Jose Peral

List of Publications by Year
in descending order

110 papers	7,106 citations	47006 47 h-index	58581 82 g-index
113 all docs	113 docs citations	113 times ranked	6874 citing authors

#	Article	IF	Citations
1	Heterogeneous photocatalytic oxidation of gas-phase organics for air purification: Acetone, 1-butanol, butyraldehyde, formaldehyde, and m-xylene oxidation. Journal of Catalysis, 1992, 136, 554-565.	6.2	480
2	Aniline mineralization by AOP's: anodic oxidation, photocatalysis, electro-Fenton and photoelectro-Fenton processes. Applied Catalysis B: Environmental, 1998, 16, 31-42.	20.2	374
3	Heterogeneous Photocatalysis for Purification, Decontamination and Deodorization of Air. Journal of Chemical Technology and Biotechnology, 1997, 70, 117-140.	3.2	362
4	Fenton and photo-Fenton oxidation of textile effluents. Water Research, 2002, 36, 2703-2710.	11.3	355
5	Removal of organic contaminants in paper pulp treatment effluents under Fenton and photo-Fenton conditions. Applied Catalysis B: Environmental, 2002, 36, 63-74.	20.2	249
6	TIO2-photocatalyzed degradation of phenol and ortho-substituted phenolic compounds. Applied Catalysis B: Environmental, 2001, 30, 359-373.	20.2	200
7	Aniline degradation by combined photocatalysis and ozonation. Applied Catalysis B: Environmental, 1998, 19, 59-65.	20.2	182
8	2,4-Dichlorophenoxyacetic acid degradation by catalyzed ozonation: TiO2/UVA/O3 and Fe(II)/UVA/O3 systems. Applied Catalysis B: Environmental, 2000, 27, 169-177.	20.2	162
9	Degradation of some biorecalcitrant pesticides by homogeneous and heterogeneous photocatalytic ozonation. Chemosphere, 2005, 58, 1127-1133.	8.2	155
10	Experimental design of Fenton and photo-Fenton reactions for the treatment of cellulose bleaching effluents. Chemosphere, 2003, 53, 1211-1220.	8.2	145
11	Heterogeneous photocatalytic reactions of nitrite oxidation and Cr(VI) reduction on iron-doped titania prepared by the wet impregnation method. Applied Catalysis B: Environmental, 1998, 16, 187-196.	20.2	143
12	Environmental assessment of different solar driven advanced oxidation processes. Solar Energy, 2005, 79, 369-375.	6.1	133
13	Partial degradation of five pesticides and an industrial pollutant by ozonation in a pilot-plant scale reactor. Journal of Hazardous Materials, 2006, 138, 363-369.	12.4	132
14	The testing of several biological and chemical coupled treatments for Cibacron Red FN-R azo dye removal. Journal of Hazardous Materials, 2008, 154, 484-490.	12.4	132
15	Low-Temperature Deposition of TiO2 Thin Films with Photocatalytic Activity from Colloidal Anatase Aqueous Solutions. Chemistry of Materials, 2001, 13, 2567-2573.	6.7	130
16	TiO2 deactivation during gas-phase photocatalytic oxidation of ethanol. Catalysis Today, 2002, 76, 259-270.	4.4	105
17	Transition metal tungstates synthesized by co-precipitation method: Basic photocatalytic properties. Electrochimica Acta, 2012, 81, 227-232.	5.2	99
18	TiO2 photocatalyst deactivation by gas-phase oxidation of heteroatom organics. Journal of Molecular Catalysis A, 1997, 115, 347-354.	4.8	97

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19	Pilot plant scale reactive dyes degradation by solar photo-Fenton and biological processes. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 195, 205-214.	3.9	93
20	Replacement of H2O2 by O2 in Fenton and photo-Fenton reactions. Chemosphere, 2000, 41, 1187-1192.	8.2	92
21	Photocatalytic degradation of short-chain organic diacids. Catalysis Today, 2002, 76, 221-233.	4.4	92
22	Redox photodegradation of 2,4-dichlorophenoxyacetic acid over TiO2. Applied Catalysis B: Environmental, 1995, 5, 377-387.	20.2	91
23	Life cycle assessment of a coupled solar photocatalyticâ€“biological process for wastewater treatment. Water Research, 2006, 40, 3533-3540.	11.3	91
24	Environmental assessment of different photo-Fenton approaches for commercial reactive dye removal. Journal of Hazardous Materials, 2006, 138, 218-225.	12.4	83
25	Decolorization and mineralization of commercial reactive dyes under solar light assisted photo-Fenton conditions. Solar Energy, 2004, 77, 573-581.	6.1	76
26	Efficiency of Cu2O/BiVO4 particles prepared with a new soft procedure on the degradation of dyes under visible-light irradiation. Applied Surface Science, 2015, 328, 361-367.	6.1	75
27	Biodegradability of treated aqueous solutions of biorecalcitrant pesticides by means of photocatalytic ozonation. Desalination, 2007, 211, 22-33.	8.2	74
28	Photocatalyzed Degradation of Phenol, 2,4-Dichlorophenol, Phenoxyacetic Acid and 2,4-Dichlorophenoxyacetic Acid over SupportedTiO2 in a Flow System. Journal of Chemical Technology and Biotechnology, 1996, 67, 237-242.	3.2	72
29	Photocatalyzed destruction of aniline in UV-illuminated aqueous TiO2 suspensions. Electrochimica Acta, 1997, 42, 1877-1882.	5.2	63
30	Assessment of photo-Fenton and biological treatment coupling for Diuron and Linuron removal from water. Water Research, 2006, 40, 2533-2540.	11.3	63
31	Advanced Oxidation Processes at Laboratory Scale: Environmental and Economic Impacts. ACS Sustainable Chemistry and Engineering, 2015, 3, 3188-3196.	6.7	63
32	Photocatalytic hydrogen production in a solar pilot plant using a Au/TiO2 photo catalyst. International Journal of Hydrogen Energy, 2016, 41, 11933-11940.	7.1	62
33	Solar pilot plant scale hydrogen generation by irradiation of Cu/TiO2 composites in presence of sacrificial electron donors. Applied Catalysis B: Environmental, 2018, 229, 15-23.	20.2	62
34	Combining photo-Fenton process with aerobic sequencing batch reactor for commercial hetero-bireactive dye removal. Applied Catalysis B: Environmental, 2006, 67, 86-92.	20.2	61
35	Heterogeneous photocatalytic hydrogen generation in a solar pilot plant. International Journal of Hydrogen Energy, 2013, 38, 12718-12724.	7.1	61
36	Degradation of Procion Red H-E7B reactive dye by coupling a photo-Fenton system with a sequencing batch reactor. Journal of Hazardous Materials, 2006, 134, 220-229.	12.4	57

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37	Nanostructured zinc oxide films grown from microwave activated aqueous solutions. Thin Solid Films, 2005, 483, 79-83.	1.8	56
38	Environmental assessment of different advanced oxidation processes applied to a bleaching Kraft mill effluent. Chemosphere, 2006, 62, 9-16.	8.2	56
39	Catalytic Role of Surface Oxygens in TiO₂ Photooxidation Reactions: Aqueous Benzene Photooxidation with Ti¹⁸O₂ under Anaerobic Conditions. Journal of Physical Chemistry Letters, 2013, 4, 1415-1422.	4.6	56
40	Light-induced oxidation of phenol over ZnO powder. Journal of Photochemistry and Photobiology A: Chemistry, 1988, 44, 209-217.	3.9	53
41	Multivariate approach to photocatalytic degradation of a cellulose bleaching effluent. Applied Catalysis B: Environmental, 2001, 33, 89-96.	20.2	53
42	Evaluation of the intermediates generated during the degradation of Diuron and Linuron herbicides by the photo-Fenton reaction. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 189, 364-373.	3.9	53
43	Comprehensive Kinetic and Mechanistic Analysis of TiO₂ Photocatalytic Reactions According to the Directâ€“Indirect Model: (II) Experimental Validation. Journal of Physical Chemistry C, 2014, 118, 14276-14290.	3.1	52
44	1,2-Diolates of titanium as suitable precursors for the preparation of photoactive high surface titania. Applied Catalysis B: Environmental, 1999, 21, 269-277.	20.2	51
45	How Green Is a Chemical Reaction? Application of LCA to Green Chemistry. Environmental Science & Technology, 2002, 36, 5517-5520.	10.0	51
46	Nitrogen doped TiO2 for hydrogen production under visible light irradiation. Solar Energy, 2012, 86, 558-566.	6.1	51
47	Combined photo-Fenton and biological treatment for Diuron and Linuron removal from water containing humic acid. Journal of Hazardous Materials, 2007, 147, 167-174.	12.4	49
48	Fe(III) photocatalyzed degradation of low chain carboxylic acids. Applied Catalysis B: Environmental, 2004, 50, 89-99.	20.2	48
49	Synthesis and photocatalytic activity of mesoporous anatase prepared from tetrabutylammonium-titania composites. Materials Research Bulletin, 2000, 35, 193-202.	5.2	46
50	Degradation Pathways of the Commercial Reactive Azo Dye Procion Red H-E7B under Solar-Assisted Photo-Fenton Reaction. Environmental Science & Technology, 2008, 42, 6663-6670.	10.0	46
51	Degradation of 2,4-dichlorophenoxyacetic acid by in situ photogenerated fenton reagent. Electrochimica Acta, 1996, 41, 1981-1985.	5.2	45
52	Removal of organic contaminants in paper pulp effluents by AOPs: an economic study. Journal of Chemical Technology and Biotechnology, 2002, 77, 525-532.	3.2	45
53	Life-Cycle Assessment of a Coupled Advanced Oxidation-Biological Process for Wastewater Treatment: Comparison with Granular Activated Carbon Adsorption. Environmental Engineering Science, 2007, 24, 638-651.	1.6	45
54	TiO2 deactivation during the gas-phase photocatalytic oxidation of dimethyl sulfide. Applied Catalysis B: Environmental, 2004, 52, 69-77.	20.2	43

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55	Photosensitized CNâ" oxidation over TiO2. Journal of Photochemistry and Photobiology A: Chemistry, 1990, 55, 251-257.	3.9	42
56	TiO2 Layers Grown from Flowing Precursor Solutions Using Microwave Heating. Langmuir, 2001, 17, 891-896.	3.5	41
57	Photo-oxidation of phenoxyacetic acid by TiO2-illuminated catalyst. Applied Catalysis B: Environmental, 1993, 3, 45-53.	20.2	40
58	Comprehensive Kinetic and Mechanistic Analysis of TiO₂ Photocatalytic Reactions According to the Directâ€"Indirect Model: (I) Theoretical Approach. Journal of Physical Chemistry C, 2014, 118, 14266-14275.	3.1	39
59	Photocatalytic degradation and toxicity reduction of isoniazid using Î²-Bi2O3 in real wastewater. Catalysis Today, 2020, 341, 82-89.	4.4	39
60	Heterogeneous photocatalytic oxidation of nitrite over iron-doped TiO2 samples. Journal of Molecular Catalysis, 1994, 87, 67-74.	1.2	38
61	Microwave activated chemical bath deposition (MW-CBD) of zinc oxide: Influence of bath composition and substrate characteristics. Journal of Crystal Growth, 2005, 285, 6-16.	1.5	38
62	Coupled solar photo-Fenton and biological treatment for the degradation of diuron and linuron herbicides at pilot scale. Chemosphere, 2008, 72, 622-629.	8.2	38
63	Facile synthesis of visible-light-driven Cu₂O/BiVO₄ composites for the photomineralization of recalcitrant pesticides. RSC Advances, 2017, 7, 45885-45895.	3.6	38
64	H2O2 Formation from photocatalytic processes at the ZnO/water interface. Environmental Science and Pollution Research, 2001, 8, 285-287.	5.3	37
65	Oxidation of Î±-methylphenylglycine under Fenton and electro-Fenton conditions in the dark and in the presence of solar light. Applied Catalysis B: Environmental, 2009, 89, 12-21.	20.2	37
66	Enhanced photocatalytic degradation of maleic acid by Fe(III) adsorption onto the TiO2 surface. Catalysis Today, 2005, 101, 245-252.	4.4	33
67	Removal of organic contaminants in paper pulp treatment effluents by TiO2 photocatalyzed oxidation. Journal of Photochemistry and Photobiology A: Chemistry, 1997, 109, 281-286.	3.9	32
68	Preparation of anatase powders from fluorine-complexed titanium(iv) aqueous solution using microwave irradiation. Journal of Materials Chemistry, 2000, 10, 1911-1914.	6.7	32
69	In situ synthesis of Au-decorated BiOCl/BiVO4 hybrid ternary system with enhanced visible-light photocatalytic behavior. Applied Surface Science, 2019, 487, 743-754.	6.1	32
70	Decolorisation and mineralisation of homo- and hetero-bireactive dyes under Fenton and photo-Fenton conditions. Coloration Technology, 2004, 120, 188-194.	1.5	29
71	Photocatalytic Cyanide Oxidation from Aqueous Copper Cyanide Solutions over TiO2 and ZnO. Journal of Chemical Technology and Biotechnology, 2007, 53, 93-96.	3.2	29
72	Life cycle assessment of solar photo-Fenton and solar photoelectro-Fenton processes used for the degradation of aqueous Î±-methylphenylglycine. Journal of Environmental Monitoring, 2011, 13, 167-174.	2.1	29

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73	Electrochemically assisted deposition of titanium dioxide on aluminium cathodes. Journal of Materials Chemistry, 2002, 12, 2769-2773.	6.7	28
74	Surface Chemistry and Interfacial Chargeâ€Transfer Mechanisms in Photoinduced Oxygen Exchange at O₂â€“TiO₂ Interfaces. ChemPhysChem, 2011, 12, 901-907.	2.1	28
75	Low-temperature synthesis of BiVO4 powders by Pluronic-assisted hydrothermal method: Effect of the surfactant and temperature on the morphology and structural control. Ceramics International, 2014, 40, 4631-4638.	4.8	27
76	Hydrogen generation by irradiation of commercial CuO + TiO2 mixtures at solar pilot plant scale and in presence of organic electron donors. Applied Catalysis B: Environmental, 2019, 257, 117890.	20.2	27
77	Solar activated ozonation of phenol and malic acid. Chemosphere, 2003, 50, 1085-1093.	8.2	26
78	Optimization of the experimental conditions of hydrogen production by the Ptâ€“(CdS/ZnS) system under visible light illumination. RSC Advances, 2016, 6, 36681-36688.	3.6	26
79	Synthesis of graphene-based photocatalysts for water splitting by laser-induced doping with ionic liquids. Carbon, 2018, 130, 48-58.	10.3	26
80	Aluminium(iii) adsorption: a soft and simple method to prevent TiO2deactivation during salicylic acid photodegradation. Chemical Communications, 2005, , 1851-1853.	4.1	25
81	Removal of toxic cyanide from water by heterogeneous photocatalytic oxidation over ZnO. Solar Energy, 1988, 41, 55-59.	6.1	24
82	Titanium(IV) oxide thin films obtained by a two-step soft-solution method. Thin Solid Films, 2002, 411, 185-191.	1.8	22
83	Treatment of bleaching Kraft mill effluents and polychlorinated phenolic compounds with ozonation. Journal of Chemical Technology and Biotechnology, 2002, 77, 891-897.	3.2	21
84	LIFE CYCLE ASSESSMENT OF THE REMOVAL OF DIURON AND LINURON HERBICIDES FROM WATER USING THREE ENVIRONMENTALLY FRIENDLY TECHNOLOGIES. Environmental Technology (United Kingdom), 2007, 28, 819-830.	2.2	21
85	Predicted environmental concentrations of cocaine and benzoylecgonine in a model environmental system. Water Research, 2009, 43, 5236-5242.	11.3	20
86	Catalytic Role of TiO₂ Terminal Oxygen Atoms in Liquidâ€Phase Photocatalytic Reactions: Oxidation of Aromatic Compounds in Anhydrous Acetonitrile. ChemPhysChem, 2014, 15, 2311-2320.	2.1	20
87	Factors affecting the kinetics of methyl orange reduction photosensitized by colloidal CdS. Journal of Photochemistry and Photobiology A: Chemistry, 1993, 73, 47-52.	3.9	19
88	Photocatalytic Hydrogen Production Under Visible Light by Using a CdS/WO3 Composite. Catalysis Letters, 2016, 146, 100-108.	2.6	19
89	Photoactivity of nanostructured spheres of BiVO4 synthesized by ultrasonic spray pyrolysis at low temperature. Materials Research Bulletin, 2021, 143, 111447.	5.2	18
90	Treatment of biorecalcitrant Î±-methylphenylglycine aqueous solutions with a solar photo-Fenton-aerobic biological coupling: Biodegradability and environmental impact assessment. Chemical Engineering Journal, 2011, 172, 654-664.	12.7	17

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91	Assessment of Pharmaceuticals Fate in a Model Environment. Water, Air, and Soil Pollution, 2011, 218, 413-422.	2.4	17
92	Photo-oxidation of sulfite ions in the presence of some iron oxides. Journal of Photochemistry and Photobiology A: Chemistry, 1995, 87, 121-125.	3.9	16
93	Comparative evaluation of polymer surface functionalization techniques before iron oxide deposition. Activity of the iron oxide-coated polymer films in the photo-assisted degradation of organic pollutants and inactivation of bacteria. Chemical Engineering Journal, 2010, 160, 176-184.	12.7	16
94	Oxidation of HSO3â˜ in aqueous suspensions of Î±-Fe2O3, Î±-FeOOh, Î²-FeOOH and Î³-FeOOH in the dark and under illumination. Environmental Pollution, 1997, 95, 283-288.	7.5	15
95	Kinetics of the photocatalytic oxidation of N(III) and S(IV) on different semiconductor oxides. Chemosphere, 1999, 38, 1265-1271.	8.2	14
96	Enhancement of photocatalytic activity of TiO by adsorbed aluminium(III). Applied Catalysis B: Environmental, 2005, 55, 105-113.	20.2	14
97	Some observations about the photocatalytic oxidation of cyanate to nitrate over TiO2. Electrochimica Acta, 1994, 39, 2461-2463.	5.2	13
98	Heterogeneous Photochemistry: An Easy Experiment. Journal of Chemical Education, 1995, 72, 565.	2.3	13
99	Photocatalytic performance of binary and ternary Ptâ€“Cu2Oâ€“BiVO4 catalysts under visible-light irradiation. Ceramics International, 2021, 47, 32364-32370.	4.8	10
100	Commentary on the article: â€œA new kinetic model for heterogeneous photocatalysis with titanium dioxide: Case of non-specific adsorption considering back reaction, by S. Valencia, F. CataÃ±o, L. Rios, G. Restrepo and J. MarÃn, published in Applied Catalysis B: Environmental, 104 (2011) 300â€“304â€• Applied Catalysis B: Environmental, 2012, 111-112, 649-650.	20.2	8
101	Catalytic role of bridging oxygens in TiO₂ liquid phase photocatalytic reactions: analysis of H₂¹⁶O photooxidation on labeled Ti¹⁸O₂. Catalysis Science and Technology, 2017, 7, 902-910.	4.1	8
102	Competitive processes in photocatalysis. Phenol-sulphide and phenol-cyanide competitive photooxidation over ZnO. Electrochimica Acta, 1989, 34, 1335-1338.	5.2	6
103	Detection and elimination of the constant error component and the interactive matrix interference in the determination of adsorbable organic halogen (AOX) in bleached kraft paper pulp mill effluents. Analytica Chimica Acta, 1996, 333, 139-146.	5.4	6
104	Oxidation of S(IV) to S(VI) under Fenton, photo-Fenton and Î³-FeOOH photocatalized conditions. Journal of Molecular Catalysis A, 1996, 112, 269-276.	4.8	5
105	Comments on the published article â€œEffects of hydroxyl radicals and oxygen species on the 4-chlorophenol degradation by photoeletrocatalytic reactions with TiO2-film electrodes by J. Yang, J. Dai, Ch. Chen, J. Zhao; J. Photochem. Photobiol. A: Chem. 208 (2009) 66â€“77â€• Journal of Photochemistry and Photobiology A: Chemistry, 2010, 210, 215-216.	3.9	5
106	Photogalvanic behaviour of K3Mn(CN)6 in CNâ˜ aqueous solutions. Electrochimica Acta, 1990, 35, 427-429.	5.2	4
107	Photoreduction of Cr(VI) Over CdS Supported on a Glass Matrix. Hazardous Waste and Hazardous Materials, 1991, 8, 151-159.	0.4	4
108	Use of Physicochemical Parameters To Assess the Environmental Fate of Organic Pollutants: The Fugacity Model. Journal of Chemical Education, 2006, 83, 237.	2.3	4

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109	A Comparison of the Environmental Impact of Different AOPs: Risk Indexes. Molecules, 2015, 20, 503-518.	3.8	4
110	Economic Assessment and Possible Industrial Application of a (Photo)catalytic Process. , 2019, , 235-267.		2