

Lei Ge

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8612067/publications.pdf>

Version: 2024-02-01

112
papers

10,051
citations

50566

48
h-index

39744

98
g-index

114
all docs

114
docs citations

114
times ranked

13876
citing authors

#	ARTICLE	IF	CITATIONS
1	Electron acceptor design for 2D/2D iodine/carbon nitride heterojunction boosting charge transfer and CO ₂ photoreduction. <i>Chemical Engineering Journal</i> , 2022, 433, 133594.	6.6	11
2	Activation of peroxydisulfate by defect-rich CuO nanoparticles supported on layered MgO for organic pollutants degradation: An electron transfer mechanism. <i>Chemical Engineering Journal</i> , 2022, 431, 134026.	6.6	29
3	Electrochemical CO ₂ reduction in membrane-electrode assemblies. <i>CheM</i> , 2022, 8, 663-692.	5.8	86
4	Laser-Induced N- and B-Codoped Graphene Nanozymes with Intrinsic Peroxidase-Like Activities for Bactericidal Application. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 2750-2760.	3.2	18
5	New Undisputed Evidence and Strategy for Enhanced Lattice-Oxygen Participation of Perovskite Electrocatalyst through Cation Deficiency Manipulation. <i>Advanced Science</i> , 2022, 9, e2200530.	5.6	75
6	Regulating the reaction zone of electrochemical CO ₂ reduction on gas-diffusion electrodes by distinctive hydrophilic-hydrophobic catalyst layers. <i>Applied Catalysis B: Environmental</i> , 2022, 310, 121362.	10.8	21
7	Composite cathodes for protonic ceramic fuel cells: Rationales and materials. <i>Composites Part B: Engineering</i> , 2022, 238, 109881.	5.9	59
8	Stabilizing bienzymatic cascade catalysis via immobilization in ZIF-8/GO composites obtained by GO assisted co-growth. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 217, 112585.	2.5	6
9	Unveiling the effects of dimensionality of tin oxide-derived catalysts on CO ₂ reduction by using gas-diffusion electrodes. <i>Reaction Chemistry and Engineering</i> , 2021, 6, 345-352.	1.9	20
10	Catalysis based on ferroelectrics: controllable chemical reaction with boosted efficiency. <i>Nanoscale</i> , 2021, 13, 7096-7107.	2.8	27
11	Gas diffusion electrodes (GDEs) for electrochemical reduction of carbon dioxide, carbon monoxide, and dinitrogen to value-added products: a review. <i>Energy and Environmental Science</i> , 2021, 14, 1959-2008.	15.6	243
12	The controllable synthesis of urchin-shaped hierarchical superstructure MOFs with high catalytic activity and stability. <i>Chemical Communications</i> , 2021, 57, 8758-8761.	2.2	10
13	Revealing cracking and breakage behaviours of gibbsite particles. <i>Ceramics International</i> , 2021, 47, 4625-4632.	2.3	1
14	Flexible A-site doping La _{0.6-x} M _x Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ (M=Ca, Ba, Bi; x=0, 0.1, 0.2) as novel cathode material for intermediate-temperature solid oxide fuel cells: A first-principles study and experimental exploration. <i>Journal of Power Sources</i> , 2021, 490, 229564.	4.0	24
15	Understanding the Effects of Anion Interactions with Ag Electrodes on Electrochemical CO ₂ Reduction in Choline Halide Electrolytes. <i>ChemSusChem</i> , 2021, 14, 2601-2611.	3.6	5
16	High-Performance Perovskite Composite Electrocatalysts Enabled by Controllable Interface Engineering. <i>Small</i> , 2021, 17, e2101573.	5.2	128
17	Shape-tuned electrodeposition of bismuth-based nanosheets on flow-through hollow fiber gas diffusion electrode for high-efficiency CO ₂ reduction to formate. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119945.	10.8	77
18	Improved enzymatic activity by oriented immobilization on graphene oxide with tunable surface heterogeneity. <i>Composites Part B: Engineering</i> , 2021, 216, 108788.	5.9	32

#	ARTICLE	IF	CITATIONS
19	Improved adenylate cyclase activity via affinity immobilization onto co-modified GO with bio-inspired adhesive and PEI. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 205, 111888.	2.5	13
20	Toward controlled geometric structure and surface property heterogeneities of TiO ₂ for lipase immobilization. <i>Process Biochemistry</i> , 2021, 110, 118-128.	1.8	2
21	Stand-alone asymmetric hollow fiber gas-diffusion electrodes with distinguished bronze phases for high-efficiency CO ₂ electrochemical reduction. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120538.	10.8	35
22	Crystal Facet Engineering of Copper-Based Metal-Organic Frameworks with Inorganic Modulators. <i>Crystal Growth and Design</i> , 2021, 21, 926-934.	1.4	16
23	Catalyst-Electrolyte Interactions in Aqueous Reine Solutions for Highly Selective Electrochemical CO ₂ Reduction. <i>ChemSusChem</i> , 2020, 13, 304-311.	3.6	29
24	Advances and challenges in electrochemical CO ₂ reduction processes: an engineering and design perspective looking beyond new catalyst materials. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1511-1544.	5.2	305
25	Electrochemical Reduction of CO ₂ to Ethane through Stabilization of an Ethoxy Intermediate. <i>Angewandte Chemie</i> , 2020, 132, 19817-19821.	1.6	33
26	Interfacial microenvironment for lipase immobilization: Regulating the heterogeneity of graphene oxide. <i>Chemical Engineering Journal</i> , 2020, 394, 125038.	6.6	28
27	High-performance metal-organic framework-perovskite hybrid as an important component of the air-electrode for rechargeable Zn-Air battery. <i>Journal of Power Sources</i> , 2020, 468, 228377.	4.0	52
28	Efficient organic enrichment from sludge filtrate via a forward osmosis membrane process. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104042.	3.3	9
29	Interfacial engineering of a polymer-MOF composite by <i>in situ</i> vitrification. <i>Chemical Communications</i> , 2020, 56, 3609-3612.	2.2	43
30	From scheelite BaMoO ₄ to perovskite BaMoO ₃ : Enhanced electrocatalysis toward the hydrogen evolution in alkaline media. <i>Composites Part B: Engineering</i> , 2020, 198, 108214.	5.9	46
31	Cracking behaviour and mechanism at grain boundary of gibbsite during calcination. <i>Ceramics International</i> , 2020, 46, 12067-12072.	2.3	2
32	Direct evidence of boosted oxygen evolution over perovskite by enhanced lattice oxygen participation. <i>Nature Communications</i> , 2020, 11, 2002.	5.8	366
33	Electrochemical Reduction of CO ₂ to Ethane through Stabilization of an Ethoxy Intermediate. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19649-19653.	7.2	122
34	Modulated Sn Oxidation States over a Cu ₂ O-Derived Substrate for Selective Electrochemical CO ₂ Reduction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 22760-22770.	4.0	36
35	Toward Excellence of Transition Metal-Based Catalysts for CO ₂ Electrochemical Reduction: An Overview of Strategies and Rationales. <i>Small Methods</i> , 2020, 4, 2000033.	4.6	60
36	Tuning the Product Selectivity of the Cu Hollow Fiber Gas Diffusion Electrode for Efficient CO ₂ Reduction to Formate by Controlled Surface Sn Electrodeposition. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 21670-21681.	4.0	69

#	ARTICLE	IF	CITATIONS
37	Perovskite Materials in Electrocatalysis. <i>Materials Horizons</i> , 2020, , 209-250.	0.3	4
38	Effect of oxidation and silane surface treatments of coal powders on relative permeability in packed coal beds. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 69, 102931.	2.1	5
39	A Surfactant-Free and Scalable General Strategy for Synthesizing Ultrathin Two-Dimensional Metal-Organic Framework Nanosheets for the Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2019, 131, 13699-13706.	1.6	64
40	A Surfactant-Free and Scalable General Strategy for Synthesizing Ultrathin Two-Dimensional Metal-Organic Framework Nanosheets for the Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 13565-13572.	7.2	205
41	High-Performance PEDOT:PSS Flexible Thermoelectric Materials and Their Devices by Triple Post-Treatments. <i>Chemistry of Materials</i> , 2019, 31, 5238-5244.	3.2	153
42	Fine-Tuning the Coordinatively Unsaturated Metal Sites of Metal-Organic Frameworks by Plasma Engraving for Enhanced Electrocatalytic Activity. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 44300-44307.	4.0	53
43	Selectivity Control for Electrochemical CO ₂ Reduction by Charge Redistribution on the Surface of Copper Alloys. <i>ACS Catalysis</i> , 2019, 9, 9411-9417.	5.5	172
44	Gas storage potential and electrohydraulic discharge (EHD) stimulation of coal seam interburden from the Surat Basin. <i>International Journal of Coal Geology</i> , 2019, 208, 24-36.	1.9	14
45	Carbon Monoliths by Assembling Carbon Spheres for Gas Adsorption. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 4957-4969.	1.8	14
46	Surface functionalization of graphene oxide by amino acids for <i>Thermomyces lanuginosus</i> lipase adsorption. <i>Journal of Colloid and Interface Science</i> , 2019, 546, 211-220.	5.0	38
47	Anisotropic coal permeability estimation by determining cleat compressibility using mercury intrusion porosimetry and stress-strain measurements. <i>International Journal of Coal Geology</i> , 2019, 205, 75-86.	1.9	31
48	Characterisation and evaluation of shockwave generation in water conditions for coal fracturing. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 66, 255-264.	2.1	22
49	Defect-Induced Pt-Co-Se Coordinated Sites with Highly Asymmetrical Electronic Distribution for Boosting Oxygen-Involving Electrocatalysis. <i>Advanced Materials</i> , 2019, 31, e1805581.	11.1	168
50	Cracking Behavior and Mechanism of Gibbsite Crystallites during Calcination. <i>Crystal Research and Technology</i> , 2019, 54, 1800201.	0.6	3
51	Orientated growth of copper-based MOF for acetylene storage. <i>Chemical Engineering Journal</i> , 2019, 357, 320-327.	6.6	36
52	Co-localization of glucose oxidase and catalase enabled by a self-assembly approach: Matching between molecular dimensions and hierarchical pore sizes. <i>Food Chemistry</i> , 2019, 275, 197-205.	4.2	21
53	Combined Adsorption and Covalent Linking of Paclitaxel on Functionalized Nano-Graphene Oxide for Inhibiting Cancer Cells. <i>ACS Omega</i> , 2018, 3, 2396-2405.	1.6	18
54	A phase inversion polymer coating to prevent swelling and spalling of clay fines in coal seam gas wells. <i>International Journal of Coal Science and Technology</i> , 2018, 5, 179-190.	2.7	4

#	ARTICLE	IF	CITATIONS
55	Affinity induced immobilization of adenylate cyclase from the crude cell lysate for ATP conversion. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 164, 155-164.	2.5	16
56	Tuning oxygen vacancies in two-dimensional iron-cobalt oxide nanosheets through hydrogenation for enhanced oxygen evolution activity. <i>Nano Research</i> , 2018, 11, 3509-3518.	5.8	167
57	Pore channel surface modification for enhancing anti-fouling membrane distillation. <i>Applied Surface Science</i> , 2018, 443, 217-226.	3.1	48
58	A nitrogen-doped electrocatalyst from metal-organic framework-carbon nanotube composite. <i>Journal of Materials Research</i> , 2018, 33, 538-545.	1.2	16
59	Metal organic framework based mixed matrix membranes: an overview on filler/polymer interfaces. <i>Journal of Materials Chemistry A</i> , 2018, 6, 293-312.	5.2	377
60	Bronze alloys with tin surface sites for selective electrochemical reduction of CO ₂ . <i>Chemical Communications</i> , 2018, 54, 13965-13968.	2.2	43
61	Permeability enhancement of coal by chemical-free fracturing using high-voltage electrohydraulic discharge. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 57, 1-10.	2.1	28
62	Effect of rheological properties of mesophase pitch and coal mixtures on pore development in activated carbon discs with high compressive strength. <i>Fuel Processing Technology</i> , 2018, 177, 219-227.	3.7	19
63	Silver-Perovskite Hybrid Electrocatalysts for Oxygen Reduction Reaction in Alkaline Media. <i>Journal of the Electrochemical Society</i> , 2018, 165, H524-H529.	1.3	12
64	Ultrathin Iron-Cobalt Oxide Nanosheets with Abundant Oxygen Vacancies for the Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2017, 29, 1606793.	11.1	1,144
65	Anti-fouling membranes by manipulating surface wettability and their anti-fouling mechanism. <i>Desalination</i> , 2017, 413, 127-135.	4.0	108
66	Rational Design of a Water-Storable Hierarchical Architecture Decorated with Amorphous Barium Oxide and Nickel Nanoparticles as a Solid Oxide Fuel Cell Anode with Excellent Sulfur Tolerance. <i>Advanced Science</i> , 2017, 4, 1700337.	5.6	74
67	Effect of sonication and hydrogen peroxide oxidation of carbon nanotube modifiers on the microstructure of pitch-derived activated carbon foam discs. <i>Carbon</i> , 2017, 124, 142-151.	5.4	24
68	Enabling Process Intensification by 3D Printing of Catalytic Structures. <i>ChemCatChem</i> , 2017, 9, 4132-4138.	1.8	39
69	Activated carbon derived from bio-waste hemp hurd and retted hemp hurd for CO ₂ adsorption. <i>Composites Communications</i> , 2017, 5, 27-30.	3.3	35
70	The preparation of activated carbon discs from tar pitch and coal powder for adsorption of CO ₂ , CH ₄ and N ₂ . <i>Microporous and Mesoporous Materials</i> , 2017, 238, 19-26.	2.2	45
71	Surface-etched halloysite nanotubes in mixed matrix membranes for efficient gas separation. <i>Separation and Purification Technology</i> , 2017, 173, 63-71.	3.9	50
72	Highly active nickel-cobalt/nanocarbon thin films as efficient water splitting electrodes. <i>Nanoscale</i> , 2016, 8, 18507-18515.	2.8	56

#	ARTICLE	IF	CITATIONS
73	Smart, Porous Polymer Coatings to Bind Clay Minerals in Coal Bed Methane Wells. , 2016, , .		0
74	Ionic Liquids as the MOFs/Polymer Interfacial Binder for Efficient Membrane Separation. ACS Applied Materials & Interfaces, 2016, 8, 32041-32049.	4.0	157
75	Propylene/propane selective mixed matrix membranes with grape-branched MOF/CNT filler. Journal of Materials Chemistry A, 2016, 4, 6084-6090.	5.2	65
76	Amphiphobic PVDF composite membranes for anti-fouling direct contact membrane distillation. Journal of Membrane Science, 2016, 505, 61-69.	4.1	141
77	Mixed-Matrix Membranes with Metal-Organic Framework-Decorated CNT Fillers for Efficient CO ₂ Separation. ACS Applied Materials & Interfaces, 2015, 7, 14750-14757.	4.0	124
78	Synthesis and characterization of three amino-functionalized metal-organic frameworks based on the 2-aminoterephthalic ligand. Dalton Transactions, 2015, 44, 8190-8197.	1.6	72
79	High activity electrocatalysts from metal-organic framework-carbon nanotube templates for the oxygen reduction reaction. Carbon, 2015, 82, 417-424.	5.4	140
80	Calcium Looping for CO ₂ Capture at a Constant High Temperature. Energy & Fuels, 2014, 28, 307-318.	2.5	43
81	Mixed Matrix Membranes with Strengthened MOFs/Polymer Interfacial Interaction and Improved Membrane Performance. ACS Applied Materials & Interfaces, 2014, 6, 5609-5618.	4.0	163
82	In situ synthesis of zeolitic imidazolate frameworks/carbon nanotube composites with enhanced CO ₂ adsorption. Dalton Transactions, 2014, 43, 7028.	1.6	108
83	Facile synthesis of nitrogen doped reduced graphene oxide as a superior metal-free catalyst for oxidation. Chemical Communications, 2013, 49, 9914.	2.2	294
84	Hierarchically structured metal-organic framework/vertically-aligned carbon nanotubes hybrids for CO ₂ capture. RSC Advances, 2013, 3, 25360.	1.7	51
85	Difference in the cooperative interaction between carbon nanotubes and Ru particles loaded on their internal/external surface. RSC Advances, 2013, 3, 12641.	1.7	18
86	Two-Step Boron and Nitrogen Doping in Graphene for Enhanced Synergistic Catalysis. Angewandte Chemie - International Edition, 2013, 52, 3110-3116.	7.2	863
87	Mixed matrix membranes incorporated with size-reduced Cu-BTC for improved gas separation. Journal of Materials Chemistry A, 2013, 1, 6350.	5.2	140
88	Halloysite Nanotube Supported Ru Nanocatalysts Synthesized by the Inclusion of Preformed Ru Nanoparticles for Preferential Oxidation of CO in H ₂ -Rich Atmosphere. Journal of Physical Chemistry C, 2013, 117, 4141-4151.	1.5	46
89	Study on the Controllable Scale-Up Growth of Vertically-Aligned Carbon Nanotube Arrays. Journal of Nanoscience and Nanotechnology, 2012, 12, 2722-2732.	0.9	3
90	Vertically-aligned carbon nanotube membranes for hydrogen separation. RSC Advances, 2012, 2, 5329.	1.7	33

#	ARTICLE	IF	CITATIONS
91	Enhanced hydrogen separation by vertically-aligned carbon nanotube membranes with zeolite imidazolate frameworks as a selective layer. <i>RSC Advances</i> , 2012, 2, 11793.	1.7	15
92	Porous Polyethersulfone-Supported Zeolitic Imidazolate Framework Membranes for Hydrogen Separation. <i>Journal of Physical Chemistry C</i> , 2012, 116, 13264-13270.	1.5	96
93	The preparation, structures, and properties of poly(vinylidene fluoride)/multiwall carbon nanotubes nanocomposites. <i>Journal of Applied Polymer Science</i> , 2012, 125, E592.	1.3	19
94	Amorphous Iron Oxide Decorated 3D Heterostructured Electrode for Highly Efficient Oxygen Reduction. <i>Chemistry of Materials</i> , 2011, 23, 4193-4198.	3.2	80
95	Deactivation and Regeneration of Oxygen Reduction Reactivity on Double Perovskite $\text{Ba}_{2-x}\text{Bi}_{0.1-x}\text{Sc}_{0.2-x}\text{Co}_{1.7-x}\text{O}_{6+x}$ Cathode for Intermediate-Temperature Solid Oxide Fuel Cells. <i>Chemistry of Materials</i> , 2011, 23, 1618-1624.	3.2	49
96	Halloysite-Nanotube-Supported Ru Nanoparticles for Ammonia Catalytic Decomposition to Produce CO_x -Free Hydrogen. <i>Energy & Fuels</i> , 2011, 25, 3408-3416.	2.5	88
97	Novel B-site ordered double perovskite $\text{Ba}_{2-x}\text{Bi}_{0.1-x}\text{Sc}_{0.2-x}\text{Co}_{1.7-x}\text{O}_{6+x}$ for highly efficient oxygen reduction reaction. <i>Energy and Environmental Science</i> , 2011, 4, 872-875.	15.6	112
98	Investigation of Gas Permeability in Carbon Nanotube (CNT)-Polymer Matrix Membranes via Modifying CNTs with Functional Groups/Metals and Controlling Modification Location. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6661-6670.	1.5	83
99	Enhanced gas permeability by fabricating functionalized multi-walled carbon nanotubes and polyethersulfone nanocomposite membrane. <i>Separation and Purification Technology</i> , 2011, 78, 76-82.	3.9	109
100	A comparison study of catalytic oxidation and acid oxidation to prepare carbon nanotubes for filling with Ru nanoparticles. <i>Carbon</i> , 2011, 49, 2022-2032.	5.4	38
101	Evaluation and optimization of $\text{Bi}_{1-x}\text{Sr}_x\text{FeO}_3$ perovskites as cathodes of solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 3179-3186.	3.8	70
102	High performance cobalt-free perovskite cathode for intermediate temperature solid oxide fuel cells. <i>Journal of Materials Chemistry</i> , 2010, 20, 9619.	6.7	133
103	Evaluation of mixed-conducting lanthanum-strontium-cobaltite ceramic membrane for oxygen separation. <i>AIChE Journal</i> , 2009, 55, 2603-2613.	1.8	26
104	Low-temperature synthesis of $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-x}$ perovskite powder via asymmetric sol-gel process and catalytic auto-combustion. <i>Ceramics International</i> , 2009, 35, 2809-2815.	2.3	13
105	Effects of preparation methods on the oxygen nonstoichiometry, B-site cation valences and catalytic efficiency of perovskite $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-x}$. <i>Ceramics International</i> , 2009, 35, 3201-3206.	2.3	20
106	Facile auto-combustion synthesis for oxygen separation membrane application. <i>Journal of Membrane Science</i> , 2009, 329, 219-227.	4.1	13
107	Double-site yttria-doped $\text{Sr}_{1-x}\text{Y}_x\text{Co}_{1-y}\text{Y}_y\text{O}_3$ perovskite oxides as oxygen semi-permeable membranes. <i>Journal of Alloys and Compounds</i> , 2009, 474, 477-483.	2.8	28
108	Oxygen selective membranes based on B-site cation-deficient $(\text{Ba}_{0.5}\text{Sr}_{0.5})(\text{Co}_{0.8}\text{Fe}_{0.2})\text{O}_{3-x}$ perovskite with improved operational stability. <i>Journal of Membrane Science</i> , 2008, 318, 182-190.	4.1	47

#	ARTICLE	IF	CITATIONS
109	Systematic investigation on new $\text{SrCo}_{1-x}\text{yNb}_y\text{O}_{3-\delta}$ ceramic membranes with high oxygen semi-permeability. <i>Journal of Membrane Science</i> , 2008, 323, 436-443.	4.1	114
110	Synthesis, characterization and evaluation of cation-ordered $\text{LnBaCo}_2\text{O}_{5+x}$ as materials of oxygen permeation membranes and cathodes of SOFCs. <i>Acta Materialia</i> , 2008, 56, 4876-4889.	3.8	461
111	Facile autocombustion synthesis of $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ (LSCF) perovskite via a modified complexing sol-gel process with NH_4NO_3 as combustion aid. <i>Journal of Alloys and Compounds</i> , 2008, 450, 338-347.	2.8	38
112	Properties and performance of A-site deficient $(\text{Ba}_{0.5}\text{Sr}_{0.5})_{1-x}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ for oxygen permeating membrane. <i>Journal of Membrane Science</i> , 2007, 306, 318-328.	4.1	111