

Zhimin Ao

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/7340239/zhimin-ao-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

160
papers

8,113
citations

48
h-index

86
g-index

166
ext. papers

10,727
ext. citations

8.4
avg, IF

6.82
L-index

#	Paper	IF	Citations
160	Abrading bulk metal into single atoms.. <i>Nature Nanotechnology</i> , 2022 ,	28.7	12
159	Nitrogen defects/boron dopants engineered tubular carbon nitride for efficient tetracycline hydrochloride photodegradation and hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2022 , 303, 120932	21.8	20
158	Recent progress in single-atom alloys: Synthesis, properties, and applications in environmental catalysis. <i>Journal of Hazardous Materials</i> , 2022 , 424, 127427	12.8	9
157	Nitrogen-rich layered carbon for adsorption of typical volatile organic compounds and low-temperature thermal regeneration. <i>Journal of Hazardous Materials</i> , 2022 , 424, 127348	12.8	2
156	A Versatile Route to Fabricate Metal/UiO-66 (Metal = Pt, Pd, Ru) with High Activity and Stability for the Catalytic Oxidation of Various Volatile Organic Compounds. <i>Chemical Engineering Journal</i> , 2022 , 136900	14.7	3
155	Hydrogen Generation from Photocatalytic Treatment of Wastewater Containing Pharmaceuticals and Personal Care Products by Oxygen-doped Crystalline Carbon Nitride. <i>Separation and Purification Technology</i> , 2022 , 121425	8.3	0
154	Protrudent Iron Single-Atom Accelerated Interfacial Piezoelectric Polarization for Self-Powered Water Motion Triggered Fenton-Like Reaction. <i>Small</i> , 2021 , e2105279	11	10
153	Synchronous removal of emulsions and soluble organic contaminants via a microalgae-based membrane system: performance and mechanisms. <i>Water Research</i> , 2021 , 206, 117741	12.5	9
152	New insights into the single-atom-decorated Zr ₂ CO ₂ (MXene) as an efficient catalyst for CO oxidation in incomplete combustion gas. <i>Applied Surface Science</i> , 2021 , 575, 151777	6.7	2
151	Vanadium doped 1T MoS ₂ nanosheets for highly efficient electrocatalytic hydrogen evolution in both acidic and alkaline solutions. <i>Chemical Engineering Journal</i> , 2021 , 409, 128158	14.7	30
150	Photocatalytic H ₂ O ₂ production using Ti ₃ C ₂ MXene as a non-noble metal cocatalyst. <i>Applied Catalysis A: General</i> , 2021 , 618, 118127	5.1	12
149	First-Principles Evaluation of Volatile Organic Compounds Degradation in Z-Scheme Photocatalytic Systems: MXene and Graphitic-CN Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 23843-23852	9.5	18
148	Insights into the Electron-Transfer Mechanism of Permanganate Activation by Graphite for Enhanced Oxidation of Sulfamethoxazole. <i>Environmental Science & Technology</i> , 2021 , 55, 9189-9198 ^{10.3}	10.3	32
147	Encapsulation of Platinum by Titania under an Oxidative Atmosphere: Contrary to Classical Strong Metal-Support Interactions. <i>ACS Catalysis</i> , 2021 , 11, 6081-6090	13.1	12
146	Photo-piezoelectric synergistic degradation of typical volatile organic compounds on BaTiO ₃ . <i>Chinese Chemical Letters</i> , 2021 ,	8.1	2
145	N-doped graphite encapsulated metal nanoparticles catalyst for removal of Bisphenol A via activation of peroxymonosulfate: A singlet oxygen-dominated oxidation process. <i>Chemical Engineering Journal</i> , 2021 , 415, 128890	14.7	37
144	Experimental and DFT insights into the visible-light driving metal-free C ₃ N ₅ activated persulfate system for efficient water purification. <i>Applied Catalysis B: Environmental</i> , 2021 , 289, 120023	21.8	58

143	Oily sludge derived carbons as peroxymonosulfate activators for removing aqueous organic pollutants: Performances and the key role of carbonyl groups in electron-transfer mechanism. <i>Journal of Hazardous Materials</i> , 2021 , 414, 125552	12.8	26
142	Metal-free black-red phosphorus as an efficient heterogeneous reductant to boost Fe/Fe cycle for peroxymonosulfate activation. <i>Water Research</i> , 2021 , 188, 116529	12.5	49
141	Theoretical exploration of VOCs removal mechanism by carbon nanotubes through persulfate-based advanced oxidation processes: Adsorption and catalytic oxidation. <i>Journal of Hazardous Materials</i> , 2021 , 405, 124684	12.8	30
140	Near-infrared light to heat conversion in peroxydisulfate activation with MoS: A new photo-activation process for water treatment. <i>Water Research</i> , 2021 , 190, 116720	12.5	46
139	Investigation of the electronic structure of two-dimensional GaN/Zr2CO2 hetero-junction: Type-II band alignment with tunable bandgap. <i>Applied Surface Science</i> , 2021 , 542, 148505	6.7	9
138	Novel two-dimensional crystalline carbon nitrides beyond g-C3N4: structure and applications. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 17-33	13	29
137	Activation of peroxydisulfate by V-Fe concentrate ore for enhanced degradation of carbamazepine: Surface V(III) and V(IV) as electron donors promoted the regeneration of Fe(II). <i>Applied Catalysis B: Environmental</i> , 2021 , 282, 119559	21.8	52
136	Metal-organic frameworks derived C/TiO for visible light photocatalysis: Simple synthesis and contribution of carbon species. <i>Journal of Hazardous Materials</i> , 2021 , 403, 124048	12.8	50
135	Piezoelectric activation of peroxymonosulfate by MoS2 nanoflowers for the enhanced degradation of aqueous organic pollutants. <i>Environmental Science: Nano</i> , 2021 , 8, 784-794	7.1	21
134	Single-Atom Fe Catalyst Outperforms Its Homogeneous Counterpart for Activating Peroxymonosulfate to Achieve Effective Degradation of Organic Contaminants. <i>Environmental Science & Technology</i> , 2021 , 55, 7034-7043	10.3	64
133	Insights into the role of in-situ and ex-situ hydrogen peroxide for enhanced ferrate(VI) towards oxidation of organic contaminants. <i>Water Research</i> , 2021 , 203, 117548	12.5	12
132	Density functional theory study on the enhanced adsorption mechanism of gaseous pollutants on Al-doped Ti2CO2 monolayer. <i>Sustainable Materials and Technologies</i> , 2021 , 29, e00294	5.3	1
131	Excellent sulfur and water resistance for CO oxidation on Pt single-atom-catalyst supported by defective graphene: The effect of vacancy type. <i>Applied Surface Science</i> , 2021 , 566, 150624	6.7	1
130	Density functional theory investigation on selective adsorption of VOCs on borophene. <i>Chinese Chemical Letters</i> , 2021 , 32, 2803-2803	8.1	16
129	Insights into heterogeneous catalytic activation of peroxymonosulfate by natural chalcopyrite: pH-dependent radical generation, degradation pathway and mechanism. <i>Chemical Engineering Journal</i> , 2020 , 397, 125387	14.7	57
128	Mechanism Insight into enhanced photodegradation of pharmaceuticals and personal care products in natural water matrix over crystalline graphitic carbon nitrides. <i>Water Research</i> , 2020 , 180, 115925	12.5	57
127	Insight into the effect of lignocellulosic biomass source on the performance of biochar as persulfate activator for aqueous organic pollutants remediation: Epicarp and mesocarp of citrus peels as examples. <i>Journal of Hazardous Materials</i> , 2020 , 399, 123043	12.8	79
126	Criteria of active sites in nonradical persulfate activation process from integrated experimental and theoretical investigations: boron-nitrogen-co-doped nanocarbon-mediated peroxydisulfate activation as an example. <i>Environmental Science: Nano</i> , 2020 , 7, 1899-1911	7.1	36

125	Atomic-scale identification of influencing factors of sodium dendrite growth on different current collectors. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 10199-10205	13	9
124	FeO/graphene aerogels: A stable and efficient persulfate activator for the rapid degradation of malachite green. <i>Chemosphere</i> , 2020 , 251, 126402	8.4	34
123	Density functional theory calculations on single atomic catalysis: Ti-decorated Ti ₃ C ₂ O ₂ monolayer (MXene) for HCHO oxidation. <i>Chinese Journal of Catalysis</i> , 2020 , 41, 1633-1644	11.3	26
122	Degradation of bisphenol A by peroxymonosulfate activated with oxygen vacancy modified nano-NiO-ZnO composite oxides: A typical surface-bound radical system. <i>Chemical Engineering Journal</i> , 2020 , 400, 125915	14.7	52
121	Efficient photocatalytic overall water splitting on metal-free 1D SWCNT/2D ultrathin C ₃ N ₄ heterojunctions via novel non-resonant plasmonic effect. <i>Applied Catalysis B: Environmental</i> , 2020 , 278, 119312	21.8	46
120	Understanding of the Oxidation Behavior of Benzyl Alcohol by Peroxymonosulfate via Carbon Nanotubes Activation. <i>ACS Catalysis</i> , 2020 , 10, 3516-3525	13.1	76
119	Integrating nitrogen vacancies into crystalline graphitic carbon nitride for enhanced photocatalytic hydrogen production. <i>Chemical Communications</i> , 2020 , 56, 3179-3182	5.8	15
118	Single atom catalytic oxidation mechanism of formaldehyde on Al doped graphene at room temperature. <i>Chinese Chemical Letters</i> , 2020 , 31, 1966-1969	8.1	56
117	Activation of peroxydisulfate by natural titanomagnetite for atrazine removal via free radicals and high-valent iron-oxo species. <i>Chemical Engineering Journal</i> , 2020 , 387, 124165	14.7	47
116	Nitrogen-doped Carbon Nanospheres-Modified Graphitic Carbon Nitride with Outstanding Photocatalytic Activity. <i>Nano-Micro Letters</i> , 2020 , 12, 24	19.5	27
115	Core-shell magnetic Fe ₃ O ₄ @Zn/Co-ZIFs to activate peroxymonosulfate for highly efficient degradation of carbamazepine. <i>Applied Catalysis B: Environmental</i> , 2020 , 277, 119136	21.8	183
114	Nitrogen fixation on a single Mo atom embedded stanene monolayer: a computational study. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 13981-13988	3.6	15
113	Adsorption behaviors of HCN, SO ₂ , H ₂ S and NO molecules on graphitic carbon nitride with Mo atom decoration. <i>Applied Surface Science</i> , 2020 , 501, 144199	6.7	25
112	A promising blue phosphorene/CN van der Waals type-II heterojunction as a solar photocatalyst: a first-principles study. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 615-623	3.6	20
111	A novel single-atom catalyst for CO oxidation in humid environmental conditions: Ni-embedded divacancy graphene. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 287-295	13	28
110	Boosting the electrochemical performance of 3D composite lithium metal anodes through synergistic structure and interface engineering. <i>Energy Storage Materials</i> , 2020 , 26, 56-64	19.4	39
109	Recent progress in g-C ₃ N ₄ quantum dots: synthesis, properties and applications in photocatalytic degradation of organic pollutants. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 485-502	13	103
108	Insight into the Growth of Anisotropic CdSe Nanocrystals: Attachment of Intrinsically Different Building Blocks. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 27754-27762	3.8	2

107	Evaluation procedure of photocatalysts for VOCs degradation from the view of density functional theory calculations: g-C3N4 dots/graphene as an example. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 20363-20372	13	28
106	Ultrafine copper nanoclusters and single sites for Fenton-like reactions with high atom utilities. <i>Environmental Science: Nano</i> , 2020 , 7, 2595-2606	7.1	8
105	Graphitic Carbon Nitride Microtubes for Efficient Photocatalytic Overall Water Splitting: The Morphology Derived Electrical Field Enhancement. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 14386-14396	8.3	16
104	Dramatic enhancement effects of l-cysteine on the degradation of sulfadiazine in Fe/CaO system. <i>Journal of Hazardous Materials</i> , 2020 , 383, 121133	12.8	39
103	Novel carbon and defects co-modified g-CN for highly efficient photocatalytic degradation of bisphenol A under visible light. <i>Journal of Hazardous Materials</i> , 2020 , 384, 121323	12.8	57
102	Surface engineering of hollow carbon nitride microspheres for efficient photoredox catalysis. <i>Chemical Engineering Journal</i> , 2020 , 381, 122593	14.7	25
101	Peroxydisulfate activation by positively polarized carbocatalyst for enhanced removal of aqueous organic pollutants. <i>Water Research</i> , 2019 , 166, 115043	12.5	86
100	Temperature-Dependent Thermal Decomposition Pathway of Organic-Inorganic Halide Perovskite Materials. <i>Chemistry of Materials</i> , 2019 , 31, 8515-8522	9.6	40
99	Origins of boron catalysis in peroxymonosulfate activation and advanced oxidation. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 23904-23913	13	33
98	Interfacial-engineered cobalt@carbon hybrids for synergistically boosted evolution of sulfate radicals toward green oxidation. <i>Applied Catalysis B: Environmental</i> , 2019 , 256, 117795	21.8	62
97	Degradation of organic pollutants by peroxymonosulfate activated by MnO2 with different crystalline structures: Catalytic performances and mechanisms. <i>Chemical Engineering Journal</i> , 2019 , 374, 170-180	14.7	81
96	A Co-Fe Prussian blue analogue for efficient Fenton-like catalysis: the effect of high-spin cobalt. <i>Chemical Communications</i> , 2019 , 55, 7151-7154	5.8	34
95	Density functional theory investigation of the enhanced adsorption mechanism and potential catalytic activity for formaldehyde degradation on Al-decorated C2N monolayer. <i>Chinese Journal of Catalysis</i> , 2019 , 40, 664-672	11.3	27
94	Strain Effect on the Dissociation of Water Molecules on Silicene: Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 11591-11601	3.8	11
93	Integrating Biolayer Interferometry, Atomic Force Microscopy, and Density Functional Theory Calculation Studies on the Affinity between Humic Acid Fractions and Graphene Oxide. <i>Environmental Science & Technology</i> , 2019 , 53, 3773-3781	10.3	38
92	Enhanced adsorption mechanism of carbonyl-containing volatile organic compounds on Al-decorated porous graphene monolayer: A density functional theory calculation study. <i>Sustainable Materials and Technologies</i> , 2019 , 21, e00103	5.3	6
91	Boosting Fenton-Like Reactions via Single Atom Fe Catalysis. <i>Environmental Science & Technology</i> , 2019 , 53, 11391-11400	10.3	105
90	sp2/sp3 Framework from Diamond Nanocrystals: A Key Bridge of Carbonaceous Structure to Carbocatalysis. <i>ACS Catalysis</i> , 2019 , 9, 7494-7519	13.1	50

89	Phosphorous doped carbon nitride nanobelts for photodegradation of emerging contaminants and hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2019 , 257, 117931	21.8	105
88	Degradation of Cosmetic Microplastics via Functionalized Carbon Nanosprings. <i>Matter</i> , 2019 , 1, 745-758	12.7	140
87	Metal-Organic Framework Derived N/C Supported Austenite Nanoparticles as Efficient Oxygen Reduction Catalysts. <i>ChemNanoMat</i> , 2019 , 5, 525-530	3.5	7
86	Tuneable electronic and magnetic properties of hybrid silicene/silicane nanoribbons induced by nitrogen doping. <i>Thin Solid Films</i> , 2018 , 653, 126-135	2.2	6
85	Adsorption mechanisms of different volatile organic compounds onto pristine C2N and Al-doped C2N monolayer: A DFT investigation. <i>Applied Surface Science</i> , 2018 , 450, 484-491	6.7	55
84	Density functional theory study on the effects of oxygen groups on band gap tuning of graphitic carbon nitrides for possible photocatalytic applications. <i>Sustainable Materials and Technologies</i> , 2018 , 16, 12-22	5.3	24
83	A coupled technique to eliminate overall nonpolar and polar volatile organic compounds from paint production industry. <i>Journal of Cleaner Production</i> , 2018 , 185, 266-274	10.3	15
82	Ag ₂ MoO ₄ nanoparticles encapsulated in g-C ₃ N ₄ for sunlight photodegradation of pollutants. <i>Catalysis Today</i> , 2018 , 315, 205-212	5.3	44
81	Nanodiamonds in sp ² /sp ³ configuration for radical to nonradical oxidation: Core-shell layer dependence. <i>Applied Catalysis B: Environmental</i> , 2018 , 222, 176-181	21.8	157
80	First Principles Study on the CO Oxidation on Mn-Embedded Divacancy Graphene. <i>Frontiers in Chemistry</i> , 2018 , 6, 187	5	52
79	Degradation of aniline by electrochemical activation of peroxydisulfate at MWCNT cathode: The proofed concept of nonradical oxidation process. <i>Chemosphere</i> , 2018 , 206, 432-438	8.4	48
78	Tailoring the photocatalytic activity of WO ₃ by Nb-F codoping from first-principles calculations. <i>Chinese Journal of Physics</i> , 2018 , 56, 2285-2290	3.5	2
77	Enhanced stability and induced magnetic moments of silicene by substitutional doping of nickel. <i>Chemical Physics Letters</i> , 2018 , 706, 202-207	2.5	9
76	Shape-Controlled Synthesis of Metal-Organic Frameworks with Adjustable Fenton-Like Catalytic Activity. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 38051-38056	9.5	24
75	Density Functional Theory Study on the Ultrathin InAs/GaAs Core/Shell Nanowires for Solar Cell Applications. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 382, 032056	0.4	
74	Strain Controlled Ferromagnetic-Antiferromagnetic Transformation in Mn-Doped Silicene for Information Transformation Devices. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 1484-1488	6.4	43
73	Few-Layered Trigonal WS Nanosheet-Coated Graphite Foam as an Efficient Free-Standing Electrode for a Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 30591-30598	9.5	42
72	Enhanced and one-way absorptance of LiNiO ₂ thin films in one-dimensional photonic crystals. <i>Journal of Applied Physics</i> , 2017 , 122, 243104	2.5	1

71	Adsorption Mechanisms of Typical Carbonyl-Containing Volatile Organic Compounds on Anatase TiO ₂ (001) Surface: A DFT Investigation. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 13717-13722	3.8	35
70	The tuned absorptance in multilayer graphene-dielectric structures by intraband transition. <i>Journal of Applied Physics</i> , 2017 , 122, 133109	2.5	6
69	The dependence of the tunneling characteristic on the electronic energy bands and the carrier states of Graphene superlattice. <i>Materials Research Express</i> , 2016 , 3, 095005	1.7	
68	UV irradiation induced reversible graphene band gap behaviors. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 8459-8465	7.1	8
67	Coulomb screening effects on the optoelectronic far-infrared properties of spatially separated few-layer graphene. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2016 , 84, 324-329	3	1
66	Porous carbon nanocages encapsulated with tin nanoparticles for high performance sodium-ion batteries. <i>Energy Storage Materials</i> , 2016 , 5, 180-190	19.4	48
65	Electrospun cobalt embedded porous nitrogen doped carbon nanofibers as an efficient catalyst for water splitting. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 12818-12824	13	70
64	Defections induced hydrogenation of silicene: a density functional theory calculation study. <i>RSC Advances</i> , 2016 , 6, 69861-69868	3.7	8
63	Unveiling the active sites of graphene-catalyzed peroxymonosulfate activation. <i>Carbon</i> , 2016 , 107, 371-374	37.4	219
62	Strain modulating half-metallicity of semifluorinated GaN nanosheets. <i>Chemical Physics Letters</i> , 2016 , 653, 42-46	2.5	3
61	The optical conductivity in double and three layer graphene systems. <i>Solid State Communications</i> , 2016 , 227, 23-27	1.6	2
60	Occurrence of radical and nonradical pathways from carbocatalysts for aqueous and nonaqueous catalytic oxidation. <i>Applied Catalysis B: Environmental</i> , 2016 , 188, 98-105	21.8	386
59	Activation of peroxymonosulfate by carbonaceous oxygen groups: experimental and density functional theory calculations. <i>Applied Catalysis B: Environmental</i> , 2016 , 198, 295-302	21.8	192
58	Electric field modulated half-metallicity of semichlorinated GaN nanosheets. <i>Solid State Communications</i> , 2016 , 245, 5-10	1.6	5
57	Topotactic Transformation of Metal-Organic Frameworks to Graphene-Encapsulated Transition-Metal Nitrides as Efficient Fenton-like Catalysts. <i>ACS Nano</i> , 2016 , 10, 11532-11540	16.7	174
56	Surface-tailored nanodiamonds as excellent metal-free catalysts for organic oxidation. <i>Carbon</i> , 2016 , 103, 404-411	10.4	127
55	Fabrication of the protonated graphitic carbon nitride nanosheets as enhanced electrochemical sensing platforms for hydrogen peroxide and paracetamol detection. <i>Electrochimica Acta</i> , 2016 , 206, 259-269	6.7	50
54	NiMg dual-acceptor co-doping in CuCrO ₂ studied by first-principles calculations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2016 , 380, 3861-3865	2.3	8

53	MoS ₂ /Graphene Composite Anodes with Enhanced Performance for Sodium-Ion Batteries: The Role of the Two-Dimensional Heterointerface. <i>Advanced Functional Materials</i> , 2015 , 25, 1393-1403	15.6	577
52	Tuning electronic and magnetic properties of GaN nanosheets by surface modifications and nanosheet thickness. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 8692-8	3.6	23
51	Hydrogenation of silicene with tensile strains. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 2593-2602	7.1	31
50	Band gap narrowing in nitrogen-doped La ₂ Ti ₂ O ₇ predicted by density-functional theory calculations. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 8994-9000	3.6	31
49	Insights into N-doping in single-walled carbon nanotubes for enhanced activation of superoxides: a mechanistic study. <i>Chemical Communications</i> , 2015 , 51, 15249-52	5.8	195
48	Enhancement of the Stability of Fluorine Atoms on Defective Graphene and at Graphene/Fluorographene Interface. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 19659-65	9.5	35
47	The longitudinal optical conductivity in bilayer graphene and other two-dimensional systems. <i>Physica B: Condensed Matter</i> , 2015 , 457, 92-95	2.8	2
46	The anisotropic energy spectrum dependence of the optical conductivity in bilayer graphene. <i>Optics Communications</i> , 2015 , 338, 145-148	2	0
45	First Principles Study on the Electronic Structure and Interface Stability of Hybrid Silicene/Fluorosilicene Nanoribbons. <i>Scientific Reports</i> , 2015 , 5, 15734	4.9	11
44	Confinement of massless Dirac fermions in the graphene matrix induced by the B/N heteroatoms. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 5586-93	3.6	4
43	Density functional theory study on the electronic properties and stability of silicene/silicane nanoribbons. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 3954-3959	7.1	26
42	Zn vacancy induced ferromagnetism in K doped ZnO. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 11953-11958	19.58	34
41	Ferromagnetism and Crossover of Positive Magnetoresistance to Negative Magnetoresistance in Na-Doped ZnO. <i>Chemistry of Materials</i> , 2015 , 27, 1285-1291	9.6	31
40	Nitrogen-doped graphene for generation and evolution of reactive radicals by metal-free catalysis. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 4169-78	9.5	471
39	Microwave-assisted synthesis of mesoporous Co ₃ O ₄ nanoflakes for applications in lithium ion batteries and oxygen evolution reactions. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 3306-13	9.5	141
38	Strain effects on the electronic structure of ZnSnP ₂ via modified Becke-Johnson exchange potential. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2015 , 379, 427-430	2.3	9
37	Micelle-template synthesis of nitrogen-doped mesoporous graphene as an efficient metal-free electrocatalyst for hydrogen production. <i>Scientific Reports</i> , 2014 , 4, 7557	4.9	77
36	Reversible hydrophobic to hydrophilic transition in graphene via water splitting induced by UV irradiation. <i>Scientific Reports</i> , 2014 , 4, 6450	4.9	78

35	Density functional theory calculations on the CO catalytic oxidation on Al-embedded graphene. <i>RSC Advances</i> , 2014 , 4, 20290-20296	3.7	156
34	Electric field manipulated reversible hydrogen storage in graphene studied by DFT calculations. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014 , 211, 351-356	1.6	6
33	Doping indium in Bi ₂ O ₃ to tune the electronic structure and improve the photocatalytic activities: first-principles calculations and experimental investigation. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 23476-82	3.6	34
32	Electronic and magnetic properties of nitrogen-doped graphene nanoribbons with grain boundary. <i>RSC Advances</i> , 2014 , 4, 1503-1511	3.7	7
31	Electric field induced hydrogenation of silicene. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 16588-94	3.6	43
30	AA bilayer graphene on Si-terminated SiO ₂ under electric field. <i>Chinese Physics B</i> , 2014 , 23, 026802	1.2	1
29	Electrodeposition of Mesoporous Co ₃ O ₄ Nanosheets on Carbon Foam for High Performance Supercapacitors. <i>Journal of Nanomaterials</i> , 2014 , 2014, 1-5	3.2	4
28	Hydrogen storage in porous graphene with Al decoration. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 16244-16251	6.7	75
27	First principles study on the hydrophilic and conductive graphene doped with Al atoms. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 10859-65	3.6	38
26	Enhanced hydrogen sensing properties of graphene by introducing a mono-atom-vacancy. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 21016-22	3.6	24
25	Density functional theory calculations on graphene/SiO ₂ (0001) interface. <i>Nanoscale Research Letters</i> , 2012 , 7, 158	5	13
24	The electric field as a novel switch for uptake/release of hydrogen for storage in nitrogen doped graphene. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 1463-7	3.6	69
23	First-principles study of nitrogen-doped CuAlO ₂ . <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2012 , 376, 2613-2616	2.3	15
22	Reversible Transition of Graphene from Hydrophobic to Hydrophilic in the Presence of an Electric Field. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 19321-19326	3.8	42
21	Transformation from AA to AB-Stacked Bilayer Graphene on SiO ₂ under an Electric Field. <i>Chinese Physics Letters</i> , 2011 , 28, 087303	1.8	4
20	Temperature- and thickness-dependent elastic moduli of polymer thin films. <i>Nanoscale Research Letters</i> , 2011 , 6, 243	5	24
19	The Tunable Bandgap of AB-Stacked Bilayer Graphene on SiO ₂ with H ₂ O Molecule Adsorption. <i>Chinese Physics Letters</i> , 2011 , 28, 117302	1.8	4
18	Electric field: A catalyst for hydrogenation of graphene. <i>Applied Physics Letters</i> , 2010 , 96, 253106	3.4	84

17	Electric Field Activated Hydrogen Dissociative Adsorption to Nitrogen-Doped Graphene. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 14503-14509	3.8	99
16	Enhanced stability of hydrogen atoms at the graphene/graphane interface of nanoribbons. <i>Applied Physics Letters</i> , 2010 , 97, 233109	3.4	45
15	High-capacity hydrogen storage in Al-adsorbed graphene. <i>Physical Review B</i> , 2010 , 81,	3.3	199
14	Correlation of the applied electrical field and CO adsorption/desorption behavior on Al-doped graphene. <i>Solid State Communications</i> , 2010 , 150, 680-683	1.6	70
13	GROWTH MODE OF GRAPHENE LAYERS DEPOSITED ON SiO ₂ SUBSTRATE. <i>International Journal of Modern Physics B</i> , 2009 , 23, 3643-3648	1.1	
12	Molecular hydrogen storage in Al-doped bulk graphite with wider layer distances. <i>Solid State Communications</i> , 2009 , 149, 1363-1367	1.6	11
11	Al doped graphene: A promising material for hydrogen storage at room temperature. <i>Journal of Applied Physics</i> , 2009 , 105, 074307	2.5	183
10	Thermal stability of interaction between the CO molecules and the Al doped graphene. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 1683-7	3.6	49
9	The effects of electronic field on the atomic structure of the graphene/SiO ₂ interface. <i>Nanotechnology</i> , 2008 , 19, 275710	3.4	20
8	The determination of Young's modulus in noble metal nanowires. <i>Applied Physics Letters</i> , 2008 , 93, 081905	3.4	26
7	Lindemann-like size-independent glass-transition criterion for polymers. <i>Polymer</i> , 2008 , 49, 3578-3581	3.9	3
6	Enhancement of CO detection in Al doped graphene. <i>Chemical Physics Letters</i> , 2008 , 461, 276-279	2.5	365
5	Temperature and size effects on the amplitude of atomic vibration of Co nanocrystals embedded in Ag matrix. <i>Chemical Physics Letters</i> , 2007 , 439, 102-104	2.5	9
4	Size Effects on Miscibility and Glass Transition Temperature of PS/TMPC Blend Films: a Simulation and Thermodynamic Approach. <i>Key Engineering Materials</i> , 2007 , 334-335, 105-108	0.4	0
3	Size effects on the Kauzmann temperature and related thermodynamic parameters of Ag nanoparticles. <i>Nanotechnology</i> , 2007 , 18, 255706	3.4	18
2	Size effects on miscibility and glass transition temperature of binary polymer blend films. <i>Langmuir</i> , 2006 , 22, 1241-6	4	24
1	Flow line of density functional theory in heterogeneous persulfate-based advanced oxidation processes for pollutant degradation: A review. <i>Critical Reviews in Environmental Science and Technology</i> , 1-21	11.1	0