Brian Tarroja

List of Publications by Year
in descending order

Version: 2024-02-01

40 papers	1,330 citations	346980 22 h-index	406436 35 g-index
40 all docs	40 docs citations	40 times ranked	1583 citing authors

#	Article	IF	Citations
1	Core process representation in power system operational models: Gaps, challenges, and opportunities for multisector dynamics research. Energy, 2022, 238, 122049.	4.5	20
2	Potential Health Impact Assessment of Large-Scale Production of Batteries for the Electric Grid. Minerals, Metals and Materials Series, 2022, , 417-425.	0.3	3
3	Techno-Economic Analysis of Material Costs for Emerging Flow Batteries. Minerals, Metals and Materials Series, 2022, , 449-460.	0.3	1
4	Advancing chemical hazard assessment with decision analysis: A case study on lithium-ion and redox flow batteries used for energy storage. Journal of Hazardous Materials, 2022, 437, 129301.	6.5	5
5	The value of consumer acceptance of controlled electric vehicle charging in a decarbonizing grid: The case of California. Energy, 2021, 229, 120691.	4.5	27
6	Environmental benefit-detriment thresholds for flow battery energy storage systems: A case study in California. Applied Energy, 2021, 300, 117354.	5.1	10
7	Determining cost-optimal approaches for managing excess renewable electricity in decarbonized electricity systems. Renewable Energy, 2021, 178, 1187-1197.	4.3	18
8	Climate change impacts on Three Gorges Reservoir impoundment and hydropower generation. Journal of Hydrology, 2020, 580, 123922.	2.3	78
9	Assessing concurrent effects of climate change on hydropower supply, electricity demand, and greenhouse gas emissions in the Upper Yangtze River Basin of China. Applied Energy, 2020, 279, 115694.	5.1	55
10	Flow battery production: Materials selection and environmental impact. Journal of Cleaner Production, 2020, 269, 121740.	4.6	48
11	How do non-carbon priorities affect zero-carbon electricity systems? A case study of freshwater consumption and cost for Senate Bill 100 compliance in California. Applied Energy, 2020, 265, 114824.	5.1	16
12	Estimating the technical feasibility of fuel cell and battery electric vehicles for the medium and heavy duty sectors in California. Applied Energy, 2020, 276, 115439.	5.1	85
13	Implications of hydropower variability from climate change for a future, highly-renewable electric grid in California. Applied Energy, 2019, 237, 353-366.	5.1	40
14	Prioritizing among the end uses of excess renewable energy for cost-effective greenhouse gas emission reductions. Applied Energy, 2019, 235, 284-298.	5.1	52
15	Assessing climate change impacts on California hydropower generation and ancillary services provision. Climatic Change, 2018, 151, 395-412.	1.7	34
16	Comparing the emissions benefits of centralized vs. decentralized electric vehicle smart charging approaches: A case study of the year 2030 California electric grid. Journal of Power Sources, 2018, 401, 175-185.	4.0	43
17	Translating climate change and heating system electrification impacts on building energy use to future greenhouse gas emissions and electric grid capacity requirements in California. Applied Energy, 2018, 225, 522-534.	5.1	59
18	Assessing future water resource constraints on thermally based renewable energy resources in California. Applied Energy, 2018, 226, 49-60.	5.1	18

#	Article	IF	Citations
19	Resource portfolio design considerations for materially-efficient planning of 100% renewable electricity systems. Energy, 2018, 157, 460-471.	4.5	14
20	California drought increases CO2 footprint of energy. Sustainable Cities and Society, 2017, 28, 450-452.	5.1	34
21	A Comparison of Fuel Cell and Energy Storage Technologies' Potential to Reduce CO2 Emissions and Meet Renewable Generation Goals. ECS Transactions, 2016, 71, 193-203.	0.3	2
22	Assessing the stationary energy storage equivalency of vehicle-to-grid charging battery electric vehicles. Energy, 2016, 106, 673-690.	4.5	82
23	Charging a renewable future: The impact of electric vehicle charging intelligence on energy storage requirements to meet renewable portfolio standards. Journal of Power Sources, 2016, 336, 63-74.	4.0	72
24	Quantifying climate change impacts on hydropower generation and implications on electric grid greenhouse gas emissions and operation. Energy, 2016, 111, 295-305.	4.5	99
25	The effectiveness of plug-in hybrid electric vehicles and renewable power in support of holistic environmental goals: Part 2 â€“ Design and operation implications for load-balancing resources on the electric grid. Journal of Power Sources, 2015, 278, 782-793.	4.0	14
26	The importance of grid integration for achievable greenhouse gas emissions reductions from alternative vehicle technologies. Energy, 2015, 87, 504-519.	4.5	52
27	Dispatch of fuel cells as Transmission Integrated Grid Energy Resources to support renewables and reduce emissions. Applied Energy, 2015, 148, 178-186.	5.1	12
28	Evaluating options for balancing the water â€“ electricity nexus in California: Part 2â€”Greenhouse gas and renewable energy utilization impacts. Science of the Total Environment, 2014, 497-498, 711-724.	3.9	31
29	Advancing Toward Sustainability Goals at the University of California, Irvine. , 2014, , .		2
30	The effectiveness of plug-in hybrid electric vehicles and renewable power in support of holistic environmental goals: Part 1 â€“ Evaluation of aggregate energy and greenhouse gas performance. Journal of Power Sources, 2014, 257, 461-470.	4.0	26
31	Evaluating options for Balancing the Water-Electricity Nexus in California: Part 1 â€“ Securing Water Availability. Science of the Total Environment, 2014, 497-498, 697-710.	3.9	26
32	Solar power variability and spatial diversification: implications from an electric grid load balancing perspective. International Journal of Energy Research, 2013, 37, 1002-1016.	2.2	22
33	Exploration of the integration of renewable resources into California's electric system using the Holistic Grid Resource Integration and Deployment (HiGRID) tool. Energy, 2013, 50, 353-363.	4.5	60
34	Metrics for evaluating the impacts of intermittent renewable generation on utility load-balancing. Energy, 2012, 42, 546-562.	4.5	63
35	Spatial and temporal analysis of electric wind generation intermittency and dynamics. Renewable Energy, 2011, 36, 3424-3432.	4.3	57
36	Design, Simulation and Control of a 100 MW-Class Solid Oxide Fuel Cell Gas Turbine Hybrid System. Journal of Fuel Cell Science and Technology, 2010, 7, .	0.8	14

#	Article	IF	Citations
37	Parametric Thermodynamic Analysis of a Solid Oxide Fuel Cell Gas Turbine System Design Space. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	0.5	31
38	High Temperature Stationary Solid Oxide Fuel Cell Systems in the Renewable Future. , 2009, , .		0
39	Parametric Thermodynamic Analysis of a Solid Oxide Fuel Cell Gas Turbine System Design Space. , 2008, , .		3
40	Design, Simulation, and Control of a 100 Megawatt-Class Solid Oxide Fuel Cell Gas Turbine Hybrid System. , 2008, , .		2