Matthias Breitwieser

List of Publications by Year
in descending order

21	985	516710 16	794594 19
papers	citations	h-index	g-index

23	23	23	1020
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Direct deposition of proton exchange membranes enabling high performance hydrogen fuel cells. Journal of Materials Chemistry A, 2015, 3, 11239-11245.	10.3	128
2	Efficient and Stable Low Iridium Loaded Anodes for PEM Water Electrolysis Made Possible by Nanofiber Interlayers. ACS Applied Energy Materials, 2020, 3, 8276-8284.	5.1	106
3	Tailoring the Membraneâ€Electrode Interface in PEM Fuel Cells: A Review and Perspective on Novel Engineering Approaches. Advanced Energy Materials, 2018, 8, 1701257.	19.5	105
4	Allâ€Hydrocarbon MEA for PEM Water Electrolysis Combining Low Hydrogen Crossover and High Efficiency. Advanced Energy Materials, 2020, 10, 1903995.	19.5	88
5	Cerium Oxide Decorated Polymer Nanofibers as Effective Membrane Reinforcement for Durable, Highâ€Performance Fuel Cells. Advanced Energy Materials, 2017, 7, 1602100.	19.5	56
6	The reasons for the high power density of fuel cells fabricated with directly deposited membranes. Journal of Power Sources, 2016, 326, 170-175.	7.8	55
7	Improved Pt-utilization efficiency of low Pt-loading PEM fuel cell electrodes using direct membrane deposition. Electrochemistry Communications, 2015, 60, 168-171.	4.7	54
8	Simple fabrication of 12ÂÎ¼m thin nanocomposite fuel cell membranes by direct electrospinning and printing. Journal of Power Sources, 2017, 337, 137-144.	7.8	53
9	A fully spray-coated fuel cell membrane electrode assembly using Aquivion ionomer with a graphene oxide/cerium oxide interlayer. Journal of Power Sources, 2017, 351, 145-150.	7.8	51
10	Electrospun sulfonated poly(ether ketone) nanofibers as proton conductive reinforcement for durable Nafion composite membranes. Journal of Power Sources, 2017, 361, 237-242.	7.8	41
11	Directly coated membrane electrode assemblies for proton exchange membrane water electrolysis. Electrochemistry Communications, 2020, 110, 106640.	4.7	40
12	A completely spray-coated membrane electrode assembly. Electrochemistry Communications, 2016, 70, 65-68.	4.7	39
13	Directly deposited Nafion/TiO₂ composite membranes for high power medium temperature fuel cells. RSC Advances, 2016, 6, 24261-24266.	3.6	39
14	Improving the water management in anion-exchange membrane fuel cells via ultra-thin, directly deposited solid polymer electrolyte. RSC Advances, 2020, 10, 8645-8652.	3.6	35
15	Hydrocarbon-based Pemionâ„¢ proton exchange membrane fuel cells with state-of-the-art performance. Sustainable Energy and Fuels, 2021, 5, 3687-3699.	4.9	34
16	Fully Hydrocarbon Membrane Electrode Assemblies for Proton Exchange Membrane Fuel Cells and Electrolyzers: An Engineering Perspective. Advanced Energy Materials, 2022, 12, .	19.5	34
17	On the stability of anion exchange membrane fuel cells incorporating polyimidazolium ionene (Aemion+Â®) membranes and ionomers. Sustainable Energy and Fuels, 2022, 6, 3551-3564.	4.9	18
18	Catalyst layers for fluorineâ€free hydrocarbon PEMFCs. Electrochimica Acta, 2022, 401, 139479.	5.2	5

#	Article	IF	Citations
19	Water Electrolyzers: Allâ€Hydrocarbon MEA for PEM Water Electrolysis Combining Low Hydrogen Crossover and High Efficiency (Adv. Energy Mater. 14/2020). Advanced Energy Materials, 2020, 10, 2070061.	19.5	3
20	Fuel Cells: Cerium Oxide Decorated Polymer Nanofibers as Effective Membrane Reinforcement for Durable, Highâ€Performance Fuel Cells (Adv. Energy Mater. 6/2017). Advanced Energy Materials, 2017, 7, .	19.5	0
21	MOF-Derived Fe-Zn-N-C Catalysts for Precious Metal Free Cathodes Showing High Performance in Anion-Exchange Membrane Fuel Cells. ECS Meeting Abstracts, 2022, MA2022-01, 1482-1482.	0.0	0