Jeremy Michalek

List of Publications by Year
in descending order

70	4,929	109264 35	98753 67
papers	citations	h-index	g-index

72	72	72	4591
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Life Cycle Assessment of Greenhouse Gas Emissions from Plug-in Hybrid Vehicles: Implications for Policy. Environmental Science & Technology, 2008, 42, 3170-3176.	4.6	605
2	Effectiveness of incentives on electric vehicle adoption in Norway. Transportation Research, Part D: Transport and Environment, 2016, 46, 56-68.	3.2	334
3	Will subsidies drive electric vehicle adoption? Measuring consumer preferences in the U.S. and China. Transportation Research, Part A: Policy and Practice, 2015, 73, 96-112.	2.0	240
4	Effects of Regional Temperature on Electric Vehicle Efficiency, Range, and Emissions in the United States. Environmental Science & Technology, 2015, 49, 3974-3980.	4.6	228
5	Valuation of plug-in vehicle life-cycle air emissions and oil displacement benefits. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16554-16558.	3.3	219
6	Energy use and life cycle greenhouse gas emissions of drones for commercial package delivery. Nature Communications, 2018, 9, 409.	5.8	181
7	Influence of driving patterns on life cycle cost and emissions of hybrid and plug-in electric vehicle powertrains. Energy Policy, 2013, 60, 445-461.	4.2	175
8	Regional Variability and Uncertainty of Electric Vehicle Life Cycle CO₂ Emissions across the United States. Environmental Science & Technology, 2015, 49, 8844-8855.	4.6	147
9	Architectural layout design optimization. Engineering Optimization, 2002, 34, 461-484.	1.5	146
10	Life Cycle Assessment and Grid Electricity: What Do We Know and What Can We Know?. Environmental Science & Technology, 2010, 44, 1895-1901.	4.6	146
11	A techno-economic analysis and optimization of Li-ion batteries forÂlight-duty passenger vehicle electrification. Journal of Power Sources, 2015, 273, 966-980.	4.0	143
12	Cost-effectiveness of plug-in hybrid electric vehicle battery capacity and charging infrastructure investment for reducing US gasoline consumption. Energy Policy, 2013, 52, 429-438.	4.2	128
13	Balancing Marketing and Manufacturing Objectives in Product Line Design. Journal of Mechanical Design, Transactions of the ASME, 2006, 128, 1196-1204.	1.7	123
14	Expert assessments of the cost and expected future performance of proton exchange membrane fuel cells for vehicles. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4899-4904.	3.3	118
15	A Study of Fuel Efficiency and Emission Policy Impact on Optimal Vehicle Design Decisions. Journal of Mechanical Design, Transactions of the ASME, 2004, 126, 1062-1070.	1.7	109
16	Optimal Plug-In Hybrid Electric Vehicle Design and Allocation for Minimum Life Cycle Cost, Petroleum Consumption, and Greenhouse Gas Emissions. Journal of Mechanical Design, Transactions of the ASME, 2010, 132, .	1.7	100
17	Estimating the potential of controlled plug-in hybrid electric vehicle charging to reduce operational and capacity expansion costs for electric power systems with high wind penetration. Applied Energy, 2014, 115, 190-204.	5.1	92
18	Plug-in hybrid electric vehicle LiFePO4 battery life implications of thermal management, driving conditions, and regional climate. Journal of Power Sources, 2017, 338, 49-64.	4.0	91

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19	Sustainability implications of electricity outages in sub-Saharan Africa. Nature Sustainability, 2018, 1, 589-597.	11.5	87
20	Effect of regional grid mix, driving patterns and climate on the comparative carbon footprint of gasoline and plug-in electric vehicles in the United States. Environmental Research Letters, 2016, 11, 044007.	2.2	84
21	Effects of on-demand ridesourcing on vehicle ownership, fuel consumption, vehicle miles traveled, and emissions per capita in U.S. States. Transportation Research Part C: Emerging Technologies, 2019, 108, 289-301.	3.9	76
22	Labeling energy cost on light bulbs lowers implicit discount rates. Ecological Economics, 2014, 97, 42-50.	2.9	72
23	Optimal design and allocation of electrified vehicles and dedicated charging infrastructure for minimum life cycle greenhouse gas emissions and cost. Energy Policy, 2012, 51, 524-534.	4.2	69
24	Alternative Fuel Vehicle Adoption Increases Fleet Gasoline Consumption and Greenhouse Gas Emissions under United States Corporate Average Fuel Economy Policy and Greenhouse Gas Emissions Standards. Environmental Science & Technology, 2016, 50, 2165-2174.	4.6	65
25	An efficient decomposed multiobjective genetic algorithm for solving the joint product platform selection and product family design problem with generalized commonality. Structural and Multidisciplinary Optimization, 2009, 39, 187-201.	1.7	62
26	An Efficient Weighting Update Method to Achieve Acceptable Consistency Deviation in Analytical Target Cascading. Journal of Mechanical Design, Transactions of the ASME, 2005, 127, 206-214.	1.7	61
27	Uncertainties in Future U.S. Extreme Precipitation From Downscaled Climate Projections. Geophysical Research Letters, 2020, 47, e2019GL086797.	1.5	59
28	Keeping infrastructure reliable under climate uncertainty. Nature Climate Change, 2020, 10, 488-490.	8.1	59
29	The effect of modeling choices on updating intensity-duration-frequency curves and stormwater infrastructure designs for climate change. Climatic Change, 2020, 159, 289-308.	1.7	57
30	Emissions and Cost Implications of Controlled Electric Vehicle Charging in the U.S. PJM Interconnection. Environmental Science & Technology, 2015, 49, 5813-5819.	4.6	53
31	Cost and benefit estimates of partially-automated vehicle collision avoidance technologies. Accident Analysis and Prevention, 2016, 95, 104-115.	3.0	52
32	Interactive design optimization of architectural layouts. Engineering Optimization, 2002, 34, 485-501.	1.5	51
33	Long-term electric system investments to support Plug-in Hybrid Electric Vehicles. , 2008, , .		47
34	A structural analysis of vehicle design responses to Corporate Average Fuel Economy policy. Transportation Research, Part A: Policy and Practice, 2009, 43, 814-828.	2.0	47
35	Temporal and spatial evaluation of stormwater engineering standards reveals risks and priorities across the United States. Environmental Research Letters, 2018, 13, 074006.	2.2	45
36	Potentials for Sustainable Transportation in Cities to Alleviate Climate Change Impacts. Environmental Science & Technology, 2012, 46, 2529-2537.	4.6	42

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37	Exploring the Economic, Environmental, and Travel Implications of Changes in Parking Choices due to Driverless Vehicles: An Agent-Based Simulation Approach. Journal of the Urban Planning and Development Division, ASCE, 2018, 144, .	0.8	38
38	Availability of Biomass Residues for Co-Firing in Peninsular Malaysia: Implications for Cost and GHG Emissions in the Electricity Sector. Energies, 2014, 7, 804-823.	1.6	36
39	Weights, Norms, and Notation in Analytical Target Cascading. Journal of Mechanical Design, Transactions of the ASME, 2005, 127, 499-501.	1.7	35
40	Infrastructure resilience to navigate increasingly uncertain and complex conditions in the Anthropocene. Npj Urban Sustainability, 2021, 1, .	3.7	35
41	Consequential life cycle air emissions externalities for plug-in electric vehicles in the PJM interconnection. Environmental Research Letters, 2016, 11, 024009.	2.2	34
42	A Decomposed Gradient-Based Approach for Generalized Platform Selection and Variant Design in Product Family Optimization. Journal of Mechanical Design, Transactions of the ASME, 2008, 130, .	1.7	26
43	Alternative-fuel-vehicle policy interactions increase U.S. greenhouse gas emissions. Transportation Research, Part A: Policy and Practice, 2019, 124, 396-407.	2.0	25
44	The impact of Uber and Lyft on vehicle ownership, fuel economy, and transit across U.S. cities. IScience, 2021, 24, 101933.	1.9	25
45	Consistency and robustness of forecasting for emerging technologies: The case of Li-ion batteries for electric vehicles. Energy Policy, 2017, 106, 415-426.	4.2	24
46	Development of a Simulation Model to Analyze the Effect of Thermal Management on Battery Life. , 0, , .		20
47	Low-Level Automated Light-Duty Vehicle Technologies Provide Opportunities to Reduce Fuel Consumption. Transportation Research Record, 2018, 2672, 60-74.	1.0	19
48	In-flight positional and energy use data set of a DJI Matrice 100 quadcopter for small package delivery. Scientific Data, 2021, 8, 155.	2.4	19
49	Pooling stated and revealed preference data in the presence of RP endogeneity. Transportation Research Part B: Methodological, 2018, 109, 70-89.	2.8	17
50	Hydrogen Storage for Fuel Cell Electric Vehicles: Expert Elicitation and a Levelized Cost of Driving Model. Environmental Science & Technology, 2021, 55, 553-562.	4.6	16
51	A validation study of lithium-ion cell constant c-rate discharge simulation with Battery Design StudioÂ®. International Journal of Energy Research, 2013, 37, 1562-1568.	2.2	14
52	A Decomposed Genetic Algorithm for Solving the Joint Product Family Optimization Problem. , 2007, , .		13
53	A Deterministic Lagrangian-Based Global Optimization Approach for Quasiseparable Nonconvex Mixed-Integer Nonlinear Programs. Journal of Mechanical Design, Transactions of the ASME, 2009, 131, .	1.7	13
54	Relaxations of factorable functions with convex-transformable intermediates. Mathematical Programming, 2014, 144, 107-140.	1.6	12

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55	Forecasting light-duty vehicle demand using alternative-specific constants for endogeneity correction versus calibration. Transportation Research Part B: Methodological, 2016, 84, 182-210.	2.8	12
56	Using rainfall measures to evaluate hydrologic performance of green infrastructure systems under climate change. Sustainable and Resilient Infrastructure, 2021, 6, 156-180.	1.7	11
57	Net-societal and net-private benefits of some existing vehicle crash avoidance technologies. Accident Analysis and Prevention, 2019, 125, 207-216.	3.0	10
58	Resilience to Extreme Rainfall Starts with Science. Bulletin of the American Meteorological Society, 2021, 102, E808-E813.	1.7	9
59	Air Pollution, Greenhouse Gas, and Traffic Externality Benefits and Costs of Shifting Private Vehicle Travel to Ridesourcing Services. Environmental Science & Technology, 2021, 55, 13174-13185.	4.6	9
60	Exploring the Role of Interaction Effects in Visual Conjoint Analysis. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, .	1.7	7
61	On the implications of using composite vehicles in choice model prediction. Transportation Research Part B: Methodological, 2018, 116, 163-188.	2.8	6
62	Effects of Air Emission Externalities on Optimal Ridesourcing Fleet Electrification and Operations. Environmental Science & Technology, 2021, 55, 3188-3200.	4.6	5
63	Wasting less electricity before use. Nature Climate Change, 2019, 9, 648-649.	8.1	4
64	Environmental and Economic Trade-Offs of City Vehicle Fleet Electrification and Photovoltaic Installation in the U.S. PJM Interconnection. Environmental Science & Technology, 2020, 54, 380-389.	4.6	3
65	Effect of crude oil carbon accounting decisions on meeting global climate budgets. Environment Systems and Decisions, 2017, 37, 261-275.	1.9	2
66	Choice at the pump: measuring preferences for lower-carbon combustion fuels. Environmental Research Letters, 2019, 14, 084035.	2.2	2
67	Engineersâ€™ Roles and Responsibilities in Automated Vehicle Ethics: Exploring Engineering Codes of Ethics as a Guide to Addressing Issues in Sociotechnical Systems. Journal of Transportation Engineering Part A: Systems, 2022, 148, .	0.8	1
68	Framing the Use of Climate Model Projections in Infrastructure Engineering: Practices, Uncertainties, and Recommendations. Journal of Infrastructure Systems, 2022, 28, .	1.0	1
69	Consistency and Robustness in Forecasting for Emerging Technologies: The Case of Li-ion Batteries for Electric Vehicles. SSRN Electronic Journal, 0, , .	0.4	0
70	Implications of Competitor Representation for Profit-Maximizing Design. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	1.7	0