Xiangdong Yao

List of Publications by Year in Descending Order

171 papers	14,241 citations	64 h-index	116 g-index
178 ext. papers	16,818 ext. citations	11.6 avg, IF	6.92 L-index

#	Paper	IF	Citations
171	Single Carbon Vacancy Traps Atomic Platinum for Hydrogen Evolution Catalysis.. *Journal of the American Chemical Society*, **2022**,	16.4	21
170	Single-site catalysis in heterogeneous electro-Fenton reaction for wastewater remediation. *Chem Catalysis*, **2022**,		2
169	Defective Fe Metal-organic Frameworks Enhance Metabolic Profiling for High-accuracy Diagnosis of Human Cancers.. *Advanced Materials*, **2022**, e2201422	24	5
168	Beyond Platinum: Defects Abundant CoP3/Ni2P Heterostructure for Hydrogen Evolution Electrocatalysis. *Small Science*, **2021**, 1, 2000027		20
167	Defective carbon-based materials: controllable synthesis and electrochemical applications. *EnergyChem*, **2021**, 100059	36.9	3
166	Defective Structures in Metal Compounds for Energy-Related Electrocatalysis. *Small Structures*, **2021**, 2, 2000067	8.7	54
165	Defect engineering and characterization of active sites for efficient electrocatalysis. *Nanoscale*, **2021**, 13, 3327-3345	7.7	14
164	Controlled Asymmetric Charge Distribution of Active Centers in Conjugated Polymers for Oxygen Reduction. *Angewandte Chemie - International Edition*, **2021**, 60, 26483-26488	16.4	11
163	Controllable synthesis of FeN4 species for acidic oxygen reduction **2020**, 2, 452-460		22
162	Sulfur-Modified Oxygen Vacancies in Iron–Cobalt Oxide Nanosheets: Enabling Extremely High Activity of the Oxygen Evolution Reaction to Achieve the Industrial Water Splitting Benchmark. *Angewandte Chemie*, **2020**, 132, 14772-14778	3.6	10
161	Sulfur-Modified Oxygen Vacancies in Iron-Cobalt Oxide Nanosheets: Enabling Extremely High Activity of the Oxygen Evolution Reaction to Achieve the Industrial Water Splitting Benchmark. *Angewandte Chemie - International Edition*, **2020**, 59, 14664-14670	16.4	73
160	A Directional Synthesis for Topological Defect in Carbon. *CheM*, **2020**, 6, 2009-2023	16.2	49
159	Clarifying the Origin of Oxygen Reduction Activity in Heteroatom-Modified Defective Carbon. *Cell Reports Physical Science*, **2020**, 1, 100083	6.1	18
158	Atom-Coordinated Structure Triggers Selective H2O2 Production. *CheM*, **2020**, 6, 548-550	16.2	23
157	Edge-Rich Fe-N Active Sites in Defective Carbon for Oxygen Reduction Catalysis. *Advanced Materials*, **2020**, 32, e2000966	24	113
156	Gradient-Concentration Design of Stable Core-Shell Nanostructure for Acidic Oxygen Reduction Electrocatalysis. *Advanced Materials*, **2020**, 32, e2003493	24	30
155	A cascade surface immobilization strategy to access high-density and closely distanced atomic Pt sites for enhancing alkaline hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2020**, 8, 5255-5262	13	14

154	Understanding the Activity of Co-N4□Cx in Atomic Metal Catalysts for Oxygen Reduction Catalysis. *Angewandte Chemie*, **2020**, 132, 6178-6183	3.6	30
153	Understanding the Activity of Co-N C in Atomic Metal Catalysts for Oxygen Reduction Catalysis. *Angewandte Chemie - International Edition*, **2020**, 59, 6122-6127	16.4	86
152	Recent advances in liquid-phase chemical hydrogen storage. *Energy Storage Materials*, **2020**, 26, 290-312	19.4	61
151	One-step In-situ Synthesis of Vacancy-rich CoFe2O4@Defective Graphene Hybrids as Bifunctional Oxygen Electrocatalysts for Rechargeable Zn-Air Batteries. *Chemical Research in Chinese Universities*, **2020**, 36, 479-487	2.2	14
150	Bimetallic ZIF derived Co nanoparticle anchored N-doped porous carbons for an efficient oxygen reduction reaction. *Inorganic Chemistry Frontiers*, **2020**, 7, 946-952	6.8	10
149	Metal-Free Thiophene-Sulfur Covalent Organic Frameworks: Precise and Controllable Synthesis of Catalytic Active Sites for Oxygen Reduction. *Journal of the American Chemical Society*, **2020**, 142, 8104-8108	16.4	105
148	Exfoliation of amorphous phthalocyanine conjugated polymers into ultrathin nanosheets for highly efficient oxygen reduction. *Journal of Materials Chemistry A*, **2019**, 7, 3112-3119	13	55
147	Air cathode of zinc-air batteries: a highly efficient and durable aerogel catalyst for oxygen reduction. *Nanoscale*, **2019**, 11, 826-832	7.7	36
146	Defect Engineering and Surface Functionalization of Nanocarbons for Metal-Free Catalysis. *Advanced Materials*, **2019**, 31, e1805717	24	88
145	Identification of active sites for acidic oxygen reduction on carbon catalysts with and without nitrogen doping. *Nature Catalysis*, **2019**, 2, 688-695	36.5	251
144	Charge Polarization from Atomic Metals on Adjacent Graphitic Layers for Enhancing the Hydrogen Evolution Reaction. *Angewandte Chemie*, **2019**, 131, 9504-9508	3.6	1
143	Insight into the design of defect electrocatalysts: From electronic structure to adsorption energy. *Materials Today*, **2019**, 31, 47-68	21.8	173
142	Charge Polarization from Atomic Metals on Adjacent Graphitic Layers for Enhancing the Hydrogen Evolution Reaction. *Angewandte Chemie - International Edition*, **2019**, 58, 9404-9408	16.4	50
141	Catalytic Nanocarbons: Defect Engineering and Surface Functionalization of Nanocarbons for Metal-Free Catalysis (Adv. Mater. 13/2019). *Advanced Materials*, **2019**, 31, 1970096	24	2
140	The Role of Defect Sites in Nanomaterials for Electrocatalytic Energy Conversion. *CheM*, **2019**, 5, 1371-1397	19.2	170
139	Probing the Active Sites of Carbon-Encapsulated Cobalt Nanoparticles for Oxygen Reduction. *Small Methods*, **2019**, 3, 1800439	12.8	21
138	A Surfactant-Free and Scalable General Strategy for Synthesizing Ultrathin Two-Dimensional Metal□Organic Framework Nanosheets for the Oxygen Evolution Reaction. *Angewandte Chemie*, **2019**, 131, 13699-13706	3.6	37
137	A Surfactant-Free and Scalable General Strategy for Synthesizing Ultrathin Two-Dimensional Metal-Organic Framework Nanosheets for the Oxygen Evolution Reaction. *Angewandte Chemie - International Edition*, **2019**, 58, 13565-13572	16.4	121

136	Innenrücktitelbild: Charge Polarization from Atomic Metals on Adjacent Graphitic Layers for Enhancing the Hydrogen Evolution Reaction (Angew. Chem. 28/2019). *Angewandte Chemie*, **2019**, 131, 9749-9749	3.6	
135	Defect-Induced Pt-Co-Se Coordinated Sites with Highly Asymmetrical Electronic Distribution for Boosting Oxygen-Involving Electrocatalysis. *Advanced Materials*, **2019**, 31, e1805581	24	118
134	Generating Oxygen Vacancies in MnO Hexagonal Sheets for Ultralong Life Lithium Storage with High Capacity. *ACS Nano*, **2019**, 13, 2062-2071	16.7	47
133	Defective Carbons Derived from Macadamia Nut Shell Biomass for Efficient Oxygen Reduction and Supercapacitors. *ChemElectroChem*, **2018**, 5, 1874-1879	4.3	29
132	Defect electrocatalytic mechanism: concept, topological structure and perspective. *Materials Chemistry Frontiers*, **2018**, 2, 1250-1268	7.8	90
131	An ethynyl-linked Fe/Co heterometallic phthalocyanine conjugated polymer for the oxygen reduction reaction. *Journal of Materials Chemistry A*, **2018**, 6, 8349-8357	13	40
130	Generating lithium vacancies through delithiation of Li(NixCoyMnz)O2 towards bifunctional electrocatalysts for rechargeable zinc-air batteries. *Energy Storage Materials*, **2018**, 15, 202-208	19.4	18
129	Graphene Defects Trap Atomic Ni Species for Hydrogen and Oxygen Evolution Reactions. *CheM*, **2018**, 4, 285-297	16.2	436
128	On the hydrogen desorption entropy change of modified MgH2. *Journal of Alloys and Compounds*, **2018**, 737, 427-432	5.7	8
127	Electronic Structure Tuning in NiFeN/r-GO Aerogel toward Bifunctional Electrocatalyst for Overall Water Splitting. *ACS Nano*, **2018**, 12, 245-253	16.7	347
126	Assessment of sugarcane bagasse gasification in supercritical water for hydrogen production. *International Journal of Hydrogen Energy*, **2018**, 43, 13711-13719	6.7	35
125	Direct catalytic conversion of glucose and cellulose. *Green Chemistry*, **2018**, 20, 863-872	10	45
124	Activity Origins in Nanocarbons for the Electrocatalytic Hydrogen Evolution Reaction. *Small*, **2018**, 14, e1800235	11	42
123	Boosting hydrogen evolution via optimized hydrogen adsorption at the interface of CoP3 and Ni2P. *Journal of Materials Chemistry A*, **2018**, 6, 5560-5565	13	76
122	Tuning oxygen vacancies in two-dimensional iron-cobalt oxide nanosheets through hydrogenation for enhanced oxygen evolution activity. *Nano Research*, **2018**, 11, 3509-3518	10	110
121	Dehydrogenation and reaction pathway of Perovskite-Type NH4Ca(BH4)3. *Progress in Natural Science: Materials International*, **2018**, 28, 194-199	3.6	4
120	Coordination of Atomic Co-Pt Coupling Species at Carbon Defects as Active Sites for Oxygen Reduction Reaction. *Journal of the American Chemical Society*, **2018**, 140, 10757-10763	16.4	301
119	A Defect-Driven Metal-free Electrocatalyst for Oxygen Reduction in Acidic Electrolyte. *CheM*, **2018**, 4, 2345-2356	16.2	193

118	Sandwich-Like Reduced Graphene Oxide/Carbon Black/Amorphous Cobalt Borate Nanocomposites as Bifunctional Cathode Electrocatalyst in Rechargeable Zinc-Air Batteries. *Advanced Energy Materials*, **2018**, 8, 1801495	21.8	44
117	Defects on carbons for electrocatalytic oxygen reduction. *Chemical Society Reviews*, **2018**, 47, 7628-7658	58.5	282
116	Plasma-Triggered Synergy of Exfoliation, Phase Transformation, and Surface Engineering in Cobalt Diselenide for Enhanced Water Oxidation. *Angewandte Chemie - International Edition*, **2018**, 57, 16421-16425	16.4	84
115	Plasma-Triggered Synergy of Exfoliation, Phase Transformation, and Surface Engineering in Cobalt Diselenide for Enhanced Water Oxidation. *Angewandte Chemie*, **2018**, 130, 16659-16663	3.6	29
114	Defective Carbons for Electrocatalytic Oxygen Reduction **2018**, 59-75		0
113	Grafting Cobalt Diselenide on Defective Graphene for Enhanced Oxygen Evolution Reaction. *IScience*, **2018**, 7, 145-153	6.1	29
112	Scalable and controllable synthesis of atomic metal electrocatalysts assisted by an egg-box in alginate. *Journal of Materials Chemistry A*, **2018**, 6, 18417-18425	13	38
111	Ultrathin Iron-Cobalt Oxide Nanosheets with Abundant Oxygen Vacancies for the Oxygen Evolution Reaction. *Advanced Materials*, **2017**, 29, 1606793	24	821
110	A Heterostructure Coupling of Exfoliated Ni-Fe Hydroxide Nanosheet and Defective Graphene as a Bifunctional Electrocatalyst for Overall Water Splitting. *Advanced Materials*, **2017**, 29, 1700017	24	651
109	Gasification of diosgenin solid waste for hydrogen production in supercritical water. *International Journal of Hydrogen Energy*, **2017**, 42, 9448-9457	6.7	21
108	NaBH 4 regeneration from NaBO 2 by high-energy ball milling and its plausible mechanism. *International Journal of Hydrogen Energy*, **2017**, 42, 13127-13135	6.7	28
107	System analysis of pulping process coupled with supercritical water gasification of black liquor for combined hydrogen, heat and power production. *Energy*, **2017**, 132, 238-247	7.9	51
106	Hydrogen generation via hydrolysis of magnesium with seawater using Mo, MoO2, MoO3 and MoS2 as catalysts. *Journal of Materials Chemistry A*, **2017**, 5, 8566-8575	13	76
105	Switched Photocurrent on Tin Sulfide-Based Nanoplate Photoelectrodes. *ChemSusChem*, **2017**, 10, 670-674	8.5	17
104	Defective graphene anchored iron-cobalt nanoparticles for efficient electrocatalytic oxygen reduction. *Chemical Communications*, **2017**, 53, 12140-12143	5.8	19
103	Hexagonal Sphericon Hematite with High Performance for Water Oxidation. *Advanced Materials*, **2017**, 29, 1703792	24	39
102	Platinum stabilized by defective activated carbon with excellent oxygen reduction performance in alkaline media. *Chinese Journal of Catalysis*, **2017**, 38, 1011-1020	11.3	8
101	Brønsted base site engineering of graphitic carbon nitride for enhanced photocatalytic activity. *Journal of Materials Chemistry A*, **2017**, 5, 19227-19236	13	24

100	Carbon scaffold modified by metal (Ni) or non-metal (N) to enhance hydrogen storage of MgH2 through nanoconfinement. *International Journal of Hydrogen Energy*, **2017**, 42, 22933-22941	6.7	44
99	Recent Progress in Oxygen Electrocatalysts for Zinc–Air Batteries. *Small Methods*, **2017**, 1, 1700209	12.8	142
98	Toward Aerogel Electrodes of Superior Rate Performance in Supercapacitors through Engineered Hollow Nanoparticles of NiCoO. *Advanced Science*, **2017**, 4, 1700345	13.6	32
97	Defective-Activated-Carbon-Supported Mn-Co Nanoparticles as a Highly Efficient Electrocatalyst for Oxygen Reduction. *Advanced Materials*, **2016**, 28, 8771-8778	24	139
96	Defect Graphene as a Trifunctional Catalyst for Electrochemical Reactions. *Advanced Materials*, **2016**, 28, 9532-9538	24	711
95	NbO-EAlO nanofibers as heterogeneous catalysts for efficient conversion of glucose to 5-hydroxymethylfurfural. *Scientific Reports*, **2016**, 6, 34068	4.9	22
94	Boosting oxygen reduction and hydrogen evolution at the edge sites of a web-like carbon nanotube-graphene hybrid. *Carbon*, **2016**, 107, 739-746	10.4	22
93	Molecular engineering of Ni-/Co-porphyrin multilayers on reduced graphene oxide sheets as bifunctional catalysts for oxygen evolution and oxygen reduction reactions. *Chemical Science*, **2016**, 7, 5640-5646	9.4	108
92	Activated carbon becomes active for oxygen reduction and hydrogen evolution reactions. *Chemical Communications*, **2016**, 52, 8156-9	5.8	114
91	Defect-driven oxygen reduction reaction (ORR) of carbon without any element doping. *Inorganic Chemistry Frontiers*, **2016**, 3, 417-421	6.8	117
90	Seaweed biomass derived (Ni,Co)/CNT nanoaerogels: efficient bifunctional electrocatalysts for oxygen evolution and reduction reactions. *Journal of Materials Chemistry A*, **2016**, 4, 6376-6384	13	135
89	Atomically isolated nickel species anchored on graphitized carbon for efficient hydrogen evolution electrocatalysis. *Nature Communications*, **2016**, 7, 10667	17.4	435
88	Scalable and Cost-Effective Synthesis of Highly Efficient Fe2N-Based Oxygen Reduction Catalyst Derived from Seaweed Biomass. *Small*, **2016**, 12, 1295-301	11	131
87	Hydrogen production from supercritical water gasification of chicken manure. *International Journal of Hydrogen Energy*, **2016**, 41, 22722-22731	6.7	81
86	Combination of nanosizing and interfacial effect: Future perspective for designing Mg-based nanomaterials for hydrogen storage. *Renewable and Sustainable Energy Reviews*, **2015**, 44, 289-303	16.2	128
85	Express penetration of hydrogen on Mg(10 13) along the close-packed-planes. *Scientific Reports*, **2015**, 5, 10776	4.9	81
84	Sustainable seaweed-based one-dimensional (1D) nanofibers as high-performance electrocatalysts for fuel cells. *Journal of Materials Chemistry A*, **2015**, 3, 14188-14194	13	64
83	Metallic Ni nanocatalyst in situ formed from a metal–organic-framework by mechanochemical reaction for hydrogen storage in magnesium. *Journal of Materials Chemistry A*, **2015**, 3, 8294-8299	13	49

82	Carbon for the oxygen reduction reaction: a defect mechanism. *Journal of Materials Chemistry A*, **2015**, 3, 11736-11739	13	184
81	Nanosheets Co3O4 Interleaved with Graphene for Highly Efficient Oxygen Reduction. *ACS Applied Materials & Interfaces*, **2015**, 7, 21373-80	9.5	87
80	Catalytically Enhanced Hydrogen Sorption in Mg-MgH2 by Coupling Vanadium-Based Catalyst and Carbon Nanotubes. *Materials*, **2015**, 8, 3491-3507	3.5	17
79	Supercritical Water Gasification of Coal with Waste Black Liquor as Inexpensive Additives. *Energy & Fuels*, **2015**, 29, 384-391	4.1	50
78	Potassium niobate nanolamina: a promising adsorbent for entrapment of radioactive cations from water. *Scientific Reports*, **2014**, 4, 7313	4.9	21
77	New electroless plating method for preparation of highly active CoB catalysts for NaBH4 hydrolysis. *International Journal of Hydrogen Energy*, **2014**, 39, 414-425	6.7	44
76	Manipulating solar absorption and electron transport properties of rutile TiO2 photocatalysts via highly n-type F-doping. *Journal of Materials Chemistry A*, **2014**, 2, 3513	13	49
75	Density functional theory analysis of structural and electronic properties of orthorhombic perovskite CH3NH3PbI3. *Physical Chemistry Chemical Physics*, **2014**, 16, 1424-9	3.6	284
74	Towards easy reversible dehydrogenation of LiBH4 by catalyzing hierarchic nanostructured CoB. *Nano Energy*, **2014**, 10, 235-244	17.1	40
73	Destabilization of LiBH4 dehydrogenation through H+H interactions by cooperating with alkali metal hydroxides. *RSC Advances*, **2014**, 4, 3082-3089	3.7	14
72	MgTM (TM: Ti, Nb, V, Co, Mo or Ni) coreshell like nanostructures: synthesis, hydrogen storage performance and catalytic mechanism. *Journal of Materials Chemistry A*, **2014**, 2, 9645-9655	13	167
71	In Situ Photochemical Synthesis of Zn-Doped Cu2O Hollow Microcubes for High Efficient Photocatalytic H2 Production. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1446-1452	8.3	70
70	Synthesis and characterization of three novel 3D metalorganic frameworks constructed from semi-rigid V-shaped ligands. *Inorganic Chemistry Communication*, **2014**, 46, 329-334	3.1	7
69	A self-sponsored doping approach for controllable synthesis of S and N co-doped trimodal-porous structured graphitic carbon electrocatalysts. *Energy and Environmental Science*, **2014**, 7, 3720-3726	35.4	180
68	One-step synthesis of nitrogen-doped microporous carbon materials as metal-free electrocatalysts for oxygen reduction reaction. *Journal of Materials Chemistry A*, **2014**, 2, 11666-11671	13	70
67	Fluorine-doped porous single-crystal rutile TiO2 nanorods for enhancing photoelectrochemical water splitting. *Chemistry - A European Journal*, **2014**, 20, 11439-44	4.8	55
66	Geometric structure of rutile titanium dioxide (111) surfaces. *Physical Review B*, **2014**, 90,	3.3	17
65	Preparation of nitrogen-doped TiOgraphene nanohybrids and application as counter electrode for dye-sensitized solar cells. *ACS Applied Materials & Interfaces*, **2014**, 6, 2118-24	9.5	41

64	Catalytic Hydrogenation of Carbon Dioxide to Fuels. *Current Organic Chemistry*, **2014**, 18, 1335-1345	1.7	15
63	Effect of titanium based complex catalyst and carbon nanotubes on hydrogen storage performance of magnesium. *Science China Chemistry*, **2013**, 56, 451-458	7.9	3
62	Theoretical understanding and prediction of lithiated sodium hexatitanates. *ACS Applied Materials & Interfaces*, **2013**, 5, 1108-12	9.5	9
61	A highly crystalline Nb3O7F nanostructured photoelectrode: fabrication and photosensitisation. *Journal of Materials Chemistry A*, **2013**, 1, 6563	13	28
60	Remarkable enhancement in dehydrogenation of MgH2 by a nano-coating of multi-valence Ti-based catalysts. *Journal of Materials Chemistry A*, **2013**, 1, 5603	13	164
59	Nature of visible-light responsive fluorinated titanium dioxides. *Journal of Materials Chemistry A*, **2013**, 1, 12948	13	24
58	Evaluation of a cobalt□molybdenum□boron catalyst for hydrogen generation of alkaline sodium borohydride solution□aluminum powder system. *Journal of Power Sources*, **2013**, 224, 304-311	8.9	36
57	Vapor-phase hydrothermal growth of novel segmentally configured nanotubular crystal structure. *Small*, **2013**, 9, 3043-50	11	8
56	Destabilization of Mg-H bonding through nano-interfacial confinement by unsaturated carbon for hydrogen desorption from MgH2. *Physical Chemistry Chemical Physics*, **2013**, 15, 5814-20	3.6	62
55	Designed synthesis of LiMn2O4 microspheres with adjustable hollow structures for lithium-ion battery applications. *Journal of Materials Chemistry A*, **2013**, 1, 837-842	13	50
54	Target synthesis of a novel porous aromatic framework and its highly selective separation of CO(2)/CH(4). *Chemical Communications*, **2013**, 49, 2780-2	5.8	102
53	Edges of FeO/Pt(111) Interface: A First-Principle Theoretical Study. *Journal of Physical Chemistry C*, **2013**, 117, 1672-1676	3.8	8
52	Enhanced hydrogen desorption from Mg(BH4)2 by combining nanoconfinement and a Ni catalyst. *Journal of Materials Chemistry A*, **2013**, 1, 3471	13	76
51	Engineering the band gap of bare titanium dioxide materials for visible-light activity: a theoretical prediction. *RSC Advances*, **2013**, 3, 8777	3.7	29
50	A novel 3D porous cadmium(II) MOF based on conjugated ligand with potential application for sensing small linear conjugated molecule. *Inorganic Chemistry Communication*, **2012**, 25, 74-78	3.1	16
49	Fabrication of mesoporous lignocellulose aerogels from wood via cyclic liquid nitrogen freezing□thawing in ionic liquid solution. *Journal of Materials Chemistry*, **2012**, 22, 13548		95
48	Structure, reactivity, photoactivity and stability of Ti-O based materials: a theoretical comparison. *Physical Chemistry Chemical Physics*, **2012**, 14, 2333-8	3.6	40
47	Dehydrogenation of Ammonia Borane Confined by Low-Density Porous Aromatic Framework. *Journal of Physical Chemistry C*, **2012**, 116, 25694-25700	3.8	28

46	Yolk@shell anatase TiO2 hierarchical microspheres with exposed {001} facets for high-performance dye sensitized solar cells. *Journal of Materials Chemistry*, **2012**, 22, 22082		92
45	Selective adsorption of carbon dioxide by carbonized porous aromatic framework (PAF). *Energy and Environmental Science*, **2012**, 5, 8370	35.4	200
44	Catalytically enhanced dehydrogenation of MgH2 by activated carbon supported PdVOx (x=2.38) nanocatalyst. *International Journal of Hydrogen Energy*, **2012**, 37, 13393-13399	6.7	15
43	Confined LiBH4: Enabling fast hydrogen release at ~100C. *International Journal of Hydrogen Energy*, **2012**, 37, 18920-18926	6.7	38
42	Visible light active pure rutile TiO2 photoanodes with 100% exposed pyramid-shaped (111) surfaces. *Nano Research*, **2012**, 5, 762-769	10	46
41	Single crystal Fe2O3 with exposed {104} facets for high performance gas sensor applications. *RSC Advances*, **2012**, 2, 6178	3.7	70
40	Hydrogenation/dehydrogenation in MgH2-activated carbon composites prepared by ball milling. *International Journal of Hydrogen Energy*, **2012**, 37, 7579-7585	6.7	43
39	Synthesis of ordered mesoporous MgO/carbon composites by a one-pot assembly of amphiphilic triblock copolymers. *Journal of Materials Chemistry*, **2011**, 21, 795-800		60
38	Anatase TiOcrystal facet growth: mechanistic role of hydrofluoric acid and photoelectrocatalytic activity. *ACS Applied Materials & Interfaces*, **2011**, 3, 2472-8	9.5	95
37	Nanoparticles enwrapped with nanotubes: A unique architecture of CdS/titanate nanotubes for efficient photocatalytic hydrogen production from water. *Journal of Materials Chemistry*, **2011**, 21, 5134		102
36	Adsorption and Dissociation of Ammonia Borane Outside and Inside Single-Walled Carbon Nanotubes: A Density Functional Theory Study. *Journal of Physical Chemistry C*, **2011**, 115, 12580-12585	3.8	6
35	A selective etching phenomenon on {001} faceted anatase titanium dioxide single crystal surfaces by hydrofluoric acid. *Chemical Communications*, **2011**, 47, 2829-31	5.8	117
34	Catalytic De/Hydrogenation in Mg by Co-Doped Ni and VOx on Active Carbon: Extremely Fast Kinetics at Low Temperatures and High Hydrogen Capacity. *Advanced Energy Materials*, **2011**, 1, 387-393	21.8	48
33	Synergetic effects of hydrogenated Mg3La and TiCl3 on the dehydrogenation of LiBH4. *Journal of Materials Chemistry*, **2011**, 21, 9179		44
32	A facile vapor-phase hydrothermal method for direct growth of titanate nanotubes on a titanium substrate via a distinctive nanosheet roll-up mechanism. *Journal of the American Chemical Society*, **2011**, 133, 19032-5	16.4	90
31	Twins in Cd1ZnxS solid solution: Highly efficient photocatalyst for hydrogen generation from water. *Energy and Environmental Science*, **2011**, 4, 1372	35.4	270
30	Hydrogen Incorporation and Storage in Well-Defined Nanocrystals of Anatase Titanium Dioxide. *Journal of Physical Chemistry C*, **2011**, 115, 25590-25594	3.8	92
29	Origin of reactivity diversity of lattice oxygen in titanates. *Chemical Physics Letters*, **2011**, 511, 82-86	2.5	11

28	Progress in sodium borohydride as a hydrogen storage material: Development of hydrolysis catalysts and reaction systems. *International Journal of Hydrogen Energy*, **2011**, 36, 5983-5997	6.7	258
27	Zinc sulfide nanowire arrays on silicon wafers for field emitters. *Nanotechnology*, **2010**, 21, 065701	3.4	19
26	Fabrication of highly ordered TiO2 nanorod/nanotube adjacent arrays for photoelectrochemical applications. *Langmuir*, **2010**, 26, 11226-32	4	59
25	Ammonia borane confined by a metal-organic framework for chemical hydrogen storage: enhancing kinetics and eliminating ammonia. *Journal of the American Chemical Society*, **2010**, 132, 1490-1	16.4	230
24	Anatase TiO(2) microspheres with exposed mirror-like plane {001} facets for high performance dye-sensitized solar cells (DSSCs). *Chemical Communications*, **2010**, 46, 8395-7	5.8	159
23	Ordered Mesoporous Carbons Enriched with Nitrogen: Application to Hydrogen Storage. *Journal of Physical Chemistry C*, **2010**, 114, 8639-8645	3.8	55
22	Roles of trifluoroacetic acid, acetic acid and their salts in the synthesis of helical mesoporous materials. *Journal of Porous Materials*, **2010**, 17, 123-131	2.4	2
21	Hydrogen adsorption on NiNaY composites at room and cryogenic temperatures. *Catalysis Today*, **2010**, 158, 317-323	5.3	2
20	Lithium-Catalyzed Dehydrogenation of Ammonia Borane within Mesoporous Carbon Framework for Chemical Hydrogen Storage. *Advanced Functional Materials*, **2009**, 19, 265-271	15.6	148
19	Field Emission and Cathodoluminescence of ZnS Hexagonal Pyramids of Zinc Blende Structured Single Crystals. *Advanced Functional Materials*, **2009**, 19, 484-490	15.6	42
18	Electron-tomography determination of the packing structure of macroporous ordered siliceous foams assembled from vesicles. *Small*, **2009**, 5, 377-82	11	21
17	Synthesis and characterization of (h0l) oriented high-silica zeolite beta membrane. *Microporous and Mesoporous Materials*, **2009**, 124, 8-14	5.3	24
16	Controlled evolution from multilamellar vesicles to hexagonal mesostructures through the addition of 1,3,5-trimethylbenzene. *Journal of Colloid and Interface Science*, **2009**, 336, 368-73	9.3	13
15	Self-assembly and cathodoluminescence of microbelts from Cu-doped boron nitride nanotubes. *ACS Nano*, **2008**, 2, 1523-32	16.7	36
14	Fluorination-induced magnetism in boron nitride nanotubes from ab initio calculations. *Applied Physics Letters*, **2008**, 92, 102515	3.4	48
13	Magnesium-based materials for hydrogen storage: Recent advances and future perspectives. *Science Bulletin*, **2008**, 53, 2421-2431	10.6	32
12	Solving complex concentric circular mesostructures by using electron tomography. *Angewandte Chemie - International Edition*, **2008**, 47, 6670-3	16.4	24
11	Growth, Cathodoluminescence and Field Emission of ZnS Tetrapod Tree-like Heterostructures. *Advanced Functional Materials*, **2008**, 18, 3063-3069	15.6	47

10	Ammonia borane destabilized by lithium hydride: an advanced on-board hydrogen storage material. *Advanced Materials*, **2008**, 20, 2756-9	24	172
9	Solving Complex Concentric Circular Mesostructures by Using Electron Tomography. *Angewandte Chemie*, **2008**, 120, 6772-6775	3.6	3
8	Phosphate removal from wastewater using red mud. *Journal of Hazardous Materials*, **2008**, 158, 35-42	12.8	329
7	Catalytic decomposition of ammonia over fly ash supported Ru catalysts. *Fuel Processing Technology*, **2008**, 89, 1106-1112	7.2	22
6	Synthesis and characterization of chromium oxide nanocrystals via solid thermal decomposition at low temperature. *Microporous and Mesoporous Materials*, **2008**, 112, 621-626	5.3	24
5	Metallic and carbon nanotube-catalyzed coupling of hydrogenation in magnesium. *Journal of the American Chemical Society*, **2007**, 129, 15650-4	16.4	114
4	Modelling of grain size transition with alloy concentration in solidified AlSi alloys. *Journal of Materials Science*, **2007**, 42, 9756-9764	4.3	6
3	Mg-based nanocomposites with high capacity and fast kinetics for hydrogen storage. *Journal of Physical Chemistry B*, **2006**, 110, 11697-703	3.4	80
2	Effects of SWNT and metallic catalyst on hydrogen absorption/desorption performance of MgH2. *Journal of Physical Chemistry B*, **2005**, 109, 22217-21	3.4	82
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