

# Byung Kook Kim

## List of Publications by Year in descending order

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61  
papers

1,225  
citations

430874

18  
h-index

395702

33  
g-index

61  
all docs

61  
docs citations

61  
times ranked

1041  
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy-Optimal transport trajectory planning and online trajectory modification for holonomic robots. Asian Journal of Control, 2021, 23, 2185-2200.	3.0	9
2	Cornering Trajectory Planning Avoiding Slip for Differential-Wheeled Mobile Robots. IEEE Transactions on Industrial Electronics, 2020, 67, 6698-6708.	7.9	15
3	An Efficient Minimum-Time Cooperative Task Planning Algorithm for Serving Robots and Operators. Robotica, 2020, 38, 1895-1920.	1.9	1
4	Global Trajectory Planning Based on DWMR Dynamics in Circular C-space. International Journal of Control, Automation and Systems, 2019, 17, 2624-2633.	2.7	0
5	Time-Optimal Trajectory Planning Based on Dynamics for Differential-Wheeled Mobile Robots With a Geometric Corridor. IEEE Transactions on Industrial Electronics, 2017, 64, 5502-5512.	7.9	41
6	Minimum-energy cornering trajectory planning with self-rotation for three-wheeled omni-directional mobile robots. International Journal of Control, Automation and Systems, 2017, 15, 1857-1866.	2.7	23
7	Development of Precise Encoder Edge-Based State Estimation for Motors. IEEE Transactions on Industrial Electronics, 2016, 63, 3648-3655.	7.9	16
8	Efficient time-optimal two-corner trajectory planning algorithm for differential-driven wheeled mobile robots with bounded motor control inputs. Robotics and Autonomous Systems, 2015, 64, 35-43.	5.1	21
9	Minimum-Energy Trajectory Generation for Cornering with a Fixed Heading for Three-Wheeled Omni-Directional Mobile Robots. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 75, 205-221.	3.4	11
10	Online Minimum-Energy Trajectory Planning and Control on a Straight-Line Path for Three-Wheeled Omnidirectional Mobile Robots. IEEE Transactions on Industrial Electronics, 2014, 61, 4771-4779.	7.9	103
11	Energy-Efficient Trajectory Generation for Space Manipulators with Reaction Wheels under a Fixed Base Orientation. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 76, 219-237.	3.4	3
12	Dynamic Ultrasonic Hybrid Localization System for Indoor Mobile Robots. IEEE Transactions on Industrial Electronics, 2013, 60, 4562-4573.	7.9	106
13	Time-optimal straight-line trajectory planning on hill for two-wheeled mobile robots. , 2013, , .		0
14	Time-optimal cornering trajectory planning for differential-driven wheeled mobile robots with motor current and voltage constraints. , 2013, , .		1
15	Minimum-energy trajectory planning and control on a straight line with rotation for three-wheeled omni-directional mobile robots. , 2012, , .		11
16	Minimum-time trajectory generation algorithm along curved paths for mobile robots with a motor control input constraint. , 2012, , .		4
17	Minimum-Time Trajectory for Three-Wheeled Omnidirectional Mobile Robots Following a Bounded-Curvature Path With a Referenced Heading Profile. IEEE Transactions on Robotics, 2011, 27, 800-808.	10.3	50
18	Accurate Hybrid Global Self-Localization Algorithm for Indoor Mobile Robots With Two-Dimensional Isotropic Ultrasonic Receivers. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 3391-3404.	4.7	41

#	ARTICLE	IF	CITATIONS
19	Dynamic localization based on EKF for indoor mobile robots using discontinuous ultrasonic distance measurements. , 2010, , .		4
20	Calibrated localization with 2-D laser range finder for indoor mobile robots. , 2010, , .		1
21	Minimum-energy trajectory planning on a tangent for battery-powered three-wheeled omni-directional mobile robots. , 2010, , .		1
22	Minimum-time grid coverage trajectory planning algorithm for mobile robots with battery voltage constraints. , 2010, , .		5
23	A multi-robot task planning system minimizing the total execution time for hospital service. , 2010, , .		5
24	Energy-efficient reference gait generation utilizing variable ZMP and vertical hip motion based on inverted pendulum model for biped robots. , 2010, , .		3
25	A hybrid algorithm for global self-localization of indoor mobile robots with 2-D isotropic ultrasonic receivers. , 2009, , .		3
26	Major orthogonal vector-based local localization algorithm for indoor mobile robots. , 2009, , .		0
27	VecSLAM: An Efficient Vector-Based SLAM Algorithm for Indoor Environments. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 56, 301-318.	3.4	20
28	Non-preemptible last section assignment for reducing feedback latency in real-time control systems. International Journal of Systems Science, 2009, 40, 479-495.	5.5	1
29	An Efficient Localization Algorithm Based on Vector Matching for Mobile Robots Using Laser Range Finders. Journal of Intelligent and Robotic Systems: Theory and Applications, 2008, 51, 461-488.	3.4	25
30	Minimum-Energy Translational Trajectory Generation for Differential-Driven Wheeled Mobile Robots. Journal of Intelligent and Robotic Systems: Theory and Applications, 2007, 49, 367-383.	3.4	63
31	Robotic smart house to assist people with movement disabilities. Autonomous Robots, 2007, 22, 183-198.	4.8	81
32	Dynamic Voltage Scaling for Digital Control System Implementation. Real-Time Systems, 2005, 29, 263-280.	1.3	13
33	Probabilistic Schedulability Analysis of Harmonic Multi-Task Systems with Dual-Modular Temporal Redundancy. Real-Time Systems, 2004, 26, 199-222.	1.3	6
34	Measuring the machine intelligence quotient (MIQ) of human-machine cooperative systems. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2001, 31, 89-96.	2.9	47
35	Near-time-optimal trajectory planning for wheeled mobile robots with translational and rotational sections. IEEE Transactions on Automation Science and Engineering, 2001, 17, 85-90.	2.3	41
36	Near minimum-time direct voltage control algorithms for wheeled mobile robots with current and voltage constraints. Robotica, 2001, 19, 29-39.	1.9	18

#	ARTICLE	IF	CITATIONS
37	Feature-based probabilistic map building using time and amplitude information of sonar in indoor environments. <i>Robotica</i> , 2001, 19, 423-437.	1.9	7
38	An optimal checkpointing-strategy for real-time control systems under transient faults. <i>IEEE Transactions on Reliability</i> , 2001, 50, 293-301.	4.6	74
39	Obstacle avoidance control for redundant manipulators using collidability measure. <i>Robotica</i> , 2000, 18, 143-151.	1.9	39
40	Task-scheduling strategies for reliable TMR controllers using task grouping and assignment. <i>IEEE Transactions on Reliability</i> , 2000, 49, 355-362.	4.6	15
41	Title is missing!. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2000, 28, 213-229.	3.4	8
42	Design of an auditory guidance system for the blind with signal transformation from stereo ultrasonic to binaural audio. <i>Artificial Life and Robotics</i> , 2000, 4, 220-226.	1.2	9
43	Design and stability analysis of single-input fuzzy logic controller. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , 2000, 30, 303-309.	5.0	159
44	Task assignment and scheduling for open real-time control systems. , 1997, , .		2
45	Minimum-time minimum-loss speed control of induction motors under field-oriented control. <i>IEEE Transactions on Industrial Electronics</i> , 1997, 44, 809-815.	7.9	40
46	Design of robust reliable H $\infty$ output feedback control for a class of uncertain linear systems with sensor failure. <i>International Journal of Systems Science</i> , 1996, 27, 963-968.	5.5	5
47	Decentralized iterative learning control methods for large scale linear dynamic systems. <i>International Journal of Systems Science</i> , 1993, 24, 2239-2254.	5.5	18
48	A study on automatic control of steam turbines of fossil power plant with thermal stress constraints in turbine rotors. , 0, , .		1
49	A study on world map building for mobile robots with tri-aural ultrasonic sensor system. , 0, , .		9
50	Design of a sliding mode control type fuzzy logic control. , 0, , .		0
51	Task scheduling with feedback latency for real-time control systems. , 0, , .		13
52	Obstacle avoidance control for redundant manipulators using collidability measure. , 0, , .		0
53	Measuring machine intelligence for human-machine cooperative systems using intelligence task graph. , 0, , .		4
54	An efficient optimal task allocation and scheduling algorithm for cyclic synchronous applications. , 0, , .		1

#	ARTICLE	IF	CITATIONS
55	Reliability analysis of real-time controllers with dual-modular temporal redundancy. , 0, , .		4
56	Development of BEST nano-robot soccer team. , 0, , .		3
57	Computing period minimization for function-block simulation in parallel processing systems. , 0, , .		0
58	Design of digital control systems with dynamic voltage scaling. , 0, , .		1
59	A Robust Localization Algorithm for Mobile Robots with Laser Range Finders. , 0, , .		11
60	Energy-Saving 3-Step Velocity Control Algorithm for Battery-Powered Wheeled Mobile Robots. , 0, , .		9
61	Time-optimal cornering trajectory planning for car-like mobile robots containing actuator dynamics. Robotica, 0, , 1-23.	1.9	0