

Matteo Corno

List of Publications by Year in descending order

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144
papers

2,211
citations

218592

26
h-index

302012

39
g-index

152
all docs

152
docs citations

152
times ranked

1385
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemical Model-Based State of Charge Estimation for Li-Ion Cells. IEEE Transactions on Control Systems Technology, 2015, 23, 117-127.	3.2	104
2	Vehicle sideslip estimation: A kinematic based approach. Control Engineering Practice, 2017, 67, 1-12.	3.2	95
3	On optimal motorcycle braking. Control Engineering Practice, 2008, 16, 644-657.	3.2	81
4	Data-Driven Design of Braking Control Systems. IEEE Transactions on Control Systems Technology, 2013, 21, 186-193.	3.2	75
5	On linearâ€parameterâ€varying (LPV) slipâ€controller design for twoâ€wheeled vehicles. International Journal of Robust and Nonlinear Control, 2009, 19, 1313-1336.	2.1	70
6	Hybrid ABS Control Using Force Measurement. IEEE Transactions on Control Systems Technology, 2012, 20, 1223-1235.	3.2	65
7	Traction Control for Ride-by-Wire Sport Motorcycles: A Second-Order Sliding Mode Approach. IEEE Transactions on Industrial Electronics, 2009, 56, 3347-3356.	5.2	56
8	Adaptive Cascade Control of a Brake-By-Wire Actuator for Sport Motorcycles. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1310-1319.	3.7	56
9	Adaptive positionâ€pressure control of a brake by wire actuator for sport motorcycles. European Journal of Control, 2014, 20, 79-86.	1.6	53
10	Active Adaptive Battery Aging Management for Electric Vehicles. IEEE Transactions on Vehicular Technology, 2020, 69, 258-269.	3.9	49
11	Human-in-the-Loop Bicycle Control via Active Heart Rate Regulation. IEEE Transactions on Control Systems Technology, 2015, 23, 1029-1040.	3.2	46
12	Nonlinear Pressure Control for BBW Systems via Dead-Zone and Antiwindup Compensation. IEEE Transactions on Control Systems Technology, 2016, 24, 1419-1431.	3.2	45
13	Design and Validation of a Gain-Scheduled Controller for the Electronic Throttle Body in Ride-by-Wire Racing Motorcycles. IEEE Transactions on Control Systems Technology, 2011, 19, 18-30.	3.2	40
14	Design, Control, and Validation of a Charge-Sustaining Parallel Hybrid Bicycle. IEEE Transactions on Control Systems Technology, 2016, 24, 817-829.	3.2	38
15	Road-Departure Prevention in an Emergency Obstacle Avoidance Situation. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2014, 44, 621-629.	5.9	37
16	Optimal energy management in series hybrid electric bicycles. Automatica, 2017, 81, 96-106.	3.0	36
17	Torque Vectoring for High-Performance Electric Vehicles: An Efficient MPC Calibration. , 2020, 4, 725-730.		36
18	Adaptive-robust friction compensation in a hybrid brake-by-wire actuator. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2014, 228, 769-786.	0.7	34

#	ARTICLE	IF	CITATIONS
19	Experimental Identification of Engine-to-Slip Dynamics for Traction Control Applications in a Sport Motorbike. <i>European Journal of Control</i> , 2010, 16, 88-108.	1.6	33
20	On adaptive electronic throttle control for sport motorcycles. <i>Control Engineering Practice</i> , 2013, 21, 42-53.	3.2	33
21	Designing On-Demand Four-Wheel-Drive Vehicles via Active Control of the Central Transfer Case. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2010, 11, 931-941.	4.7	32
22	Data-Driven Online Speed Optimization in Autonomous Sailboats. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2016, 17, 762-771.	4.7	32
23	A Robust Steering Assistance System for Road Departure Avoidance. <i>IEEE Transactions on Vehicular Technology</i> , 2012, 61, 1953-1960.	3.9	30
24	Direct data-driven control of linear time-delay systems. <i>Asian Journal of Control</i> , 2012, 14, 652-663.	1.9	30
25	Single-Track Vehicle Dynamics Control: State of the Art and Perspective. <i>IEEE/ASME Transactions on Mechatronics</i> , 2015, 20, 1521-1532.	3.7	30
26	Model-Based Estimation of Lithium Concentrations and Temperature in Batteries Using Soft-Constrained Dual Unscented Kalman Filtering. <i>IEEE Transactions on Control Systems Technology</i> , 2021, 29, 926-933.	3.2	30
27	Semi-Active Steering Damper Control in Two-Wheeled Vehicles. <i>IEEE Transactions on Control Systems Technology</i> , 2011, 19, 1003-1020.	3.2	29
28	Traction-Control-Oriented State Estimation for Motorcycles. <i>IEEE Transactions on Control Systems Technology</i> , 2013, 21, 2400-2407.	3.2	29
29	Active braking control of two-wheeled vehicles on curves. <i>International Journal of Vehicle Autonomous Systems</i> , 2009, 7, 243.	0.2	28
30	An LPV Approach to Autonomous Vehicle Path Tracking in the Presence of Steering Actuation Nonlinearities. <i>IEEE Transactions on Control Systems Technology</i> , 2021, 29, 1766-1774.	3.2	28
31	On the Discretization of Linear Fractional Representations of LPV Systems. <i>IEEE Transactions on Control Systems Technology</i> , 2012, 20, 1473-1489.	3.2	27
32	Load sensing bearing based road-tyre friction estimation considering combined tyre slip. <i>Mechatronics</i> , 2016, 39, 136-146.	2.0	26
33	Vehicle sideslip estimator using load sensing bearings. <i>Control Engineering Practice</i> , 2016, 54, 46-57.	3.2	25
34	Shared control for road departure prevention. , 2011, , .		24
35	Hazard Detection for Motorcycles via Accelerometers: A Self-Organizing Map Approach. <i>IEEE Transactions on Cybernetics</i> , 2017, 47, 3609-3620.	6.2	23
36	Self-sustaining strategy for a hybrid electric bike. , 2013, , .		22

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37	Bilateral Control of SeNZAâ€”A Series Hybrid Electric Bicycle. IEEE Transactions on Control Systems Technology, 2017, 25, 864-874.	3.2	22
38	Robust Vehicle Sideslip Estimation Based on Kinematic Considerations. IFAC-PapersOnLine, 2017, 50, 14855-14860.	0.5	21
39	Electronic Stability Control for Powered Two-Wheelers. IEEE Transactions on Control Systems Technology, 2014, 22, 265-272.	3.2	19
40	Road Slope Estimation in Bicycles without Torque Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6295-6300.	0.4	18
41	Single-Sensor Control Strategies for Semi-Active Steering Damper Control in Two-Wheeled Vehicles. IEEE Transactions on Vehicular Technology, 2012, 61, 813-820.	3.9	17
42	$\{m NO\}_{m x}$ Estimation in Diesel Engines via In-Cylinder Pressure Measurement. IEEE Transactions on Control Systems Technology, 2014, 22, 396-403.	3.2	17
43	Sliding mode-based lateral vehicle dynamics control using tyre force measurements. Vehicle System Dynamics, 2015, 53, 1599-1619.	2.2	17
44	Performance Assessment of Active Aerodynamic Surfaces for Comfort and Handling Optimization in Sport Cars. IEEE Transactions on Control Systems Technology, 2016, 24, 189-199.	3.2	16
45	Electronic throttle control for ride-by-wire in sport motorcycles. , 2008, , .		15
46	Design, Analysis, and Validation of a Haptic-Based Driver Support System for Traction Control. IEEE Transactions on Intelligent Transportation Systems, 2013, 14, 1849-1859.	4.7	15
47	Pedaling torque reconstruction for half pedaling sensor. , 2013, , .		15
48	Chronic Treatment With Pirenzepine Decreases Growth Hormone Secretion in Insulin-Dependent Diabetes Mellitus. Journal of Clinical Endocrinology and Metabolism, 1989, 68, 392-396.	1.8	14
49	H<inf>âˆž</inf> control with look-ahead for lane keeping in autonomous vehicles. , 2017, , .		14
50	Hammersteinâ€”Wiener modelling of a magneto-rheological dampers considering the magnetization dynamics. Control Engineering Practice, 2021, 112, 104829.	3.2	14
51	Design and Validation of a Full Body Control Semi-Active Suspension Strategy for a Supercar. IFAC-PapersOnLine, 2019, 52, 667-672.	0.5	13
52	Experimental automatic calibration of a semi-active suspension controller via Bayesian Optimization. Control Engineering Practice, 2021, 112, 104826.	3.2	13
53	Spacecraft attitude dynamics and control in the presence of large magnetic residuals. Control Engineering Practice, 2009, 17, 456-468.	3.2	12
54	Advanced yaw control of four-wheeled vehicles via rear active differential braking. , 2009, , .		11

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55	Enhancing active safety of two-wheeled vehicles via electronic stability control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 638-643.	0.4	11
56	Optimal energy management in series hybrid electric bicycles. , 2015, , .		11
57	Human machine interfacing issues in SeNZA, a Series Hybrid Electric Bicycle. , 2015, , .		11
58	Control-Oriented Vehicle Attitude Estimation With Online Sensors Bias Compensation. , 2009, , .		10
59	Virtual Reference Feedback Tuning of Internal Model Controllers. , 2010, , .		10
60	Active Control of Aerodynamic Surfaces for Ride Control in Sport Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7553-7558.	0.4	10
61	A haptic-based, safety-oriented, braking assistance system for road bicycles. , 2017, , .		10
62	Efficient Control-Oriented Coupled Electrochemical Thermal Modeling of Li-Ion Cells. IEEE Transactions on Industrial Electronics, 2021, 68, 7024-7033.	5.2	10
63	On the Periodic Noise Affecting Wheel Speed Measurement. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1695-1700.	0.4	9
64	Combined battery SOC/SOH estimation using a nonlinear adaptive observer. , 2015, , .		9
65	Adaptive Ultrasound-Based Tractor Localization for Semi-Autonomous Vineyard Operations. Agronomy, 2021, 11, 287.	1.3	9
66	Advantages of rear steer in LTI and LPV vehicle stability control. , 2013, , .		8
67	Cyclist Heart Rate Control via a Continuously Varying Transmission. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 912-917.	0.4	8
68	Combined performance and stability optimisation via central transfer case active control in four-wheeled vehicles. , 2009, , .		7
69	Design of an Adaptive Throttle-by-Wire Control System for a Sport Motorbike. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 4785-4790.	0.4	7
70	Longitudinal Velocity Estimation in Single-Track Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1701-1706.	0.4	7
71	Lateral vehicle dynamics control based on tyre utilization coefficients and tyre force measurements. , 2013, , .		7
72	An IMU-Driven Rider-on-Saddle Detection System for Electric-Power-Assisted Bicycles. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 3184-3193.	4.7	7

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73	An Anti-Lock Braking System for Bicycles. , 2018, , .		7
74	Linear, Parameter-Varying wheel slip control for two-wheeled vehicles. , 2008, , .		6
75	Towards Electronic Stability Control for Two-Wheeled Vehicles: A Preliminary Study. , 2010, , .		6
76	Design of steering angle observers for the active control of two-wheeled vehicles. , 2010, , .		6
77	Force-Based ABS Control Using Lateral Force Measurement. , 2011, , .		6
78	An efficient control oriented modeling approach for Lithium ion cells. , 2012, , .		6
79	Solving Algebraic Riccati Equation real time for Integrated Vehicle Dynamics Control. , 2012, , .		6
80	Improving high speed road-holding using actively controlled aerodynamic surfaces. , 2013, , .		6
81	Accelerometer-based data-driven hazard detection and classification for motorcycles. , 2014, , .		6
82	Design and Control of an All-in-the-Wheel Assisted Kick Scooter. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1858-1867.	3.7	6
83	Experimental Validation of a Hierarchical Suspension Control via MR Damper. IFAC-PapersOnLine, 2020, 53, 14401-14406.	0.5	6
84	Model Predictive Control of High-Performance Braking Systems: A Force-Based Approach. , 2022, 6, 2383-2388.		6
85	Second Order Sliding Mode for traction control in ride-by-wire sport motorcycles. , 2009, , .		5
86	On the performance increase of wheel deceleration control through force sensing. , 2010, , .		5
87	A new approach to the design of coordinated road departure avoidance systems. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2012, 226, 45-60.	0.5	5
88	A diffusive electro-equivalent Li-ion battery model. , 2013, , .		5
89	Vehicle yaw rate control using tyre force measurements. , 2015, , .		5
90	Two-wheeled vehicles black-box sideslip angle estimation. , 2017, , .		5

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91	Differential braking-based anti-rollover control for non-tilting narrow-track vehicles. , 2017, , .		5
92	Real-time cycling cadence estimation via wheel speed measurement. International Journal of Adaptive Control and Signal Processing, 2018, 32, 1052-1066.	2.3	5
93	Friction State Classification Based on Vehicle Inertial Measurements. IFAC-PapersOnLine, 2019, 52, 72-77.	0.5	5
94	Vehicle sideslip estimation via kernel-based LPV identification: Theory and experiments. Automatica, 2020, 122, 109237.	3.0	5
95	Enhancing skyhook for semi-active suspension control via machine learning. IFAC Journal of Systems and Control, 2021, 17, 100161.	1.1	5
96	Control-Oriented Modeling of Motorcycle Dynamics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 769-774.	0.4	4
97	A soft-constrained unscented Kalman filter estimator for Li-ion cells electrochemical model. , 2017, , .		4
98	Mixed-kinematic body sideslip angle estimator for high performance cars. , 2018, , .		4
99	Battery aging management for Fully Electric Vehicles. , 2018, , .		4
100	Modeling of gas exchange dynamics using cycle-ergometer tests. IFAC-PapersOnLine, 2018, 51, 349-354.	0.5	4
101	On Optimal Control of Multichamber Suspensions. IFAC-PapersOnLine, 2020, 53, 14444-14449.	0.5	4
102	An Efficient Eco-Planner for Autonomous Vehicles With Focus on Passengers Comfort. IEEE Transactions on Vehicular Technology, 2022, 71, 6984-6995.	3.9	4
103	An energy-driven road-to-driver assistance system for intersections. , 2015, , .		3
104	Traction control oriented torque-to-slip identification for powered two-wheelers. , 2015, , .		3
105	Modeling and speed limitation control of an electric kick scooter. , 2015, , .		3
106	Real-time pedaling rate estimation via wheel speed filtering. IFAC-PapersOnLine, 2017, 50, 6010-6015.	0.5	3
107	Experimental Validation of an Antilock Braking System for Snowmobiles With Lateral Stability Considerations. IEEE Transactions on Control Systems Technology, 2020, 28, 705-712.	3.2	3
108	Design of a Charge-Sustaining Energy Management System for a Free-Floating Electric Shared Bicycle. IEEE Transactions on Control Systems Technology, 2021, , 1-13.	3.2	3

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109	An Optimal Battery Sizing Co-Design Approach for Electric Racing Cars. , 2022, 6, 3074-3079.		3
110	Nonlinear Modeling and Control of a Dual-Stage Hybrid Ride-by-Wire Throttle Body for a Sport Motorbike. , 2009, , .		2
111	Rapid virtual prototyping and dynamics analysis of a common rail injection system for gasoline engines. International Journal of Vehicle Systems Modelling and Testing, 2009, 4, 17.	0.1	2
112	Wheelie detection for single-track vehicles. , 2013, , .		2
113	Deadzone compensation and anti-windup design for brake-by-wire systems. , 2014, , .		2
114	Sliding mode control for LPV systems. , 2016, , .		2
115	Control-oriented coupled electrochemical thermal model for Li-Ion batteries. , 2017, , .		2
116	Predictive Cylinder Deactivation Control for Large Displacement Automotive Engines. IEEE Transactions on Vehicular Technology, 2019, 68, 9554-9563.	3.9	2
117	Head-up Displays for Augmented Reality Applications in Racing Vehicles: a Feasibility Study. , 2019, , .		2
118	Modeling and analysis of a bicycle equipped with in-wheel suspensions. Mechanical Systems and Signal Processing, 2021, 155, 107548.	4.4	2
119	Closed-loop Battery Aging Management for Electric Vehicles. IFAC-PapersOnLine, 2020, 53, 14199-14204.	0.5	2
120	Direct Longitudinal Force Feedback for High-Performance Vehicle Dynamics Control Systems. , 2021, , .		2
121	A Yaw Rate Based Stability Control for Under-Actuated Vehicles. , 2020, , .		2
122	Coordinated lateral and longitudinal vehicle dynamics control of a scale RC vehicle. , 2015, , .		1
123	Vehicle sideslip estimation using tyre force measurements. , 2015, , .		1
124	Design and control of an electrically assisted kick scooter. , 2016, , .		1
125	Cyclistâ€™s Riding Style Assessment via Inertial Measurement. IFAC-PapersOnLine, 2017, 50, 994-999.	0.5	1
126	Longitudinal and Lateral Dynamics Evaluation of an Anti-Lock Braking System for Trail Snowmobiles. , 2017, , .		1

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127	Charge sustaining hybrid electric bikes in free-floating sharing service. , 2020, , .		1
128	A mass-preserving Sliding Mode Observer for Li-ion cells electrochemical model. , 2018, , .		1
129	Linear Parameter Varying Path Tracking Control for Over-Actuated Electric Vehicles. <i>Frontiers in Control Engineering</i> , 2021, 2, .	0.4	1
130	On Vehicle Pitch Estimation via solid-state LIDAR. <i>IFAC-PapersOnLine</i> , 2020, 53, 13904-13909.	0.5	1
131	Extended target tracking for autonomous street crossing. <i>IFAC-PapersOnLine</i> , 2020, 53, 15440-15445.	0.5	1
132	Measuring Urban Sidewalk Practicability: a Sidewalk Robot Feasibility Index. <i>IFAC-PapersOnLine</i> , 2020, 53, 15053-15058.	0.5	1
133	Is Charge Sustaining Achievable in Electric Free-Floating Bicycle Sharing?. , 2020, , .		1
134	Flexible Pricing Strategies in Electric Free-Floating Bicycle Sharing. <i>IEEE Access</i> , 2021, 9, 152972-152983.	2.6	1
135	A concurrent controllers integration strategy to enhance the riding experience in bicycle driveline emulators. , 2021, , .		1
136	Experimental Identification of Rear Wheel Slip Dynamics of a Motorbike. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009, 42, 1229-1234.	0.4	0
137	Linear Parameter-Varying System Identification: The Subspace Approach. <i>Lecture Notes in Control and Information Sciences</i> , 2012, , 53-65.	0.6	0
138	A haptic-based traction control system. , 2013, , .		0
139	An IMU-driven rider-on-saddle detection system for Electric Power Assisted bicycles. , 2016, , .		0
140	Analysis of a vibrotactile actuator for bicycle handlebars. , 2017, , .		0
141	Modeling and Control of a Servo Mechanical Press. , 2018, , .		0
142	Inertial-Based Control of an Electrically Assisted Pushcart. , 2018, , .		0
143	LiDAR Based Obstacle detection for Snow Groomers. <i>IFAC-PapersOnLine</i> , 2020, 53, 15469-15474.	0.5	0
144	Black-Box Model-Based Active Damping of Driveline Oscillations. , 2021, , .		0