

Zhimin Ao

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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	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
159	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
158	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
157	Enhancement of CO detection in Al doped graphene. <i>Chemical Physics Letters</i> , 2008 , 461, 276-279	2.5	365
156	Unveiling the active sites of graphene-catalyzed peroxymonosulfate activation. <i>Carbon</i> , 2016 , 107, 371-378	10.4	219
155	High-capacity hydrogen storage in Al-adsorbed graphene. <i>Physical Review B</i> , 2010 , 81,	3.3	199
154	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
153	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
152	Al doped graphene: A promising material for hydrogen storage at room temperature. <i>Journal of Applied Physics</i> , 2009 , 105, 074307	2.5	183
151	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
150	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
149	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
148	Density functional theory calculations on the CO catalytic oxidation on Al-embedded graphene. <i>RSC Advances</i> , 2014 , 4, 20290-20296	3.7	156
147	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
146	Degradation of Cosmetic Microplastics via Functionalized Carbon Nanosprings. <i>Matter</i> , 2019 , 1, 745-758	12.7	140
145	Surface-tailored nanodiamonds as excellent metal-free catalysts for organic oxidation. <i>Carbon</i> , 2016 , 103, 404-411	10.4	127
144	Boosting Fenton-Like Reactions via Single Atom Fe Catalysis. <i>Environmental Science & Technology</i> , 2019 , 53, 11391-11400	10.3	105

143	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
142	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
141	Electric Field Activated Hydrogen Dissociative Adsorption to Nitrogen-Doped Graphene. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 14503-14509	3.8	99
140	Peroxydisulfate activation by positively polarized carbocatalyst for enhanced removal of aqueous organic pollutants. <i>Water Research</i> , 2019 , 166, 115043	12.5	86
139	Electric field: A catalyst for hydrogenation of graphene. <i>Applied Physics Letters</i> , 2010 , 96, 253106	3.4	84
138	Degradation of organic pollutants by peroxymonosulfate activated by MnO ₂ with different crystalline structures: Catalytic performances and mechanisms. <i>Chemical Engineering Journal</i> , 2019 , 374, 170-180	14.7	81
137	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
136	Reversible hydrophobic to hydrophilic transition in graphene via water splitting induced by UV irradiation. <i>Scientific Reports</i> , 2014 , 4, 6450	4.9	78
135	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
134	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
133	Hydrogen storage in porous graphene with Al decoration. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 16244-16251	6.7	75
132	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
131	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
130	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
129	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
128	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
127	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
126	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

125	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
124	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
123	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
122	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
121	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
120	First Principles Study on the CO Oxidation on Mn-Embedded Divacancy Graphene. <i>Frontiers in Chemistry</i> , 2018 , 6, 187	5	52
119	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
118	sp ² /sp ³ Framework from Diamond Nanocrystals: A Key Bridge of Carbonaceous Structure to Carbocatalysis. <i>ACS Catalysis</i> , 2019 , 9, 7494-7519	13.1	50
117	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
116	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
115	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
114	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
113	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
112	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
111	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
110	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
109	Near-infrared light to heat conversion in peroxydisulfate activation with MoS ₂ : A new photo-activation process for water treatment. <i>Water Research</i> , 2021 , 190, 116720	12.5	46
108	Enhanced stability of hydrogen atoms at the graphene/graphane interface of nanoribbons. <i>Applied Physics Letters</i> , 2010 , 97, 233109	3.4	45

107	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
106	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
105	Electric field induced hydrogenation of silicene. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 16588-94	3.6	43
104	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
103	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
102	Temperature-Dependent Thermal Decomposition Pathway of Organic-Inorganic Halide Perovskite Materials. <i>Chemistry of Materials</i> , 2019 , 31, 8515-8522	9.6	40
101	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
100	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
99	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
98	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
97	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
96	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
95	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
94	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
93	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
92	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
91	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
90	Zn vacancy induced ferromagnetism in K doped ZnO. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 11953-11958	19.5	34

89	Origins of boron catalysis in peroxymonosulfate activation and advanced oxidation. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 23904-23913	13	33
88	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}		32
87	Hydrogenation of silicene with tensile strains. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 2593-2602	7.1	31
86	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
85	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
84	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
83	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
82	Novel two-dimensional crystalline carbon nitrides beyond g-C ₃ N ₄ : structure and applications. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 17-33	13	29
81	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
80	Evaluation procedure of photocatalysts for VOCs degradation from the view of density functional theory calculations: g-C ₃ N ₄ dots/graphene as an example. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 20363-20372	13	28
79	Density functional theory investigation of the enhanced adsorption mechanism and potential catalytic activity for formaldehyde degradation on Al-decorated C ₂ N monolayer. <i>Chinese Journal of Catalysis</i> , 2019 , 40, 664-672	11.3	27
78	Nitrogen-doped Carbon Nanospheres-Modified Graphitic Carbon Nitride with Outstanding Photocatalytic Activity. <i>Nano-Micro Letters</i> , 2020 , 12, 24	19.5	27
77	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
76	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
75	The determination of Young's modulus in noble metal nanowires. <i>Applied Physics Letters</i> , 2008 , 93, 081905	9.4	26
74	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
73	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
72	Surface engineering of hollow carbon nitride microspheres for efficient photoredox catalysis. <i>Chemical Engineering Journal</i> , 2020 , 381, 122593	14.7	25

71	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
70	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
69	Temperature- and thickness-dependent elastic moduli of polymer thin films. <i>Nanoscale Research Letters</i> , 2011 , 6, 243	5	24
68	Size effects on miscibility and glass transition temperature of binary polymer blend films. <i>Langmuir</i> , 2006 , 22, 1241-6	4	24
67	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
66	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
65	Piezoelectric activation of peroxymonosulfate by MoS ₂ nanoflowers for the enhanced degradation of aqueous organic pollutants. <i>Environmental Science: Nano</i> , 2021 , 8, 784-794	7.1	21
64	The effects of electronic field on the atomic structure of the graphene/SiO ₂ interface. <i>Nanotechnology</i> , 2008 , 19, 275710	3.4	20
63	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
62	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
61	Size effects on the Kauzmann temperature and related thermodynamic parameters of Ag nanoparticles. <i>Nanotechnology</i> , 2007 , 18, 255706	3.4	18
60	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
59	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
58	Density functional theory investigation on selective adsorption of VOCs on borophene. <i>Chinese Chemical Letters</i> , 2021 , 32, 2803-2803	8.1	16
57	Integrating nitrogen vacancies into crystalline graphitic carbon nitride for enhanced photocatalytic hydrogen production. <i>Chemical Communications</i> , 2020 , 56, 3179-3182	5.8	15
56	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
55	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
54	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

53	Density functional theory calculations on graphene/SiO ₂ (0001) interface. <i>Nanoscale Research Letters</i> , 2012 , 7, 158	5	13
52	Abrading bulk metal into single atoms.. <i>Nature Nanotechnology</i> , 2022 ,	28.7	12
51	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
50	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
49	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
48	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
47	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
46	Molecular hydrogen storage in Al-doped bulk graphite with wider layer distances. <i>Solid State Communications</i> , 2009 , 149, 1363-1367	1.6	11
45	Protrudent Iron Single-Atom Accelerated Interfacial Piezoelectric Polarization for Self-Powered Water Motion Triggered Fenton-Like Reaction. <i>Small</i> , 2021 , e2105279	11	10
44	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
43	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
42	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
41	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
40	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
39	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
38	Investigation of the electronic structure of two-dimensional GaN/Zr ₂ CO ₂ hetero-junction: Type-II band alignment with tunable bandgap. <i>Applied Surface Science</i> , 2021 , 542, 148505	6.7	9
37	UV irradiation induced reversible graphene band gap behaviors. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 8459-8465	7.1	8
36	Defections induced hydrogenation of silicene: a density functional theory calculation study. <i>RSC Advances</i> , 2016 , 6, 69861-69868	3.7	8

35	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
34	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
33	Electronic and magnetic properties of nitrogen-doped graphene nanoribbons with grain boundary. <i>RSC Advances</i> , 2014 , 4, 1503-1511	3.7	7
32	Metal-Organic Framework Derived N/C Supported Austenite Nanoparticles as Efficient Oxygen Reduction Catalysts. <i>ChemNanoMat</i> , 2019 , 5, 525-530	3.5	7
31	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
30	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
29	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
28	The tuned absorptance in multilayer graphene-dielectric structures by intraband transition. <i>Journal of Applied Physics</i> , 2017 , 122, 133109	2.5	6
27	Electric field modulated half-metallicity of semichlorinated GaN nanosheets. <i>Solid State Communications</i> , 2016 , 245, 5-10	1.6	5
26	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
25	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
24	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
23	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
22	Strain modulating half-metallicity of semifluorinated GaN nanosheets. <i>Chemical Physics Letters</i> , 2016 , 653, 42-46	2.5	3
21	Lindemann-like size-independent glass-transition criterion for polymers. <i>Polymer</i> , 2008 , 49, 3578-3581	3.9	3
20	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
19	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
18	The optical conductivity in double and three layer graphene systems. <i>Solid State Communications</i> , 2016 , 227, 23-27	1.6	2

17	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
16	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
15	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
14	Photo-piezoelectric synergistic degradation of typical volatile organic compounds on BaTiO ₃ . <i>Chinese Chemical Letters</i> , 2021 ,	8.1	2
13	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
12	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
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