Richard Stobart

List of Publications by Year
in descending order

97	1,367	686830	454577
papers	citations	13	30
		h-index	g-index

97	97	97	1169
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design of UDEâ€based controllers from their twoâ€degreeâ€ofâ€freedom nature. International Journal of Robust and Nonlinear Control, 2011, 21, 1994-2008.	2.1	163
2	A dynamic model for thermoelectric generator applied to vehicle waste heat recovery. Applied Energy, 2018, 210, 327-338.	5.1	149
3	Thermal efficiency improvement in high output diesel engines a comparison of a Rankine cycle with turbo-compounding. Applied Thermal Engineering, 2010, 30, 2253-2256.	3.0	85
4	Real-Time Energy Management for Diesel Heavy Duty Hybrid Electric Vehicles. IEEE Transactions on Control Systems Technology, 2015, 23, 829-841.	3.2	79
5	An Explicit Model Predictive Control Framework for Turbocharged Diesel Engines. IEEE Transactions on Industrial Electronics, 2014, 61, 3540-3552.	5.2	52
6	Comprehensive analysis of thermoelectric generation systems for automotive applications. Applied Thermal Engineering, 2017, 112, 1433-1444.	3.0	48
7	Heat Recovery and Bottoming Cycles for SI and CI Engines - A Perspective. , 2006, , .		47
8	An X-Ray Tomography Based Lattice Boltzmann Simulation Study on Gas Diffusion Layers of Polymer Electrolyte Fuel Cells. Journal of Fuel Cell Science and Technology, 2010, 7, .	0.8	42
9	Calculating the Anisotropic Permeability of Porous Media Using the Lattice Boltzmann Method and X-ray Computed Tomography. Transport in Porous Media, 2012, 92, 457-472.	1.2	40
10	Input Constraints Handling in an MPC/Feedback Linearization Scheme. International Journal of Applied Mathematics and Computer Science, 2009, 19, 219-232.	1.5	38
11	Prediction of the fuel economy potential for a skutterudite thermoelectric generator in light-duty vehicle applications. Applied Energy, 2018, 231, 68-79.	5.1	38
12	Dynamic feedback linearization based control synthesis of the turbocharged Diesel engine. Proceedings of the American Control Conference, 2007, , .	0.0	36
13	A Zero-Dimensional Combustion Model with Reduced Kinetics for SI Engine Knock Simulation. Combustion Science and Technology, 2009, 181, 828-852.	1.2	33
14	Modeling and Control of Diesel Engines Equipped with a Two-Stage Turbo-System. , 0, , .		31
15	The Potential for Thermo-Electric Regeneration of Energy in Vehicles. , 0, , .		31
16	Modelling the Compression Ignition Engine for Control: Review and Future Trends.. , 0, , .		27
17	Characterisation, control, and energy management of electrified turbocharged diesel engines. Energy Conversion and Management, 2017, 135, 416-433.	4.4	26
18	Energy Recovery Systems for Engines. , 0, , .		17

#	Article	IF	Citations
19	Diesel engine emissions prediction using parallel neural networks. , 2009, , .		15
20	Improved Thermoelectric Generator Performance Using High Temperature Thermoelectric Materials. , 0, , .		15
21	Fuelsfor Fuel Cell-Powered Vehicles. , 2000, , .		14
22	Evaluation of Spray/Wall Interaction Models under the Conditions Related to Diesel HCCI Engines. SAE International Journal of Fuels and Lubricants, 0, 1, 993-1008.	0.2	14
23	Dynamic feedback linearization of Diesel engines with intake variable valve actuation. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	13
24	Liquid Water Transport in Porous Metal Foam Flow-Field Fuel Cells: A Two-Phase Numerical Modelling and Ex-Situ Experimental Study. Energies, 2019, 12, 1186.	1.6	13
25	Matching and optimization for a thermoelectric generator applied in an extended-range electric vehicle for waste heat recovery. Applied Energy, 2022, 313, 118783.	5.1	13
26	BSFC Investigation Using Variable Valve Timing in a Heavy Duty Diesel Engine. , 0, , .		12
27	An Integrated Framework on Characterization, Control, and Testing of an Electrical Turbocharger Assist. IEEE Transactions on Industrial Electronics, 2018, 65, 4897-4908.	5.2	12
28	Challenges and Potential of Intra-Cycle Combustion Control for Direct Injection Diesel Engines. , 0, , .		11
29	Prediction of NO_x Emissions of a Heavy Duty Diesel Engine with a NLARX Model. , 0, , .		10
30	Study on Optimization of Regenerative Braking Control Strategy in Heavy-Duty Diesel Engine City Bus using Pneumatic Hybrid Technology. , 0, , .		10
31	The Potential of Thermoelectric Generator in Parallel Hybrid Vehicle Applications. , 0, , .		10
32	Real-Time Energy Management of the Electric Turbocharger Based on Explicit Model Predictive Control. IEEE Transactions on Industrial Electronics, 2020, 67, 3126-3137.	5.2	10
33	Online Adjustment of Start of Injection and Fuel Rail Pressure Based on Combustion Process Parameters of Diesel Engine. , 2013, , .		9
34	Disturbance Sources in the Diesel Engine Combustion Process. , 0, , .		8
35	Unified Backwards Facing and Forwards Facing Simulation of a Hybrid Electric Vehicle using MATLAB Simscape. , 0, , .		8
36	Using Pneumatic Hybrid Technology to Reduce Fuel Consumption and Eliminate Turbo-Lag. , 0, , .		7

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37	Benefiting from Sobol Sequences Experiment Design Type for Model-based Calibration. , 0, , .		7
38	Modelling the Exhaust Gas Recirculation Mass Flow Rate in Modern Diesel Engines. , 2016, , .		7
39	A Comparison of Four Modelling Techniques for Thermoelectric Generator. , 0, , .		7
40	Equivalent Stiffness Model of a Proton Exchange Membrane Fuel Cell Stack Including Hygrothermal Effects and Dimensional Tolerances. Journal of Electrochemical Energy Conversion and Storage, 2018, 15, .	1.1	7
41	Real-time Adaptive Predictive Control of the Diesel Engine Air-path Based on Fuzzy Parameters Estimation. , 0, , .		6
42	Modeling Techniques to Support Fuel Path Control in Medium Duty Diesel Engines. , 0, , .		6
43	In-Cylinder Pressure Modelling with Artificial Neural Networks. , 0, , .		6
44	Minimum Data Requirement for Neural Networks Based on Power Spectral Density Analysis. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 587-595.	7.2	6
45	Optimization of the Number of Thermoelectric Modules in a Thermoelectric Generator for a Specific Engine Drive Cycle. , 2016, , .		6
46	Experimental Investigation of Turbulent Flame Propagation and Pressure Oscillation in a Constant Volume Chamber Equipped With an Orifice Plate. Combustion Science and Technology, 0, , 1-17.	1.2	6
47	The Controllability of Vapour Based Thermal Recovery Systems in Vehicles. , 2007, , .		5
48	Development of Model Predictive Controller for SOFC-IC Engine Hybrid System. SAE International Journal of Engines, 2009, 2, 56-66.	0.4	5
49	Accurate and Continuous Fuel Flow Rate Measurement Prediction for Real Time Application. SAE International Journal of Engines, 0, 4, 1724-1737.	0.4	5
50	Fuel path control of a diesel engine at the operating point of the low load and medium speed. , 2011, , .		5
51	The Influence of Thermoelectric Materials and Operation Conditions on the Performance of Thermoelectric Generators for Automotive. , 0, , .		5
52	Prediction of Gas Concentrations in a Three-Way Catalyst for On-Board Diagnostic Applications. , 2005, , .		4
53	Predictive control using feedback linearization based on dynamic neural models. , 2007, , .		4
54	Modeling and Control Design of a SOFC-IC Engine Hybrid System. , 2008, , .		4

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55	Explicit Model Predictive Control of the Diesel Engine Fuel Path. , 2012, , .		4
56	Control-Oriented Dynamics Analysis for Electrified Turbocharged Diesel Engines. , 2016, , .		4
57	Real-Time Optimal Energy Management of Electrified Engines. IFAC-PapersOnLine, 2016, 49, 251-258.	0.5	4
58	Control Oriented Models for Exhaust Gas Aftertreatment; A Review and Prospects. , 2003, , .		3
59	Investigation of Optimum Operating Range for a Solid Oxide Fuel Cell-IC Engine Hybrid System. , 2006, , .		3
60	Analysis of the Impact on Diesel Engine Fuel Economy and Emissions by Variable Compression Ratio Using GT-Power Simulation. , 2010, , .		3
61	Future Engine Control Enabling Environment Friendly Vehicle. , 0, , .		3
62	Sliding mode fault tolerant control of uncertain systems with time varying delay: Application to AFR control. , 2013, , .		3
63	Dynamic Analysis of the Libralato Thermodynamic Cycle Based Rotary Engine. , 0, , .		3
64	Combustion Model Based Explanation of the Pmax and IMEP Coupling Phenomenon in Diesel Engine. , 2014, , .		3
65	Evaluating the Performance Improvement of Different Pneumatic Hybrid Boost Systems and Their Ability to Reduce Turbo-Lag. , 0, , .		3
66	Systematic control on Energy recovery of electrified turbocharged diesel engines. , 2015, , .		3
67	Design and Optimisation of the Propulsion Control Strategy for a Pneumatic Hybrid City Bus. SAE International Journal of Alternative Powertrains, 0, 5, 122-138.	0.8	3
68	Experimental Investigation on the Laminar Burning Velocities and Markstein Lengths of Methane and PRF95 Dual Fuels. Energy & Fuels, 2016, 30, 6777-6789.	2.5	3
69	Decoupling control of electrified turbocharged diesel engines. , 2016, , .		3
70	Two-dimensional partitioned square ice confined in graphene/graphite nanocapillaries. Journal of Chemical Physics, 2022, 156, 154510.	1.2	3
71	Life–Cycle Analysis and the Fuel Cell Car. , 0, , .		2
72	Piezo-fluidic Gaseous Fuel MPI System for Natural Gas Fuelled IC Engines.. JSME International Journal Series B, 2001, 44, 158-165.	0.3	2

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73	Towards an Open Source Model for Engine Control Systems. , 2008, , .		2
74	Scheduling and control co-design of networked induction motor control systems. , 2013, , .		2
75	Addressing the Heat Exchange Question for Thermo-Electric Generators. , 2013, , .		2
76	A Predictive Model of P_{max} and IMEP for Intra-Cycle Control. , 0, , .		2
77	Robust control of electrified turbocharged diesel engines. , 2016, , .		2
78	Optimising the Energy Efficiency and Transient Response of Diesel Engines through an Electric Turbocharger. , 2019, , .		2
79	Chapter 7. System Design Considerations for Thermoelectric Energy Recovery. RSC Energy and Environment Series, 2016, , 156-203.	0.2	2
80	Experimental investigation of flow and heat transfer characteristics on matrix ribbed channel. Thermal Science, 2020, 24, 1593-1600.	0.5	2
81	Combined hybrid clustering techniques and neural fuzzy networks to predict diesel engine emissions. , 2007, , .		1
82	Using Artificial Neural Networks for Representing the Brake Specific-Fuel Consumption and Intake Manifold pressure of a Diesel Engine. , 2009, , .		1
83	3D visualization and characterization of nano structured materials. , 2011, , .		1
84	Single NLARX Model for Particulate Matters Prediction of Diesel Engines. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10641-10646.	0.4	1
85	Real-time application of a constrained predictive controller based on dynamic neural networks with feedback linearization. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 6727-6732.	0.4	1
86	Real-Time Optimal Energy Management of Heavy Duty Hybrid Electric Vehicles. SAE International Journal of Alternative Powertrains, 0, 2, 369-378.	0.8	1
87	Integrated Feedback Scheduling and Control Codesign for Motion Coordination of Networked Induction Motor Systems. Mathematical Problems in Engineering, 2014, 2014, 1-14.	0.6	1
88	Fuzzy Speed Control of Networked Motion Control Systems. Journal of Computational and Nonlinear Dynamics, 2015, 10, .	0.7	1
89	A Parallel Hybrid Drive System for Small Vehicles: Architecture and Control Systems. , 0, , .		1
90	ACCURATE TO A FAULT. Sensor Review, 1991, 11, 28-30.	1.0	0

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91	SUSI Methodology: Evaluating Driver Error and System Hazard. , 1995, , .		0
92	13 Mode Fuel Benefit Investigation Using Variable Valve Timing in a Heavy Duty Diesel Engine. , 2009, , .		0
93	The Challenge of Fuel Path Control at High Load Conditions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2248-2253.	0.4	0
94	Hierarchical modeling and speed control of networked induction motor systems. , 2013, , .		0
95	The Role of New Automotive Engineering Masters Programme in the Industry in China. , 2016, , .		0
96	The Position Control of a Gasoline Engine during Shutdown. , 0, , .		0
97	Predicting the Effect of Fuel Path Controllable Parameters on the Performance of Combustion Controlled Diesel Engine. Lecture Notes in Electrical Engineering, 2013, , 387-400.	0.3	0