

# Dharik S Mallapragada

## List of Publications by Year in descending order

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Version: 2024-02-01

31  
papers

1,124  
citations

471509

17  
h-index

414414

32  
g-index

34  
all docs

34  
docs citations

34  
times ranked

1006  
citing authors

#	ARTICLE	IF	CITATIONS
1	The design space for long-duration energy storage in decarbonized power systems. <i>Nature Energy</i> , 2021, 6, 506-516.	39.5	236
2	Evaluating rotational inertia as a component of grid reliability with high penetrations of variable renewable energy. <i>Energy</i> , 2019, 180, 258-271.	8.8	94
3	Long-run system value of battery energy storage in future grids with increasing wind and solar generation. <i>Applied Energy</i> , 2020, 275, 115390.	10.1	94
4	Deterministic electric power infrastructure planning: Mixed-integer programming model and nested decomposition algorithm. <i>European Journal of Operational Research</i> , 2018, 271, 1037-1054.	5.7	89
5	Sector coupling <i>via</i> hydrogen to lower the cost of energy system decarbonization. <i>Energy and Environmental Science</i> , 2021, 14, 4635-4646.	30.8	65
6	Hydrogen Supply Chain Planning With Flexible Transmission and Storage Scheduling. <i>IEEE Transactions on Sustainable Energy</i> , 2021, 12, 1730-1740.	8.8	53
7	Sun-to-Fuel Assessment of Routes for Fixing CO <sub>2</sub> as Liquid Fuel. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 5136-5144.	3.7	50
8	Decarbonization synergies from joint planning of electricity and hydrogen production: A Texas case study. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 32899-32915.	7.1	49
9	Impact of model resolution on scenario outcomes for electricity sector system expansion. <i>Energy</i> , 2018, 163, 1231-1244.	8.8	48
10	Can Industrial-Scale Solar Hydrogen Supplied from Commodity Technologies Be Cost Competitive by 2030?. <i>Cell Reports Physical Science</i> , 2020, 1, 100174.	5.6	45
11	Continuous power supply from a baseload renewable power plant. <i>Applied Energy</i> , 2014, 122, 83-93.	10.1	41
12	Integrating hydrogen in single-price electricity systems: The effects of spatial economic signals. <i>Energy Policy</i> , 2022, 161, 112727.	8.8	28
13	Environmental and Economic Performance of Hybrid Power-to-Liquid and Biomass-to-Liquid Fuel Production in the United States. <i>Environmental Science &amp; Technology</i> , 2021, 55, 8247-8257.	10.0	24
14	Economic analysis of novel synergistic biofuel (H2Bioil) processes. <i>Biomass Conversion and Biorefinery</i> , 2012, 2, 141-148.	4.6	21
15	Efficient electrochemical refrigeration power plant using natural gas with $\sim 100\%$ CO <sub>2</sub> capture. <i>Journal of Power Sources</i> , 2015, 274, 130-141.	7.8	19
16	Life cycle greenhouse gas emissions and freshwater consumption of liquefied Marcellus shale gas used for international power generation. <i>Journal of Cleaner Production</i> , 2018, 205, 672-680.	9.3	19
17	Chemical engineering in a solar energy-driven sustainable future. <i>AIChE Journal</i> , 2010, 56, 2762-2768.	3.6	17
18	Limiting and achievable efficiencies for solar thermal hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 62-75.	7.1	16

#	ARTICLE	IF	CITATIONS
19	Uninterrupted renewable power through chemical storage cycles. Current Opinion in Chemical Engineering, 2014, 5, 29-36.	7.8	16
20	Grid impacts of highway electric vehicle charging and role for mitigation via energy storage. Energy Policy, 2021, 157, 112508.	8.8	16
21	Round-the-clock power supply and a sustainable economy via synergistic integration of solar thermal power and hydrogen processes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15821-15826.	7.1	14
22	Synthesis of augmented biofuel processes using solar energy. AIChE Journal, 2014, 60, 2533-2545.	3.6	12
23	From shale gas to renewable energy based transportation solutions. Energy Policy, 2014, 67, 499-507.	8.8	12
24	A consistent conceptual framework for applying climate metrics in technology life cycle assessment. Environmental Research Letters, 2017, 12, 074022.	5.2	9
25	Spatial Variation in Cost of Electricity-Driven Continuous Ammonia Production in the United States. ACS Sustainable Chemistry and Engineering, 2022, 10, 7862-7872.	6.7	9
26	A theoretical basis for the equivalence between physical and economic climate metrics and implications for the choice of Global Warming Potential time horizon. Climatic Change, 2020, 158, 107-124.	3.6	8
27	Decision making under uncertainty for deploying battery storage as a non-wire alternative in distribution networks. Energy Strategy Reviews, 2022, 41, 100862.	7.3	6
28	Scenarios of future Indian electricity demand accounting for space cooling and electric vehicle adoption. Scientific Data, 2021, 8, 178.	5.3	5
29	The impact of development priorities on power system expansion planning in sub-Saharan Africa. Energy Systems, 2022, 13, 461-492.	3.0	3
30	Climate and air pollution implications of potential energy infrastructure and policy measures in India. Energy and Climate Change, 2022, 3, 100067.	4.4	3
31	Continuous baseload renewable power using chemical refrigeration cycles. Computers and Chemical Engineering, 2014, 71, 591-601.	3.8	1