Ying Dai

List of Publications by Citations

511 papers	28,921 citations	88 h-index	151 g-index
535 ext. papers	33,684 ext. citations	7.4 avg, IF	7.58 L-index

#	Paper	IF	Citations
511	Ag@AgCl: a highly efficient and stable photocatalyst active under visible light. *Angewandte Chemie - International Edition*, **2008**, 47, 7931-3	16.4	1229
510	Oxygen vacancy induced band-gap narrowing and enhanced visible light photocatalytic activity of ZnO. *ACS Applied Materials & Interfaces*, **2012**, 4, 4024-30	9.5	997
509	Engineering BiOX (X = Cl, Br, I) nanostructures for highly efficient photocatalytic applications. *Nanoscale*, **2014**, 6, 2009-26	7.7	861
508	Plasmonic photocatalysts: harvesting visible light with noble metal nanoparticles. *Physical Chemistry Chemical Physics*, **2012**, 14, 9813-25	3.6	660
507	Evidence of the existence of magnetism in pristine VX□monolayers (X = S, Se) and their strain-induced tunable magnetic properties. *ACS Nano*, **2012**, 6, 1695-701	16.7	590
506	Highly efficient visible-light plasmonic photocatalyst Ag@AgBr. *Chemistry - A European Journal*, **2009**, 15, 1821-4	4.8	508
505	One-step synthesis of the nanostructured AgI/BiOI composites with highly enhanced visible-light photocatalytic performances. *Langmuir*, **2010**, 26, 6618-24	4	503
504	Facile in situ synthesis of visible-light plasmonic photocatalysts M@TiO2 (M = Au, Pt, Ag) and evaluation of their photocatalytic oxidation of benzene to phenol. *Journal of Materials Chemistry*, **2011**, 21, 9079		494
503	In-Situ-Reduced Synthesis of Ti□+ Self-Doped TiO⁄g-C□N□Heterojunctions with High Photocatalytic Performance under LED Light Irradiation. *ACS Applied Materials & Interfaces*, **2015**, 7, 9023-30	9.5	422
502	In situ ion exchange synthesis of the novel Ag/AgBr/BiOBr hybrid with highly efficient decontamination of pollutants. *Chemical Communications*, **2011**, 47, 7054-6	5.8	407
501	Energy transfer in plasmonic photocatalytic composites. *Light: Science and Applications*, **2016**, 5, e16017	16.7	379
500	Synthesis of highly efficient Ag@AgCl plasmonic photocatalysts with various structures. *Chemistry - A European Journal*, **2010**, 16, 538-44	4.8	366
499	Electronic and magnetic properties of perfect, vacancy-doped, and nonmetal adsorbed MoSe2, MoTe2 and WS2 monolayers. *Physical Chemistry Chemical Physics*, **2011**, 13, 15546-53	3.6	349
498	Crystal Faces of Cu2O and Their Stabilities in Photocatalytic Reactions. *Journal of Physical Chemistry C*, **2009**, 113, 14448-14453	3.8	322
497	Graphene adhesion on MoS□monolayer: an ab initio study. *Nanoscale*, **2011**, 3, 3883-7	7.7	315
496	Ag/AgBr/WO(3).H(2)O: visible-light photocatalyst for bacteria destruction. *Inorganic Chemistry*, **2009**, 48, 10697-702	5.1	288
495	Hydrogenated titania: synergy of surface modification and morphology improvement for enhanced photocatalytic activity. *Chemical Communications*, **2012**, 48, 5733-5	5.8	262

494	An anion exchange approach to Bi2WO6 hollow microspheres with efficient visible light photocatalytic reduction of CO2 to methanol. *Chemical Communications*, **2012**, 48, 9729-31	5.8	248
493	Ab Initio Prediction and Characterization of Mo2C Monolayer as Anodes for Lithium-Ion and Sodium-Ion Batteries. *Journal of Physical Chemistry Letters*, **2016**, 7, 937-43	6.4	245
492	A controlled anion exchange strategy to synthesize Bi2S3 nanocrystals/BiOCl hybrid architectures with efficient visible light photoactivity. *Chemical Communications*, **2012**, 48, 97-9	5.8	240
491	Synergistic effect of crystal and electronic structures on the visible-light-driven photocatalytic performances of Bi(2)O(3) polymorphs. *Physical Chemistry Chemical Physics*, **2010**, 12, 15468-75	3.6	231
490	Selective ethanol formation from photocatalytic reduction of carbon dioxide in water with BiVO4 photocatalyst. *Catalysis Communications*, **2009**, 11, 210-213	3.2	222
489	Chemical adsorption enhanced CO2 capture and photoreduction over a copper porphyrin based metal organic framework. *ACS Applied Materials & Interfaces*, **2013**, 5, 7654-8	9.5	219
488	Understanding Photocatalytic Activity of S- and P-Doped TiO2 under Visible Light from First-Principles. *Journal of Physical Chemistry C*, **2007**, 111, 18985-18994	3.8	214
487	Composite of CH NH PbI with Reduced Graphene Oxide as a Highly Efficient and Stable Visible-Light Photocatalyst for Hydrogen Evolution in Aqueous HI Solution. *Advanced Materials*, **2018**, 30, 1704342	24	213
486	Electronic and Optical Properties of Pristine and Vertical and Lateral Heterostructures of Janus MoSSe and WSSe. *Journal of Physical Chemistry Letters*, **2017**, 8, 5959-5965	6.4	202
485	Study of the Nitrogen Concentration Influence on N-Doped TiO2 Anatase from First-Principles Calculations. *Journal of Physical Chemistry C*, **2007**, 111, 12086-12090	3.8	202
484	Green synthetic approach for Ti3+ self-doped TiO(2-x) nanoparticles with efficient visible light photocatalytic activity. *Nanoscale*, **2013**, 5, 1870-5	7.7	194
483	Highly Photocatalytic ZnO/In2O3 Heteronanostructures Synthesized by a Coprecipitation Method. *Journal of Physical Chemistry C*, **2009**, 113, 4612-4617	3.8	191
482	First-Principles Characterization of Bi-based Photocatalysts: Bi12TiO20, Bi2Ti2O7, and Bi4Ti3O12. *Journal of Physical Chemistry C*, **2009**, 113, 5658-5663	3.8	189
481	Cu2(OH)PO4, a near-infrared-activated photocatalyst. *Angewandte Chemie - International Edition*, **2013**, 52, 4810-3	16.4	187
480	Highly efficient visible light plasmonic photocatalyst Ag@Ag(Br,I). *Chemistry - A European Journal*, **2010**, 16, 10042-7	4.8	184
479	Composition dependence of the photocatalytic activities of BiOCl(1-x)Br(x) solid solutions under visible light. *Chemistry - A European Journal*, **2011**, 17, 9342-9	4.8	171
478	Facile template-free synthesis of Bi(2)O(2)CO(3) hierarchical microflowers and their associated photocatalytic activity. *ChemPhysChem*, **2010**, 11, 2167-73	3.2	169
477	One-pot miniemulsion-mediated route to BiOBr hollow microspheres with highly efficient photocatalytic activity. *Chemistry - A European Journal*, **2011**, 17, 8039-43	4.8	159

476	Density Functional Characterization of the Visible-Light Absorption in Substitutional C-Anion- and C-Cation-Doped TiO2. *Journal of Physical Chemistry C*, **2009**, 113, 2624-2629	3.8	158
475	Progress on extending the light absorption spectra of photocatalysts. *Physical Chemistry Chemical Physics*, **2014**, 16, 2758-74	3.6	154
474	Preparation, electronic structure, and photocatalytic properties of Bi2O2CO3 nanosheet. *Applied Surface Science*, **2010**, 257, 172-175	6.7	151
473	Density Functional Characterization of the Band Edges, the Band Gap States, and the Preferred Doping Sites of Halogen-Doped TiO2. *Chemistry of Materials*, **2008**, 20, 6528-6534	9.6	151
472	Hydrogen Doped Metal Oxide Semiconductors with Exceptional and Tunable Localized Surface Plasmon Resonances. *Journal of the American Chemical Society*, **2016**, 138, 9316-24	16.4	151
471	Two-dimensional germanium monochalcogenides for photocatalytic water splitting with high carrier mobility. *Applied Catalysis B: Environmental*, **2017**, 217, 275-284	21.8	146
470	Tunable electronic and dielectric behavior of GaS and GaSe monolayers. *Physical Chemistry Chemical Physics*, **2013**, 15, 7098-105	3.6	145
469	Robust two-dimensional topological insulators in methyl-functionalized bismuth, antimony, and lead bilayer films. *Nano Letters*, **2015**, 15, 1083-9	11.5	145
468	Metallic zinc- assisted synthesis of Ti3+ self-doped TiO2 with tunable phase composition and visible-light photocatalytic activity. *Chemical Communications*, **2013**, 49, 868-70	5.8	143
467	Two-dimensional Janus PtSSe for photocatalytic water splitting under the visible or infrared light. *Journal of Materials Chemistry A*, **2019**, 7, 603-610	13	140
466	Metal-Free B@-CN: Visible/Infrared Light-Driven Single Atom Photocatalyst Enables Spontaneous Dinitrogen Reduction to Ammonia. *Nano Letters*, **2019**, 19, 6391-6399	11.5	138
465	Highly efficient photocatalyst: TiO(2) microspheres produced from TiO(2) nanosheets with a high percentage of reactive {001} facets. *Chemistry - A European Journal*, **2009**, 15, 12576-9	4.8	138
464	Synthesis and characterization of ZnS with controlled amount of S vacancies for photocatalytic H2 production under visible light. *Scientific Reports*, **2015**, 5, 8544	4.9	137
463	Theoretical study of N-doped TiO2 rutile crystals. *Journal of Physical Chemistry B*, **2006**, 110, 24011-4	3.4	132
462	Two-dimensional III2-VI3 materials: Promising photocatalysts for overall water splitting under infrared light spectrum. *Nano Energy*, **2018**, 51, 533-538	17.1	131
461	Controlled synthesis of Ag2O microcrystals with facet-dependent photocatalytic activities. *Journal of Materials Chemistry*, **2012**, 22, 21189		129
460	Density-functional characterization of antiferromagnetism in oxygen-deficient anatase and rutile TiO2. *Physical Review B*, **2010**, 81,	3.3	129
459	Ni Coordination to an Al-Based Metal-Organic Framework Made from 2-Aminoterephthalate for Photocatalytic Overall Water Splitting. *Angewandte Chemie - International Edition*, **2017**, 56, 3036-3040	16.4	128

458	Efficient separation of photogenerated electron-hole pairs by the combination of a heterolayered structure and internal polar field in pyroelectric BiOIO3 nanoplates. *Chemistry - A European Journal*, **2013**, 19, 14777-80	4.8	125
457	On the possibility of ferromagnetism in carbon-doped anatase TiO2. *Applied Physics Letters*, **2008**, 93, 132507	3.4	124
456	Graphene/g-C3N4 bilayer: considerable band gap opening and effective band structure engineering. *Physical Chemistry Chemical Physics*, **2014**, 16, 4230-5	3.6	119
455	Ag@AgCl: A Highly Efficient and Stable Photocatalyst Active under Visible Light. *Angewandte Chemie*, **2008**, 120, 8049-8051	3.6	118
454	Visible-light-driven photocatalytic S- and C- codoped meso/nanoporous TiO2. *Energy and Environmental Science*, **2010**, 3, 1128	35.4	117
453	Adsorption of gaseous ethylene via induced polarization on plasmonic photocatalyst Ag/AgCl/TiO2 and subsequent photodegradation. *Applied Catalysis B: Environmental*, **2018**, 220, 356-361	21.8	115
452	Synthesis of synergetic phosphorus and cyano groups (C N) modified g-C3N4 for enhanced photocatalytic H2 production and CO2 reduction under visible light irradiation. *Applied Catalysis B: Environmental*, **2018**, 232, 521-530	21.8	114
451	Highly efficient and noble metal-free NiS modified MnxCd1-xS solid solutions with enhanced photocatalytic activity for hydrogen evolution under visible light irradiation. *Applied Catalysis B: Environmental*, **2017**, 203, 282-288	21.8	114
450	Valley Polarization in Janus Single-Layer MoSSe via Magnetic Doping. *Journal of Physical Chemistry Letters*, **2018**, 9, 3612-3617	6.4	113
449	Many-body effects in silicene, silicane, germanene and germanane. *Physical Chemistry Chemical Physics*, **2013**, 15, 8789-94	3.6	112
448	First-Principles Study of the 2 Heterobilayers. *Journal of Physical Chemistry C*, **2011**, 115, 20237-20241	3.8	112
447	Three dimensional BiOX (X=Cl, Br and I) hierarchical architectures: facile ionic liquid-assisted solvothermal synthesis and photocatalysis towards organic dye degradation. *Materials Letters*, **2013**, 100, 285-288	3.3	111
446	Highly Efficient Visible Light Plasmonic Photocatalysts Ag@Ag(Cl,Br) and Ag@AgCl-AgI. *ChemCatChem*, **2011**, 3, 360-364	5.2	111
445	A bismuth-based metal-organic framework as an efficient visible-light-driven photocatalyst. *Chemistry - A European Journal*, **2015**, 21, 2364-7	4.8	110
444	Tailoring AgI nanoparticles for the assembly of AgI/BiOI hierarchical hybrids with size-dependent photocatalytic activities. *Journal of Materials Chemistry A*, **2013**, 1, 7131	13	109
443	Stable Si-based pentagonal monolayers: high carrier mobilities and applications in photocatalytic water splitting. *Journal of Materials Chemistry A*, **2015**, 3, 24055-24063	13	107
442	Strain-induced magnetic transitions in half-fluorinated single layers of BN, GaN and graphene. *Nanoscale*, **2011**, 3, 2301-6	7.7	107
441	Origin of d0 magnetism in II-VI and III-V semiconductors by substitutional doping at anion site. *Physical Review B*, **2010**, 81,	3.3	107

440	A Janus MoSSe monolayer: a superior and strain-sensitive gas sensing material. *Journal of Materials Chemistry A*, **2019**, 7, 1099-1106	13	106
439	Quantum spin Hall effect and topological phase transition in two-dimensional square transition-metal dichalcogenides. *Physical Review B*, **2015**, 92,	3.3	106
438	Enhancing the Photocatalytic Hydrogen Evolution Activity of Mixed-Halide Perovskite CH3NH3PbBr3−xIx Achieved by Bandgap Funneling of Charge Carriers. *ACS Catalysis*, **2018**, 8, 10349-10357	13.1	106
437	Ferromagnetism of undoped GaN mediated by through-bond spin polarization between nitrogen dangling bonds. *Applied Physics Letters*, **2009**, 94, 162505	3.4	105
436	Ag6Si2O7: a Silicate Photocatalyst for the Visible Region. *Chemistry of Materials*, **2014**, 26, 3873-3875	9.6	104
435	SnO/Reduced Graphene Oxide Interlayer Mitigating the Shuttle Effect of Li-S Batteries. *ACS Applied Materials & Interfaces*, **2018**, 10, 18665-18674	9.5	104
434	Origin of the photoactivity in boron-doped anatase and rutile TiO2 calculated from first principles. *Physical Review B*, **2007**, 76,	3.3	102
433	Photocatalytic reduction of CO2 to methanol by three-dimensional hollow structures of Bi2WO6 quantum dots. *Applied Catalysis B: Environmental*, **2017**, 219, 209-215	21.8	99
432	The synthesis of the near-spherical AgCl crystal for visible light photocatalytic applications. *Dalton Transactions*, **2011**, 40, 4104-10	4.3	99
431	Doping strategy to promote the charge separation in BiVO4 photoanodes. *Applied Catalysis B: Environmental*, **2017**, 211, 258-265	21.8	98
430	Magnetism in undoped MgO studied by density functional theory. *Physical Review B*, **2009**, 80,	3.3	98
429	Enhancing the Photocatalytic Activity of BiVO4 for Oxygen Evolution by Ce Doping: Ce3+ Ions as Hole Traps. *Journal of Physical Chemistry C*, **2016**, 120, 2058-2063	3.8	93
428	Crystal facets controlled synthesis of graphene@TiO2 nanocomposites by a one-pot hydrothermal process. *CrystEngComm*, **2012**, 14, 1687-1692	3.3	92
427	Ti3+ self-doped TiO2−x anatase nanoparticles via oxidation of TiH2 in H2O2. *Catalysis Today*, **2014**, 225, 80-89	5.3	90
426	DFT investigation on two-dimensional GeS/WS2 van der Waals heterostructure for direct Z-scheme photocatalytic overall water splitting. *Applied Surface Science*, **2018**, 434, 365-374	6.7	89
425	The role of effective mass of carrier in the photocatalytic behavior of silver halide-based Ag@AgX (X=Cl, Br, I): a theoretical study. *ChemPhysChem*, **2012**, 13, 2304-9	3.2	89
424	Single-Layer AgS: A Two-Dimensional Bidirectional Auxetic Semiconductor. *Nano Letters*, **2019**, 19, 1227-1233	11.3	89
423	Effective increasing of optical absorption and energy conversion efficiency of anatase TiO2 nanocrystals by hydrogenation. *Physical Chemistry Chemical Physics*, **2011**, 13, 18063-8	3.6	85

422	Synthesis and Activity of Plasmonic Photocatalysts. *ChemCatChem*, **2014**, 6, 2456-2476	5.2	84
421	Density Functional Characterization of the Electronic Structure and Optical Properties of N-Doped, La-Doped, and N/La-Codoped SrTiO3. *Journal of Physical Chemistry C*, **2009**, 113, 15046-15050	3.8	83
420	Composite semiconductor H(2)WO(4).H(2)O/AgCl as an efficient and stable photocatalyst under visible light. *Chemistry - A European Journal*, **2008**, 14, 10543-6	4.8	83
419	Graphene-diamond interface: Gap opening and electronic spin injection. *Physical Review B*, **2012**, 85,	3.3	82
418	Perovskite photocatalyst CsPbBr3-xIx with a bandgap funnel structure for H2 evolution under visible light. *Applied Catalysis B: Environmental*, **2019**, 245, 522-527	21.8	82
417	Enhancing visible light photocatalytic degradation performance and bactericidal activity of BiOI via ultrathin-layer structure. *Applied Catalysis B: Environmental*, **2017**, 211, 252-257	21.8	79
416	Insight into iron group transition metal phosphides (Fe2P, Co2P, Ni2P) for improving photocatalytic hydrogen generation. *Applied Catalysis B: Environmental*, **2019**, 246, 330-336	21.8	78
415	Fabrication of carbon bridged g-C3N4 through supramolecular self-assembly for enhanced photocatalytic hydrogen evolution. *Applied Catalysis B: Environmental*, **2018**, 229, 114-120	21.8	76
414	Achieving high energy density for lithium-ion battery anodes by Si/C nanostructure design. *Journal of Materials Chemistry A*, **2019**, 7, 2165-2171	13	75
413	Halogenated two-dimensional germanium: candidate materials for being of Quantum Spin Hall state. *Journal of Materials Chemistry*, **2012**, 22, 12587		74
412	A novel metal-organic framework based on bismuth and trimesic acid: synthesis, structure and properties. *Dalton Transactions*, **2015**, 44, 16238-41	4.3	73
411	A theoretical study on the electronic properties of in-plane CdS/ZnSe heterostructures: type-II band alignment for water splitting. *Journal of Materials Chemistry A*, **2018**, 6, 4161-4166	13	72
410	Relative photooxidation and photoreduction activities of the {100}, {101}, and {001} surfaces of anatase TiO2. *Langmuir*, **2013**, 29, 13647-54	4	72
409	Facile synthesis of Zn-rich (GaN)1⊠(ZnO)x solid solutions using layered double hydroxides as precursors. *Journal of Materials Chemistry*, **2011**, 21, 4562		72
408	Design and synthesis of porous M-ZnO/CeO2 microspheres as efficient plasmonic photocatalysts for nonpolar gaseous molecules oxidation: Insight into the role of oxygen vacancy defects and M=Ag, Au nanoparticles. *Applied Catalysis B: Environmental*, **2020**, 260, 118151	21.8	71
407	Efficient photocatalytic H2 production via rational design of synergistic spatially-separated dual cocatalysts modified Mn0.5Cd0.5S photocatalyst under visible light irradiation. *Chemical Engineering Journal*, **2018**, 337, 480-487	14.7	69
406	Electron-Rotor Interaction in Organic-Inorganic Lead Iodide Perovskites Discovered by Isotope Effects. *Journal of Physical Chemistry Letters*, **2016**, 7, 2879-87	6.4	69
405	Near-infrared photocatalytic activity induced by intrinsic defects in Bi2MO6 (M = W, Mo). *Physical Chemistry Chemical Physics*, **2014**, 16, 18596-604	3.6	69

404	Effects of single metal atom (Pt, Pd, Rh and Ru) adsorption on the photocatalytic properties of anatase TiO2. *Applied Surface Science*, **2017**, 426, 639-646	6.7	68
403	Valence state heterojunction Mn3O4/MnCO3: Photo and thermal synergistic catalyst. *Applied Catalysis B: Environmental*, **2016**, 180, 6-12	21.8	67
402	High-Throughput Screening of Synergistic Transition Metal Dual-Atom Catalysts for Efficient Nitrogen Fixation. *Nano Letters*, **2021**, 21, 1871-1878	11.5	66
401	Sc C as a Promising Anode Material with High Mobility and Capacity: A First-Principles Study. *ChemPhysChem*, **2017**, 18, 1627-1634	3.2	64
400	Effects of oxygen vacancy and N-doping on the electronic and photocatalytic properties of Bi2MO6 (M=Mo, W). *Journal of Solid State Chemistry*, **2012**, 187, 103-108	3.3	64
399	Anisotropic Photoelectrochemical (PEC) Performances of ZnO Single-Crystalline Photoanode: Effect of Internal Electrostatic Fields on the Separation of Photogenerated Charge Carriers during PEC Water Splitting. *Chemistry of Materials*, **2016**, 28, 6613-6620	9.6	63
398	Hydrothermal synthesis of C3N4/BiOIO3 heterostructures with enhanced photocatalytic properties. *Journal of Colloid and Interface Science*, **2015**, 442, 97-102	9.3	61
397	Tuning photocatalytic performance of the near-infrared-driven photocatalyst Cu2(OH)PO4 based on effective mass and dipole moment. *Physical Chemistry Chemical Physics*, **2014**, 16, 3267-73	3.6	61
396	Holey graphitic carbon nitride (g-CN) supported bifunctional single atom electrocatalysts for highly efficient overall water splitting. *Applied Catalysis B: Environmental*, **2020**, 264, 118521	21.8	61
395	Effect of the structure distortion on the high photocatalytic performance of C 60 /g-C 3 N 4 composite. *Applied Surface Science*, **2017**, 414, 124-130	6.7	60
394	Photoexcitation Dynamics in Janus-MoSSe/WSe Heterobilayers: Ab Initio Time-Domain Study. *Journal of Physical Chemistry Letters*, **2018**, 9, 2797-2802	6.4	60
393	Polymorph selection towards photocatalytic gaseous CO hydrogenation. *Nature Communications*, **2019**, 10, 2521	17.4	59
392	Engineering the electronic and optoelectronic properties of InX (X = S, Se, Te) monolayers via strain. *Physical Chemistry Chemical Physics*, **2017**, 19, 4855-4860	3.6	58
391	Strain-induced quantum spin Hall effect in methyl-substituted germanane GeCH3. *Scientific Reports* , **2014**, 4, 7297	4.9	58
390	Electronic Structure and Photocatalytic Water-Splitting Properties of Ag2ZnSn(S1−xSex)4. *Journal of Physical Chemistry C*, **2015**, 119, 27900-27908	3.8	58
389	Role of Cu Doping in SnO2 Sensing Properties Toward H2S. *Journal of Physical Chemistry C*, **2011**, 115, 18597-18602	3.8	58
388	Synthesis of Mn-doped ZnS microspheres with enhanced visible light photocatalytic activity. *Applied Surface Science*, **2017**, 391, 557-564	6.7	57
387	Enhancing the photocatalytic activity of BiOX (X = Cl, Br, and I), (BiO)2CO3 and Bi2O3 by modifying their surfaces with polar organic anions, 4-substituted thiophenolates. *Journal of Materials Chemistry A*, **2017**, 5, 14406-14414	13	57

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385	Intrinsic Electric Field-Induced Properties in Janus MoSSe van der Waals Structures. *Journal of Physical Chemistry Letters*, **2019**, 10, 559-565	6.4	57
384	Design of lateral heterostructure from arsenene and antimonene. *2D Materials*, **2016**, 3, 035017	5.9	57
383	Two-dimensional GeSe for high performance thin-film solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 5032-5039	13	56
382	Sulfuration of NiV-layered double hydroxide towards novel supercapacitor electrode with enhanced performance. *Chemical Engineering Journal*, **2018**, 351, 119-126	14.7	56
381	Geometric and Electronic Properties of Sn-Doped TiO2 from First-Principles Calculations. *Journal of Physical Chemistry C*, **2009**, 113, 650-653	3.8	56
380	Density functional characterization of the electronic structure and visible-light absorption of Cr-doped anatase TiO(2). *ChemPhysChem*, **2009**, 10, 2327-33	3.2	55
379	Layered photocatalyst Bi2O2[BO2(OH)] nanosheets with internal polar field enhanced photocatalytic activity. *CrystEngComm*, **2014**, 16, 4931-4934	3.3	54
378	Emergence of electric polarity in BiTeX (X = Br and I) monolayers and the giant Rashba spin splitting. *Physical Chemistry Chemical Physics*, **2014**, 16, 17603-9	3.6	53
377	Photocatalytic hydrogen evolution on P-type tetragonal zircon BiVO4. *Applied Catalysis B: Environmental*, **2019**, 251, 94-101	21.8	52
376	I2-Hydrosol-Seeded Growth of (I2)n-C-Codoped Meso/Nanoporous TiO2 for Visible Light-Driven Photocatalysis. *Journal of Physical Chemistry C*, **2010**, 114, 9510-9517	3.8	52
375	Enhanced photocatalytic degradation of organic pollutants over basic bismuth (III) nitrate/BiVO4 composite. *Journal of Colloid and Interface Science*, **2010**, 348, 211-5	9.3	52
374	Ultrasonic-assisted pyrolyzation fabrication of reduced SnO2 /g-C3N4 heterojunctions: Enhance photoelectrochemical and photocatalytic activity under visible LED light irradiation. *Nano Research*, **2016**, 9, 1969-1982	10	52
373	A first-principles study of NbSe2monolayer as anode materials for rechargeable lithium-ion and sodium-ion batteries. *Journal Physics D: Applied Physics*, **2017**, 50, 235501	3	51
372	Novel titanium nitride halide TiNX (X = F, Cl, Br) monolayers: potential materials for highly efficient excitonic solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 2073-2080	13	51
371	Two-dimensional inversion-asymmetric topological insulators in functionalized III-Bi bilayers. *Physical Review B*, **2015**, 91,	3.3	51
370	Origin of the Visible Light Absorption of GaN-Rich Ga1 ZnxN1 Ox (x = 0.125) Solid Solution. *Journal of Physical Chemistry C*, **2008**, 112, 15915-15919	3.8	51
369	Synthesis of BiOBr-PVP hybrids with enhanced adsorption-photocatalytic properties. *Applied Surface Science*, **2015**, 347, 258-264	6.7	50

368	Electronic properties of two-dimensional van der Waals GaS/GaSe heterostructures. *Journal of Materials Chemistry C*, **2015**, 3, 11548-11554	7.1	50
367	Room temperature quantum spin Hall states in two-dimensional crystals composed of pentagonal rings and their quantum wells. *NPG Asia Materials*, **2016**, 8, e264-e264	10.3	49
366	Density Functional Study of Boron-Doped Anatase TiO2. *Journal of Physical Chemistry C*, **2010**, 114, 19830-19834	3.8	49
365	W supported on g-CN manifests high activity and selectivity for N2 electroreduction to NH3. *Journal of Materials Chemistry A*, **2020**, 8, 1378-1385	13	49
364	Porous Ag-ZnO microspheres as efficient photocatalyst for methane and ethylene oxidation: Insight into the role of Ag particles. *Applied Surface Science*, **2018**, 456, 493-500	6.7	49
363	Two-dimensional ferroelastic topological insulators in single-layer Janus transition metal dichalcogenides MSSe(M=Mo,W). *Physical Review B*, **2018**, 98,	3.3	48
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361	Straintronics in two-dimensional in-plane heterostructures of transition-metal dichalcogenides. *Physical Chemistry Chemical Physics*, **2016**, 19, 663-672	3.6	47
360	Two-dimensional transition metal dichalcogenides with a hexagonal lattice: Room-temperature quantum spin Hall insulators. *Physical Review B*, **2016**, 93,	3.3	47
359	GeH: a novel material as a visible-light driven photocatalyst for hydrogen evolution. *Chemical Communications*, **2014**, 50, 11046-8	5.8	47
358	. *Journal of Physical Chemistry C*, **2012**, 116, 12977-12981	3.8	47
357	Ohmic contact in monolayer InSe-metal interface. *2D Materials*, **2017**, 4, 025116	5.9	46
356	Accelerated electrocatalytic hydrogen evolution on non-noble metal containing trinickel nitride by introduction of vanadium nitride. *Journal of Materials Chemistry A*, **2019**, 7, 5513-5521	13	46
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354	Robust type-II band alignment in Janus-MoSSe bilayer with extremely long carrier lifetime induced by the intrinsic electric field. *Physical Review B*, **2019**, 99,	3.3	46
353	Preparation of Ti3+ self-doped TiO2 nanoparticles and their visible light photocatalytic activity. *Chinese Journal of Catalysis*, **2015**, 36, 389-399	11.3	46
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