Kunsoo Huh

List of Publications by Year in Descending Order

80 papers	650 citations	15 h-index	21 g-index
92 ext. papers	811 ext. citations	2.1 avg, IF	4.36 L-index

#	Paper	IF	Citations
80	Development of Vehicle Roll Rate Estimator Using Transfer Function Estimation. *Transactions of the Korean Society of Automotive Engineers*, **2022**, 30, 1-7	0.4	1
79	A Hierarchical Motion Planning Framework for Autonomous Driving in Structured Highway Environments. *IEEE Access*, **2022**, 10, 20102-20117	3.5	1
78	An Integrated Deep Ensemble-Unscented Kalman Filter for Sideslip Angle Estimation With Sensor Filtering Network. *IEEE Access*, **2021**, 1-1	3.5	0
77	Driving Style-Based Conditional Variational Autoencoder for Prediction of Ego Vehicle Trajectory. *IEEE Access*, **2021**, 9, 169348-169356	3.5	0
76	Driving and steering collision avoidance system of autonomous vehicle with model predictive control based on non-convex optimization. *Advances in Mechanical Engineering*, **2021**, 13, 168781402110276	1.2	3
75	Anomaly Monitoring Framework in Lane Detection With a Generative Adversarial Network. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 22, 1603-1615	6.1	7
74	Emergency Collision Avoidance by Steering in Critical Situations. *International Journal of Automotive Technology*, **2021**, 22, 173-184	1.6	3
73	Hybrid Approach for Vehicle Trajectory Prediction Using Weighted Integration of Multiple Models. *IEEE Access*, **2021**, 9, 78715-78723	3.5	2
72	Adaptive Cruise Controller Design Without Transitional Strategy. *International Journal of Automotive Technology*, **2020**, 21, 675-683	1.6	2
71	Torque vectoring system design for hybrid electric-all wheel drive vehicle. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2020**, 234, 2680-2692	1.4	1
70	Multi-Head Attention based Probabilistic Vehicle Trajectory Prediction **2020**,		7
69	Target Vehicle Trajectory Prediction Algorithm Based on Model Integration. *Transactions of the Korean Society of Automotive Engineers*, **2020**, 28, 1-8	0.4	1
68	Development of an Open-loop Side-slip Angle Estimator Using Parameter Optimization. *Transactions of the Korean Society of Automotive Engineers*, **2020**, 28, 491-498	0.4	
67	Probabilistic Vehicle Trajectory Prediction Considering Inter-vehicle Interaction Based on Multi-head Attention Architecture. *Transactions of the Korean Society of Automotive Engineers*, **2020**, 28, 645-652	0.4	
66	Interaction Aware Trajectory Prediction of Surrounding Vehicles with Interaction Network and Deep Ensemble **2020**,		1
65	Rear Wheel Steering Control Algorithm for Improving Vehicle Yaw Response in High Driving Speed. *Transactions of the Korean Society of Automotive Engineers*, **2020**, 28, 453-461	0.4	1
64	Development of a Unified Lane-Keeping and Collision Avoidance System for Semi-Trailer Truck. *IEEE Access*, **2020**, 8, 149751-149763	3.5	4

63	Robust design optimisation of adaptive cruise controller considering uncertainties of vehicle parameters and occupants. *Vehicle System Dynamics*, **2020**, 58, 987-1005	2.8	2
62	Vehicle sideslip angle estimation using deep ensemble-based adaptive Kalman filter. *Mechanical Systems and Signal Processing*, **2020**, 144, 106862	7.8	23
61	RNN-Based Path Prediction of Obstacle Vehicles With Deep Ensemble. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 10252-10256	6.8	16
60	Active Front Steering for Driver's Steering Comfort and Vehicle Driving Stability. *International Journal of Automotive Technology*, **2019**, 20, 589-596	1.6	12
59	Deep Distributional Reinforcement Learning Based High-Level Driving Policy Determination. *IEEE Transactions on Intelligent Vehicles*, **2019**, 4, 416-424	5	19
58	Estimating the Maximum Road Friction Coefficient with Uncertainty Using Deep Learning **2018**,		6
57	Road Surface Classification Using a Deep Ensemble Network with Sensor Feature Selection. *Sensors*, **2018**, 18,	3.8	12
56	Autonomous Emergency Braking Considering Road Slope and Friction Coefficient. *International Journal of Automotive Technology*, **2018**, 19, 1013-1022	1.6	12
55	Intervention minimized semi-autonomous control using decoupled model predictive control **2017**,		13
54	Development of algorithms for commercial vehicle mass and road grade estimation. *International Journal of Automotive Technology*, **2017**, 18, 1077-1083	1.6	18
53	Target classification layer design via vehicle-to-vehicle communication. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2016**, 230, 1849-1861	1.4	3
52	Sensor Fusion Algorithm Design in Detecting Vehicles Using Laser Scanner and Stereo Vision. *IEEE Transactions on Intelligent Transportation Systems*, **2016**, 17, 1072-1084	6.1	32
51	Fault-tolerant braking control with integerated EMBs and regenerative in-wheel motors. *International Journal of Automotive Technology*, **2016**, 17, 923-936	1.6	13
50	Fault Detection and Estimation for Electromechanical Brake Systems Using Parity Space Approach. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2015**, 137,	1.6	10
49	Estimation of the climbing angle in the presence of yawing motion. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2015**, 229, 1263-1275	1.4	2
48	Development of an autonomous braking system using the predicted stopping distance. *International Journal of Automotive Technology*, **2014**, 15, 341-346	1.6	16
47	Design and Analysis of a Regenerative Electromagnetic Brake. *IEEE Transactions on Magnetics*, **2014**, 50, 1-4	2	6
46	Development of estimation algorithms for vehicle's mass and road grade. *International Journal of Automotive Technology*, **2013**, 14, 889-895	1.6	19

45	Fault detection and diagnosis of the electromechanical brake based on observer and parity space. *International Journal of Automotive Technology*, **2012**, 13, 845-851	1.6	11
44	Development of an electric booster system using sliding mode control for improved braking performance. *International Journal of Automotive Technology*, **2012**, 13, 1005-1011	1.6	18
43	Collision detection system design using a multi-layer laser scanner for collision mitigation. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2012**, 226, 905-914	1.4	8
42	Modeling and control of an electronic wedge brake. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, **2012**, 226, 2440-2455	1.3	15
41	Model-based sensor fault detection algorithm design for Electro-Mechanical Brake **2011**,		3
40	Monitoring System Design for Lateral Vehicle Motion. *IEEE Transactions on Vehicular Technology*, **2011**, 60, 1394-1403	6.8	28
39	Dissipative proportional integral observer for a class of uncertain nonlinear systems. *Journal of Mechanical Science and Technology*, **2011**, 25, 1551-1555	1.6	1
38	Development of a path planning system using mean shift algorithm for driver assistance. *International Journal of Automotive Technology*, **2011**, 12, 119-124	1.6	4
37	Simulation tool design for the two-axis nano stage of lithography systems. *Mechatronics*, **2010**, 20, 574-581	3	11
36	Vision-based vehicle detection and tracking algorithm design. *Optical Engineering*, **2009**, 48, 127201	1.1	12
35	Development of a Vehicle Stability Control System Using Brake-by-Wire Actuators. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2008**, 130,	1.6	22
34	Using the Milliken Moment Method and dynamic simulation to evaluate vehicle stability and controllability. *International Journal of Vehicle Design*, **2008**, 48, 132	2.4	14
33	Observer design methodology for stochastic and deterministic robustness. *International Journal of Control*, **2008**, 81, 1172-1182	1.5	7
32	Evaluation of Lane Keeping Assistance Controllers in HIL Simulations. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2008**, 41, 9491-9496		5
31	Robust proportional-integral Kalman filter design using a convex optimization method. *Journal of Mechanical Science and Technology*, **2008**, 22, 879-886	1.6	12
30	A stereo vision-based obstacle detection system in vehicles. *Optics and Lasers in Engineering*, **2008**, 46, 168-178	4.6	40
29	Optimal Proportional-Integral Adaptive Observer Design for a Class of Uncertain Nonlinear Systems. *Proceedings of the American Control Conference*, **2007**,	1.2	10
28	Dissipative Proportional Integral Observer for a Class of Uncertain Nonlinear Systems. *Proceedings of the American Control Conference*, **2007**,	1.2	3

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27	Optimal robust adaptive observer design for a class of nonlinear systems via an H-infinity approach **2006**,		6
26	Development of a vision-based lane detection system considering configuration aspects. *Optics and Lasers in Engineering*, **2005**, 43, 1193-1213	4.6	15
25	Development of a lane departure monitoring and control system. *Journal of Mechanical Science and Technology*, **2005**, 19, 1998-2006	1.6	1
24	Robust Kalman Filter Design via Selecting Performance Indices. *Transactions of the Korean Society of Mechanical Engineers, A*, **2005**, 29, 59-66	1	
23	Track Tension Controller Design and Experimental Evaluation in Tracked Vehicles. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2004**, 126, 764-771	1.6	3
22	Feedback Control of MEMS Gyroscope to Achieve the Tactical-Grade Specifications. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2004**, 37, 671-676		
21	Development of a Multi-body Dynamics Simulation Tool for Tracked Vehicles (Part II, Application to Track Tension Controller Design). *JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing*, **2003**, 46, 550-556		10
20	Unmanned Turning Force Control Based on the Spindle Drive Characteristics.. *JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing*, **2003**, 46, 314-321		3
19	Monitoring Cutting Forces In Turning: A Model-Based Approach. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2002**, 124, 26-31	3.3	33
18	Monitoring system design for estimating the lateral tire force **2002**,		2
17	T-2-4-1 Design of the Well-Conditioned Observer Using the Non-Normality Measure. *The Proceedings of the Asian Conference on Multibody Dynamics*, **2002**, 2002, 168-173		
16	Track Tension Estimation in Tracked Vehicles Under Various Maneuvering Tasks. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2001**, 123, 179-185	1.6	11
15	Discrete-Time Well-Conditioned State Observer Design and Evaluation. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2001**, 123, 615-622	1.6	1
14	Active Steering Control Based on the Estimated Tire Forces. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2001**, 123, 505-511	1.6	16
13	Estimation of dynamic track tension utilizing a simplified tracked vehicle model **2001**,		1
12	Optimal Task Sequence Planning for High Speed Robotic Assembly Using Simulated Annealing.. *JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing*, **2000**, 43, 222-229		3
11	Cutting Force Estimation Systems Based on AC Spindle Drive.. *JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing*, **2000**, 43, 230-236		2
10	Active steering control based on the estimated tire forces **1999**,		16