

Scott C.-H. Huang

Recent Publication List 2005–2010

SCI JOURNAL PUBLICATIONS

1. Scott C.-H. Huang, Hsiao-Chun Wu, Shih-Yu Chang, Fast Approximation Algorithms for Symmetric Constellation Subset Selection, to appear in *IEEE Transactions on Wireless Communications*.
2. Scott C.-H. Huang, Hsiao-Chun Wu, S. Sitharama Iyengar, Multi-Source Broadcast in Wireless Networks, to appear in *IEEE Transactions on Parallel and Distributed Systems*.
3. Kazuya Sakai, Scott C.-H. Huang, Wei-Shinn Ku, Min-Te Sun, Xiuzhen Cheng, Timer-Based CDS Construction in Wireless Ad Hoc Networks, in *IEEE Transactions on Mobile Computing*, 10(10): 1388–1402, October 2011.
4. Yi-Sheng Shiu, Shih Yu Chang, Hsiao-Chun Wu, and Scott C.-H. Huang, Hsiao-Hwa Chen, Physical Layer Security in Wireless Networks: A Tutorial, in *IEEE Wireless Communications*, 18(2): 66–74, April 2011.
5. Scott C.-H. Huang, Min-Te Sun, Qilian Liang, Peng-Jun Wan, Xiaohua Jia, Interference-Aware, Fully-Distributed Virtual Backbone Construction and Its Applications in Multi-hop Wireless Networks, in *IEEE Transactions on Communications*, 58(12): 3550–3560, December 2010.
6. Scott C.-H. Huang, Shih-Yu Chang, Hsiao-Chun Wu, Analysis and Design of Novel Randomized Broadcast Algorithm for Scalable Wireless Networks in the Interference Channels, in *IEEE Transactions on Wireless Communications*, 9(7): 2206–2215, July 2010.
7. Scott C.-H. Huang, Peng-Jun Wan, Hongwei Du, E.-K. Park, Minimum-Latency Gossiping in Radio Networks, in *IEEE Transactions on Parallel and Distributed Systems*, 21(6): 790–800, June 2010.
8. Scott C.-H. Huang, Hsiao-Chun Wu, Shih Yu Chang, Xian Liu, Novel Sequence Design for Low-PMEPR and High-Code-Rate OFDM Systems, in *IEEE Transactions on Communications*, 58(2): 405–410, February 2010.
9. Scott C.-H. Huang, Peng-Jun Wan, Jing Deng, Yunghsiang S. Han, Broadcast Scheduling in Interference Environment, in *IEEE Transactions on Mobile Computing*, 7(11): 1338–1348, 2008.
10. Scott C.-H. Huang, Frances Yao, Minming Li, Weili Wu, Lower Bounds and New Constructions on Secure Group Communication Schemes, in *Theoretical Computer Science*, 407: 511–523, 2008
11. Scott C.-H. Huang, Maggie X. Cheng, Ding-Zhu Du, GeoSENS: Geo-based SEnsor Network Secure Communication Protocol, in *Computer Communications*, 29(4): 456–461, 2006.
12. Scott C.-H. Huang, Shamila Makki, Niki Pissinou, On Optimizing Compatible Security Policies, in *EURASIP Journal on Wireless Communications and Networking*, 2006(2): 1–7, 2006.
13. Weili Wu, Hongwei Du, Xiaohua Jia, Yingshu Li, Scott C.-H. Huang, Minimum Connected Dominating Sets and Maximal Independent Sets in Unit Disk Graphs, in *Theoretical Computer Science*, 352(1–3): 1–7, 2006.
14. Manki Min, Christina X. Huang, Scott C.-H. Huang, Weili Wu, Hongwei Du, Xiaohua Jia, Improving Construction for Connected Dominating Set with Steiner Tree in Wireless Sensor Networks, in *Journal of Global Optimization*, 35(1): 111–119, May 2006.

15. Maggie X. Cheng, Scott C.-H. Huang, Xiao Huang, Weili Wu, New Graph Model for Channel Assignment in Ad Hoc Wireless Networks, in *IEE Proc.-Commun.*, 152(6): 1039–1046, December 2005.
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CONFERENCE PUBLICATIONS

1. Scott C.-H. Huang, Hsiao-Chun Wu, John M. Cioffi, Novel PMEPR Control Approach for 64- and 256-QAM Coded OFDM Systems, in *IEEE Globecom'10*, Miami, Florida, December 2010.
2. Shih Yu Chang, Hsiao-Chun Wu, Scott C.-H. Huang, Statistical Analysis for Ad Hoc Hierarchical Networks Built on Network Coding, in *IEEE Globecom'10*, Miami, Florida, December 2010.
3. Jing Deng, Scott C.-H. Huang, Yung-Hsiang S. Han, Julia H. Deng, Fault-Tolerant and Reliable Computation in Cloud Computing, in *IEEE Globecom Workshop on Web and Pervasive Security (WPS'10)*, Miami, Florida, December 2010.
4. Yonas G Debessu, Hsiao-Chun Wu, Scott C.-H. Huang, Novel Topology-Dependent Clustering and Cluster-Head Selection Scheme for Wireless Sensor Networks, in *IEEE CMC'10*, Shenzhen, China, April 2010.
5. Lu Lu, Hsiao-Chun Wu, Scott C.-H. Huang, Robust Novel EM-Based Direction-of-Arrival Estimation Technique for Wideband Source Signals, in *IEEE CMC'10*, Shenzhen, China, April 2010.
6. Scott C.-H. Huang, Hsiao-Chun Wu, Shih Yu Chang, Novel Efficient Algorithms for Symmetric Constellation Subset Selection, in *IEEE ICC'10 Wireless Communications Symposium*, Cape Town, South Africa, May 2010.
7. Peng-Jun Wan, Zhu Wang, Hongwei Du, Scott C.-H. Huang, Zhiyuan Wan, First-Fit Scheduling for Beaconing in Multihop Wireless Networks, in *IEEE INFOCOM'10*, San Diego, California, March 2010.
8. Scott C.-H. Huang, Shih Yu Chang, Hsiao-Chun Wu, Novel Reconfigurable Randomized Broadcast Algorithm for Channel-Aware Wireless Networks, in *IEEE SMC'09*, San Antonio, Texas, October 2009.
9. Peng-Jun Wan, Scott C.-H. Huang, Minimum-Latency Aggregation Scheduling in Multi-hop Wireless Networks, in *ACM MobiHoc'09*, New Orleans, Louisiana, May 2009 (acceptance rate 18 %).
10. Maggie Cheng, Xuan Gong, and Scott C.-H. Huang, Improving Sensor Network Lifetime Through Hierarchical Multi-hop Clustering, in *IEEE ICC'09 Ad Hoc and Sensor Networking Symposium*, Dresden, Germany, June 2009.
11. Scott C.-H. Huang, Hongwei Du, E.-K. Park, Minimum-Latency Gossiping in Multi-hop Wireless Networks, in *ACM MobiHoc'08*, Hong Kong, May 2008 (acceptance rate 14 %).
12. Scott C.-H. Huang, Peng-Jun Wan, Xiaohua Jia, Hongwei Du, Weiping Shang, Minimum-Latency Broadcast Scheduling in Wireless Ad Hoc Networks, in *IEEE INFOCOM'07*, Alaska, May 2007 (acceptance rate 18 %).
13. Scott C.-H. Huang, Peng-Jun Wan, Chinh T. Vu, Yingshu Li, Frances Yao, Nearly Constant Approximation for Data Aggregation Scheduling in Wireless Sensor Networks, in *IEEE INFOCOM'07*, Alaska, May 2007 (acceptance rate 18 %).
14. Chih-Wei Yi, Peng-Jun Wan, Kuo-Wei Lin, Scott C.-H. Huang, Asymptotic Distribution of The Number of Isolated Nodes in Wireless Ad Hoc Networks with Unreliable Nodes and Links, in *IEEE Globecom'06*, San Francisco, November 2006.

15. Scott C.-H. Huang, Shamila Makki, Niki Pissinou, Accusation Resolution Using Security Metrology, 1st Int'l Conference on Wireless Algorithms, Systems, and Applications (WASA), Xian, China, August 2006.
 16. Scott C.-H. Huang, Hao Zhu, Wensheng Zhang, SAP: Seamless Authentication Protocol for Vertical Handoffs in Wireless Heterogeneous Networks, The 3rd International Conference on Quality of Service in Heterogeneous Wired/Wireless Networks (QShine), Ontario, Canada, August 2006.
 17. Scott C.-H. Huang, Peng-Jun Wan, Xiaohua Jia, Hongwei Du, Low-Latency Broadcast Scheduling Schemes in Ad Hoc Networks, 1st Int'l Conference on Wireless Algorithms, Systems, and Applications (WASA), Xian, China, August 2006.
 18. Scott C.-H. Huang, Ding-Zhu Du, New Constructions on Broadcast Encryption and Key Pre-distribution Scheme, in *Proceedings of the IEEE INFOCOM'05*, Miami, Florida, March 2005 (acceptance rate 17 %).
 19. Xiaochun Cheng, Xiaoqi Ma, Maggie Cheng, Scott C.-H. Huang, Proving Secure Properties of Cryptographic Protocols with Knowledge Based Approach, in *Proceedings of the IEEE IPCCC'05*, Phoenix, Arizona, April 2005.
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BOOK CHAPTERS

1. Scott C.-H. Huang, Ding-Zhu Du, A Survey On Broadcast Encryption, in *Security and Routing in Wireless Networks, Wireless Networks and Mobile Computing, Vol 3*, Y. Xiao, J. Li, Y. Pan (Eds), ISBN: 1-59454-316-X, Nova Science Publishers, NY, 2005.