

Pierluigi Pisu

List of Publications by Year in descending order

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128
papers

3,130
citations

257101

24
h-index

197535

49
g-index

129
all docs

129
docs citations

129
times ranked

2343
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimal hybrid control of interarea oscillation in power system using energy storage systems. Optimal Control Applications and Methods, 2023, 44, 758-772.	1.3	1
2	False Data Injection Attack in a Platoon of CACC: Real-Time Detection and Isolation With a PDE Approach. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 8692-8703.	4.7	18
3	Detection of False Data Injection Attack in Connected and Automated Vehicles via Cloud-Based Sandboxing. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 9078-9088.	4.7	14
4	Impact of Dust and Sand on 5G Communications for Connected Vehicles Applications. IEEE Journal of Radio Frequency Identification, 2022, 6, 229-239.	1.5	18
5	A Hybrid Controller for DOS-Resilient String-Stable Vehicle Platoons. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 1697-1707.	4.7	33
6	A Smart Companion Robot for Automotive Assembly. , 2021, , 239-265.		0
7	Inter-Area Oscillation Damping via Hybrid LQR State Feedback Control of Large-Scale Battery. , 2021, , .		0
8	Measurement Unknown Delay Estimation in Cyber-Physical Systems: a PDE approach. , 2021, , .		1
9	Frequency Control of Large-Scale Interconnected Power Systems via Battery Integration: A Comparison between the Hybrid Battery Model and WECC Model. Energies, 2021, 14, 5605.	1.6	1
10	The effect of Dust and Sand on the 5G Millimeter-Wave links. , 2021, , .		4
11	Secure Connected and Automated Vehicles against False Data Injection Attack using Cloud-based Data Fusion. IFAC-PapersOnLine, 2021, 54, 638-643.	0.5	0
12	Optimal Multi-Channel Output Feedback Control to Damp Power System Oscillation. , 2021, , .		0
13	A Hybrid Control Framework for Large-Scale Battery Integration to the Power System for Stability Analysis. , 2020, , .		2
14	LMI-Based Output Feedback Control Design in the Presence of Sporadic Measurements. , 2020, , .		2
15	Real-time False Data Injection Attack Detection in Connected Vehicle Systems with PDE modeling. , 2020, , .		10
16	Large-Scale Battery Energy Storage System Dynamic Model for Power System Stability Analysis. , 2020, , .		15
17	Support-Vector Machine Approach for Robust Fault Diagnosis of Electric Vehicle Permanent Magnet Synchronous Motor. Proceedings of the Annual Conference of the Prognostics and Health Management Society Prognostics and Health Management Society Conference, 2020, 12, 10.	0.2	2
18	On DoS Resiliency Analysis of Networked Control Systems: Trade-Off Between Jamming Actions and Network Delays. , 2019, 3, 559-564.		17

#	ARTICLE	IF	CITATIONS
19	A Probabilistic Framework for Trajectory Prediction in Traffic Utilizing Driver Characterization. , 2019, , .		1
20	DoS-Resilient Hybrid Controller for String-Stable Connected Vehicles. , 2019, , .		4
21	Decentralized Servomechanism Control Design for Inter-Area Oscillations Damping in Power System. , 2019, , .		1
22	A Control Strategy for Driver Specific Driver Assistant System to Improve Fuel Economy of Connected Vehicles in Urban Roads. , 2019, , .		3
23	Network Aware Control Design for String Stabilization in Vehicle Platoons: An LMI Approach. , 2019, , .		3
24	Hierarchical energy management control strategies for connected hybrid electric vehicles considering efficiencies feedback. Simulation Modelling Practice and Theory, 2019, 90, 1-15.	2.2	35
25	Behavior Identification and Prediction for a Probabilistic Risk Framework. , 2019, , .		3
26	Real-Time Detection and Estimation of Denial of Service Attack in Connected Vehicle Systems. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 3893-3902.	4.7	159
27	Design and optimization of equivalent consumption minimization strategy for 4WD hybrid electric vehicles incorporating vehicle connectivity. Science China Technological Sciences, 2018, 61, 147-157.	2.0	15
28	Hierarchical distributed coordination strategy of connected and automated vehicles at multiple intersections. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2018, 22, 144-158.	2.6	40
29	Engine-Map-Based Predictive Fuel-Efficient Control Strategies for a Group of Connected Vehicles. Automotive Innovation, 2018, 1, 311-319.	3.1	5
30	Inter-Area Oscillation Damping in Large-Scale Power Systems Using Decentralized Control. , 2018, , .		7
31	Closed-loop hierarchical control strategies for connected and autonomous hybrid electric vehicles with random errors. IET Intelligent Transport Systems, 2018, 12, 1378-1385.	1.7	9
32	Replay Attack Detection in a Platoon of Connected Vehicles with Cooperative Adaptive Cruise Control. , 2018, , .		31
33	Pointing Gesture Based Point of Interest Identification in Vehicle Surroundings. , 2018, , .		1
34	The Impact of Dedicated Short Range Communication on Cooperative Adaptive Cruise Control. , 2018, , .		15
35	Cooperative Adaptive Cruise Control: PDE Modeling and Stability Analysis. , 2018, , .		4
36	Fast Model Predictive Control-Based Fuel Efficient Control Strategy for a Group of Connected Vehicles in Urban Road Conditions. IEEE Transactions on Control Systems Technology, 2017, 25, 760-767.	3.2	141

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37	Global optimal energy management control strategies for connected four-wheel drive hybrid electric vehicles. IET Intelligent Transport Systems, 2017, 11, 264-272.	1.7	44
38	Modeling and optimal energy management of a power split hybrid electric vehicle. Science China Technological Sciences, 2017, 60, 713-725.	2.0	22
39	Fuel efficient model predictive control strategies for a group of connected vehicles incorporating vertical vibration. Science China Technological Sciences, 2017, 60, 1732-1746.	2.0	3
40	Model-based design validation for advanced energy management strategies for electrified hybrid power trains using innovative vehicle hardware in the loop (VHIL) approach. Applied Energy, 2017, 204, 287-302.	5.1	34
41	Resilient control strategy under Denial of Service in connected vehicles. , 2017, , .		45
42	A Control Oriented Perspective for Security in Connected and Automated Vehicles. Mechanical Engineering, 2017, 139, S17-S20.	0.0	2
43	Coordination strategy for vehicles passing multiple signalized intersections: A connected vehicle penetration rate study. , 2017, , .		15
44	A Receding Horizon Switching Control Resilient to Communication Failures for Connected Vehicles. , 2017, , .		5
45	Hierarchical Energy Management Control of Connected Hybrid Electric Vehicles on Urban Roads With Efficiencies Feedback. , 2016, , .		9
46	Sensor Fault Diagnosis of Connected Vehicles Under Imperfect Communication Network. , 2016, , .		7
47	A fuel efficient control strategy for connected vehicles in multiple-lane urban roads. , 2016, , .		8
48	Sensor Fault Detection, Isolation, and Estimation in Lithium-Ion Batteries. IEEE Transactions on Control Systems Technology, 2016, 24, 2141-2149.	3.2	101
49	Control design and fuel economy investigation of power split HEV with energy regeneration of suspension. Applied Energy, 2016, 182, 576-589.	5.1	61
50	Model-based real-time thermal fault diagnosis of Lithium-ion batteries. Control Engineering Practice, 2016, 56, 37-48.	3.2	91
51	Hierarchical control strategies for energy management of connected hybrid electric vehicles in urban roads. Transportation Research Part C: Emerging Technologies, 2016, 62, 70-86.	3.9	128
52	Fault Detection and Isolation with Applications to Vehicle Systems. , 2016, , 293-321.		1
53	Fuel Efficient Control Strategies for Connected Hybrid Electric Vehicles in Urban Roads. , 2015, , .		4
54	Estimation of Lithium-Ion Concentrations in Both Electrodes of a Lithium-Ion Battery Cell. , 2015, , .		1

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55	Nonlinear Adaptive Observer for a Lithium-Ion Battery Cell Based on Coupled Electrochemical-Thermal Model. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	28
56	On-board Thermal Fault Diagnosis of Lithium-ion Batteries For Hybrid Electric Vehicle Application. IFAC-PapersOnLine, 2015, 48, 389-394.	0.5	24
57	Observer-Based Diagnostic Scheme for Lithium-Ion Batteries. , 2015, , .		2
58	A Quantized Stochastic Modeling Approach for Fault Diagnosis of Lithium-ion Batteries. IFAC-PapersOnLine, 2015, 48, 970-975.	0.5	2
59	Investigation of Torque Security Problems in Electrified Vehicles. , 2015, , .		4
60	Online state and parameter estimation of Battery-Double Layer Capacitor Hybrid Energy Storage System. , 2015, , .		13
61	Secure Vehicle Localization and Cruise Control for Connected Vehicles. IFAC-PapersOnLine, 2015, 48, 1192-1197.	0.5	1
62	Online Optimal Control of Connected Vehicles for Efficient Traffic Flow at Merging Roads. , 2015, , .		66
63	A Comparative Study of Three Fault Diagnosis Schemes for Wind Turbines. IEEE Transactions on Control Systems Technology, 2015, 23, 1853-1868.	3.2	54
64	Nonlinear Robust Observers for State-of-Charge Estimation of Lithium-Ion Cells Based on a Reduced Electrochemical Model. IEEE Transactions on Control Systems Technology, 2015, 23, 1935-1942.	3.2	126
65	Observer Design Based Cyber Security for Cyber Physical Systems. , 2015, , .		0
66	A fuel economic model predictive control strategy for a group of connected vehicles in urban roads. , 2015, , .		51
67	A Hardware-in-the-Loop Platform for a Series Hybrid Powertrain Featuring Two Equivalent Consumption Minimization Strategies. , 2014, , .		1
68	Sliding Mode Observer and State-Machine-Based Fault Diagnosis With Application in a Vehicle Chassis Steering System. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2014, 136, .	0.9	3
69	PEM Fuel Cell Flooding Diagnostics Based on an Unscented Kalman Filter Approach. , 2014, , .		0
70	A control benchmark on the energy management of a plug-in hybrid electric vehicle. Control Engineering Practice, 2014, 29, 287-298.	3.2	110
71	Combined estimation of State-of-Charge and State-of-Health of Li-ion battery cells using SMO on electrochemical model. , 2014, , .		25
72	Adaptive Observer Design for a Li-Ion Cell Based on Coupled Electrochemical-Thermal Model. , 2014, , .		5

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73	Thermal modeling of an on-board nickel-metal hydride pack in a power-split hybrid configuration using a cell-based resistance-capacitance, electro-thermal model. International Journal of Energy Research, 2013, 37, 331-346.	2.2	9
74	Model-based automotive system integration: using vehicle hardware in-the-loop simulation for an integration of advanced hybrid electric powertrain. International Journal of Electric and Hybrid Vehicles, 2013, 5, 215.	0.2	3
75	Development of an Electric Vehicle Hardware-in-the-Loop Emulation Platform. , 2013, , .		1
76	Merging mobility and energy vision with hybrid electric vehicles and vehicle infrastructure integration. Energy Policy, 2012, 41, 599-609.	4.2	29
77	An energy optimization strategy for power-split drivetrain plug-in hybrid electric vehicles. Transportation Research Part C: Emerging Technologies, 2012, 22, 29-41.	3.9	83
78	Forward power-train energy management modeling for assessing benefits of integrating predictive traffic data into plug-in-hybrid electric vehicles. Transportation Research, Part D: Transport and Environment, 2012, 17, 201-207.	3.2	38
79	Adaptive threshold-based fault detection and isolation for automotive electrical systems. , 2011, , .		9
80	Robust Fault Diagnosis for a Horizontal Axis Wind Turbine. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 7055-7060.	0.4	16
81	Comprehensive thermal modeling of a power-split hybrid powertrain using battery cell model. Journal of Power Sources, 2011, 196, 6588-6594.	4.0	10
82	Role of Terrain Preview in Energy Management of Hybrid Electric Vehicles. IEEE Transactions on Vehicular Technology, 2010, 59, 1139-1147.	3.9	172
83	Model-based fault detection and isolation for a diesel lean trap aftertreatment system. Control Engineering Practice, 2010, 18, 1307-1317.	3.2	18
84	A Study on a Prognosis Algorithm for PEMFC Lifetime Prediction Based on Durability Tests. , 2010, , .		2
85	Sliding mode observers for vision-based fault detection, isolation and identification in robot manipulators. , 2010, , .		10
86	State machine-based fault diagnosis with application in a vehicle chassis system. , 2010, , .		0
87	Fault Detection in Idle Speed Control of IC Engines. , 2009, , .		2
88	Model-based fault diagnosis for a vehicle chassis system. , 2009, , .		6
89	Model Based Fault Detection and Isolation in Idle Speed Control of IC Engines. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 905-910.	0.4	0
90	Utilizing Road Grade Preview For Increasing Fuel Economy of Hybrid Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 168-173.	0.4	6

#	ARTICLE	IF	CITATIONS
91	Actuators and sensors fault detection for robot manipulators via second order sliding mode observers. , 2008, , .		9
92	Second order sliding mode observers for Fault Detection of robot manipulators. , 2008, , .		6
93	Fault Detection for Robot Manipulators via Second-Order Sliding Modes. IEEE Transactions on Industrial Electronics, 2008, 55, 3954-3963.	5.2	97
94	Attitude tracking with adaptive rejection of rate gyro disturbances. , 2008, , .		1
95	Hierarchical Model-Based Fault Diagnosis for an Electrical Power Generation Storage Automotive System. Proceedings of the American Control Conference, 2007, , .	0.0	18
96	Attitude Tracking With Adaptive Rejection of Rate Gyro Disturbances. IEEE Transactions on Automatic Control, 2007, 52, 2374-2379.	3.6	32
97	A Comparative Study Of Supervisory Control Strategies for Hybrid Electric Vehicles. IEEE Transactions on Control Systems Technology, 2007, 15, 506-518.	3.2	468
98	Hybrid-Electric Powertrain Design Evaluation for Future Tactical Truck Vehicle Systems. , 2006, , 271.		1
99	Analysis and Evaluation of a Two Engine Configuration in a Series Hybrid Electric Vehicle. , 2006, , 239.		3
100	Model-Based Fault Detection and Isolation in Automotive Electrical Systems. , 2006, , 315.		9
101	Adaptive Threshold Based Diagnostics for Steer-By-Wire Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2006, 128, 428-435.	0.9	30
102	Evaluation of powertrain solutions for future tactical truck vehicle systems. , 2006, , .		3
103	Rejection of harmonic sensor disturbances in passive systems, and applications to attitude control. , 2006, , .		3
104	Modeling and Design of Heavy Duty Hybrid Electric Vehicles. , 2005, , 535.		9
105	<title>Modeling, simulation, and concept design for hybrid-electric medium-size military trucks</title>. , 2005, 5805, 1.		11
106	Minimum Sensor Second-Order Sliding Mode Longitudinal Control of Passenger Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2004, 5, 20-32.	4.7	45
107	A Comparative Study of Supervisory Control Strategies for Hybrid Electric Vehicles. , 2004, , 189.		10
108	Simplified exponentially convergent rotor resistance estimation for induction motors. IEEE Transactions on Automatic Control, 2003, 48, 325-330.	3.6	21

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109	Vehicle chassis monitoring system. Control Engineering Practice, 2003, 11, 345-354.	3.2	20
110	Dynamic Modeling of a Hybrid Electric Drivetrain for Fuel Economy, Performance and Driveability Evaluations. , 2003, , 443.		28
111	Supervisory Robust Control of Hybrid Electric Vehicles. , 2003, , .		7
112	A Framework for Model-Based Fault Diagnosis with Application to Vehicle Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 377-382.	0.4	4
113	HIERARCHICAL VEHICLE MODEL-BASED FAULT DIAGNOSIS USING PROPAGATION DIGRAPHS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 217-222.	0.4	0
114	Longitudinal control design of passenger vehicles with second order sliding modes. , 2000, , .		6
115	Model Based Diagnostics for Vehicle Systems. , 2000, , .		11
116	Chattering reduction and robust position control in induction motor with second-order VSS. International Journal of Systems Science, 1998, 29, 1-12.	3.7	5
117	A Supervisory Control Strategy for Series Hybrid Electric Vehicles with Two Energy Storage Systems. , 0, , .		45
118	Energy Management and Drivability Control Problems for Hybrid Electric Vehicles. , 0, , .		38
119	Conceptualization and Implementation of an AWD Parallel Hybrid Powertrain Concept. , 0, , .		6
120	Chassis Dynamometer as a Development Platform for Vehicle Hardware In-the-Loop "VHiL". SAE International Journal of Commercial Vehicles, 0, 6, 257-267.	0.4	8
121	Modeling and Simulation of a Series Hybrid CNG Vehicle. SAE International Journal of Alternative Powertrains, 0, 3, 20-29.	0.8	8
122	Battery Electric Bus Simulator - A Tool for Energy Consumption Analysis. , 0, , .		8
123	Eco-Driving System for Energy Efficient Driving of an Electric Bus. SAE International Journal of Passenger Cars - Electronic and Electrical Systems, 0, 8, 79-89.	0.3	14
124	VoGe: A Voice and Gesture System for Interacting with Autonomous Cars. , 0, , .		10
125	Evaluation of Navigation in Mobile Robots for Long-Term Autonomy in Automotive Manufacturing Environments. , 0, , .		4
126	A Voice and Pointing Gesture Interaction System for On-Route Update of Autonomous Vehicles' Path. , 0, , .		1

#	ARTICLE	IF	CITATIONS
127	An Immersive Vehicle-in-the-Loop VR Platform for Evaluating Human-to-Autonomous Vehicle Interactions. , 0 , , .		3
128	Cooperative Mandatory Lane Change for Connected Vehicles on Signalized Intersection Roads. , 0 , , .		1