

Valentin Ivanov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1078067/publications.pdf>

Version: 2024-02-01

99
papers

1,287
citations

471477

17
h-index

454934

30
g-index

104
all docs

104
docs citations

104
times ranked

795
citing authors

#	ARTICLE	IF	CITATIONS
1	Geographically distributed real-time co-simulation of electric vehicle. , 2022, , .		1
2	Vehicle state and tyre force estimation: demonstrations and guidelines. Vehicle System Dynamics, 2021, 59, 675-702.	3.7	56
3	Integrated Braking Control for Electric Vehicles with In-Wheel Propulsion and Fully Decoupled Brake-by-Wire System. Vehicles, 2021, 3, 145-161.	3.1	16
4	MPC-based Path Following Design for Automated Vehicles with Rear Wheel Steering. , 2021, , .		8
5	Guest Editorial: Focused Section on Mechatronics in Road Mobility Systems. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1195-1200.	5.8	1
6	Variability of Gravel Pavement Roughness: An Analysis of the Impact on Vehicle Dynamic Response and Driving Comfort. Applied Sciences (Switzerland), 2021, 11, 7582.	2.5	10
7	Feasibility of a Neural Network-Based Virtual Sensor for Vehicle Unsprung Mass Relative Velocity Estimation. Sensors, 2021, 21, 7139.	3.8	9
8	Electric Wheel Dual Drive: Functional Integration for e-Vehicle. Lecture Notes in Mobility, 2021, , 211-222.	0.2	0
9	Optimization Using a Shared and Distributed X-in-the-Loop Testing Environment. , 2021, , .		1
10	An Explicit Nonlinear Model Predictive ABS Controller for Electro-Hydraulic Braking Systems. IEEE Transactions on Industrial Electronics, 2020, 67, 3990-4001.	7.9	65
11	Wheel Slip Control for the Electric Vehicle With In-Wheel Motors: Variable Structure and Sliding Mode Methods. IEEE Transactions on Industrial Electronics, 2020, 67, 8535-8544.	7.9	43
12	Addressed Fiber Bragg Structures in Load-Sensing Wheel Hub Bearings. Sensors, 2020, 20, 6191.	3.8	13
13	Offline and Online Tyre Model Reconstruction by Locally Weighted Projection Regression. , 2020, , .		3
14	Interrogator for Vibration and Shape Mode Sensing Using an Address Fiber Bragg Grating Array. , 2020, , .		0
15	A novel semi-empirical dynamic brake model for automotive applications. Tribology International, 2020, 146, 106223.	5.9	14
16	Survey on Wheel Slip Control Design Strategies, Evaluation and Application to Antilock Braking Systems. IEEE Access, 2020, 8, 10951-10970.	4.2	61
17	Optimization Based Sliding Mode Control in Active Suspensions: Design and Hardware-in-the-Loop Assessment. , 2020, , .		6
18	Recent Advancements in Continuous Wheel Slip Control. Lecture Notes in Mechanical Engineering, 2020, , 1525-1535.	0.4	1

#	ARTICLE	IF	CITATIONS
19	Torque Vectoring Control on Ice for Electric Vehicles with Individually Actuated Wheels. Lecture Notes in Mechanical Engineering, 2020, , 1543-1551.	0.4	1
20	Tire Particle Emissions: Demand on Reliable Characterization. Tire Science and Technology, 2020, 48, 107-122.	0.4	4
21	Robust Design of Combined Control Strategy for Electric Vehicle with In-wheel Propulsion. , 2020, , .		2
22	Novel Developing Environment for Automated and Electrified Vehicles using Remote and Distributed X-in-the-Loop Technique. , 2020, , .		2
23	Tire Strain Measurement System Based on Addressed FBG-Structures. , 2019, , .		9
24	Ride Blending Control for Electric Vehicles. World Electric Vehicle Journal, 2019, 10, 36.	3.0	17
25	On Highly-Skilled Autonomous Competition Vehicles: An FSM for Autonomous Rallycross. , 2019, , .		1
26	Microwave-Photonic Sensory Tire Control System Based on FBG. , 2019, , .		9
27	Load Sensing Bearings for Automotive Applications Based on Addressed Fiber Bragg Structures. , 2019, , .		12
28	Challenges of Integrated Vehicle Chassis Control: Some Findings of the European Project EVE. IEEJ Journal of Industry Applications, 2019, 8, 218-230.	1.1	3
29	European Innovation for Next Generation Electrified Vehicles and Components. , 2019, , .		3
30	Sliding Mode Methods in Electric Vehicle Stability Control. , 2019, , .		1
31	Application of Addressed Fiber Bragg Structures for Measuring Tire Deformation. , 2019, , .		11
32	Connected and Shared X-in-the-Loop Technologies for Electric Vehicle Design. World Electric Vehicle Journal, 2019, 10, 83.	3.0	18
33	Performance Benchmark of Yaw Rate Controllers by Active Front Steering: Comparative Analysis of Model Predictive Control, Linear Quadratic Integral Control and Yaw Moment Observer. , 2019, , .		3
34	Tire dynamic monitoring setup based on microwave photonic sensors. , 2019, , .		5
35	Addressed FBG-structures for tire strain measurement. , 2019, , .		8
36	Robust Continuous Wheel Slip Control With Reference Adaptation: Application to the Brake System With Decoupled Architecture. IEEE Transactions on Industrial Informatics, 2018, 14, 4212-4223.	11.3	51

#	ARTICLE	IF	CITATIONS
37	Shared and Distributed X-in-the-Loop Tests for Automotive Systems: Feasibility Study. IEEE Access, 2018, 6, 4017-4026.	4.2	25
38	Proposal of Lateral Force Disturbance Estimation Method for In-Wheel-Motored Electric Vehicles. , 2018, , .		0
39	Estimation of Power Dissipation in Disc Brakes and Tires for Motion Control Applications in Electric Vehicles. , 2018, , .		0
40	Development of Multi-Actuated Ground Vehicles: Educational aspects. IFAC-PapersOnLine, 2018, 51, 236-242.	0.9	2
41	Investigation of Cavitation Process in Monotube Shock Absorber. International Journal of Automotive Technology, 2018, 19, 801-810.	1.4	11
42	Creation of operation algorithms for combined operation of anti-lock braking system (ABS) and electric machine included in the combined power plant. IOP Conference Series: Materials Science and Engineering, 2018, 315, 012003.	0.6	4
43	Road profile estimation with modulation function based sensor fusion and series expansion for input reconstruction. , 2018, , .		7
44	Collaborative engineering of integrated chassis control for ground vehicle: Case study of lifelong learning technologies in automotive mechatronics. , 2017, , .		4
45	Improvement of traction performance and off-road mobility for a vehicle with four individual electric motors: Driving over icy road. Journal of Terramechanics, 2017, 69, 33-43.	3.1	37
46	Individual wheel slip control using decoupled electro-hydraulic brake system. , 2017, , .		5
47	Robust brake linings friction coefficient estimation for enhancement of ehb control. , 2017, , .		4
48	Interdisciplinary design methodology for systems of mechatronic systems focus on highly dynamic environmental applications. , 2017, , .		0
49	Survey on Modelling and Techniques for Friction Estimation in Automotive Brakes. Applied Sciences (Switzerland), 2017, 7, 873.	2.5	24
50	Sliding mode approach in semi-active suspension control. , 2017, , 191-228.		2
51	Base-brake functions of electric vehicle: disturbance compensation in decoupled brake system. International Journal of Vehicle Design, 2016, 70, 69.	0.3	7
52	Experimental investigations on continuous regenerative anti-lock braking system of full electric vehicle. International Journal of Automotive Technology, 2016, 17, 327-338.	1.4	30
53	Advanced control functions of decoupled electro-hydraulic brake system. , 2016, , .		7
54	The new paradigm of an anti-lock braking system for a full electric vehicle: experimental investigation and benchmarking. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2016, 230, 1364-1377.	1.9	31

#	ARTICLE	IF	CITATIONS
55	All-wheel-drive electric vehicle with on-board motors: Experimental validation of the motion control systems. , 2015, , .		11
56	Systematization of Integrated Motion Control of Ground Vehicles. IEEE Access, 2015, 3, 2080-2099.	4.2	25
57	Wheel slip control for all-wheel drive electric vehicle with compensation of road disturbances. Journal of Terramechanics, 2015, 61, 1-10.	3.1	31
58	Electric vehicles with individually controlled on-board motors: Revisiting the ABS design. , 2015, , .		13
59	A review of fuzzy methods in automotive engineering applications. European Transport Research Review, 2015, 7, .	4.8	31
60	Vehicle motion control with subsystem prioritization. Mechatronics, 2015, 30, 297-315.	3.3	24
61	A Survey of Traction Control and Antilock Braking Systems of Full Electric Vehicles With Individually Controlled Electric Motors. IEEE Transactions on Vehicular Technology, 2015, 64, 3878-3896.	6.3	178
62	Hierarchical control of overactuated vehicles via sliding mode techniques. , 2014, , .		2
63	Cost functions for assessment of vehicle dynamics. , 2013, , .		1
64	Vehicle dynamics with brake hysteresis. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2013, 227, 139-150.	1.9	17
65	Hardware-in-the-loop test rig for integrated vehicle control systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 683-688.	0.4	16
66	Vehicle dynamics control with energy recuperation based on control allocation for independent wheel motors and brake system. International Journal of Powertrains, 2013, 2, 153.	0.3	20
67	Project Adtyre: Towards Dynamic Tyre Inflation Control. Lecture Notes in Electrical Engineering, 2013, , 185-198.	0.4	7
68	Torque Vectoring for Electric Vehicles with Individually Controlled Motors: State-of-the-Art and Future Developments. World Electric Vehicle Journal, 2012, 5, 617-628.	3.0	33
69	Fuzzy architecture of systems with alterable information: case study for tyre ground friction estimators. International Journal of Reliability and Safety, 2011, 5, 398.	0.2	1
70	Fuzzy identification of uncertain ground parameters for autonomous mobile machines. International Journal of Vehicle Autonomous Systems, 2011, 9, 219.	0.2	0
71	Fuzzy evaluation of tyreâ€œsurface interaction parameters. Journal of Terramechanics, 2010, 47, 113-130.	3.1	22
72	Kinematic Discrepancy Minimization for AWD Terrain Vehicle Dynamics Control. , 2010, , .		2

#	ARTICLE	IF	CITATIONS
73	Analysis of Tire Contact Parameters Using Visual Processing. <i>Advances in Tribology</i> , 2010, 2010, 1-11.	2.1	11
74	Fuzzy Architecture of Safety-Relevant Vehicle Systems. , 2010, , .		0
75	Assessment of tire contact properties by nondestructive analysis. Part 1. The contact length in the region of adhesion at slow rolling velocities. <i>Journal of Friction and Wear</i> , 2008, 29, 362-368.	0.5	3
76	Evaluation of tire contact properties using nondestructive testing. Part 2: Experimental determination and fuzzy model of the contact patch in the static state. <i>Journal of Friction and Wear</i> , 2008, 29, 448-454.	0.5	4
77	Research in hydraulic brake components and operational factors influencing the hysteresis losses. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2008, 222, 1633-1645.	1.9	9
78	Alterable fuzzy sets in automotive control applications. <i>International Journal of Modelling, Identification and Control</i> , 2008, 3, 305.	0.2	8
79	Intelligent control for ABS application with identification of road and environmental properties. <i>International Journal of Vehicle Autonomous Systems</i> , 2006, 4, 44.	0.2	7
80	Investigation into tyre-road interaction based on fuzzy logic methods. <i>International Journal of Vehicle Autonomous Systems</i> , 2005, 3, 198.	0.2	5
81	The Kinetic Brake Booster. , 2001, , .		0
82	About Interrelation Between the Tire Grip Properties and the Wheel Sliding. , 2001, , .		1
83	Structural Synthesizing of Intellectual Systems of Automobile Active Safety. , 2000, , .		4
84	The Theoretical Concepts for Pre-Extreme ABS. , 0, , .		3
85	Simulation of Brake Control for Motorcycles. , 0, , .		1
86	Identification of Road Properties in Advanced Active Safety Applications: Overview and Conceptual Solutions. , 0, , .		0
87	Investigation on Hysteresis Losses into Disc Brake Gear for Heavy Vehicles. , 0, , .		4
88	Advancement of Vehicle Dynamics Control with Monitoring the Tire Rolling Environment. <i>SAE International Journal of Passenger Cars - Mechanical Systems</i> , 0, 3, 199-216.	0.4	10
89	Investigation of Brake Control Using Test Rig-in-the-Loop Technique. , 0, , .		15
90	Combined Testing Technique: Development of Friction Brake System for Electric Vehicle. , 0, , .		2

#	ARTICLE	IF	CITATIONS
91	Design and Testing of ABS for Electric Vehicles with Individually Controlled On-Board Motor Drives. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 7, 902-913.	0.4	19
92	Influence of the Tire Inflation Pressure Variation on Braking Efficiency and Driving Comfort of Full Electric Vehicle with Continuous Anti-Lock Braking System. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 8, 460-467.	0.4	12
93	Experimental Study on Continuous ABS Operation in Pure Regenerative Mode for Full Electric Vehicle. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 8, 364-369.	0.4	16
94	Active Brake Judder Compensation Using an Electro-Hydraulic Brake System. SAE International Journal of Commercial Vehicles, 0, 8, 20-26.	0.4	5
95	Investigating the Parameterization of Dugoff Tire Model Using Experimental Tire-Ice Data. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 10, 83-92.	0.4	13
96	Estimation of Brake Friction Coefficient for Blending Function of Base Braking Control. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 10, 774-785.	0.4	17
97	E-Mobility-Opportunities and Challenges of Integrated Corner Solutions. SAE International Journal of Advances and Current Practices in Mobility, 0, 3, 2462-2472.	2.0	5
98	Electric Vehicle Corner Architecture: Driving Comfort Evaluation Using Objective Metrics. , 0, , .		1
99	Towards Brand-Independent Architectures, Components and Systems for Next Generation Electrified Vehicles Optimised for the Infrastructure. SAE International Journal of Advances and Current Practices in Mobility, 0, 4, 1906-1922.	2.0	1