Edward A Byers

List of Publications by Year
in descending order

37 papers	1,781 citations	279487 23 h-index	344852 36 g-index
45 all docs	45 docs citations	45 times ranked	2110 citing authors

#	Article	IF	Citations
1	Impacts of climate change on energy systems in global and regional scenarios. Nature Energy, 2020, 5, 794-802.	19.8	180
2	Global exposure and vulnerability to multi-sector development and climate change hotspots. Environmental Research Letters, 2018, 13, 055012.	2.2	162
3	Electricity generation and cooling water use: UK pathways to 2050. Global Environmental Change, 2014, 25, 16-30.	3.6	151
4	Global resource potential of seasonal pumped hydropower storage for energy and water storage. Nature Communications, 2020, 11, 947.	5.8	121
5	Improving the SDG energy poverty targets: Residential cooling needs in the Global South. Energy and Buildings, 2019, 186, 405-415.	3.1	93
6	Energy systems in scenarios at net-zero CO2 emissions. Nature Communications, 2021, 12, 6096.	5.8	91
7	The timing of unprecedented hydrological drought under climate change. Nature Communications, 2022, 13, .	5.8	77
8	Comparison between seasonal pumped-storage and conventional reservoir dams from the water, energy and land nexus perspective. Energy Conversion and Management, 2018, 166, 385-401.	4.4	70
9	A high-resolution gridded dataset to assess electrification in sub-Saharan Africa. Scientific Data, 2019, 6, 110.	2.4	65
10	A Continentalâ€Scale Hydroeconomic Model for Integrating Waterâ€Energyâ€Land Nexus Solutions. Water Resources Research, 2018, 54, 7511-7533.	1.7	57
11	Co-designing Indus Water-Energy-Land Futures. One Earth, 2019, 1, 185-194.	3.6	54
12	Drought and climate change impacts on cooling water shortages and electricity prices in Great Britain. Nature Communications, 2020, 11, 2239.	5.8	53
13	Multiâ€model and multiâ€scenario assessments of Asian water futures: The Water Futures and Solutions (WFaS) initiative. Earth's Future, 2017, 5, 823-852.	2.4	50
14	Air qualityâ€“carbonâ€“water synergies and trade-offs in Chinaâ€™s natural gas industry. Nature Sustainability, 2018, 1, 505-511.	11.5	49
15	Balancing clean water-climate change mitigation trade-offs. Environmental Research Letters, 2019, 14, 014009.	2.2	48
16	Transboundary cooperation a potential route to sustainable development in the Indus basin. Nature Sustainability, 2021, 4, 331-339.	11.5	47
17	Satellite Observations Reveal Inequalities in the Progress and Effectiveness of Recent Electrification in Sub-Saharan Africa. One Earth, 2020, 2, 364-379.	3.6	40
18	Water and climate risks to power generation with carbon capture and storage. Environmental Research Letters, 2016, 11, 024011.	2.2	39

#	Article	IF	Citations
19	Vulnerability of existing and planned coal-fired power plants in Developing Asia to changes in climate and water resources. Energy and Environmental Science, 2019, 12, 3164-3181.	15.6	38
20	The NExus Solutions Tool (NEST) v1.0: an open platform for optimizing multi-scale energyâ€“waterâ€“land system transformations. Geoscientific Model Development, 2020, 13, 1095-1121.	1.3	31
21	Technical potential and cost estimates for seawater air conditioning. Energy, 2019, 166, 979-988.	4.5	30
22	Global scenarios of household access to modern energy services under climate mitigation policy. Nature Energy, 2021, 6, 824-833.	19.8	29
23	Global scenarios of residential heating and cooling energy demand and CO2 emissions. Climatic Change, 2021, 168, 1.	1.7	28
24	Integrated Solutions for the Water-Energy-Land Nexus: Are Global Models Rising to the Challenge?. Water (Switzerland), 2019, 11, 2223.	1.2	24
25	A framework for the exergy analysis of future transport pathways: Application for the United Kingdom transport system 2010â€“2050. Energy, 2015, 88, 849-862.	4.5	21
26	Hydropower and seasonal pumped hydropower storage in the Indus basin:pros and cons. Journal of Energy Storage, 2021, 41, 102916.	3.9	21
27	Quantifying the potential for reservoirs to secure future surface water yields in the worldâ€™s largest river basins. Environmental Research Letters, 2018, 13, 044026.	2.2	20
28	Future cooling gap in shared socioeconomic pathways. Environmental Research Letters, 2021, 16, 094053.	2.2	19
29	Reducing sea level rise with submerged barriers and dams in Greenland. Mitigation and Adaptation Strategies for Global Change, 2019, 24, 779-794.	1.0	17
30	Dams with head increaser effect: Harnessing potential and kinetic power from rivers with large head and flow variation. Energy Conversion and Management, 2018, 157, 549-561.	4.4	12
31	Cooling water for Britain's future electricity supply. Proceedings of Institution of Civil Engineers: Energy, 2015, 168, 188-204.	0.5	7
32	Electricity systems capacity expansion under cooling water availability constraints. IET Energy Systems Integration, 2019, 1, 23-33.	1.1	6
33	Using the jet stream for sustainable airship and balloon transportation of cargo and hydrogen. Energy Conversion and Management: X, 2019, 3, 100016.	0.9	5
34	Tools for tackling the water-energy-food nexus. Change and Adaptation in Socio-Ecological Systems, 2015, 2, .	1.5	5
35	Balancing smart irrigation and hydropower investments for sustainable water conservation in the Indus basin. Environmental Science and Policy, 2022, 135, 147-161.	2.4	4
36	UK nuclear and fossil fuel energy infrastructure climate risks. Infrastructure Asset Management, 2015, 2, 120-130.	1.2	3

#	Article	IF	Citations
37	Quantifying interdependencies: the energyâ€“transport and waterâ€“energy nexus. , 0, , 227-240.		0