

Azim Eskandarian

List of Publications by Year in descending order

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93
papers

2,441
citations

361296

20
h-index

223716

46
g-index

111
all docs

111
docs citations

111
times ranked

1878
citing authors

#	ARTICLE	IF	CITATIONS
1	Challenges of Intervehicle Ad Hoc Networks. IEEE Transactions on Intelligent Transportation Systems, 2004, 5, 347-351.	4.7	475
2	Atomistic viewpoint of the applicability of microcontinuum theories. International Journal of Solids and Structures, 2004, 41, 2085-2097.	1.3	222
3	Crashworthiness design optimization using successive response surface approximations. Computational Mechanics, 2002, 29, 409-421.	2.2	196
4	Research Advances and Challenges of Autonomous and Connected Ground Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 683-711.	4.7	158
5	The threat of intelligent collisions. IT Professional, 2004, 6, 24-29.	1.4	143
6	A Reliable Link-Layer Protocol for Robust and Scalable Intervehicle Communications. IEEE Transactions on Intelligent Transportation Systems, 2007, 8, 4-13.	4.7	99
7	Evaluation of a Smart Algorithm for Commercial Vehicle Driver Drowsiness Detection. Intelligent Vehicles Symposium, 2009 IEEE, 2007, , .	0.0	74
8	EEG-inception: an accurate and robust end-to-end neural network for EEG-based motor imagery classification. Journal of Neural Engineering, 2021, 18, 046014.	1.8	72
9	Computer modeling and validation of a hybrid III dummy for crashworthiness simulation. Mathematical and Computer Modelling, 2002, 35, 885-893.	2.0	64
10	Ballistic impact simulation of GT model vehicle door using finite element method. Theoretical and Applied Fracture Mechanics, 2003, 40, 113-121.	2.1	64
11	Examining the physical foundation of continuum theories from the viewpoint of phonon dispersion relation. International Journal of Engineering Science, 2003, 41, 61-83.	2.7	58
12	Finite element model and validation of a surrogate crash test vehicle for impacts with roadside objects. International Journal of Crashworthiness, 1997, 2, 239-258.	1.1	45
13	Effect of drowsiness on driving performance variables of commercial vehicle drivers. International Journal of Automotive Technology, 2009, 10, 391-404.	0.7	42
14	Vehicle Collision Avoidance Maneuvers With Limited Lateral Acceleration Using Optimal Trajectory Control. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013, 135, .	0.9	39
15	Cooperative Adaptive Cruise Control With Adaptive Kalman Filter Subject to Temporary Communication Loss. IEEE Access, 2019, 7, 93558-93568.	2.6	38
16	A Collision Avoidance Steering Controller using Linear Quadratic Regulator. , 0, , .		31
17	State Estimation and Motion Prediction of Vehicles and Vulnerable Road Users for Cooperative Autonomous Driving: A Survey. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 16983-17002.	4.7	31
18	Dynamic meshless method applied to nonlocal crack problems. Theoretical and Applied Fracture Mechanics, 2002, 38, 293-300.	2.1	25

#	ARTICLE	IF	CITATIONS
19	A micromorphic electromagnetic theory. International Journal of Solids and Structures, 2004, 41, 2099-2110.	1.3	25
20	An assessment of constitutive models of concrete in the crashworthiness simulation of roadside safety structures. International Journal of Crashworthiness, 2005, 10, 5-19.	1.1	24
21	Modified Autoencoder Training and Scoring for Robust Unsupervised Anomaly Detection in Deep Learning. IEEE Access, 2020, 8, 101824-101833.	2.6	24
22	Modeling and simulation of osteoporosis and fracture of trabecular bone by meshless method. International Journal of Engineering Science, 2007, 45, 329-338.	2.7	19
23	Denial of Service Attacks on Inter-Vehicle Communication Networks. , 2008, , .		19
24	Cooperative perception in autonomous ground vehicles using a mobile robot testbed. IET Intelligent Transport Systems, 2019, 13, 1545-1556.	1.7	19
25	A Survey and Tutorial of EEG-Based Brain Monitoring for Driver State Analysis. IEEE/CAA Journal of Automatica Sinica, 2021, 8, 1222-1242.	8.5	19
26	Design automation of a laminated armor for best impact performance using approximate optimization method. International Journal of Impact Engineering, 2003, 29, 397-406.	2.4	18
27	Meshless analysis of plasticity with application to crack growth problems. Theoretical and Applied Fracture Mechanics, 2004, 41, 83-94.	2.1	18
28	Merging Strategies, Trajectory Planning and Controls for Platoon of Connected, and Autonomous Vehicles. International Journal of Intelligent Transportation Systems Research, 2020, 18, 153-173.	0.6	18
29	Steering control collision avoidance system and verification through subject study. IET Intelligent Transport Systems, 2015, 9, 907-915.	1.7	17
30	Evaluation of Portable Concrete Barriers Using Finite Element Simulation. Transportation Research Record, 2000, 1720, 1-6.	1.0	16
31	Predictive Time-Delay Control of Vehicle Suspensions. JVC/Journal of Vibration and Control, 2001, 7, 1195-1211.	1.5	16
32	Avoiding Timeslot Boundary Synchronization for Multihop Message Broadcast in Vehicular Networks. , 2009, , .		16
33	Enhancing intelligent agent collaboration for flow optimization of railroad traffic. Transportation Research, Part A: Policy and Practice, 2002, 36, 919-930.	2.0	15
34	Meshless simulation of crack propagation in multiphase materials. Theoretical and Applied Fracture Mechanics, 2006, 45, 13-17.	2.1	15
35	Evaluation of lateral trajectories with different controllers for multi-vehicle merging in platoon. , 2014, , .		15
36	Impact Finite-Element Analysis of Slip-Base Sign Support Mechanism. Journal of Transportation Engineering, 2000, 126, 143-153.	0.9	12

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37	Introduction to Intelligent Vehicles. , 2012, , 1-13.		12
38	A Systematic Multi-Vehicle Platooning and Platoon Merging: Strategy, Control, and Trajectory Generation. , 2014, , .		12
39	Vehicle Lateral and Steering Control. , 2012, , 209-232.		11
40	Experimental evaluation of cooperative adaptive cruise control with autonomous mobile robots. , 2017, , .		11
41	Dynamics modeling of robotic manipulators using an artificial neural network. Journal of Field Robotics, 1994, 11, 41-56.	0.7	10
42	Fundamentals of Driver Assistance. , 2012, , 491-535.		10
43	Analysis and evaluation of a redesigned 3-3 slipbase sign support system using finite element simulations. International Journal of Crashworthiness, 1999, 4, 7-16.	1.1	9
44	Accurate Alignment Inspection System for Low-Resolution Automotive LiDAR. IEEE Sensors Journal, 2021, 21, 11961-11968.	2.4	9
45	Fuzzy Logic Control for active suspension of a Non-Linear Full-Vehicle Model. , 2009, , .		7
46	The effect of information, and communication topologies on input-to-state stability of platoon. , 2016, , .		7
47	Sentinel: An Onboard Lane Change Advisory System for Intelligent Vehicles to Reduce Traffic Delay During Freeway Incidents. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 8906-8917.	4.7	7
48	Drowsy and Fatigued Driving Problem Significance and Detection Based on Driver Control Functions. , 2012, , 941-974.		7
49	Meshless analysis of high-speed impact. Theoretical and Applied Fracture Mechanics, 2005, 44, 201-207.	2.1	6
50	Efficient Certificate Distribution for Vehicle Heartbeat Messages. , 2008, , .		6
51	Integrating Odometry and Inter-vehicular Communication for Adaptive Cruise Control with Target Detection Loss. , 2018, , .		6
52	A Computationally Efficient Multiclass Time-Frequency Common Spatial Pattern Analysis on EEG Motor Imagery. , 2020, 2020, 514-518.		6
53	Attention-based Neural Network for Driving Environment Complexity Perception. , 2021, , .		6
54	X-CAR: An Experimental Vehicle Platform for Connected Autonomy Research. IEEE Intelligent Transportation Systems Magazine, 2023, 15, 41-57.	2.6	6

#	ARTICLE	IF	CITATIONS
55	Mobile Robot Coordinated Platooning: A Small-Scale Experimental Evaluation to Emulate Connected Vehicles. , 2015, , .		5
56	Experimental Evaluation of Different Controllers for Cooperative Adaptive Cruise Control. , 2017, , .		5
57	Collision Avoidance Using a Cerebellar Model Arithmetic Computer Neural Network. Computer-Aided Civil and Infrastructure Engineering, 1998, 13, 303-314.	6.3	4
58	Analysis of airbag depowering and related parameters in out of position environment. International Journal of Crashworthiness, 1998, 3, 237-248.	1.1	4
59	Effect of Occupant Position and Air Bag Inflation Parameters on Driver Injury Measures. , 0, , .		4
60	CARAVAN: A Communications Architecture for Reliable Adaptive Vehicular Adhoc Networks. , 2006, , .		4
61	Development of an Intelligent Multimode Speed Adaptation System. , 2007, , .		4
62	Effectiveness and Acceptance of Adaptive Intelligent Speed Adaptation Systems. Transportation Research Record, 2008, 2086, 133-139.	1.0	4
63	Vehicle Evasive Maneuver Trajectory Optimization Using Collocation Technique. , 2010, , .		4
64	Synchronization challenges in media access coordination for vehicular ad hoc networks. Wireless Communications and Mobile Computing, 2011, 11, 954-963.	0.8	4
65	Concurrent Multi-Domain Simulations in Structural Dynamics Using Multiple Grid and Multiple Time-Scale (MGMT) Method. International Journal of Computational Methods, 2018, 15, 1850021.	0.8	4
66	End-to-End Multi-Task Machine Learning of Vehicle Dynamics for Steering Angle Prediction for Autonomous Driving. , 2019, , .		4
67	Nozzle design using an iterative Dirichlet approach. International Journal for Numerical Methods in Engineering, 1986, 22, 481-494.	1.5	3
68	Finite element modelling of anthropomorphic test devices for vehicle crashworthiness evaluation. International Journal of Crashworthiness, 2001, 6, 511-524.	1.1	3
69	Measuring speed behaviors for future intelligent, adaptive in-vehicle speed management systems. , 2008, , .		3
70	A probabilistic approach to driver assistance for delay reduction at congested highway lane drops. International Journal of Transportation Science and Technology, 2021, 10, 353-365.	2.0	3
71	Traffic-Aware Lane Change Advance Warning System for Delay Reduction at Congested Freeway Diverge Areas. Journal of Transportation Engineering Part A: Systems, 2021, 147, .	0.8	3
72	Estimating the Probability That a Vehicle Reaches a Near-Term Goal State Using Multiple Lane Changes. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 5326-5337.	4.7	3

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73	Drowsy and Fatigued Driver Warning, Counter Measures, and Assistance. , 2012, , 975-996.		3
74	Automatic Inspection System for Automotive LiDAR Alignment Using a Cubic Target. IEEE Sensors Journal, 2022, 22, 2793-2801.	2.4	3
75	Longitudinal Control Algorithm for Cooperative Autonomous Vehicles to Avoid Accident with Vulnerable Road Users. , 2020, , .		3
76	Development of an Active Steering Control System in a Car Driving Simulator. , 0, , .		2
77	Visual Object Tracking on the Inverse Perspective Map for Autonomous Vehicles. , 2017, , .		2
78	On non-equilibrium molecular dynamics with Euclidean objectivity. Acta Mechanica, 2017, 228, 693-710.	1.1	2
79	Intelligent Speed Adaptation (ISA). , 2012, , 581-602.		2
80	An Improved Small-Scale Connected Autonomous Vehicle Platform. , 2019, , .		2
81	Safety performance evaluation of secure mailboxes using finite element simulations and crash testing. International Journal of Crashworthiness, 2005, 10, 341-349.	1.1	1
82	Analyzing Roadside Safety Implications of Future Vehicle Designs. , 2014, , .		1
83	Estimating the Likelihood of Reaching a Road Target Using Multiple Lane Changes for Driver Assistance. , 2020, , .		1
84	Thermo-plastic effects on structural behaviour during crush and impact. International Journal of Vehicle Design, 2002, 30, 22.	0.1	0
85	Wave Propagation in Micromorphic Ferroelectric Solids. , 2003, , 205.		0
86	Vehicle Dynamic Simulation for Reconstruction of Rollover Crashes. , 2006, , 449.		0
87	A Neighboring Optimal Controller for Disturbance Rejection During Vehicle Evasive Maneuvers. , 2011, , .		0
88	Analyzing Steady-State Visual Evoked Potentials for Effective User Response Detection for Brain-Computer Interfaces. , 2013, , .		0
89	An Integrated Modeling Method to Evaluate Fleet Safety Performance of New Vehicle Designs. , 2013, , .		0
90	The 2014â€“2017 George N. Saridis Best Transactions Paper Award. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 4920-4921.	4.7	0

#	ARTICLE	IF	CITATIONS
91	Multiple Grid and Multiple Time-Scale (MGMT) Simulations in Continuum Mechanics. , 2012, , .		0
92	Concurrent Multiple-Time-Scale Simulations With Improved Numerical Dissipation for Structural Dynamics. , 2013, , .		0
93	Modeling and estimation of dynamics of time-delayed plants/processes. International Journal of Dynamics and Control, 0, , .	1.5	0