Tobias S Schmidt

List of Publications by Year
in descending order

76 papers	5,453 citations	81900 39 h-index	85541 71 g-index
77 all docs	77 docs citations	77 times ranked	4146 citing authors

#	Article	IF	Citations
1	The economic viability of battery storage for residential solar photovoltaic systems â€“ A review and a simulation model. Renewable and Sustainable Energy Reviews, 2014, 39, 1101-1118.	16.4	410
2	A review and probabilistic model of lifecycle costs of stationary batteries in multiple applications. Renewable and Sustainable Energy Reviews, 2013, 25, 240-250.	16.4	261
3	A dynamic analysis of financing conditions for renewable energy technologies. Nature Energy, 2018, 3, 1084-1092.	39.5	209
4	How do policies mobilize private finance for renewable energy?â€"A systematic review with an investor perspective. Applied Energy, 2019, 236, 1249-1268.	10.1	200
5	The multiple roles of state investment banks in low-carbon energy finance: An analysis of Australia, the UK and Germany. Energy Policy, 2018, 115, 158-170.	8.8	196
6	Low-carbon investment risks and de-risking. Nature Climate Change, 2014, 4, 237-239.	18.8	193
7	The importance of project finance for renewable energy projects. Energy Economics, 2018, 69, 280-294.	12.1	191
8	Measuring the temporal dynamics of policy mixes â€“ An empirical analysis of renewable energy policy mixesâ€™ balance and design features in nine countries. Research Policy, 2019, 48, 103557.	6.4	177
9	Technology life-cycles in the energy sector â€" Technological characteristics and the role of deployment for innovation. Technological Forecasting and Social Change, 2016, 104, 102-121.	11.6	170
10	Estimating the cost of capital for renewable energy projects. Energy Economics, 2020, 88, 104783.	12.1	163
11	Rural electrification through village gridsâ€"Assessing the cost competitiveness of isolated renewable energy technologies in Indonesia. Renewable and Sustainable Energy Reviews, 2013, 22, 482-496.	16.4	152
12	Technology as a driver of climate and energy politics. Nature Energy, 2017, 2, .	39.5	147
13	Use cases for stationary battery technologies: A review of the literature and existing projects. Renewable and Sustainable Energy Reviews, 2016, 56, 705-721.	16.4	138
14	The effects of climate policy on the rate and direction of innovation: A survey of the EU ETS and the electricity sector. Environmental Innovation and Societal Transitions, 2012, 2, 23-48.	5.5	135
15	Navigating the Clean Energy Transition in the COVID-19 Crisis. Joule, 2020, 4, 1137-1141.	24.0	134
16	Japan's post-Fukushima challenge â€“ implications from the German experience on renewable energy policy. Energy Policy, 2012, 45, 6-11.	8.8	112
17	Limiting the public cost of stationary battery deployment by combiningÂapplications. Nature Energy, 2016, 1, .	39.5	106
18	Anticipating industry localization effects of clean technology deployment policies in developing countries. Global Environmental Change, 2016, 38, 8-20.	7.8	104

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19	The sectoral configuration of technological innovation systems: Patterns of knowledge development and diffusion in the lithium-ion battery technology in Japan. Research Policy, 2017, 46, 709-723.	6.4	104
20	Shedding light on solar technologiesâ€"A techno-economic assessment and its policy implications. Energy Policy, 2011, 39, 6422-6439.	8.8	99
21	The effect of local and global learning on the cost of renewable energy in developing countries. Journal of Cleaner Production, 2016, 128, 6-21.	9.3	95
22	Accelerating Low-Carbon Innovation. Joule, 2020, 4, 2259-2267.	24.0	76
23	Experience Curves for Operations and Maintenance Costs of Renewable Energy Technologies. Joule, 2020, 4, 359-375.	24.0	74
24	How a productâ€™s design hierarchy shapes the evolution of technological knowledgeâ€"Evidence from patent-citation networks in wind power. Research Policy, 2016, 45, 1195-1217.	6.4	71
25	Attracting private investments into rural electrification â€" A case study on renewable energy based village grids in Indonesia. Energy for Sustainable Development, 2013, 17, 581-595.	4.5	69
26	Cost-efficient demand-pull policies for multi-purpose technologies â€" The case of stationary electricity storage. Applied Energy, 2015, 155, 334-348.	10.1	67
27	Integrating finance into the multi-level perspective: Technology niche-finance regime interactions and financial policy interventions. Research Policy, 2020, 49, 103985.	6.4	65
28	Adverse effects of rising interest rates on sustainable energy transitions. Nature Sustainability, 2019, 2, 879-885.	23.7	64
29	The role of inter-sectoral learning in knowledge development and diffusion: Case studies on three clean energy technologies. Technological Forecasting and Social Change, 2019, 146, 464-487.	11.6	64
30	Managing tradeoffs in green industrial policies: The role of renewable energy policy design. World Development, 2019, 122, 11-26.	4.9	63
31	Internal or external spilloversâ€"Which kind of knowledge is more likely to flow within or across technologies. Research Policy, 2016, 45, 27-41.	6.4	61
32	Assessing the costs of photovoltaic and wind power in six developing countries. Nature Climate Change, 2012, 2, 548-553.	18.8	58
33	Additional Emissions and Cost from Storing Electricity in Stationary Battery Systems. Environmental Science & Technology, 2019, 53, 3379-3390.	10.0	58
34	Renewable energy policy as an enabler of fossil fuel subsidy reform? Applying a socio-technical perspective to the cases of South Africa and Tunisia. Global Environmental Change, 2017, 45, 99-110.	7.8	58
35	Explaining Advocacy Coalition Change with Policy Feedback. Policy Studies Journal, 2020, 48, 1109-1134.	5.1	57
36	Enabling Mini-Grid Development in Rural India. World Development, 2017, 93, 94-107.	4.9	56

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37	Projecting the Competition between Energy-Storage Technologies in the Electricity Sector. Joule, 2020, 4, 2162-2184.	24.0	48
38	Policy goals, partisanship and paradigmatic change in energy policy â€“ analyzing parliamentary discourse in Germany over 30 years. Climate Policy, 2019, 19, 771-786.	5.1	47
39	Composting projects under the Clean Development Mechanism: Sustainable contribution to mitigate climate change. Waste Management, 2011, 31, 138-146.	7.4	43
40	Do deployment policies pick technologies by (not) picking applications?â€"A simulation of investment decisions in technologies with multiple applications. Research Policy, 2016, 45, 1965-1983.	6.4	43
41	The role of inter-sectoral knowledge spillovers in technological innovations: The case of lithium-ion batteries. Technological Forecasting and Social Change, 2019, 148, 119718.	11.6	43
42	The role of actors in the policy design process: introducing design coalitions to explain policy output. Policy Sciences, 2020, 53, 309-347.	2.8	41
43	Scaling up finance for off-grid renewable energy: The role of aggregation and spatial diversification in derisking investments in mini-grids for rural electrification in India. Energy Policy, 2017, 108, 657-672.	8.8	40
44	A quantitative analysis of 10 multilateral development banksâ€™ investment in conventional and renewable power-generation technologies from 2006 to 2015. Nature Energy, 2019, 4, 75-82.	39.5	40
45	Opening new markets for clean energy: The role of project developers in the global diffusion of renewable energy technologies. Business and Politics, 2018, 20, 553-587.	0.8	39
46	Climate policy for short- and long-lived pollutants. Nature Climate Change, 2018, 8, 933-936.	18.8	38
47	Bias in energy system models with uniform cost of capital assumption. Nature Communications, 2019, 10, 4588.	12.8	38
48	An analysis of remote electric mini-grids in Laos using the Technological Innovation Systems approach. Technological Forecasting and Social Change, 2015, 95, 218-233.	11.6	36
49	Analyzing the competitiveness of low-carbon drive-technologies in road-freight: A total cost of ownership analysis in Europe. Applied Energy, 2022, 306, 118079.	10.1	34
50	Decarbonising the power sector via technological change â€“ differing contributions from heterogeneous firms. Energy Policy, 2012, 43, 466-479.	8.8	33
51	Explaining the diffusion of biogas in India: a new functional approach considering national borders and technology transfer. Environmental Economics and Policy Studies, 2014, 16, 171-199.	2.0	31
52	The politics of climate finance: Consensus and partisanship in designing green state investment banks in the United Kingdom and Australia. Energy Research and Social Science, 2020, 69, 101583.	6.4	27
53	Transfer patterns in Phase I of the EU Emissions Trading System: a first reality check based on cluster analysis. Climate Policy, 2016, 16, 474-495.	5.1	25
54	Supporting energy technology deployment while avoiding unintended technological lock-in: a policy design perspective. Environmental Research Letters, 2018, 13, 104011.	5.2	24

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55	A â€œtechnology-smartâ€•battery policy strategy for Europe. Science, 2018, 361, 1075-1077.	12.6	24
56	Hybridizing low-carbon technology deployment policy and fossil fuel subsidy reform: a climate finance perspective. Environmental Research Letters, 2017, 12, 014002.	5.2	23
57	A comparative analysis of green financial policy output in OECD countries. Environmental Research Letters, 2021, 16, 074031.	5.2	23
58	Performance of renewable energy technologies under the CDM. Climate Policy, 2010, 10, 17-37.	5.1	21
59	Safeguarding the energy transition against political backlash to carbon markets. Nature Energy, 2022, 7, 290-296.	39.5	20
60	Measuring whether municipal climate networks make a difference: the case of utility-scale solar PV investment in large global cities. Climate Policy, 2019, 19, 908-922.	5.1	19
61	Strengthen finance in sustainability transitions research. Environmental Innovation and Societal Transitions, 2021, 41, 77-80.	5.5	19
62	Comparing CO2 emissions impacts of electricity storage across applications and energy systems. Joule, 2021, 5, 1501-1520.	24.0	18
63	The effect of differentiating costs of capital by country and technology on the European energy transition. Climatic Change, 2021, 167, 1.	3.6	18
64	Learning in the financial sector is essential for reducing renewable energy costs. Nature Energy, 2019, 4, 835-836.	39.5	17
65	Understanding and accounting for the effect of exchange rate fluctuations on global learning rates. Nature Energy, 2020, 5, 71-78.	39.5	15
66	Governing complex societal problems: The impact of private on public regulation through technological change. Regulation and Governance, 2021, 15, 840-855.	2.9	14
67	Accounting for finance in electrification models for sub-Saharan Africa. Nature Energy, 2022, 7, 631-641.	39.5	14
68	Determinants of cost of capital in the electricity sector. Progress in Energy, 2022, 4, 033001.	10.9	14
69	Historical and projected improvements in net energy performance of power generation technologies. Energy and Environmental Science, 2018, 11, 3524-3530.	30.8	13
70	Profitability of commercial and industrial photovoltaics and battery projects in South-East-Asia. Applied Energy, 2020, 271, 115218.	10.1	13
71	Financing the energy transition: four insights and avenues for future research. Environmental Research Letters, 2022, 17, 051003.	5.2	12
72	State ownership and technology adoption: The case of electric utilities and renewable energy. Research Policy, 2022, 51, 104534.	6.4	10

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73	Spurring low-carbon electrosynthesis through energy and innovation policy. IScience, 2021, 24, 102045.	4.1	8
74	Making electrification models more realistic by incorporating differences in institutional quality and financing cost. Progress in Energy, 2020, 2, 013001.	10.9	6
75	Estimating the Cost of Capital for Renewable Energy Projects. SSRN Electronic Journal, 2019, , .	0.4	5
76	A Heuristic for Technology Strategies in Post-Kyoto Bottom-Up Climate Policy. SSRN Electronic Journal, 2015, , .	0.4	0