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	Implications of Competitor Representation for Profit-Maximizing Design. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	1.7	0
2	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
3	Framing the Use of Climate Model Projections in Infrastructure Engineering: Practices, Uncertainties, and Recommendations. Journal of Infrastructure Systems, 2022, 28, .	1.0	1
4	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
5	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
6	The impact of Uber and Lyft on vehicle ownership, fuel economy, and transit across U.S. cities. IScience, 2021, 24, 101933.	1.9	25
7	Effects of Air Emission Externalities on Optimal Ridesourcing Fleet Electrification and Operations. Environmental Science & Technology, 2021, 55, 3188-3200.	4.6	5
8	Infrastructure resilience to navigate increasingly uncertain and complex conditions in the Anthropocene. Npj Urban Sustainability, 2021, 1, .	3.7	35
9	Resilience to Extreme Rainfall Starts with Science. Bulletin of the American Meteorological Society, 2021, 102, E808-E813.	1.7	9
10	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
11	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
12	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
13	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
14	Uncertainties in Future U.S. Extreme Precipitation From Downscaled Climate Projections. Geophysical Research Letters, 2020, 47, e2019GL086797.	1.5	59
15	Keeping infrastructure reliable under climate uncertainty. Nature Climate Change, 2020, 10, 488-490.	8.1	59
16	Wasting less electricity before use. Nature Climate Change, 2019, 9, 648-649.	8.1	4
17	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
18	Choice at the pump: measuring preferences for lower-carbon combustion fuels. Environmental Research Letters, 2019, 14, 084035.	2.2	2

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19	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
20	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
21	Net-societal and net-private benefits of some existing vehicle crash avoidance technologies. Accident Analysis and Prevention, 2019, 125, 207-216.	3.0	10
22	Pooling stated and revealed preference data in the presence of RP endogeneity. Transportation Research Part B: Methodological, 2018, 109, 70-89.	2.8	17
23	Energy use and life cycle greenhouse gas emissions of drones for commercial package delivery. Nature Communications, 2018, 9, 409.	5.8	181
24	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
25	Low-Level Automated Light-Duty Vehicle Technologies Provide Opportunities to Reduce Fuel Consumption. Transportation Research Record, 2018, 2672, 60-74.	1.0	19
26	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
27	Sustainability implications of electricity outages in sub-Saharan Africa. Nature Sustainability, 2018, 1, 589-597.	11.5	87
28	On the implications of using composite vehicles in choice model prediction. Transportation Research Part B: Methodological, 2018, 116, 163-188.	2.8	6
29	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
30	Effect of crude oil carbon accounting decisions on meeting global climate budgets. Environment Systems and Decisions, 2017, 37, 261-275.	1.9	2
31	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
32	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
33	Consequential life cycle air emissions externalities for plug-in electric vehicles in the PJM interconnection. Environmental Research Letters, 2016, 11, 024009.	2.2	34
34	Effectiveness of incentives on electric vehicle adoption in Norway. Transportation Research, Part D: Transport and Environment, 2016, 46, 56-68.	3.2	334
35	Cost and benefit estimates of partially-automated vehicle collision avoidance technologies. Accident Analysis and Prevention, 2016, 95, 104-115.	3.0	52
36	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

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37	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
38	Exploring the Role of Interaction Effects in Visual Conjoint Analysis. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, .	1.7	7
39	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
40	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
41	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
42	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
43	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
44	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
45	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
46	Labeling energy cost on light bulbs lowers implicit discount rates. Ecological Economics, 2014, 97, 42-50.	2.9	72
47	Relaxations of factorable functions with convex-transformable intermediates. Mathematical Programming, 2014, 144, 107-140.	1.6	12
48	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
49	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
50	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
51	Potentials for Sustainable Transportation in Cities to Alleviate Climate Change Impacts. Environmental Science & Technology, 2012, 46, 2529-2537.	4.6	42
52	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
53	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
54	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

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55	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
56	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
57	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
58	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
59	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
60	Long-term electric system investments to support Plug-in Hybrid Electric Vehicles. , 2008, , .		47
61	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
62	A Decomposed Genetic Algorithm for Solving the Joint Product Family Optimization Problem. , 2007, , .		13
63	Balancing Marketing and Manufacturing Objectives in Product Line Design. Journal of Mechanical Design, Transactions of the ASME, 2006, 128, 1196-1204.	1.7	123
64	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
65	Weights, Norms, and Notation in Analytical Target Cascading. Journal of Mechanical Design, Transactions of the ASME, 2005, 127, 499-501.	1.7	35
66	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
67	Interactive design optimization of architectural layouts. Engineering Optimization, 2002, 34, 485-501.	1.5	51
68	Architectural layout design optimization. Engineering Optimization, 2002, 34, 461-484.	1.5	146
69	Development of a Simulation Model to Analyze the Effect of Thermal Management on Battery Life. , 0, , .		20
70	Consistency and Robustness in Forecasting for Emerging Technologies: The Case of Li-ion Batteries for Electric Vehicles. SSRN Electronic Journal, 0, , .	0.4	0