

Meagan S Mauter

List of Publications by Year in Descending Order

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Version: 2024-04-23

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

73
papers

3,875
citations

24
h-index

62
g-index

81
ext. papers

4,454
ext. citations

9.8
avg, IF

6.08
L-index

#	Paper	IF	Citations
73	Energy-Optimal Siting of Decentralized Water Recycling Systems. <i>Environmental Science & Technology</i> , 2021 , 55, 15343-15350	10.3	1
72	Energy and CO Emissions Penalty Ranges for Geologic Carbon Storage Brine Management. <i>Environmental Science & Technology</i> , 2021 , 55, 4305-4313	10.3	1
71	Competing Ion Behavior in Direct Electrochemical Selenite Reduction. <i>ACS ES&T Engineering</i> , 2021 , 1, 1028-1035		0
70	Real-time feedback improves multi-stakeholder design for complex environmental systems. <i>Environmental Research Communications</i> , 2021 , 3, 045006	3.1	
69	The Economic Infeasibility of Salinity Gradient Energy via Pressure Retarded Osmosis. <i>ACS ES&T Engineering</i> , 2021 , 1, 1113-1121		0
68	Cost optimization of multi-stage gap membrane distillation. <i>Journal of Membrane Science</i> , 2021 , 627, 119228	9.6	8
67	Technoeconomic Assessment of a Sequential Step-Leaching Process for Rare Earth Element Extraction from Acid Mine Drainage Precipitates. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 9308-9316	8.3	1
66	Learning is inhibited by heat exposure, both internationally and within the United States. <i>Nature Human Behaviour</i> , 2021 , 5, 19-27	12.8	10
65	Cost Comparison of Capacitive Deionization and Reverse Osmosis for Brackish Water Desalination. <i>ACS ES&T Engineering</i> , 2021 , 1, 261-273		18
64	Cost and energy intensity of U.S. potable water reuse systems. <i>Environmental Science: Water Research and Technology</i> , 2021 , 7, 748-761	4.2	6
63	Direct Electrochemical Pathways for Selenium Reduction in Aqueous Solutions. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 2027-2036	8.3	7
62	High-impact innovations for high-salinity membrane desalination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	3
61	Assessing the demand response capacity of U.S. drinking water treatment plants. <i>Applied Energy</i> , 2020 , 267, 114899	10.7	17
60	Optimization Framework to Assess the Demand Response Capacity of a Water Distribution System. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2020 , 146, 04020063	2.8	4
59	Neural networks for estimating physical parameters in membrane distillation. <i>Journal of Membrane Science</i> , 2020 , 610, 118285	9.6	3
58	Cost optimization of high recovery single stage gap membrane distillation. <i>Journal of Membrane Science</i> , 2020 , 611, 118370	9.6	8
57	Flue Gas Desulfurization Wastewater Composition and Implications for Regulatory and Treatment Train Design. <i>Environmental Science & Technology</i> , 2020 , 54, 3783-3792	10.3	13

56	Impact of module design on heat transfer in membrane distillation. <i>Journal of Membrane Science</i> , 2020 , 601, 117898	9.6	8
55	Magnetic Field-Induced Alignment of Nanofibrous Supramolecular Membranes: A Molecular Design Approach to Create Tissue-like Biomaterials. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 22661-22672	9.5	8
54	Quantifying uncertainty in groundwater depth from sparse well data in the California Central Valley. <i>Environmental Research Letters</i> , 2020 , 15, 084029	6.2	1
53	Performance Loss of Activated Carbon Electrodes in Capacitive Deionization: Mechanisms and Material Property Predictors. <i>Environmental Science & Technology</i> , 2020 , 54, 15516-15526	10.3	8
52	Foulant Adsorption to Heterogeneous Surfaces with Zwitterionic Nanoscale Domains. <i>ACS Applied Polymer Materials</i> , 2020 , 2, 4709-4718	4.3	6
51	Desalination for a circular water economy. <i>Energy and Environmental Science</i> , 2020 , 13, 3180-3184	35.4	24
50	Zwitterionic copolymer additive architecture affects membrane performance: fouling resistance and surface rearrangement in saline solutions. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 4829-4846	13	43
49	Trace Element Mass Flow Rates from U.S. Coal Fired Power Plants. <i>Environmental Science & Technology</i> , 2019 , 53, 5585-5595	10.3	8
48	Environmentally significant shifts in trace element emissions from coal plants complying with the 1990 Clean Air Act Amendments. <i>Energy Policy</i> , 2019 , 132, 1206-1215	7.2	8
47	Understanding and mitigating performance decline in electrochemical deionization. <i>Current Opinion in Chemical Engineering</i> , 2019 , 25, 67-74	5.4	11
46	Water Desalination: Electrostatic and Electrochemical Separation Processes 2019 , 1-25		
45	Computational framework for modeling membrane processes without process and solution property simplifications. <i>Journal of Membrane Science</i> , 2019 , 573, 682-693	9.6	16
44	The role of nanotechnology in tackling global water challenges. <i>Nature Sustainability</i> , 2018 , 1, 166-175	22.1	241
43	Retrofitting the Regulated Power Plant: Optimizing Energy Allocation to Electricity Generation, Water Treatment, and Carbon Capture Processes at Coal-Fired Generating Facilities. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 2694-2703	8.3	14
42	Technoeconomic Optimization of Emerging Technologies for Regulatory Analysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 2370-2378	8.3	8
41	Air Emission Reduction Benefits of Biogas Electricity Generation at Municipal Wastewater Treatment Plants. <i>Environmental Science & Technology</i> , 2018 , 52, 1633-1643	10.3	8
40	Fundamental challenges and engineering opportunities in flue gas desulfurization wastewater treatment at coal fired power plants. <i>Environmental Science: Water Research and Technology</i> , 2018 , 4, 909-925	4.2	38
39	Mechanisms of Humic Acid Fouling on Capacitive and Insertion Electrodes for Electrochemical Desalination. <i>Environmental Science & Technology</i> , 2018 , 52, 12633-12641	10.3	27

38	Cost Optimization of Osmotically Assisted Reverse Osmosis. <i>Environmental Science & Technology</i> , 2018 , 52, 11813-11821	10.3	14
37	Spatially resolved air-water emissions tradeoffs improve regulatory impact analyses for electricity generation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 1862-1867	11.5	20
36	Nanotechnology for sustainable food production: promising opportunities and scientific challenges. <i>Environmental Science: Nano</i> , 2017 , 4, 767-781	7.1	148
35	Allocating Damage Compensation in a Federalist System: Lessons from Spatially Resolved Air Emissions in the Marcellus. <i>Environmental Science & Technology</i> , 2017 , 51, 3600-3608	10.3	4
34	Computing the Diamagnetic Susceptibility and Diamagnetic Anisotropy of Membrane Proteins from Structural Subunits. <i>Journal of Chemical Theory and Computation</i> , 2017 , 13, 2945-2953	6.4	6
33	Osmotically assisted reverse osmosis for high salinity brine treatment. <i>Desalination</i> , 2017 , 421, 3-11	10.3	84
32	Characterizing convective heat transfer coefficients in membrane distillation cassettes. <i>Journal of Membrane Science</i> , 2017 , 538, 108-121	9.6	14
31	Economic and policy drivers of agricultural water desalination in California's central valley. <i>Agricultural Water Management</i> , 2017 , 194, 192-203	5.9	18
30	Ion Transport and Competition Effects on NaTi(PO) and NaMnO Selective Insertion Electrode Performance. <i>Langmuir</i> , 2017 , 33, 12580-12591	4	22
29	Air Emissions Damages from Municipal Drinking Water Treatment Under Current and Proposed Regulatory Standards. <i>Environmental Science & Technology</i> , 2017 , 51, 10299-10306	10.3	11
28	Management and dewatering of brines extracted from geologic carbon storage sites. <i>International Journal of Greenhouse Gas Control</i> , 2017 , 63, 194-214	4.2	15
27	High-resolution model for estimating the economic and policy implications of agricultural soil salinization in California. <i>Environmental Research Letters</i> , 2017 , 12, 094010	6.2	18
26	Multiobjective Optimization Model for Minimizing Cost and Environmental Impact in Shale Gas Water and Wastewater Management. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 3728-3735	8.3	49
25	Bacterial Nanocellulose Aerogel Membranes: Novel High-Porosity Materials for Membrane Distillation. <i>Environmental Science and Technology Letters</i> , 2016 , 3, 85-91	11	61
24	Magnetically Directed Two-Dimensional Crystallization of OmpF Membrane Proteins in Block Copolymers. <i>Journal of the American Chemical Society</i> , 2016 , 138, 28-31	16.4	25
23	Quantity, Quality, and Availability of Waste Heat from United States Thermal Power Generation. <i>Environmental Science & Technology</i> , 2015 , 49, 8297-306	10.3	96
22	Water Treatment Capacity of Forward-Osmosis Systems Utilizing Power-Plant Waste Heat. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 6378-6389	3.9	36
21	Crosslinked poly(ethylene oxide) containing siloxanes fabricated through thiol-ene photochemistry. <i>Journal of Polymer Science Part A</i> , 2015 , 53, 1548-1557	2.5	20

20	Influence of surface charge on the rate, extent, and structure of adsorbed Bovine Serum Albumin to gold electrodes. <i>Journal of Colloid and Interface Science</i> , 2015 , 460, 321-8	9.3	29
19	Electrodeposited MnO ₂ For Pseudocapacitive Deionization: Relating Deposition Condition and Electrode Structure to Performance. <i>Electrochimica Acta</i> , 2015 , 182, 1008-1018	6.7	14
18	Investment optimization model for freshwater acquisition and wastewater handling in shale gas production. <i>AIChE Journal</i> , 2015 , 61, 1770-1782	3.6	57
17	Regional variation in water-related impacts of shale gas development and implications for emerging international plays. <i>Environmental Science & Technology</i> , 2014 , 48, 8298-306	10.3	93
16	Modular polymerized ionic liquid block copolymer membranes for CO ₂ /N ₂ separation. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 7967-7972	13	44
15	Expert Elicitation of Trends in Marcellus Oil and Gas Wastewater Management. <i>Journal of Environmental Engineering, ASCE</i> , 2014 , 140,	2	32
14	Risks and risk governance in unconventional shale gas development. <i>Environmental Science & Technology</i> , 2014 , 48, 8289-97	10.3	132
13	Surface cell density effects on Escherichia coli gene expression during cell attachment. <i>Environmental Science & Technology</i> , 2013 , 47, 6223-30	10.3	6
12	Emerging Pollutants [Part II: Treatment. <i>Water Environment Research</i> , 2013 , 85, 2022-2071	2.8	9
11	Stable sequestration of single-walled carbon nanotubes in self-assembled aqueous nanopores. <i>Journal of the American Chemical Society</i> , 2012 , 134, 3950-3	16.4	14
10	New perspectives on nanomaterial aquatic ecotoxicity: production impacts exceed direct exposure impacts for carbon nanotubes. <i>Environmental Science & Technology</i> , 2012 , 46, 2902-10	10.3	132
9	Antifouling ultrafiltration membranes via post-fabrication grafting of biocidal nanomaterials. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 2861-8	9.5	226
8	Nanocomposites of vertically aligned single-walled carbon nanotubes by magnetic alignment and polymerization of a lyotropic precursor. <i>ACS Nano</i> , 2010 , 4, 6651-8	16.7	80
7	Microbial cytotoxicity of carbon-based nanomaterials: implications for river water and wastewater effluent. <i>Environmental Science & Technology</i> , 2009 , 43, 2648-53	10.3	317
6	Physicochemical determinants of multiwalled carbon nanotube bacterial cytotoxicity. <i>Environmental Science & Technology</i> , 2008 , 42, 7528-34	10.3	289
5	Environmental applications of carbon-based nanomaterials. <i>Environmental Science & Technology</i> , 2008 , 42, 5843-59	10.3	1154
4	Desalination Process Design Assisted by Osmotic Power for High Water Recovery and Low Energy Consumption. <i>ACS Sustainable Chemistry and Engineering</i> ,	8.3	1
3	Recommendations for Advancing FAIR and Open Data Standards in the Water Treatment Community. <i>ACS ES&T Engineering</i> ,		0

- 2 Marginal energy intensity of water supply. *Energy and Environmental Science*, 35:4 4
- 1 Carbon Benefits of Drinking Water Treatment Electrification. *ACS ES&T Engineering*, 2