station Cooperative Wireless Communication System and an Apparatus for Same," *US Patent* No. 9,407,344, issued on Aug. 2, 2016.

This patent has led to **two LTE Standard Proposals 3GPP R1-110385, R1-112340 for partial CoMP in "one-way asymmetric" backhaul, which have been published in the 3GPP TR 36.819 v11.2.0 (Chapter 5.5, page 15) for LTE CoMP Standard.**

[P10] Y. J. Chun, D. I. Kim, W. Choi, and H. Seo, "Method and Apparatus for Subset Network Coding with Multiple Antennas by Relay Node in Wireless Communication System," *US Patent* No. 9,350,440, issued on May 24, 2016.

[P9] D. I. Kim, Y. J. Chun, W. Choi, H. Seo, and B.-H. Kim, "Method for Network Coding for Cooperative Relay Network in Wireless Communication System," *US Patent* No. 9,184,871, issued on Nov. 10, 2015.

[P8] D. I. Kim, H. C. Moon, S. W. An, J. S. Han, S. Chae, and M. S. Jin, "Apparatus and Method for Cluster Based Opportunistic Power Control in Wireless Communication System," *US Patent* No. 8,942,752, issued on Jan. 27, 2015.

This patent has led to **LTE Standard Proposal 3GPP R1-106052 for HetNet.**

[P7] D. I. Kim, W. Choi, J. Kim, B.-H. Kim, and H. Seo, "Method and Device for Transmitting/Receiving Data in Wireless Communication System Supporting Relay Node," *US Patent* No. 8,934,333, issued on Jan. 13, 2015.

This patent has led to **LTE Standard Proposal 3GPP R1-092852 for Type-2 UE Relay.**

[P6] S. B. Kim, H. D. Kim, D. I. Kim, E. T. Lim, W. J. Shin, and K. Y. Park, "Apparatus and Method for Semi Distributed Resource Allocation in a Cognitive Radio Wireless Communication System," *US Patent* No. 8,908,543, issued on Dec. 9, 2014.

[P5] D. I. Kim, W. Choi, J. Y. Ryu, H. Seo, and B.-H. Kim, "Multiple Data Stream Transmission Method and Apparatus in Relay System," *US Patent* No. 8,750,788, issued on Jun. 10, 2014.

This patent has led to **three LTE Standard Proposals 3GPP R1-092852, R1-110385, R1-112340 for partial CoMP in "one-way asymmetric" backhaul, two of which have been published in the 3GPP TR 36.819 v11.2.0 (Chapter 5.5, page 15) for LTE CoMP Standard.**

[P4] S. R. Cho, W. Choi, and D. I. Kim, "Method and Apparatus for Effective Multi-Cell Interference Control Service," *US Patent* No. 8,099,052, issued on Jan. 17, 2012.

[P3] D. I. Kim, S. Erkucuk, and K. S. Kwak, "UWB M-CSK/BPPM Wireless Communication System and Method for Increased Information Rate," *US Patent* No. 7,773,659, issued on Aug. 10, 2010.

[P2] D. I. Kim, T. Jia, and K. S. Kwak, "M-ary Orthogonal Coded/Balanced UWB Transmitted Reference Systems," *US Patent* No. 7,660,230, issued on Feb. 9, 2010.

[P1] D. I. Kim, Y. R. Lee, Y. S. Kim, and H. R. You, "Method of Acquiring A Cell Cite Station in Asynchronous CDMA Cellular Communication Systems," *US Patent* No. 6,289,007, issued on Sep. 11, 2001.

Conference Articles

[C145] Z. Ni, W. Wang, D. I. Kim, P. Wang, and D. Niyato, "Evolutionary Game for Consensus Provision in Permissionless Blockchain Networks with Shards," accepted for publication, *IEEE ICC '19*, Shanghai, China, May 2019.

[C144] J. Kang, Z. Xiong, D. Niyato, and D. I. Kim, "Incentivizing Secure Block Verification by Contract Theory in Blockchain-enabled Vehicular Networks," accepted for publication, *IEEE ICC '19*, Shanghai, China, May 2019.

[C143] C. Luong, T. T. Anh, H. T. T. Binh, D. Niyato, D. I. Kim, and Y.-C. Liang, "Joint Transaction Transmission and Channel Selection in Cognitive Radio based Blockchain Networks: A Deep Reinforcement Learning Approach," accepted for publication, *IEEE ICASSP '19*, Brighton, United Kingdom, May 2019.

[C142] T. T. Anh, N. C. Luong, D. Niyato, Y.-C. Liang, and D. I. Kim, "Deep Reinforcement Learning for Time Scheduling in RF-Powered Backscatter Cognitive Radio Networks," accepted for publication, *IEEE WCNC '19*, Marrakech, Morocco, Apr. 2019.

[C141] S. Feng, W. Wang, D. Niyato, D. I. Kim, and P. Wang, "Dynamic Sensor Renting in RF-powered Crowdsensing Service Market with Blockchain," accepted for publication, *IEEE WCNC '19*, Marrakech, Morocco, Apr. 2019.

[C140] T. Y. Kim and D. I. Kim, "Sparse-Coded Ambient Backscatter Communication for Massive OFDM-Induced IoT Networks," (**invited**) *IEEE ICCS 2018 Special Session on Ambient Backscatter Communications*, Chengdu, China, Dec. 2018.

[C139] S. Feng, W. Wang, D. Niyato, D. I. Kim, and P. Wang, "Competitive Data Trading in Wireless-

Powered Internet of Things (IoT) Crowdsensing Systems with Blockchain,” *2018 IEEE International Conference on Communication Systems (IEEE ICCS 2018)*, Chengdu, China, Dec. 2018.

[C138] S. H. Kim and D. I. Kim, “Traffic-Aware Backscatter Communications in Wireless-Powered Heterogeneous Networks,” accepted for publication, *IEEE VTC '18 Fall*, Chicago, USA, Aug. 2018.

[C137] J. J. Park, J. H. Moon, K.-Y. Lee, and D. I. Kim, “Adaptive Mode Switching Algorithm for Dual Mode SWIPT with Duty Cycle Operation,” (**invited**) *IEEE SPAWC 2018 Special Session on Wireless Information and Power Transmission: RF, Signal and System Design*, Kalamata, Greece, June 2018.

[C136] J. H. Moon, J. J. Park, and D. I. Kim, “New Reconfigurable Nonlinear Energy Harvester: Boosting Rate-Energy Tradeoff,” accepted for publication, *IEEE VTC '18 Spring*, Porto, Portugal, June 2018.

[C135] J. J. Park, J. H. Moon, K.-Y. Lee, and D. I. Kim, “Dual Mode SWIPT: Waveform Design and Transceiver Architecture with Adaptive Mode Switching Policy,” accepted for publication, *IEEE VTC '18 Spring*, Porto, Portugal, June 2018.

[C134] P. K. Sharma and D. I. Kim, “Coverage Probability of 3D UAV Networks with RWP Mobility-Based Altitude Control,” accepted for publication, *IEEE ICC '18 Workshops: Integrating UAVs into 5G*, Kansas City, MO, May 2018.

[C133] H. S. Lee, M. E. Ahmed, and D. I. Kim, “Traffic-Aware Optimal Spectrum Sensing Policy in Wireless-Powered Cognitive Radio Networks,” accepted for publication, *ACM International Conference on Ubiquitous Information Management and Communication (IMCOM 2018)*, Langkawi, Malaysia, Jan. 2018.

[C132] H. S. Lee, M. E. Ahmed, and D. I. Kim, “Optimal Spectrum Sensing Policy in RF-Powered Cognitive Radio Networks,” (**invited**) *23rd Asia-Pacific Conference on Communications (APCC) 2017*, Perth, Australia, Dec. 2017.

[C131] P. K. Sharma and D. I. Kim, “UAV-enabled Downlink Wireless System with Non-Orthogonal Multiple Access,” accepted for publication, *IEEE GLOBECOM '17 Workshops: 8th International Workshop on Wireless Networking and Control for Unmanned Autonomous Vehicles*, Singapore, Dec. 2017.

[C130] L. Dong, D. Niyato, D. I. Kim, and D. T. Hoang, “A Joint Scheduling and Content Caching Scheme for Energy Harvesting Access Points with Multicast,” accepted for publication, *IEEE GLOBECOM '17*, Singapore, Dec. 2017.

- [C129] X. Lu, H. Jiang, D. Niyato, D. I. Kim, and P. Wang, "Analysis of Wireless-Powered Device-to-Device Communications with Ambient Backscattering," accepted for publication, *IEEE VTC '17 Fall*, Toronto, Canada, Sep. 2017.
- [C128] K. W. Choi, L. Ginting, D. Setiawan, A. A. Aziz, and D. I. Kim, "Coverage Probability of Distributed Wireless Power Transfer System," *2017 Ninth International Conference on Ubiquitous and Future Networks (ICUFN)*, pp. 691-696, Milan, Italy, July 2017.
- [C127] T. Y. Kim and D. I. Kim, "Optimum MCS for High-Throughput Long-Range Ambient Backscatter Communication Networks," (**invited**) *IEEE SPAWC 2017 Special Session on Signal Processing for Wireless Powered Communications*, Sapporo, Japan, July 2017.
- [C126] H. Tabassum, M. S. Ali, E. Hossain, M. J. Hossain, and D. I. Kim, "Uplink Vs. Downlink NOMA in Cellular Networks: Challenges and Research Directions," (**invited**) *IEEE VTC '17 Spring Workshop on Emerging Non-Orthogonal Multiple Access Techniques for 5G*, Sydney, Australia, June 2017.
- [C125] Z. Wei, S. Sun, X. Zhu, Y. Huang, L. Dong, and D. I. Kim, "Wireless Information and Power Transfer: Spectral Efficiency Optimization for Asymmetric Full-Duplex Relay Systems," accepted for publication, *IEEE VTC '17 Spring*, Sydney, Australia, June 2017.
- [C124] K. W. Choi, P. A. Rosyady, L. Ginting, A. A. Aziz, and D. I. Kim, "Simultaneously Charging Multiple Sensor Nodes in Multi-Antenna Wireless-Powered Sensor Networks," accepted for publication, *IEEE ICC '17 Workshop on Emerging Energy Harvesting Solutions for 5G Networks (5G-NRG)*, Paris, France, May 2017.
- [C123] M. E. Ahmed and D. I. Kim, "Traffic-Pattern Aware Opportunistic Wireless Energy Harvesting in Cognitive Radio Networks," accepted for publication, *IEEE ICC '17*, Paris, France, May 2017.
- [C122] D. T. Hoang, D. Niyato, P. Wang, and D. I. Kim, "Optimal Time Sharing in RF-Powered Backscatter Cognitive Radio Networks," accepted for publication, *IEEE ICC '17*, Paris, France, May 2017.
- [C121] D. T. Hoang, D. Niyato, P. Wang, D. I. Kim, and L. B. Le, "Overlay RF-Powered Backscatter Cognitive Radio Networks: A Game Theoretic Approach," accepted for publication, *IEEE ICC '17*, Paris, France, May 2017.

- [C120] D. Setiawan, A. A. Aziz, D. I. Kim, and K. W. Choi, "Experiment and Modeling of Wireless-Powered Sensor Network," accepted for publication, *IEEE WCNC '17 Workshop on Energy Harvesting and Remotely Powered Wireless Communication for the IoT*, San Francisco, CA, Mar. 2017.
- [C119] T. Y. Kim and D. I. Kim, "Cache-assisted Amorphous Cell Association for Heterogeneous Content Delivery Networks," accepted for publication, *ACM International Conference on Ubiquitous Information Management and Communication (IMCOM 2017)*, Beppu, Japan, Jan. 2017.
- [C118] D. T. Hoang, D. Niyato, P. Wang, D. I. Kim, and Z. Han, "The Tradeoff Analysis in RF-Powered Backscatter Cognitive Radio Networks," accepted for publication, *IEEE GLOBECOM '16*, Washington, DC, Dec. 2016.
- [C117] D. Niyato, P. Wang, D. I. Kim, and Z. Han, "Opportunistic Energy Scheduling in Wireless Powered Sensor Networks," (**invited**) *IEEE VTC '16 Fall*, Montreal, Canada, Sep. 2016.
- [C116] S. H. Kim and D. I. Kim, "Hybrid Backscatter Communication for Wireless Powered Communication Networks," accepted for publication, *The Thirteenth International Symposium on Wireless Communication Systems (ISWCS '16)*, Poznan, Poland, Sep. 2016.
- [C115] S. Wu, Y. Shin, J. Y. Kim, and D. I. Kim, "Energy Outage and Achievable Throughput in RF Energy Harvesting Cognitive Radio Network," accepted for publication, *IEEE PIMRC '16*, Valencia, Spain, Sep. 2016.
- [C114] J. J. Park, J. H. Moon, and D. I. Kim, "Time-Switching Based In-Band Full Duplex Wireless Powered Two-Way Relay," accepted for publication, *2016 URSI Asia-Pacific Radio Science Conference (URSI AP-RASC 2016)*, Seoul, Korea, Aug. 2016.
- [C113] J. H. Moon, J. J. Park, and D. I. Kim, "Energy Signal Design and Decoding Procedure for Full-Duplex Two-Way Wireless Powered Relay," accepted for publication, *2016 URSI Asia-Pacific Radio Science Conference (URSI AP-RASC 2016)*, Seoul, Korea, Aug. 2016.
- [C112] D. Niyato, D. I. Kim, P. Wang, and M. Bennis, "Joint Admission Control and Content Caching Policy for Energy Harvesting Access Points," accepted for publication, *IEEE ICC '16*, Kuala Lumpur, Malaysia, May 2016.
- [C111] D. Niyato, D. I. Kim, P. Wang, and L. Song, "A Novel Caching Mechanism for Internet of Things

(IoT) Sensing Service with Energy Harvesting,” accepted for publication, *IEEE ICC '16*, Kuala Lumpur, Malaysia, May 2016.

[C110] D. Niyato, M. A. Alsheikh, P. Wang, D. I. Kim, and Z. Han, “Market Model and Optimal Pricing Scheme of Big Data and Internet of Things (IoT),” accepted for publication, *IEEE ICC '16*, Kuala Lumpur, Malaysia, May 2016.

[C109] D. Niyato, X. Lu, P. Wang, D. I. Kim, and Z. Han, “Distributed Wireless Energy Scheduling for Wireless Powered Sensor Networks,” accepted for publication, *IEEE ICC '16*, Kuala Lumpur, Malaysia, May 2016.

[C108] S. Salari, M. Z. Amirani, I.-M. Kim, D. I. Kim, and J. Yang, “Collaborated Beamforming for Bidirectional Relay Networks in the Presence of Interference,” accepted for publication, *2nd International Conference on Computer and Information Science and Technology (CIST'16)*, Ottawa, Canada, May 2016.

[C107] M. E. Ahmed and D. I. Kim, “Traffic and Energy-Aware Access in Wireless Powered Cognitive Radio Networks,” accepted for publication, *IEEE WCNC '16 Workshop on Wireless Powered Communication Networks (WPCNets)*, Doha, Qatar, Apr. 2016.

[C106] A. A. Nasir, D. T. Ngo, H. D. Tuan, S. Durrani, and D. I. Kim, “Secure Beamforming for Max-Min SINR in Multi-Cell SWIPT Systems,” accepted for publication, *IEEE WCNC '16 Workshop on Wireless Powered Communication Networks (WPCNets)*, Doha, Qatar, Apr. 2016.

[C105] T. Y. Kim and D. I. Kim, “Cluster-based Collaborative Caching for Amorphous User Cell Association,” accepted for publication, *ACM International Conference on Ubiquitous Information Management and Communication (IMCOM 2016)*, Danang, Vietnam, Jan. 2016

[C104] D. Niyato, P. Wang, and D. I. Kim, “Optimal Service Auction for Wireless Powered Internet of Things (IoT) Device,” accepted for publication, *IEEE GLOBECOM '15*, San Diego, CA, Dec. 2015.

[C103] S. H. Choi and D. I. Kim, “Backscatter Radio Communication for Wireless Powered Communication Networks,” accepted for publication, *21th Asia-Pacific Conference on Communications (APCC) 2015*, Kyoto, Japan, Oct. 2015.

[C102] S. H. Kim and D. I. Kim, “Performance Tradeoff in Two-Zone based Wireless Powered Communication Networks,” accepted for publication, *The Twelfth International Symposium on Wireless*

Communication Systems (ISWCS '15), Brussels, Belgium, Aug. 2015.

[C101] H. S. Lee, I.-M. Kim, D. I. Kim, S. Kim, and K. Lim, "Interference-Aware Clustering Algorithms in Multi-Relay Cellular Networks," *The 15th International Conference on Computational Science and Its Applications (ICCSA 2015)*, Banff, Alberta, Canada, June 2015.

[C100] D. Niyato, P. Wang, D. I. Kim, Z. Han, and J. C.M. Teo, "User's Deception Mechanisms against Jammers in Wireless Energy Harvesting Networks," accepted for publication, *IEEE ICC '15*, London, UK, June 2015.

[C99] D. Niyato, P. Wang, D. I. Kim, Z. Han, and L. Xiao, "Game Theoretic Modeling of Jamming Attack in Wireless Powered Communication Networks," accepted for publication, *IEEE ICC '15*, London, UK, June 2015.

[C98] D. Niyato, F. Adachi, P. Wang, and D. I. Kim, "Competitive Cell Association and Antenna Allocation in 5G Massive MIMO Networks," accepted for publication, *IEEE ICC '15*, London, UK, June 2015.

[C97] D. Niyato, P. Wang, D. I. Kim, and Z. Han, "Content Messenger Selection and Wireless Energy Transfer Policy in Mobile Social Networks," accepted for publication, *IEEE ICC '15*, London, UK, June 2015.

[C96] D. Niyato, P. Wang, D. I. Kim, and W. Saad, "Finding the Best Friend in Mobile Social Energy Networks," accepted for publication, *IEEE ICC '15*, London, UK, June 2015.

[C95] W. S. Kim, W. J. Kim, H. S. Lee, I.-M. Kim, D. I. Kim, S. Kim, and K. Lim, "Relay Selection in Multiple Clustered Relay Networks," accepted for publication, *IEEE 2015 Wireless Telecommunications Symposium (WTS)*, New York, NY, Apr. 2015.

[C94] D. Niyato, P. Wang, D. I. Kim, Z. Han, and L. Xiao, "Performance Analysis of Delay-Constrained Wireless Energy Harvesting Communication Networks under Jamming Attacks," accepted for publication, *IEEE WCNC '15*, New Orleans, LA, Mar. 2015.

[C93] W. J. Kim, H. S. Lee, and D. I. Kim, "Cache-Induced Hybrid CoMP in Wireless Video Streaming Networks," accepted for publication, *IEEE Eighth IEEE International Conference on Advanced Networks and Telecommunication Systems (ANTS) 2014*, New Delhi, India, Dec. 2014.

- [C92] D. Niyato, P. Wang, and D. I. Kim, "Performance Analysis of Cognitive Radio Networks with Opportunistic RF Energy Harvesting," accepted for publication, *IEEE GLOBECOM '14*, Austin, TX, Dec. 2014.
- [C91] D. Niyato, Z. Yang, P. Wang, and D. I. Kim, "Optimal Wireless Energy Charging Policy for a Mobile Node in Smart Grid Environment," accepted for publication, *IEEE SmartGridComm '14 Symposium*, Venice, Italy, Nov. 2014.
- [C90] D. Niyato, P. Wang, P. C.H. Joo, Z. Han, and D. I. Kim, "Optimal Energy Management Policy of a Mobile Cloudlet with Wireless Energy Charging," accepted for publication, *IEEE SmartGridComm '14 Symposium*, Venice, Italy, Nov. 2014.
- [C89] D. I. Kim, D. Niyato, and D. Hwang, "Wireless Energy Harvesting Communications: Beamforming and Stochastic Optimization," accepted for publication, *International Conference on ICT Convergence (ICTC) 2014*, Busan, Korea, Oct. 2014.
- [C88] D. J. Son, C. H. Yu, and D. I. Kim, "Resource Allocation based on Clustering for D2D Communications in Underlying Cellular Networks," accepted for publication, *International Conference on ICT Convergence (ICTC) 2014*, Busan, Korea, Oct. 2014. [This paper has won the Best Paper Award for ICTC 2014.](#)
- [C87] D. Niyato, P. Wang, and D. I. Kim, "Admission Control Policy for Wireless Networks with RF Energy Transfer," accepted for publication, *IEEE ICC '14*, Sydney, Australia, June 2014.
- [C86] D. Niyato, P. Wang, and D. I. Kim, "Channel Selection in Cognitive Radio Networks with Opportunistic RF Energy Harvesting," accepted for publication, *IEEE ICC '14*, Sydney, Australia, June 2014.
- [C85] D. T. Hoang, D. Niyato, P. Wang, and D. I. Kim, "Optimal Decentralized Control Policy for Wireless Communication Systems with Wireless Energy Transfer," accepted for publication, *IEEE ICC '14*, Sydney, Australia, June 2014.
- [C84] D. T. Hoang, D. Niyato, and D. I. Kim, "Cooperative Bidding of Data Transmission and Wireless Energy Transfer," accepted for publication, *IEEE WCNC '14*, Istanbul, Turkey, Apr. 2014.
- [C83] S. K. Choi, W. J. Kim, H. S. Lee, and D. I. Kim, "Interference Forwarding for D2D based Heterogeneous Cellular Networks," accepted for publication, *IEEE ICC '13*, Xian, China, Aug. 2013.

- [C82] S. S. Nam, H.-C. Yang, M.-S. Alouini, and D. I. Kim, "Exact Capture Probability Analysis of GSC Receivers over i.n.d. Rayleigh Fading Channels," accepted for publication, *IEEE ISIT '13*, Istanbul, Turkey, July 2013.
- [C81] L. B. Le, E. Hossain, D. Niyato, and D. I. Kim, "Mobility-aware Admission Control with QoS Guarantees in OFDMA Femtocell Networks," accepted for publication, *IEEE ICC '13*, Budapest, Hungary, June 2013.
- [C80] C. Wang, Y. Liu, M. Tao, Z. Han, and D. I. Kim, "Stackelberg Game for Spectrum Reuse in the Two-Tier LTE Femtocell Network," accepted for publication, *IEEE WCNC '13*, Shanghai, China, Apr. 2013.
- [C79] S. S. Nam, D. I. Kim, H. Seo, and B.-H. Kim, "Modified Dynamic DF Protocol with Hybrid-AM for Type-2 UE Relay in LTE-Advanced," accepted for publication, *IEEE ICC '12*, Beijing, China, Aug. 2012.
- [C78] L. B. Le, H. T. Dinh, D. Niyato, E. Hossain, and D. I. Kim, "Joint Load Balancing and Admission Control in OFDMA-Based Femtocell Networks," accepted for publication, *IEEE ICC '12*, Ottawa, Canada, June 2012.
- [C77] P. Liu, S. Gazor, I.-M. Kim, and D. I. Kim, "Robust Detector for Amplify-and-Forward with Noncoherent Frequency-Shift Keying," *26th Bien. Sym. Commun.*, vol. 1, pp. 56-59, Kingston, Ontario, May 2012.
- [C76] S. Guruacharya, D. Niyato, and D. I. Kim, "Access Control via Coalitional Power Game," *IEEE WCNC '12*, Paris, France, pp. 2851-2855, Apr. 2012.
- [C75] S. S. Nam, D. I. Kim, and H.-C. Yang, "Modified Dynamic DF for Type-2 UE Relays," *IEEE WCNC '12*, Paris, France, pp. 1402-1407, Apr. 2012.
- [C74] Y. J. Chun and D. I. Kim, "Optimized MIMO Relaying in Random Linear Coded Multiple-Access Relay Network," *IEEE WCNC '12*, Paris, France, pp. 375-380, Apr. 2012.
- [C73] E. Hossain and D. I. Kim, "Constrained Weighted Sum Rate Maximization for Multicast Service in Downlink OFDMA," accepted for publication, *6th International Conference on Ubiquitous Information Management and Communication (ICUIMC '12)*, Feb. 2012.

- [C72] H.-C. Yang, S. S. Nam, and D. I. Kim, "Exact Performance Analysis of Joint Partial RAKE Receiver and Adaptive Modulation subject to Self-Interference," accepted for publication, *6th International Conference on Ubiquitous Information Management and Communication (ICUIMC '12)*, Feb. 2012.
- [C71] T. Khalaf, Y. J. Chun, and D. I. Kim, "MIMO Relaying in Random Linear Coded Multiple-Access Relay Network," accepted for publication, *6th International Conference on Ubiquitous Information Management and Communication (ICUIMC '12)*, Feb. 2012.
- [C70] J. Kim and D. I. Kim, "Optimal Relaying Strategy for UE Relays," accepted for publication, *17th Asia-Pacific Conference on Communications (APCC) 2011*, Kota Kinabalu, Sabah, Malaysia, Oct. 2011. [This paper has won the Best Paper Award for APCC 2011.](#)
- [C69] J. R. Yang and D. I. Kim, "Power Control for Two-Tier Femtocell Networks Using Pricing Mechanism via Emergency Message," accepted for publication, *17th Asia-Pacific Conference on Communications (APCC) 2011*, Kota Kinabalu, Sabah, Malaysia, Oct. 2011.
- [C68] D. T. Ngo, L. B. Le, T. Le-Ngoc, E. Hossain, and D. I. Kim, "Distributed Interference Management in Femtocell Networks," accepted for publication, *IEEE VTC '11 Fall*, San Francisco, CA, Sep. 2011.
- [C67] K. Oh and D. I. Kim, "Relay Selection with Limited Feedback for Multiple UE Relays," *ICCSA 2011, Lecture Notes in Computer Science*, vol. 6786, pp. 157-166, July 2011.
- [C66] M. S. Jin, S. Chae, and D. I. Kim, "Per Cluster Based Opportunistic Power Control for Heterogeneous Networks," accepted for publication, *IEEE VTC '11 Spring*, Budapest, Hungary, May 2011.
- [C65] S. Chae and D. I. Kim, "Hybrid Inter-Sector Coordinated Multi-point Transmission Scheme," accepted for publication, *5th International Conference on Ubiquitous Information Management and Communication (ICUIMC '11)*, Feb. 2011.
- [C64] E. Hossain, J. Kim, and D. I. Kim, "Partial Information Relaying with Multiple Relays and Destination Nodes," accepted for publication, *5th International Conference on Ubiquitous Information Management and Communication (ICUIMC '11)*, Feb. 2011.
- [C63] S. Guruacharya, D. Niyato, E. Hossain, and D. I. Kim, "Hierarchical Competition in Femtocell-Based Cellular Networks," accepted for publication, *IEEE GLOBECOM '10*, Miami, FL, Nov. 2010.

- [C62] Y. Ma and D. I. Kim, "Subchannel-Sharing Based Distributed Optimization of Ad-Hoc Cognitive Radio Network," accepted for publication, *IEEE GLOBECOM '10*, Miami, FL, Nov. 2010.
- [C61] S. Chae and D. I. Kim, "Antenna Selected Space-Time Block Code Coordinated Multi-cell Transmission," accepted for publication, *IEEE PIMRC '10*, Istanbul, Turkey, Sep. 2010.
- [C60] J. Y. Ryu, W. Choi, and D. I. Kim, "A Novel Partial Decode-and-Forward Relaying with Multiple Antennas," (invited) *IEEE VTC '10 Fall*, Ottawa, Canada, Sep. 2010.
- [C59] J. Kim and D. I. Kim, "Partial Information Relaying with Multi-Layered Superposition Coding," *ICCSA 2010, Lecture Notes in Computer Science*, vol. 6018, pp. 42-51, July 2010.
- [C58] E. C. Kim, J. Y. Kim, H. J. Choi, and D. I. Kim, "Co-channel Interference Cancellation based on SIC with Optimal Ordering for Cooperative Communication Systems," *International Conference on Consumer Electronics (ICCE '10)*, vol. 1, pp. 277-278, Jan. 2010.
- [C57] Y. Ma and D. I. Kim, "Centralized and Distributed Optimization of Ad-Hoc Cognitive Radio Network," accepted for publication, *IEEE GLOBECOM '09*, Honolulu, Hawaii, Nov. 2009.
- [C56] W. J. Shin and D. I. Kim, "Penalized Iterative Waterfilling Algorithm for Multi-cell OFDMA Systems," accepted for publication, *IEEE PIMRC '09*, Tokyo, Sep. 2009.
- [C55] T. Kim and D. I. Kim, "Hybrid Hard/Soft Decode-and-Forward Relaying Protocol with Distributed Turbo Code," *ICCSA 2009, Lecture Notes in Computer Science*, vol. 5593, pp 372-382, July 2009.
- [C54] J. S. Lee and D. I. Kim, "Adaptive and Iterative GSC/MRC Switching Techniques Based on CRC Error Detection for AF Relaying System," *ICCSA 2009, Lecture Notes in Computer Science*, vol. 5593, pp 276-285, July 2009.
- [C53] D. Niyato, E. Hossain, D. I. Kim, and Z. Han, "Joint Optimization of Placement and Bandwidth Reservation for Relays in IEEE 802.16j Mobile Multihop Networks," accepted for publication, *IEEE ICC '09*, Dresden, Germany, June 2009.
- [C52] W. Choi, J.-P. Hong, D. I. Kim, and B.-H. Kim, "An Error Detection Aided GSC/MRC Switching scheme in AF based Cooperative Communications," accepted for publication, *IEEE VTC '09 Spring*, Barcelona, Spain, Apr. 2009.

- [C51] W. J. Shin, K. Y. Park, and D. I. Kim, "Average-Sense Joint Rate and Power Allocation Algorithm Combined with Admission Control in Cognitive Radio Networks," accepted for publication, *IEEE VTC '09 Spring*, Barcelona, Spain, Apr. 2009.
- [C50] Y. Ma, D. I. Kim, and A. Leith, "Weighted Sum Rate Optimization of Multicell Cognitive Radio Networks," accepted for publication, *IEEE GLOBECOM '08*, New Orleans, LA, Nov. 2008.
- [C49] D. I. Kim, "Multiple Access Performance of M-ary Orthogonal Balanced UWB Transmitted-Reference Systems," accepted for publication, *IEEE ICC '08*, Beijing, China, May 2008.
- [C48] D. I. Kim, L. B. Le, and E. Hossain, "Resource Allocation for Cognitive Radios in Dynamic Spectrum Access Environment," (**invited**) *Third International Conference on Cognitive Radio Oriented Wireless Networks and Communications (CROWNCOM2008)*, Singapore, May 2008.
- [C47] H. Fu and D. I. Kim, "Downlink Scheduling with AMC and FCS in WCDMA Networks," accepted for publication, *IEEE GLOBECOM '07*, Washington D.C., Nov. 2007.
- [C46] S. Erkucuk, D. I. Kim, and K. S. Kwak, "Effects of Channel Models and Rake Receiving Process on UWB-IR System Performance," accepted for publication, *IEEE ICC '07*, Scotland, UK, June 2007.
- [C45] T. Liu, D. I. Kim, and R. G. Vaughan, "A High-Resolution, Multi-Template Deconvolution Algorithm for Time-Domain UWB Channel Characterization," *IEEE Canadian Conference on Electrical and Computer Engineering (CCECE) 2007*, Vancouver, BC, Apr. 2007. **This paper has won the Best Student Paper Award for CCECE 2007.**
- [C44] S. Erkucuk and D. I. Kim, "UWB-IR System Performance for Implementable Rake Receivers," *IEEE Canadian Conference on Electrical and Computer Engineering (CCECE) 2007*, Vancouver, BC, Apr. 2007.
- [C43] S. Erkucuk, D. I. Kim, and K. S. Kwak, "Code Shift Keying Modulation for Low-Rate UWB Communications under Dense Multipath," accepted for publication, *IEEE GLOBECOM '06*, San Francisco, CA, Nov. 2006.
- [C42] T. Jia and D. I. Kim, "Multiuser Performance of Balanced UWB Transmitted-Reference System in Multipath," accepted for publication, *IEEE GLOBECOM '06*, San Francisco, CA, Nov. 2006.

- [C41] H. Fu and D. I. Kim, "Analysis of Throughput and Fairness of WCDMA Networks with Downlink Scheduling," accepted for publication, *IEEE ISSSTA '06*, Manaus, Brazil, Aug. 2006.
- [C40] D. I. Kim and T. Jia, "M-ary Orthogonal Coded/Balanced UWB Transmitted-Reference System," *IEEE ICC '06*, vol. 12, pp. 5552-5557, Istanbul, Turkey, June 2006.
- [C39] S. Erkucuk and D. I. Kim, "Effects of Code Design on the Spectral Characteristics of M-CSK Based Impulse Radios," *IEEE ICC '06*, vol. 10, pp. 4757-4762, Istanbul, Turkey, June 2006.
- [C38] S. Erkucuk and D. I. Kim, "Combined M-ary Code Shift/Differential Chaos Shift Keying for Low-Rate UWB Communications," *IEEE International Conference on Ultra-Wideband (ICU) 2005*, pp. 33-37, Zurich, Switzerland, Sep. 2005. **This paper has won the Best Student Paper Award for ICU 2005.**
- [C37] T. Jia and D. I. Kim, "Analysis of Average Signal-to-Interference-Noise Ratio for Indoor UWB Rake Receiving System," *IEEE VTC Spring '05*, vol. 2, pp. 1396-1400, Stockholm, Sweden, May 2005.
- [C36] S. Erkucuk and D. I. Kim, "Power Spectral Density Characteristics of M-CSK Based Impulse Radios in UWB Communications," *IEEE VTC Spring '05*, vol. 2, pp. 1391-1395, Stockholm, Sweden, May 2005.
- [C35] D. I. Kim, "Efficient and Fair Scheduling for Best-Effort Downlink Packet Data," *IEEE VTC Spring '05*, vol. 1, pp. 324-328, Stockholm, Sweden, May 2005.
- [C34] W. Choi, C. Yi, J. Y. Kim, and D. I. Kim, "A Delay Diversity Receiver for CDMA Cellular Systems," *IEEE International Symp. on Intelligent Signal Processing and Commun. Systems (ISPACS) '04*, pp. 468-471, Seoul, Korea, Nov. 2004.
- [C33] S. Erkucuk and D. I. Kim, "Combined M-ary Code Shift Keying/Binary Pulse Position Modulation for Ultra Wideband Communications," *IEEE GLOBECOM '04*, vol. 2, pp. 804-808, Dallas, TX, Nov. 2004.
- [C32] D. I. Kim, "Two-Best User Scheduling for High-Speed Downlink Multicode DS-CDMA with Code Constraint," *IEEE GLOBECOM '04*, vol. 4, pp. 2659-2663, Dallas, TX, Nov. 2004.
- [C31] D. I. Kim, E. Hossain, and V. K. Bhargava, "Dynamic Rate and Power Adaptation for Forward Link Transmission Using High-Order Modulation and Multicode Formats in Cellular WCDMA Networks," *IEEE GLOBECOM '03*, vol. 1, pp. 393-397, San Francisco, CA, Nov. 2003.

- [C30] E. Hossain, D. I. Kim, and V. K. Bhargava, "Opportunistic Scheduling under Constrained Frame Error Rate in Cellular Multicode CDMA Networks," *IEEE GLOBECOM '03*, vol. 2, pp. 987-991, San Francisco, CA, Nov. 2003.
- [C29] D. I. Kim, "Adaptive Selection/Maximal-Ratio Combining for Multidimensional Multicode DS-CDMA with Precoding," *IEEE GLOBECOM '03*, vol. 3, pp. 1689-1693, San Francisco, CA, Nov. 2003.
- [C28] D. I. Kim, E. Hossain, and V. K. Bhargava, "Dynamic Rate and Power Adaptation under Multiple SIR Constraints in Cellular VSF WCDMA Networks," *IEEE ICC '03*, vol. 5, pp. 3317-3321, Anchorage, Alaska, May 2003.
- [C27] D. I. Kim, "Cellular Multi-rate CDMA Packet Transmission with Rate-based Slot Allocation," *IEEE ISSSTA '02*, vol. 2/3, pp. 405-409, Prague, Czech, Sep. 2002.
- [C26] E. Hossain, D. I. Kim, and V. K. Bhargava, "TCP Performance under Dynamic Link Adaptation in Cellular Multi-Rate WCDMA Networks," *IEEE ICC '02*, vol. 3, pp. 1834-1839, New York, Apr. 2002.
- [C25] D. I. Kim, "Global Power and Optimal Rate Allocation for Cellular Multi-rate CDMA Systems," *IEEE WCNC '02*, vol. 1, pp. 210-214, Orlando, Florida, Mar. 2002.
- [C24] E. Hossain, D. I. Kim, and V. K. Bhargava, "Dynamic Assignment of Random Access Code Channels in WCDMA Networks," *IEEE GLOBECOM '01*, vol. 5, pp. 3034-3039, San Antonio, Texas, Nov. 2001.
- [C23] E. Hossain, D. I. Kim, and V. K. Bhargava, "Modeling and Analysis of TCP Performance under Joint Rate and Power Adaptation in Multi-cell Multi-rate WCDMA Systems," *IEEE MILCOM '01*, vol. 1, pp. 731-736, Oct. 2001.
- [C22] D. I. Kim, E. Hossain, and V. K. Bhargava, "Integrated Rate and Error Control in Variable Spreading Gain WCDMA Systems," *IEEE ICC '01*, vol. 5, pp. 1362-1366, Helsinki, Finland, June 2001.
- [C21] E. Hossain, D. I. Kim, C. Scholefield, and V. K. Bhargava, "TCP Performance in WCDMA-Based Cellular Wireless IP Networks," *IEEE ICPWC '00*, pp. 167-172, India, Dec. 2000.
- [C20] H. Minn, D. I. Kim, and V. K. Bhargava, "A Reduced Complexity Channel Estimation for OFDM Systems with Precoding and Transmit Diversity in Mobile Wireless Channels," *IEEE WPMC '00*, vol. 1/2, pp. 27-33, Bangkok, Thailand, Nov. 2000.

- [C19] D. I. Kim, "Multidimensional Signaling & Per-Symbol Detection for High Data Rate DS-CDMA Systems," *IEEE PIMRC '00*, vol. 2, pp. 1390-1394, London, UK, Sep. 2000.
- [C18] D. I. Kim, "CEM Modulation & Per-Symbol Detection for High-Data-Rate Multicode DS-CDMA Systems," *IEEE GLOBECOM '99*, vol. 5/5, pp. 2620-2624, Rio de Janeiro, Brazil, Dec. 1999.
- [C17] H. S. Lee, H. M. Pyo, and D. I. Kim, "Cell Search Scheme Using I/Q Multiplexed Code Assignment in Asynchronous W-CDMA Systems," *IEEE VTC '99*, vol. 2, pp. 1560-1564, Houston, Texas, May 1999.
- [C16] D. I. Kim and K. H. Park, "A Hybrid Nonlinear Distortion Compensator for Multicode DS/CDMA Systems," *IEEE ICUPC '98*, vol. 1/2, pp. 1087-1092, Florence, Italy, Oct. 1998.
- [C15] D. I. Kim and Y. R. Lee, "I/Q Multiplexed Code Assignment for Fast Cell Search under Hierarchical Cell Structures," *IEEE ICUPC '98*, vol. 1/2, pp. 389-394, Florence, Italy, Oct. 1998.
- [C14] D. I. Kim and Y. R. Lee, "Fast Cell Search Using I/Q Multiplexed Code in Asynchronous DS/CDMA Cellular Systems," *IEEE ISSSTA '98*, vol. 3/3, pp. 832-836, Sun City, South Africa, Sep. 1998.
- [C13] D. I. Kim, "Multipath-Diversity Performance of Direct-Sequence CDMA Using Combined M-ary Signalling," *IEEE ISSSTA '98*, vol. 3/3, pp. 781-785, Sun City, South Africa, Sep. 1998.
- [C12] D. I. Kim and D. I. Lee, "CQ Importance Sampling Technique for Efficient Simulation in Rayleigh-Faded Channels," *IEEE ISIT '98*, vol. 1, pp. 158, MIT, Massachusetts, Aug. 1998.
- [C11] Y. S. Kim, H. R. You, J. S. Jang, and D. I. Kim, "Compensation of Nonlinear Distortion for Multi-Code DS/CDMA Systems using Predistortion and Sequence Estimation," *International Technical Conference on Circuits Systems, Computers and Communications (ITC-CSCC '98)*, vol. 1, pp. 833-837, Sokcho, Korea, July 1998.
- [C10] D. I. Kim, "Performance of Direct-Sequence CDMA Based on Binary PPM/Biorthogonal Modulation," *APCC '97*, vol. 2/3, pp. 875-878, Sydney, Australia, Dec. 1997.
- [C9] D. I. Kim, "Analysis of Decorrelating Detector Employing Common Spreading Code," *IEEE ICC '97*, vol. 2/3, pp. 610-614, Montreal, Canada, June 1997.

[C8] D. I. Kim and J. C. Roh, "RA/T Spreading Code Scheme for Centralized DS/SSMA Packet Radio Networks," *IEEE ISSSTA '96*, vol. 3/3, pp. 1108-1112, Mainz, Germany, Sep. 1996.

[C7] D. I. Kim, "On the Performance of Biorthogonal Pulse Position Modulated Direct-Sequence CDMA Communication," *IEEE GLOBECOM '95*, vol. 3/4, pp. 1739-1743, Singapore, Nov. 1995.

[C6] D. I. Kim and J. C. Roh, "Random Access with Controlled Time of Arrival for Distributed Spread-Spectrum Packet Radio Networks," *IEEE ICC '95*, vol. 2/3, pp. 1136-1140, Seattle, Washington, June 1995.

[C5] D. I. Kim, "Performance of a DS/SSMA Packet Radio System Using Group Coding Technique," *IEEE MILCOM '94*, vol. 3/3, pp. 967-971, New Jersey, New York, Oct. 1994.

[C4] D. I. Kim, "Multiple-Capture Performance of a Common Code DS/SSMA Packet Radio System," *IEEE GLOBECOM '93*, vol. 3/4, pp. 1739-1743, Houston, Texas, Nov. 1993.

[C3] D. I. Kim, "Multiple Capture in a Centralized DS/SSMA Packet Radio Network with Common Spreading Code," *1st Asia-Pacific Conference on Communications (APCC) 1993*, vol. 1/2, pp. 369-372, Daejeon, Korea, Aug. 1993.

[C2] D. I. Kim and R. A. Scholtz, "A Random Spreading Code Assignment Scheme for Centralized Spread-Spectrum Packet Radio Networks," *IEEE MILCOM '91*, vol. 1/3, pp. 6.2.1-6.2.5, McLean, Virginia, Nov. 1991.

[C1] D. I. Kim and R. A. Scholtz, "Multiple Capture in a Centralized Packet Radio System with Common Direct-Sequence Spread-Spectrum Modulation," *15th Bien. Sym. Commun.*, vol. 1, pp. 1-4, Kingston, Ontario, June 1990.

Other Published Articles

[3] S. Erkucuk, D. I. Kim, and K. S. Kwak, "Code Shift Keying for UWB PHY," *IEEE 802.15.4a WPAN Standard Meeting, IEEE doc.: 15-06-0045-004a*, Waikaloa, HI, Jan. 2006 [Proposal (reviewed) and Presentation].

[2] S. Erkucuk and D. I. Kim, "*M*-ary Code Shift Keying (MCSK) Based Impulse Radios for Ultra Wideband Communications," *IEEE Mini-symposium on Short-Range Wireless Communications*, Vancouver, BC, Apr. 2005 [Abstract (reviewed) and Presentation].

[1] D. I. Kim, S. Erkucuk, and K. S. Kwak, “*M*-ary Code Shift Keying/Binary PPM (MCSK/BPPM) Based Impulse Radio,” *IEEE 802.15.4a WPAN Standard Meeting, IEEE doc.: 15-05-0022-02-004a*, Monterey, CA, Jan. 2005 [Proposal (reviewed) and Presentation].

REFERENCES

Available upon request