Thomas H Bradley

List of Publications by Year
in descending order

135 papers	5,841 citations	172457 29 h-index	82547 72 g-index
136 all docs	136 docs citations	136 times ranked	6563 citing authors

#	Article	IF	Citations
1	Net-zero emissions energy systems. Science, 2018, 360, .	12.6	1,165
2	Review of hybrid, plug-in hybrid, and electric vehicle market modeling Studies. Renewable and Sustainable Energy Reviews, 2013, 21, 190-203.	16.4	421
3	Design, demonstrations and sustainability impact assessments for plug-in hybrid electric vehicles. Renewable and Sustainable Energy Reviews, 2009, 13, 115-128.	16.4	377
4	Advanced Driver-Assistance Systems: A Path Toward Autonomous Vehicles. IEEE Consumer Electronics Magazine, 2018, 7, 18-25.	2.3	332
5	Net Energy and Greenhouse Gas Emission Evaluation of Biodiesel Derived from Microalgae. Environmental Science & Technology, 2010, 44, 7975-7980.	10.0	310
6	The effect of communication architecture on the availability, reliability, and economics of plug-in hybrid electric vehicle-to-grid ancillary services. Journal of Power Sources, 2010, 195, 1500-1509.	7.8	248
7	Total cost of ownership, payback, and consumer preference modeling of plug-in hybrid electric vehicles. Applied Energy, 2013, 103, 488-506.	10.1	164
8	Microalgae bulk growth model with application to industrial scale systems. Bioresource Technology, 2011, 102, 5083-5092.	9.6	160
9	Development and experimental characterization of a fuel cell powered aircraft. Journal of Power Sources, 2007, 171, 793-801.	7.8	158
10	Investigation of battery end-of-life conditions for plug-in hybrid electric vehicles. Journal of Power Sources, 2011, 196, 5147-5154.	7.8	144
11	Nannochloropsis production metrics in a scalable outdoor photobioreactor for commercial applications. Bioresource Technology, 2012, 117, 164-171.	9.6	124
12	Review of transportation hydrogen infrastructure performance and reliability. International Journal of Hydrogen Energy, 2019, 44, 12010-12023.	7.1	115
13	Estimating the HVAC energy consumption of plug-in electric vehicles. Journal of Power Sources, 2014, 259, 117-124.	7.8	114
14	Analysis of plug-in hybrid electric vehicle utility factors. Journal of Power Sources, 2010, 195, 5399-5408.	7.8	100
15	Techno-economic and Monte Carlo probabilistic analysis of microalgae biofuel production system. Bioresource Technology, 2016, 219, 45-52.	9.6	100
16	An Evaluation of State-of-Charge Limitations and Actuation Signal Energy Content on Plug-in Hybrid Electric Vehicle, Vehicle-to-Grid Reliability, and Economics. IEEE Transactions on Smart Grid, 2012, 3, 483-491.	9.0	87
17	Quantitative Measurement of Direct Nitrous Oxide Emissions from Microalgae Cultivation. Environmental Science & Technology, 2011, 45, 9449-9456.	10.0	78
18	Geographical and temporal differences in electric vehicle range due to cabin conditioning energy consumption. Journal of Power Sources, 2015, 275, 468-475.	7.8	76

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19	Scalability of combining microalgae-based biofuels with wastewater facilities: A review. Algal Research, 2015, 9, 160-169.	4.6	73
20	Current Large-Scale US Biofuel Potential from Microalgae Cultivated in Photobioreactors. Bioenergy Research, 2012, 5, 49-60.	3.9	67
21	Geographical Assessment of Microalgae Biofuels Potential Incorporating Resource Availability. Bioenergy Research, 2013, 6, 591-600.	3.9	53
22	Microalgae to biofuels: Life cycle impacts of methane production of anaerobically digested lipid extracted algae. Bioresource Technology, 2014, 171, 37-43.	9.6	51
23	Economic Viability and Environmental Impact of In-Motion Wireless Power Transfer. IEEE Transactions on Transportation Electrification, 2019, 5, 135-146.	7.8	50
24	Analysis of water footprint of a photobioreactor microalgae biofuel production system from blue, green and lifecycle perspectives. Algal Research, 2013, 2, 196-203.	4.6	49
25	Application of systems theoretic process analysis to a lane keeping assist system. Reliability Engineering and System Safety, 2017, 167, 177-183.	8.9	44
26	Hardware-in-the-Loop Testing of a Fuel Cell Aircraft Powerplant. Journal of Propulsion and Power, 2009, 25, 1336-1344.	2.2	42
27	The Efficacy of Electric Vehicle Time-of-Use Rates in Guiding Plug-in Hybrid Electric Vehicle Charging Behavior. IEEE Transactions on Smart Grid, 2012, 3, 1679-1686.	9.0	41
28	Analysis of corporate average fuel economy regulation compliance scenarios inclusive of plug in hybrid vehicles. Applied Energy, 2014, 113, 1323-1337.	10.1	40
29	Comparison of Design Methods for Fuel-Cell-Powered Unmanned Aerial Vehicles. Journal of Aircraft, 2009, 46, 1945-1956.	2.4	36
30	Effective Model-Based Systems Engineering. , 2019, , .		36
31	Uncertainties in corn stover feedstock supply logistics cost and life-cycle greenhouse gas emissions for butanol production. Applied Energy, 2017, 208, 1343-1356.	10.1	32
32	Predicting demand for hydrogen station fueling. International Journal of Hydrogen Energy, 2020, 45, 32298-32310.	7.1	32
33	Supply and value chain analysis of mixed biomass feedstock supply system for lignocellulosic sugar production. Biofuels, Bioproducts and Biorefining, 2019, 13, 635-659.	3.7	30
34	Economic comparison of fuel cell powered forklifts to battery powered forklifts. International Journal of Hydrogen Energy, 2012, 37, 12054-12059.	7.1	28
35	Reductions in the mitochondrial ABC transporter Abcb10 affect the transcriptional profile of heme biosynthesis genes. Journal of Biological Chemistry, 2017, 292, 16284-16299.	3.4	28
36	Design and Performance Validation of a Fuel Cell Unmanned Aerial Vehicle. , 2006, , .		27

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37	Stochastic economic and environmental footprints of biodiesel production from Jatropha curcas Linnaeus in the different federal states of Nepal. Renewable and Sustainable Energy Reviews, 2020, 120, 109619.	16.4	27
38	Actual Versus Estimated Utility Factor of a Large Set of Privately Owned Chevrolet Volts. SAE International Journal of Alternative Powertrains, 0, 3, 30-35.	0.8	25
39	Prediction Error Applied to Hybrid Electric Vehicle Optimal Fuel Economy. IEEE Transactions on Control Systems Technology, 2018, 26, 2121-2134.	5.2	23
40	Life cycle net energy and greenhouse gas emissions of photosynthetic cyanobacterial biorefineries: Challenges for industrial production of biofuels. Algal Research, 2017, 26, 445-452.	4.6	22
41	Scale‐Up of flat plate photobioreactors considering diffuse and direct light characteristics. Biotechnology and Bioengineering, 2012, 109, 363-370.	3.3	20
42	V2V Communication Based Real-World Velocity Predictions for Improved HEV Fuel Economy. , 0, , .		20
43	Toward Improving Vehicle Fuel Economy with ADAS. SAE International Journal of Connected and Automated Vehicles, 0, 1, 81-92.	0.4	19
44	Probabilistic Lifecycle Assessment of Butanol Production from Corn Stover Using Different Pretreatment Methods. Environmental Science & Technology, 2018, 52, 14528-14537.	10.0	19
45	SEDAN: Security-Aware Design of Time-Critical Automotive Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 9017-9030.	6.3	19
46	Development and Evaluation of Velocity Predictive Optimal Energy Management Strategies in Intelligent and Connected Hybrid Electric Vehicles. Energies, 2021, 14, 5713.	3.1	19
47	Energy Management for Fuel Cell Powered Hybrid-Electric Aircraft. , 2009, , .		18
48	Analyzing Drive Cycles for Hybrid Electric Vehicle Simulation and Optimization. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, .	2.9	17
49	Biomass feedstock transport using fuel cell and battery electric trucks improves lifecycle metrics of biofuel sustainability and economy. Journal of Cleaner Production, 2021, 279, 123593.	9.3	17
50	Design Space Exploration of Small-Scale PEM Fuel Cell Long Endurance Aircraft. , 2006, , .		16
51	MiMiR: an integrated platform for microarray data sharing, mining and analysis. BMC Bioinformatics, 2008, 9, 379.	2.6	16
52	The Importance of HEV Fuel Economy and Two Research Gaps Preventing Real World Implementation of Optimal Energy Management. , 2017, , .		16
53	Investigation of Vehicle Speed Prediction from Neural Network Fit of Real World Driving Data for Improved Engine On/Off Control of the EcoCAR3 Hybrid Camaro. , 0, , .		16
54	Enabling Prediction for Optimal Fuel Economy Vehicle Control. , 2018, , .		16

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55	Design and Flight Test Results for a 24 Hour Fuel Cell Unmanned Aerial Vehicle. , 2010, , .		15
56	A mixed computational and experimental approach to improved biogas burner flame port design. Energy for Sustainable Development, 2018, 44, 37-46.	4.5	15
57	Modeling operating modes, energy consumptions, and infrastructure requirements of fuel cell plug in hybrid electric vehicles using longitudinal geographical transportation data. International Journal of Hydrogen Energy, 2018, 43, 12420-12427.	7.1	15
58	A geographical assessment of vegetation carbon stocks and greenhouse gas emissions on potential microalgae-based biofuel facilities in the United States. Bioresource Technology, 2016, 221, 270-275.	9.6	14
59	Beyond treatment technology: Understanding motivations and barriers for wastewater treatment and reuse in unconventional energy production. Resources, Conservation and Recycling, 2022, 177, 106011.	10.8	14
60	Vehicle Velocity Prediction Using Artificial Neural Network and Effect of Real World Signals on Prediction Window. , 0, , .		14
61	Economic and Efficient Hybrid Vehicle Fuel Economy and Emissions Modeling Using anÂArtificial Neural Network. , 0, , .		13
62	A Cyanobacterial Sidestream Nutrient Removal Process and Its Life Cycle Implications. Bioenergy Research, 2019, 12, 217-228.	3.9	13
63	Test Results for a Fuel Cell-Powered Demonstration Aircraft. , 0, , .		12
64	Design Studies for Hydrogen Fuel Cell Powered Unmanned Aerial Vehicles. , 2008, , .		12
65	The Effect of Trip Preview Prediction Signal Quality on Hybrid Vehicle Fuel Economy. IFAC-PapersOnLine, 2015, 48, 271-276.	0.9	12
66	An economic comparison of battery energy storage to conventional energy efficiency technologies in Colorado manufacturing facilities. Applied Energy, 2016, 164, 133-139.	10.1	12
67	Towards Improving Vehicle Fuel Economy with ADAS. , 2018, , .		12
68	A dynamic thermal algal growth model for pilot-scale open-channel raceways. Bioresource Technology Reports, 2020, 10, 100405.	2.7	12
69	Comparative analysis of a modelâ€based systems engineering approach to a traditional systems engineering approach for architecting a robotic space system through knowledge categorization. Systems Engineering, 2021, 24, 177-199.	2.7	12
70	Increasing the Fuel Economy of Connected and Autonomous Lithium-Ion Electrified Vehicles. Green Energy and Technology, 2018, , 129-151.	0.6	11
71	Identification and Review of the Research Gaps Preventing a Realization of Optimal Energy Management Strategies in Vehicles. SAE International Journal of Alternative Powertrains, 0, 8, .	0.8	11
72	Economic feasibility of in-motion wireless power transfer in a high-density traffic corridor. ETransportation, 2022, 11, 100154.	14.8	11

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73	Economic feasibility and infrastructure optimization of in-motion charging of electric vehicles using wireless power transfer. , 2016, , .		10
74	Real-Time Implementation of Optimal Energy Management in Hybrid Electric Vehicles: Globally Optimal Control of Acceleration Events. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, .	1.6	10
75	Analyzing the Energy Consumption Variation during Chassis Dynamometer Testing of Conventional, Hybrid Electric, and Battery Electric Vehicles. SAE International Journal of Alternative Powertrains, 0, 3, 36-43.	0.8	9
76	JAMS. , 2017, , .		9
77	JAMS-SG. ACM Transactions on Design Automation of Electronic Systems, 2019, 24, 1-31.	2.6	9
78	Pilotâ€scale openâ€channel raceways and flatâ€panel photobioreactors maintain wellâ€mixed conditions under a wide range of mixing energy inputs. Biotechnology and Bioengineering, 2020, 117, 959-969.	3.3	9
79	Mobility Energy Productivity Evaluation of Prediction-Based Vehicle Powertrain Control Combined with Optimal Traffic Management. , 0, , .		9
80	Evaluation of Existing Customer-owned, On-site Distributed Generation Business Models. Electricity Journal, 2014, 27, 42-52.	2.5	8
81	Feasibility of wireless power transfer for electrification of transportation: Techno-economics and life cycle assessment. , 2015, , .		8
82	Priority-based Multi-level Monitoring of Signal Integrity in a Distributed Powertrain Control System. IFAC-PapersOnLine, 2015, 48, 462-469.	0.9	8
83	Command Shaping Under Nonsymmetrical Acceleration and Braking Dynamics. Journal of Vibration and Acoustics, Transactions of the ASME, 2008, 130, .	1.6	7
84	Design considerations for an engine-integral reciprocating natural gas compressor. Applied Energy, 2015, 156, 129-137.	10.1	7
85	High-Fidelity Modeling of Light-Duty Vehicle Emission and Fuel Economy Using Deep Neural Networks. , 0, , .		7
86	Colorado State University EcoCAR 3 Final Technical Report. , 0, , .		7
87	Alternative Plug in Hybrid Electric Vehicle Utility Factor. , 0, , .		6
88	Objective Comparison of Hybrid Vehicles through Simulation Optimization. , 0, , .		6
89	Quantifying Uncertainty in Vehicle Simulation Studies. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 5, 381-392.	0.4	6
90	Infrastructure optimization and economic feasibility of in-motion wireless power transfer. , 2016, , .		6

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91	Renewables firming using grid scale battery storage in a real-time pricing market. , 2017, , .		6
92	Uncertainty analysis and propagation for an Auxiliary Power Module. , 2017, , .		6
93	Input Shaping for Nonlinear Drive Systems. , 2006, , 633.		5
94	Scalable turbocharger performance maps for dynamic state-based engine models. International Journal of Engine Research, 2016, 17, 705-712.	2.3	5
95	Measurement of Medium-Duty Plug-In Hybrid Electric Vehicle Fuel Economy Sensitivity to Ambient Temperature. IEEE Transactions on Transportation Electrification, 2018, 4, 184-189.	7.8	5
96	Combining Ad Hoc Text Mining and Descriptive Analytics to Investigate Public EV Charging Prices in the United States. Energies, 2021, 14, 5240.	3.1	5
97	Energy Consumption Test Methods and Results for Servo-Pump Continuously Variable Transmission Control System. , 2005, , .		4
98	An Evaluation of Customer-Optimized Distributed Generation in New England Utility and Real-Time Markets. Electricity Journal, 2015, 28, 70-85.	2.5	4
99	Validated Modeling and Synthesis of Medium-Scale Polymer Electrolyte Membrane Fuel Cell Aircraft. , 2006, , .		4
100	A model of the effects of automatic generation control signal characteristics on energy storage system reliability. Journal of Power Sources, 2014, 247, 594-604.	7.8	3
101	The Effect of Hill Planning and Route Type Identification Prediction Signal Quality on Hybrid Vehicle Fuel Economy. , 0, , .		3
102	Application of Pre-Computed Acceleration Event Control to Improve Fuel Economy in Hybrid Electric Vehicles. , 0, , .		3
103	Comparative Analysis of Model-Based and Traditional Systems Engineering Approaches for Architecting a Robotic Space System Through Automatic Information Transfer. IEEE Access, 2021, 9, 107476-107492.	4.2	3
104	Comparative analysis of model‐based and traditional systems engineering approaches for simulating a robotic space system architecture through automatic knowledge processing. Systems Engineering, 2022, 25, 360-386.	2.7	3
105	Analysis of Design Tradeoffs for Plug-in Hybrid Vehicles. , 2010, , 159-191.		2
106	Plug-in Fuel Cell Vehicle Technology and Value Analysis. World Electric Vehicle Journal, 2012, 5, 217-226.	3.0	2
107	Detailed Design of a Fuel Cell Plug-in Hybrid Electric Vehicle. , 2013, , .		2
108	Validation and Analysis of the Fuel Cell Plug-in Hybrid Electric Vehicle Built by Colorado State University for the EcoCAR 2: Plugging into the Future Vehicle Competition. , 0, , .		2

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109	Data Management for Geographically and Temporally Rich Plug-in Hybrid Vehicle "Big Data". World Electric Vehicle Journal, 2016, 8, 293-304.	3.0	2
110	Electrification of Class 8 Trucking: Economic Analysis of In-Motion Wireless Power Transfer Compared to Long-Range Batteries. , 2018, , .		2
111	Evaluation of unmanned aerial vehicle tactics through the metrics of survivability. Journal of Defense Modeling and Simulation, 0, , 154851292110316.	1.7	2
112	A road damage and life-cycle greenhouse gas comparison of trucking and pipeline water delivery systems for hydraulically fractured oil and gas field development in Colorado. PLoS ONE, 2017, 12, e0180587.	2.5	2
113	Synchronous and Open, Real World, Vehicle, ADAS, and Infrastructure Data Streams for Automotive Machine Learning Algorithms Research. , 0, , .		2
114	Stochastic simulation of system reliability as a tool for maintenance strategy optimization in a cement plant. , 2011, , .		1
115	From course assessment to redesign: a hybrid-vehicle course as a case illustration. European Journal of Engineering Education, 2013, 38, 687-699.	2.3	1
116	Analysis and Optimization of a Parallel Hydraulic Hybrid. , 2014, , .		1
117	EcoCAR 3: Architecture Selection Validation through Vehicle Modeling and Simulation for the Colorado State University Vehicle Innovation Team. IFAC-PapersOnLine, 2015, 48, 147-152.	0.9	1
118	Reducing Effective Vehicle Emissions Through the Integration of a Carbon Capture and Sequestration System in the CSU EcoCAR Vehicle. , 0, , .		1
119	Weight Reduction through the Design and Manufacturing of Composite Half-Shafts for the EcoCAR 3. , 0, , .		1
120	Discussion: "Temperature of Food and Drink Intake Matters"(Wong, K. V., 2016, ASME J. Energy Resour.) Tj ETQq0 0 0 rgBT /Overlo 139, .	2.3	1
121	Preliminary results from a model-driven architecture methodology for development of an event-driven space communications service concept. , 2017, , .		1
122	Analyzing Requirements in an Operational Viewpoint. , 2019, , 99-152.		1
123	A Colorado-specific life cycle assessment model to support evaluation of low-carbon transportation fuels and policy. Environmental Research: Infrastructure and Sustainability, 0, , .	2.3	1
124	Design and Construction of Grid Attached Storage Simulator. , 2011, , .		0
125	Design of a Fuel Cell Plug-in Hybrid Electric Vehicle in a Range Extending Configuration by Colorado State University for the EcoCAR2 Competition. , 0, , .		0
126	Detailed Analysis of a Fuel Cell Plug-in Hybrid Vehicle Demonstration. , 0, , .		0

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127	An Adaptive Green Zone Strategy for Hybrid Electric Vehicle Control. , 2018, , .		0
128	Vehicle Electrification in Chile: A Life Cycle Assessment and Techno-Economic Analysis Using Data Generated by Autonomie Vehicle Modeling Software. , 2018, , .		0
129	Applying Model–Based Systems Architecture Processes (MBSAP) Methodology for Diversified MBSE Projects with Efficient Systems of Systems Accomplishments. Incose International Symposium, 2020, 30, 1568-1580.	0.6	0
130	Evaluation of Timely Communications Access Methods Using NASA Space Network. Journal of Aerospace Information Systems, 2021, 18, 333-346.	1.4	0
131	Pseudo-Carcinomatosis â€" an Atypical Presentation of Pseudomyxoma Peritonei in a Morbidly Obese Patient. American Journal of Gastroenterology, 2008, 103, S346.	0.4	0
132	Geographical and Temporal Variations in Plug-in Electric Vehicle HVAC Loads. , 2012, , .		0
133	Evaluation of Increased Discretization of Real-Time Locational Marginal Prices on Customer-Optimized Distributed Generation. , 2014, , .		0
134	Project Management and Implementation in EcoCAR 3. , 2015, , .		0
135	Quantifying Repeatability of Real-World On-Road Driving Using Dynamic Time Warping. , 0, , .		0