

Ajay Gambhir

List of Publications by Year in descending order

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54
papers

3,731
citations

147801

31
h-index

161849

54
g-index

58
all docs

58
docs citations

58
times ranked

4323
citing authors

#	ARTICLE	IF	CITATIONS
1	Coupling circularity performance and climate action: From disciplinary silos to transdisciplinary modelling science. <i>Sustainable Production and Consumption</i> , 2022, 30, 269-277.	11.0	11
2	Near-term transition and longer-term physical climate risks of greenhouse gas emissions pathways. <i>Nature Climate Change</i> , 2022, 12, 88-96.	18.8	26
3	Policy incentives for Greenhouse Gas Removal Techniques: the risks of premature inclusion in carbon markets and the need for a multi-pronged policy framework. <i>Energy and Climate Change</i> , 2022, 3, 100074.	4.4	8
4	Climate and sustainability co-governance in Kenya: A multi-criteria analysis of stakeholders' perceptions and consensus. <i>Energy for Sustainable Development</i> , 2022, 68, 457-471.	4.5	7
5	Modelling net-zero emissions energy systems requires a change in approach. <i>Climate Policy</i> , 2021, 21, 222-231.	5.1	85
6	Perspective of comprehensive and comprehensible multi-model energy and climate science in Europe. <i>Energy</i> , 2021, 215, 119153.	8.8	57
7	How Are Future Energy Technology Costs Estimated? Can We Do Better?. <i>International Review of Environmental and Resource Economics</i> , 2021, 15, 271-318.	1.3	7
8	Collective foresight and intelligence for sustainability. <i>Global Sustainability</i> , 2021, 4, .	3.3	6
9	Grid versus off-grid electricity access options: A review on the economic and environmental impacts. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 143, 110864.	16.4	31
10	Confronting mitigation deterrence in low-carbon scenarios. <i>Environmental Research Letters</i> , 2021, 16, 064099.	5.2	29
11	nThe cost and emissions advantages of incorporating anchor loads into solar mini-grids in India. <i>Renewable and Sustainable Energy Transition</i> , 2021, , 100003.	2.9	3
12	Challenges in the harmonisation of global integrated assessment models: A comprehensive methodology to reduce model response heterogeneity. <i>Science of the Total Environment</i> , 2021, 783, 146861.	8.0	32
13	The Impact of U.S. Reâ€engagement in Climate on the Paris Targets. <i>Earth's Future</i> , 2021, 9, e2021EF002077.	6.3	3
14	Where is the EU headed given its current climate policy? A stakeholder-driven model inter-comparison. <i>Science of the Total Environment</i> , 2021, 793, 148549.	8.0	26
15	A hybrid approach to identifying and assessing interactions between climate action (SDG13) policies and a range of SDGs in a UK context. <i>Discover Sustainability</i> , 2021, 2, 43.	2.8	5
16	The policy implications of an uncertain carbon dioxide removal potential. <i>Joule</i> , 2021, 5, 2593-2605.	24.0	37
17	Cost reductions in renewables can substantially erode the value of carbon capture and storage in mitigation pathways. <i>One Earth</i> , 2021, 4, 1588-1601.	6.8	26
18	A multi-model analysis of long-term emissions and warming implications of current mitigation efforts. <i>Nature Climate Change</i> , 2021, 11, 1055-1062.	18.8	69

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19	The cost of mitigation revisited. <i>Nature Climate Change</i> , 2021, 11, 1035-1045.	18.8	34
20	Transitional assistance policies for just, equitable and smooth low-carbon transitions: who, what and how?. <i>Climate Policy</i> , 2020, 20, 902-921.	5.1	80
21	The desirability of transitions in demand: Incorporating behavioural and societal transformations into energy modelling. <i>Energy Research and Social Science</i> , 2020, 70, 101780.	6.4	41
22	Reply to "High energy and materials requirement for direct air capture calls for further analysis and R&D". <i>Nature Communications</i> , 2020, 11, 3286.	12.8	13
23	The UK and German Low-Carbon Industry Transitions from a Sectoral Innovation and System Failures Perspective. <i>Energies</i> , 2020, 13, 4994.	3.1	17
24	The appropriate use of reference scenarios in mitigation analysis. <i>Nature Climate Change</i> , 2020, 10, 605-610.	18.8	45
25	Assessing the feasibility of carbon dioxide mitigation options in terms of energy usage. <i>Nature Energy</i> , 2020, 5, 720-728.	39.5	54
26	A deep dive into the modelling assumptions for biomass with carbon capture and storage (BECCS): a transparency exercise. <i>Environmental Research Letters</i> , 2020, 15, 084008.	5.2	27
27	Energy modellers should explore extremes more systematically in scenarios. <i>Nature Energy</i> , 2020, 5, 104-107.	39.5	71
28	Comparative life cycle assessment of lithium-ion battery chemistries for residential storage. <i>Journal of Energy Storage</i> , 2020, 28, 101230.	8.1	53
29	An inter-model assessment of the role of direct air capture in deep mitigation pathways. <i>Nature Communications</i> , 2019, 10, 3277.	12.8	267
30	The role of advanced demand-sector technologies and energy demand reduction in achieving ambitious carbon budgets. <i>Applied Energy</i> , 2019, 238, 351-367.	10.1	40
31	A Review of Criticisms of Integrated Assessment Models and Proposed Approaches to Address These, through the Lens of BECCS. <i>Energies</i> , 2019, 12, 1747.	3.1	119
32	Direct Air Carbon Capture and Sequestration: How It Works and How It Could Contribute to Climate-Change Mitigation. <i>One Earth</i> , 2019, 1, 405-409.	6.8	90
33	Planning a Low-Carbon Energy Transition: What Can and Can't the Models Tell Us?. <i>Joule</i> , 2019, 3, 1795-1798.	24.0	37
34	Energy system changes in 1.5°C, well below 2°C and 2°C scenarios. <i>Energy Strategy Reviews</i> , 2019, 23, 69-80.	7.3	57
35	Energy access through electricity storage: Insights from technology providers and market enablers. <i>Energy for Sustainable Development</i> , 2019, 48, 1-10.	4.5	22
36	Prospective improvements in cost and cycle life of off-grid lithium-ion battery packs: An analysis informed by expert elicitations. <i>Energy Policy</i> , 2018, 114, 578-590.	8.8	70

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37	How long does innovation and commercialisation in the energy sectors take? Historical case studies of the timescale from invention to widespread commercialisation in energy supply and end use technology. <i>Energy Policy</i> , 2018, 123, 682-699.	8.8	62
38	The Economics of 1.5°C Climate Change. <i>Annual Review of Environment and Resources</i> , 2018, 43, 455-480.	13.4	23
39	Avoiding dangerous climate: results from the AVOID2 programme. <i>Weather</i> , 2017, 72, 340-345.	0.7	2
40	Future cost and performance of water electrolysis: An expert elicitation study. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 30470-30492.	7.1	1,240
41	Assessing the Feasibility of Global Long-Term Mitigation Scenarios. <i>Energies</i> , 2017, 10, 89.	3.1	51
42	Exploring the Feasibility of Low-Carbon Scenarios Using Historical Energy Transitions Analysis. <i>Energies</i> , 2017, 10, 116.	3.1	35
43	The Contribution of Non-CO2 Greenhouse Gas Mitigation to Achieving Long-Term Temperature Goals. <i>Energies</i> , 2017, 10, 602.	3.1	21
44	The Impact of Shale Gas on the Cost and Feasibility of Meeting Climate Targets – A Global Energy System Model Analysis and an Exploration of Uncertainties. <i>Energies</i> , 2017, 10, 158.	3.1	11
45	Off-grid solar photovoltaic systems for rural electrification and emissions mitigation in India. <i>Solar Energy Materials and Solar Cells</i> , 2016, 156, 147-156.	6.2	63
46	Limiting global warming to 2°C: What do the latest mitigation studies tell us about costs, technologies and other impacts?. <i>Energy Strategy Reviews</i> , 2016, 13-14, 67-76.	7.3	44
47	The future costs of OPV – A bottom-up model of material and manufacturing costs with uncertainty analysis. <i>Solar Energy Materials and Solar Cells</i> , 2016, 156, 49-58.	6.2	66
48	Financial impacts of UK's energy and climate change policies on commercial and industrial businesses. <i>Energy Policy</i> , 2016, 91, 273-286.	8.8	8
49	Reducing China's road transport sector CO2 emissions to 2050: Technologies, costs and decomposition analysis. <i>Applied Energy</i> , 2015, 157, 905-917.	10.1	132
50	India's CO2 emissions pathways to 2050: Energy system, economic and fossil fuel impacts with and without carbon permit trading. <i>Energy</i> , 2014, 77, 791-801.	8.8	55
51	A review of the technologies, economics and policy instruments for decarbonising energy-intensive manufacturing industries. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 30, 616-640.	16.4	185
52	India's CO2 emission pathways to 2050: What role can renewables play?. <i>Applied Energy</i> , 2014, 131, 79-86.	10.1	70
53	A hybrid modelling approach to develop scenarios for China's carbon dioxide emissions to 2050. <i>Energy Policy</i> , 2013, 59, 614-632.	8.8	39
54	The AVOID programme's new simulations of the global benefits of stringent climate change mitigation. <i>Climatic Change</i> , 2013, 120, 55-70.	3.6	19