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Enhanced photocatalytic activity of g-C<sub>3</sub>N<sub>4</sub> for selective CO<sub>2</sub> reduction to CH<sub>3</sub>OH via facile coupling of ZnO: a direct Z-scheme mechanism

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754	Next-Generation Multifunctional CarbonMetal Nanohybrids for Energy and Environmental Applications.		
753	Amine-Functionalized ZnO Nanosheets for Efficient CO <sub>2</sub> Capture and Photoreduction. <b>2015</b> , 20, 18847-55		36
752	Advances in Magnetically Separable Photocatalysts: Smart, Recyclable Materials for Water Pollution Mitigation. <b>2016</b> , 6, 79		66
751	Potentiodynamic Uniform Anchoring of Platinum Nanoparticles on N-Doped Graphene with Improved Mass Activity for the Electrooxidation of Ammonia. <b>2016</b> , 3, 605-614		15
750	MnO <sub>2</sub> and carbon nanotube co-modified C <sub>3</sub> N <sub>4</sub> composite catalyst for enhanced water splitting activity under visible light irradiation. <b>2016</b> , 41, 22743-22750		39
749	A new Bi-based visible-light-sensitive photocatalyst BiLa <sub>1.4</sub> Ca <sub>0.6</sub> O <sub>4.2</sub> : crystal structure, optical property and photocatalytic activity. <b>2016</b> , 6, 23235		13
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737	Facile synthesis of cobalt-doped zinc oxide thin films for highly efficient visible light photocatalysts. <b>2016</b> , 390, 111-121		67
736	Ultra-thin coating of g-C <sub>3</sub> N <sub>4</sub> on an aligned ZnO nanorod film for rapid charge separation and improved photodegradation performance. <b>2016</b> , 6, 89944-89952		42
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726	Construction of amorphous Ta <sub>2</sub> O <sub>5</sub> /g-C <sub>3</sub> N <sub>4</sub> nanosheet hybrids with superior visible-light photoactivities for organic dye degradation and mechanism insight. <b>2016</b> , 170, 10-21		36
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7 <sup>19</sup>	Hierarchical ZnO/S,N:GQD composites: Biotemplated synthesis and enhanced visible-light-driven photocatalytic activity. <b>2017</b> , 391, 484-490	42
7 <sup>18</sup>	Alternative photocatalysts to TiO <sub>2</sub> for the photocatalytic reduction of CO <sub>2</sub> . <b>2017</b> , 391, 149-174	137
7 <sup>17</sup>	Magnetically separable photocatalyst of direct Z-scheme g-C <sub>3</sub> N <sub>4</sub> nanosheets/natural hematite ore hybrids. <b>2017</b> , 336, 156-163	26
7 <sup>16</sup>	Photocatalytic back-conversion of CO <sub>2</sub> into oxygenate fuels using an efficient ZnO/CuO/carbon nanotube solar-energy-material: Artificial photosynthesis. <b>2017</b> , 18, 89-97	17
7 <sup>15</sup>	Highly enhanced photocatalytic degradation of methylene blue over the indirect all-solid-state Z-scheme g-C <sub>3</sub> N <sub>4</sub> -RGO-TiO <sub>2</sub> nanoheterojunctions. <b>2017</b> , 405, 60-70	276
7 <sup>14</sup>	Hierarchical Porous O-Doped g-C <sub>3</sub> N <sub>4</sub> with Enhanced Photocatalytic CO Reduction Activity. <b>2017</b> , 13, 1603938	732
7 <sup>13</sup>	Oxygen defects-mediated Z-scheme charge separation in g-C <sub>3</sub> N <sub>4</sub> /ZnO photocatalysts for enhanced visible-light degradation of 4-chlorophenol and hydrogen evolution. <b>2017</b> , 206, 406-416	255
7 <sup>12</sup>	Construction of g-C <sub>3</sub> N <sub>4</sub> /CeO <sub>2</sub> /ZnO ternary photocatalysts with enhanced photocatalytic performance. <b>2017</b> , 106, 1-9	83
7 <sup>11</sup>	La <sub>2</sub> Sn <sub>2</sub> O <sub>7</sub> enhanced photocatalytic CO <sub>2</sub> reduction with H <sub>2</sub> O by deposition of Au co-catalyst. <b>2017</b> , 7, 14186-14191	46
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7 <sup>08</sup>	In situ synthesis of C-doped TiO <sub>2</sub> @g-C <sub>3</sub> N <sub>4</sub> core-shell hollow nanospheres with enhanced visible-light photocatalytic activity for H <sub>2</sub> evolution. <b>2017</b> , 322, 435-444	161
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623	Constructing 2D/2D Fe <sub>2</sub> O <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> Direct Z-Scheme Photocatalysts with Enhanced H <sub>2</sub> Generation Performance. <b>2018</b> , 2, 1800006	300
622	Highly Efficient Visible Light Active 2D-2D Nanocomposites of N-ZnO-g-C <sub>3</sub> N <sub>4</sub> for Photocatalytic Degradation of Diverse Industrial Pollutants. <b>2018</b> , 3, 1919-1932	63
621	Facile synthesis of carbon quantum dots loaded with mesoporous g-CN for synergistic absorption and visible light photodegradation of fluoroquinolone antibiotics. <b>2018</b> , 47, 1284-1293	49
620	Hollow CoS <sub>x</sub> Polyhedrons Act as High-Efficiency Cocatalyst for Enhancing the Photocatalytic Hydrogen Generation of g-C <sub>3</sub> N <sub>4</sub> . <b>2018</b> , 6, 2767-2779	258
619	Enhanced selective photocatalytic reduction of CO <sub>2</sub> to CH <sub>4</sub> over plasmonic Au modified g-C <sub>3</sub> N <sub>4</sub> photocatalyst under UV <sub>A</sub> light irradiation. <b>2018</b> , 439, 552-559	93
618	ZnO hierarchical microsphere for enhanced photocatalytic activity. <b>2018</b> , 741, 622-632	113
617	Photocatalytic degradation of fluoroquinolone antibiotics using ordered mesoporous g-C <sub>3</sub> N <sub>4</sub> under simulated sunlight irradiation: Kinetics, mechanism, and antibacterial activity elimination. <b>2018</b> , 227, 114-122	183
616	Mn-doping-induced photocatalytic activity enhancement of ZnO nanorods prepared on glass substrates. <b>2018</b> , 439, 285-297	102
615	Enhanced photocatalytic performance of g-C <sub>3</sub> N <sub>4</sub> /Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> heterojunction nanocomposites. <b>2018</b> , 229, 160-172	75
614	Construction of an all-solid-state Z-scheme photocatalyst based on graphite carbon nitride and its enhancement to catalytic activity. <b>2018</b> , 5, 599-615	143
613	In situ hydrothermal preparation and photocatalytic desulfurization performance of metallophthalocyanine sensitized SnO <sub>2</sub> . <b>2018</b> , 471, 782-787	20
612	Direct Z-scheme heterojunction nanocomposite for the enhanced solar H <sub>2</sub> production. <b>2018</b> , 553, 43-51	24

611	DNA for Assembly and Charge Transport Photocatalytic Reduction of CO <sub>2</sub> . <b>2018</b> , 2, 1700156	5
610	Fabrication of Cu-doped ZnO nanoneedles on different substrate via wet chemical approach: Structural characterization and photocatalytic performance. <b>2018</b> , 447, 213-221	26
609	Ag <sub>2</sub> CrO <sub>4</sub> /g-C <sub>3</sub> N <sub>4</sub> /graphene oxide ternary nanocomposite Z-scheme photocatalyst with enhanced CO <sub>2</sub> reduction activity. <b>2018</b> , 231, 368-380	362
608	DFT Study on Sulfur-Doped g-C <sub>3</sub> N <sub>4</sub> Nanosheets as a Photocatalyst for CO <sub>2</sub> Reduction Reaction. <b>2018</b> , 122, 7712-7719	116
607	TiO <sub>2</sub> /MXene Ti <sub>3</sub> C <sub>2</sub> composite with excellent photocatalytic CO <sub>2</sub> reduction activity. <b>2018</b> , 361, 255-266	397
606	Enhanced photocatalytic CO <sub>2</sub> reduction activity of MOF-derived ZnO/NiO porous hollow spheres. <b>2018</b> , 24, 548-554	72
605	Recent progress on the nanoparticles-assisted greenhouse carbon dioxide conversion processes. <b>2018</b> , 24, 522-547	33
604	2D/2D Z-scheme Bi <sub>2</sub> WO <sub>6</sub> /Porous-g-C <sub>3</sub> N <sub>4</sub> with synergy of adsorption and visible-light-driven photodegradation. <b>2018</b> , 447, 125-134	78
603	Self-integrated Bi <sub>2</sub> O <sub>3</sub> /Bi <sub>2</sub> O <sub>2.33</sub> @Bi <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> ternary composites: Formation mechanism and visible light photocatalytic activity. <b>2018</b> , 430, 613-624	43
602	Facile synthesis of Z-scheme BiVO <sub>4</sub> /porous graphite carbon nitride heterojunction for enhanced visible-light-driven photocatalyst. <b>2018</b> , 430, 595-602	132
601	g-C <sub>3</sub> N <sub>4</sub> based composite photocatalysts for photocatalytic CO <sub>2</sub> reduction. <b>2018</b> , 300, 160-172	176
600	Photoassisted oxygen reduction reaction on mpg-C <sub>3</sub> N <sub>4</sub> : The effects of elements doping on the performance of ORR. <b>2018</b> , 430, 325-334	20
599	Improved solar light stimulated charge separation of g-C <sub>3</sub> N <sub>4</sub> through self-altering acidic treatment. <b>2018</b> , 430, 355-361	23
598	Fabrication of modified g-C <sub>3</sub> N <sub>4</sub> nanorod/Ag <sub>3</sub> PO <sub>4</sub> nanocomposites for solar-driven photocatalytic oxygen evolution from water splitting. <b>2018</b> , 430, 301-308	73
597	Double Z-scheme ZnO/ZnS/g-C <sub>3</sub> N <sub>4</sub> ternary structure for efficient photocatalytic H <sub>2</sub> production. <b>2018</b> , 430, 293-300	138
596	Synthesis of magnetic Bi <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> /ZnFe <sub>2</sub> O <sub>4</sub> composite with improved photocatalytic activity and easy recyclability. <b>2018</b> , 433, 610-616	22
595	Photocatalytic carbon dioxide reduction to fuels in continuous flow monolith photoreactor using montmorillonite dispersed Fe/TiO <sub>2</sub> nanocatalyst. <b>2018</b> , 170, 242-250	55
594	Three dimensional hierarchical heterostructures of g-CN nanosheets/TiO nanofibers: Controllable growth via gas-solid reaction and enhanced photocatalytic activity under visible light. <b>2018</b> , 344, 113-122	90

593	Molten salt-mediated formation of g-C3N4-MoS2 for visible-light-driven photocatalytic hydrogen evolution. <b>2018</b> , 430, 218-224	69
592	g-C3N4-Based Heterostructured Photocatalysts. <b>2018</b> , 8, 1701503	1245
591	ZnO2-promoted ZnO as an efficient photocatalyst for the photoreduction of carbon dioxide in the presence of water. <b>2018</b> , 103, 24-28	24
590	Sb doped SnO2-decorated porous g-C3N4 nanosheet heterostructures with enhanced photocatalytic activities under visible light irradiation. <b>2018</b> , 221, 670-680	95
589	Ni-Mo-S nanoparticles modified graphitic C3N4 for efficient hydrogen evolution. <b>2018</b> , 427, 587-597	79
588	ZnO-rich CdS-ZIF-8 catalyst for enhanced visible-light photocatalytic degradation of methylene blue. <b>2018</b> , 44, 2347-2364	7
587	Facile Synthesis of CeO2 Nanosheets Decorated upon BiOI Microplate: A Surface Oxygen Vacancy Promoted Z-Scheme-Based 2D-2D Nanocomposite Photocatalyst with Enhanced Photocatalytic Activity. <b>2018</b> , 122, 808-819	83
586	One-pot, facile fabrication of a Ag3PO4-based ternary Z-scheme photocatalyst with excellent visible-light photoactivity and anti-photocorrosion performance. <b>2018</b> , 436, 90-101	31
585	Fabrication of flower-like direct Z-scheme Bi2O3/g-C3N4 photocatalyst with enhanced visible light photoactivity for Rhodamine B degradation. <b>2018</b> , 436, 162-171	90
584	Noble metal-free RGO/TiO2 composite nanofiber with enhanced photocatalytic H2-production performance. <b>2018</b> , 434, 620-625	72
583	One-pot, self-assembled hydrothermal synthesis of 3D flower-like CuS/g-C3N4 composite with enhanced photocatalytic activity under visible-light irradiation. <b>2018</b> , 115, 59-68	70
582	2D/2D g-C3N4/MnO2 Nanocomposite as a Direct Z-Scheme Photocatalyst for Enhanced Photocatalytic Activity. <b>2018</b> , 6, 965-973	392
581	Structural, optical and photocatalytic properties of visible light driven zinc oxide hybridized two-dimensional conjugated polymeric g-C3N4 composite. <b>2018</b> , 75, 431-441	14
580	Recent developments in the design of photoreactors for solar energy conversion from water splitting and CO2 reduction. <b>2018</b> , 550, 122-141	68
579	First-principle calculation study of tri-s-triazine-based g-C3N4: A review. <b>2018</b> , 224, 983-999	268
578	Controllable synthesis of mesoporous multi-shelled ZnO microspheres as efficient photocatalysts for NO oxidation. <b>2018</b> , 435, 468-475	39
577	Metal ion-containing ionic liquid assisted synthesis and enhanced photoelectrochemical performance of g-C3N4/ZnO composites. <b>2018</b> , 33, 185-192	4
576	Rapid Sterilization and Accelerated Wound Healing Using Zn2+ and Graphene Oxide Modified g-C3N4 under Dual Light Irradiation. <b>2018</b> , 28, 1800299	173

575	TiO <sub>2</sub> -based heterojunction photocatalysts for photocatalytic reduction of CO <sub>2</sub> into solar fuels. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 22411-22436	13	129
574	A highly efficient Z-scheme B-doped g-C <sub>3</sub> N <sub>4</sub> /SnS <sub>2</sub> photocatalyst for CO <sub>2</sub> reduction reaction: a computational study. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 21056-21063	13	92
573	Requirements for efficient metal oxide photocatalysts for CO <sub>2</sub> reduction. <b>2018</b> , 275-301		2
572	Fabrication of Hierarchical ZnO@NiO Core-Shell Heterostructures for Improved Photocatalytic Performance. <b>2018</b> , 13, 260		14
571	Graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) electrodes for energy conversion and storage: a review on photoelectrochemical water splitting, solar cells and supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 22346-22380	13	166
570	Improved visible-light catalytic activities of novel Au/P-doped g-C <sub>3</sub> N <sub>4</sub> photocatalyst for solar fuel production and mechanism. <b>2018</b> , 568, 139-147		61
569	Direct Z-Scheme CsO-BiO-ZnO Heterostructures as Efficient Sunlight-Driven Photocatalysts. <b>2018</b> , 3, 12260-12269		49
568	Cellulose Nanocrystal-ZnO Nanohybrids for Controlling Photocatalytic Activity and UV Protection in Cosmetic Formulation. <b>2018</b> , 3, 12403-12411		32
567	Z-Scheme Au@Void@g-CN/SnS Yolk-Shell Heterostructures for Superior Photocatalytic CO Reduction under Visible Light. <b>2018</b> , 10, 34123-34131		85
566	Facile fabrication of direct solid-state Z-scheme g-CN/FeO heterojunction: a cost-effective photocatalyst with high efficiency for the degradation of aqueous organic pollutants. <b>2018</b> , 47, 15382-15390		39
565	Hierarchical ZnO Decorated with CeO Nanoparticles as the Direct Z-Scheme Heterojunction for Enhanced Photocatalytic Activity. <b>2018</b> , 10, 39679-39687		146
564	Roles and Properties of Cocatalysts in Semiconductor-Based Materials for Efficient CO <sub>2</sub> Photoreduction. <b>2018</b> , 275-305		0
563	Carbon-nitride-based core-shell nanomaterials: synthesis and applications. <b>2018</b> , 29, 20280-20301		9
562	Synthesis and Modifications of Mesoporous g-C <sub>3</sub> N <sub>4</sub> Photocatalyst. <b>2018</b> , 345-366		
561	Influence of g-CN Precursors in g-CN/NiTiO Composites on Photocatalytic Behavior and the Interconnection between g-CN and NiTiO. <b>2018</b> , 34, 13144-13154		45
560	Carbon nitrides and metal nanoparticles: from controlled synthesis to design principles for improved photocatalysis. <b>2018</b> , 47, 7783-7817		167
559	Synergistic effect between ultrasound and fierce mechanical activation towards mineral extraction: A case study of ZnO ore. <b>2018</b> , 48, 163-170		5
558	Boosting Charge-Transfer Efficiency by Simultaneously Tuning Double Effects of Metal Nanocrystal in Z-Scheme Photocatalytic Redox System. <b>2018</b> , 122, 12291-12306		22

557	Direct Z-scheme photocatalysts: Principles, synthesis, and applications. <b>2018</b> , 21, 1042-1063		737
556	Pt@Cu <sub>2</sub> O/WO <sub>3</sub> composite photocatalyst for enhanced photocatalytic water oxidation performance. <b>2018</b> , 237, 309-317		66
555	Photocatalytic degradation of MO and phenol over novel ECoOOH/g-C <sub>3</sub> N <sub>4</sub> composite under visible light irradiation. <b>2018</b> , 228, 121-124		24
554	Graphitic Carbon Nitride-Based Heterojunction Photoactive Nanocomposites: Applications and Mechanism Insight. <b>2018</b> , 10, 21035-21055		179
553	Photocatalytic reductive dechlorination of 2-chlorodibenzo-p-dioxin by Pd modified g-CN photocatalysts under UV-vis irradiation: Efficacy, kinetics and mechanism. <b>2018</b> , 355, 74-81		37
552	Controllable synthesis of magnetic Fe <sub>3</sub> O <sub>4</sub> encapsulated semimetal Bi nanospheres with excellent stability and catalytic activity. <b>2018</b> , 53, 13886-13899		8
551	Surface chemistry imposes selective reduction of CO <sub>2</sub> to CO over Ta <sub>3</sub> N <sub>5</sub> /LaTiO <sub>2</sub> N photocatalyst. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 14838-14846	13	23
550	Biomimetic Z-scheme photocatalyst with a tandem solid-state electron flow catalyzing H <sub>2</sub> evolution. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 15668-15674	13	138
549	Synthesis of BiOCl <sub>0.5</sub> IO <sub>0.5</sub> /TiO <sub>2</sub> heterojunctions with enhanced visible-light photocatalytic properties. <b>2018</b> , 20, 1		11
548	Antibacterial activity of Cu <sub>2</sub> O and Ag co-modified rice grains-like ZnO nanocomposites. <b>2018</b> , 34, 2359-2367		25
547	ZnO nanoparticles implanted in TiO <sub>2</sub> macrochannels as an effective direct Z-scheme heterojunction photocatalyst for degradation of RhB. <b>2018</b> , 456, 666-675		95
546	The electronic structure and photoactivity of TiO <sub>2</sub> modified by hybridization with monolayer g-C <sub>3</sub> N <sub>4</sub> . <b>2018</b> , 364, 328-335		9
545	Fabricating direct Z-scheme PTCDAs/g-C <sub>3</sub> N <sub>4</sub> photocatalyst based on interfacial strong interaction for efficient photooxidation of benzylamine. <b>2018</b> , 456, 861-870		34
544	Application of Exfoliated Inorganic Nanosheets for Strongly-Coupled Hybrid Photocatalysts. <b>2018</b> , 2, 1800092		16
543	Common-cation based Z-scheme ZnS@ZnO core-shell nanostructure for efficient solar-fuel production. <b>2018</b> , 238, 518-524		39
542	Ethylenediamine-functionalized CdS/tetra(4-carboxyphenyl)porphyrin iron(III) chloride hybrid system for enhanced CO <sub>2</sub> photoreduction. <b>2018</b> , 459, 292-299		15
541	Azine-based covalent organic frameworks as metal-free visible light photocatalysts for CO <sub>2</sub> reduction with H <sub>2</sub> O. <b>2018</b> , 239, 46-51		125
540	g-C <sub>3</sub> N <sub>4</sub> -Based Nanomaterials for Visible Light-Driven Photocatalysis. <b>2018</b> , 8, 74		141

539	Novel direct Z-scheme Cu <sub>2</sub> V <sub>2</sub> O <sub>7</sub> /g-C <sub>3</sub> N <sub>4</sub> for visible light photocatalytic conversion of CO <sub>2</sub> into valuable fuels. <b>2018</b> , 457, 968-974		61
538	Direct Z-scheme PDA-modified ZnO hierarchical microspheres with enhanced photocatalytic CO <sub>2</sub> reduction performance. <b>2018</b> , 457, 1096-1102		46
537	Highly efficient photoelectrocatalytic reduction of CO <sub>2</sub> on the Ti <sub>3</sub> C <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> heterojunction with rich Ti <sup>3+</sup> and pyri-N species. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 15213-15220	13	63
536	Interactions between ZnO nanoparticles and amorphous g-C <sub>3</sub> N <sub>4</sub> nanosheets in thermal formation of g-C <sub>3</sub> N <sub>4</sub> /ZnO composite materials: The annealing temperature effect. <b>2018</b> , 458, 369-381		39
535	Graphitic carbon nitride nanosheets anchored with BiOBr and carbon dots: Exceptional visible-light-driven photocatalytic performances for oxidation and reduction reactions. <b>2018</b> , 530, 642-657		56
534	Enhanced photocatalytic properties of Bi <sub>4</sub> O <sub>5</sub> Br <sub>2</sub> by Mn doping: a first principles study. <b>2018</b> , 5, 075512		10
533	Dramatic visible photocatalytic performance of g-C <sub>3</sub> N <sub>4</sub> -based nanocomposite due to the synergistic effect of AgBr and ZnO semiconductors. <b>2018</b> , 122, 174-183		18
532	Construction of Sn/oxide g-C <sub>3</sub> N <sub>4</sub> nanostructure by electrostatic self-assembly strategy with enhanced photocatalytic degradation performance. <b>2018</b> , 457, 1035-1043		13
531	Zinc oxide-graphitic carbon nitride nano hybrid as an efficient electrochemical sensor and photocatalyst. <b>2018</b> , 277, 467-476		43
530	Direct Z-Scheme TiO <sub>2</sub> /NiS CoreShell Hybrid Nanofibers with Enhanced Photocatalytic H <sub>2</sub> -Production Activity. <b>2018</b> , 6, 12291-12298		158
529	A Facile Synthesis of WS <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> Composites with Improved Photocatalytic Activity. <b>2018</b> , 39, 965-971		10
528	Designing biomimetic porous celery: TiO <sub>2</sub> /ZnO nanocomposite for enhanced CO <sub>2</sub> photoreduction. <b>2018</b> , 53, 11595-11606		16
527	In-situ self-sacrificial fabrication of lanthanide hydroxycarbonates/graphitic carbon nitride heterojunctions: nitrogen photofixation under simulated solar light irradiation. <b>2018</b> , 347, 849-859		44
526	Chalcogenide photocatalysts for selective oxidation of aromatic alcohols to aldehydes using O <sub>2</sub> and visible light: A case study of CdIn <sub>2</sub> S <sub>4</sub> , CdS and In <sub>2</sub> S <sub>3</sub> . <b>2018</b> , 348, 966-977		52
525	Recent progress on band and surface engineering of graphitic carbon nitride for artificial photosynthesis. <b>2018</b> , 462, 693-712		35
524	Stannous oxide promoted charge separation in rationally designed heterojunction photocatalysts with a controllable mechanism. <b>2018</b> , 47, 12734-12741		6
523	Flower-like MoS <sub>2</sub> on graphitic carbon nitride for enhanced photocatalytic and electrochemical hydrogen evolutions. <b>2018</b> , 239, 334-344		100
522	Novel visible light induced Ag <sub>2</sub> S/g-C <sub>3</sub> N <sub>4</sub> /ZnO nanoarrays heterojunction for efficient photocatalytic performance. <b>2018</b> , 462, 896-903		26

521	First-principle investigation on charge carrier transfer in transition-metal single atoms loaded g-C3N4. <b>2018</b> , 459, 385-392	28
520	Construction of TiO2/CdS heterojunction photocatalysts with enhanced visible light activity. <b>2018</b> , 455, 729-735	37
519	Graphitic carbon nitride/BiOI loaded on electrospun silica nanofibers with enhanced photocatalytic activity. <b>2018</b> , 455, 952-962	29
518	Fe-doped Bi4O5Br2 visible light photocatalyst: A first principles investigation. <b>2018</b> , 17, 1850031	3
517	A novel Z-scheme Bi2MoO6/BiOBr photocatalyst for enhanced photocatalytic activity under visible light irradiation. <b>2018</b> , 456, 473-481	112
516	Dual Z-scheme g-C3N4/Ag3PO4/Ag2MoO4 ternary composite photocatalyst for solar oxygen evolution from water splitting. <b>2018</b> , 456, 369-378	156
515	Fabrication of mediator-free g-C3N4/Bi2WO6 Z-scheme with enhanced photocatalytic reduction dechlorination performance of 2,4-DCP. <b>2018</b> , 455, 1010-1018	56
514	A facile approach to synthesize graphitic carbon nitride microwires for enhanced photocatalytic H2 evolution from water splitting under full solar spectrum. <b>2018</b> , 8, 3599-3609	26
513	Fabrication of Ta3N5ZnO direct Z-scheme photocatalyst for hydrogen generation. <b>2019</b> , 44, 19162-19167	14
512	Effects of deposition angle on synthesis of amorphous carbon nitride thin films prepared by plasma focus device. <b>2019</b> , 463, 141-149	9
511	Optimizing electronic structure and charge transport of sulfur/potassium co-doped graphitic carbon nitride with efficient photocatalytic hydrogen evolution performance. <b>2019</b> , 33, e5163	7
510	The cube-like porous ZnO/C composites derived from metal organic framework-5 as anodic material with high electrochemical performance for Ni/Zn rechargeable battery. <b>2019</b> , 438, 226986	24
509	A novel Cs2OBi2O3TiO2ZnO heterostructure with direct Z-Scheme for efficient photocatalytic water splitting. <b>2019</b> , 45, 23756-23764	13
508	Waste Eggshell-Derived Dual-Functional CuO/ZnO/Eggshell Nanocomposites: (Photo)catalytic Reduction and Bacterial Inactivation. <b>2019</b> , 7, 15762-15771	52
507	Graphdiyne: A New Photocatalytic CO2 Reduction Cocatalyst. <b>2019</b> , 29, 1904256	115
506	Graphitic carbon nitride based Z scheme photocatalysts: Design considerations, synthesis, characterization and applications. <b>2019</b> , 79, 383-408	31
505	Construction of Z-scheme g-C3N4/Ag/P3HT heterojunction for enhanced visible-light photocatalytic degradation of tetracycline (TC) and methyl orange (MO). <b>2019</b> , 496, 143653	22
504	All-inorganic perovskite/graphitic carbon nitride composites for CO photoreduction into C1 compounds under low concentrations of CO. <b>2019</b> , 48, 14115-14121	24



503	Hydrogen Production Improvement on Water Decomposition Through Internal Interfacial Charge Transfer in M <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> -M <sub>2</sub> P <sub>2</sub> O <sub>7</sub> Mixed-Phase Catalyst (M = Co, Ni, and Cu). <b>2019</b> , 9, 602		6
502	Synthesis of foamed zinc oxide/silica spheres coupled with g-C <sub>3</sub> N <sub>4</sub> nanosheets for visible light photocatalysis. <b>2019</b> , 54, 13118-13134		14
501	Multiple regulations of Mn-based oxides in boosting peroxymonosulfate activation for norfloxacin removal. <b>2019</b> , 584, 117170		12
500	Construction of Ag <sub>2</sub> S/WO <sub>3</sub> Direct Z-Scheme Photocatalyst for Enhanced Charge Separation Efficiency and H <sub>2</sub> Generation Activity. <b>2019</b> , 58, 14802-14813		12
499	Synergistically effective and highly visible light responsive SnO <sub>2</sub> -g-C <sub>3</sub> N <sub>4</sub> nanostructures for improved photocatalytic and photoelectrochemical performance. <b>2019</b> , 495, 143432		52
498	S-rGO modified sulphur doped carbon nitride with mixed-dimensional hierarchical nanostructures of silver vanadate for the enhanced photocatalytic degradation of pollutants in divergent fields. <b>2019</b> , 495, 143478		13
497	Novel g-C <sub>3</sub> N <sub>4</sub> /g-C <sub>3</sub> N <sub>4</sub> S-scheme isotype heterojunction for improved photocatalytic hydrogen generation. <b>2019</b> , 495, 143555		94
496	Room-temperature hydrolysis fabrication of BiOBr/BiOBr Z-Scheme photocatalyst with enhanced resorcinol degradation and NO removal activity. <b>2019</b> , 235, 767-775		22
495	Deliberate construction of direct Z-scheme photocatalysts through photodeposition. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 18348-18356	13	54
494	Study of PdO species on surface of TiO <sub>2</sub> for photoreduction of CO <sub>2</sub> into CH <sub>4</sub> . <b>2019</b> , 384, 112032		8
493	Photocatalytic Decomposition of N <sub>2</sub> O by Using Nanostructured Graphitic Carbon Nitride/Zinc Oxide Photocatalysts Immobilized on Foam. <b>2019</b> , 9, 735		8
492	Correction to: Dynamic analysis of gene expression and determination of chemicals in agarwood in <i>Aquilaria sinensis</i> . <b>2019</b> , 32, 2247		
491	TiO <sub>2</sub> nanofibers embedded with g-C <sub>3</sub> N <sub>4</sub> nanosheets and decorated with Ag nanoparticles as Z-scheme photocatalysts for environmental remediation. <b>2019</b> , 7, 103452		17
490	Review on DFT calculation of s-triazine-based carbon nitride. <b>2019</b> , 1, 32-56		130
489	Carbon-Based Nanomaterials via Heterojunction Serving as Photocatalyst. <b>2019</b> , 7, 713		27
488	Synthesis of RGO/BiOI/ZnO composites with efficient photocatalytic reduction of aqueous Cr(VI) under visible-light irradiation. <b>2019</b> , 112, 154-158		38
487	A mini-review on the synthesis and structural modification of g-C <sub>3</sub> N <sub>4</sub> -based materials, and their applications in solar energy conversion and environmental remediation. <b>2019</b> , 3, 2907-2925		78
486	Photocatalytic Applications of Heterostructure Graphitic Carbon Nitride: Pollutant Degradation, Hydrogen Gas Production (water splitting), and CO Reduction. <b>2019</b> , 14, 234		47

485	2D/3D interface engineering: direct Z-scheme g-C3N4/YMnO3 heterojunction for reinforced visible-light photocatalytic oxidation. <b>2019</b> , 30, 17601-17611	12
484	Enhanced Photocatalytic CO Reduction in Defect-Engineered Z-Scheme WO <sub>3</sub> /g-CN Heterostructures. <b>2019</b> , 4, 15593-15599	47
483	CuO/ZnO/g-C3N4 heterostructures as efficient visible light-driven photocatalysts. <b>2019</b> , 7, 103412	31
482	Photocatalytic coupling of methane and CO <sub>2</sub> into C <sub>2</sub> -hydrocarbons over Zn doped g-C3N4 catalysts. <b>2019</b> , 498, 143861	28
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480	A Z-scheme BiMoO <sub>6</sub> /CdSe-diethylenetriamine heterojunction for enhancing photocatalytic hydrogen production activity under visible light. <b>2019</b> , 48, 1067-1074	52
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330	Direct Z-scheme Bi <sub>2</sub> S <sub>3</sub> /BiFeO <sub>3</sub> heterojunction nanofibers with enhanced photocatalytic activity. <b>2020</b> , 834, 155158	31
329	BiVO <sub>4</sub> , Bi <sub>2</sub> WO <sub>6</sub> and Bi <sub>2</sub> MoO <sub>6</sub> photocatalysis: A brief review. <b>2020</b> , 56, 45-68	78
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282	Visible-light-driven nitrogen-doped carbon quantum dots decorated g-C <sub>3</sub> N <sub>4</sub> /Bi <sub>2</sub> WO <sub>6</sub> Z-scheme composite with enhanced photocatalytic activity and mechanism insight. <b>2020</b> , 835, 155180	35
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280	Highly Selective Photoreduction of CO with Suppressing H <sub>2</sub> Evolution by Plasmonic Au/CdSe-Cu <sub>2</sub> O Hierarchical Nanostructures under Visible Light. <b>2020</b> , 16, e2000426	30
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274	Encapsulation of Co single sites in covalent triazine frameworks for photocatalytic production of syngas. <b>2021</b> , 42, 123-130	16
273	Z-scheme heterostructure BiOCl-Ag-AgBr with enhanced sunlight-driven photocatalytic activity in simultaneous removal of Cr <sup>6+</sup> and phenol contaminants. <b>2021</b> , 376, 151-161	11
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263	Electrocatalytic and catalytic CO <sub>2</sub> hydrogenation on ZnO/g-C <sub>3</sub> N <sub>4</sub> hybrid nanoelectrodes. <b>2021</b> , 538, 148120	16
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256	In-situ growth of ultrafine ZnO on g-C <sub>3</sub> N <sub>4</sub> layer for highly active and selective CO <sub>2</sub> photoreduction to CH <sub>4</sub> under visible light. <b>2021</b> , 137, 111177	13
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248	Visible light response ZnO/g-C <sub>3</sub> N <sub>4</sub> thin film photocatalyst. <b>2021</b> , 40, 96-104		21
247	CHAPTER 8:Emerging Applications for Graphitic Carbon Nitride-based Materials: CO <sub>2</sub> Reduction as a Case Study. <b>2021</b> , 295-317		
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245	A 20-core copper(I) nanocluster as electron-hole recombination inhibitor on TiO <sub>2</sub> nanosheets for enhancing photocatalytic H <sub>2</sub> evolution. <b>2021</b> , 13, 16182-16188		0
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243	Artificial Z-scheme-based photocatalysts: design strategies and approaches. <b>2021</b> , 165-186		
242	Perspectives in Carbon Oxides Conversion to Methanol/Dimethyl Ether: Distinctive Contribution of Heterogeneous and Photocatalysis. <b>2021</b> , 557-597		
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238	Gas sensing performance of 2D nanomaterials/metal oxide nanocomposites: a review.		19
237	Intrinsic carbon-doping induced synthesis of oxygen vacancies-mediated TiO <sub>2</sub> nanocrystals: Enhanced photocatalytic NO removal performance and mechanism. <b>2021</b> , 393, 179-189		10
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228	Enhanced photocatalytic activity of the direct Z-scheme black phosphorus/BiOX (X = Cl, Br, I) heterostructures. <b>2021</b> , 23, 17894-17903		3
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224	2D materials and their heterostructures for photocatalytic water splitting and conversion of CO <sub>2</sub> to value chemicals and fuels. <b>2021</b> , 3, 022003		9
223	A Review on Emerging Efficient and Stable Perovskite Solar Cells Based on g-CN Nanostructures. <b>2021</b> , 14,		6
222	Surface Plasmonic Resonance and Z-Scheme Charge Transport Synergy in Three-Dimensional Flower-like Ag <sub>2</sub> TeO <sub>2</sub> /ZnO Heterostructures for Highly Improved Photocatalytic CO <sub>2</sub> Reduction. <b>2021</b> , 4, 3544-3554		16
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219	Photocatalytic CO <sub>2</sub> Reduction. <b>2021</b> , 243-267		
218	Emerging polymeric carbon nitride Z-scheme systems for photocatalysis. <b>2021</b> , 2, 100355		46
217	Carbon Nitride-Based Ruthenium Single Atom Photocatalyst for CO Reduction to Methanol. <b>2021</b> , 17, e2006478		43
216	Crystal Violet-Sensitized Direct Z-Scheme Heterojunction Coupled with a G-Wire Superstructure for Photoelectrochemical Sensing of Uracil-DNA Glycosylase. <b>2021</b> , 13, 15881-15889		5

215	Elegant Construction of ZnInS/BiVO Hierarchical Heterostructures as Direct Z-Scheme Photocatalysts for Efficient CO Photoreduction. <b>2021</b> , 13, 15092-15100	33
214	Ag and Cu Nanoparticles Synergistically Enhance Photocatalytic CO <sub>2</sub> Reduction Activity of B Phase TiO <sub>2</sub> . 1	1
213	From Trash to Treasure: Probing Cycloaddition and Photocatalytic Reduction of CO <sub>2</sub> over Cerium-Based Metal-Organic Frameworks. <b>2021</b> , 125, 8497-8507	10
212	Reductant-free synthesis of oxygen vacancies-mediated TiO <sub>2</sub> nanocrystals with enhanced photocatalytic NO removal performance: An experimental and DFT study. <b>2021</b> , 544, 148923	7
211	An Overview of the Recent Progress in Polymeric Carbon Nitride Based Photocatalysis. <b>2021</b> , 21, 1811-1844	15
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202	Construction of dual ligand Ti-based MOFs with enhanced photocatalytic CO <sub>2</sub> reduction performance. <b>2021</b> , 48, 101528	9
201	Zinc sulfide quantum dots/zinc oxide nanospheres/bismuth-enriched bismuth oxyiodides as Z-scheme/type-II tandem heterojunctions for an efficient charge separation and boost solar-driven photocatalytic performance. <b>2021</b> , 592, 259-270	18
200	CdS-modified ZIF-8-derived porous carbon for organic pollutant degradations under visible-light irradiation. <b>2021</b> , 47, 4193-4211	2
199	The enhanced photocatalytic reduction of uranium(VI) by ZnS@g-C <sub>3</sub> N <sub>4</sub> heterojunctions under sunlight. <b>2021</b> , 329, 1125-1133	4
198	Bi <sub>2</sub> O <sub>3</sub> -sensitized hierarchically mesoporous ZnO nanoparticles for Hg(II) reduction. <b>2021</b> , 47, 17069-17076	1

197	Boosting light-driven CO reduction into solar fuels: Mainstream avenues for engineering ZnO-based photocatalysts. <b>2021</b> , 197, 111134	13
196	TiO <sub>2</sub> /polydopamine S-scheme heterojunction photocatalyst with enhanced CO <sub>2</sub> -reduction selectivity. <b>2021</b> , 289, 120039	98
195	Modulate 1O <sub>2</sub> by passivate oxygen vacancy to boosting the photocatalytic performance of Z-scheme Mo <sub>2</sub> S <sub>3</sub> /BiOCl heterostructure. <b>2021</b> , 266, 118547	12
194	MoS nanosheets/silver nanoparticles anchored onto textile fabric as "dip catalyst" for synergistic p-nitrophenol hydrogenation. <b>2021</b> , 28, 64674-64686	4
193	Nano-channel-based physical and chemical synergic regulation for dendrite-free lithium plating. <b>2021</b> , 14, 3585-3597	4
192	A review of material aspects in developing direct Z-scheme photocatalysts. <b>2021</b> , 47, 75-107	42
191	One-pot synthesis of S-scheme MoS/g-CN heterojunction as effective visible light photocatalyst. <b>2021</b> , 11, 14787	10
190	One-pot synthesis of 3D porous Bi <sub>7</sub> O <sub>9</sub> I <sub>3</sub> /N-doped graphene aerogel with enhanced photocatalytic activity for organic dye degradation in wastewater. <b>2021</b> , 47, 19556-19566	3
189	Interface engineering Z-scheme Ti-Fe <sub>2</sub> O <sub>3</sub> /In <sub>2</sub> O <sub>3</sub> photoanode for highly efficient photoelectrochemical water splitting. <b>2021</b> , 290, 120058	41
188	Direct Z-scheme FeV <sub>2</sub> O <sub>4</sub> /g-C <sub>3</sub> N <sub>4</sub> Binary Catalyst for Highly Selective Reduction of Carbon Dioxide. <b>2021</b> , 132051	0
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186	Energy Platform for Directed Charge Transfer in the Cascade Z-Scheme Heterojunction: CO Photoreduction without a Cocatalyst. <b>2021</b> , 60, 20906-20914	37
185	Enhanced photocatalytic activity of ZnO/g-C <sub>3</sub> N <sub>4</sub> nanofibers constituting carbonaceous species under simulated sunlight for organic dye removal. <b>2021</b> , 47, 26185-26196	11
184	First-principles calculations to investigate stability, electronic and optical properties of fluorinated MoSi <sub>2</sub> N <sub>4</sub> monolayer. <b>2021</b> , 30, 104864	3
183	H <sub>2</sub> O <sub>2</sub> production and in situ sterilization over a ZnO/g-C <sub>3</sub> N <sub>4</sub> heterojunction photocatalyst. <b>2021</b> , 420, 129722	22
182	A roadmap towards the development of superior photocatalysts for solar- driven CO <sub>2</sub> -to-fuels production. <b>2021</b> , 148, 111298	13
181	Magnetic NiFe <sub>2</sub> O <sub>4</sub> nanoparticles decorated on N-doped BiOBr nanosheets for expeditious visible light photocatalytic phenol degradation and hexavalent chromium reduction via a Z-scheme heterojunction mechanism. <b>2021</b> , 559, 149966	27
180	Carbon quantum dots-modified reduced ultrathin g-C <sub>3</sub> N <sub>4</sub> with strong photoredox capacity for broad spectrum-driven PPCPs remediation in natural water matrices. <b>2021</b> , 420, 129935	4

179	Van der Waals enhanced interfacial interaction in cellulose/zinc oxide nanocomposite coupled by graphitic carbon nitride. <b>2021</b> , 268, 118235	5
178	A direct Z-scheme LaFeO <sub>3</sub> /WO <sub>3</sub> photocatalyst for enhanced degradation of phenol under visible light irradiation. <b>2021</b> , 9, 106337	4
177	Defect-mediated Z-scheme carriers dynamics of C-ZnO/A-CN toward highly enhanced photocatalytic TC degradation. <b>2021</b> , 877, 160321	8
176	Structural and Optical Properties of Ultra-thin g-C <sub>3</sub> N <sub>4</sub> nanotubes based g-C <sub>3</sub> N <sub>4</sub> /Ag/Ag <sub>2</sub> CrO <sub>4</sub> ternary composite photocatalyst with Z-scheme carrier transfer mechanism. <b>2021</b> , 121, 111608	5
175	Tuning dimensionality TiO <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> heterostructure for enhanced elemental mercury removal performance under visible-light. <b>2021</b> , 782, 139027	5
174	Controllable functionalization of g-C <sub>3</sub> N <sub>4</sub> mediated all-solid-state (ASS) Z-scheme photocatalysts towards sustainable energy and environmental applications. <b>2021</b> , 24, 101972	3
173	Z-scheme induced g-C <sub>3</sub> N <sub>4</sub> /WS <sub>2</sub> heterojunction photocatalyst with improved electron mobility for enhanced solar photocatalysis. <b>2021</b> , 228, 53-67	7
172	Z-scheme interface modification by MnV <sub>2</sub> O <sub>6</sub> for V <sub>2</sub> O <sub>5</sub> /g-C <sub>3</sub> N <sub>4</sub> heterostructure towards efficient visible photocatalytic activity. <b>2021</b> , 882, 160751	2
171	Construction ZnIn <sub>2</sub> S <sub>4</sub> /Ti <sub>3</sub> C <sub>2</sub> of 2D/2D heterostructures with enhanced visible light photocatalytic activity: A combined experimental and first-principles DFT study. <b>2021</b> , 570, 151183	8
170	Optimization of photocatalytic degradation conditions and toxicity assessment of norfloxacin under visible light by new lamellar structure magnetic ZnO/g-CN. <b>2021</b> , 225, 112742	2
169	Decoration of amine functionalized zirconium metal organic framework/silver iodide heterojunction on carbon fiber cloth as a filter- membrane-shaped photocatalyst for degrading antibiotics. <b>2021</b> , 603, 582-593	5
168	Facile fabrication of protonated g-C <sub>3</sub> N <sub>4</sub> /oxygen-doped g-C <sub>3</sub> N <sub>4</sub> homojunction with enhanced visible photocatalytic degradation performance of deoxynivalenol. <b>2021</b> , 9, 106380	4
167	Polymeric carbon nitride with internal n-p homojunctions for efficient photocatalytic CO <sub>2</sub> reduction coupled with cyclohexene oxidation. <b>2021</b> , 298, 120568	11
166	Superior photoBenton activity towards chlortetracycline degradation over novel g-C <sub>3</sub> N <sub>4</sub> nanosheets/schwertmannite nanocomposites with accelerated Fe(III)/Fe(II) cycling. <b>2021</b> , 279, 119760	4
165	Photocatalytic carbon dioxide reduction: Exploring the role of ultrathin 2D graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ). <b>2021</b> , 425, 131402	15
164	Rationally designed plasmonic hybrid coupling structure of Ag/rGO-ZnO for enhanced photocatalytic CO <sub>2</sub> reduction. <b>2021</b> , 887, 161457	5
163	Electron-extracting system with enhanced photocatalytic hydrogen production performance: Synergistic utilization of Z-scheme and Ohmic heterojunctions. <b>2022</b> , 429, 132476	6
162	Z-scheme junction Bi <sub>2</sub> O <sub>2</sub> (NO <sub>3</sub> )(OH)/g-C <sub>3</sub> N <sub>4</sub> for promoting CO <sub>2</sub> photoreduction. <b>2022</b> , 429, 132268	4

161	Formation of hierarchical Bi <sub>2</sub> MoO <sub>6</sub> /In <sub>2</sub> S <sub>3</sub> S-scheme heterojunction with rich oxygen vacancies for boosting photocatalytic CO <sub>2</sub> reduction. <b>2022</b> , 429, 132456	15
160	Visible-light degradation of antibiotics catalyzed by titania/zirconia/graphitic carbon nitride ternary nanocomposites: a combined experimental and theoretical study. <b>2022</b> , 300, 120633	16
159	2D g-C <sub>3</sub> N <sub>4</sub> as a bifunctional photocatalyst for co-catalyst and sacrificial agent-free photocatalytic N <sub>2</sub> fixation and dye photodegradation. <b>2021</b> , 45, 7174-7184	5
158	Heterogeneous photocatalysis: Z-scheme based heterostructures. <b>2021</b> , 1-38	
157	All-solid-state Z-scheme systems for photocatalytic CO <sub>2</sub> reduction. <b>2021</b> , 219-255	
156	Lanthanum bismuth oxide photocatalysts for CO <sub>2</sub> reduction to CO with high selectivity. <b>2021</b> , 5, 2688-2694	1
155	Synthesis and characterization of Graphitic Carbon Nitride/Mesoporous Nano-Silica (g-C <sub>3</sub> N <sub>4</sub> /KCC-1) nanocomposite as a novel highly efficient and recyclable photocatalyst for degradation of antibiotic in aqueous solution. <b>2021</b> , 47, 1447-1469	5
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152	Z-Scheme Photocatalytic Systems for Carbon Dioxide Reduction: Where Are We Now?. <b>2020</b> , 59, 22894-22915	196
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150	Z-scheme binary 1D ZnWO <sub>4</sub> nanorods decorated 2D NiFeO nanoplates as photocatalysts for high efficiency photocatalytic degradation of toxic organic pollutants from wastewater. <b>2020</b> , 268, 110677	51
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148	Graphitic Carbon Nitride-Based Composite in Advanced Oxidation Processes for Aqueous Organic Pollutants Removal: A Review. <b>2021</b> , 9, 66	9
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145	EPR Investigation on Electron Transfer of 2D/3D g-C <sub>3</sub> N <sub>4</sub> /ZnO S-Scheme Heterojunction for Enhanced CO <sub>2</sub> Photoreduction. 2100264	20
144	Metal-Free Z-Scheme aza-CMP/C <sub>2</sub> N Heterostructure to Facilitate Photocatalytic CO <sub>2</sub> Reduction: A Computational Study. <b>2021</b> , 125, 23133-23141	0

143	Photocatalytic Z-Scheme Overall Water Splitting: Recent Advances in Theory and Experiments. <b>2021</b> , e2105195	23
142	One-pot synthesis of SnS <sub>2</sub> Nanosheets supported on g-C <sub>3</sub> N <sub>4</sub> as high capacity and stable cycling anode for sodium-ion batteries.	1
141	Investigation on synergistic effect of rGO and carbon quantum dots-embedded ZnO hollow spheres for improved photocatalytic aqueous pollutant removal process. <b>2021</b> , 32, 28633	3
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137	Facile synthesis of Z-scheme Bi <sub>2</sub> O <sub>3</sub> /Bi <sub>2</sub> WO <sub>6</sub> composite for highly effective visible-light-driven photocatalytic degradation of nitrobenzene. <b>2022</b> , 552, 111377	1
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135	Graphitic Carbon Nitride/Metal Oxides Nanocomposites and Their Applications in Engineering. <b>2020</b> , 231-265	
134	Polydopamine and Nafion bi-layer passivation modified CdS photoanode for photoelectrochemical hydrogen evolution.	1
133	A Review of Recent Progress on Photocatalytic Carbon dioxide Reduction into Sustainable Energy Products using Carbon Nitride. <b>2021</b> ,	5
132	Covalent organic framework based WO <sub>3</sub> @COF/rGO for efficient visible-light-driven H <sub>2</sub> evolution by two-step separation mode. <b>2021</b> , 431, 133404	8
131	An S-scheme NH <sub>2</sub> -UiO-66/SiC photocatalyst via microwave synthesis with improved CO <sub>2</sub> reduction activity. <b>2022</b> , 55, 101806	4
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126	Solar fuels: research and development strategies to accelerate photocatalytic CO <sub>2</sub> conversion into hydrocarbon fuels.	36



125	CdS-sensitized 3D ordered macroporous g-C3N4 for enhanced visible-light photocatalytic hydrogen generation. <b>2022</b> , 111, 204-210	2
124	Recent Progress and Future Perspectives of Carbon Dots in the Detection, Degradation, and Enhancement of Drugs. 2100264	3
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120	Construction of S-scheme heterojunction by doping Bi2WO6 into Bi2O3 for efficiently enhanced visible-light photocatalytic performance. <b>2022</b> , 57, 4265-4282	0
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117	Emerging frontiers of Z-scheme photocatalytic systems. <b>2022</b> , 4, 111-127	20
116	Step-scheme ZnO@ZnS hollow microspheres for improved photocatalytic H2 production performance. <b>2022</b> , 43, 329-338	10
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114	Effect of work-function and morphology of heterostructure components on CO2 reduction photo-catalytic activity of MoS2-Cu2O heterostructure. <b>2022</b> , 433, 132709	1
113	Cu2-xO@TiO2-y Z-scheme heterojunctions for sonodynamic-chemodynamic combined tumor eradication. <b>2022</b> , 435, 134777	4
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109	Strategies to Enhance ZnO Photocatalyst's Performance for Water Treatment: A Comprehensive Review.. <b>2022</b> , e202100299	3
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107	Advances for CO <sub>2</sub> Photocatalytic Reduction in Porous Ti-Based Photocatalysts.	5
106	Selective solar-driven CO <sub>2</sub> reduction mediated by 2D/2D Bi <sub>2</sub> O <sub>2</sub> SiO <sub>3</sub> /MXene nanosheets heterojunction. <b>2022</b> ,	4
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104	Novel BiVO <sub>4</sub> /ZnO heterojunction for amended photoreduction of mercury (II) ions. <b>2022</b> , 127, 112251	1
103	Carbon nitride-based Z-scheme heterojunctions for solar-driven advanced oxidation processes.. <b>2022</b> , 434, 128866	6
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94	Bi <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> /Bi <sub>2</sub> O <sub>3</sub> Z-scheme photocatalyst with oxygen vacancies and Bi for enhanced visible-light photocatalytic degradation of tetracycline.	1
93	Photocatalytic materials applications for sustainable agriculture. <b>2022</b> , 100965	1
92	Efficient degradation of emerging organic pollutant by cerium phosphate/g-C <sub>3</sub> N <sub>4</sub> /Vis/PMS system: Catalytic kinetics and toxicity evaluation. <b>2022</b> , 126, 109067	
91	Photocatalytic activity of the visible-light-driven spherical Ag <sub>2</sub> S modifying the CdS synthesized by the facile chemical methods for the degradation of methylene blue and rhodamine B. <b>2022</b> , 285, 126174	1
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88	Synergy of nitrogen vacancies and intercalation of carbon species for enhancing sunlight photocatalytic hydrogen production of carbon nitride. <b>2022</b> , 314, 121497	1
87	Scope and prospect of transition metal-based cocatalysts for visible light-driven photocatalytic hydrogen evolution with graphitic carbon nitride. <b>2022</b> , 465, 214516	1
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85	Graphitic Carbon Nitrides: Synthesis, Properties, and Applications in Perovskite Solar Cells. <b>2022</b> , 45-76	
84	Recent advances in solar-driven CO <sub>2</sub> reduction over g-C <sub>3</sub> N <sub>4</sub> -based photocatalysts.	3
83	Principles, synthesis and applications of dual Z-scheme photocatalysts. <b>2022</b> , 467, 214596	2
82	Core-shell Covalently Linked Graphitic Carbon Nitride-Melamine-Resorcinol-Formaldehyde Microsphere Polymers for Efficient Photocatalytic CO <sub>2</sub> Reduction to Methanol.	7
81	Metal-Doped Graphitic Carbon Nitride Nanomaterials for Photocatalytic Environmental Applications: A Review. <b>2022</b> , 12, 1754	3
80	Experimental and molecular dynamics investigations on Z-scheme visible light Ag <sub>3</sub> PO <sub>4</sub> /CuWO <sub>4</sub> photocatalysts for antibiotic degradation. <b>2022</b> , 107975	0
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75	Designing Nanoengineered Photocatalysts for Hydrogen Generation by Water Splitting and Conversion of Carbon Dioxide to Clean Fuels.	
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