Cailei Yuan

List of Publications by Year
in descending order

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113 papers	2,327 citations	201385 27 h-index	276539 41 g-index
113 all docs	113 docs citations	113 times ranked	2747 citing authors

#	Article	IF	Citations
1	Magnetic Enhancement for Hydrogen Evolution Reaction on Ferromagnetic MoS₂ Catalyst. Nano Letters, 2020, 20, 2923-2930.	4.5	130
2	Enhanced Gas-Sensing Properties of the Hierarchical TiO₂ Hollow Microspheres with Exposed High-Energy {001} Crystal Facets. ACS Applied Materials & Interfaces, 2015, 7, 24902-24908.	4.0	99
3	MoS₂ MoirÃ© Superlattice for Hydrogen Evolution Reaction. ACS Energy Letters, 2019, 4, 2830-2835.	8.8	98
4	In situ growth of Co3O4@NiMoO4 composite arrays on alumina substrate with improved triethylamine sensing performance. Sensors and Actuators B: Chemical, 2020, 302, 127154.	4.0	74
5	High selectivity of sulfur-doped SnO₂ in NO₂ detection at lower operating temperatures. Nanoscale, 2018, 10, 20761-20771.	2.8	68
6	2D ultra-thin WO3 nanosheets with dominant {002} crystal facets for high-performance xylene sensing and methyl orange photocatalytic degradation. Journal of Alloys and Compounds, 2019, 783, 848-854.	2.8	64
7	Single-crystalline porous nanosheets assembled hierarchical Co3O4 microspheres for enhanced gas-sensing properties to trace xylene. Sensors and Actuators B: Chemical, 2017, 246, 68-77.	4.0	60
8	Tunable Surface Selenization on MoO₂â€Based Carbon Substrate for Notably Enhanced Sodiumâ€Ion Storage Properties. Small, 2020, 16, e2001905.	5.2	60
9	Ultrasensitive flexible near-infrared photodetectors based on Van der Waals Bi2Te3 nanoplates. Applied Surface Science, 2019, 484, 542-550.	3.1	50
10	Fabrication of novel flower-like Co 3 O 4 structures assembled by single-crystalline porous nanosheets for enhanced xylene sensing properties. Journal of Alloys and Compounds, 2017, 706, 116-125.	2.8	49
11	Porous Co3O4/CoS2 nanosheet-assembled hierarchical microspheres as superior electrocatalyst towards oxygen evolution reaction. Electrochimica Acta, 2018, 268, 10-19.	2.6	48
12	Novel nitrogen-doped ordered mesoporous carbon as high-performance anode material for sodium-ion batteries. Journal of Alloys and Compounds, 2019, 791, 874-882.	2.8	47
13	Work function variation of monolayer MoS2 by nitrogen-doping. Applied Physics Letters, 2018, 113, .	1.5	45
14	Wafer-Scale Sulfur Vacancy-Rich Monolayer MoS₂ for Massive Hydrogen Production. Journal of Physical Chemistry Letters, 2019, 10, 4763-4768.	2.1	45
15	High performance visible photodetectors based on thin two-dimensional Bi2Te3 nanoplates. Journal of Alloys and Compounds, 2019, 798, 656-664.	2.8	44
16	Novel electrocatalyst of nanoporous FeP cubes prepared by fast electrodeposition coupling with acid-etching for efficient hydrogen evolution. Electrochimica Acta, 2020, 329, 135185.	2.6	44
17	Field-Free Improvement of Oxygen Evolution Reaction in Magnetic Two-Dimensional Heterostructures. Nano Letters, 2021, 21, 10486-10493.	4.5	43
18	Micro Eddy Current Facilitated by Screwed MoS₂ Structure for Enhanced Hydrogen Evolution Reaction. Advanced Functional Materials, 2022, 32, .	7.8	43

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19	Pore engineering of Co3O4 nanowire arrays by MOF-assisted construction for enhanced acetone sensing performances. Sensors and Actuators B: Chemical, 2021, 329, 129095.	4.0	39
20	High-energy {001} crystal facets and surface fluorination engineered gas sensing properties of anatase titania nanocrystals. Applied Surface Science, 2017, 423, 602-610.	3.1	38
21	Controllable preparation of faceted Co3O4 nanocrystals@MnO2 nanowires shish-kebab structures with enhanced triethylamine sensing performance. Sensors and Actuators B: Chemical, 2020, 304, 127358.	4.0	36
22	Influences of carrier gas flow rate on the morphologies of MoS2 flakes. Chemical Physics Letters, 2015, 631-632, 30-33.	1.2	32
23	Improved ethanol gas sensing performances of a ZnO/Co₃O₄ composite induced by its flytrap-like structure. Physical Chemistry Chemical Physics, 2017, 19, 29601-29607.	1.3	31
24	Anatase TiO2 hierarchical microspheres consisting of truncated nanothorns and their structurally enhanced gas sensing performance. Journal of Alloys and Compounds, 2017, 694, 292-299.	2.8	29
25	WO3 nanofibers anchored by porous NiCo2O4 nanosheets for xylene detection. Ceramics International, 2018, 44, 21717-21724.	2.3	29
26	A systematic study on the crystal facets-dependent gas sensing properties of anatase TiO2 with designed {010}, {101} and {001} facets. Ceramics International, 2019, 45, 6282-6290.	2.3	28
27	Ultra-fast and high flexibility near-infrared photodetectors based on Bi2Se3 nanobelts grown via catalyst-free van der Waals epitaxy. Journal of Alloys and Compounds, 2020, 818, 152819.	2.8	28
28	Synthetic strategy and evaluation of hierarchical nanoporous NiO/NiCoP microspheres as efficient electrocatalysts for hydrogen evolution reaction. Electrochimica Acta, 2018, 292, 88-97.	2.6	27
29	Pâ€“N heterointerface-determined acetone sensing characteristics of Î±-MoO₃@NiO core@shell nanobelts. CrystEngComm, 2019, 21, 5834-5844.	1.3	27
30	Design of NiCo2O4 porous nanosheets/Î±-MoO3 nanorods heterostructures for ppb-level ethanol detection. Powder Technology, 2019, 345, 633-642.	2.1	25
31	Crystal plane dependent electrocatalytic performance of NiS2 nanocrystals for hydrogen evolution reaction. Journal of Catalysis, 2020, 381, 63-69.	3.1	25
32	Influences of oxygen vacancies on the enhanced nonlinear optical properties of confined ZnO quantum dots. Journal of Alloys and Compounds, 2018, 739, 345-352.	2.8	24
33	Ferromagnetic behaviors in monolayer MoS2 introduced by nitrogen-doping. Applied Physics Letters, 2020, 116, .	1.5	23
34	Horizontal growth of MoS₂ nanowires by chemical vapour deposition. RSC Advances, 2015, 5, 68283-68286.	1.7	22
35	Encapsulating N-Doped Carbon Nanorod Bundles/MoO₂ Nanoparticles via Surface Growth of Ultrathin MoS₂ Nanosheets for Ultrafast and Ultralong Cycling Sodium Storage. ACS Applied Materials & Interfaces, 2020, 12, 6205-6216.	4.0	22
36	Directly anchoring non-noble metal single atoms on 1T-TMDs with tip structure for efficient hydrogen evolution. Chemical Engineering Journal, 2022, 428, 131210.	6.6	22

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37	One-step electrochemical exfoliation of nanoparticles-assembled NiO nanosheets for non-enzymatic glucose biosensor. Materials Letters, 2018, 213, 174-177.	1.3	20
38	Granular molybdenum dioxide precipitated on N-doped carbon nanorods with multistage architecture for ultralong-life sodium-ion batteries. Electrochimica Acta, 2019, 325, 134903.	2.6	19
39	Strain induced tetragonal SrTiO3 nanoparticles at room temperature. Applied Physics Letters, 2012, 101, 071909.	1.5	18
40	Synthesis and gas-sensing properties of ZnO@NiCo2O4 core@shell nanofibers. Materials Research Bulletin, 2019, 114, 1-9.	2.7	18
41	Ultra-long high quality catalyst-free WO₃ nanowires for fabricating high-performance visible photodetectors. Nanotechnology, 2020, 31, 274003.	1.3	18
42	Ultrathin Sb₂Se₃ Nanowires for Polarimetric Imaging Photodetectors with a High Signal/Noise Ratio. Advanced Materials Interfaces, 2022, 9, .	1.9	18
43	Thickness-Dependent Strain Effect on the Deformation of the Graphene-Encapsulated Au Nanoparticles. Journal of Nanomaterials, 2014, 2014, 1-6.	1.5	17
44	Strain-induced matrix-dependent deformation of GaAs nanoparticles. Nanoscale, 2014, 6, 1119-1123.	2.8	17
45	Morphology evolution of MoS2 nanorods grown by chemical vapor deposition. Journal of Crystal Growth, 2015, 430, 1-6.	0.7	17
46	Laminated bilayer MoS2 with weak interlayer coupling. Nanoscale, 2018, 10, 1145-1152.	2.8	17
47	Elimination of Interlayer Potential Barriers of Chromium Sulfide by Self-Intercalation for Enhanced Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2021, 13, 13055-13062.	4.0	17
48	Interface Engineering of Fe₂O₃@Co₃O₄ Nanocubes for Enhanced Triethylamine Sensing Performance. Industrial & Engineering Chemistry Research, 2022, 61, 8057-8068.	1.8	17
49	Strain-Induced Structural Phase Transition of Si Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 16374-16377.	1.5	16
50	Enhanced nonlinear optical properties of alloyed AgCu glassy nanoparticles. Journal of Alloys and Compounds, 2020, 819, 153003.	2.8	16
51	Electrochemically assisted synthesis of three-dimensional FeP nanosheets to achieve high electrocatalytic activity for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 24197-24208.	3.8	15
52	Mono-faceted WO_{3â^'x} nanorods in situ hybridized in carbon nanosheets for ultra-fast/stable sodium-ion storage. Journal of Materials Chemistry A, 2020, 8, 23919-23929.	5.2	15
53	Synthesis of nitrogen-doped porous carbon nanofibers as an anode material for high performance sodium-ion batteries. Solid State Ionics, 2019, 337, 170-177.	1.3	14
54	Active {1â€¯1â€¯1}-faceted ultra-thin NiO single-crystalline porous nanosheets supported highly dispersed Pt nanoparticles for synergetic enhancement of gas sensing and photocatalytic performance. Applied Surface Science, 2019, 471, 124-133.	3.1	14

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55	Quaternary compounds Ag₂XYSe₄ (Xâ€‰â€‰=â€‰â€‰Ba, Sr; Yâ€‰â€‰=â€‰â€‰Sn, Ge) as novel po thermoelectric materials. Journal Physics D: Applied Physics, 2020, 53, 115302.	1.3	14
56	MoS₂ Nanoribbons with a Prolonged Photoresponse Lifetime for Enhanced Visible Light Photoelectrocatalytic Hydrogen Evolution. Inorganic Chemistry, 2021, 60, 1991-1997.	1.9	14
57	Enhanced photocatalytic performance of Ag decorated hierarchical micro/nanostructured TiO2 microspheres. Journal of Alloys and Compounds, 2015, 652, 386-392.	2.8	13
58	An individual sandwich hybrid nanostructure of cobalt disulfide in-situ grown on N doped carbon layer wrapped on multi-walled carbon nanotubes for high-efficiency lithium sulfur batteries. Journal of Colloid and Interface Science, 2022, 610, 560-572.	5.0	13
59	Porous N-doped carbon with confined Fe-doped CoP grown on CNTs for superefficient oxygen evolution electrocatalysis. Chemical Communications, 2022, 58, 1597-1600.	2.2	13
60	Light-assisted room temperature gas sensing performance and mechanism of direct Z-scheme MoS2/SnO2 crystal faceted heterojunctions. Journal of Hazardous Materials, 2022, 436, 129246.	6.5	13
61	Highly dispersed Pt nanoparticles on hierarchical titania nanoflowers with {010} facets for gas sensing and photocatalysis. Journal of Materials Science, 2019, 54, 6826-6840.	1.7	12
62	Two-photon and three-photon absorption in ZnO nanocrystals embedded in Al₂O₃ matrix influenced by defect states. Optics Letters, 2019, 44, 179.	1.7	12
63	Strained GaAs nanocrystals for nonvolatile memory applications. RSC Advances, 2014, 4, 19584.	1.7	11
64	Monolayer-by-monolayer stacked pyramid-like MoS₂nanodots on monolayered MoS₂flakes with enhanced photoluminescence. Nanoscale, 2015, 7, 17468-17472.	2.8	11
65	Strain Engineered Band Structure and Optical Properties of Confined GaAs Quantum Dots. Journal of Physical Chemistry C, 2017, 121, 5800-5804.	1.5	11
66	Graphene-templated growth of vertical MnO nanosheets with open macroporous architectures as anode materials for fast lithium storage. Journal of Alloys and Compounds, 2018, 769, 10-17.	2.8	11
67	Crystal facets engineering and rGO hybridizing for synergistic enhancement of photocatalytic activity of nickel disulfide. Journal of Hazardous Materials, 2020, 384, 121402.	6.5	11
68	Revealing the synergistic mechanism of multiply nanostructured V2O3 hollow nanospheres integrated with doped N, Ni heteroatoms, in-situ grown carbon nanotubes and coated carbon nanolayers for the enhancement of lithium-sulfur batteries. Journal of Colloid and Interface Science, 2022, 612, 760-771.	5.0	11
69	Boosting the OER Performance of Nitrogen-Doped Ni Nanoclusters Confined in an Amorphous Carbon Matrix. Inorganic Chemistry, 2022, 61, 2360-2367.	1.9	11
70	Hierarchical Porous and Sandwich-like Sulfur-Doped Carbon Nanosheets as High-Performance Anodes for Sodium-Ion Batteries. Industrial & Engineering Chemistry Research, 2022, 61, 2126-2135.	1.8	11
71	Morphology engineering of monolayer MoS 2 by adjusting chemical environment during growth. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 74, 292-296.	1.3	10
72	Strain-induced direct band gap LaAlO3 nanocrystals. Materials Letters, 2012, 68, 392-394.	1.3	9

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73	Strain-gradient facilitated formation of confined Ge/GeO₂nanoparticles with a cracked shell and enhanced two-photon absorption. Journal of Materials Chemistry C, 2014, 2, 8768-8772.	2.7	9
74	Modulation ferromagnetism in multiferroic BiFeO3 nanocrystals via bandgap engineering. Applied Physics Letters, 2019, 114, .	1.5	9
75	Nonvolatile charge memory with optical controllability in two-terminal pristine Î±-In₂Se₃ nanosheets. Journal Physics D: Applied Physics, 2020, 53, 075108.	1.3	9
76	Prediction for structure stability and ultrahigh hydrogen evolution performance of monolayer 2H-CrS2. Materials Today Communications, 2020, 25, 101707.	0.9	9
77	Controllable synthesis of one-dimensional NiS2 nanotube and nanorod arrays on nickel foams for efficient electrocatalytic water splitting. International Journal of Hydrogen Energy, 2021, 46, 50-60.	3.8	9
78	Active Site Engineering in CoP@NC/Graphene Heterostructures Enabling Enhanced Hydrogen Evolution. Inorganic Chemistry, 2021, 60, 16761-16768.	1.9	9
79	Enhanced Gas Sensing Performance of rGO Wrapped Crystal Facet-Controlled Co₃O₄ Nanocomposite Heterostructures. Journal of Physical Chemistry C, 2022, 126, 4879-4888.	1.5	9
80	Tuning strain and photoluminescence of confined Au nanoparticles by hydrogen passivation. RSC Advances, 2017, 7, 6875-6879.	1.7	8
81	Enhanced photoluminescence of WS2/WO3 heterostructural QDs. Journal of Alloys and Compounds, 2020, 834, 155066.	2.8	8
82	Hysteresis Effect in Twoâ€Dimensional Bi₂Te₃ Nanoplate Fieldâ€Effect Transistors. Advanced Electronic Materials, 2021, 7, .	2.6	8
83	Highly Mesoporous Cobalt-Hybridized 2D Cu₃P Nanosheet Arrays as Boosting Janus Electrocatalysts for Water Splitting. Inorganic Chemistry, 2021, 60, 18325-18336.	1.9	8
84	Synthesis, photoluminescence and charge storage characteristics of isolated silver nanocrystals embedded in Al2O3 gate dielectric. Thin Solid Films, 2008, 516, 7675-7679.	0.8	7
85	Strain-induced phase-structure of Fe2O3 nanoparticles. Journal of Alloys and Compounds, 2018, 742, 7-12.	2.8	7
86	Electrochemical exfoliation of hierarchical Co3O4 microflowers and their conversion into CoP as high-efficiency hydrogen evolution electrocatalyst. Electrochimica Acta, 2019, 322, 134768.	2.6	7
87	Light-modulated ferromagnetism of strained NiFe2O4 nanocrystals. Ceramics International, 2019, 45, 13319-13323.	2.3	7
88	Formation and strain distribution of Ni/NiO core/shell magnetic nanoparticles fabricated by pulsed laser deposition. Science China: Physics, Mechanics and Astronomy, 2011, 54, 1254-1257.	2.0	6
89	A new approach for fabricating Au-Ag alloy nanoparticles confined in Al 2 O 3 matrix. Materials Letters, 2017, 190, 248-251.	1.3	6
90	Dielectric matrix imposed stressâ€“strain effect on photoluminescence of Ge nanocrystals. Solid State Communications, 2009, 149, 598-601.	0.9	5

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91	The role of strain on the magnetic properties of confined Fe3O4 nanocrystals in Al2O3 matrix. Materials Letters, 2019, 239, 52-55.	1.3	5
92	FKBP8 inhibits virusâ€induced RLRâ€VISA signaling. Journal of Medical Virology, 2019, 91, 482-492.	2.5	5
93	Structure Modulation in Confined Nanoparticles: The Role of the Strain Gradient. Journal of Physical Chemistry C, 2020, 124, 21810-21817.	1.5	5
94	Strain-induced fcc Fe nanocrystals confined in Al2O3 matrix. Journal of Alloys and Compounds, 2017, 727, 1100-1104.	2.8	4
95	Enhancement of infrared response speed via modulating crystallinity of highly-oriented PbS polycrystalline thin films. Infrared Physics and Technology, 2022, 121, 104033.	1.3	4
96	Matrix-Dependent Strain Distributions of Au and Ag Nanoparticles in a Metal-Oxide-Semiconductor-Based Nonvolatile Memory Device. Nanomaterials and Nanotechnology, 2015, 5, 27.	1.2	3
97	Strain-engineered photoluminescence of confined Ag nanocrystals. Journal of Alloys and Compounds, 2016, 688, 463-467.	2.8	3
98	Morphology evolution of MoS2: From monodisperse nanoparticles to self-assembled nanobelts. Chemical Physics Letters, 2016, 646, 1-5.	1.2	3
99	One-Dimensional Zinc Oxide Decorated Cobalt Oxide Nanospheres for Enhanced Gas-Sensing Properties. Frontiers in Chemistry, 2018, 6, 628.	1.8	3
100	Influence of different exchangeâ€“correlation potentials on twisted structures of bilayer XS2 (XÂ=ÂMo,) Tj ETQq0 0 0 rgBT /Overlock 10	1.4	3
101	N-doped Fe nanoparticles confined in carbon matrix for high-performance oxygen evolution reaction. Applied Physics Letters, 2022, 120, 133901.	1.5	3
102	Preparation and photoluminescence properties of Ge nanocrystals embedded in SiO2 matrices with Geâ€“GeO coreâ€“shell structure. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 1403-1405.	1.3	2
103	Prolonging lifetime of photogenerated carriers in WO3 nanowires by oxygen vacancies engineering for enhanced photoelectrocatalytic oxygen evolution reaction. Applied Physics Letters, 2021, 119, .	1.5	2
104	Pt capping effects on the perpendicular magnetic properties of Pt/Co2MnSi/MgAl2O4 trilayers. European Physical Journal Plus, 2022, 137, .	1.2	2
105	Multiple structure integrations of embedded-Co and coated-TiO2 nanoparticles in N, Co-codoped carbon nanotubes for high efficiency lithium-sulfur batteries. Applied Surface Science, 2022, 600, 154154.	3.1	2
106	Photoluminescence and charge storage characteristics of silica nanocrystals: The role of stress-induced interface defects. Applied Surface Science, 2010, 256, 3138-3141.	3.1	1
107	Shell Thickness-Dependent Strain Distributions of Confined Au/Ag and Ag/Au Core-Shell Nanoparticles. Advances in Condensed Matter Physics, 2015, 2015, 1-7.	0.4	1
108	Strain distribution of confined Ge/GeO2 core/shell nanoparticles engineered by growth environments. Chemical Physics Letters, 2016, 646, 91-94.	1.2	1

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109	General synthesis of mixed-dimensional van der Waals heterostructures with hexagonal symmetry. Nanotechnology, 2021, 32, 505610.	1.3	1
110	Effects of biaxial strain and local constant potential on electronic structure of monolayer SnSe. Physica B: Condensed Matter, 2021, 618, 413177.	1.3	1
111	Antiferromagnetic Phase Induced by Nitrogen Doping in 2D Cr2S3. Materials, 2022, 15, 1716.	1.3	1
112	Ultrafast transient photoinduced absorption in Ge core andÂGe/GeO2 core/shell nanoparticles: effect of interface passivation. Applied Physics A: Materials Science and Processing, 2011, 102, 527-530.	1.1	0
113	Interfacial Effect on Photo-Modulated Magnetic Properties of Core/Shell-Structured NiFe/NiFe2O4 Nanoparticles. Materials, 2022, 15, 1347.	1.3	0