

# Baibiao Huang

## List of Publications by Citations

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723  
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93  
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754  
ext. papers

41,763  
ext. citations

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#	Paper	IF	Citations
723	Ag@AgCl: a highly efficient and stable photocatalyst active under visible light. <i>Angewandte Chemie - International Edition</i> , <b>2008</b> , 47, 7931-3	16.4	1229
722	Oxygen vacancy induced band-gap narrowing and enhanced visible light photocatalytic activity of ZnO. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 4024-30	9.5	997
721	Engineering BiOX (X = Cl, Br, I) nanostructures for highly efficient photocatalytic applications. <i>Nanoscale</i> , <b>2014</b> , 6, 2009-26	7.7	861
720	Fabrication and Characterization of Visible-Light-Driven Plasmonic Photocatalyst Ag/AgCl/TiO <sub>2</sub> Nanotube Arrays. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 16394-16401	3.8	732
719	Plasmonic photocatalysts: harvesting visible light with noble metal nanoparticles. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 9813-25	3.6	660
718	Evidence of the existence of magnetism in pristine VX monolayers (X = S, Se) and their strain-induced tunable magnetic properties. <i>ACS Nano</i> , <b>2012</b> , 6, 1695-701	16.7	590
717	Highly efficient visible-light plasmonic photocatalyst Ag@AgBr. <i>Chemistry - A European Journal</i> , <b>2009</b> , 15, 1821-4	4.8	508
716	One-step synthesis of the nanostructured AgI/BiOI composites with highly enhanced visible-light photocatalytic performances. <i>Langmuir</i> , <b>2010</b> , 26, 6618-24	4	503
715	Facile in situ synthesis of visible-light plasmonic photocatalysts M@TiO <sub>2</sub> (M = Au, Pt, Ag) and evaluation of their photocatalytic oxidation of benzene to phenol. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 9079		494
714	In-Situ-Reduced Synthesis of TiO <sub>2</sub> /Ag-CdTe Heterojunctions with High Photocatalytic Performance under LED Light Irradiation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 9023-30	9.5	422
713	In situ ion exchange synthesis of the novel Ag/AgBr/BiOBr hybrid with highly efficient decontamination of pollutants. <i>Chemical Communications</i> , <b>2011</b> , 47, 7054-6	5.8	407
712	Synthesis of highly efficient Ag@AgCl plasmonic photocatalysts with various structures. <i>Chemistry - A European Journal</i> , <b>2010</b> , 16, 538-44	4.8	366
711	Electronic and magnetic properties of perfect, vacancy-doped, and nonmetal adsorbed MoSe <sub>2</sub> , MoTe <sub>2</sub> and WS <sub>2</sub> monolayers. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 15546-53	3.6	349
710	Crystal Faces of Cu <sub>2</sub> O and Their Stabilities in Photocatalytic Reactions. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 14448-14453	3.8	322
709	Graphene adhesion on MoS <sub>2</sub> monolayer: an ab initio study. <i>Nanoscale</i> , <b>2011</b> , 3, 3883-7	7.7	315
708	Oxygenated monolayer carbon nitride for excellent photocatalytic hydrogen evolution and external quantum efficiency. <i>Nano Energy</i> , <b>2016</b> , 27, 138-146	17.1	303
707	Ag/AgBr/WO <sub>3</sub> ·H <sub>2</sub> O: visible-light photocatalyst for bacteria destruction. <i>Inorganic Chemistry</i> , <b>2009</b> , 48, 10697-702	5.1	288

706	Hydrothermal Synthesis and Visible-light Photocatalytic Activity of Novel Cage-like Ferric Oxide Hollow Spheres. <i>Crystal Growth and Design</i> , <b>2009</b> , 9, 1474-1480	3.5	277
705	Hydrogenated titania: synergy of surface modification and morphology improvement for enhanced photocatalytic activity. <i>Chemical Communications</i> , <b>2012</b> , 48, 5733-5	5.8	262
704	An anion exchange approach to Bi <sub>2</sub> WO <sub>6</sub> hollow microspheres with efficient visible light photocatalytic reduction of CO <sub>2</sub> to methanol. <i>Chemical Communications</i> , <b>2012</b> , 48, 9729-31	5.8	248
703	Ab Initio Prediction and Characterization of Mo <sub>2</sub> C Monolayer as Anodes for Lithium-Ion and Sodium-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 937-43	6.4	245
702	A controlled anion exchange strategy to synthesize Bi <sub>2</sub> S <sub>3</sub> nanocrystals/BiOCl hybrid architectures with efficient visible light photoactivity. <i>Chemical Communications</i> , <b>2012</b> , 48, 97-9	5.8	240
701	Synergistic effect of crystal and electronic structures on the visible-light-driven photocatalytic performances of Bi <sub>2</sub> O <sub>3</sub> polymorphs. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 15468-75	3.6	231
700	Selective ethanol formation from photocatalytic reduction of carbon dioxide in water with BiVO <sub>4</sub> photocatalyst. <i>Catalysis Communications</i> , <b>2009</b> , 11, 210-213	3.2	222
699	Chemical adsorption enhanced CO <sub>2</sub> capture and photoreduction over a copper porphyrin based metal organic framework. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 7654-8	9.5	219
698	One-pot template-free synthesis of monodisperse zinc sulfide hollow spheres and their photocatalytic properties. <i>Chemistry - A European Journal</i> , <b>2009</b> , 15, 6731-9	4.8	215
697	Understanding Photocatalytic Activity of S- and P-Doped TiO <sub>2</sub> under Visible Light from First-Principles. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 18985-18994	3.8	214
696	Composite of CH <sub>3</sub> NH <sub>2</sub> PbI <sub>3</sub> with Reduced Graphene Oxide as a Highly Efficient and Stable Visible-Light Photocatalyst for Hydrogen Evolution in Aqueous HI Solution. <i>Advanced Materials</i> , <b>2018</b> , 30, 1704342	24	213
695	Electronic and Optical Properties of Pristine and Vertical and Lateral Heterostructures of Janus MoSSe and WSSe. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 5959-5965	6.4	202
694	Study of the Nitrogen Concentration Influence on N-Doped TiO <sub>2</sub> Anatase from First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 12086-12090	3.8	202
693	Synergetic Effect of Ti and Oxygen Doping on Enhancing Photoelectrochemical and Photocatalytic Properties of TiO <sub>2</sub> /g-CN Heterojunctions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 11577-11586	9.5	199
692	Green synthetic approach for Ti <sup>3+</sup> self-doped TiO <sub>2-x</sub> nanoparticles with efficient visible light photocatalytic activity. <i>Nanoscale</i> , <b>2013</b> , 5, 1870-5	7.7	194
691	Highly Photocatalytic ZnO/In <sub>2</sub> O <sub>3</sub> Heteronanostructures Synthesized by a Coprecipitation Method. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 4612-4617	3.8	191
690	First-Principles Characterization of Bi-based Photocatalysts: Bi <sub>12</sub> TiO <sub>20</sub> , Bi <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> , and Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> . <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 5658-5663	3.8	189
689	Cu <sub>2</sub> (OH)PO <sub>4</sub> , a near-infrared-activated photocatalyst. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 4810-3	16.4	187

688	Highly efficient visible light plasmonic photocatalyst Ag@Ag(Br,I). <i>Chemistry - A European Journal</i> , <b>2010</b> , 16, 10042-7	4.8	184
687	Hydrothermal preparation and photocatalytic activity of mesoporous Au-TiO <sub>2</sub> nanocomposite microspheres. <i>Journal of Colloid and Interface Science</i> , <b>2009</b> , 334, 58-64	9.3	181
686	Composition dependence of the photocatalytic activities of BiOCl(1-x)Br(x) solid solutions under visible light. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 9342-9	4.8	171
685	Hierarchical TiO <sub>2</sub> microspheres: synergetic effect of {001} and {101} facets for enhanced photocatalytic activity. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 15032-8	4.8	170
684	Facile template-free synthesis of Bi <sub>2</sub> O(2)CO(3) hierarchical microflowers and their associated photocatalytic activity. <i>ChemPhysChem</i> , <b>2010</b> , 11, 2167-73	3.2	169
683	Ultrabroadband MoS Photodetector with Spectral Response from 445 to 2717 nm. <i>Advanced Materials</i> , <b>2017</b> , 29, 1605972	24	166
682	Dual-Mode On-to-Off Modulation of Plasmon-Induced Transparency and Coupling Effect in Patterned Graphene-Based Terahertz Metasurface. <i>Nanoscale Research Letters</i> , <b>2020</b> , 15, 1	5	164
681	One-pot miniemulsion-mediated route to BiOBr hollow microspheres with highly efficient photocatalytic activity. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 8039-43	4.8	159
680	Density Functional Characterization of the Visible-Light Absorption in Substitutional C-Anion- and C-Cation-Doped TiO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 2624-2629	3.8	158
679	Progress on extending the light absorption spectra of photocatalysts. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 2758-74	3.6	154
678	Theoretical predictions on the electronic structure and charge carrier mobility in 2D phosphorus sheets. <i>Scientific Reports</i> , <b>2015</b> , 5, 9961	4.9	153
677	Preparation, electronic structure, and photocatalytic properties of Bi <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> nanosheet. <i>Applied Surface Science</i> , <b>2010</b> , 257, 172-175	6.7	151
676	Density Functional Characterization of the Band Edges, the Band Gap States, and the Preferred Doping Sites of Halogen-Doped TiO <sub>2</sub> . <i>Chemistry of Materials</i> , <b>2008</b> , 20, 6528-6534	9.6	151
675	Hydrogen Doped Metal Oxide Semiconductors with Exceptional and Tunable Localized Surface Plasmon Resonances. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 9316-24	16.4	151
674	Two-dimensional germanium monochalcogenides for photocatalytic water splitting with high carrier mobility. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 217, 275-284	21.8	146
673	Ultra-low loading of Ag <sub>3</sub> PO <sub>4</sub> on hierarchical In <sub>2</sub> S <sub>3</sub> microspheres to improve the photocatalytic performance: The cocatalytic effect of Ag and Ag <sub>3</sub> PO <sub>4</sub> . <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 202, 84-94	21.8	146
672	Tunable electronic and dielectric behavior of GaS and GaSe monolayers. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 7098-105	3.6	145
671	Metallic zinc- assisted synthesis of Ti <sup>3+</sup> self-doped TiO <sub>2</sub> with tunable phase composition and visible-light photocatalytic activity. <i>Chemical Communications</i> , <b>2013</b> , 49, 868-70	5.8	143

670	Synthesis and photocatalytic properties of BiOCl nanowire arrays. <i>Materials Letters</i> , <b>2010</b> , 64, 115-118	3.3	140
669	Two-dimensional Janus PtSSe for photocatalytic water splitting under the visible or infrared light. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 603-610	13	140
668	Metal-Free B@-CN: Visible/Infrared Light-Driven Single Atom Photocatalyst Enables Spontaneous Dinitrogen Reduction to Ammonia. <i>Nano Letters</i> , <b>2019</b> , 19, 6391-6399	11.5	138
667	Highly efficient photocatalyst: TiO(2) microspheres produced from TiO(2) nanosheets with a high percentage of reactive {001} facets. <i>Chemistry - A European Journal</i> , <b>2009</b> , 15, 12576-9	4.8	138
666	Synthesis and characterization of ZnS with controlled amount of S vacancies for photocatalytic H <sub>2</sub> production under visible light. <i>Scientific Reports</i> , <b>2015</b> , 5, 8544	4.9	137
665	Theoretical study of N-doped TiO <sub>2</sub> rutile crystals. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 24011-4	3.4	132
664	Two-dimensional III <sub>2</sub> -VI <sub>3</sub> materials: Promising photocatalysts for overall water splitting under infrared light spectrum. <i>Nano Energy</i> , <b>2018</b> , 51, 533-538	17.1	131
663	Controlled synthesis of Ag <sub>2</sub> O microcrystals with facet-dependent photocatalytic activities. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 21189		129
662	Density-functional characterization of antiferromagnetism in oxygen-deficient anatase and rutile TiO <sub>2</sub> . <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	129
661	Ni Coordination to an Al-Based Metal-Organic Framework Made from 2-Aminoterephthalate for Photocatalytic Overall Water Splitting. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 3036-3040	16.4	128
660	Preparation, characterization, and photocatalytic properties of silver carbonate. <i>Applied Surface Science</i> , <b>2011</b> , 257, 8732-8736	6.7	126
659	Efficient separation of photogenerated electron-hole pairs by the combination of a heterolayered structure and internal polar field in pyroelectric BiOIO <sub>3</sub> nanoplates. <i>Chemistry - A European Journal</i> , <b>2013</b> , 19, 14777-80	4.8	125
658	On the possibility of ferromagnetism in carbon-doped anatase TiO <sub>2</sub> . <i>Applied Physics Letters</i> , <b>2008</b> , 93, 132507	3.4	124
657	Graphene/g-C <sub>3</sub> N <sub>4</sub> bilayer: considerable band gap opening and effective band structure engineering. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 4230-5	3.6	119
656	Ag@AgCl: A Highly Efficient and Stable Photocatalyst Active under Visible Light. <i>Angewandte Chemie</i> , <b>2008</b> , 120, 8049-8051	3.6	118
655	Visible-light-driven photocatalytic S- and C- codoped meso/nanoporous TiO <sub>2</sub> . <i>Energy and Environmental Science</i> , <b>2010</b> , 3, 1128	35.4	117
654	Adsorption of gaseous ethylene via induced polarization on plasmonic photocatalyst Ag/AgCl/TiO <sub>2</sub> and subsequent photodegradation. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 220, 356-361	21.8	115
653	Synthesis of synergetic phosphorus and cyano groups ( C N) modified g-C <sub>3</sub> N <sub>4</sub> for enhanced photocatalytic H <sub>2</sub> production and CO <sub>2</sub> reduction under visible light irradiation. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 232, 521-530	21.8	114

652	Highly efficient and noble metal-free NiS modified $Mn_xCd_{1-x}S$ solid solutions with enhanced photocatalytic activity for hydrogen evolution under visible light irradiation. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 203, 282-288	21.8	114
651	Valley Polarization in Janus Single-Layer MoSSe via Magnetic Doping. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 3612-3617	6.4	113
650	Many-body effects in silicene, silicane, germanene and germanane. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 8789-94	3.6	112
649	First-Principles Study of the [email protected]2 Heterobilayers. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 20237-20241	3.8	112
648	Three dimensional BiOX (X=Cl, Br and I) hierarchical architectures: facile ionic liquid-assisted solvothermal synthesis and photocatalysis towards organic dye degradation. <i>Materials Letters</i> , <b>2013</b> , 100, 285-288	3.3	111
647	Highly Efficient Visible Light Plasmonic Photocatalysts Ag@Ag(Cl,Br) and Ag@AgCl-AgI. <i>ChemCatChem</i> , <b>2011</b> , 3, 360-364	5.2	111
646	A bismuth-based metal-organic framework as an efficient visible-light-driven photocatalyst. <i>Chemistry - A European Journal</i> , <b>2015</b> , 21, 2364-7	4.8	110
645	Tailoring AgI nanoparticles for the assembly of AgI/BiOI hierarchical hybrids with size-dependent photocatalytic activities. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 7131	13	109
644	Stable Si-based pentagonal monolayers: high carrier mobilities and applications in photocatalytic water splitting. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 24055-24063	13	107
643	Strain-induced magnetic transitions in half-fluorinated single layers of BN, GaN and graphene. <i>Nanoscale</i> , <b>2011</b> , 3, 2301-6	7.7	107
642	Origin of d0 magnetism in II-VI and III-V semiconductors by substitutional doping at anion site. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	107
641	Enhancing the Photocatalytic Hydrogen Evolution Activity of Mixed-Halide Perovskite $CH_3NH_3PbBr_{3-x}I_x$ Achieved by Bandgap Funneling of Charge Carriers. <i>ACS Catalysis</i> , <b>2018</b> , 8, 10349-10357 <sup>12.1</sup>	13.1	106
640	Ferromagnetism of undoped GaN mediated by through-bond spin polarization between nitrogen dangling bonds. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 162505	3.4	105
639	Ag <sub>6</sub> Si <sub>2</sub> O <sub>7</sub> : a Silicate Photocatalyst for the Visible Region. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 3873-3875	9.6	104
638	Strategic synthesis of hierarchical TiO <sub>2</sub> microspheres with enhanced photocatalytic activity. <i>Chemistry - A European Journal</i> , <b>2010</b> , 16, 11266-70	4.8	103
637	Origin of the photoactivity in boron-doped anatase and rutile TiO <sub>2</sub> calculated from first principles. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	102
636	Photocatalytic reduction of CO <sub>2</sub> to methanol by three-dimensional hollow structures of Bi <sub>2</sub> WO <sub>6</sub> quantum dots. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 219, 209-215	21.8	99
635	The synthesis of the near-spherical AgCl crystal for visible light photocatalytic applications. <i>Dalton Transactions</i> , <b>2011</b> , 40, 4104-10	4.3	99

634	Doping strategy to promote the charge separation in BiVO <sub>4</sub> photoanodes. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 211, 258-265	21.8	98
633	One-pot solvothermal synthesis of Cu-modified BiOCl via a Cu-containing ionic liquid and its visible-light photocatalytic properties. <i>RSC Advances</i> , <b>2014</b> , 4, 14281	3.7	98
632	CuO Nanoparticles with Both {100} and {111} Facets for Enhancing the Selectivity and Activity of CO Electroreduction to Ethylene. <i>Advanced Science</i> , <b>2020</b> , 7, 1902820	13.6	97
631	Enhancing the Photocatalytic Activity of BiVO <sub>4</sub> for Oxygen Evolution by Ce Doping: Ce <sup>3+</sup> Ions as Hole Traps. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 2058-2063	3.8	93
630	Crystal facets controlled synthesis of graphene@TiO <sub>2</sub> nanocomposites by a one-pot hydrothermal process. <i>CrystEngComm</i> , <b>2012</b> , 14, 1687-1692	3.3	92
629	Ti <sup>3+</sup> self-doped TiO <sub>2</sub> anatase nanoparticles via oxidation of TiH <sub>2</sub> in H <sub>2</sub> O <sub>2</sub> . <i>Catalysis Today</i> , <b>2014</b> , 225, 80-89	5.3	90
628	DFT investigation on two-dimensional GeS/WS <sub>2</sub> van der Waals heterostructure for direct Z-scheme photocatalytic overall water splitting. <i>Applied Surface Science</i> , <b>2018</b> , 434, 365-374	6.7	89
627	The role of effective mass of carrier in the photocatalytic behavior of silver halide-based Ag@AgX (X=Cl, Br, I): a theoretical study. <i>ChemPhysChem</i> , <b>2012</b> , 13, 2304-9	3.2	89
626	Single-Layer AgS: A Two-Dimensional Bidirectional Auxetic Semiconductor. <i>Nano Letters</i> , <b>2019</b> , 19, 1227-1233	12.33	89
625	Z-scheme reduced graphene oxide/TiO <sub>2</sub> -Bronze/W <sub>18</sub> O <sub>49</sub> ternary heterostructure towards efficient full solar-spectrum photocatalysis. <i>Carbon</i> , <b>2018</b> , 139, 415-426	10.4	85
624	Effective increasing of optical absorption and energy conversion efficiency of anatase TiO <sub>2</sub> nanocrystals by hydrogenation. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 18063-8	3.6	85
623	Anion-exchange synthesis of Ag <sub>2</sub> S/Ag <sub>3</sub> PO <sub>4</sub> core/shell composites with enhanced visible and NIR light photocatalytic performance and the photocatalytic mechanisms. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 209, 566-578	21.8	84
622	Synthesis and Activity of Plasmonic Photocatalysts. <i>ChemCatChem</i> , <b>2014</b> , 6, 2456-2476	5.2	84
621	Synthesis of nanometer Bi <sub>2</sub> WO <sub>6</sub> synthesized by sol-gel method and its visible-light photocatalytic activity for degradation of 4BS. <i>Journal of Physics and Chemistry of Solids</i> , <b>2010</b> , 71, 579-582	3.9	84
620	Co-delivery of erlotinib and doxorubicin by pH-sensitive charge conversion nanocarrier for synergistic therapy. <i>Journal of Controlled Release</i> , <b>2016</b> , 229, 80-92	11.7	83
619	Band-gap-matched CdSe QD/WS <sub>2</sub> nanosheet composite: Size-controlled photocatalyst for high-efficiency water splitting. <i>Nano Energy</i> , <b>2017</b> , 31, 84-89	17.1	83
618	Density Functional Characterization of the Electronic Structure and Optical Properties of N-Doped, La-Doped, and N/La-Codoped SrTiO <sub>3</sub> . <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 15046-15050	3.8	83
617	Composite semiconductor H <sub>2</sub> WO <sub>4</sub> .H <sub>2</sub> O/AgCl as an efficient and stable photocatalyst under visible light. <i>Chemistry - A European Journal</i> , <b>2008</b> , 14, 10543-6	4.8	83

616	Graphene-diamond interface: Gap opening and electronic spin injection. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	82
615	First-principles calculations for geometrical structures and electronic properties of Si-doped TiO <sub>2</sub> . <i>Chemical Physics Letters</i> , <b>2008</b> , 456, 71-75	2.5	82
614	Perovskite photocatalyst CsPbBr <sub>3-x</sub> I <sub>x</sub> with a bandgap funnel structure for H <sub>2</sub> evolution under visible light. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 245, 522-527	21.8	82
613	Cu <sub>2</sub> O thin films deposited by reactive direct current magnetron sputtering. <i>Thin Solid Films</i> , <b>2009</b> , 517, 5700-5704	2.2	80
612	Enhancing visible light photocatalytic degradation performance and bactericidal activity of BiOI via ultrathin-layer structure. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 211, 252-257	21.8	79
611	In-situ hydroxyl modification of monolayer black phosphorus for stable photocatalytic carbon dioxide conversion. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 269, 118760	21.8	76
610	Fabrication of carbon bridged g-C <sub>3</sub> N <sub>4</sub> through supramolecular self-assembly for enhanced photocatalytic hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 229, 114-120	21.8	76
609	One-step synthesis of AgCl concave cubes by preferential overgrowth along and directions. <i>Chemical Communications</i> , <b>2012</b> , 48, 3488-90	5.8	76
608	A Novel Mild Phase-Transition to Prepare Black Phosphorus Nanosheets with Excellent Energy Applications. <i>Small</i> , <b>2017</b> , 13, 1602243	11	75
607	Achieving high energy density for lithium-ion battery anodes by Si/C nanostructure design. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 2165-2171	13	75
606	Phase junction CdS: High efficient and stable photocatalyst for hydrogen generation. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 221, 179-186	21.8	74
605	Halogenated two-dimensional germanium: candidate materials for being of Quantum Spin Hall state. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 12587		74
604	A novel metal-organic framework based on bismuth and trimesic acid: synthesis, structure and properties. <i>Dalton Transactions</i> , <b>2015</b> , 44, 16238-41	4.3	73
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483	Fabrication of Ti <sup>3+</sup> self-doped TiO <sub>2</sub> (A) nanoparticle/TiO <sub>2</sub> (R) nanorod heterojunctions with enhanced visible-light-driven photocatalytic properties. <i>RSC Advances</i> , <b>2014</b> , 4, 37061-37069	3.7	38
482	Plasma treated Bi <sub>2</sub> WO <sub>6</sub> ultrathin nanosheets with oxygen vacancies for improved photocatalytic CO <sub>2</sub> reduction. <i>Inorganic Chemistry Frontiers</i> , <b>2020</b> , 7, 597-602	6.8	38
481	TiO <sub>2</sub> /Ti <sub>3</sub> C <sub>2</sub> as an efficient photocatalyst for selective oxidation of benzyl alcohol to benzaldehyde. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 286, 119885	21.8	38
480	In-plane interfacing effects of two-dimensional transition-metal dichalcogenide heterostructures. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 15632-8	3.6	38
479	One-step exfoliation and fluorination of g-C <sub>3</sub> N <sub>4</sub> nanosheets with enhanced photocatalytic activities. <i>New Journal of Chemistry</i> , <b>2017</b> , 41, 3061-3067	3.6	37
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477	One-pot solvothermal synthesis of S doped BiOCl for solar water oxidation. <i>RSC Advances</i> , <b>2015</b> , 5, 47261-47264	3.7	37
476	Prediction of two-dimensional materials with half-metallic Dirac cones: Ni <sub>2</sub> C <sub>18</sub> H <sub>12</sub> and Co <sub>2</sub> C <sub>18</sub> H <sub>12</sub> . <i>Carbon</i> , <b>2014</b> , 73, 382-388	10.4	37
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473	Lateral heterojunctions within monolayer h-BN/graphene: a first-principles study. <i>RSC Advances</i> , <b>2015</b> , 5, 33037-33043	3.7	35

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469	Boosting the electrocatalytic HER performance of Ni <sub>3</sub> N-V <sub>2</sub> O <sub>3</sub> via the interface coupling effect. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 283, 119590	21.8	35
468	Effect of the intra- and inter-triazine N-vacancies on the photocatalytic hydrogen evolution of graphitic carbon nitride. <i>Chemical Engineering Journal</i> , <b>2019</b> , 369, 263-271	14.7	34
467	Prediction of large-gap quantum spin hall insulator and Rashba-Dresselhaus effect in two-dimensional g-TIA (A = N, P, As, and Sb) monolayer films. <i>Nano Research</i> , <b>2015</b> , 8, 2954-2962	10	34
466	Intrinsic anomalous valley Hall effect in single-layer Nb <sub>3</sub> I <sub>8</sub> . <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	34
465	Fabrication of BiVO <sub>4</sub> photoanode consisted of mesoporous nanoparticles with improved bulk charge separation efficiency. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 238, 586-591	21.8	34
464	Electronic transport properties on transition-metal terminated zigzag graphene nanoribbons. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 113708	2.5	34
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456	Atomic geometry and electronic structure of defects in Zn <sub>3</sub> N <sub>2</sub> . <i>Thin Solid Films</i> , <b>2008</b> , 516, 1297-1301	2.2	32
455	2D/2D heterostructure of ultrathin BiVO <sub>4</sub> /Ti <sub>3</sub> C <sub>2</sub> nanosheets for photocatalytic overall Water splitting. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 285, 119855	21.8	32



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