Zhimin Ao

List of Publications by Year
in descending order

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166	13,302	16437 64	23514 111
papers	citations	h-index	g-index

167	167	167	10979
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nitrogen-Doped Graphene for Generation and Evolution of Reactive Radicals by Metal-Free Catalysis. ACS Applied Materials & Interfaces, 2015, 7, 4169-4178.	4.0	677
2	MoS₂/Graphene Composite Anodes with Enhanced Performance for Sodiumâ€Ion Batteries: The Role of the Twoâ€Dimensional Heterointerface. Advanced Functional Materials, 2015, 25, 1393-1403.	7.8	657
3	Occurrence of radical and nonradical pathways from carbocatalysts for aqueous and nonaqueous catalytic oxidation. Applied Catalysis B: Environmental, 2016, 188, 98-105.	10.8	570
4	Core-shell magnetic Fe3O4@Zn/Co-ZIFs to activate peroxymonosulfate for highly efficient degradation of carbamazepine. Applied Catalysis B: Environmental, 2020, 277, 119136.	10.8	452
5	Enhancement of CO detection in Al doped graphene. Chemical Physics Letters, 2008, 461, 276-279.	1.2	415
6	Unveiling the active sites of graphene-catalyzed peroxymonosulfate activation. Carbon, 2016, 107, 371-378.	5.4	359
7	Degradation of Cosmetic Microplastics via Functionalized Carbon Nanosprings. Matter, 2019, 1, 745-758.	5.0	306
8	Activation of peroxymonosulfate by carbonaceous oxygen groups: experimental and density functional theory calculations. Applied Catalysis B: Environmental, 2016, 198, 295-302.	10.8	261
9	Insights into N-doping in single-walled carbon nanotubes for enhanced activation of superoxides: a mechanistic study. Chemical Communications, 2015, 51, 15249-15252.	2.2	259
10	Topotactic Transformation of Metalâ€“Organic Frameworks to Graphene-Encapsulated Transition-Metal Nitrides as Efficient Fenton-like Catalysts. ACS Nano, 2016, 10, 11532-11540.	7.3	253
11	Single-Atom Fe Catalyst Outperforms Its Homogeneous Counterpart for Activating Peroxymonosulfate to Achieve Effective Degradation of Organic Contaminants. Environmental Science & Technology, 2021, 55, 7034-7043.	4.6	244
12	High-capacity hydrogen storage in Al-adsorbed graphene. Physical Review B, 2010, 81, .	1.1	232
13	Nanodiamonds in sp 2 /sp 3 configuration for radical to nonradical oxidation: Core-shell layer dependence. Applied Catalysis B: Environmental, 2018, 222, 176-181.	10.8	214
14	Al doped graphene: A promising material for hydrogen storage at room temperature. Journal of Applied Physics, 2009, 105, .	1.1	212
15	Boosting Fenton-Like Reactions via Single Atom Fe Catalysis. Environmental Science & Technology, 2019, 53, 11391-11400.	4.6	210
16	Experimental and DFT insights into the visible-light driving metal-free C3N5 activated persulfate system for efficient water purification. Applied Catalysis B: Environmental, 2021, 289, 120023.	10.8	190
17	Density functional theory calculations on the CO catalytic oxidation on Al-embedded graphene. RSC Advances, 2014, 4, 20290-20296.	1.7	181
18	Understanding of the Oxidation Behavior of Benzyl Alcohol by Peroxymonosulfate via Carbon Nanotubes Activation. ACS Catalysis, 2020, 10, 3516-3525.	5.5	178

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19	Recent progress in g-C₃N₄ quantum dots: synthesis, properties and applications in photocatalytic degradation of organic pollutants. Journal of Materials Chemistry A, 2020, 8, 485-502.	5.2	173
20	Phosphorous doped carbon nitride nanobelts for photodegradation of emerging contaminants and hydrogen evolution. Applied Catalysis B: Environmental, 2019, 257, 117931.	10.8	170
21	Microwave-assisted Synthesis of Mesoporous Co₃O₄ Nanoflakes for Applications in Lithium Ion Batteries and Oxygen Evolution Reactions. ACS Applied Materials & Interfaces, 2015, 7, 3306-3313.	4.0	169
22	Surface-tailored nanodiamonds as excellent metal-free catalysts for organic oxidation. Carbon, 2016, 103, 404-411.	5.4	164
23	Insights into heterogeneous catalytic activation of peroxymonosulfate by natural chalcopyrite: pH-dependent radical generation, degradation pathway and mechanism. Chemical Engineering Journal, 2020, 397, 125387.	6.6	157
24	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. Journal of Hazardous Materials, 2020, 399, 123043.	6.5	152
25	Degradation of organic pollutants by peroxymonosulfate activated by MnO2 with different crystalline structures: Catalytic performances and mechanisms. Chemical Engineering Journal, 2019, 374, 170-180.	6.6	145
26	Peroxydisulfate activation by positively polarized carbocatalyst for enhanced removal of aqueous organic pollutants. Water Research, 2019, 166, 115043.	5.3	137
27	Insights into the Electron-Transfer Mechanism of Permanganate Activation by Graphite for Enhanced Oxidation of Sulfamethoxazole. Environmental Science & Technology, 2021, 55, 9189-9198.	4.6	131
28	Activation of peroxydisulfate by V-Fe concentrate ore for enhanced degradation of carbamazepine: Surface â‰¡V(III) and â‰¡V(IV) as electron donors promoted the regeneration of â‰¡Fe(II). Applied Catalysis B: Environmental, 2021, 282, 119559.	10.8	128
29	Nitrogen defects/boron dopants engineered tubular carbon nitride for efficient tetracycline hydrochloride photodegradation and hydrogen evolution. Applied Catalysis B: Environmental, 2022, 303, 120932.	10.8	127
30	Electric Field Activated Hydrogen Dissociative Adsorption to Nitrogen-Doped Graphene. Journal of Physical Chemistry C, 2010, 114, 14503-14509.	1.5	122
31	Interfacial-engineered cobalt@carbon hybrids for synergistically boosted evolution of sulfate radicals toward green oxidation. Applied Catalysis B: Environmental, 2019, 256, 117795.	10.8	117
32	Degradation of bisphenol A by peroxymonosulfate activated with oxygen vacancy modified nano-NiO-ZnO composite oxides: A typical surface-bound radical system. Chemical Engineering Journal, 2020, 400, 125915.	6.6	114
33	Metal-free black-red phosphorus as an efficient heterogeneous reductant to boost Fe3+/Fe2+ cycle for peroxymonosulfate activation. Water Research, 2021, 188, 116529.	5.3	114
34	Near-infrared light to heat conversion in peroxydisulfate activation with MoS2: A new photo-activation process for water treatment. Water Research, 2021, 190, 116720.	5.3	109
35	Novel carbon and defects co-modified g-C3N4 for highly efficient photocatalytic degradation of bisphenol A under visible light. Journal of Hazardous Materials, 2020, 384, 121323.	6.5	108
36	N-doped graphite encapsulated metal nanoparticles catalyst for removal of Bisphenol A via activation of peroxymonosulfate: A singlet oxygen-dominated oxidation process. Chemical Engineering Journal, 2021, 415, 128890.	6.6	108

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37	Reversible Hydrophobic to Hydrophilic Transition in Graphene via Water Splitting Induced by UV Irradiation. Scientific Reports, 2014, 4, 6450.	1.6	105
38	Metalâ€“organic frameworks derived C/TiO2 for visible light photocatalysis: Simple synthesis and contribution of carbon species. Journal of Hazardous Materials, 2021, 403, 124048.	6.5	105
39	Abrading bulk metal into single atoms. Nature Nanotechnology, 2022, 17, 403-407.	15.6	102
40	Mechanism Insight into enhanced photodegradation of pharmaceuticals and personal care products in natural water matrix over crystalline graphitic carbon nitrides. Water Research, 2020, 180, 115925.	5.3	101
41	Vanadium doped 1T MoS2 nanosheets for highly efficient electrocatalytic hydrogen evolution in both acidic and alkaline solutions. Chemical Engineering Journal, 2021, 409, 128158.	6.6	98
42	Hydrogen storage in porous graphene with Al decoration. International Journal of Hydrogen Energy, 2014, 39, 16244-16251.	3.8	93
43	Micelle-Template Synthesis of Nitrogen-Doped Mesoporous Graphene as an Efficient Metal-Free Electrocatalyst for Hydrogen Production. Scientific Reports, 2014, 4, 7557.	1.6	93
44	Novel two-dimensional crystalline carbon nitrides beyond g-C₃N₄: structure and applications. Journal of Materials Chemistry A, 2021, 9, 17-33.	5.2	92
45	Electric field: A catalyst for hydrogenation of graphene. Applied Physics Letters, 2010, 96, .	1.5	91
46	Single atom catalytic oxidation mechanism of formaldehyde on Al doped graphene at room temperature. Chinese Chemical Letters, 2020, 31, 1966-1969.	4.8	91
47	Adsorption mechanisms of different volatile organic compounds onto pristine C2N and Al-doped C2N monolayer: A DFT investigation. Applied Surface Science, 2018, 450, 484-491.	3.1	90
48	Efficient photocatalytic overall water splitting on metal-free 1D SWCNT/2D ultrathin C3N4 heterojunctions via novel non-resonant plasmonic effect. Applied Catalysis B: Environmental, 2020, 278, 119312.	10.8	89
49	Activation of peroxydisulfate by natural titanomagnetite for atrazine removal via free radicals and high-valent iron-oxo species. Chemical Engineering Journal, 2020, 387, 124165.	6.6	88
50	Electrospun cobalt embedded porous nitrogen doped carbon nanofibers as an efficient catalyst for water splitting. Journal of Materials Chemistry A, 2016, 4, 12818-12824.	5.2	87
51	sp²/sp³ Framework from Diamond Nanocrystals: A Key Bridge of Carbonaceous Structure to Carbocatalysis. ACS Catalysis, 2019, 9, 7494-7519.	5.5	86
52	Temperature-Dependent Thermal Decomposition Pathway of Organicâ€“Inorganic Halide Perovskite Materials. Chemistry of Materials, 2019, 31, 8515-8522.	3.2	83
53	Correlation of the applied electrical field and CO adsorption/desorption behavior on Al-doped graphene. Solid State Communications, 2010, 150, 680-683.	0.9	79
54	Theoretical exploration of VOCs removal mechanism by carbon nanotubes through persulfate-based advanced oxidation processes: Adsorption and catalytic oxidation. Journal of Hazardous Materials, 2021, 405, 124684.	6.5	78

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55	Dramatic enhancement effects of l-cysteine on the degradation of sulfadiazine in Fe3+/CaO2 system. Journal of Hazardous Materials, 2020, 383, 121133.	6.5	76
56	First Principles Study on the CO Oxidation on Mn-Embedded Divacancy Graphene. Frontiers in Chemistry, 2018, 6, 187.	1.8	75
57	A Coâ€“Fe Prussian blue analogue for efficient Fenton-like catalysis: the effect of high-spin cobalt. Chemical Communications, 2019, 55, 7151-7154.	2.2	74
58	Fe3O4/graphene aerogels: A stable and efficient persulfate activator for the rapid degradation of malachite green. Chemosphere, 2020, 251, 126402.	4.2	74
59	Integrating Biolayer Interferometry, Atomic Force Microscopy, and Density Functional Theory Calculation Studies on the Affinity between Humic Acid Fractions and Graphene Oxide. Environmental Science & Technology, 2019, 53, 3773-3781.	4.6	73
60	Boosting the electrochemical performance of 3D composite lithium metal anodes through synergistic structure and interface engineering. Energy Storage Materials, 2020, 26, 56-64.	9.5	73
61	Insights into the role of in-situ and ex-situ hydrogen peroxide for enhanced ferrate(VI) towards oxidation of organic contaminants. Water Research, 2021, 203, 117548.	5.3	72
62	The electric field as a novel switch for uptake/release of hydrogen for storage in nitrogen doped graphene. Physical Chemistry Chemical Physics, 2012, 14, 1463-1467.	1.3	71
63	Degradation of aniline by electrochemical activation of peroxydisulfate at MWCNT cathode: The proofed concept of nonradical oxidation process. Chemosphere, 2018, 206, 432-438.	4.2	68
64	Origins of boron catalysis in peroxymonosulfate activation and advanced oxidation. Journal of Materials Chemistry A, 2019, 7, 23904-23913.	5.2	67
65	Ag2MoO4 nanoparticles encapsulated in g-C3N4 for sunlight photodegradation of pollutants. Catalysis Today, 2018, 315, 205-212.	2.2	66
66	Fabrication of the protonated graphitic carbon nitride nanosheets as enhanced electrochemical sensing platforms for hydrogen peroxide and paracetamol detection. Electrochimica Acta, 2016, 206, 259-269.	2.6	63
67	Oily sludge derived carbons as peroxymonosulfate activators for removing aqueous organic pollutants: Performances and the key role of carbonyl groups in electron-transfer mechanism. Journal of Hazardous Materials, 2021, 414, 125552.	6.5	63
68	Porous carbon nanocages encapsulated with tin nanoparticles for high performance sodium-ion batteries. Energy Storage Materials, 2016, 5, 180-190.	9.5	61
69	Criteria of active sites in nonradical persulfate activation process from integrated experimental and theoretical investigations: boronâ€“nitrogen-co-doped nanocarbon-mediated peroxydisulfate activation as an example. Environmental Science: Nano, 2020, 7, 1899-1911.	2.2	60
70	Density functional theory calculations on single atomic catalysis: Ti-decorated Ti3C2O2 monolayer (MXene) for HCHO oxidation. Chinese Journal of Catalysis, 2020, 41, 1633-1644.	6.9	59
71	Protrudent Iron Singleâ€Atom Accelerated Interfacial Piezoelectric Polarization for Selfâ€Powered Water Motion Triggered Fentonâ€Like Reaction. Small, 2022, 18, e2105279.	5.2	58
72	Piezoelectric activation of peroxymonosulfate by MoS₂ nanoflowers for the enhanced degradation of aqueous organic pollutants. Environmental Science: Nano, 2021, 8, 784-794.	2.2	57

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73	Thermal stability of interaction between the CO molecules and the Al doped graphene. Physical Chemistry Chemical Physics, 2009, 11, 1683.	1.3	56
74	Few-Layered Trigonal WS₂ Nanosheet-Coated Graphite Foam as an Efficient Free-Standing Electrode for a Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 30591-30598.	4.0	56
75	Strain Controlled Ferromagnetic-Antiferromagnetic Transformation in Mn-Doped Silicene for Information Transformation Devices. Journal of Physical Chemistry Letters, 2017, 8, 1484-1488.	2.1	55
76	Evaluation procedure of photocatalysts for VOCs degradation from the view of density functional theory calculations: g-C₃N₄ dots/graphene as an example. Journal of Materials Chemistry A, 2020, 8, 20363-20372.	5.2	54
77	Electric field induced hydrogenation of silicene. Physical Chemistry Chemical Physics, 2014, 16, 16588-16594.	1.3	51
78	Surface engineering of hollow carbon nitride microspheres for efficient photoredox catalysis. Chemical Engineering Journal, 2020, 381, 122593.	6.6	49
79	Reversible Transition of Graphene from Hydrophobic to Hydrophilic in the Presence of an Electric Field. Journal of Physical Chemistry C, 2012, 116, 19321-19326.	1.5	48
80	Shape-Controlled Synthesis of Metalâ€“Organic Frameworks with Adjustable Fenton-Like Catalytic Activity. ACS Applied Materials & Interfaces, 2018, 10, 38051-38056.	4.0	48
81	First-Principles Evaluation of Volatile Organic Compounds Degradation in Z-Scheme Photocatalytic Systems: MXene and Graphitic-CN Heterostructures. ACS Applied Materials & Interfaces, 2021, 13, 23843-23852.	4.0	47
82	Encapsulation of Platinum by Titania under an Oxidative Atmosphere: Contrary to Classical Strong Metalâ€“Support Interactions. ACS Catalysis, 2021, 11, 6081-6090.	5.5	47
83	Enhanced stability of hydrogen atoms at the graphene/graphane interface of nanoribbons. Applied Physics Letters, 2010, 97, .	1.5	46
84	Density functional theory investigation on selective adsorption of VOCs on borophene. Chinese Chemical Letters, 2021, 32, 2803-2806.	4.8	46
85	Adsorption Mechanisms of Typical Carbonyl-Containing Volatile Organic Compounds on Anatase TiO₂ (001) Surface: A DFT Investigation. Journal of Physical Chemistry C, 2017, 121, 13717-13722.	1.5	46
86	A novel single-atom catalyst for CO oxidation in humid environmental conditions: Ni-embedded divacancy graphene. Journal of Materials Chemistry A, 2020, 8, 287-295.	5.2	45
87	Density functional theory investigation of the enhanced adsorption mechanism and potential catalytic activity for formaldehyde degradation on Al-decorated C2N monolayer. Chinese Journal of Catalysis, 2019, 40, 664-672.	6.9	44
88	Zn vacancy induced ferromagnetism in K doped ZnO. Journal of Materials Chemistry C, 2015, 3, 11953-11958.	2.7	43
89	A promising blue phosphorene/C₂N van der Waals type-II heterojunction as a solar photocatalyst: a first-principles study. Physical Chemistry Chemical Physics, 2020, 22, 615-623.	1.3	43
90	Nitrogen-doped Carbon Nanospheres-Modified Graphitic Carbon Nitride with Outstanding Photocatalytic Activity. Nano-Micro Letters, 2020, 12, 24.	14.4	43

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91	First principles study on the hydrophilic and conductive graphene doped with Al atoms. Physical Chemistry Chemical Physics, 2013, 15, 10859.	1.3	42
92	Photocatalytic H2O2 production using Ti3C2 MXene as a non-noble metal cocatalyst. Applied Catalysis A: General, 2021, 618, 118127.	2.2	42
93	Doping indium in Î²-Bi₂O₃to tune the electronic structure and improve the photocatalytic activities: first-principles calculations and experimental investigation. Physical Chemistry Chemical Physics, 2014, 16, 23476-23482.	1.3	40
94	Enhancement of the Stability of Fluorine Atoms on Defective Graphene and at Graphene/Fluorographene Interface. ACS Applied Materials & Interfaces, 2015, 7, 19659-19665.	4.0	39
95	Graphitic Carbon Nitride Microtubes for Efficient Photocatalytic Overall Water Splitting: The Morphology Derived Electrical Field Enhancement. ACS Sustainable Chemistry and Engineering, 2020, 8, 14386-14396.	3.2	39
96	Recent progress in single-atom alloys: Synthesis, properties, and applications in environmental catalysis. Journal of Hazardous Materials, 2022, 424, 127427.	6.5	39
97	Adsorption behaviors of HCN, SO2, H2S and NO molecules on graphitic carbon nitride with Mo atom decoration. Applied Surface Science, 2020, 501, 144199.	3.1	38
98	Ferromagnetism and Crossover of Positive Magnetoresistance to Negative Magnetoresistance in Na-Doped ZnO. Chemistry of Materials, 2015, 27, 1285-1291.	3.2	37
99	Band gap narrowing in nitrogen-doped La₂Ti₂O₇ predicted by density-functional theory calculations. Physical Chemistry Chemical Physics, 2015, 17, 8994-9000.	1.3	37
100	Hydrogenation of silicene with tensile strains. Journal of Materials Chemistry C, 2015, 3, 2593-2602.	2.7	35
101	Density functional theory study on the effects of oxygen groups on band gap tuning of graphitic carbon nitrides for possible photocatalytic applications. Sustainable Materials and Technologies, 2018, 16, 12-22.	1.7	33
102	Nitrogen fixation on a single Mo atom embedded stanene monolayer: a computational study. Physical Chemistry Chemical Physics, 2020, 22, 13981-13988.	1.3	33
103	A versatile route to fabricate Metal/UiO-66 (MetalÂ=ÂPt, Pd, Ru) with high activity and stability for the catalytic oxidation of various volatile organic compounds. Chemical Engineering Journal, 2022, 448, 136900.	6.6	33
104	Integrating nitrogen vacancies into crystalline graphitic carbon nitride for enhanced photocatalytic hydrogen production. Chemical Communications, 2020, 56, 3179-3182.	2.2	32
105	Temperature- and thickness-dependent elastic moduli of polymer thin films. Nanoscale Research Letters, 2011, 6, 243.	3.1	31
106	Enhanced hydrogen sensing properties of graphene by introducing a mono-atom-vacancy. Physical Chemistry Chemical Physics, 2013, 15, 21016.	1.3	30
107	Nitrogen-rich layered carbon for adsorption of typical volatile organic compounds and low-temperature thermal regeneration. Journal of Hazardous Materials, 2022, 424, 127348.	6.5	30
108	Synchronous removal of emulsions and soluble organic contaminants via a microalgae-based membrane system: performance and mechanisms. Water Research, 2021, 206, 117741.	5.3	30

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109	The determination of Youngâ€™s modulus in noble metal nanowires. Applied Physics Letters, 2008, 93, 081905.	1.5	29
110	Density functional theory study on the electronic properties and stability of silicene/silicane nanoribbons. Journal of Materials Chemistry C, 2015, 3, 3954-3959.	2.7	28
111	Investigation of the electronic structure of two-dimensional GaN/Zr2CO2 hetero-junction: Type-II band alignment with tunable bandgap. Applied Surface Science, 2021, 542, 148505.	3.1	28
112	Size Effects on Miscibility and Glass Transition Temperature of Binary Polymer Blend Films. Langmuir, 2006, 22, 1241-1246.	1.6	26
113	Tuning electronic and magnetic properties of GaN nanosheets by surface modifications and nanosheet thickness. Physical Chemistry Chemical Physics, 2015, 17, 8692-8698.	1.3	26
114	A coupled technique to eliminate overall nonpolar and polar volatile organic compounds from paint production industry. Journal of Cleaner Production, 2018, 185, 266-274.	4.6	25
115	Ultrafine copper nanoclusters and single sites for Fenton-like reactions with high atom utilities. Environmental Science: Nano, 2020, 7, 2595-2606.	2.2	24
116	The effects of electronic field on the atomic structure of the graphene/Î±-SiO2 interface. Nanotechnology, 2008, 19, 275710.	1.3	23
117	Understanding the Importance of Periodate Species in the pH-Dependent Degradation of Organic Contaminants in the H₂O₂/Periodate Process. Environmental Science & Technology, 2022, 56, 10372-10380.	4.6	23
118	Size effects on the Kauzmann temperature and related thermodynamic parameters of Ag nanoparticles. Nanotechnology, 2007, 18, 255706.	1.3	20
119	Atomic-scale identification of influencing factors of sodium dendrite growth on different current collectors. Journal of Materials Chemistry A, 2020, 8, 10199-10205.	5.2	20
120	Photo-piezoelectric synergistic degradation of typical volatile organic compounds on BaTiO3. Chinese Chemical Letters, 2022, 33, 410-414.	4.8	20
121	Density functional theory calculations on graphene/Î±-SiO2(0001) interface. Nanoscale Research Letters, 2012, 7, 158.	3.1	19
122	Strain Effect on the Dissociation of Water Molecules on Silicene: Density Functional Theory Study. Journal of Physical Chemistry C, 2019, 123, 11591-11601.	1.5	17
123	First-principles study of nitrogen-doped CuAlO2. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 2613-2616.	0.9	16
124	New insights into the single-atom-decorated Zr2CO2 (MXene) as an efficient catalyst for CO oxidation in incomplete combustion gas. Applied Surface Science, 2022, 575, 151777.	3.1	16
125	Molecular hydrogen storage in Al-doped bulk graphite with wider layer distances. Solid State Communications, 2009, 149, 1363-1367.	0.9	15
126	Excellent sulfur and water resistance for CO oxidation on Pt single-atom-catalyst supported by defective graphene: The effect of vacancy type. Applied Surface Science, 2021, 566, 150624.	3.1	15

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127	Flow line of density functional theory in heterogeneous persulfate-based advanced oxidation processes for pollutant degradation: A review. Critical Reviews in Environmental Science and Technology, 2023, 53, 483-503.	6.6	15
128	UV irradiation induced reversible graphene band gap behaviors. Journal of Materials Chemistry C, 2016, 4, 8459-8465.	2.7	13
129	Enhanced stability and induced magnetic moments of silicene by substitutional doping of nickel. Chemical Physics Letters, 2018, 706, 202-207.	1.2	13
130	Temperature and size effects on the amplitude of atomic vibration of Co nanocrystals embedded in Ag matrix. Chemical Physics Letters, 2007, 439, 102-104.	1.2	11
131	First Principles Study on the Electronic Structure and Interface Stability of Hybrid Silicene/Fluorosilicene Nanoribbons. Scientific Reports, 2015, 5, 15734.	1.6	11
132	Understanding the structureâ€“activity relationships of different double atom catalysts from density functional calculations: three general rules for efficient CO oxidation. Journal of Materials Chemistry A, 2022, 10, 9025-9036.	5.2	11
133	Hydrogen generation from photocatalytic treatment of wastewater containing pharmaceuticals and personal care products by Oxygen-doped crystalline carbon nitride. Separation and Purification Technology, 2022, 296, 121425.	3.9	11
134	Nâ€“Mg dual-acceptor co-doping in CuCrO2 studied by first-principles calculations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 3861-3865.	0.9	10
135	Strain effects on the electronic structure of ZnSnP2 via modified Beckeâ€“Johnson exchange potential. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 427-430.	0.9	9
136	Metalâ€Organic Framework Derived N/C Supported Austenite Nanoparticles as Efficient Oxygen Reduction Catalysts. ChemNanoMat, 2019, 5, 525-530.	1.5	9
137	Electrodeposition of Mesoporous Co₃O₄Nanosheets on Carbon Foam for High Performance Supercapacitors. Journal of Nanomaterials, 2014, 2014, 1-5.	1.5	8
138	Electric field manipulated reversible hydrogen storage in graphene studied by <scp>DFT</scp> calculations. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 351-356.	0.8	8
139	Defections induced hydrogenation of silicene: a density functional theory calculation study. RSC Advances, 2016, 6, 69861-69868.	1.7	8
140	Tuneable electronic and magnetic properties of hybrid silicene/silicane nanoribbons induced by nitrogen doping. Thin Solid Films, 2018, 653, 126-135.	0.8	8
141	Electronic and magnetic properties of nitrogen-doped graphene nanoribbons with grain boundary. RSC Advances, 2014, 4, 1503-1511.	1.7	7
142	Enhanced adsorption mechanism of carbonyl-containing volatile organic compounds on Al-decorated porous graphene monolayer: A density functional theory calculation study. Sustainable Materials and Technologies, 2019, 21, e00103.	1.7	7
143	The tuned absorptance in multilayer graphene-dielectric structures by intraband transition. Journal of Applied Physics, 2017, 122, .	1.1	7
144	Transformation from AA to AB-Stacked Bilayer Graphene on Î±-SiO ₂ under an Electric Field. Chinese Physics Letters, 2011, 28, 087303.	1.3	6

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145	Electric field modulated half-metallicity of semichlorinated GaN nanosheets. Solid State Communications, 2016, 245, 5-10.	0.9	6
146	The Tunable Bandgap of AB-Stacked Bilayer Graphene on SiO 2 with H 2 O Molecule Adsorption. Chinese Physics Letters, 2011, 28, 117302.	1.3	4
147	Confinement of massless Dirac fermions in the graphene matrix induced by the B/N heteroatoms. Physical Chemistry Chemical Physics, 2015, 17, 5586-5593.	1.3	4
148	Strain modulating half-metallicity of semifluorinated GaN nanosheets. Chemical Physics Letters, 2016, 653, 42-46.	1.2	4
149	Editorial: Environmental Catalysis and the Corresponding Catalytic Mechanism. Frontiers in Chemistry, 2019, 7, 75.	1.8	4
150	Density functional theory study on the enhanced adsorption mechanism of gaseous pollutants on Al-doped Ti2CO2 monolayer. Sustainable Materials and Technologies, 2021, 29, e00294.	1.7	4
151	DFT Study of the Decomposition Mechanism of H₂S on V-decorated Ti₂CO₂ Single-Atom Catalyst. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2020, .	2.2	4
152	Strain boosts CO oxidation on Ni single-atom-catalyst supported by defective graphene. Chinese Chemical Letters, 2023, 34, 107395.	4.8	4
153	Lindemann-like size-independent glass-transition criterion for polymers. Polymer, 2008, 49, 3578-3581.	1.8	3
154	AA bilayer graphene on Si-terminated SiO 2 under electric field. Chinese Physics B, 2014, 23, 026802.	0.7	3
155	The optical conductivity in double and three layer graphene systems. Solid State Communications, 2016, 227, 23-27.	0.9	3
156	Enhanced and one-way absorptance of LiNiO2 thin films in one-dimensional photonic crystals. Journal of Applied Physics, 2017, 122, .	1.1	3
157	The longitudinal optical conductivity in bilayer graphene and other two-dimensional systems. Physica B: Condensed Matter, 2015, 457, 92-95.	1.3	2
158	Tailoring the photocatalytic activity of WO3 by Nb-F codoping from first-principles calculations. Chinese Journal of Physics, 2018, 56, 2285-2290.	2.0	2
159	Insight into the Growth of Anisotropic CdSe Nanocrystals: Attachment of Intrinsically Different Building Blocks. Journal of Physical Chemistry C, 2020, 124, 27754-27762.	1.5	2
160	Size Effects on Miscibility and Glass Transition Temperature of PS/TMPC Blend Films: a Simulation and Thermodynamic Approach. Key Engineering Materials, 2007, 334-335, 105-108.	0.4	1
161	The anisotropic energy spectrum dependence of the optical conductivity in bilayer graphene. Optics Communications, 2015, 338, 145-148.	1.0	1
162	Coulomb screening effects on the optoelectronic far-infrared properties of spatially separated few-layer graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 84, 324-329.	1.3	1

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163	Transition metal decorated bismuthene for ammonia synthesis: A density functional theory study. Chinese Chemical Letters, 2023, 34, 107659.	4.8	1
164	GROWTH MODE OF GRAPHENE LAYERS DEPOSITED ON SiO₂ SUBSTRATE. International Journal of Modern Physics B, 2009, 23, 3643-3648.	1.0	0
165	The dependence of the tunneling characteristic on the electronic energy bands and the carrierâ€™s states of Graphene superlattice. Materials Research Express, 2016, 3, 095005.	0.8	0
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