

Xin Xiao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7707197/publications.pdf>

Version: 2024-02-01

31
papers

3,434
citations

304743

22
h-index

434195

31
g-index

31
all docs

31
docs citations

31
times ranked

3225
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-assembled fungus-biochar composite pellets (FBPs) for enhanced co-sorption-biodegradation towards phenanthrene. <i>Chemosphere</i> , 2022, 286, 131887.	8.2	11
2	Rational solvent molecule tuning for high-performance lithium metal battery electrolytes. <i>Nature Energy</i> , 2022, 7, 94-106.	39.5	336
3	Scalable, Ultrathin, and High-Temperature-Resistant Solid Polymer Electrolytes for Energy-Dense Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	132
4	Selective Separation Catalysis Membrane for Highly Efficient Water and Soil Decontamination via a Persulfate-Based Advanced Oxidation Process. <i>Environmental Science & Technology</i> , 2022, 56, 3234-3244.	10.0	20
5	Facile nitrogen doping in fungal hyphae-derived biochars via cooperation of microbial culture and pyrolysis for efficient catalytic reduction of 4-nitrophenol. <i>Chemosphere</i> , 2022, 300, 134526.	8.2	4
6	Tuning Fluorination of Linear Carbonate for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2022, 169, 040555.	2.9	24
7	Sensitive, portable heavy-metal-ion detection by the sulfidation method on a superhydrophobic concentrator (SPOT). <i>One Earth</i> , 2021, 4, 756-766.	6.8	2
8	Selectively coupled small Pd nanoparticles on sp ² -hybridized domain of graphene-based aerogel with enhanced catalytic activity and stability. <i>Science of the Total Environment</i> , 2021, 771, 145396.	8.0	11
9	All-Solid-State Lithium-Sulfur Batteries Enhanced by Redox Mediators. <i>Journal of the American Chemical Society</i> , 2021, 143, 18188-18195.	13.7	66
10	Dynamic spatial progression of isolated lithium during battery operations. <i>Nature</i> , 2021, 600, 659-663.	27.8	111
11	Ultralight and fire-extinguishing current collectors for high-energy and high-safety lithium-ion batteries. <i>Nature Energy</i> , 2020, 5, 786-793.	39.5	168
12	Air-Filtering Masks for Respiratory Protection from PM _{2.5} and Pandemic Pathogens. <i>One Earth</i> , 2020, 3, 574-589.	6.8	60
13	Designing a Nanoscale Three-phase Electrochemical Pathway to Promote Pt-catalyzed Formaldehyde Oxidation. <i>Nano Letters</i> , 2020, 20, 8719-8724.	9.1	15
14	Proton uptake behaviors of organic and inorganic matters in biochars prepared under different pyrolytic temperatures. <i>Science of the Total Environment</i> , 2020, 746, 140853.	8.0	6
15	Destruction of Per- and Polyfluoroalkyl Substances (PFASs) in Aqueous Film-Forming Foam (AFFF) with UV-Sulfite Photoreductive Treatment. <i>Environmental Science & Technology</i> , 2020, 54, 6957-6967.	10.0	88
16	Incorporating the Nanoscale Encapsulation Concept from Liquid Electrolytes into Solid-State Lithium-Sulfur Batteries. <i>Nano Letters</i> , 2020, 20, 5496-5503.	9.1	30
17	Application of biochar-based materials in environmental remediation: from multi-level structures to specific devices. <i>Biochar</i> , 2020, 2, 1-31.	12.6	118
18	Novel insights into effects of silicon-rich biochar (Sichar) amendment on cadmium uptake, translocation and accumulation in rice plants. <i>Environmental Pollution</i> , 2020, 265, 114772.	7.5	42

#	ARTICLE	IF	CITATIONS
19	Environmental Effects of Silicon within Biochar (Sichar) and Carbon—Silicon Coupling Mechanisms: A Critical Review. <i>Environmental Science & Technology</i> , 2019, 53, 13570-13582.	10.0	91
20	pH-dependent sorption of sulfonamide antibiotics onto biochars: Sorption mechanisms and modeling. <i>Environmental Pollution</i> , 2019, 248, 48-56.	7.5	61
21	Effects of biochar amendment on the soil silicon cycle in a soil-rice ecosystem. <i>Environmental Pollution</i> , 2019, 248, 823-833.	7.5	30
22	Insight into Multiple and Multilevel Structures of Biochars and Their Potential Environmental Applications: A Critical Review. <i>Environmental Science & Technology</i> , 2018, 52, 5027-5047.	10.0	593
23	Reductive Defluorination of Branched Per- and Polyfluoroalkyl Substances with Cobalt Complex Catalysts. <i>Environmental Science and Technology Letters</i> , 2018, 5, 289-294.	8.7	65
24	Biochar Impacts on Soil Silicon Dissolution Kinetics and their Interaction Mechanisms. <i>Scientific Reports</i> , 2018, 8, 8040.	3.3	39
25	A Direct Observation of the Fine Aromatic Clusters and Molecular Structures of Biochars. <i>Environmental Science & Technology</i> , 2017, 51, 5473-5482.	10.0	173
26	Sorption of Poly- and Perfluoroalkyl Substances (PFASs) Relevant to Aqueous Film-Forming Foam (AFFF)-Impacted Groundwater by Biochars and Activated Carbon. <i>Environmental Science & Technology</i> , 2017, 51, 6342-6351.	10.0	239
27	Sugar Cane-Converted Graphene-like Material for the Superhigh Adsorption of Organic Pollutants from Water via Coassembly Mechanisms. <i>Environmental Science & Technology</i> , 2017, 51, 12644-12652.	10.0	63
28	H/C atomic ratio as a smart linkage between pyrolytic temperatures, aromatic clusters and sorption properties of biochars derived from diverse precursory materials. <i>Scientific Reports</i> , 2016, 6, 22644.	3.3	149
29	Interaction Mechanisms between Biochar and Organic Pollutants. <i>SSSA Special Publication Series</i> , 2015, , 225-257.	0.2	4
30	Quantification of Chemical States, Dissociation Constants and Contents of Oxygen-containing Groups on the Surface of Biochars Produced at Different Temperatures. <i>Environmental Science & Technology</i> , 2015, 49, 309-317.	10.0	277
31	Transformation, Morphology, and Dissolution of Silicon and Carbon in Rice Straw-Derived Biochars under Different Pyrolytic Temperatures. <i>Environmental Science & Technology</i> , 2014, 48, 3411-3419.	10.0	406