

# Kang G Shin

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/7222483/kang-g-shin-publications-by-year.pdf>

**Version:** 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

116  
papers

3,702  
citations

24  
h-index

59  
g-index

139  
ext. papers

4,492  
ext. citations

4  
avg, IF

5.6  
L-index

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 116 | In-vehicle Phone Localization for Prevention of Distracted Driving. <i>IEEE Transactions on Mobile Computing</i> , <b>2022</b> , 1-1   | 4.6  | 0         |
| 115 | Pervasive Pose Estimation for Fall Detection. <i>ACM Transactions on Computing for Healthcare</i> , <b>2022</b> , 3, 1-23  | 2.6  |           |
| 114 | Context-Aware Beam Tracking for 5G mmWave V2I Communications. <i>IEEE Transactions on Mobile Computing</i> , <b>2021</b> , 1-1   | 4.6  | 2         |
| 113 | Incentivizing Platform User Interactions for Crowdsensing. <i>IEEE Internet of Things Journal</i> , <b>2021</b> , 8, 8314-8327   | 3.7  | 2         |
| 112 | Distribution Prediction for Reconfiguring Urban Dockless E-Scooter Sharing Systems. <i>IEEE Transactions on Knowledge and Data Engineering</i> , <b>2021</b> , 1-1               | 4.2  | 1         |
| 111 | Exploiting Interactions of Multiple Interferences for Their Cooperative Interference Alignment. <i>IEEE Transactions on Wireless Communications</i> , <b>2021</b> , 1-1          | 9.6  | 0         |
| 110 | Spatio-Temporal Capsule-based Reinforcement Learning for Mobility-on-Demand Coordination. <i>IEEE Transactions on Knowledge and Data Engineering</i> , <b>2020</b> , 1-1         | 4.2  | 2         |
| 109 | . <i>IEEE Transactions on Parallel and Distributed Systems</i> , <b>2020</b> , 31, 1783-1798   | 3.7  | 2         |
| 108 | Causes and fixes of unexpected phone shutoffs <b>2020</b> ,  |      | 2         |
| 107 | Inside-Out Precoding to Manage Multiple Interferences From the Same Source. <i>IEEE Transactions on Vehicular Technology</i> , <b>2020</b> , 69, 7583-7595                       | 6.8  | 2         |
| 106 | Information Fusion for (Re)Configuring Bike Station Networks with Crowdsourcing. <i>IEEE Transactions on Knowledge and Data Engineering</i> , <b>2020</b> , 1-1                  | 4.2  | 1         |
| 105 | Accurate Angular Inference for 802.11ad Devices Using Beam-Specific Measurements. <i>IEEE Transactions on Mobile Computing</i> , <b>2020</b> , 1-1                               | 4.6  |           |
| 104 | ICAS: an Extensible Framework for Estimating the Susceptibility of IC Layouts to Additive Trojans <b>2020</b> ,  |      | 2         |
| 103 | Coverage Performance in MIMO-ZFBF Dense HetNets with Multiplexing and LOS/NLOS Path-Loss Attenuation. <i>IEEE Transactions on Mobile Computing</i> , <b>2020</b> , 19, 2044-2061 | 4.6  | 1         |
| 102 | Interference Steering to Manage Interference in IoT. <i>IEEE Internet of Things Journal</i> , <b>2019</b> , 6, 10458-10471   | 10.7 | 15        |
| 101 | Coverage Performance of Aerial-Terrestrial HetNets <b>2019</b> ,   |      | 7         |
| 100 | Interference Recycling: Exploiting Interfering Signals to Enhance Data Transmission <b>2019</b> ,  |      | 2         |

|    |   |     |    |
|----|---|-----|----|
| 99 | On the Granularity of Trie-Based Data Structures for Name Lookups and Updates. <i>IEEE/ACM Transactions on Networking</i> , <b>2019</b> , 27, 777-789                       | 3.8 | 12 |
| 98 | Security and Privacy in the Internet of Things. <i>Computer</i> , <b>2019</b> , 52, 40-49   | 1.6 | 6  |
| 97 | Coordinated Multi-Point Transmissions Based on Interference Alignment and Neutralization. <i>IEEE Transactions on Wireless Communications</i> , <b>2019</b> , 18, 3347-3365 | 9.6 | 10 |
| 96 | Exploiting interactions among signals to decode interfering transmissions with fewer receiving antennas. <i>Computer Communications</i> , <b>2019</b> , 136, 63-75          | 5.1 | 6  |
| 95 | How Do Non-Ideal UAV Antennas Affect Air-to-Ground Communications? <b>2019</b> ,  |     | 4  |
| 94 | Design and Adaptation of Multi-Interference Steering. <i>IEEE Transactions on Wireless Communications</i> , <b>2019</b> , 18, 3329-3346                                     | 9.6 | 4  |
| 93 | Spatio-Temporal Capsule-based Reinforcement Learning for Mobility-on-Demand Network Coordination <b>2019</b> ,  |     | 20 |
| 92 | Thermal-Aware Scheduling for Integrated CPUs--GPU Platforms. <i>Transactions on Embedded Computing Systems</i> , <b>2019</b> , 18, 1-25                                     | 1.8 | 4  |
| 91 | Optimal Design and Management of a Hybrid Energy Storage System <b>2019</b> ,   |     | 1  |
| 90 | Distributed Packet Forwarding and Caching Based on Stochastic Network Utility Maximization. <i>IEEE/ACM Transactions on Networking</i> , <b>2018</b> , 26, 1264-1277        | 3.8 | 15 |
| 89 | . <i>IEEE Transactions on Mobile Computing</i> , <b>2018</b> , 17, 1019-1032  | 4.6 | 3  |
| 88 | (Re)Configuring Bike Station Network via Crowdsourced Information Fusion and Joint Optimization <b>2018</b> ,   |     | 9  |
| 87 | Dynamic Interference Steering in Heterogeneous Cellular Networks. <i>IEEE Access</i> , <b>2018</b> , 6, 28552-28562   | 3.5 | 5  |
| 86 | Physical-State-Aware Dynamic Slack Management for Mixed-Criticality Systems <b>2018</b> ,   |     | 9  |
| 85 | Closing the Gap Between Stability and Schedulability: A New Task Model for Cyber-Physical Systems <b>2018</b> ,   |     | 10 |
| 84 | Power Savings with CoMP Technology in Cellular Networks <b>2018</b> ,   |     | 1  |
| 83 | MUCA: New Routing for Named Data Networking <b>2018</b> ,   |     | 10 |
| 82 | Steering Crowdsourced Signal Map Construction via Bayesian Compressive Sensing <b>2018</b> ,  |     | 27 |

|    |  |     |    |
|----|--|-----|----|
| 81 | An Optimization Method for Multi-Operator and Mixed-Traffic LTE Deployments in the Unlicensed Bands <b>2018</b> ,  |     | 3  |
| 80 | A Fast and Memory-Efficient Trie Structure for Name-Based Packet Forwarding <b>2018</b> ,  |     | 18 |
| 79 | Thermal-Aware Resource Management for Embedded Real-Time Systems. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2018</b> , 37, 2857-2868 | 2.5 | 11 |
| 78 | . <i>IEEE Transactions on Vehicular Technology</i> , <b>2017</b> , 66, 6801-6818   | 6.8 | 9  |
| 77 | Adaptive transmission in heterogeneous networks. <i>IET Communications</i> , <b>2017</b> , 11, 604-613   | 1.3 |    |
| 76 | Enhancing wireless performance using reflectors <b>2017</b> ,  |     | 5  |
| 75 | Coverage Analysis of Multi-Stream MIMO HetNets With MRC Receivers. <i>IEEE Transactions on Wireless Communications</i> , <b>2017</b> , 16, 7816-7833                                 | 9.6 | 4  |
| 74 | When and how much to neutralize interference? <b>2017</b> ,  |     | 9  |
| 73 | Decoding interfering signals with fewer receiving antennas <b>2016</b> ,   |     | 6  |
| 72 | Coverage Performance of MIMO-MRC in Heterogeneous Networks: A Stochastic Geometry Perspective <b>2016</b> ,  |     | 7  |
| 71 | Coordinated multi-point transmissions based on interference alignment and neutralization <b>2016</b> ,   |     | 5  |
| 70 | Offline Guarantee and Online Management of Power Demand and Supply in Cyber-Physical Systems <b>2016</b> ,   |     | 2  |
| 69 | Differentially private and strategy-proof spectrum auction with approximate revenue maximization <b>2015</b> ,   |     | 36 |
| 68 | Modeling and Real-Time Scheduling of Large-Scale Batteries for Maximizing Performance <b>2015</b> ,  |     | 6  |
| 67 | Real-time battery thermal management for electric vehicles <b>2014</b> ,   |     | 19 |
| 66 | Secure cooperative spectrum sensing and access against intelligent malicious behaviors <b>2014</b> ,   |     | 21 |
| 65 | Real-Time Discharge/Charge Rate Management for Hybrid Energy Storage in Electric Vehicles <b>2014</b> ,  |     | 8  |
| 64 | Enhanced cognitive Radio Resource Management for LTE systems <b>2013</b> ,   |     | 4  |

|    |   |      |    |
|----|---|------|----|
| 63 | Schedulability Analysis for a Mode Transition in Real-Time Multi-core Systems <b>2013</b> ,   |      | 7  |
| 62 | Maximizing Transmission Opportunities in Wireless Multihop Networks. <i>IEEE Transactions on Mobile Computing</i> , <b>2013</b> , 12, 1879-1892                           | 4.6  | 5  |
| 61 | Design and Management of Satellite Power Systems <b>2013</b> ,  |      | 13 |
| 60 | On Selfish Configuration in Wi-Fi Tethering. <i>IEEE Communications Letters</i> , <b>2013</b> , 17, 841-843   | 3.8  | 2  |
| 59 | Real-time prediction of battery power requirements for electric vehicles <b>2013</b> ,  |      | 40 |
| 58 | DESA: Dependable, Efficient, Scalable Architecture for Management of Large-Scale Batteries. <i>IEEE Transactions on Industrial Informatics</i> , <b>2012</b> , 8, 406-417 | 11.9 | 57 |
| 57 | Controlling Preemption for Better Schedulability in Multi-Core Systems <b>2012</b> ,  |      | 14 |
| 56 | Admission and Eviction Control of Cognitive Radio Users at Wi-Fi 2.0 Hotspots. <i>IEEE Transactions on Mobile Computing</i> , <b>2012</b> , 11, 1666-1677                 | 4.6  | 4  |
| 55 | Exploiting Spectrum Heterogeneity in Dynamic Spectrum Market. <i>IEEE Transactions on Mobile Computing</i> , <b>2012</b> , 11, 2020-2032                                  | 4.6  | 21 |
| 54 | Pack Sizing and Reconfiguration for Management of Large-Scale Batteries <b>2012</b> ,   |      | 25 |
| 53 | Sidekick: AP aggregation over partially overlapping channels <b>2011</b> ,  |      | 4  |
| 52 | Opportunistic Access of TV Spectrum Using Cognitive-Radio-Enabled Cellular Networks. <i>IEEE Transactions on Vehicular Technology</i> , <b>2011</b> , 60, 3853-3864       | 6.8  | 19 |
| 51 | Adaptive Subcarrier Nulling: Enabling partial spectrum sharing in wireless LANs <b>2011</b> ,   |      | 20 |
| 50 | MODELZ: Monitoring, Detection, and Analysis of Energy-Greedy Anomalies in Mobile Handsets. <i>IEEE Transactions on Mobile Computing</i> , <b>2011</b> , 10, 968-981       | 4.6  | 18 |
| 49 | Efficient Sensing Matters a Lot for Large-Scale Batteries <b>2011</b> ,   |      | 12 |
| 48 | M-Polar: Channel Allocation for Throughput Maximization in SDR Mesh Networks <b>2010</b> ,  |      | 2  |
| 47 | Multihop Transmission Opportunity in Wireless Multihop Networks <b>2010</b> ,   |      | 5  |
| 46 | Asymmetry-Aware Real-Time Distributed Joint Resource Allocation in IEEE 802.22 WRANs <b>2010</b> ,  |      | 12 |

|    |   |     |  |     |
|----|---|-----|--|-----|
| 45 | Chorus: Collision Resolution for Efficient Wireless Broadcast <b>2010</b> ,   |     |  | 18  |
| 44 | DAC: Distributed Asynchronous Cooperation for Wireless Relay Networks <b>2010</b> ,   |     |  | 15  |
| 43 | On predictive routing of security contexts in an all-IP network. <i>Security and Communication Networks</i> , <b>2009</b> , 3, n/a-n/a                                    | 1.9 |  | 1   |
| 42 | Scheduling of Battery Charge, Discharge, and Rest <b>2009</b> ,   |     |  | 42  |
| 41 | On Dynamic Reconfiguration of a Large-Scale Battery System <b>2009</b> ,  |     |  | 45  |
| 40 | Throughput Behavior in Multihop Multiantenna Wireless Networks. <i>IEEE Transactions on Mobile Computing</i> , <b>2009</b> , 8, 1480-1494                                 | 4.6 |  | 5   |
| 39 | Fast Discovery of Spectrum Opportunities in Cognitive Radio Networks <b>2008</b> ,  |     |  | 98  |
| 38 | Efficient Discovery of Spectrum Opportunities with MAC-Layer Sensing in Cognitive Radio Networks. <i>IEEE Transactions on Mobile Computing</i> , <b>2008</b> , 7, 533-545 | 4.6 |  | 490 |
| 37 | Impact of RTOS parameters on end-to-end timing performance. <i>ACM SIGBED Review</i> , <b>2008</b> , 5, 1-2   | 1.3 |  | 1   |
| 36 | Defense Against Spoofed IP Traffic Using Hop-Count Filtering. <i>IEEE/ACM Transactions on Networking</i> , <b>2007</b> , 15, 40-53  | 3.8 |  | 201 |
| 35 | Aggregating Bandwidth for Multihomed Mobile Collaborative Communities. <i>IEEE Transactions on Mobile Computing</i> , <b>2007</b> , 6, 280-296                            | 4.6 |  | 20  |
| 34 | Interference Analysis and Transmit Power Control in IEEE 802.11a/h Wireless LANs. <i>IEEE/ACM Transactions on Networking</i> , <b>2007</b> , 15, 1007-1020                | 3.8 |  | 37  |
| 33 | On Mobile Viruses Exploiting Messaging and Bluetooth Services <b>2006</b> ,   |     |  | 53  |
| 32 | Distributed Authentication of Program Integrity Verification in Wireless Sensor Networks <b>2006</b> ,  |     |  | 1   |
| 31 | Robust Adaptive Metrics for Deadline Assignment in Distributed Hard Real-Time Systems. <i>Real-Time Systems</i> , <b>2002</b> , 23, 239-271                               | 1.3 |  | 12  |
| 30 | Trade-Off Analysis of Real-Time Control Performance and Schedulability*. <i>Real-Time Systems</i> , <b>2001</b> , 21, 199-217   | 1.3 |  | 14  |
| 29 | Real-time dynamic voltage scaling for low-power embedded operating systems <b>2001</b> ,  |     |  | 516 |
| 28 | A comparative study of bandwidth reservation and admission control schemes in QoS-sensitive cellular networks. <i>Wireless Networks</i> , <b>2000</b> , 6, 289-305        | 2.5 |  | 30  |

|    |   |     |     |
|----|---|-----|-----|
| 27 | A cellular wireless local area network with QoS guarantees for heterogeneous traffic. <i>Mobile Networks and Applications</i> , <b>1998</b> , 3, 89-100           | 2.9 | 10  |
| 26 | Distributed tool sharing in flexible manufacturing systems. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>1998</b> , 14, 379-389            |     | 14  |
| 25 | Fast restoration of real-time communication service from component failures in multi-hop networks. <i>Computer Communication Review</i> , <b>1997</b> , 27, 77-88 | 1.4 | 12  |
| 24 | A router architecture for real-time point-to-point networks. <i>Computer Architecture News</i> , <b>1996</b> , 24, 237-246  |     | 18  |
| 23 | A synthetic workload for a distributed real-time system. <i>Real-Time Systems</i> , <b>1996</b> , 11, 5-18  | 1.3 | 7   |
| 22 | A NEW LOCATION CODING SCHEME FOR INTELLIGENT TRANSPORTATION SYSTEMS. <i>Journal of Intelligent Transportation Systems</i> , <b>1996</b> , 3, 99-109               |     |     |
| 21 | Analytic evaluation of contention protocols used in distributed real-time systems. <i>Real-Time Systems</i> , <b>1995</b> , 9, 69-107                             | 1.3 | 3   |
| 20 | Adaptive Deadlock-Free Routing in Multicomputers Using Only One Extra Virtual Channel <b>1993</b> ,   |     | 40  |
| 19 | A distributed I/O architecture for HARTS. <i>Computer Architecture News</i> , <b>1990</b> , 18, 332-342   |     | 1   |
| 18 | Optimal Dynamic Control of Resources in a Distributed System. <i>IEEE Transactions on Software Engineering</i> , <b>1989</b> , 15, 1188-1198                      | 3.5 | 19  |
| 17 | Effects of Computing Time Delay on Real-Time Control Systems <b>1988</b> ,  |     | 3   |
| 16 | Performance measures for control computers. <i>IEEE Transactions on Automatic Control</i> , <b>1987</b> , 32, 467-473.  | 5.9 | 19  |
| 15 | Intertask communications in an integrated multirobot system. <i>IEEE Journal of Robotics and Automation</i> , <b>1987</b> , 3, 90-100                             |     | 19  |
| 14 | Robust trajectory planning for robotic manipulators under payload uncertainties. <i>IEEE Transactions on Automatic Control</i> , <b>1987</b> , 32, 1044-1054      | 5.9 | 27  |
| 13 | Clock Synchronization of a Large Multiprocessor System in the Presence of Malicious Faults. <i>IEEE Transactions on Computers</i> , <b>1987</b> , C-36, 2-12      | 2.5 | 43  |
| 12 | Optimal Checkpointing of Real-Time Tasks. <i>IEEE Transactions on Computers</i> , <b>1987</b> , C-36, 1328-1341   | 2.5 | 72  |
| 11 | Processor Allocation in an N-Cube Multiprocessor Using Gray Codes. <i>IEEE Transactions on Computers</i> , <b>1987</b> , C-36, 1396-1407                          | 2.5 | 128 |
| 10 | A dynamic programming approach to trajectory planning of robotic manipulators. <i>IEEE Transactions on Automatic Control</i> , <b>1986</b> , 31, 491-500          | 5.9 | 214 |

|   |   |     |     |
|---|---|-----|-----|
| 9 | Selection of near-minimum time geometric paths for robotic manipulators. <i>IEEE Transactions on Automatic Control</i> , <b>1986</b> , 31, 501-511                          | 5.9 | 66  |
| 8 | A unified method for evaluating real-time computer controllers and its application. <i>IEEE Transactions on Automatic Control</i> , <b>1985</b> , 30, 357-366               | 5.9 | 70  |
| 7 | Suboptimal control of industrial manipulators with a weighted minimum time-fuel criterion. <i>IEEE Transactions on Automatic Control</i> , <b>1985</b> , 30, 1-10           | 5.9 | 36  |
| 6 | Minimum-time control of robotic manipulators with geometric path constraints. <i>IEEE Transactions on Automatic Control</i> , <b>1985</b> , 30, 531-541                     | 5.9 | 587 |
| 5 | A cost-effective multistage interconnection network with network overlapping and memory interleaving. <i>IEEE Transactions on Computers</i> , <b>1985</b> , C-34, 1088-1101 | 2.5 | 4   |
| 4 | Evaluation of Error Recovery Blocks Used for Cooperating Processes. <i>IEEE Transactions on Software Engineering</i> , <b>1984</b> , SE-10, 692-700                         | 3.5 | 24  |
| 3 | Adaptive packet filters   |     | 5   |
| 2 | Software engineering of machine control systems: an approach to lifecycle economics   |     | 3   |
| 1 | Automatic generation of trajectory planners for industrial robots   |     | 2   |