Peng Li

List of Publications by Year
in descending order

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107	10,484	24978 57	31759 101
papers	citations	h-index	g-index

112	112	112	12575
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In Situ Bond Modulation of Graphitic Carbon Nitride to Construct pâ€“n Homojunctions for Enhanced Photocatalytic Hydrogen Production. Advanced Functional Materials, 2016, 26, 6822-6829.	7.8	583
2	Ultrathin W₁₈O₄₉ Nanowires with Diameters below 1â€…nm: Synthesis, Nearâ€Infrared Absorption, Photoluminescence, and Photochemical Reduction of Carbon Dioxide. Angewandte Chemie - International Edition, 2012, 51, 2395-2399.	7.2	492
3	Photothermal Conversion of CO₂ into CH₄ with H₂ over Groupâ€…VIII Nanocatalysts: An Alternative Approach for Solar Fuel Production. Angewandte Chemie - International Edition, 2014, 53, 11478-11482.	7.2	385
4	Promoting Active Species Generation by Plasmon-Induced Hot-Electron Excitation for Efficient Electrocatalytic Oxygen Evolution. Journal of the American Chemical Society, 2016, 138, 9128-9136.	6.6	341
5	Surface-Alkalinization-Induced Enhancement of Photocatalytic H₂ Evolution over SrTiO₃-Based Photocatalysts. Journal of the American Chemical Society, 2012, 134, 1974-1977.	6.6	330
6	Natureâ€Inspired Environmental â€œPhosphorylationâ€•Boosts Photocatalytic H₂ Production over Carbon Nitride Nanosheets under Visibleâ€Light Irradiation. Angewandte Chemie - International Edition, 2015, 54, 13561-13565.	7.2	287
7	Dendriteâ€Free Sodiumâ€Metal Anodes for Highâ€Energy Sodiumâ€Metal Batteries. Advanced Materials, 2018, 30, e1801334.	11.1	267
8	MXeneâ€Based Dendriteâ€Free Potassium Metal Batteries. Advanced Materials, 2020, 32, e1906739.	11.1	244
9	The Effects of Crystal Structure and Electronic Structure on Photocatalytic H₂ Evolution and CO₂ Reduction over Two Phases of Perovskite-Structured NaNbO₃. Journal of Physical Chemistry C, 2012, 116, 7621-7628.	1.5	243
10	Drastic Layerâ€Numberâ€Dependent Activity Enhancement in Photocatalytic H₂ Evolution over nMoS₂/CdS (n â‰¥ 1) Under Visible Light. Advanced Energy Materials, 2015, 5, 1402279.	10.2	239
11	Hematite Films Decorated with Nanostructured Ferric Oxyhydroxide as Photoanodes for Efficient and Stable Photoelectrochemical Water Splitting. Advanced Functional Materials, 2015, 25, 2686-2692.	7.8	223
12	Photocatalytic Reduction of Carbon Dioxide by Hydrous Hydrazine over Auâ€“Cu Alloy Nanoparticles Supported on SrTiO₃/TiO₂ Coaxial Nanotube Arrays. Angewandte Chemie - International Edition, 2015, 54, 841-845.	7.2	223
13	High-Active Anatase TiO₂ Nanosheets Exposed with 95% {100} Facets Toward Efficient H₂ Evolution and CO₂ Photoreduction. ACS Applied Materials & Interfaces, 2013, 5, 1348-1354.	4.0	203
14	Co-porphyrin/carbon nitride hybrids for improved photocatalytic CO2 reduction under visible light. Applied Catalysis B: Environmental, 2017, 200, 141-149.	10.8	198
15	Engineering the Edges of MoS₂ (WS₂) Crystals for Direct Exfoliation into Monolayers in Polar Micromolecular Solvents. Journal of the American Chemical Society, 2016, 138, 14962-14969.	6.6	189
16	Conversion of Carbon Dioxide by Methane Reforming under Visibleâ€Light Irradiation: Surfaceâ€Plasmonâ€Mediated Nonpolar Molecule Activation. Angewandte Chemie - International Edition, 2015, 54, 11545-11549.	7.2	168
17	Stable Conversion Chemistryâ€Based Lithium Metal Batteries Enabled by Hierarchical Multifunctional Polymer Electrolytes with Nearâ€Single Ion Conduction. Angewandte Chemie - International Edition, 2019, 58, 6001-6006.	7.2	167
18	Photocatalytic CO₂conversion over alkali modified TiO₂without loading noble metal cocatalyst. Chemical Communications, 2014, 50, 11517-11519.	2.2	162

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19	Leaf-architectured 3D Hierarchical Artificial Photosynthetic System of Perovskite Titanates Towards CO2 Photoreduction Into Hydrocarbon Fuels. Scientific Reports, 2013, 3, 1667.	1.6	159
20	In situ synthesis of ordered mesoporous Co-doped TiO₂ and its enhanced photocatalytic activity and selectivity for the reduction of CO₂. Journal of Materials Chemistry A, 2015, 3, 9491-9501.	5.2	155
21	Interfacial electronic coupling of ultrathin transition-metal hydroxide nanosheets with layered MXenes as a new prototype for platinum-like hydrogen evolution. Energy and Environmental Science, 2021, 14, 6419-6427.	15.6	154
22	Synthesis and photocatalytic properties of metastable Î²-Bi₂O₃stabilized by surface-coordination effects. Journal of Materials Chemistry A, 2015, 3, 5119-5125.	5.2	149
23	Photocatalytic Water Splitting under Visible Light by Mixed-Valence Sn₃O₄. ACS Applied Materials & Interfaces, 2014, 6, 3790-3793.	4.0	148
24	Photocatalytic reduction of CO₂over Ag/TiO₂nanocomposites prepared with a simple and rapid silver mirror method. Nanoscale, 2016, 8, 11870-11874.	2.8	139
25	Photoreduction of CO 2 over the well-crystallized ordered mesoporous TiO 2 with the confined space effect. Nano Energy, 2014, 9, 50-60.	8.2	137
26	A universal strategy towards highâ€“energy aqueous multivalentâ€“ion batteries. Nature Communications, 2021, 12, 2857.	5.8	126
27	A new heterojunction Ag3PO4/Cr-SrTiO3 photocatalyst towards efficient elimination of gaseous organic pollutants under visible light irradiation. Applied Catalysis B: Environmental, 2013, 134-135, 286-292.	10.8	123
28	Two Birds with One Stone: FeS₂@C Yolkâ€“Shell Composite for High-Performance Sodium-Ion Energy Storage and Electromagnetic Wave Absorption. Nano Letters, 2020, 20, 3769-3777.	4.5	123
29	Ion-exchange synthesis of a micro/mesoporous Zn2GeO4 photocatalyst at room temperature for photoreduction of CO2. Chemical Communications, 2011, 47, 2041.	2.2	119
30	Mesoporous palladiumâ€“copper bimetallic electrodes for selective electrocatalytic reduction of aqueous CO₂to CO. Journal of Materials Chemistry A, 2016, 4, 4776-4782.	5.2	115
31	Gold photosensitized SrTiO3 for visible-light water oxidation induced by Au interband transitions. Journal of Materials Chemistry A, 2014, 2, 9875.	5.2	106
32	Highly disordered cobalt oxide nanostructure induced by sulfur incorporation for efficient overall water splitting. Nano Energy, 2020, 71, 104652.	8.2	105
33	Elemental Boron for Efficient Carbon Dioxide Reduction under Light Irradiation. Angewandte Chemie - International Edition, 2017, 56, 5570-5574.	7.2	104
34	Self-Healing Janus Interfaces for High-Performance LAGP-Based Lithium Metal Batteries. ACS Energy Letters, 2020, 5, 1456-1464.	8.8	104
35	Cation Vacancy-Initiated CO₂ Photoreduction over ZnS for Efficient Formate Production. ACS Energy Letters, 2019, 4, 1387-1393.	8.8	102
36	Polyolefinâ€Based Janus Separator for Rechargeable Sodium Batteries. Angewandte Chemie - International Edition, 2020, 59, 16725-16734.	7.2	102

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37	Biomimetic polymeric semiconductor based hybrid nanosystems for artificial photosynthesis towards solar fuels generation via CO2 reduction. Nano Energy, 2016, 25, 128-135.	8.2	97
38	High-performance lithiumâ€“organic batteries by achieving 16 lithium storage in poly(imine-anthraquinone). Journal of Materials Chemistry A, 2019, 7, 2368-2375.	5.2	96
39	n-type boron phosphide as a highly stable, metal-free, visible-light-active photocatalyst for hydrogen evolution. Nano Energy, 2016, 28, 158-163.	8.2	94
40	Constructing cubicâ€“orthorhombic surface-phase junctions of NaNbO₃ towards significant enhancement of CO₂ photoreduction. Journal of Materials Chemistry A, 2014, 2, 5606-5609.	5.2	93
41	Constructing Atomic Heterometallic Sites in Ultrathin Nickel-Incorporated Cobalt Phosphide Nanosheets via a Boron-Assisted Strategy for Highly Efficient Water Splitting. Nano Letters, 2021, 21, 823-832.	4.5	91
42	Surface-coordination-induced selective synthesis of cubic and orthorhombic NaNbO₃and their photocatalytic properties. Journal of Materials Chemistry A, 2013, 1, 1185-1191.	5.2	89
43	A highly durable p-LaFeO₃/n-Fe₂O₃ photocell for effective water splitting under visible light. Chemical Communications, 2015, 51, 3630-3633.	2.2	83
44	Designing composite solid-state electrolytes for high performance lithium ion or lithium metal batteries. Chemical Science, 2020, 11, 8686-8707.	3.7	82
45	Highly efficient and stable photocatalytic reduction of CO₂ to CH₄ over Ru loaded NaTaO₃. Chemical Communications, 2015, 51, 7645-7648.	2.2	81
46	High-Performance Quasi-Solid-State MXene-Based Liâ€“I Batteries. ACS Central Science, 2019, 5, 365-373.	5.3	78
47	Boosting the Reversibility of Sodium Metal Anode via Heteroatomâ€Đoped Hollow Carbon Fibers. Small, 2019, 15, e1902688.	5.2	76
48	Efficient photocatalytic CO 2 reduction in all-inorganic aqueous environment: Cooperation between reaction medium and Cd(II) modified colloidal ZnS. Nano Energy, 2017, 34, 524-532.	8.2	74
49	Fabrication of p-type CaFe2O4 nanofilms for photoelectrochemical hydrogen generation. Electrochemistry Communications, 2011, 13, 275-278.	2.3	71
50	Hollow spheres consisting of Ti_{0.91}O₂/CdS nanohybrids for CO₂ photofixation. Chemical Communications, 2015, 51, 13354-13357.	2.2	71
51	Light assisted CO₂reduction with methane over SiO₂encapsulated Ni nanocatalysts for boosted activity and stability. Journal of Materials Chemistry A, 2017, 5, 10567-10573.	5.2	71
52	Serosa-Mimetic Nanoarchitecture Membranes for Highly Efficient Osmotic Energy Generation. Journal of the American Chemical Society, 2021, 143, 16206-16216.	6.6	70
53	W18O49 nanowire networks for catalyzed dehydration of isopropyl alcohol to propylene under visible light. Journal of Materials Chemistry A, 2013, 1, 6125.	5.2	65
54	Enhanced Photocatalytic Oxidation of Isopropanol by HKUST-1@TiO₂ Coreâ€“Shell Structure with Ultrathin Anatase Porous Shell: Toxic Intermediate Control. Industrial & Engineering Chemistry Research, 2016, 55, 8096-8103.	1.8	61

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55	Theoretical analysis of geometry-correlated conductivity of molecular wire. Chemical Physics Letters, 2006, 422, 111-116.	1.2	60
56	Artificial photosynthesis on tree trunk derived alkaline tantalates with hierarchical anatomy: towards CO₂ photo-fixation into CO and CH₄. Nanoscale, 2015, 7, 113-120.	2.8	59
57	Three-Dimensional Lupinus-like TiO₂ Nanorod@Sn₃O₄ Nanosheet Hierarchical Heterostructured Arrays as Photoanode for Enhanced Photoelectrochemical Performance. ACS Applied Materials & Interfaces, 2017, 9, 38537-38544.	4.0	59
58	A hierarchically three-dimensional CoNi/N-doped porous carbon nanosheets with high performance of electromagnetic wave absorption. Carbon, 2022, 188, 503-512.	5.4	57
59	Porous Na3V2(PO4)3/C nanoplates for high-performance sodium storage. Journal of Colloid and Interface Science, 2019, 539, 168-174.	5.0	55
60	Hierarchical nanowire arrays based on carbon nanotubes and Co₃O₄ decorated ZnO for enhanced photoelectrochemical water oxidation. Journal of Materials Chemistry A, 2015, 3, 13731-13737.	5.2	54
61	Hierarchical Ti₃C₂T_x MXene/Carbon Nanotubes for Low Overpotential and Long-Life Li-CO₂ Batteries. ACS Nano, 2021, 15, 8407-8417.	7.3	54
62	Theoretical investigation on molecular rectification on the basis of asymmetric substitution and proton transfer reaction. Journal of Chemical Physics, 2008, 129, 224704.	1.2	51
63	Enhanced water oxidation reaction kinetics on a BiVO₄ photoanode by surface modification with Ni₄O₄ cubane. Journal of Materials Chemistry A, 2019, 7, 278-288.	5.2	51
64	Bifunctional-Nanotemplate Assisted Synthesis of Nanoporous SrTiO₃ Photocatalysts Toward Efficient Degradation of Organic Pollutant. ACS Applied Materials & Interfaces, 2014, 6, 22726-22732.	4.0	50
65	Nanoconfined SnO2/SnSe2 heterostructures in N-doped carbon nanotubes for high-performance sodium-ion batteries. Chemical Engineering Journal, 2021, 418, 129501.	6.6	48
66	In situ construction of Î±-Bi₂O₃/g-C₃N₄/Î²-Bi₂O₃composites and their highly efficient photocatalytic performances. RSC Advances, 2015, 5, 92963-92969.	3.7	45
67	Bonding and Electron Energy-Level Alignment at Metal/TiO₂ Interfaces: A Density Functional Theory Study. Journal of Physical Chemistry C, 2016, 120, 5549-5556.	1.5	45
68	Selective Deposition of Ag₃PO₄ on Specific Facet of BiVO₄ Nanoplate for Enhanced Photoelectrochemical Performance. Solar Rrl, 2018, 2, 1800102.	3.1	44
69	Two-dimensional Sb@TiO2â˜x nanoplates as a high-performance anode material for sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 2553-2559.	5.2	42
70	Insights into the critical dual-effect of acid treatment on ZnxCd1-xS for enhanced photocatalytic production of syngas under visible light. Applied Catalysis B: Environmental, 2021, 288, 119976.	10.8	41
71	Selective local nitrogen doping in a TiO2 electrode for enhancing photoelectrochemical water splitting. Chemical Communications, 2012, 48, 8649.	2.2	37
72	Nanoarchitectonics of a Au nanoprism array on WO₃film for synergistic optoelectronic response. Science and Technology of Advanced Materials, 2011, 12, 044604.	2.8	34

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73	Design of a photoelectrochemical device for the selective conversion of aqueous CO2to CO: using mesoporous palladiumâ€“copper bimetallic cathode and hierarchical ZnO-based nanowire array photoanode. Chemical Communications, 2016, 52, 8235-8238.	2.2	32
74	Stable Conversion Chemistryâ€Based Lithium Metal Batteries Enabled by Hierarchical Multifunctional Polymer Electrolytes with Nearâ€Single Ion Conduction. Angewandte Chemie, 2019, 131, 6062-6067.	1.6	30
75	Sulfur-Doped Flowerlike Porous Carbon Derived from Metalâ€“Organic Frameworks as a High-Performance Potassium-Ion Battery Anode. ACS Applied Energy Materials, 2021, 4, 2282-2291.	2.5	28
76	Layer structured materials for ambient nitrogen fixation. Coordination Chemistry Reviews, 2022, 460, 214468.	9.5	28
77	Novel visible-light sensitive vanadate photocatalysts for water oxidation: implications from density functional theory calculations. Journal of Materials Chemistry A, 2015, 3, 10720-10723.	5.2	27
78	Series of ZnSn(OH)₆ Polyhedra: Enhanced CO₂ Dissociation Activation and Crystal Facet-Based Homojunction Boosting Solar Fuel Synthesis. Inorganic Chemistry, 2017, 56, 5704-5709.	1.9	27
79	Electrocatalytic reduction of N₂ and nitrogen-incorporation process on dopant-free defect graphene. Journal of Materials Chemistry A, 2020, 8, 55-61.	5.2	27
80	Theoretical investigation into molecular diodes integrated in series using the non-equilibrium Green's function method. Physical Chemistry Chemical Physics, 2011, 13, 1301-1306.	1.3	26
81	Bimetallic Sulfide/Sulfur Doped T3C2Tx MXene Nanocomposites as High-performance Anode Materials for Sodium-ion Batteries. Chemical Research in Chinese Universities, 2020, 36, 431-438.	1.3	26
82	Enhanced Visible-Light-Driven Hydrogen Production of Carbon Nitride by Band Structure Tuning. Journal of Physical Chemistry C, 2018, 122, 17261-17267.	1.5	23
83	Nanorod-like Î±-Bi₂O₃: a highly active photocatalyst synthesized using g-C₃N₄ as a template. RSC Advances, 2014, 4, 55062-55066.	1.7	22
84	Modulation of sulfur partial pressure in sulfurization to significantly improve the photoelectrochemical performance over the Cu₂ZnSnS₄ photocathode. Chemical Communications, 2015, 51, 14057-14059.	2.2	21
85	In situ synthesis of N-doped carbon nanotubesâ€“BiOCl nanocomposites and their synergistic photocatalytic performance. RSC Advances, 2016, 6, 2926-2934.	1.7	21
86	Selfâ€Assembled Urchinâ€Like CuWO 4 /WO 3 Heterojunction Nanoarrays as Photoanodes for Photoelectrochemical Water Splitting. ChemElectroChem, 2021, 8, 125-134.	1.7	19
87	Synthesis, Characterization, and Photocatalytic Activity of g-C₃N₄/KTaO₃Composites under Visible Light Irradiation. Journal of Nanomaterials, 2015, 2015, 1-7.	1.5	17
88	Room-temperature driven and visible light enhanced dehydrogenation reactions catalysed by basic Au/SrTiO₃. Journal of Materials Chemistry A, 2016, 4, 1941-1946.	5.2	17
89	Elemental Boron for Efficient Carbon Dioxide Reduction under Light Irradiation. Angewandte Chemie, 2017, 129, 5662-5666.	1.6	17
90	Exceptional enhancement of H2 production in alkaline environment over plasmonic Au/TiO2 photocatalyst under visible light. APL Materials, 2015, 3, .	2.2	16

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91	Revealing the illumination effect on the discharge products in highâ€performance Liâ€“O₂ batteries with heterostructured photocatalysts. , 2022, 4, 1169-1181.		16
92	Constructing a multicomponent junction for improved visible-light photocatalytic performance induced by Au nanoparticles. Chemical Communications, 2015, 51, 2173-2176.	2.2	15
93	Wafer-scale Si nanoconed arrays induced syngas in the photoelectrochemical CO2 reduction. Catalysis Today, 2020, 339, 321-327.	2.2	15
94	A highly efficient and free-standing copper single atoms anchored nitrogen-doped carbon nanofiberÂcathode toward reliable Liâ€“CO2 batteries. Materials Today Energy, 2022, 25, 100967.	2.5	15
95	Hematite homojunctions without foreign element doping for efficient and stable overall water splitting. RSC Advances, 2016, 6, 62263-62269.	1.7	14
96	Fast Lithium Ionic Conductivity in Complex Hydrideâ€Sulfide Electrolytes by Double Anions Substitution. Small Methods, 2021, 5, e2100609.	4.6	14
97	Effects of cation concentration on photocatalytic performance over magnesium vanadates. APL Materials, 2015, 3, 104405.	2.2	11
98	Theoretical investigation on conformational behavior of 2,2â€²-bithiophene under the influence of external electric field at ab initio levels. Computational and Theoretical Chemistry, 2007, 808, 125-134.	1.5	9
99	Band-Gap Engineering of NaNbO₃for Photocatalytic H₂Evolution with Visible Light. International Journal of Photoenergy, 2014, 2014, 1-6.	1.4	9
100	Promoting hole transfer for photoelectrochemical water oxidation through a manganese cluster catalyst bioinspired by natural photosystem II. Chemical Communications, 2020, 56, 4244-4247.	2.2	9
101	Regulating the surface state of ZnIn₂S₄ by gamma-ray irradiation for enhanced photocatalytic hydrogen evolution. Catalysis Science and Technology, 2022, 12, 927-934.	2.1	9
102	Fabrication of a Covalent Triazine Framework Functional Interlayer for High-Performance Lithiumâ€“Sulfur Batteries. Nanomaterials, 2022, 12, 255.	1.9	7
103	A quantum chemistry study of diethynylbenzene macrocycles: Structural and electronic properties. Computational and Theoretical Chemistry, 2008, 861, 7-13.	1.5	6
104	A quasi-3D Sb₂S₃/reduced graphene oxide/MXene (Ti₃C₂T_x) hybrid for high-rate and durable sodium-ion batteries. Nanoscale, 2022, 14, 5529-5536.	2.8	6
105	PolyolefinâBased Janus Separator for Rechargeable Sodium Batteries. Angewandte Chemie, 2020, 132, 16868-16877.	1.6	5
106	Constructing Sn(<scp>ii</scp>)-doped SrNb₂O₆ for visible light response driven H₂ and O₂ evolution from water. Catalysis Science and Technology, 2019, 9, 3619-3622.	2.1	4
107	Cu-Loaded NaNbO₃ Three-Dimensional Networks for CO₂ Photoreduction to C₂ Species. Energy & Fuels, 2022, 36, 11654-11659.	2.5	2