

# David Parra

## List of Publications by Year in descending order

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Version: 2024-02-01

45  
papers

3,008  
citations

147726

31  
h-index

243529

44  
g-index

47  
all docs

47  
docs citations

47  
times ranked

3009  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on the role, cost and value of hydrogen energy systems for deep decarbonisation. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 101, 279-294.	8.2	378
2	An interdisciplinary review of energy storage for communities: Challenges and perspectives. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 79, 730-749.	8.2	209
3	An integrated techno-economic and life cycle environmental assessment of power-to-gas systems. <i>Applied Energy</i> , 2017, 193, 440-454.	5.1	204
4	Community energy storage: A smart choice for the smart grid?. <i>Applied Energy</i> , 2018, 212, 489-497.	5.1	162
5	Optimum community energy storage system for PV energy time-shift. <i>Applied Energy</i> , 2015, 137, 576-587.	5.1	148
6	Techno-economic implications of the electrolyser technology and size for power-to-gas systems. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 3748-3761.	3.8	144
7	Optimum community energy storage for renewable energy and demand load management. <i>Applied Energy</i> , 2017, 200, 358-369.	5.1	135
8	Becoming prosumer: Revealing trading preferences and decision-making strategies in peer-to-peer energy communities. <i>Energy Policy</i> , 2020, 137, 111098.	4.2	117
9	Optimum community energy storage system for demand load shifting. <i>Applied Energy</i> , 2016, 174, 130-143.	5.1	107
10	Effect of tariffs on the performance and economic benefits of PV-coupled battery systems. <i>Applied Energy</i> , 2016, 164, 175-187.	5.1	107
11	Techno-economic and environmental assessment of stationary electricity storage technologies for different time scales. <i>Energy</i> , 2017, 139, 1173-1187.	4.5	95
12	Analysis of space heating demand in the Swiss residential building stock: Element-based bottom-up model of archetype buildings. <i>Energy and Buildings</i> , 2019, 184, 300-322.	3.1	77
13	Optimizing PV and grid charging in combined applications to improve the profitability of residential batteries. <i>Journal of Energy Storage</i> , 2017, 13, 58-72.	3.9	74
14	Modeling of PV generation, battery and hydrogen storage to investigate the benefits of energy storage for single dwelling. <i>Sustainable Cities and Society</i> , 2014, 10, 1-10.	5.1	73
15	Spatial analysis of distribution grid capacity and costs to enable massive deployment of PV, electric mobility and electric heating. <i>Applied Energy</i> , 2021, 287, 116504.	5.1	71
16	Assessment of the current thermal performance level of the Swiss residential building stock: Statistical analysis of energy performance certificates. <i>Energy and Buildings</i> , 2018, 178, 360-378.	3.1	68
17	Optimized PV-coupled battery systems for combining applications: Impact of battery technology and geography. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 112, 978-990.	8.2	58
18	Additional Emissions and Cost from Storing Electricity in Stationary Battery Systems. <i>Environmental Science &amp; Technology</i> , 2019, 53, 3379-3390.	4.6	58

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19	Techno-economic analysis of battery storage and curtailment in a distribution grid with high PV penetration. <i>Journal of Energy Storage</i> , 2018, 17, 73-83.	3.9	57
20	Cost-effectiveness of large-scale deep energy retrofit packages for residential buildings under different economic assessment approaches. <i>Energy and Buildings</i> , 2020, 215, 109870.	3.1	51
21	Impact of local energy markets integration in power systems layer: A comprehensive review. <i>Applied Energy</i> , 2021, 301, 117434.	5.1	51
22	Integration of prosumer peer-to-peer trading decisions into energy community modelling. <i>Nature Energy</i> , 2022, 7, 74-82.	19.8	50
23	Design, testing and evaluation of a community hydrogen storage system for end user applications. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 5215-5229.	3.8	49
24	Levelized cost of solar photovoltaics and wind supported by storage technologies to supply firm electricity. <i>Journal of Energy Storage</i> , 2020, 27, 101027.	3.9	41
25	The nature of combining energy storage applications for residential battery technology. <i>Applied Energy</i> , 2019, 239, 1343-1355.	5.1	38
26	Peer-to-peer electricity trading as an enabler of increased PV and EV ownership. <i>Energy Conversion and Management</i> , 2021, 245, 114634.	4.4	37
27	The role of hydrogen in achieving the decarbonization targets for the UK domestic sector. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 4158-4169.	3.8	36
28	Decarbonising heat with optimal PV and storage investments: A detailed sector coupling modelling framework with flexible heat pump operation. <i>Applied Energy</i> , 2021, 282, 116110.	5.1	36
29	Solar space heating and cooling for Spanish housing: Potential energy savings and emissions reduction. <i>Solar Energy</i> , 2011, 85, 2622-2641.	2.9	35
30	Are batteries the optimum PV-coupled energy storage for dwellings? Techno-economic comparison with hot water tanks in the UK. <i>Energy and Buildings</i> , 2016, 116, 614-621.	3.1	34
31	Techno-economic potential of large-scale energy retrofit in the Swiss residential building stock. <i>Energy Procedia</i> , 2017, 122, 121-126.	1.8	32
32	Physical design, techno-economic analysis and optimization of distributed compressed air energy storage for renewable energy integration. <i>Journal of Energy Storage</i> , 2021, 35, 102268.	3.9	25
33	An assessment of the impacts of renewable and conventional electricity supply on the cost and value of power-to-gas. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 9577-9593.	3.8	23
34	What adds more flexibility? An energy system analysis of storage, demand-side response, heating electrification, and distribution reinforcement. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 167, 112696.	8.2	23
35	Decarbonizing heat with PV-coupled heat pumps supported by electricity and heat storage: Impacts and trade-offs for prosumers and the grid. <i>Energy Conversion and Management</i> , 2021, 240, 114220.	4.4	22
36	Do I need to charge right now? Tailored choice architecture design can increase preferences for electric vehicle smart charging. <i>Energy Policy</i> , 2022, 162, 112818.	4.2	14

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37	Optimised allocation of PV and storage capacity among different consumer types and urban settings: A prospective analysis for Switzerland. <i>Journal of Cleaner Production</i> , 2020, 259, 120762.	4.6	13
38	The demand-side resource opportunity for deep grid decarbonization. <i>Joule</i> , 2022, 6, 972-983.	11.7	13
39	Does bulk electricity storage assist wind and solar in replacing dispatchable power production?. <i>Energy Economics</i> , 2020, 85, 104495.	5.6	11
40	How Does the Electricity Demand Profile Impact the Attractiveness of PV-Coupled Battery Systems Combining Applications?. <i>Energies</i> , 2020, 13, 4038.	1.6	11
41	Disaggregation of energy storage operation by timescales. <i>Journal of Energy Storage</i> , 2019, 23, 480-494.	3.9	7
42	Impact of prosumer battery operation on the cost of power supply. <i>Journal of Energy Storage</i> , 2020, 29, 101323.	3.9	7
43	Editorial: Advances in Power-to-X: Processes, Systems, and Deployment. <i>Frontiers in Energy Research</i> , 2021, 9, .	1.2	3
44	Solar Space Heating System Using High Efficiency Flat Plate Collectors: Experimental Results. , 2010, , .		1
45	Modelling the effects of low-cost large-scale energy storage in the UK electricity network. , 2019, , .		0