Yan Chen

List of Publications by Year
in descending order

72	4,652	117625	98798
papers	citations	34 h-index	67 g-index

73	73	73	4513
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tunning the defects in lignin-derived-carbon and trimetallic layered double hydroxides composites (LDH@LDC) for efficient removal of U(VI) and Cr(VI) in aquatic environment. Chemical Engineering Journal, 2022, 428, 132113.	12.7	36
2	Regulating surface oxygen species on copper (I) oxides via plasma treatment for effective reduction of nitrate to ammonia. Applied Catalysis B: Environmental, 2022, 305, 121021.	20.2	98
3	Layered-perovskite oxides with in situ exsolved Coâ€“Fe alloy nanoparticles as highly efficient electrodes for high-temperature carbon dioxide electrolysis. Journal of Materials Chemistry A, 2022, 10, 2327-2335.	10.3	26
4	Activating lattice oxygen in NiFe-based (oxy)hydroxide for water electrolysis. Nature Communications, 2022, 13, 2191.	12.8	179
5	Improving electrochemical nitrate reduction activity of layered perovskite oxide La2CuO4 via B-site doping. Catalysis Today, 2022, 402, 259-265.	4.4	17
6	Manipulating the Resistive Switching in Epitaxial SrCoO_{2.5} Thin-Film-Based Memristors by Strain Engineering. ACS Applied Electronic Materials, 2022, 4, 2729-2738.	4.3	5
7	Promoting biomass electrooxidation via modulating proton and oxygen anion deintercalation in hydroxide. Nature Communications, 2022, 13, .	12.8	60
8	Insights into the pollutant electron property inducing the transformation of peroxymonosulfate activation mechanisms on manganese dioxide. Applied Catalysis B: Environmental, 2022, 317, 121753.	20.2	29
9	Spectroscopic investigation of defects mediated oxidization of single-layer MoS2. Science China Technological Sciences, 2021, 64, 611-619.	4.0	6
10	Constructing MoS2/Lignin-derived carbon nanocomposites for highly efficient removal of Cr(VI) from aqueous environment. Journal of Hazardous Materials, 2021, 408, 124847.	12.4	65
11	Progress of Exsolved Metal Nanoparticles on Oxides as High Performance (Electro)Catalysts for the Conversion of Small Molecules. Small, 2021, 17, e2005383.	10.0	53
12	Applications of Ion Beam Irradiation in Multifunctional Oxide Thin Films: A Review. ACS Applied Electronic Materials, 2021, 3, 1031-1042.	4.3	20
13	Improving the activity and stability of Ni-based electrodes for solid oxide cells through surface engineering: Recent progress and future perspectives. Materials Reports Energy, 2021, 1, 100025.	3.2	11
14	Enhancing the non-enzymatic glucose detection performance of Ni(OH)2 nanosheets via defect engineering. Surfaces and Interfaces, 2021, 25, 101234.	3.0	5
15	Enhancing co-catalysis of MoS2 for persulfate activation in Fe3+-based advanced oxidation processes via defect engineering. Chemical Engineering Journal, 2021, 417, 127987.	12.7	58
16	Modulating Reaction Pathways on Perovskite Cobaltite Nanofibers through Excessive Surface Oxygen Defects for Efficient Water Oxidation. Energy & Fuels, 2021, 35, 13967-13974.	5.1	7
17	Tuning reaction pathways of peroxymonosulfate-based advanced oxidation process via defect engineering. Cell Reports Physical Science, 2021, 2, 100550.	5.6	9
18	Activating Lattice Oxygen in Perovskite Oxide by Bâ€Site Cation Doping for Modulated Stability and Activity at Elevated Temperatures. Advanced Science, 2021, 8, e2102713.	11.2	44

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19	Enhancing the Intrinsic Activity and Stability of Perovskite Cobaltite at Elevated Temperature Through Surface Stress. Small, 2021, 17, e2104144.	10.0	21
20	The Restructuring-Induced CoO_x Catalyst for Electrochemical Water Splitting. Jacs Au, 2021, 1, 2216-2223.	7.9	32
21	Heterointerface engineering for enhancing the electrochemical performance of solid oxide cells. Energy and Environmental Science, 2020, 13, 53-85.	30.8	178
22	Revealing the effects of oxygen defects on the electro-catalytic activity of nickel oxide. International Journal of Hydrogen Energy, 2020, 45, 424-432.	7.1	21
23	NiS_x@MoS₂ heterostructure prepared by atomic layer deposition as high-performance hydrogen evolution reaction electrocatalysts in alkaline media. Journal of Materials Research, 2020, 35, 822-830.	2.6	15
24	Construction of Multifunctional Nanoarchitectures in One Step on a Composite Fuel Catalyst through In Situ Exsolution of La_{0.5}Sr_{0.5}Fe_{0.8}Ni_{0.1}Nb_{0.1}O_{3â^Î´}. ACS Applied Materials & Interfaces, 2020, 12, 34890-34900.	8.0	23
25	A facile top-down approach for constructing perovskite oxide nanostructure with abundant oxygen defects as highly efficient water oxidation electrocatalyst. International Journal of Hydrogen Energy, 2020, 45, 22808-22816.	7.1	15
26	Tuning proton-coupled electron transfer by crystal orientation for efficient water oxidization on double perovskite oxides. Nature Communications, 2020, 11, 4299.	12.8	93
27	A Mini Review on the Application of Proton-Conducting Solid Oxide Cells for CO₂ Conversion. Energy & Fuels, 2020, 34, 13427-13437.	5.1	17
28	Oxygen defect engineering in double perovskite oxides for effective water oxidation. Journal of Materials Chemistry A, 2020, 8, 10957-10965.	10.3	60
29	Defect-Mediated Adsorption of Metal Ions for Constructing Ni Hydroxide/MoS₂ Heterostructures as High-Performance Water-Splitting Electrocatalysts. ACS Applied Energy Materials, 2020, 3, 7039-7047.	5.1	20
30	Nanoscale Ni(OH)_x Films on Carbon Cloth Prepared by Atomic Layer Deposition and Electrochemical Activation for Glucose Sensing. ACS Applied Nano Materials, 2019, 2, 4427-4434.	5.0	30
31	A semi-classical model for the charge exchange and energy loss of slow highly charged ions in ultrathin materials. Matter and Radiation at Extremes, 2019, 4, 054401.	3.9	5
32	Improving the Activity for Oxygen Evolution Reaction by Tailoring Oxygen Defects in Double Perovskite Oxides. Advanced Functional Materials, 2019, 29, 1901783.	14.9	152
33	Uncovering the Effect of Lattice Strain and Oxygen Deficiency on Electrocatalytic Activity of Perovskite Cobaltite Thin Films. Advanced Science, 2019, 6, 1801898.	11.2	136
34	Anionic defect engineering of transition metal oxides for oxygen reduction and evolution reactions. Journal of Materials Chemistry A, 2019, 7, 5875-5897.	10.3	252
35	Modified Oxygen Defect Chemistry at Transition Metal Oxide Heterostructures Probed by Hard X-ray Photoelectron Spectroscopy and X-ray Diffraction. Chemistry of Materials, 2018, 30, 3359-3371.	6.7	48
36	Tuning Electronic Structure of Single Layer MoS₂ through Defect and Interface Engineering. ACS Nano, 2018, 12, 2569-2579.	14.6	203

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37	Hierarchically Porous Co and Nâ€Codoped Carbon Hollow Structure Derived from PS@ZIFâ€67 as an Electrocatalyst for Oxygen Reduction. ChemistrySelect, 2018, 3, 4831-4837.	1.5	19
38	An In Situ Formed, Dualâ€Phase Cathode with a Highly Active Catalyst Coating for Protonic Ceramic Fuel Cells. Advanced Functional Materials, 2018, 28, 1704907.	14.9	82
39	Defect Engineering in Single-Layer MoS₂ Using Heavy Ion Irradiation. ACS Applied Materials & Interfaces, 2018, 10, 42524-42533.	8.0	138
40	Impact of Strain-Induced Changes in Defect Chemistry on Catalytic Activity of Nd₂NiO_{4+Î´} Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 36926-36932.	8.0	31
41	Improving the Electrocatalytic Activity and Durability of the La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3â^'Î´} Cathode by Surface Modification. ACS Applied Materials & Interfaces, 2018, 10, 39785-39793.	8.0	71
42	Self-Templated Synthesis of Hierarchically Porous N-Doped Carbon Derived from Biomass for Supercapacitors. ACS Sustainable Chemistry and Engineering, 2018, 6, 13932-13939.	6.7	58
43	Generating Sub-nanometer Pores in Single-Layer MoS₂ by Heavy-Ion Bombardment for Gas Separation: A Theoretical Perspective. ACS Applied Materials & Interfaces, 2018, 10, 28909-28917.	8.0	37
44	A highly active, CO₂-tolerant electrode for the oxygen reduction reaction. Energy and Environmental Science, 2018, 11, 2458-2466.	30.8	202
45	A robust and active hybrid catalyst for facile oxygen reduction in solid oxide fuel cells. Energy and Environmental Science, 2017, 10, 964-971.	30.8	204
46	Dislocations Accelerate Oxygen Ion Diffusion in La_{0.8}Sr_{0.2}MnO₃ Epitaxial Thin Films. ACS Nano, 2017, 11, 11475-11487.	14.6	80
47	Controlling cation segregation in perovskite-based electrodes for high electro-catalytic activity and durability. Chemical Society Reviews, 2017, 46, 6345-6378.	38.1	246
48	Electronic Structure Evolution of SrCoO_x during Electrochemically Driven Phase Transition Probed by in Situ X-ray Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 24148-24157.	3.1	40
49	Spinel/perovskite cobaltite nanocomposites synthesized by combinatorial pulsed laser deposition. CrystEngComm, 2016, 18, 7745-7752.	2.6	9
50	Accelerated Oxygen Exchange Kinetics on Nd₂NiO_{4+Î´} Thin Films with Tensile Strain along c-Axis. ACS Nano, 2015, 9, 1613-1621.	14.6	54
51	Fast oxygen exchange and diffusion kinetics of grain boundaries in Sr-doped LaMnO₃thin films. Physical Chemistry Chemical Physics, 2015, 17, 7659-7669.	2.8	92
52	Segregated Chemistry and Structure on (001) and (100) Surfaces of (La_{1â€“x}Sr_x)₂CoO₄ Override the Crystal Anisotropy in Oxygen Exchange Kinetics. Chemistry of Materials, 2015, 27, 5436-5450.	6.7	115
53	Vertically aligned nanocomposite La_{0.8}Sr_{0.2}CoO₃/(La_{0.5}Sr_{0.5})₂CoO₄ cathodes â€“ electronic structure, surface chemistry and oxygen reduction kinetics. Journal of Materials Chemistry A, 2015, 3, 207-219.	10.3	76
54	Chemomechanics of ionically conductive ceramics for electrical energy conversion and storage. Journal of Electroceramics, 2014, 32, 3-27.	2.0	38

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55	Reducibility of Co at the La_{0.8}Sr_{0.2}CoO₃/(La_{0.5}Sr_{0.5})₂CoO₄ hetero- at elevated temperatures. Journal of Materials Chemistry A, 2014, 2, 14690.	10.8	30
56	Dependence of Defect Chemistry and Surface Composition on the Crystal Orientation of (La0.5Sr0.5)2CoO4 Dense Thin Films. ECS Transactions, 2013, 58, 265-274.	0.5	1
57	Surface Chemistry and Non-Stoichiometry of Nd₂NiO₄₊ _{Î´} Epitaxial Thin Films with Different Orientation and Strain. ECS Transactions, 2013, 57, 1743-1752.	0.5	5
58	Cation Size Mismatch and Charge Interactions Drive Dopant Segregation at the Surfaces of Manganite Perovskites. Journal of the American Chemical Society, 2013, 135, 7909-7925.	13.7	468
59	Electronic Activation of Cathode Superlattices at Elevated Temperatures â€“ Source of Markedly Accelerated Oxygen Reduction Kinetics. Advanced Energy Materials, 2013, 3, 1221-1229.	19.5	88
60	Tailoring the wettability of nanocrystalline TiO2 films. Applied Surface Science, 2012, 258, 2266-2269.	6.1	9
61	Impact of Sr segregation on the electronic structure and oxygen reduction activity of SrTi1â^'xFexO3 surfaces. Energy and Environmental Science, 2012, 5, 7979.	30.8	179
62	Surface Electronic Structure Transitions at High Temperature on Perovskite Oxides: The Case of Strained La_{0.8}Sr_{0.2}CoO₃ Thin Films. Journal of the American Chemical Society, 2011, 133, 17696-17704.	13.7	148
63	STUDY ON THE MECHANISM OF VISIBLE ABSORPTION ENHANCEMENT FOR N⁺ IMPLANTED TiO₂ BY RAMAN SPECTROSCOPY. Surface Review and Letters, 2011, 18, 135-140.	1.1	1
64	Chemical, Electronic and Nanostructure Dynamics on Sr(Ti1-xFex)O3 Thin-Film Surfaces at High Temperatures. ECS Transactions, 2011, 35, 2409-2416.	0.5	5
65	Structural, Chemical, and Electronic State on La_{0.7}Sr_{0.3}MnO₃ Dense Thin-Film Surfaces at High Temperature: Surface Segregation. ECS Transactions, 2010, 28, 235-240.	0.5	12
66	Applications of Heavy Ion Irradiation in Photonic CrystalResearch. Journal of the Korean Physical Society, 2009, 55, 2708-2710.	0.7	3
67	Etching characteristic for tracks of multicharged ions in polymer. Radiation Measurements, 2008, 43, S111-S115.	1.4	6
68	Wettability characteristic of PTFE and glass surface irradiated by keV ions. Applied Surface Science, 2008, 254, 5497-5500.	6.1	22
69	Anisotropic deformation of polystyrene particles by MeV Au ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 894-898.	1.4	6
70	The investigation of energy loss and damage in polycarbonate induced by MeV carbon clusters. Nuclear Instruments & Methods in Physics Research B, 2007, 262, 205-208.	1.4	3
71	Topological and chemical investigation on super-hydrophobicity of PTFE surface caused by ion irradiation. Applied Surface Science, 2007, 254, 464-467.	6.1	25
72	Damage cross-section of carbon cluster ions Cn+ (n= 1â€“5) collision with polycarbonate. Chemical Physics Letters, 2006, 433, 140-144.	2.6	0