Zi-Rong Tang

List of Publications by Year in Descending Order

104 papers	10,842 citations	53 h-index	104 g-index
109 ext. papers	12,827 ext. citations	11.8 avg, IF	7.05 L-index

#	Paper	IF	Citations
104	Photoredox coupling of benzyl alcohol oxidation with CO2 reduction over CdS/TiO2 heterostructure under visible light irradiation. *Applied Catalysis B: Environmental*, **2022**, 307, 121158	21.8	7
103	Coupling Organic Synthesis and Hydrogen Evolution over Composite WO3/ZnIn2S4 Z-Scheme Photocatalyst. *Journal of Physical Chemistry C*, **2022**, 126, 1872-1880	3.8	3
102	Multifunctional graphene-based composite photocatalysts oriented by multifaced roles of graphene in photocatalysis. *Chinese Journal of Catalysis*, **2022**, 43, 708-730	11.3	5
101	Benzyl alcohol oxidation and hydrogen generation over MoS2/ZnIn2S4 composite photocatalyst. *Research on Chemical Intermediates*, **2022**, 48, 1	2.8	1
100	Photocatalytic selective oxidation of aromatic alcohols coupled with hydrogen evolution over CdS/WO3 composites. *Chinese Journal of Catalysis*, **2022**, 43, 1851-1859	11.3	0
99	Activating two-dimensional Ti3C2Tx-MXene with single-atom cobalt for efficient CO2 photoreduction. *Cell Reports Physical Science*, **2021**, 2, 100371	6.1	29
98	Coupling Strategy for CO Valorization Integrated with Organic Synthesis by Heterogeneous Photocatalysis. *Angewandte Chemie - International Edition*, **2021**, 60, 21150-21172	16.4	32
97	Photothermal catalytic CO2 reduction over nanomaterials. *Chem Catalysis*, **2021**, 1, 272-297		33
96	Transition metal doping BiOBr nanosheets with oxygen vacancy and exposed {102} facets for visible light nitrogen fixation. *Applied Catalysis B: Environmental*, **2021**, 281, 119516	21.8	48
95	Nanostructured metal phosphides: from controllable synthesis to sustainable catalysis. *Chemical Society Reviews*, **2021**, 50, 7539-7586	58.5	45
94	Au clusters-based visible light photocatalysis. *Research on Chemical Intermediates*, **2021**, 47, 29-50	2.8	4
93	Photocatalytic Abatement of Emerging Micropollutants in Water and Wastewater **2021**, 671-684		
92	Cooperative Syngas Production and C-N Bond Formation in One Photoredox Cycle. *Angewandte Chemie - International Edition*, **2021**, 60, 7962-7970	16.4	33
91	Cooperative Coupling of Oxidative Organic Synthesis and Hydrogen Production over Semiconductor-Based Photocatalysts. *Chemical Reviews*, **2021**, 121, 13051-13085	68.1	68
90	Roles of Graphene Oxide in Heterogeneous Photocatalysis. *ACS Materials Au*, **2021**, 1, 37-54		6
89	Methane conversion over artificial photocatalysts. *Catalysis Communications*, **2021**, 159, 106346	3.2	6
88	Enhanced ambient ammonia photosynthesis by Mo-doped Bi5O7Br nanosheets with light-switchable oxygen vacancies. *Chinese Journal of Catalysis*, **2021**, 42, 2020-2026	11.3	5

87	Cocatalyst decorated ZnIn2S4 composites for cooperative alcohol conversion and H2 evolution. *Applied Catalysis B: Environmental*, **2021**, 298, 120541	21.8	26
86	Selective Organic Transformations over Cadmium Sulfide-Based Photocatalysts. *ACS Catalysis*, **2020**, 10, 6262-6280	13.1	91
85	Surface/Interface Engineering of Carbon-Based Materials for Constructing Multidimensional Functional Hybrids. *Solar Rrl*, **2020**, 4, 1900577	7.1	31
84	Switching Light for Site-Directed Spatial Loading of Cocatalysts onto Heterojunction Photocatalysts with Boosted Redox Catalysis. *ACS Catalysis*, **2020**, 10, 3194-3202	13.1	52
83	Visible-light-driven integrated organic synthesis and hydrogen evolution over 1D/2D CdS-Ti3C2Tx MXene composites. *Applied Catalysis B: Environmental*, **2020**, 269, 118783	21.8	81
82	A unique coordination-driven route for the precise nanoassembly of metal sulfides on metal-organic frameworks. *Nanoscale Horizons*, **2020**, 5, 714-719	10.8	22
81	Photoredox dual reaction for selective alcohol oxidation and hydrogen evolution over nickel surface-modified ZnIn2S4. *Applied Catalysis B: Environmental*, **2020**, 271, 118946	21.8	68
80	Boosting the activity and stability of Ag-Cu2O/ZnO nanorods for photocatalytic CO2 reduction. *Applied Catalysis B: Environmental*, **2020**, 268, 118380	21.8	108
79	Rationally designed transition metal hydroxide nanosheet arrays on graphene for artificial CO reduction. *Nature Communications*, **2020**, 11, 5181	17.4	82
78	Efficient Photoredox-Mediated C□ Coupling Organic Synthesis and Hydrogen Production over Engineered Semiconductor Quantum Dots. *ACS Catalysis*, **2020**, 10, 14327-14335	13.1	46
77	Photo-driven Fischer□ropsch synthesis. *Journal of Materials Chemistry A*, **2020**, 8, 24253-24266	13	7
76	Surface-defect-engineered photocatalyst for nitrogen fixation into value-added chemical feedstocks. *Catalysis Science and Technology*, **2020**, 10, 6098-6110	5.5	17
75	Defect-promoted visible light-driven C C coupling reactions pairing with CO2 reduction. *Journal of Catalysis*, **2020**, 390, 244-250	7.3	26
74	Valorization of Biomass-Derived Platform Molecules via Photoredox Sustainable Catalysis. *Transactions of Tianjin University*, **2020**, 26, 325-340	2.9	8
73	Tip-grafted Ag-ZnO nanorod arrays decorated with Au clusters for enhanced photocatalysis. *Catalysis Today*, **2020**, 340, 121-127	5.3	20
72	Microstructure and surface control of MXene films for water purification. *Nature Sustainability*, **2019**, 2, 856-862	22.1	142
71	Gold nanorods-based hybrids with tailored structures for photoredox catalysis: fundamental science, materials design and applications. *Nano Today*, **2019**, 27, 48-72	17.9	65
70	Broadband Light Harvesting and Unidirectional Electron Flow for Efficient Electron Accumulation for Hydrogen Generation. *Angewandte Chemie*, **2019**, 131, 10108-10112	3.6	11

69	Broadband Light Harvesting and Unidirectional Electron Flow for Efficient Electron Accumulation for Hydrogen Generation. *Angewandte Chemie - International Edition*, **2019**, 58, 10003-10007	16.4	61
68	Dynamic Evolution of Atomically Dispersed Cu Species for CO2 Photoreduction to Solar Fuels. *ACS Catalysis*, **2019**, 9, 4824-4833	13.1	128
67	One-dimensional copper-based heterostructures toward photo-driven reduction of CO2 to sustainable fuels and feedstocks. *Journal of Materials Chemistry A*, **2019**, 7, 8676-8689	13	51
66	Photocorrosion Inhibition of Semiconductor-Based Photocatalysts: Basic Principle, Current Development, and Future Perspective. *ACS Catalysis*, **2019**, 9, 4642-4687	13.1	253
65	Efficient photoredox conversion of alcohol to aldehyde and H by heterointerface engineering of bimetal-semiconductor hybrids. *Chemical Science*, **2019**, 10, 3514-3522	9.4	66
64	Hierarchically tailorable double-array film hybrids with enhanced photocatalytic and photoelectrochemical performances. *Applied Catalysis B: Environmental*, **2019**, 259, 118086	21.8	8
63	Earth-Abundant MoS and Cobalt Phosphate Dual Cocatalysts on 1D CdS Nanowires for Boosting Photocatalytic Hydrogen Production. *Langmuir*, **2019**, 35, 11056-11065	4	42
62	Noble metal free CdS@CuS-NixP hybrid with modulated charge transfer for enhanced photocatalytic performance. *Applied Catalysis B: Environmental*, **2019**, 257, 117934	21.8	63
61	3D graphene-based gel photocatalysts for environmental pollutants degradation. *Environmental Pollution*, **2019**, 253, 365-376	9.3	125
60	Silicon nanowires@Co3O4 arrays film with Z-scheme band alignment for hydrogen evolution. *Catalysis Today*, **2019**, 335, 294-299	5.3	10
59	3D graphene/AgBr/Ag cascade aerogel for efficient photocatalytic disinfection. *Applied Catalysis B: Environmental*, **2019**, 245, 343-350	21.8	67
58	Efficient visible-light-driven water remediation by 3D graphene aerogel-supported nitrogen-doped carbon quantum dots. *Catalysis Today*, **2019**, 335, 160-165	5.3	12
57	TiCT -Based Three-Dimensional Hydrogel by a Graphene Oxide-Assisted Self-Convergence Process for Enhanced Photoredox Catalysis. *ACS Nano*, **2019**, 13, 295-304	16.7	143
56	Photoredox catalysis over graphene aerogel-supported composites. *Journal of Materials Chemistry A*, **2018**, 6, 4590-4604	13	149
55	3D carbon quantum dots/graphene aerogel as a metal-free catalyst for enhanced photosensitization efficiency. *Applied Catalysis B: Environmental*, **2018**, 233, 11-18	21.8	79
54	Constructing film composites of silicon nanowires@CdS quantum dot arrays with ameliorated photocatalytic performance. *New Journal of Chemistry*, **2018**, 42, 14096-14103	3.6	11
53	Tunable plasmonic core-shell heterostructure design for broadband light driven catalysis. *Chemical Science*, **2018**, 9, 8914-8922	9.4	54
52	An adaptive geometry regulation strategy for 3D graphene materials: towards advanced hybrid photocatalysts. *Chemical Science*, **2018**, 9, 8876-8882	9.4	20

51	Ti3C2Tx MXene as a Janus cocatalyst for concurrent promoted photoactivity and inhibited photocorrosion. *Applied Catalysis B: Environmental*, **2018**, 237, 43-49	21.8	119
50	Recent progress in carbon quantum dots: synthesis, properties and applications in photocatalysis. *Journal of Materials Chemistry A*, **2017**, 5, 3717-3734	13	604
49	One dimensional CdS based materials for artificial photoredox reactions. *Journal of Materials Chemistry A*, **2017**, 5, 2387-2410	13	142
48	One-dimensional CdS@MoS2 core-shell nanowires for boosted photocatalytic hydrogen evolution under visible light. *Applied Catalysis B: Environmental*, **2017**, 202, 298-304	21.8	279
47	Heterostructured semiconductor nanowire arrays for artificial photosynthesis. *Materials Horizons*, **2016**, 3, 270-282	14.4	89
46	One-dimensional CdS nanowires□eO2 nanoparticles composites with boosted photocatalytic activity. *New Journal of Chemistry*, **2015**, 39, 6756-6764	3.6	33
45	One-dimension-based spatially ordered architectures for solar energy conversion. *Chemical Society Reviews*, **2015**, 44, 5053-75	58.5	317
44	Electrostatic self-assembly of CdS nanowires-nitrogen doped graphene nanocomposites for enhanced visible light photocatalysis. *Journal of Energy Chemistry*, **2015**, 24, 145-156	12	34
43	New insight into the enhanced visible light photocatalytic activity over boron-doped reduced graphene oxide. *Nanoscale*, **2015**, 7, 7030-4	7.7	49
42	Constructing one-dimensional silver nanowire-doped reduced graphene oxide integrated with CdS nanowire network hybrid structures toward artificial photosynthesis. *Nanoscale*, **2015**, 7, 861-6	7.7	69
41	Two-dimensional MoS□anosheet-coated Bi□□discoids: synthesis, formation mechanism, and photocatalytic application. *Langmuir*, **2015**, 31, 4314-22	4	147
40	1D CdS nanowire□D BiVO4 nanosheet heterostructures toward photocatalytic selective fine-chemical synthesis. *RSC Advances*, **2015**, 5, 16476-16483	3.7	55
39	One-dimensional Nanostructures for Photocatalytic Organic Synthesis. *Current Organic Chemistry*, **2015**, 19, 484-497	1.7	7
38	Toward improving the graphene-semiconductor composite photoactivity via the addition of metal ions as generic interfacial mediator. *ACS Nano*, **2014**, 8, 623-33	16.7	336
37	One-dimensional nanostructure based materials for versatile photocatalytic applications. *RSC Advances*, **2014**, 4, 12685	3.7	182
36	Noncovalently Functionalized Graphene-Directed Synthesis of Ultralarge Graphene-Based TiO2 Nanosheet Composites: Tunable Morphology and Photocatalytic Applications. *Journal of Physical Chemistry C*, **2014**, 118, 27325-27335	3.8	49
35	A nanotree-like CdS/ZnO nanocomposite with spatially branched hierarchical structure for photocatalytic fine-chemical synthesis. *Nanoscale*, **2014**, 6, 7193-8	7.7	89
34	Synthesis of BiVO4 nanosheets-graphene composites toward improved visible light photoactivity. *Journal of Energy Chemistry*, **2014**, 23, 564-574	12	28

33	Graphene Oxide as a Surfactant and Support for In-Situ Synthesis of Au–Pd Nanoalloys with Improved Visible Light Photocatalytic Activity. *Journal of Physical Chemistry C*, **2014**, 118, 5299-5308	3.8	91
32	A simple yet efficient visible-light-driven CdS nanowires-carbon nanotube 1D–1D nanocomposite photocatalyst. *Journal of Catalysis*, **2014**, 309, 146-155	7.3	146
31	Toward improving the photocatalytic activity of $BiVO_4$–graphene 2D–2D composites under visible light by the addition of mediator. *RSC Advances*, **2014**, 4, 58448-58452	3.7	26
30	A Unique Silk Mat-Like Structured Pd/CeO2 as an Efficient Visible Light Photocatalyst for Green Organic Transformation in Water. *ACS Sustainable Chemistry and Engineering*, **2013**, 1, 1258-1266	8.3	63
29	Inhibiting Pd nanoparticle aggregation and improving catalytic performance using one-dimensional CeO2 nanotubes as support. *Chinese Journal of Catalysis*, **2013**, 34, 1123-1127	11.3	9
28	Synthesis of titanate nanotube-CdS nanocomposites with enhanced visible light photocatalytic activity. *Inorganic Chemistry*, **2013**, 52, 11758-66	5.1	67
27	A critical and benchmark comparison on graphene-, carbon nanotube-, and fullerene-semiconductor nanocomposites as visible light photocatalysts for selective oxidation. *Journal of Catalysis*, **2013**, 299, 210-221	7.3	154
26	Identification of Bi_2WO_6 as a highly selective visible-light photocatalyst toward oxidation of glycerol to dihydroxyacetone in water. *Chemical Science*, **2013**, 4, 1820	9.4	271
25	An Efficient Self-Assembly of CdS Nanowires–Reduced Graphene Oxide Nanocomposites for Selective Reduction of Nitro Organics under Visible Light Irradiation. *Journal of Physical Chemistry C* , **2013**, 117, 8251-8261	3.8	173
24	One-pot, high-yield synthesis of one-dimensional ZnO nanorods with well-defined morphology as a highly selective photocatalyst. *RSC Advances*, **2013**, 3, 5956	3.7	48
23	CdS–graphene nanocomposites as visible light photocatalyst for redox reactions in water: A green route for selective transformation and environmental remediation. *Journal of Catalysis*, **2013**, 303, 60-69	7.3	190
22	Visible-light-driven oxidation of primary C-H bonds over CdS with dual co-catalysts graphene and TiO2. *Scientific Reports*, **2013**, 3, 3314	4.9	106
21	Graphene transforms wide band gap ZnS to a visible light photocatalyst. The new role of graphene as a macromolecular photosensitizer. *ACS Nano*, **2012**, 6, 9777-89	16.7	591
20	Synthesis of one-dimensional CdS@TiO_2 core-shell nanocomposites photocatalyst for selective redox: the dual role of TiO_2 shell. *ACS Applied Materials & Interfaces*, **2012**, 4, 6378-85	9.5	309
19	Tuning the optical property and photocatalytic performance of titanate nanotube toward selective oxidation of alcohols under ambient conditions. *ACS Applied Materials & Interfaces*, **2012**, 4, 1512-20	9.5	89
18	Transforming CdS into an efficient visible light photocatalyst for selective oxidation of saturated primary C–H bonds under ambient conditions. *Chemical Science*, **2012**, 3, 2812	9.4	205
17	Improving the photocatalytic performance of graphene-TiO2 nanocomposites via a combined strategy of decreasing defects of graphene and increasing interfacial contact. *Physical Chemistry Chemical Physics*, **2012**, 14, 9167-75	3.6	256
16	A facile and high-yield approach to synthesize one-dimensional CeO2 nanotubes with well-shaped hollow interior as a photocatalyst for degradation of toxic pollutants. *RSC Advances*, **2011**, 1, 1772	3.7	103

15	Synthesis of high surface area CuMn2O4 by supercritical anti-solvent precipitation for the oxidation of CO at ambient temperature. *Catalysis Science and Technology*, **2011**, 1, 740	5.5	42
14	Engineering the unique 2D mat of graphene to achieve graphene-TiO2 nanocomposite for photocatalytic selective transformation: what advantage does graphene have over its forebear carbon nanotube?. *ACS Nano*, **2011**, 5, 7426-35	16.7	621
13	Composites of Titanate Nanotube and Carbon Nanotube as Photocatalyst with High Mineralization Ratio for Gas-Phase Degradation of Volatile Aromatic Pollutant. *Journal of Physical Chemistry C*, **2011**, 115, 7880-7886	3.8	104
12	Nanocomposite of Ag/AgBr/TiO2 as a photoactive and durable catalyst for degradation of volatile organic compounds in the gas phase. *Applied Catalysis B: Environmental*, **2011**, 106, 445-452	21.8	192
11	TiO2-graphene nanocomposites for gas-phase photocatalytic degradation of volatile aromatic pollutant: is TiO2-graphene truly different from other TiO2-carbon composite materials?. *ACS Nano*, **2010**, 4, 7303-14	16.7	1455
10	The adsorption of methanol at the defective site of single-walled carbon nanotube. *Physica B: Condensed Matter*, **2010**, 405, 770-773	2.8	11
9	FACILE CYCLOADDITION OF TRANSITION METAL OXIDES ONTO THE SIDEWALL OF BORON-DOPED FULLERENE. *Surface Review and Letters*, **2009**, 16, 525-532	1.1	
8	New Nanocrystalline Cu/MnOx Catalysts Prepared from Supercritical Antisolvent Precipitation. *ChemCatChem*, **2009**, 1, 247-251	5.2	41
7	Ceria prepared using supercritical antisolvent precipitation: a green support for gold–palladium nanoparticles for the selective catalytic oxidation of alcohols. *Journal of Materials Chemistry*, **2009**, 19, 8619		82
6	Energy dispersive X-ray spectroscopy of bimetallic nanoparticles in an aberration corrected scanning transmission electron microscope. *Faraday Discussions*, **2008**, 138, 337-51; discussion 421-34	3.6	98
5	Nanocrystalline cerium oxide produced by supercritical antisolvent precipitation as a support for high-activity gold catalysts. *Journal of Catalysis*, **2007**, 249, 208-219	7.3	79
4	Preparation of Tio2 Using Supercritical CO2 Antisolvent Precipitation (SAS): A Support for High Activity Gold Catalysts. *Studies in Surface Science and Catalysis*, **2006**, 162, 219-226	1.8	12
3	Hexaaquacobalt(II) (2-triethylenetetraminehexaacetato)diaquadicobalt(II) tetrahydrate. *Acta Crystallographica Section E: Structure Reports Online*, **2003**, 59, m867-m869		4
2	Nanoscale Assembly of CdS/BiVO4 Hybrids for Coupling Selective Fine Chemical Synthesis and Hydrogen Production under Visible Light. *ACS Physical Chemistry Au*,		1
1	Suzuki cross-coupling reactions over engineered AuPd alloy nanoparticles by recycling scattered light. *Nano Research*,1	10	1