

Lei Feng

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/336657/publications.pdf>

Version: 2024-02-01

67
papers

964
citations

566801

15
h-index

552369

26
g-index

68
all docs

68
docs citations

68
times ranked

564
citing authors

#	ARTICLE	IF	CITATIONS
1	Supervisory Control Architecture for Discrete-Event Systems. IEEE Transactions on Automatic Control, 2008, 53, 1449-1461.	3.6	118
2	Internet-enabled real-time collaborative assembly modeling via an e-Assembly system: status and promise. CAD Computer Aided Design, 2004, 36, 835-847.	1.4	72
3	TCT: A Computation Tool for Supervisory Control Synthesis. , 2006, , .		59
4	Integration of Learning-Based Testing and Supervisory Control for Requirements Conformance of Black-Box Reactive Systems. IEEE Transactions on Automation Science and Engineering, 2018, 15, 2-15.	3.4	59
5	A Learning-Based Synthesis Approach to the Supremal Nonblocking Supervisor of Discrete-Event Systems. IEEE Transactions on Automatic Control, 2018, 63, 3345-3360.	3.6	48
6	Elastodynamic Optimization of a 5-DoF Parallel Kinematic Machine Considering Parameter Uncertainty. IEEE/ASME Transactions on Mechatronics, 2019, 24, 315-325.	3.7	47
7	On the Computation of Natural Observers in Discrete-Event Systems. Discrete Event Dynamic Systems: Theory and Applications, 2010, 20, 63-102.	0.6	45
8	Computationally Efficient Supervisor Design: Abstraction and Modularity. , 0, , .		35
9	Supervisory Control of Timed Discrete-Event Systems Subject to Communication Delays and Non-FIFO Observations. IFAC-PapersOnLine, 2018, 51, 456-463.	0.5	32
10	A structural approach to the non-blocking supervisory control of discrete-event systems. International Journal of Advanced Manufacturing Technology, 2009, 41, 1152-1168.	1.5	29
11	Hierarchical predictive energy management of hybrid electric buses based on driver information. Journal of Cleaner Production, 2020, 269, 122374.	4.6	24
12	Systems Modeling with EAST-ADL for Fault Tree Analysis through HiP-HOPS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 91-96.	0.4	22
13	Case Studies in Learning-Based Testing. Lecture Notes in Computer Science, 2013, , 164-179.	1.0	20
14	Reducing auxiliary energy consumption of heavy trucks by onboard prediction and real-time optimization. Applied Energy, 2017, 188, 652-671.	5.1	19
15	Safe Stop Trajectory Planning for Highly Automated Vehicles: An Optimal Control Problem Formulation. , 2018, , .		19
16	An architectural approach to the analysis, verification and validation of software intensive embedded systems. Computing (Vienna/New York), 2013, 95, 649-688.	3.2	18
17	An Efficient Fault Diagnosis Approach Based on Integer Linear Programming for Labeled Petri Nets. IEEE Transactions on Automatic Control, 2021, 66, 2393-2398.	3.6	18
18	Optimal shape morphing control of 4D printed shape memory polymer based on reinforcement learning. Robotics and Computer-Integrated Manufacturing, 2022, 73, 102209.	6.1	17

#	ARTICLE	IF	CITATIONS
19	Designing communicating transaction processes by supervisory control theory. Formal Methods in System Design, 2007, 30, 117-141.	0.9	13
20	Synthesizing the optimal gait of a quadruped robot with soft actuators using deep reinforcement learning. Robotics and Computer-Integrated Manufacturing, 2022, 78, 102382.	6.1	13
21	On the Computation of Natural Observers in Discrete-Event Systems. , 2006, , .		12
22	Development of a micromirror based laser vector scanning automotive HUD. , 2011, , .		12
23	A real-time optimal control method for swing-free tower crane motions. , 2013, , .		11
24	Design and Formal Verification of a Safe Stop Supervisor for an Automated Vehicle. , 2019, , .		11
25	Verifying system behaviors in EAST-ADL2 with the SPIN model checker. , 2010, , .		10
26	Design and closed loop control of a 3D printed soft actuator. , 2020, , .		9
27	Fuel Minimization of the Electric Engine Cooling System With Active Grille Shutter by Iterative Quadratic Programming. IEEE Transactions on Vehicular Technology, 2020, 69, 2621-2635.	3.9	9
28	Optimal Vehicle Control for Fuel Efficiency. SAE International Journal of Commercial Vehicles, 2015, 8, 682-694.	0.4	8
29	A cascade control approach to active suspension using pneumatic actuators. Asian Journal of Control, 2019, 21, 70-88.	1.9	8
30	Fuel Minimization of a Hybrid Electric Racing Car by Quasi-Pontryagin's Minimum Principle. IEEE Transactions on Vehicular Technology, 2021, 70, 5551-5564.	3.9	8
31	Customized protective visors enabled by closed loop controlled 4D printing. Scientific Reports, 2022, 12, 7566.	1.6	8
32	Computationally Efficient Supervisor Design: Control Flow Decomposition. , 0, , .		7
33	Abstractions for nonblocking supervisory control of Extended Finite Automata. , 2012, , .		6
34	Optimization of Gear Shifting and Torque Split for Improved Fuel Efficiency and Drivability of HEVs. , 2013, , .		6
35	A geometric programming approach to the optimization of mechatronic systems in early design stages. , 2016, , .		6
36	Optimal Complete Vehicle Control for Fuel Efficiency. Transportation Research Procedia, 2016, 14, 1087-1096.	0.8	6

#	ARTICLE	IF	CITATIONS
37	Control of Black-Box Embedded Systems by Integrating Automaton Learning and Supervisory Control Theory of Discrete-Event Systems. IEEE Transactions on Automation Science and Engineering, 2020, 17, 361-374.	3.4	6
38	Supervisory control of extended finite automata using transition projection. , 2012, , .		5
39	A Case Study on Achieving Fair Data Age Distribution in Vehicular Communications. , 2017, , .		5
40	The Optimal Road Grade Design for Minimizing Ground Vehicle Energy Consumption. Energies, 2017, 10, 700.	1.6	5
41	Autonomic Middleware for Automotive Embedded Systems. , 2009, , 169-210.		5
42	Shape Estimation of a 3D Printed Soft Sensor Using Multi-Hypothesis Extended Kalman Filter. IEEE Robotics and Automation Letters, 2022, 7, 8383-8390.	3.3	5
43	Online reinforcement learning for the shape morphing adaptive control of 4D printed shape memory polymer. Control Engineering Practice, 2022, 126, 105257.	3.2	5
44	Fuel efficiency improvement in HEVs using electromechanical brake system. , 2013, , .		4
45	Design-Space Reduction for Architectural Optimization of Automotive Embedded Systems. , 2015, , .		4
46	Early Phase Design-Optimization of Mechatronic Systems. , 2017, , .		4
47	A Position-Control Based Approach to Haptic Rendering of Stiff Objects. IEEE Transactions on Haptics, 2021, 14, 646-659.	1.8	4
48	Model abstraction for discrete-event systems by binary linear programming with applications to manufacturing systems. Science Progress, 2021, 104, 003685042110308.	1.0	4
49	A Bibliometric Analysis on Model-based Systems Engineering. , 2021, , .		4
50	Achieving Online Coordination in Real-Time Collaborative Assembly Modeling: A Supervisory Control Approach. Journal of Computing and Information Science in Engineering, 2006, 6, 252-262.	1.7	3
51	Self configuration of dependent tasks for dynamically reconfigurable automotive embedded systems. , 2008, , .		3
52	Feedback Control for the Precise Shape Morphing of 4D-Printed Shape Memory Polymer. IEEE Transactions on Industrial Electronics, 2021, 68, 12698-12707.	5.2	3
53	Study on Efficient Fused Deposition Modelling of Thermoplastic Polyurethane Inflatable Wall Features for Airtightness. Advances in Transdisciplinary Engineering, 2020, , .	0.1	3
54	One-Step Prediction for Improving Gear Changing Control of HEVs. Journal of Robotics and Mechatronics, 2014, 26, 799-808.	0.5	3

#	ARTICLE	IF	CITATIONS
55	Increasing Fuel Efficiency of a Hybrid Electric Competition Car by a Binary Equivalent Consumption Minimization Strategy. , 2018, , .		2
56	A New Approach to Haptic Rendering by Position Control. , 2019, , .		2
57	Revisiting strong detectability of networked discrete-event systems. IFAC-PapersOnLine, 2020, 53, 21-27.	0.5	2
58	Nonblocking coordination of discrete-event systems by control-flow nets. , 2007, , .		1
59	On the Computation of Natural Observers for Extended Finite Automata. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2448-2455.	0.4	1
60	Formulating customized specifications for resource allocation problem of distributed embedded systems. , 2016, , .		1
61	A Binary Controller to Ensure Engine Peak Efficiency for a Parallel Hybrid Electric Car*. , 2019, , .		1
62	Optimal road grade design based on stochastic speed trajectories for minimising transportation energy consumption. IET Intelligent Transport Systems, 2021, 15, 1414.	1.7	1
63	17 Towards Model-Based Engineering of Self-configuring Embedded Systems. Lecture Notes in Computer Science, 2010, , 345-353.	1.0	1
64	A Flexible 4D Printing Service Platform for Smart Manufacturing. Advances in Transdisciplinary Engineering, 2020, , .	0.1	1
65	A position control-based approach to haptic rendering of stiff objects using piece-wise linear model. Advances in Mechanical Engineering, 2021, 13, 168781402110648.	0.8	1
66	A Joint-space Position Control-based Approach to Haptic Rendering of Stiff Objects using Gain Scheduling. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 103, 1.	2.0	0
67	An Approach for Supervisor Reduction of Discrete-Event Systems. Lecture Notes in Computer Science, 2020, , 3-14.	1.0	0