

Feng-cai Lei

List of Publications by Year in descending order

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77
papers

8,098
citations

94433

37
h-index

62596

80
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84
all docs

84
docs citations

84
times ranked

9753
citing authors

#	ARTICLE	IF	CITATIONS
1	Construct high-precise SERS sensor by hierarchical superhydrophobic Si/Cu(OH) ₂ platform for ultratrace detection of food contaminants. <i>Sensors and Actuators B: Chemical</i> , 2022, 352, 131056.	7.8	8
2	Recent advances in the pre-oxidation process in electrocatalytic urea oxidation reactions. <i>Chemical Communications</i> , 2022, 58, 2430-2442.	4.1	71
3	Electrochemical reduction of nitrate on silver surface and an <i>in situ</i> Raman spectroscopy study. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 2734-2740.	6.0	18
4	Acceleration of the pre-oxidation process by tuning the degree of sulfurization for promoted oxygen evolution reaction. <i>Chemical Communications</i> , 2022, 58, 6360-6363.	4.1	23
5	Cerium-induced lattice disordering in Co-based nanocatalysts promoting the hydrazine electro-oxidation behavior. <i>Chemical Communications</i> , 2022, 58, 6845-6848.	4.1	15
6	Particle-in-Molybdenum Disulfide-Coated Cavity Structure with a Raman Internal Standard for Sensitive Raman Detection of Water Contaminants from Ions to 300 nm Nanoplastics. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 5815-5823.	4.6	22
7	Reduction-induced surface reconstruction to fabricate cobalt hydroxide/molybdenum oxide hybrid nanosheets for promoted oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 413, 127540.	12.7	25
8	Integrated accurate extraction and fast detection of analyte: Capillarity-Based SERS substrate using in effluent monitoring. <i>Applied Surface Science</i> , 2021, 542, 148735.	6.1	5
9	Electronic Optimization by Coupling FeCo Nanoclusters and Pt Nanoparticles to Carbon Nanotubes for Efficient Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 5895-5901.	6.7	9
10	Multiscale structure enabled effective plasmon coupling and molecular enriching for SERS detection. <i>Applied Surface Science</i> , 2021, 544, 148908.	6.1	11
11	SERS substrate with wettability difference for molecular self-concentrating detection. <i>Nanotechnology</i> , 2021, 32, 375603.	2.6	4
12	Heterostructured CuO@ZnO@Ag biomimetic setaria as wettability-switchable difunctional SERS substrate for trace pesticide and DNA detections. <i>Nanophotonics</i> , 2021, 10, 2671-2682.	6.0	11
13	Heterostructured Cu ₂ O@Au nanowire as a dual-functional nanocomposite for environmental pollutant degradation and hydrogen peroxide sensing. <i>Applied Optics</i> , 2021, 60, 5936.	1.8	0
14	Preparation of a superhydrophobic AgNP/GF substrate and its SERS application in a complex detection environment. <i>Optics Express</i> , 2021, 29, 34085.	3.4	4
15	A self-sacrificial templated route to fabricate CuFe Prussian blue analogue/Cu(OH) ₂ nanoarray as an efficient pre-catalyst for ultrastable bifunctional electro-oxidation. <i>Chemical Engineering Journal</i> , 2021, 422, 130139.	12.7	58
16	Electrochemical synthesis of ammonia by nitrate reduction on indium incorporated in sulfur doped graphene. <i>Chemical Engineering Journal</i> , 2021, 426, 131317.	12.7	40
17	Dressing Plasmons in Nanoparticle-in-Quasi-Cavity Architectures for Trace-Level Surface-Enhanced Raman Spectroscopy Detection. <i>ACS Applied Nano Materials</i> , 2021, 4, 152-158.	5.0	2
18	ultrathin nanosheets of hydrated copper pyrophosphate as efficient pre-catalysts for robust water oxidation. <i>Chemical Communications</i> , 2021, 57, 11517-11520.	4.1	15

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19	Molten-Salt-Protected Pyrolytic Approach for Fabricating Borate-Modified Cobalt-iron Spinel Oxide with Robust Oxygen-Evolving Performance. ACS Sustainable Chemistry and Engineering, 2021, 9, 14596-14604.	6.7	19
20	Cobalt, iron co-incorporated Ni(OH) ₂ multiphase for superior multifunctional electrocatalytic oxidation. Chemical Communications, 2021, 57, 13752-13755.	4.1	4
21	Fast multiphase analysis: Self-separation of mixed solution by a wettability-controlled CuO@Ag SERS substrate and its applications in pollutant detection. Sensors and Actuators B: Chemical, 2020, 307, 127663.	7.8	22
22	Hierarchical Particle-In-Quasicavity Architecture for Ultratrace <i>In Situ</i> Raman Sensing and Its Application in Real-Time Monitoring of Toxic Pollutants. Analytical Chemistry, 2020, 92, 14754-14761.	6.5	118
23	Concurrently Realizing Geometric Confined Growth and Doping of Transition Metals within Graphene Hosts for Bifunctional Electrocatalysts toward a Solid-State Rechargeable Micro-Zn-Air Battery. ACS Applied Materials & Interfaces, 2020, 12, 38031-38044.	8.0	24
24	Molten-Salt-Protected Pyrolysis for Fabricating Perovskite Nanocrystals with Promoted Water Oxidation Behavior. ACS Sustainable Chemistry and Engineering, 2020, 8, 16711-16719.	6.7	17
25	Synthesis of Semiconducting 2H-Phase WTe ₂ Nanosheets with Large Positive Magnetoresistance. Inorganic Chemistry, 2020, 59, 11935-11939.	4.0	17
26	Modulation of electronic structures in two-dimensional electrocatalysts for the hydrogen evolution reaction. Chemical Communications, 2020, 56, 11910-11930.	4.1	56
27	In-plane $\hat{\Gamma}^2$ -Co(OH) ₂ /Co ₃ O ₄ hybrid nanosheets for flexible all-solid-state thin-film supercapacitors with high electrochemical performance. Nanoscale, 2020, 12, 24251-24258.	5.6	13
28	Novel (Ni, Fe)S ₂ /(Ni, Fe)S ₄ solid solution hybrid: an efficient electrocatalyst with robust oxygen-evolving performance. Science China Chemistry, 2020, 63, 1030-1039.	8.2	22
29	<i>In-situ</i> Electrospinning for Intestinal Hemostasis. International Journal of Nanomedicine, 2020, Volume 15, 3869-3875.	6.7	6
30	Modulation of crystal water in cobalt phosphate for promoted water oxidation. Chemical Communications, 2020, 56, 4575-4578.	4.1	37
31	Efficient Ammonia Electrosynthesis from Nitrate on Strained Ruthenium Nanoclusters. Journal of the American Chemical Society, 2020, 142, 7036-7046.	13.7	542
32	A molten-salt protected pyrolysis approach for fabricating a ternary nickel-cobalt-iron oxide nanomesh catalyst with promoted oxygen-evolving performance. Chemical Communications, 2020, 56, 4579-4582.	4.1	23
33	Nickel incorporated Co ₉ S ₈ nanosheet arrays on carbon cloth boosting overall urea electrolysis. Electrochimica Acta, 2020, 338, 135883.	5.2	61
34	Electric Field-Modulated Surface Enhanced Raman Spectroscopy by PVDF/Ag Hybrid. Scientific Reports, 2020, 10, 5269.	3.3	11
35	An iron incorporation-induced nickel hydroxide multiphase with a 2D/3D hierarchical sheet-on-sheet structure for electrocatalytic water oxidation. Chemical Communications, 2019, 55, 10138-10141.	4.1	15
36	Modified bluing treatment to produce nickel-cobalt-iron spinel oxide with promoted oxygen-evolving performance. Chemical Communications, 2019, 55, 9841-9844.	4.1	18

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37	Promoted water splitting by efficient electron transfer between Au nanoparticles and hematite nanoplates: a theoretical and experimental study. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 1478-1483.	2.8	22
38	Constructing Hierarchical Wire-on-Sheet Nanoarrays in Phase-Regulated Cerium-Doped Nickel Hydroxide for Promoted Urea Electro-oxidation. , 2019, 1, 103-110.		100
39	Quasi Optical Cavity of Hierarchical ZnO Nanosheets@Ag Nanoravines with Synergy of Near- and Far-Field Effects for in Situ Raman Detection. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3676-3680.	4.6	60
40	Copper-incorporated hierarchical wire-on-sheet $\text{Ni}(\text{OH})_2$ nanoarrays as robust trifunctional catalysts for synergistic hydrogen generation and urea oxidation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13577-13584.	10.3	159
41	A ternary cobalt-molybdenum-vanadium layered double hydroxide nanosheet array as an efficient bifunctional electrocatalyst for overall water splitting. <i>Chemical Communications</i> , 2019, 55, 3521-3524.	4.1	121
42	$\text{Ni}_x\text{Co}_{3-x}\text{O}_4$ Nanoneedle Arrays Grown on Ni Foam as an Efficient Bifunctional Electrocatalyst for Full Water Splitting. <i>Chemistry - an Asian Journal</i> , 2019, 14, 480-485.	3.3	21
43	Platinum Nanocrystals Decorated on Defect-Rich MoS_2 Nanosheets for pH-Universal Hydrogen Evolution Reaction. <i>Crystal Growth and Design</i> , 2019, 19, 60-65.	3.0	39
44	In situ detection of trace pollutants: a cost-effective SERS substrate of blackberry-like silver/graphene oxide nanoparticle cluster based on quick self-assembly technology. <i>Optics Express</i> , 2019, 27, 9879.	3.4	26
45	Removal of toxic metal ions using chitosan coated carbon nanotube composites for supercapacitors. <i>Science China Chemistry</i> , 2018, 61, 797-805.	8.2	23
46	Synthesis of low-cost 3D-porous ZnO/Ag SERS-active substrate with ultrasensitive and repeatable detectability. <i>Sensors and Actuators B: Chemical</i> , 2018, 256, 268-275.	7.8	55
47	Morphology and electronic structure modulation induced by fluorine doping in nickel-based heterostructures for robust bifunctional electrocatalysis. <i>Nanoscale</i> , 2018, 10, 20384-20392.	5.6	61
48	The CoMo-LDH ultrathin nanosheet as a highly active and bifunctional electrocatalyst for overall water splitting. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 2964-2970.	6.0	76
49	Two-Dimensional Mn-Co LDH/Graphene Composite towards High-Performance Water Splitting. <i>Catalysts</i> , 2018, 8, 350.	3.5	27
50	ZnCo_2O_4 ultrathin nanosheets towards the high performance of flexible supercapacitors and bifunctional electrocatalysis. <i>Journal of Alloys and Compounds</i> , 2018, 764, 565-573.	5.5	63
51	Capillary-Assisted Assembly: A Fast Preparation of 3D Pomegranate-Like Ag Nanoparticle Clusters on CuO Nanowires and Its Applications in SERS. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800672.	3.7	23
52	Partially amorphous nickel-iron layered double hydroxide nanosheet arrays for robust bifunctional electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16121-16129.	10.3	193
53	Iron-incorporated $\text{Ni}(\text{OH})_2$ Hierarchical Nanosheet Arrays for Electrocatalytic Urea Oxidation. <i>Chemistry - A European Journal</i> , 2018, 24, 18408-18412.	3.3	114
54	High stability luminophores: fluorescent CsPbX_3 (X = Cl, Br and I) nanofiber prepared by one-step electrospinning method. <i>Optics Express</i> , 2018, 26, 20649.	3.4	24

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55	Sub-3-nm pores in two-dimensional nanomesh promoting the generation of electroactive phase for robust water oxidation. <i>Nano Energy</i> , 2018, 53, 74-82.	16.0	94
56	Visualization and Inhibition of Mitochondria-Nuclear Translocation of Apoptosis Inducing Factor by a Graphene Oxide-DNA Nanosensor. <i>Analytical Chemistry</i> , 2017, 89, 4642-4647.	6.5	13
57	Nano metal-enhanced power conversion efficiency in CH ₃ NH ₃ PbI ₃ solar cells. <i>Journal of Physics and Chemistry of Solids</i> , 2017, 103, 16-21.	4.0	1
58	Dual Effect in Fluorine-Doped Hematite Nanocrystals for Efficient Water Oxidation. <i>ChemSusChem</i> , 2017, 10, 4465-4471.	6.8	51
59	Nitrogen-doping induced oxygen divacancies in freestanding molybdenum trioxide single-layers boosting electrocatalytic hydrogen evolution. <i>Nano Energy</i> , 2016, 30, 810-817.	16.0	62
60	Ultrathin TiO ₂ flakes optimizing solar light driven CO ₂ reduction. <i>Nano Energy</i> , 2016, 26, 692-698.	16.0	107
61	Metallic tin quantum sheets confined in graphene toward high-efficiency carbon dioxide electroreduction. <i>Nature Communications</i> , 2016, 7, 12697.	12.8	522
62	Innentitelbild: Metallic Single-Unit-Cell Orthorhombic Cobalt Diselenide Atomic Layers: Robust Water-Electrolysis Catalysts (<i>Angew. Chem.</i> 41/2015). <i>Angewandte Chemie</i> , 2015, 127, 12046-12046.	2.0	1
63	Metallic Single-Unit-Cell Orthorhombic Cobalt Diselenide Atomic Layers: Robust Water-Electrolysis Catalysts. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 12004-12008.	13.8	166
64	Atomic-Layer-Confined Doping for Atomic-Level Insights into Visible-Light Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 9266-9270.	13.8	158
65	Single Unit Cell Bismuth Tungstate Layers Realizing Robust Solar CO ₂ Reduction to Methanol. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 13971-13974.	13.8	342
66	Ultrathin Two-Dimensional Inorganic Materials: New Opportunities for Solid State Nanochemistry. <i>Accounts of Chemical Research</i> , 2015, 48, 3-12.	15.6	255
67	Atomically-thin two-dimensional sheets for understanding active sites in catalysis. <i>Chemical Society Reviews</i> , 2015, 44, 623-636.	38.1	872
68	Ultrahigh Energy Density Realized by a Single-Layer $\text{Co}(\text{OH})_2$ All-Solid-State Asymmetric Supercapacitor. <i>Angewandte Chemie</i> , 2014, 126, 13003-13007.	2.0	32
69	Freestanding atomically-thin cuprous oxide sheets for improved visible-light photoelectrochemical water splitting. <i>Nano Energy</i> , 2014, 8, 205-213.	16.0	54
70	All-Surface-Atomic-Metal Chalcogenide Sheets for High-Efficiency Visible-Light Photoelectrochemical Water Splitting. <i>Advanced Energy Materials</i> , 2014, 4, 1300611.	19.5	154
71	Ultrahigh Energy Density Realized by a Single-Layer $\text{Co}(\text{OH})_2$ All-Solid-State Asymmetric Supercapacitor. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12789-12793.	13.8	290
72	Free-floating ultrathin tin monoxide sheets for solar-driven photoelectrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10647.	10.3	54

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73	Photoelectrochemical Reactions: All-Surface-Atomic-Metal Chalcogenide Sheets for High-Efficiency Visible-Light Photoelectrochemical Water Splitting (Adv. Energy Mater. 1/2014). Advanced Energy Materials, 2014, 4, .	19.5	3
74	Atomically-thin non-layered cobalt oxide porous sheets for highly efficient oxygen-evolving electrocatalysts. Chemical Science, 2014, 5, 3976.	7.4	332
75	Oxygen Vacancies Confined in Ultrathin Indium Oxide Porous Sheets for Promoted Visible-Light Water Splitting. Journal of the American Chemical Society, 2014, 136, 6826-6829.	13.7	1,178
76	Innentitelbild: Freestanding Tin Disulfide Single-Layers Realizing Efficient Visible-Light Water Splitting (Angew. Chem. 35/2012). Angewandte Chemie, 2012, 124, 8798-8798.	2.0	4
77	Freestanding Tin Disulfide Single-Layers Realizing Efficient Visible-Light Water Splitting. Angewandte Chemie - International Edition, 2012, 51, 8727-8731.	13.8	545