Maria Carmen Hidalgo

List of Publications by Year
in descending order

109	5,576	66234	82410
papers	citations	42 h-index	72 g-index

111	111	111	6545
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cu-doped TiO2 systems with improved photocatalytic activity. Applied Catalysis B: Environmental, 2006, 67, 41-51.	10.8	491
2	Enhanced photocatalytic removal of phenol from aqueous solutions using ZnO modified with Ag. Applied Catalysis B: Environmental, 2018, 225, 197-206.	10.8	392
3	Structural and surface approach to the enhanced photocatalytic activity of sulfated TiO2 photocatalyst. Applied Catalysis B: Environmental, 2006, 63, 45-59.	10.8	228
4	Preparation and Physicochemical Properties of ZrO2and Fe/ZrO2Prepared by a Solâ˜Gel Technique. Langmuir, 2001, 17, 202-210.	1.6	210
5	Comparative study of the photodeposition of Pt, Au and Pd on pre-sulphated TiO2 for the photocatalytic decomposition of phenol. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 217, 275-283.	2.0	164
6	Photocatalytic deactivation of commercial TiO2 samples during simultaneous photoreduction of Cr(VI) and photooxidation of salicylic acid. Journal of Photochemistry and Photobiology A: Chemistry, 2001, 138, 79-85.	2.0	146
7	Photocatalytic properties of ZrO2 and Fe/ZrO2 semiconductors prepared by a solâ€“gel technique. Journal of Photochemistry and Photobiology A: Chemistry, 1999, 129, 89-99.	2.0	142
8	Effect of TiO2 acidic pre-treatment on the photocatalytic properties for phenol degradation. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 179, 20-27.	2.0	133
9	Photocatalytic removal of patent blue V dye on Au-TiO 2 and Pt-TiO 2 catalysts. Applied Catalysis B: Environmental, 2016, 188, 134-146.	10.8	130
10	Sunlight highly photoactive Bi2WO6â€“TiO2 heterostructures for rhodamine B degradation. Chemical Communications, 2010, 46, 4809.	2.2	129
11	A fine route to tune the photocatalytic activity of TiO2. Applied Catalysis B: Environmental, 2006, 63, 31-40.	10.8	125
12	Photocatalytic behaviour of sulphated TiO2 for phenol degradation. Applied Catalysis B: Environmental, 2003, 45, 39-50.	10.8	118
13	Hydrothermal preparation of highly photoactive TiO2 nanoparticles. Catalysis Today, 2007, 129, 50-58.	2.2	114
14	A novel preparation of high surface area TiO2 nanoparticles from alkoxide precursor and using active carbon as additive. Catalysis Today, 2002, 76, 91-101.	2.2	96
15	Novel Bi2WO6â€“TiO2 heterostructures for Rhodamine B degradation under sunlike irradiation. Journal of Hazardous Materials, 2011, 185, 1425-1434.	6.5	87
16	Photodeposition of gold on titanium dioxide for photocatalytic phenol oxidation. Applied Catalysis A: General, 2011, 397, 112-120.	2.2	86
17	ZnO and Pt-ZnO photocatalysts: Characterization and photocatalytic activity assessing by means of three substrates. Catalysis Today, 2018, 313, 12-19.	2.2	84
18	Photocatalytic properties of surface modified platinised TiO2: Effects of particle size and structural composition. Catalysis Today, 2007, 129, 43-49.	2.2	82

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19	Effect of Sulfate Pretreatment on Gold-Modified TiO₂ for Photocatalytic Applications. Journal of Physical Chemistry C, 2009, 113, 12840-12847.	1.5	81
20	High UV-photocatalytic activity of ZnO and Ag/ZnO synthesized by a facile method. Catalysis Today, 2017, 284, 121-128.	2.2	81
21	UV and visible-light driven photocatalytic removal of caffeine using ZnO modified with different noble metals (Pt, Ag and Au). Materials Research Bulletin, 2019, 112, 251-260.	2.7	81
22	Influence of Carboxylic Acid on the Photocatalytic Reduction of Cr(VI) Using Commercial TiO2. Langmuir, 2001, 17, 7174-7177.	1.6	76
23	Role of Fe3+/Fe2+ as TiO2 dopant ions in photocatalytic degradation of carboxylic acids. Journal of Molecular Catalysis A, 2003, 197, 157-171.	4.8	75
24	Highly photoactive ZnO by amine capping-assisted hydrothermal treatment. Applied Catalysis B: Environmental, 2008, 83, 30-38.	10.8	70
25	Photocatalytic hydrogen production from degradation of glucose over fluorinated and platinized TiO2 catalysts. Journal of Catalysis, 2016, 339, 47-56.	3.1	69
26	Mixed Î±-Fe2O3/Bi2WO6 oxides for photoassisted hetero-Fenton degradation of Methyl Orange and Phenol. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 332, 521-533.	2.0	67
27	Cyclohexane photocatalytic oxidation on Pt/TiO2 catalysts. Catalysis Today, 2013, 209, 164-169.	2.2	66
28	Study of the phenol photocatalytic degradation over TiO2 modified by sulfation, fluorination, and platinum nanoparticles photodeposition. Applied Catalysis B: Environmental, 2015, 179, 305-312.	10.8	66
29	Ethanol partial photoxidation on Pt/TiO2 catalysts as green route for acetaldehyde synthesis. Catalysis Today, 2012, 196, 101-109.	2.2	60
30	Insights towards the influence of Pt features on the photocatalytic activity improvement of TiO2 by platinisation. Applied Catalysis B: Environmental, 2012, 126, 76-85.	10.8	58
31	Preparation of ZnFe2O4/ZnO composite: Effect of operational parameters for photocatalytic degradation of dyes under UV and visible illumination. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 390, 112305.	2.0	58
32	Effect of ZrO2 incorporation and calcination temperature on the photocatalytic activity of commercial TiO2 for salicylic acid and Cr(VI) photodegradation. Applied Catalysis A: General, 2002, 231, 185-199.	2.2	54
33	Influence of sulfur on the structural, surface properties and photocatalytic activity of sulfated TiO2. Applied Catalysis B: Environmental, 2009, 90, 633-641.	10.8	52
34	In situ FT-IR study of the adsorption and photocatalytic oxidation of ethanol over sulfated and metallized TiO2. Applied Catalysis B: Environmental, 2013, 142-143, 205-213.	10.8	52
35	Correlation study between photo-degradation and surface adsorption properties of phenol and methyl orange on TiO2 Vs platinum-supported TiO2. Applied Catalysis B: Environmental, 2014, 150-151, 107-115.	10.8	51
36	Study of the E. coli elimination from urban wastewater over photocatalysts based on metallized TiO2. Applied Catalysis B: Environmental, 2017, 200, 469-476.	10.8	49

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37	Synthesis and Characterization of ZnO-ZrO₂ Nanocomposites for Photocatalytic Degradation and Mineralization of Phenol. Journal of Nanomaterials, 2019, 2019, 1-12.	1.5	49
38	Influence of residual carbon on the photocatalytic activity of TiO2/C samples for phenol oxidation. Applied Catalysis B: Environmental, 2003, 43, 163-173.	10.8	46
39	Highly photoactive supported TiO2 prepared by thermal hydrolysis of TiOSO4: Optimisation of the method and comparison with other synthetic routes. Applied Catalysis B: Environmental, 2005, 61, 259-266.	10.8	46
40	Silver-modified ZnO highly UV-photoactive. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 356, 112-122.	2.0	46
41	Fast photodegradation of rhodamine B and caffeine using ZnO-hydroxyapatite composites under UV-light illumination. Catalysis Today, 2022, 388-389, 176-186.	2.2	44
42	Modification of the physicochemical properties of commercial TiO2 samples by soft mechanical activation. Journal of Photochemistry and Photobiology A: Chemistry, 2002, 148, 341-348.	2.0	43
43	Photocatalytic activity of single and mixed nanosheet-like Bi2WO6 and TiO2 for Rhodamine B degradation under sunlike and visible illumination. Applied Catalysis A: General, 2012, 423-424, 34-41.	2.2	43
44	Ptâ€“TiO2â€“Nb2O5 heterojunction as effective photocatalyst for the degradation of diclofenac and ketoprofen. Materials Science in Semiconductor Processing, 2020, 107, 104839.	1.9	43
45	Enhanced UV and visible light photocatalytic properties of synthesized AgBr/SnO2 composites. Separation and Purification Technology, 2021, 257, 117948.	3.9	43
46	Photocatalytic H2 production from glycerol aqueous solutions over fluorinated Pt-TiO2 with high {001} facet exposure. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 365, 52-59.	2.0	40
47	Coupling of Ag2CO3 to an optimized ZnO photocatalyst: Advantages vs. disadvantages. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 369, 119-132.	2.0	40
48	Photocatalytic reduction of CO2 over platinised Bi2WO6-based materials. Photochemical and Photobiological Sciences, 2015, 14, 678-685.	1.6	39
49	Enhancement of TiO2/C photocatalytic activity by sulfate promotion. Applied Catalysis A: General, 2004, 259, 235-243.	2.2	37
50	Study of the synergic effect of sulphate pre-treatment and platinisation on the highly improved photocatalytic activity of TiO2. Applied Catalysis B: Environmental, 2008, 81, 49-55.	10.8	34
51	Titania-Supported Gold Catalysts: Comparison between the Photochemical Phenol Oxidation and Gaseous CO Oxidation Performances. Catalysis Letters, 2008, 123, 198-206.	1.4	32
52	A facile shape-controlled synthesis of highly photoactive fluorine containing TiO2 nanosheets with high {001} facet exposure. Journal of Materials Science, 2018, 53, 435-446.	1.7	32
53	Gas phase photocatalytic oxidation of toluene using highly active Pt doped TiO2. Journal of Molecular Catalysis A, 2010, 320, 14-18.	4.8	31
54	Simultaneous Production of CH₄and H₂from Photocatalytic Reforming of Glucose Aqueous Solution on Sulfated Pd-TiO₂Catalysts. Oil and Gas Science and Technology, 2015, 70, 891-902.	1.4	31

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55	Degradation of Rhodamine B/Phenol Mixtures in Water by Sunâ€Like Excitation of a Bi₂WO₆â€“TiO₂ Photocatalyst. Photochemistry and Photobiology, 2013, 89, 832-840.	1.3	29
56	Study of the effectiveness of the flocculation-photocatalysis in the treatment of wastewater coming from dairy industries. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 256-264.	2.0	29
57	Influence of amine template on the photoactivity of TiO2 nanoparticles obtained by hydrothermal treatment. Applied Catalysis B: Environmental, 2008, 78, 176-182.	10.8	27
58	Selective photooxidation of alcohols as test reaction for photocatalytic activity. Applied Catalysis B: Environmental, 2012, 128, 150-158.	10.8	27
59	Highly photoactive and stable TiO2 coatings on sintered glass. Applied Catalysis A: General, 2004, 277, 183-189.	2.2	25
60	Characterisation and photocatalytic properties of titaniaâ€“silica mixed oxides doped with Ag and Pt. Applied Catalysis A: General, 2010, 387, 135-140.	2.2	25
61	Features of coupled AgBr/WO3 materials as potential photocatalysts. Journal of Alloys and Compounds, 2021, 867, 159191.	2.8	25
62	Photocatalytic Ethanol Oxidative Dehydrogenation over Pt/TiO₂: Effect of the Addition of Blue Phosphors. International Journal of Photoenergy, 2012, 2012, 1-9.	1.4	23
63	Synthesis and application of layered titanates in the photocatalytic degradation of phenol. Applied Catalysis B: Environmental, 2015, 163, 23-29.	10.8	23
64	A comparative study of Bi2WO6, CeO2, and TiO2 as catalysts for selective photo-oxidation of alcohols to carbonyl compounds. Applied Catalysis A: General, 2015, 505, 375-381.	2.2	22
65	A comparative assessment of the UV-photocatalytic activities of ZnO synthesized by different routes. Journal of Environmental Chemical Engineering, 2018, 6, 7161-7171.	3.3	22
66	Hybrid ZnO/Ag3PO4 photocatalysts, with low and high phosphate molar percentages. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 388, 112196.	2.0	22
67	EXAFS study and photocatalytic properties of un-doped and iron-doped ZrO2-TiO2 (photo-) catalysts. Catalysis Today, 2007, 128, 245-250.	2.2	21
68	Photocatalytic production of hydrogen and methane from glycerol reforming over Pt/TiO2â€“Nb2O5. International Journal of Hydrogen Energy, 2021, 46, 38678-38691.	3.8	20
69	Structural determination of the Fe-modified zirconium oxide. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 470, 341-346.	0.7	19
70	Effect of the type of acid used in the synthesis of titaniaâ€“silica mixed oxides on their photocatalytic properties. Applied Catalysis B: Environmental, 2014, 150-151, 389-395.	10.8	19
71	Extraordinary visible photocatalytic activity of a Co0.2Zn0.8O system studied in the Remazol BB oxidation. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 382, 111877.	2.0	18
72	Coupling of WO3 with anatase TiO2 sample with high {001} facet exposition: Effect on the photocatalytic properties. Catalysis Today, 2019, 328, 142-148.	2.2	18

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73	Role of Fe(III) in aqueous solution or deposited on ZnO surface in the photoassisted degradation of rhodamine B and caffeine. Chemosphere, 2020, 241, 125009.	4.2	18
74	Role of activated carbon on the increased photocatalytic activity of AC/Bi2WO6 coupled materials. Applied Catalysis A: General, 2013, 466, 51-59.	2.2	17
75	Visible light photodegradation of blue basic 41 using cobalt doped ZnO: Boxâ€“Behnken optimization and DFT calculation. Journal of the Iranian Chemical Society, 2022, 19, 2779-2794.	1.2	17
76	Selectivity and mechanism of cumene liquid-phase oxidation in the presence of powdered mixed ironâ€“aluminum oxides prepared by alkoxy method. Applied Catalysis A: General, 2000, 193, 237-242.	2.2	16
77	Boosting the visible-light photoactivity of Bi2WO6 using acidic carbon additives. Applied Catalysis A: General, 2015, 505, 467-477.	2.2	16
78	High {0â€¯0â€¯1} faceted TiO2 nanoparticles for the valorization of oxygenated compounds present in aqueous biomass-derived feedstocks. Journal of Catalysis, 2018, 358, 266-276.	3.1	16
79	Urban wastewater treatment by using Ag/ZnO and Pt/TiO2 photocatalysts. Environmental Science and Pollution Research, 2019, 26, 4171-4179.	2.7	16
80	Microwave-assisted sol-gel synthesis of TiO2 in the presence of halogenhydric acids. Characterization and photocatalytic activity. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 394, 112457.	2.0	16
81	A laser flash photolysis study of the photochemical activity of a synthesised ZrTiO4. Materials Letters, 1999, 39, 370-373.	1.3	14
82	Photo-induced processes on Nb 2 O 5 synthesized by different procedures. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 359, 40-52.	2.0	14
83	Synthesis, characterization and photocatalytic activity of Bi-doped TiO2 photocatalysts under simulated solar irradiation. Applied Catalysis A: General, 2011, , .	2.2	13
84	Fluorinated and Platinized Titania as Effective Materials in the Photocatalytic Treatment of Dyestuffs and Stained Wastewater Coming from Handicrafts Factories. Catalysts, 2019, 9, 179.	1.6	13
85	Effect of synthesis pH on the physicochemical properties of a synthesized Bi2WO6 and the type of substrate chosen, in assessing its photo-catalytic activities. Arabian Journal of Chemistry, 2020, 13, 431-443.	2.3	11
86	Evaluation of Auâ€“ZnO, ZnO/Ag2CO3 and Agâ€“TiO2 as Photocatalyst for Wastewater Treatment. Topics in Catalysis, 2020, 63, 1286-1301.	1.3	11
87	Design of Ag/ and Pt/TiO2-SiO2 nanomaterials for the photocatalytic degradation of phenol under solar irradiation. Environmental Science and Pollution Research, 2018, 25, 18894-18913.	2.7	10
88	Outstanding visible photocatalytic activity of a new mixed bismuth titanatate material. Applied Surface Science, 2017, 394, 16-24.	3.1	9
89	Sol-gel synthesis of ZnWO4-(ZnO) composite materials. Characterization and photocatalytic properties. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 404, 112962.	2.0	9
90	Study of the Initiation Route of Cumene Liquid-Phase Oxidation over Ironâ€™Aluminum Oxide Catalysts Obtained by the Alkoxy Method. Langmuir, 1999, 15, 463-468.	1.6	8

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91	Photocatalytic Treatment of Stained Wastewater Coming from Handicraft Factories. A Case Study at the Pilot Plant Level. Water (Switzerland), 2021, 13, 2705.	1.2	8
92	Transformation of CO2Alone and Combined with Ethanol Present in the Hydrogen-Accumulating Intermetallic System TiFe0.95Zr0.03Mo0.02, Pd/SiO2, and Î³-Al2O3. Langmuir, 1999, 15, 6601-6604.	1.6	7
93	Gas-phase Photocatalytic Partial Oxidation of Cyclohexane to Cyclohexanol and Cyclohexanone on Au/TiO2 Photocatalysts. Journal of Advanced Oxidation Technologies, 2013, 16, .	0.5	7
94	Photocatalytic propylene epoxidation on Bi2WO6-based photocatalysts. Research on Chemical Intermediates, 2015, 41, 4199-4212.	1.3	7
95	Differences in the Catalytic Behavior of Au-Metalized TiO2 Systems During Phenol Photo-Degradation and CO Oxidation. Catalysts, 2019, 9, 331.	1.6	7
96	BixTiyOz-Fe multiphase systems with excellent photocatalytic performance in the visible. Catalysis Today, 2019, 328, 136-141.	2.2	5
97	Insights into the structural and physicochemical properties of Zn-Bi-O composites for efficient photodegradation of caffeic acid, rhodamine B and methyl orange. Applied Surface Science, 2022, 581, 152351.	3.1	5
98	Low temperature selective methane activation to alkenes by a new hydrogen-accumulating system. Chemical Communications, 1999, , 943-944.	2.2	4
99	Study of the visible light activity of Pt and Au-TiO2 photocatalysts in organic pollutants degradation. Revista Facultad De IngenierÃa, 2017, , 20-30.	0.5	4
100	Exploring the photocatalytic activities of a highly {0 0 1} faceted TiO2 sensitized by coupling with AgBr or Ag3PO4. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 276, 115555.	1.7	4
101	EXAFS study of the Fex/ZrO2composite nanomaterials obtained by solâ€“gel synthesis. Journal of Synchrotron Radiation, 2001, 8, 528-530.	1.0	3
102	XAFS study of high-disperse Pd-containing nanosystem supported on TiO2 oxide matrix. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 575, 180-184.	0.7	3
103	Oxidative Dehydrogenation of Ethanol over Au/TiO2 Photocatalysts. Journal of Advanced Oxidation Technologies, 2012, 15, .	0.5	3
104	Comparison of the effects generated by the dry-soft grinding and the photodeposition of Au and Pt processes on the visible light absorption and photoactivity of TiO2. Materials Research Express, 2019, 6, 1050d9.	0.8	2
105	How the Ti Precursor is Involved in the Effectiveness of Pt-TiO2 Materials in Photodegrading Methyl Orange. Revista Facultad De Ciencias BÃ¡sicas, 2021, 16, 21-30.	0.2	2
106	EXAFS Study of Fe3 Interaction with ZrO2 and TiO2 Oxides. Physica Scripta, 2005, , 736.	1.2	1
107	Photocatalytic treatment based on TiO2 for a coal mining drainage. Revista Facultad De IngenierÃa, 0, , .	0.5	1
108	XAFS study of an intermetallic TiFe0.95Zr0.03Mo0.02 system for CO2 conversion. Nuclear Instruments & Methods in Physics Research B, 2003, 199, 216-221.	0.6	0

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109	ZnO/Ag3PO4 and ZnOâ€“Malachite as Effective Photocatalysts for the Removal of Enteropathogenic Bacteria, Dyestuffs, and Heavy Metals from Municipal and Industrial Wastewater. Water (Switzerland), 2021, 13, 2264.	1.2	0