

Theo Hofman

List of Publications by Year in descending order

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63
papers

1,482
citations

430754

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all docs

63
docs citations

63
times ranked

1078
citing authors

#	ARTICLE	IF	CITATIONS
1	Decomposition-Based Integrated Optimal Electric Powertrain Design. IEEE Transactions on Vehicular Technology, 2022, 71, 6044-6058.	3.9	1
2	Co-Design of CVT-Based Electric Vehicles. Energies, 2021, 14, 1825.	1.6	10
3	Integrated Plant and Control Design of a Continuously Variable Transmission. IEEE Transactions on Vehicular Technology, 2021, 70, 4212-4224.	3.9	6
4	A Convex Optimization Framework for Minimum Lap Time Design and Control of Electric Race Cars. IEEE Transactions on Vehicular Technology, 2021, 70, 8478-8489.	3.9	28
5	Optimal Design of Electric Micromobility Vehicles. , 2021, , .		6
6	Battery-Electric Powertrain Design Analysis for an Efficient Passenger Vehicle. , 2021, , .		1
7	Energy management of hybrid vehicles with state constraints: A penalty and implicit Hamiltonian minimization approach. Applied Energy, 2020, 260, 114149.	5.1	29
8	Joint Design and Control of Electric Vehicle Propulsion Systems. , 2020, , .		18
9	Powertrain Control for Hybrid-Electric Vehicles Using Supervised Machine Learning. Vehicles, 2020, 2, 267-286.	1.7	14
10	Automated Multi-Level Dynamic System Topology Design Synthesis. Vehicles, 2020, 2, 603-624.	1.7	2
11	A Review of the Integrated Design and Control of Electrified Vehicles. Energies, 2020, 13, 5454.	1.6	16
12	Electric Powertrain Topology Analysis and Design for Heavy-Duty Trucks. Energies, 2020, 13, 2434.	1.6	37
13	The Influence of Mode Change Penalties on the Comparison of Hybrid Drivetrain Topologies. IFAC-PapersOnLine, 2020, 53, 14141-14146.	0.5	0
14	Transmission Ratio Design for Electric Vehicles via Analytical Modeling and optimization. , 2020, , .		4
15	Improved Implementation of Dynamic Programming on the Example of Hybrid Electric Vehicle Control. IFAC-PapersOnLine, 2019, 52, 147-152.	0.5	20
16	Integrated Energy and Thermal Management for Electrified Powertrains. Energies, 2019, 12, 2058.	1.6	9
17	Driving-Cycle-Aware Energy Management of Hybrid Electric Vehicles Using a Three-Dimensional Markov Chain Model. Automotive Innovation, 2019, 2, 146-156.	3.1	29
18	Multi-Level Energy Management for Hybrid Electric Vehicles – Part I. Vehicles, 2019, 1, 3-40.	1.7	15

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19	Multi-Level Energy Managementâ€™Part II: Implementation and Validation. <i>Vehicles</i> , 2019, 1, 41-56.	1.7	4
20	Evolution and Classification of Energy and Thermal Management Systems in Electrified Powertrains. , 2019, , .		2
21	Control Strategy Development for Integrated Continuous Variable Transmission Design. , 2019, , .		0
22	Optimal Control of an Integrated Energy and Thermal Management System for Electrified Powertrains. , 2019, , .		5
23	Intelligent Synthesis of Driving Cycle for Advanced Design and Control of Powertrains. , 2018, , .		10
24	Modified Computational Design Synthesis Using Simulation-Based Evaluation and Constraint Consistency for Vehicle Powertrain Systems. <i>IEEE Transactions on Vehicular Technology</i> , 2018, 67, 8065-8076.	3.9	17
25	Automated Dynamic Modeling of Arbitrary Hybrid and Electric Drivetrain Topologies. <i>IEEE Transactions on Vehicular Technology</i> , 2018, 67, 6921-6934.	3.9	12
26	Hybrid Vehicle Energy Management: Singular Optimal Control. <i>IEEE Transactions on Vehicular Technology</i> , 2017, 66, 9654-9666.	3.9	30
27	Clamping Strategies for Belt-Type Continuously Variable Transmissions: An Overview. , 2017, , .		1
28	Optimal Control of Engine Warmup in Hybrid Vehicles. <i>Oil and Gas Science and Technology</i> , 2016, 71, 14.	1.4	7
29	Review of Optimization Strategies for System-Level Design in Hybrid Electric Vehicles. <i>IEEE Transactions on Vehicular Technology</i> , 2016, , 1-1.	3.9	143
30	Synthesis of Realistic Driving Cycles With High Accuracy and Computational Speed, Including Slope Information. <i>IEEE Transactions on Vehicular Technology</i> , 2016, 65, 4118-4128.	3.9	72
31	Functional and Cost-Based Automatic Generator for Hybrid Vehicles Topologies. <i>IEEE/ASME Transactions on Mechatronics</i> , 2015, 20, 1561-1572.	3.7	52
32	From Optimal to Real-Time Control of a Mechanical Hybrid Powertrain. <i>IEEE Transactions on Control Systems Technology</i> , 2015, 23, 670-678.	3.2	8
33	Implementation of Dynamic Programming for Optimal Control Problems With Continuous States. <i>IEEE Transactions on Control Systems Technology</i> , 2015, 23, 1172-1179.	3.2	23
34	Semi-empirical power dissipation modelling of mechanical hybrid powertrain components. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2014, 228, 443-456.	1.1	3
35	Fast and smooth clutch engagement control for dual-clutch transmissions. <i>Control Engineering Practice</i> , 2014, 22, 57-68.	3.2	59
36	Optimal Control of a Mechanical Hybrid Powertrain With Cold-Start Conditions. <i>IEEE Transactions on Vehicular Technology</i> , 2014, 63, 1555-1566.	3.9	16

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37	Topology and Flywheel Size Optimization for Mechanical Hybrid Powertrains. IEEE Transactions on Vehicular Technology, 2014, 63, 4192-4205.	3.9	23
38	Fast and Smooth Clutch Engagement Control for a Mechanical Hybrid Powertrain. IEEE Transactions on Control Systems Technology, 2014, 22, 1241-1254.	3.2	38
39	Comparison of Bi-Level Optimization Frameworks for Sizing and Control of a Hybrid Electric Vehicle. , 2014, , .		27
40	Topology Optimization of Hybrid Power Trains. Lecture Notes in Control and Information Sciences, 2014, , 181-198.	0.6	3
41	Extending Energy Management in Hybrid Electric Vehicles with explicit control of gear shifting and start-stop. , 2012, , .		15
42	Analysis of optimal mechanical-hybrid powertrain topologies. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 41-48.	0.4	4
43	Performance simulations of a low-cost hybrid powertrain with large fuel savings. International Journal of Powertrains, 2012, 1, 377.	0.1	3
44	Optimal Control of the Gearshift Command for Hybrid Electric Vehicles. IEEE Transactions on Vehicular Technology, 2012, 61, 3531-3543.	3.9	104
45	Sizing Stack and Battery of a Fuel Cell Hybrid Distribution Truck. Oil and Gas Science and Technology, 2012, 67, 563-573.	1.4	23
46	Optimal Control of a Mechanical Hybrid Powertrain. IEEE Transactions on Vehicular Technology, 2012, 61, 485-497.	3.9	51
47	Topology Optimization for Hybrid Electric Vehicles With Automated Transmissions. IEEE Transactions on Vehicular Technology, 2012, 61, 2442-2451.	3.9	76
48	Predictive gear shift control for a parallel Hybrid Electric Vehicle. , 2011, , .		24
49	Analysis of modelling and simulation methodologies for vehicular propulsion systems. International Journal of Powertrains, 2011, 1, 117.	0.1	5
50	Belt-pulley friction estimation for the Continuously Variable Transmission. , 2011, , .		6
51	Optimal energy management for a flywheel-based hybrid vehicle. , 2011, , .		1
52	An optimal control-based algorithm for Hybrid Electric Vehicle using preview route information. , 2010, , .		8
53	Improvement of fuel economy in Power-Shift Automated Manual Transmission through shift strategy optimization - an experimental study. , 2010, , .		22
54	Energy efficiency analysis and comparison of transmission technologies for an electric vehicle. , 2010, , .		74

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55	New educational demands for the future: Automotive Technology - Master of Science. , 2010, , .		0
56	A Comparative Study and Analysis of an Optimized Control Strategy for the Toyota Hybrid System. World Electric Vehicle Journal, 2009, 3, 563-571.	1.6	8
57	Design of CVT-Based Hybrid Passenger Cars. IEEE Transactions on Vehicular Technology, 2009, 58, 572-587.	3.9	36
58	Analysis of modeling and simulation methodologies for vehicular propulsion systems. , 2009, , .		3
59	Hybrid component specification optimisation for a medium-duty hybrid electric truck. International Journal of Heavy Vehicle Systems, 2008, 15, 356.	0.1	14
60	Rule-based energy management strategies for hybrid vehicles. International Journal of Electric and Hybrid Vehicles, 2007, 1, 71.	0.2	189
61	Parametric Modeling of Components for Selection and Specification of Hybrid Vehicle Drivetrains. World Electric Vehicle Journal, 2007, 1, 215-224.	1.6	5
62	Modeling for simulation of hybrid drivetrain components. , 2006, , .		3
63	Optimal design of energy storage systems for hybrid vehicle drivetrains. , 0, , .		8