Xiao Su

List of Publications by Year
in descending order

59 papers	2,505 citations	218677 26 h-index	197818 49 g-index
61 all docs	61 docs citations	61 times ranked	2307 citing authors

#	Article	IF	Citations
1	Charge-transfer materials for electrochemical water desalination, ion separation and the recovery of elements. Nature Reviews Materials, 2020, 5, 517-538.	48.7	360
2	Electrochemically-mediated selective capture of heavy metal chromium and arsenic oxyanions from water. Nature Communications, 2018, 9, 4701.	12.8	193
3	Asymmetric Faradaic systems for selective electrochemical separations. Energy and Environmental Science, 2017, 10, 1272-1283.	30.8	143
4	Redox-electrodes for selective electrochemical separations. Advances in Colloid and Interface Science, 2017, 244, 6-20.	14.7	132
5	Postsynthetic Functionalization of Mg-MOF-74 with Tetraethylenepentamine: Structural Characterization and Enhanced CO₂ Adsorption. ACS Applied Materials & Interfaces, 2017, 9, 11299-11306.	8.0	131
6	Bromine-Catalyzed Conversion of CO₂ and Epoxides to Cyclic Carbonates under Continuous Flow Conditions. Journal of the American Chemical Society, 2013, 135, 18497-18501.	13.7	130
7	Redox-electrolytes for non-flow electrochemical energy storage: A critical review and best practice. Progress in Materials Science, 2019, 101, 46-89.	32.8	111
8	Anionâ€Selective Redox Electrodes: Electrochemically Mediated Separation with Heterogeneous Organometallic Interfaces. Advanced Functional Materials, 2016, 26, 3394-3404.	14.9	106
9	Capacitive deionization and electrosorption for heavy metal removal. Environmental Science: Water Research and Technology, 2020, 6, 258-282.	2.4	92
10	Asymmetric Redoxâ€Polymer Interfaces for Electrochemical Reactive Separations: Synergistic Capture and Conversion of Arsenic. Advanced Materials, 2020, 32, e1906877.	21.0	77
11	Electrosorption at functional interfaces: from molecular-level interactions to electrochemical cell design. Physical Chemistry Chemical Physics, 2017, 19, 23570-23584.	2.8	71
12	Functional Networks of Organic and Coordination Polymers: Catalysis of Fructose Conversion. Chemistry of Materials, 2014, 26, 6257-6264.	6.7	58
13	Heteropolyacid-Functionalized Aluminum 2-Aminoterephthalate Metal-Organic Frameworks As Reactive Aldehyde Sorbents and Catalysts. ACS Applied Materials & Interfaces, 2013, 5, 5468-5477.	8.0	56
14	Selective cobalt and nickel electrodeposition for lithium-ion battery recycling through integrated electrolyte and interface control. Nature Communications, 2021, 12, 6554.	12.8	56
15	Electrochemical approaches for selective recovery of critical elements in hydrometallurgical processes of complex feedstocks. IScience, 2021, 24, 102374.	4.1	46
16	Electrochemical interfaces for chemical and biomolecular separations. Current Opinion in Colloid and Interface Science, 2020, 46, 77-93.	7.4	40
17	An Asymmetric Ironâ€Based Redoxâ€Active System for Electrochemical Separation of Ions in Aqueous Media. Advanced Functional Materials, 2020, 30, 1910363.	14.9	39
18	Electrochemical lithium recovery system through the simultaneous lithium enrichment via sustainable redox reaction. Chemical Engineering Journal, 2021, 420, 127715.	12.7	39

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19	Rapid Inversion of Surface Charges in Heteroatomâ€Doped Porous Carbon: A Route to Robust Electrochemical Desalination. Advanced Functional Materials, 2020, 30, 1909387.	14.9	38
20	Electrochemically Mediated Reduction of Nitrosamines by Hemin-Functionalized Redox Electrodes. Environmental Science and Technology Letters, 2017, 4, 161-167.	8.7	36
21	Redox Interfaces for Electrochemically Controlled Proteinâ€“Surface Interactions: Bioseparations and Heterogeneous Enzyme Catalysis. Chemistry of Materials, 2017, 29, 5702-5712.	6.7	35
22	Molecular Tuning of Redoxâ€Copolymers for Selective Electrochemical Remediation. Advanced Functional Materials, 2020, 30, 2004635.	14.9	34
23	Recent advances in wastewater treatment using semiconductor photocatalysts. Current Opinion in Green and Sustainable Chemistry, 2022, 36, 100644.	5.9	33
24	Redox-copolymers for the recovery of rare earth elements by electrochemically regenerated ion-exchange. Journal of Materials Chemistry A, 2021, 9, 20068-20077.	10.3	31
25	Structure and Potentialâ€Dependent Selectivity in Redoxâ€Metallopolymers: Electrochemically Mediated Multicomponent Metal Separations. Advanced Functional Materials, 2021, 31, 2009307.	14.9	30
26	Redox-mediated electrochemical desalination for waste valorization in dairy production. Chemical Engineering Journal, 2022, 428, 131082.	12.7	30
27	Perspective and challenges in electrochemical approaches for reactive CO2 separations. IScience, 2021, 24, 103422.	4.1	28
28	Density of Ocular Components of the Bovine Eye. Optometry and Vision Science, 2009, 86, 1187-1195.	1.2	27
29	Aldehyde Self-Condensation Catalysis by Aluminum Aminoterephthalate Metalâ€“Organic Frameworks Modified with Aluminum Isopropoxide. Chemistry of Materials, 2013, 25, 1636-1642.	6.7	25
30	Electrochemical separation of organic acids and proteins for food and biomanufacturing. Chemical Engineering Research and Design, 2022, 178, 267-288.	5.6	25
31	Ferroceneâ€Containing Inverse Opals by Meltâ€Shear Organization of Core/Shell Particles. Macromolecular Rapid Communications, 2018, 39, e1800428.	3.9	24
32	Parametric investigation of the desalination performance in multichannel membrane capacitive deionization (MC-MCDI). Desalination, 2021, 503, 114950.	8.2	24
33	Semiconducting Polymer Interfaces for Electrochemically Assisted Mercury Remediation. ACS Applied Materials & Interfaces, 2020, 12, 49713-49722.	8.0	22
34	Mechanism and performance relevance of nanomorphogenesis in polyamide films revealed by quantitative 3D imaging and machine learning. Science Advances, 2022, 8, eabk1888.	10.3	22
35	Electrochemical remediation of perfluoroalkyl substances from water. Electrochimica Acta, 2022, 403, 139635.	5.2	19
36	Self-Decontaminating Fibrous Materials Reactive toward Chemical Threats. ACS Applied Materials & Interfaces, 2016, 8, 17555-17564.	8.0	18

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37	Electrochemically-assisted removal of cadmium ions by redox active Cu-based metal-organic framework. Chemical Engineering Journal, 2021, 421, 129765.	12.7	18
38	Electrochemical Separations for Metal Recycling. Electrochemical Society Interface, 2020, 29, 55-61.	0.4	18
39	Electrosorption of cadmium ions in aqueous solutions using a copper-gallate metal-organic framework. Chemosphere, 2022, 286, 131853.	8.2	16
40	Advances and challenges in metal ion separation from water. Trends in Chemistry, 2021, 3, 819-831.	8.5	14
41	Chitosan/sericin blend membranes for adsorption of bovine serum albumin. Canadian Journal of Chemical Engineering, 2017, 95, 954-960.	1.7	10
42	Emerging investigator series: electrochemically-mediated remediation of GenX using redox-copolymers. Environmental Science: Water Research and Technology, 2021, 7, 2231-2240.	2.4	9
43	Synthesis and covalent immobilization of redox-active metallopolymers for organic phase electrochemistry. Polymer, 2022, 244, 124656.	3.8	7
44	Iron phosphomolybdate complexes in electrocatalytic reduction of aqueous disinfection byproducts. Chemical Engineering Journal, 2021, 408, 127354.	12.7	5
45	Rate, Efficiency, and Mechanisms of Electrochemical Perfluorooctanoic Acid Degradation with Boron-Doped Diamond and Plasma Electrodes. Langmuir, 2022, 38, 8975-8986.	3.5	5
46	Electrochemistry for Recycling. Electrochemical Society Interface, 2021, 30, 41-43.	0.4	4
47	Electrochemical Remediation: Molecular Tuning of Redoxâ€Copolymers for Selective Electrochemical Remediation (Adv. Funct. Mater. 52/2020). Advanced Functional Materials, 2020, 30, 2070346.	14.9	3
48	Electrochemical Reactive Separation: Asymmetric Redoxâ€Polymer Interfaces for Electrochemical Reactive Separations: Synergistic Capture and Conversion of Arsenic (Adv. Mater. 6/2020). Advanced Materials, 2020, 32, 2070040.	21.0	1
49	Reactive Fibrous Materials for Decontamination of Chemical and Biological Threats. Key Engineering Materials, 0, 893, 3-10.	0.4	1
50	Corrigendum to â€œElectrochemically-assisted removal of cadmium ions by redox active Cu-based metalâ€“organic frameworkâ€•[Chem. Eng. J. 421 (2021) 129765]. Chemical Engineering Journal, 2021, 426, 130667.	12.7	1
51	Redox Copolymers for the Electrochemically-Mediated Removal of per- and Polyfluoroalkyl Substances from Water. ECS Meeting Abstracts, 2021, MA2021-02, 1531-1531.	0.0	1
52	Membrane-based electrochemical technologies: III. Selective ion removal and recovery. , 2022, , 403-444.		1
53	Redox Electrodes: Anion-Selective Redox Electrodes: Electrochemically Mediated Separation with Heterogeneous Organometallic Interfaces (Adv. Funct. Mater. 20/2016). Advanced Functional Materials, 2016, 26, 3552-3552.	14.9	0
54	Magnesium Thiodialkanoates: Dually-Functional Additives to Organic Coatings. Industrial & Engineering Chemistry Research, 2018, 57, 10992-11004.	3.7	0

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55	Capacitive Deionization: Rapid Inversion of Surface Charges in Heteroatomâ€Doped Porous Carbon: A Route to Robust Electrochemical Desalination (Adv. Funct. Mater. 9/2020). Advanced Functional Materials, 2020, 30, 2070054.	14.9	0
56	Electrosorption: Structure and Potentialâ€Dependent Selectivity in Redoxâ€Metallopolymers: Electrochemically Mediated Multicomponent Metal Separations (Adv. Funct. Mater. 15/2021). Advanced Functional Materials, 2021, 31, 2170103.	14.9	0
57	(Invited) Molecular Engineering of Redox-Active Electrodes for Selective Ion Separations and Process Intensification. ECS Meeting Abstracts, 2019, , .	0.0	0
58	Redox-Active Interfaces for Electrochemical Reactive Separations and Process Intensification. ECS Meeting Abstracts, 2021, MA2021-02, 841-841.	0.0	0
59	Structural and Potential-Dependent Metal Anion Selectivity of Redox-Metallopolymer Electrosorbents. ECS Meeting Abstracts, 2021, MA2021-02, 759-759.	0.0	0