Patrick Ep Jochem

List of Publications by Year
in descending order

89 papers	3,613 citations	218381 26 h-index	149479 56 g-index
96 all docs	96 docs citations	96 times ranked	3438 citing authors

#	Article	IF	Citations
1	Measuring the immeasurable â€" A survey of sustainability indices. Ecological Economics, 2007, 63, 1-8.	2.9	659
2	A review of consumer preferences of and interactions with electric vehicle charging infrastructure. Transportation Research, Part D: Transport and Environment, 2018, 62, 508-523.	3.2	393
3	Transport: A roadblock to climate change mitigation?. Science, 2015, 350, 911-912.	6.0	307
4	Assessing CO 2 emissions of electric vehicles in Germany in 2030. Transportation Research, Part A: Policy and Practice, 2015, 78, 68-83.	2.0	108
5	External costs of electric vehicles. Transportation Research, Part D: Transport and Environment, 2016, 42, 60-76.	3.2	100
6	Solar energy storage in German households: profitability, load changes and flexibility. Energy Policy, 2016, 98, 520-532.	4.2	99
7	Load shift potential of electric vehicles in Europe. Journal of Power Sources, 2014, 255, 283-293.	4.0	97
8	Generating electric vehicle load profiles from empirical data of three EV fleets in Southwest Germany. Journal of Cleaner Production, 2017, 150, 253-266.	4.6	96
9	A scenario-based stochastic optimization model for charging scheduling of electric vehicles under uncertainties of vehicle availability and charging demand. Journal of Cleaner Production, 2020, 254, 119886.	4.6	88
10	Two-stage stochastic optimization for cost-minimal charging of electric vehicles at public charging stations with photovoltaics. Applied Energy, 2019, 242, 769-781.	5.1	82
11	Towards Concise Models of Grid Stability. , 2018, , .		72
12	How many fast-charging stations do we need along European highways?. Transportation Research, Part D: Transport and Environment, 2019, 73, 120-129.	3.2	62
13	CO2 Mitigation Potential of Plug-in Hybrid Electric Vehicles larger than expected. Scientific Reports, 2017, 7, 16493.	1.6	61
14	Integrating renewable energy sources by electric vehicle fleets under uncertainty. Energy, 2017, 141, 2145-2153.	4.5	59
15	Including road transport in the EU ETS (European Emissions Trading System): A model-based analysis of the German electricity and transport sector. Energy, 2014, 69, 708-720.	4.5	54
16	Methods for forecasting the market penetration of electric drivetrains in the passenger car market. Transport Reviews, 2018, 38, 322-348.	4.7	54
17	Impact of electric trucks powered by overhead lines on the European electricity system and CO2 emissions. Energy Policy, 2019, 130, 32-40.	4.2	54
18	Incentivizing smart charging: Modeling charging tariffs for electric vehicles in German and French electricity markets. Energy Research and Social Science, 2018, 42, 112-126.	3.0	53

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19	Empirical Fuel Consumption and CO₂ Emissions of Plugâ€In Hybrid Electric Vehicles. Journal of Industrial Ecology, 2018, 22, 773-784.	2.8	50
20	Electricity storage systems in the future German energy sector. Computers and Operations Research, 2016, 66, 228-240.	2.4	47
21	Greenhouse gas emissions of electric vehicles in Europe considering different charging strategies. Transportation Research, Part D: Transport and Environment, 2020, 87, 102534.	3.2	46
22	Charging strategies for economic operations of electric vehicles in commercial applications. Transportation Research, Part D: Transport and Environment, 2017, 51, 173-189.	3.2	42
23	The impact of daily and annual driving on fuel economy and CO2 emissions of plug-in hybrid electric vehicles. Transportation Research, Part A: Policy and Practice, 2018, 118, 331-340.	2.0	39
24	Powertrain technologies and their impact on greenhouse gas emissions in key car markets. Transportation Research, Part D: Transport and Environment, 2020, 80, 102214.	3.2	36
25	Literature vs. Twitter: Empirical insights on customer needs in e-mobility. Journal of Cleaner Production, 2019, 213, 508-520.	4.6	34
26	Simulating vehicle fleet composition: A review of system dynamics models. Renewable and Sustainable Energy Reviews, 2019, 115, 109367.	8.2	33
27	Empirical carbon dioxide emissions of electric vehicles in a French-German commuter fleet test. Journal of Cleaner Production, 2017, 142, 263-278.	4.6	32
28	Does free-floating carsharing reduce private vehicle ownership? The case of SHARE NOW in European cities. Transportation Research, Part A: Policy and Practice, 2020, 141, 373-395.	2.0	29
29	Optimizing the allocation of fast charging infrastructure along the German autobahn. Journal of Business Economics, 2016, 86, 513-535.	1.3	28
30	Perceived price complexity of dynamic energy tariffs: An investigation of antecedents and consequences. Energy Policy, 2017, 106, 244-254.	4.2	28
31	Strategic policy targets and the contribution of hydrogen in a 100% renewable European power system. Energy Reports, 2021, 7, 4595-4608.	2.5	27
32	Reducing computing time of energy system models by a myopic approach. Energy Systems, 2014, 5, 65-83.	1.8	26
33	The potential of carbon dioxide emission reductions in German commercial transport by electric vehicles. International Journal of Environmental Science and Technology, 2014, 11, 2169-2184.	1.8	25
34	Demand response with heuristic control strategies for modulating heat pumps. Applied Energy, 2019, 238, 1346-1360.	5.1	25
35	An efficient two-stage algorithm for decentralized scheduling of micro-CHP units. European Journal of Operational Research, 2015, 245, 862-874.	3.5	23
36	Unit commitment of photovoltaic-battery systems: An advanced approach considering uncertainties from load, electric vehicles, and photovoltaic. Applied Energy, 2020, 280, 115972.	5.1	23

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37	The Costs of Privacy in Local Energy Markets. , 2013, , .		22
38	Global perspective on CO₂ emissions of electric vehicles. Environmental Research Letters, 2021, 16, 054043.	2.2	22
39	Decentralized optimization approaches for using the load flexibility of electric heating devices. Energy, 2020, 193, 116651.	4.5	18
40	Fast charging stations with stationary batteries: A techno-economic comparison of fast charging along highways and in cities. Transportation Research Procedia, 2020, 48, 3832-3849.	0.8	18
41	A climate club to decarbonize the global steel industry. Nature Climate Change, 2022, 12, 494-496.	8.1	18
42	How to assess the quality and transparency of energy scenarios: Results of a case study. Energy Strategy Reviews, 2019, 26, 100380.	3.3	17
43	Can product service systems support electric vehicle adoption?. Transportation Research, Part A: Policy and Practice, 2020, 137, 343-359.	2.0	17
44	Long-term impacts of battery electric vehicles on the German electricity system. European Physical Journal: Special Topics, 2016, 225, 583-593.	1.2	16
45	Meeting the Modeling Needs of Future Energy Systems. Energy Technology, 2017, 5, 1007-1025.	1.8	16
46	On the influence of jurisdiction on the profitability of residential photovoltaic-storage systems: A multi-national case study. Energy Policy, 2017, 109, 428-440.	4.2	16
47	An Environmental Assessment Framework for Energy System Analysis (EAFESA): The method and its application to the European energy system transformation. Journal of Cleaner Production, 2020, 243, 118614.	4.6	16
48	A Survey on User Acceptance of Wireless Electric Vehicle Charging. World Electric Vehicle Journal, 2018, 9, 36.	1.6	15
49	The Influence of Electric Vehicle Charging on Low Voltage Grids with Characteristics Typical for Germany. World Electric Vehicle Journal, 2019, 10, 88.	1.6	15
50	Model-Based Quantification of Load Shift Potentials and Optimized Charging of Electric Vehicles. Smart Grid and Renewable Energy, 2013, 04, 398-408.	0.7	15
51	Carbon implications of marginal oils from market-derived demand shocks. Nature, 2021, 599, 80-84.	13.7	15
52	Electric Vehicles with Range Extenders: Evaluating the Contribution to the Sustainable Development of Metropolitan Regions. Journal of the Urban Planning and Development Division, ASCE, 2018, 144, .	0.8	12
53	Simulating Electric Vehicle Diffusion and Charging Activities in France and Germany. World Electric Vehicle Journal, 2019, 10, 73.	1.6	12
54	Two-stage stochastic program optimizing the cost of electric vehicles in commercial fleets. Applied Energy, 2021, 293, 116649.	5.1	12

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55	When will electric vehicles capture the German market? And why?. , 2013, , .		11
56	How to model the cycling ability of thermal units in power systems. Energy, 2016, 103, 397-409.	4.5	11
57	Interlinking major markets to explore electric car uptake. Energy Policy, 2020, 144, 111588.	4.2	11
58	Demand response through decentralized optimization in residential areas with wind and photovoltaics. Energy, 2021, 223, 119984.	4.5	11
59	Vehicle Energy Consumption in Python (VencoPy): Presenting and Demonstrating an Open-Source Tool to Calculate Electric Vehicle Charging Flexibility. Energies, 2021, 14, 4349.	1.6	11
60	Load-shifting potentials in households including electric mobility - A comparison of user behaviour with modelling results. , 2013, , .		10
61	Integrating Electric Vehicles into the German Electricity Grid â€“ an Interdisciplinary Analysis. World Electric Vehicle Journal, 2012, 5, 763-770.	1.6	9
62	Ein Rollenmodell zur Einbindung der Endkunden in eine smarte Energiewelt. Zeitschrift FÃ¼r Energiewirtschaft, 2013, 37, 195-210.	0.2	9
63	Integrating vehicleâ€toâ€grid technology into energy system models: Novel methods and their impact on greenhouse gas emissions. Journal of Industrial Ecology, 2022, 26, 392-405.	2.8	9
64	Consumer understanding and evaluation of carbon-neutral electric vehicle charging services. Applied Energy, 2022, 313, 118799.	5.1	9
65	Energy Saving Obligations and White Certificates: Ideas and Considerations for the Transport Sector. International Journal of Sustainable Transportation, 2011, 5, 345-374.	2.1	8
66	Global electric car market deployment considering endogenous battery price development. , 2020, , 281-305.		8
67	MonetÃre Anreize zur Steuerung der Ladelast von Elektrofahrzeugen â€“ eine modellgestÃ¼tzte Optimierung. Zeitschrift FÃ¼r Energiewirtschaft, 2013, 37, 1-12.	0.2	7
68	Experiences of EV users in the French-German context. , 2013, , .		7
69	The role of coordination costs in mode choice decisions: A case study of German cities. Transportation Research, Part A: Policy and Practice, 2021, 149, 31-44.	2.0	6
70	On the Road to an Electric Mobility Mass Marketâ€"How Can Early Adopters be Characterized?. Lecture Notes in Mobility, 2016, , 21-51.	0.2	6
71	Impacts of a Carbon Dioxide Emissions Trading Scheme in German Road Transportation. Transportation Research Record, 2009, 2139, 153-160.	1.0	5
72	Interdependencies of home energy storage between electric vehicle and stationary battery. , 2013, , .		5

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73	CROME: The French and German field demonstration of the interoperable mobility with EVs. , 2013, , .		5
74	CO2 Emission Reduction in Freight Transports: How to Stimulate Environmental Friendly Behaviour?. SSRN Electronic Journal, 0, , .	0.4	5
75	Impacts of electric vehicles on the European high and extra high voltage power grid. Journal of Industrial Ecology, 2022, 26, 824-837.	2.8	5
76	EV market development pathways — An application of System Dynamics for policy simulation. , 2013, , .		4
77	Defining a day-ahead spot market for unbundled time-specific renewable energy certificates. , 2017, , .		4
78	Aggregating load shifting potentials of electric vehicles for energy system models. , 2020, , .		4
79	On the Necessity and Nature of E-Mobility Services â€“ Towards a Service Description Framework. Lecture Notes in Business Information Processing, 2015, , 109-122.	0.8	4
80	Interdependencies of Home Energy Storage between Electric Vehicle and Stationary Battery. World Electric Vehicle Journal, 2013, 6, 1144-1150.	1.6	3
81	Provision of demand response by French prosumers with photovoltaic-battery systems in multiple markets. Energy Systems, 0, , 1.	1.8	3
82	Profitability of photovoltaic battery systems considering temporal resolution. , 2015, , .		1
83	Marketing Risk of Renewable Generators. , 2019, , .		1
84	The Impact of Electric Vehicles on Energy Systems. , 2021, , 560-565.		1
85	Electricity Storage Systems and Their Allocation in the German Power System. Operations Research Proceedings: Papers of the Annual Meeting = VortrÃge Der Jahrestagung / DGOR, 2014, , 7-13.	0.1	1
86	How to Integrate Electric Vehicles in the Future Energy System?. Lecture Notes in Mobility, 2014, , 243-263.	0.2	1
87	Internalizing External Costs of Transport with a Focus on Climate Change. Transportation Research, Economics and Policy, 2011, , 187-207.	0.3	1
88	Uncertainty handling control algorithms for demand response with modulating electric heating devices. , 2019, , .		0
89	Electric Vehicle Market Diffusion in Main Nonâ€“European Markets. , 2021, , 75-88.		0