JosÃ© Miguel DoÃ±a RodrÃ-guez

List of Publications by Year
in descending order

103 papers	4,781 citations	66343 42 h-index	102487 66 g-index
104 all docs	104 docs citations	104 times ranked	5534 citing authors

#	Article	IF	Citations
1	Process and Film Characterization of Chemicalâ€Bathâ€Deposited ZnS Thin Films. Journal of the Electrochemical Society, 1994, 141, 205-210.	2.9	173
2	The photocatalytic disinfection of urban waste waters. Chemosphere, 2000, 41, 323-327.	8.2	151
3	TiO2 activation by using activated carbon as a support Part I. Surface characterisation and decantability study. Applied Catalysis B: Environmental, 2003, 44, 161-172.	20.2	151
4	Chemical Bath Deposition of CdS Thin Films: An Approach to the Chemical Mechanism Through Study of the Film Microstructure. Journal of the Electrochemical Society, 1997, 144, 4081-4091.	2.9	132
5	Ceramic photocatalytic membranes for water filtration under UV and visible light. Applied Catalysis B: Environmental, 2015, 178, 12-19.	20.2	132
6	TiO2 activation by using activated carbon as a support Part II. Photoreactivity and FTIR study. Applied Catalysis B: Environmental, 2003, 44, 153-160.	20.2	122
7	Effect of inorganic ions on the photocatalytic treatment of agro-industrial wastewaters containing imazalil. Applied Catalysis B: Environmental, 2014, 156-157, 284-292.	20.2	119
8	TiO2-photocatalysis as a tertiary treatment of naturally treated wastewater. Catalysis Today, 2002, 76, 279-289.	4.4	117
9	Gas-phase ethanol photocatalytic degradation study with TiO2 doped with Fe, Pd and Cu. Journal of Molecular Catalysis A, 2004, 215, 153-160.	4.8	112
10	Comparative study of alcohols as sacrificial agents in H2 production by heterogeneous photocatalysis using Pt/TiO2 catalysts. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 312, 45-54.	3.9	110
11	Photocatalytic degradation of formic acid using Fe/TiO2 catalysts: the role of Fe3+/Fe2+ ions in the degradation mechanism. Applied Catalysis B: Environmental, 2001, 32, 49-61.	20.2	106
12	Highly concentrated phenolic wastewater treatment by the Photo-Fenton reaction, mechanism study by FTIR-ATR. Chemosphere, 2001, 44, 1017-1023.	8.2	104
13	FTIR study of gas-phase alcohols photocatalytic degradation with TiO2 and AC-TiO2. Applied Catalysis B: Environmental, 2004, 53, 221-232.	20.2	103
14	Efficient and affordable hydrogen production byÂwater photo-splitting using TiO2-based photocatalysts. International Journal of Hydrogen Energy, 2013, 38, 2144-2155.	7.1	101
15	Chemical bath codeposited CdSî—¸ZnS film characterization. Thin Solid Films, 1995, 268, 5-12.	1.8	88
16	TiO2, surface modified TiO2 and graphene oxide-TiO2 photocatalysts for degradation of water pollutants under near-UV/Vis and visible light. Chemical Engineering Journal, 2013, 224, 17-23.	12.7	87
17	Photocatalytic degradation of phenolic compounds with new TiO2 catalysts. Applied Catalysis B: Environmental, 2010, 100, 346-354.	20.2	85
18	Chemical Bath Deposition of CdS Thin Films: Electrochemical In Situ Kinetic Studies. Journal of the Electrochemical Society, 1992, 139, 2810-2814.	2.9	84

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19	Microstructure and charge trapping assessment in highly reactive mixed phase TiO2 photocatalysts. Applied Catalysis B: Environmental, 2016, 192, 242-252.	20.2	82
20	Effect of TiO2â€“Pd and TiO2â€“Ag on the photocatalytic oxidation of diclofenac, isoproturon and phenol. Chemical Engineering Journal, 2016, 298, 82-95.	12.7	77
21	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
22	Maleic acid photocatalytic degradation using Fe-TiO2 catalysts. Applied Catalysis B: Environmental, 2002, 36, 113-124.	20.2	74
23	Chemicalâ€Bath Deposition of ZnSe Thin Films: Process and Material Characterization. Journal of the Electrochemical Society, 1995, 142, 764-770.	2.9	73
24	Highly photoactive ZnO by amine capping-assisted hydrothermal treatment. Applied Catalysis B: Environmental, 2008, 83, 30-38.	20.2	70
25	Production of hydrogen by water photo-splitting over commercial and synthesised Au/TiO2 catalysts. Applied Catalysis B: Environmental, 2014, 147, 439-452.	20.2	70
26	Electronic Structure of F-Doped Bulk Rutile, Anatase, and Brookite Polymorphs of TiO₂. Journal of Physical Chemistry C, 2012, 116, 12738-12746.	3.1	68
27	Photocatalytic degradation of phenol and phenolic compounds. Journal of Hazardous Materials, 2007, 146, 520-528.	12.4	66
28	Effect of deposition of silver on structural characteristics and photoactivity of TiO2-based photocatalysts. Applied Catalysis B: Environmental, 2012, 127, 112-120.	20.2	66
29	Hydrogen production using Pt-loaded TiO2 photocatalysts. International Journal of Hydrogen Energy, 2013, 38, 11737-11748.	7.1	66
30	Study of the phenol photocatalytic degradation over TiO2 modified by sulfation, fluorination, and platinum nanoparticles photodeposition. Applied Catalysis B: Environmental, 2015, 179, 305-312.	20.2	66
31	Degradation of diphenhydramine pharmaceutical in aqueous solutions by using two highly active TiO2 photocatalysts: Operating parameters and photocatalytic mechanism. Applied Catalysis B: Environmental, 2012, 113-114, 221-227.	20.2	64
32	FTIR study of photocatalytic degradation of 2-propanol in gas phase with different TiO2 catalysts. Applied Catalysis B: Environmental, 2009, 89, 204-213.	20.2	63
33	Photocatalytic degradation of estradiol under simulated solar light and assessment of estrogenic activity. Applied Catalysis B: Environmental, 2015, 162, 437-444.	20.2	62
34	Comparative study of MTBE photocatalytic degradation with TiO2 and Cu-TiO2. Applied Catalysis B: Environmental, 2008, 78, 355-363.	20.2	60
35	Photocatalytic degradation of formaldehyde containing wastewater from veterinarian laboratories. Chemosphere, 2004, 55, 893-904.	8.2	58
36	Photocatalytic removal of 2,4-dichlorophenoxyacetic acid by using solâ€“gel synthesized nanocrystalline and commercial TiO2: Operational parameters optimization and toxicity studies. Applied Catalysis B: Environmental, 2012, 125, 28-34.	20.2	55

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37	The dependence of the surface diffusion coefficients of gold atoms on the potential: its influence on reconstruction of metal lattices. Surface Science, 1992, 274, 205-214.	1.9	52
38	Detoxification of waters contaminated with phenol, formaldehyde and phenolâ€“formaldehyde mixtures using a combination of biological treatments and advanced oxidation techniques. Applied Catalysis B: Environmental, 2015, 163, 63-73.	20.2	51
39	Estimation of kinetic parameters and UV doses necessary to remove twenty-three pharmaceuticals from pre-treated urban wastewater by UV/H2O2. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 329, 130-138.	3.9	48
40	Dependence of Electroâ€optical Properties on the Deposition Conditions of Chemical Bath Deposited CdS Thin Films. Journal of the Electrochemical Society, 1997, 144, 4091-4098.	2.9	46
41	Influence of residual carbon on the photocatalytic activity of TiO2/C samples for phenol oxidation. Applied Catalysis B: Environmental, 2003, 43, 163-173.	20.2	46
42	Photocatalytic degradation of endocrine disruptor compounds under simulated solar light. Water Research, 2013, 47, 3997-4005.	11.3	44
43	Degradation and detoxification of 4-nitrophenol by advanced oxidation technologies and bench-scale constructed wetlands. Journal of Environmental Management, 2012, 105, 53-60.	7.8	43
44	Adsorption and photocatalytic degradation of 2,4-dichlorophenol in TiO2 suspensions. Effect of hydrogen peroxide, sodium peroxodisulphate and ozone. Applied Catalysis A: General, 2013, 455, 227-233.	4.3	43
45	Enhancement of stability and photoactivity of TiO2 coatings on annular glass reactors to remove emerging pollutants from waters. Chemical Engineering Journal, 2015, 279, 488-497.	12.7	43
46	Comparison of supported TiO2 catalysts in the photocatalytic degradation of NOx. Journal of Molecular Catalysis A, 2016, 413, 56-66.	4.8	43
47	Kinetics and adsorption comparative study on the photocatalytic degradation of o-, m- and p-cresol. Catalysis Today, 2007, 129, 256-262.	4.4	42
48	Combining TiO2-photocatalysis and wetland reactors for the efficient treatment of pesticides. Chemosphere, 2008, 71, 788-794.	8.2	42
49	ZnO activation by using activated carbon as a support: Characterisation and photoreactivity. Applied Catalysis A: General, 2009, 364, 174-181.	4.3	41
50	Optimization of the degradation of imazalil by photocatalysis: Comparison between commercial and lab-made photocatalysts. Applied Catalysis B: Environmental, 2013, 138-139, 391-400.	20.2	41
51	Influence of nickel in the hydrogen production activity of TiO2. Applied Catalysis B: Environmental, 2014, 152-153, 192-201.	20.2	39
52	Study of the photocatalytic activity of Pt-modified commercial TiO2 for hydrogen production in the presence of common organic sacrificial agents. Applied Catalysis A: General, 2016, 518, 189-197.	4.3	35
53	The effect of acetic acid on the photocatalytic degradation of catechol and resorcinol. Applied Catalysis A: General, 2006, 299, 274-284.	4.3	34
54	Photodegradation of 2,4-dichlorophenoxyacetic acid over TiO2(B)/anatase nanobelts and Au-TiO2(B)/anatase nanobelts. Applied Surface Science, 2019, 467-468, 1076-1087.	6.1	34

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55	Effect of hydrothermal treatment on structural and photocatalytic properties of TiO2 synthesized by solâ€“gel method. Applied Catalysis A: General, 2012, 411-412, 153-159.	4.3	32
56	NO photooxidation with TiO2 photocatalysts modified with gold and platinum. Applied Catalysis B: Environmental, 2017, 205, 148-157.	20.2	32
57	Effect of NO2 and NO3-/HNO3 adsorption on NO photocatalytic conversion. Applied Catalysis B: Environmental, 2019, 244, 660-670.	20.2	30
58	High concentrated phenol and 1,2-propylene glycol water solutions treatment by photocatalysis. Applied Catalysis B: Environmental, 2001, 30, 1-10.	20.2	28
59	Role of Pd and Cu in gas-phase alcohols photocatalytic degradation with doped TiO2. Journal of Photochemistry and Photobiology A: Chemistry, 2005, 174, 7-14.	3.9	27
60	Influence of amine template on the photoactivity of TiO2 nanoparticles obtained by hydrothermal treatment. Applied Catalysis B: Environmental, 2008, 78, 176-182.	20.2	27
61	Differences in the vapour phase photocatalytic degradation of ammonia and ethanol in the presence of water as a function of TiO2 characteristics and the presence of O2. Catalysis Today, 2016, 266, 53-61.	4.4	27
62	Solar photocatalytic removal of herbicides from real water by using solâ€“gel synthesized nanocrystalline TiO2: Operational parameters optimization and toxicity studies. Solar Energy, 2013, 87, 150-157.	6.1	26
63	Photocatalytic Activity of Nanostructured Anatase Coatings Obtained by Cold Gas Spray. Journal of Thermal Spray Technology, 2014, 23, 1135-1141.	3.1	25
64	Photocatalytic treatment of water containing imazalil using an immobilized TiO 2 photoreactor. Applied Catalysis A: General, 2015, 498, 1-9.	4.3	25
65	Treatment of effluents from wool dyeing process by photo-Fenton at solar pilot plant. Journal of Environmental Chemical Engineering, 2014, 2, 163-171.	6.7	23
66	Synthesis of highly photoactive TiO2 and Pt/TiO2 nanocatalysts for substrate-specific photocatalytic applications. Applied Catalysis B: Environmental, 2012, 125, 383-389.	20.2	22
67	Comparative study of nanocrystalline titanium dioxide obtained through solâ€“gel and solâ€“gelâ€“hydrothermal synthesis. Journal of Colloid and Interface Science, 2013, 400, 31-40.	9.4	21
68	Synthesis of sol-gel pyrophyllite/TiO2 heterostructures: Effect of calcination temperature and methanol washing on photocatalytic activity. Surfaces and Interfaces, 2019, 14, 19-25.	3.0	21
69	Mesoporous pyrophylliteâ€“titania nanocomposites: synthesis and activity in phenol photocatalytic degradation. Research on Chemical Intermediates, 2019, 45, 333-353.	2.7	21
70	Comparative study of phenolic compounds mixtures. Catalysis Today, 2007, 129, 177-184.	4.4	20
71	The effect of dosage on the photocatalytic degradation of organic pollutants. Research on Chemical Intermediates, 2007, 33, 351-358.	2.7	19
72	Highly photoactive TiO2 microspheres for photocatalytic production of hydrogen. International Journal of Hydrogen Energy, 2019, 44, 24653-24666.	7.1	18

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73	Thermal effect of carboxylic acids in the degradation by photo-Fenton of high concentrations of ethylene glycol. Applied Catalysis B: Environmental, 2012, 113-114, 107-115.	20.2	17
74	Catalytic Efficiency of Cu-Supported Pyrophyllite in Heterogeneous Catalytic Oxidation of Phenol. Arabian Journal for Science and Engineering, 2019, 44, 6313-6325.	3.0	17
75	Performance and Economic Assessment ofÂthe Treatment of Phenol with TiO₂ Photocatalysis, Photoâ€Fenton, Biological Aerated Filter, and Wetland Reactors. Chemical Engineering and Technology, 2017, 40, 1165-1175.	1.5	16
76	Incidence of pretreatment by potassium permanganate on hazardous laboratory wastes photodegradability. Water Research, 2000, 34, 3967-3976.	11.3	15
77	TiO2-based (Fe3O4, SiO2, reduced graphene oxide) magnetically recoverable photocatalysts for imazalil degradation in a synthetic wastewater. Environmental Science and Pollution Research, 2018, 25, 27724-27736.	5.3	15
78	Bandgap optimization of solâ€“gel-derived TiO₂ and its effect on the photodegradation of formic acid. Nano Futures, 2021, 5, 025004.	2.2	15
79	Solar Photocatalytic Destruction of p-Nitrophenol: A Pedagogical Use of Lab Wastes. Journal of Chemical Education, 2001, 78, 775.	2.3	14
80	Highly photoactive anatase nanoparticles obtained using trifluoroacetic acid as an electron scavenger and morphological control agent. Journal of Materials Chemistry A, 2013, 1, 14358.	10.3	13
81	The effect of aliphatic carboxylic acids on the photocatalytic degradation of p-nitrophenol. Catalysis Today, 2007, 129, 185-193.	4.4	11
82	Effect of stone filters in a pondâ€“wetland system treating raw wastewater from a university campus. Desalination, 2009, 237, 277-284.	8.2	11
83	Detoxification of the herbicide propanil by means of Fenton process and TiO2-photocatalysis. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 291, 34-43.	3.9	11
84	Study of adsorption and degradation of dimethylphthalate on TiO2-based photocatalysts. Chemical Physics, 2016, 475, 112-118.	1.9	11
85	Effect of TiO2 Addition on Mortars: Characterization and Photoactivity. Applied Sciences (Switzerland), 2019, 9, 2598.	2.5	11
86	Comparison of photocatalytic activity of Î±Fe2O3-TiO2/P on the removal of pollutants on liquid and gaseous phase. Journal of Environmental Chemical Engineering, 2021, 9, 104828.	6.7	11
87	Voltammetric Determination of Ni and Co in Water Samples. Journal of Chemical Education, 1997, 74, 1444.	2.3	10
88	The Effect of Modifying TiO2 on Catechol and Resorcinol Photocatalytic Degradation. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 80-86.	1.8	8
89	Competition between metal-catalysed electroreduction of dinitrogen, protons, and nitrogen oxides: a DFT perspective. Catalysis Science and Technology, 2022, 12, 2856-2864.	4.1	8
90	Comparative study on the photocatalytic mineralization of homologous aliphatic acids and alcohols. Applied Surface Science, 2006, 252, 8193-8202.	6.1	7

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91	Effect of Lewis acid centres and H2O2-complexes on the photocatalytic degradation of phenol. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 249, 61-69.	3.9	7
92	TiO2 and F-TiO2 photocatalytic deactivation in gas phase. Chemical Physics Letters, 2017, 684, 164-170.	2.6	7
93	Nano-Photocatalytic Materials: Possibilities and Challenges. Nanomaterials, 2021, 11, 688.	4.1	7
94	FTIR study of the photocatalytic degradation of NH4+ determination wastes. Journal of Photochemistry and Photobiology A: Chemistry, 2002, 148, 215-222.	3.9	6
95	Effect of additives in photocatalytic degradation of commercial azo dye Lanaset Sun Yellow 180. Photochemical and Photobiological Sciences, 2013, 12, 703-708.	2.9	5
96	Treatment of wastewater containing imazalil by means of Fenton-based processes. Desalination and Water Treatment, 2016, 57, 13865-13877.	1.0	5
97	Influence of Water on the Oxidation of NO on Pd/TiO2 Photocatalysts. Nanomaterials, 2020, 10, 2354.	4.1	5
98	Conventional and photocatalytic degradation of aromatic amines from nitrite determination wastes. Toxicological and Environmental Chemistry, 2003, 85, 61-73.	1.2	4
99	Highly concentrated phenolic wastewater treatment by heterogeneous and homogeneous photocatalysis: mechanism study by FTIR-ATR. Water Science and Technology, 2001, 44, 229-36.	2.5	3
100	Efect of Ti F surface interaction on the photocatalytic degradation of phenol, aniline and formic acid. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 348, 139-149.	3.9	2
101	Effect of the Co-deposition of Pd and Pt on $$hbox {TiO}_{2}$$ TiO 2 Photoactivity. Arabian Journal for Science and Engineering, 2019, 44, 131-143.	3.0	2
102	Adsorption and Photocatalytic Degradation of Phthalic Acid on TiO2 and ZnO. Journal of Advanced Oxidation Technologies, 2008, 11, .	0.5	0
103	Valorisation of a by-product from the TiO₂ pigment industry for its application in advanced oxidation processes. Desalination and Water Treatment, 2016, 57, 26211-26221.	1.0	0