Yaan Cao

List of Publications by Year
in descending order

54 papers	2,351 citations	218677 26 h-index	206112 48 g-index
58 all docs	58 docs citations	58 times ranked	3024 citing authors

#	Article	IF	Citations
1	Improved photocatalytic activity of LaFeO3 with doping Mn3+ ions and modifying Pd2+ ions for photoreduction of CO2 into CH4. Journal of Power Sources, 2022, 519, 230738.	7.8	30
2	Regulating the band structure by modifying Ti3C2 and doping Fe ions improved photocatalytic activity and selectivity of ZnGa2O4â€“Ti3C2â€“Fe for photoreducted CO2 into CH4. Journal of Power Sources, 2022, 535, 231421.	7.8	10
3	Thermal catalytic mechanism for the metal ions(Cu, in, Pd and Pt) modified TiO2 on degradation of HCHO. Materials Science in Semiconductor Processing, 2021, 123, 105547.	4.0	10
4	Synthesis of palladium-modified MnS photocatalysts with enhanced photocatalytic activity in the photoreduction of CO2 to CH4. Applied Surface Science, 2021, 541, 148519.	6.1	12
5	Hexagonal Zn2SnO4 nanoplates self-doped with Sn4+ ions towards efficient photoreduction of CO2 into CH4. Materials Science in Semiconductor Processing, 2021, 130, 105818.	4.0	16
6	Z-scheme interface modification by MnV2O6 for V2O5/g-C3N4 heterostructure towards efficient visible photocatalytic activity. Journal of Alloys and Compounds, 2021, 882, 160751.	5.5	21
7	Improved photocatalytic activity of ZnO via the modification of In2O3 and MoS2 surface species for the photoreduction of CO2. Applied Surface Science, 2021, 566, 150649.	6.1	10
8	Animal heat activated cancer therapy by a traditional catalyst TiO2-Pd/graphene composites. Scientific Reports, 2020, 10, 15823.	3.3	2
9	Matching and adjusting energy band structures of Pd-modified sulphides (ZnS,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td (photoreduction. Nanoscale, 2020, 12, 18180-18192.	5.6	25
10	Study of PdO species on surface of TiO2 for photoreduction of CO2 into CH4. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 384, 112032.	3.9	18
11	Synthesis of zinc based hierarchical microspheres photocatalyst and their enhanced photocatalytic activity. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 106, 57-61.	2.7	4
12	Synthesis of porous ZnMn2O4 flower-like microspheres by using MOF as precursors and its application on photoreduction of CO2 into CO. Applied Surface Science, 2019, 465, 383-388.	6.1	47
13	The band structure and photocatalytic mechanism of MoS2-modified C3N4 photocatalysts with improved visible photocatalytic activity. Materials Research Bulletin, 2018, 102, 433-439.	5.2	31
14	Synergetic effect of N3â^', In3+ and Sn4+ ions in TiO2 towards efficient visible photocatalysis. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 356, 132-137.	3.9	10
15	Doping Mechanism of Ge⁴⁺ Ions in Ge⁴⁺â€Doped TiO₂. Physica Status Solidi (B): Basic Research, 2018, 255, 1700289.	1.5	4
16	Synergistic effects of Zn and Pd species in TiO2 towards efficient photo-reduction of CO2 into CH4. New Journal of Chemistry, 2018, 42, 483-488.	2.8	16
17	Stannous oxide promoted charge separation in rationally designed heterojunction photocatalysts with a controllable mechanism. Dalton Transactions, 2018, 47, 12734-12741.	3.3	9
18	Doping and transformation mechanisms of Fe³⁺ions in Fe-doped TiO₂. CrystEngComm, 2017, 19, 1100-1105.	2.6	30

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19	TiO₂â€“Pd/C composited photocatalyst with improved photocatalytic activity for photoreduction of CO₂ into CH₄. New Journal of Chemistry, 2017, 41, 3204-3210.	2.8	21
20	Improved Visible Photocatalytic Activity on Titania Modified with â^'Oâ€“Pdâ€“Cl Species Assisted by Oxidative Addition Reaction of Pd⁰. Journal of Physical Chemistry C, 2017, 121, 375-380.	3.1	3
21	Adjustment and Matching of Energy Band of TiO₂-Based Photocatalysts by Metal Ions (Pd,) Tj ETQq1 1 0.784314 rgBT /Ov C, 2017, 121, 1089-1098.	3.1	54
22	Modification of Pd and Mn on the Surface of TiO2 with Enhanced Photocatalytic Activity for Photoreduction of CO2 into CH4. Journal of Physical Chemistry C, 2017, 121, 270-277.	3.1	19
23	The band structure and photocatalytic mechanism for a CeO₂-modified C₃N₄ photocatalyst. New Journal of Chemistry, 2017, 41, 9724-9730.	2.8	29
24	Synthesis of TiO2-N/SnO2 heterostructure photocatalyst and its photocatalytic mechanism. Journal of Colloid and Interface Science, 2017, 486, 176-183.	9.4	24
25	Improved photocatalytic activity of TiO2 modified with unique Oâ€“Znâ€“Cl surface species. Separation and Purification Technology, 2016, 171, 118-122.	7.9	7
26	Enhanced photocatalytic activity of TiO₂ activated by doping Zr and modifying Pd. RSC Advances, 2016, 6, 29950-29957.	3.6	26
27	Enhanced photocatalytic activity of TiO₂â€“Cu/C with regulation and matching of energy levels by carbon and copper for photoreduction of CO₂ into CH₄. CrystEngComm, 2016, 18, 2956-2964.	2.6	37
28	The influence of pH values on the existing states of In and B ions in TiO2. Applied Surface Science, 2016, 365, 263-267.	6.1	1
29	TiO₂/vanadate (Sr₁₀V₆O₂₅,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 352 Td heterostructured photocatalysts with enhanced photocatalytic activity for photoreduction of CO₂ into CH₄. Nanoscale, 2016, 8, 949-958.	5.6	52
30	Doping mechanism of Zn²⁺ions in Zn-doped TiO₂prepared by a solâ€“gel method. CrystEngComm, 2015, 17, 5074-5080.	2.6	50
31	A new Ni/Ni3(BO3)2/NiO heterostructured photocatalyst with efficient reduction of CO2 into CH4. Separation and Purification Technology, 2015, 142, 14-17.	7.9	16
32	Efficient visible-light photocatalytic degradation system assisted by conventional Pd catalysis. Scientific Reports, 2015, 5, 9561.	3.3	32
33	The existing states of doped B 3+ ions on the B doped TiO 2. Applied Surface Science, 2015, 345, 67-71.	6.1	32
34	New Type Photocatalyst PbBiO₂Cl: Materials Design and Experimental Validation. Journal of Physical Chemistry C, 2015, 119, 28190-28193.	3.1	22
35	Structure of Nitrogen and Zirconium Co-Doped Titania with Enhanced Visible-Light Photocatalytic Activity. ACS Applied Materials & Interfaces, 2014, 6, 4622-4629.	8.0	78
36	Adjustment and Control of Energy Levels for TiO₂â€“N/ZrO₂â€“x</sub>N_x with Enhanced Visible Light Photocatalytic Activity. Journal of Physical Chemistry C, 2014, 118, 20982-20988.	3.1	28

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37	Fabrication of N-TiO₂/InBO₃ Heterostructures with Enhanced Visible Photocatalytic Performance. Journal of Physical Chemistry C, 2014, 118, 13545-13551.	3.1	38
38	Improved photocatalytic activity of self-assemble TiO 2 nanobelts with Au nanoparticles. Applied Surface Science, 2014, 315, 247-251.	6.1	18
39	The Design of TiO₂ Nanostructures (Nanoparticle, Nanotube, and Nanosheet) and Their Photocatalytic Activity. Journal of Physical Chemistry C, 2014, 118, 12727-12733.	3.1	91
40	Investigation on a novel ZnO/TiO2â€“B photocatalyst with enhanced visible photocatalytic activity. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 58, 118-123.	2.7	25
41	Generation and evolution of plasma during femtosecond laser ablation of silicon in different ambient gases. Laser and Particle Beams, 2013, 31, 539-545.	1.0	13
42	Doping Behavior of Zr⁴⁺ Ions in Zr⁴⁺-Doped TiO₂ Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 27120-27126.	3.1	106
43	Enhanced photocatalytic activity of titania with unique surface indium and boron species. Applied Surface Science, 2013, 273, 638-644.	6.1	23
44	An enhanced visible-light photocatalytic activity of TiO2 by nitrogen and nickelâ€“chlorine modification. Separation and Purification Technology, 2013, 104, 256-262.	7.9	55
45	Synthesis of Indium Borate and Its Application in Photodegradation of 4-Chlorophenol. Environmental Science & Technology, 2012, 46, 2330-2336.	10.0	69
46	Improved visible-light photocatalytic activity of titania activated by nitrogen and indium modification. Journal of Materials Chemistry, 2012, 22, 14443.	6.7	44
47	Improved visible light photocatalytic activity of titania doped with tin and nitrogen. Journal of Materials Chemistry, 2011, 21, 144-150.	6.7	106
48	Doping mode, band structure and photocatalytic mechanism of Bâ€“N-codoped TiO2. Applied Surface Science, 2011, 257, 7335-7342.	6.1	53
49	Fabrication of Rutile TiO₂â^'Sn/Anatase TiO₂â^'N Heterostructure and Its Application in Visible-Light Photocatalysis. Journal of Physical Chemistry C, 2010, 114, 3627-3633.	3.1	145
50	Structure and Phase Transition Behavior of Sn⁴⁺-Doped TiO₂ Nanoparticles. Journal of Physical Chemistry C, 2009, 113, 18121-18124.	3.1	110
51	Unique Surface Chemical Species on Indium Doped TiO₂ and Their Effect on the Visible Light Photocatalytic Activity. Journal of Physical Chemistry C, 2009, 113, 20912-20917.	3.1	187
52	Great Enhancement of Photocatalytic Activity of Nitrogen-Doped Titania by Coupling with Tungsten Oxide. Journal of Physical Chemistry B, 2006, 110, 14391-14397.	2.6	194
53	Effect of plasma treatment on surface properties of TiO2 nanoparticulate films. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 262, 181-186.	4.7	22
54	Improved photocatalytic activity of Sn4+ doped TiO2 nanoparticulate films prepared by plasma-enhanced chemical vapor deposition. New Journal of Chemistry, 2004, 28, 218.	2.8	212