Fernando Fresno

List of Publications by Year
in descending order

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75 papers	3,824 citations	147801 31 h-index	123424 61 g-index
75 all docs	75 docs citations	75 times ranked	5813 citing authors

#	Article	IF	Citations
1	Development of alternative photocatalysts to TiO2: Challenges and opportunities. Energy and Environmental Science, 2009, 2, 1231.	30.8	1,150
2	Photocatalytic materials: recent achievements and near future trends. Journal of Materials Chemistry A, 2014, 2, 2863-2884.	10.3	387
3	Unravelling the effect of charge dynamics at the plasmonic metal/semiconductor interface for CO2 photoreduction. Nature Communications, 2018, 9, 4986.	12.8	168
4	Solar hydrogen production by two-step thermochemical cycles: Evaluation of the activity of commercial ferrites. International Journal of Hydrogen Energy, 2009, 34, 2918-2924.	7.1	107
5	Design of Advanced Photocatalytic Materials for Energy and Environmental Applications. Green Energy and Technology, 2013, , .	0.6	102
6	On the selectivity of CO2 photoreduction towards CH4 using Pt/TiO2 catalysts supported on mesoporous silica. Applied Catalysis B: Environmental, 2018, 239, 68-76.	20.2	98
7	FTIR and NMR Study of the Adsorbed Water on Nanocrystalline Anatase. Journal of Physical Chemistry C, 2007, 111, 10590-10596.	3.1	94
8	Influence of the structural characteristics of Ti1â^'xSnxO2 nanoparticles on their photocatalytic activity for the elimination of methylcyclohexane vapors. Applied Catalysis B: Environmental, 2005, 55, 159-167.	20.2	81
9	V-doped SnS2: a new intermediate band material for a better use of the solar spectrum. Physical Chemistry Chemical Physics, 2011, 13, 20401.	2.8	80
10	CO2 reduction over NaNbO3 and NaTaO3 perovskite photocatalysts. Photochemical and Photobiological Sciences, 2017, 16, 17-23.	2.9	76
11	Mechanistic View of the Main Current Issues in Photocatalytic CO₂ Reduction. Journal of Physical Chemistry Letters, 2018, 9, 7192-7204.	4.6	76
12	Recent Achievements in Development of TiO2-Based Composite Photocatalytic Materials for Solar Driven Water Purification and Water Splitting. Materials, 2020, 13, 1338.	2.9	76
13	Comparative study of the activity of nickel ferrites for solar hydrogen production by two-step thermochemical cycles. International Journal of Hydrogen Energy, 2010, 35, 8503-8510.	7.1	69
14	Photocatalytic degradation of toluene over doped and coupled (Ti,M)O2 (M=Sn or Zr) nanocrystalline oxides: Influence of the heteroatom distribution on deactivation. Applied Catalysis B: Environmental, 2008, 84, 598-606.	20.2	66
15	Hierarchical TiO 2 nanofibres as photocatalyst for CO 2 reduction: Influence of morphology and phase composition on catalytic activity. Journal of CO2 Utilization, 2016, 15, 24-31.	6.8	61
16	Highly active photocatalytic coatings prepared by a low-temperature method. Environmental Science and Pollution Research, 2014, 21, 11238-11249.	5.3	58
17	Photocatalytic degradation of a sulfonylurea herbicide over pure and tin-doped TiO2 photocatalysts. Journal of Photochemistry and Photobiology A: Chemistry, 2005, 173, 13-20.	3.9	55
18	Waterâ^'Hydroxyl Interactions on Small Anatase Nanoparticles Prepared by the Hydrothermal Route. Journal of Physical Chemistry C, 2010, 114, 16534-16540.	3.1	54

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19	Activity enhancement pathways in LaFeO3@TiO2 heterojunction photocatalysts for visible and solar light driven degradation of myclobutanil pesticide in water. Journal of Hazardous Materials, 2020, 400, 123099.	12.4	53
20	Surface Functionalization of Nanostructured Fe₂O₃ Polymorphs: From Design to Light-Activated Applications. ACS Applied Materials & Interfaces, 2013, 5, 7130-7138.	8.0	44
21	Hydrothermally synthesized nanocrystalline tin disulphide as visible light-active photocatalyst: Spectral response and stability. Applied Catalysis A: General, 2012, 415-416, 111-117.	4.3	43
22	Ga-Promoted Photocatalytic H2 Production over Pt/ZnO Nanostructures. ACS Applied Materials & Interfaces, 2016, 8, 23729-23738.	8.0	43
23	Influence of Sn4+on the structural and electronic properties of Ti1â^'xSnxO2nanoparticles used as photocatalysts. Physical Chemistry Chemical Physics, 2006, 8, 2421-2430.	2.8	42
24	Synergy effect between photocatalysis and heterogeneous photo-Fenton catalysis on Ti-doped LaFeO₃ perovskite for high efficiency light-assisted water treatment. Catalysis Science and Technology, 2020, 10, 1299-1310.	4.1	42
25	Photoelectrochemical Hydrogen Evolution Driven by Visible-to-Ultraviolet Photon Upconversion. ACS Applied Energy Materials, 2019, 2, 207-211.	5.1	41
26	Ferrite Materials for Photoassisted Environmental and Solar Fuels Applications. Topics in Current Chemistry, 2020, 378, 6.	5.8	39
27	Hybrids Based on BOPHY-Conjugated Porous Polymers as Photocatalysts for Hydrogen Production: Insight into the Charge Transfer Pathway. ACS Catalysis, 2020, 10, 9804-9812.	11.2	38
28	Magnetic resonance study of the defects influence on the surface characteristics of nanosize anatase. Catalysis Today, 2007, 129, 240-246.	4.4	36
29	TiO₂ Nanocolumn Arrays for More Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 5979-5989.	8.0	36
30	Evaluation of photoassisted treatments for norfloxacin removal in water using mesoporous Fe2O3-TiO2 materials. Journal of Environmental Management, 2019, 238, 243-250.	7.8	35
31	The role of the surface acidic/basic centers and redox sites on TiO2 in the photocatalytic CO2 reduction. Applied Catalysis B: Environmental, 2022, 303, 120931.	20.2	34
32	Influence of surface density on the CO2 photoreduction activity of a DC magnetron sputtered TiO2 catalyst. Applied Catalysis B: Environmental, 2018, 224, 912-918.	20.2	30
33	Highly robust La1-xTixFeO3 dual catalyst with combined photocatalytic and photo-CWPO activity under visible light for 4-chlorophenol removal in water. Applied Catalysis B: Environmental, 2020, 262, 118310.	20.2	30
34	Silverâ€"Gold Bimetal-Loaded TiO₂ Photocatalysts for CO₂ Reduction. Industrial & Engineering Chemistry Research, 2020, 59, 9440-9450.	3.7	30
35	Synthesis of Ti1â^'Sn O2 nanosized photocatalysts in reverse microemulsions. Catalysis Today, 2009, 143, 230-236.	4.4	29
36	Carbon nanotube synthesis and spinning as macroscopic fibers assisted by the ceramic reactor tube. Scientific Reports, 2019, 9, 9239.	3.3	28

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37	Synthesis of BiVO4/TiO2 composites and evaluation of their photocatalytic activity under indoor illumination. Environmental Science and Pollution Research, 2014, 21, 11189-11197.	5.3	24
38	Spectral response and stability of In2S3 as visible light-active photocatalyst. Catalysis Communications, 2012, 20, 1-5.	3.3	23
39	Triphenyltin hydroxide as a precursor for the synthesis of nanosized tin-doped TiO2 photocatalysts. Applied Organometallic Chemistry, 2006, 20, 220-225.	3.5	22
40	Photocatalytic H2 production from aqueous methanol solutions using metal-co-catalysed Zn2SnO4 nanostructures. Applied Catalysis B: Environmental, 2016, 191, 106-115.	20.2	20
41	Selectivity in UV photocatalytic CO2 conversion over bare and silver-decorated niobium-tantalum perovskites. Catalysis Today, 2021, 361, 85-93.	4.4	17
42	Synergism in TiO2 photocatalytic ozonation for the removal of dichloroacetic acid and thiacloprid. Environmental Research, 2021, 197, 110982.	7.5	17
43	Ti-Modified LaFeO₃/Î²-SiC Alveolar Foams as Immobilized Dual Catalysts with Combined Photo-Fenton and Photocatalytic Activity. ACS Applied Materials & Interfaces, 2020, 12, 57025-57037.	8.0	16
44	Ionic liquid-assisted synthesis of F-doped titanium dioxide nanomaterials with high surface area for multi-functional catalytic and photocatalytic applications. Applied Catalysis A: General, 2021, 613, 118029.	4.3	14
45	A molecular approach to the synthesis of platinum-decorated mesoporous graphitic carbon nitride as selective CO2 reduction photocatalyst. Journal of CO2 Utilization, 2021, 50, 101574.	6.8	13
46	Structural and electronic insight into the effect of indium doping on the photocatalytic performance of TiO₂ for CO₂ conversion. Journal of Materials Chemistry A, 2022, 10, 6054-6064.	10.3	13
47	Factors influencing the photocatalytic activity ofÂalkali Nb Ta perovskites for hydrogen production from aqueous methanol solutions. International Journal of Hydrogen Energy, 2016, 41, 19921-19928.	7.1	11
48	Photoâ€Induced Selfâ€Cleaning and Wettability in TiO₂ Nanocolumn Arrays Obtained by Glancingâ€Angle Deposition with Sputtering. Advanced Sustainable Systems, 2021, 5, 2100071.	5.3	11
49	Thermal Properties of Surface-Modified $$upalpha $$ Î± - and $$upvarepsilon $$ Îµ -Fe $$_{2}hbox {O}_{3}$$ 2 O 3 Photocatalysts Determined by Beam Deflection Spectroscopy. International Journal of Thermophysics, 2014, 35, 2107-2114.	2.1	9
50	Effect of La as Promoter in the Photoreduction of CO2 Over TiO2 Catalysts. Topics in Catalysis, 2017, 60, 1119-1128.	2.8	9
51	Assessing the feasibility of reduced graphene oxide as an electronic promoter for photocatalytic hydrogen production over Nb-Ta perovskite photocatalysts. Catalysis Today, 2021, 362, 22-27.	4.4	9
52	Effect of the TiO 2 Nanocrystal Dispersion Over SBAâ€15 in the Photocatalytic H 2 Production Using Ethanol as Electron Donor. Advanced Sustainable Systems, 0, , 2100133.	5.3	9
53	Influence of Catalyst Properties and Reactor Configuration on the Photocatalytic Degradation of Trichloroethylene Under Sunlight Irradiation. Journal of Solar Energy Engineering, Transactions of the ASME, 2008, 130, .	1.8	8
54	TiO2-reduced graphene oxide-Pt nanocomposites for the photogeneration of hydrogen from ethanol liquid and gas phases. Catalysis Today, 2021, 380, 41-52.	4.4	8

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55	Ferrite Materials for Photoassisted Environmental and Solar Fuels Applications. Topics in Current Chemistry Collections, 2020, , 107-162.	0.5	7
56	Photocatalysis: new highlights from JEP 2013. Environmental Science and Pollution Research, 2014, 21, 11111-11115.	5.3	6
57	Improved Methane Production by Photocatalytic CO2 Conversion over Ag/In2O3/TiO2 Heterojunctions. Materials, 2022, 15, 843.	2.9	5
58	Easy and Green Route towards Nanostructured ZnO as an Active Sensing Material with Unexpected H₂S Dosimeterâ€Type Behaviour. European Journal of Inorganic Chemistry, 2019, 2019, 837-846.	2.0	4
59	Heterojunctions: Joining Different Semiconductors. Green Energy and Technology, 2013, , 311-327.	0.6	4
60	Self-Cleaning and Anti-Fogging Surfaces Based on Nanostructured Metal Oxides. Advances in Science and Technology, 2014, 91, 39-47.	0.2	3
61	Approaching photocatalysts characterization under real conditions: In situ and operando studies. , 2021, , 139-156.		2
62	The New Promising Semiconductors: Metallates and Other Mixed Compounds. Green Energy and Technology, 2013, , 123-156.	0.6	2
63	Incorporation of TiO₂ Into Mesoporous SiO₂: From Synthesis to Photocatalytic Applications. Journal of Surfaces and Interfaces of Materials, 2014, 2, 267-273.	0.5	2
64	Influence of Post-Synthesis Modifications of Ti1â^'xZrxO2 Nanocrystallites on Their Photocatalytic Activity for Toluene and Methylcyclohexane Degradation. Journal of Nanoscience and Nanotechnology, 2019, 19, 7810-7818.	0.9	1
65	Simultaneous Photocatalytic Abatement of NO and SO2: Influence of the TiO2 Nature and Mechanistic Insights. Journal of Photocatalysis, 2021, 2, 130-139.	0.4	1
66	Irradiance-Controlled Photoassisted Synthesis of Sub-Nanometre Sized Ruthenium Nanoparticles as Co-Catalyst for TiO2 in Photocatalytic Reactions. Materials, 2021, 14, 4799.	2.9	1
67	Future Perspectives of Photocatalysis. Green Energy and Technology, 2013, , 345-348.	0.6	1
68	A Special Section on Nanostructured Catalysts for Environmental Remediation. Journal of Nanoscience and Nanotechnology, 2020, 20, 5859-5860.	0.9	1
69	Sensitizers: Dyes and Quantum Dots. Green Energy and Technology, 2013, , 329-343.	0.6	0
70	Metalâ€"organic frameworks based on conjugated organic ligands for optoelectronic applications. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C202-C202.	0.1	0
71	Chalcogenides and Other Non-oxidic Semiconductors. Green Energy and Technology, 2013, , 157-169.	0.6	0
72	Preparation of Photocatalytic Optically Transparent Coatings from Pigment Dispersions. Journal of Surfaces and Interfaces of Materials, 2014, 2, 280-287.	0.5	0

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73	Unravelling the photoredox pathways in CO2 photoreduction by artificial photosynthesis. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C134-C134.	0.1	0
74	Sulfur polyconjugated organic ligands as building block in photoactive metalâ€“organic frameworks. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, e372-e373.	0.1	0
75	New insight in the CO2 photo-activation mechanism in artificial photosynthesis. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, e287-e288.	0.1	0