

# Sixto Malato

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6264654/publications.pdf>

Version: 2024-02-01

329  
papers

28,463  
citations

4388

86  
h-index

6654

156  
g-index

354  
all docs

354  
docs citations

354  
times ranked

18247  
citing authors

#	ARTICLE	IF	CITATIONS
1	Decontamination and disinfection of water by solar photocatalysis: Recent overview and trends. <i>Catalysis Today</i> , 2009, 147, 1-59.	4.4	2,574
2	Combination of Advanced Oxidation Processes and biological treatments for wastewater decontamination—A review. <i>Science of the Total Environment</i> , 2011, 409, 4141-4166.	8.0	1,946
3	Advanced oxidation processes for water treatment: advances and trends for R&D. <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 769-776.	3.2	755
4	Photocatalysis with solar energy at a pilot-plant scale: an overview. <i>Applied Catalysis B: Environmental</i> , 2002, 37, 1-15.	20.2	648
5	Solar photocatalysis: Materials, reactors, some commercial, and pre-industrialized applications. A comprehensive approach. <i>Applied Catalysis B: Environmental</i> , 2015, 170-171, 90-123.	20.2	541
6	Consolidated vs new advanced treatment methods for the removal of contaminants of emerging concern from urban wastewater. <i>Science of the Total Environment</i> , 2019, 655, 986-1008.	8.0	515
7	Photo-Fenton Degradation of Diclofenac: Identification of Main Intermediates and Degradation Pathway. <i>Environmental Science &amp; Technology</i> , 2005, 39, 8300-8306.	10.0	349
8	Degradation of sulfamethoxazole in water by solar photo-Fenton. <i>Chemical and toxicological evaluation. Water Research</i> , 2009, 43, 3922-3931.	11.3	308
9	Photocatalytic treatment of water-soluble pesticides by photo-Fenton and TiO <sub>2</sub> using solar energy. <i>Catalysis Today</i> , 2002, 76, 209-220.	4.4	293
10	Degradation of fifteen emerging contaminants at 1/4 g L <sup>-1</sup> initial concentrations by mild solar photo-Fenton in MWTP effluents. <i>Water Research</i> , 2010, 44, 545-554.	11.3	293
11	Degradation of the antibiotic amoxicillin by photo-Fenton process — Chemical and toxicological assessment. <i>Water Research</i> , 2011, 45, 1394-1402.	11.3	289
12	Degradation and inactivation of tetracycline by TiO <sub>2</sub> photocatalysis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006, 184, 141-146.	3.9	285
13	The photo-fenton reaction and the TiO <sub>2</sub> /UV process for waste water treatment — novel developments. <i>Catalysis Today</i> , 1999, 53, 131-144.	4.4	280
14	Solar photocatalytic treatment of synthetic municipal wastewater. <i>Water Research</i> , 2004, 38, 1147-1154.	11.3	271
15	Photocatalytic degradation of emerging contaminants in municipal wastewater treatment plant effluents using immobilized TiO <sub>2</sub> in a solar pilot plant. <i>Applied Catalysis B: Environmental</i> , 2011, 103, 294-301.	20.2	268
16	Application of solar AOPs and ozonation for elimination of micropollutants in municipal wastewater treatment plant effluents. <i>Water Research</i> , 2013, 47, 1521-1528.	11.3	254
17	Photocatalytic decontamination and disinfection of water with solar collectors. <i>Catalysis Today</i> , 2007, 122, 137-149.	4.4	252
18	Solar photocatalysis: a clean process for water detoxification. <i>Science of the Total Environment</i> , 2002, 291, 85-97.	8.0	251

#	ARTICLE	IF	CITATIONS
19	Decontamination industrial pharmaceutical wastewater by combining solar photo-Fenton and biological treatment. <i>Water Research</i> , 2009, 43, 661-668.	11.3	243
20	Mature landfill leachate treatment by coagulation/flocculation combined with Fenton and solar photo-Fenton processes. <i>Journal of Hazardous Materials</i> , 2015, 286, 261-268.	12.4	239
21	Photo-Fenton and modified photo-Fenton at neutral pH for the treatment of emerging contaminants in wastewater treatment plant effluents: A comparison. <i>Water Research</i> , 2013, 47, 833-840.	11.3	238
22	Applied studies in solar photocatalytic detoxification: an overview. <i>Solar Energy</i> , 2003, 75, 329-336.	6.1	233
23	Engineering of solar photocatalytic collectors. <i>Solar Energy</i> , 2004, 77, 513-524.	6.1	220
24	Application of the colloidal stability of TiO <sub>2</sub> particles for recovery and reuse in solar photocatalysis. <i>Water Research</i> , 2003, 37, 3180-3188.	11.3	217
25	Azo-dyes photocatalytic degradation in aqueous suspension of TiO <sub>2</sub> under solar irradiation. <i>Chemosphere</i> , 2002, 49, 1223-1230.	8.2	215
26	Photo-Fenton treatment of water containing natural phenolic pollutants. <i>Chemosphere</i> , 2003, 50, 71-78.	8.2	204
27	Treatment of emerging contaminants in wastewater treatment plants (WWTP) effluents by solar photocatalysis using low TiO <sub>2</sub> concentrations. <i>Journal of Hazardous Materials</i> , 2012, 211-212, 131-137.	12.4	199
28	Enhancement of the rate of solar photocatalytic mineralization of organic pollutants by inorganic oxidizing species. <i>Applied Catalysis B: Environmental</i> , 1998, 17, 347-356.	20.2	198
29	TiO <sub>2</sub> -based solar photocatalytic detoxification of water containing organic pollutants. Case studies of 2,4-dichlorophenoxyacetic acid (2,4-D) and of benzofuran. <i>Applied Catalysis B: Environmental</i> , 1998, 17, 15-23.	20.2	195
30	Application of time-of-flight mass spectrometry to the analysis of phototransformation products of diclofenac in water under natural sunlight. <i>Journal of Mass Spectrometry</i> , 2005, 40, 908-915.	1.6	186
31	Degradation of Imidacloprid in Water by Photo-Fenton and TiO <sub>2</sub> Photocatalysis at a Solar Pilot Plant: A Comparative Study. <i>Environmental Science &amp; Technology</i> , 2001, 35, 4359-4366.	10.0	184
32	Solar Photocatalytic Detoxification and Disinfection of Water: Recent Overview. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2007, 129, 4-15.	1.8	183
33	Solar photocatalytic degradation of 4-chlorophenol using the synergistic effect between titania and activated carbon in aqueous suspension. <i>Catalysis Today</i> , 1999, 54, 255-265.	4.4	177
34	Review of feasible solar energy applications to water processes. <i>Renewable and Sustainable Energy Reviews</i> , 2009, 13, 1437-1445.	16.4	177
35	Solar efficiency of a new deposited titania photocatalyst: chlorophenol, pesticide and dye removal applications. <i>Applied Catalysis B: Environmental</i> , 2003, 46, 319-332.	20.2	174
36	Effect of water-matrix composition on Trimethoprim solar photodegradation kinetics and pathways. <i>Water Research</i> , 2010, 44, 2735-2744.	11.3	171

#	ARTICLE	IF	CITATIONS
37	Solar photocatalytic degradation of some hazardous water-soluble pesticides at pilot-plant scale. <i>Journal of Hazardous Materials</i> , 2006, 138, 507-517.	12.4	170
38	Best available technologies and treatment trains to address current challenges in urban wastewater reuse for irrigation of crops in EU countries. <i>Science of the Total Environment</i> , 2020, 710, 136312.	8.0	167
39	Water disinfection by solar photocatalysis using compound parabolic collectors. <i>Catalysis Today</i> , 2005, 101, 345-352.	4.4	166
40	Application of Photo-Fenton as a Tertiary Treatment of Emerging Contaminants in Municipal Wastewater.. <i>Environmental Science &amp; Technology</i> , 2010, 44, 1792-1798.	10.0	166
41	Applicability of the Photo-Fenton method for treating water containing pesticides. <i>Catalysis Today</i> , 1999, 54, 309-319.	4.4	159
42	Pilot-plant treatment of olive mill wastewater (OMW) by solar TiO <sub>2</sub> photocatalysis and solar photo-Fenton. <i>Solar Energy</i> , 2004, 77, 567-572.	6.1	158
43	Degradation of some biorecalcitrant pesticides by homogeneous and heterogeneous photocatalytic ozonation. <i>Chemosphere</i> , 2005, 58, 1127-1133.	8.2	155
44	Decontamination and disinfection of water by solar photocatalysis: The pilot plants of the Plataforma Solar de Almeria. <i>Materials Science in Semiconductor Processing</i> , 2016, 42, 15-23.	4.0	152
45	Treatment of Municipal Wastewater Treatment Plant Effluents with Modified Photo-Fenton As a Tertiary Treatment for the Degradation of Micro Pollutants and Disinfection. <i>Environmental Science &amp; Technology</i> , 2012, 46, 2885-2892.	10.0	146
46	Solar photocatalytic degradation of persistent pharmaceuticals at pilot-scale: Kinetics and characterization of major intermediate products. <i>Applied Catalysis B: Environmental</i> , 2009, 89, 255-264.	20.2	145
47	Solar photocatalytic disinfection of water using titanium dioxide graphene composites. <i>Chemical Engineering Journal</i> , 2015, 261, 36-44.	12.7	145
48	Fe-zeolites as heterogeneous catalysts in solar Fenton-like reactions at neutral pH. <i>Applied Catalysis B: Environmental</i> , 2012, 125, 51-58.	20.2	141
49	Photochemical versus coupled photochemicalâ€“biological flow system for the treatment of two biorecalcitrant herbicides: metobromuron and isoproturon. <i>Applied Catalysis B: Environmental</i> , 2000, 27, 153-168.	20.2	140
50	Photocatalytic Treatment of Diuron by Solar Photocatalysis:Â Evaluation of Main Intermediates and Toxicity. <i>Environmental Science &amp; Technology</i> , 2003, 37, 2516-2524.	10.0	140
51	Decomposition of diclofenac by solar driven photocatalysis at pilot plant scale. <i>Catalysis Today</i> , 2005, 101, 219-226.	4.4	138
52	Degradation study of 15 emerging contaminants at low concentration by immobilized TiO <sub>2</sub> in a pilot plant. <i>Catalysis Today</i> , 2010, 151, 107-113.	4.4	138
53	Comparison of various titania samples of industrial origin in the solar photocatalytic detoxification of water containing 4-chlorophenol. <i>Catalysis Today</i> , 1999, 54, 217-228.	4.4	137
54	Toxicity assays: a way for evaluating AOPs efficiency. <i>Water Research</i> , 2002, 36, 4255-4262.	11.3	136

#	ARTICLE	IF	CITATIONS
55	Solar photocatalytic degradation and detoxification of EU priority substances. <i>Catalysis Today</i> , 2005, 101, 203-210.	4.4	135
56	Degradation of a four-pesticide mixture by combined photo-Fenton and biological oxidation. <i>Water Research</i> , 2009, 43, 653-660.	11.3	133
57	Partial degradation of five pesticides and an industrial pollutant by ozonation in a pilot-plant scale reactor. <i>Journal of Hazardous Materials</i> , 2006, 138, 363-369.	12.4	132
58	Removal of pharmaceuticals from MWTP effluent by nanofiltration and solar photo-Fenton using two different iron complexes at neutral pH. <i>Water Research</i> , 2014, 64, 23-31.	11.3	131
59	Degradation of pesticides in water using solar advanced oxidation processes. <i>Applied Catalysis B: Environmental</i> , 2006, 64, 272-281.	20.2	130
60	Large solar plant photocatalytic water decontamination: Degradation of pentachlorophenol. <i>Chemosphere</i> , 1993, 26, 2103-2119.	8.2	128
61	SOLAR PHOTOCATALYTIC DEGRADATION OF WATER AND AIR POLLUTANTS: CHALLENGES AND PERSPECTIVES. <i>Solar Energy</i> , 1999, 66, 169-182.	6.1	128
62	Solar photo-Fenton treatment – Process parameters and process control. <i>Applied Catalysis B: Environmental</i> , 2006, 64, 121-130.	20.2	128
63	Degradation of emerging contaminants at low concentrations in MWTPs effluents with mild solar photo-Fenton and TiO <sub>2</sub> . <i>Catalysis Today</i> , 2009, 144, 124-130.	4.4	126
64	Compound parabolic concentrator technology development to commercial solar detoxification applications. <i>Solar Energy</i> , 1999, 67, 317-330.	6.1	122
65	New integrated photocatalytic-biological flow system using supported TiO <sub>2</sub> and fixed bacteria for the mineralization of isoproturon. <i>Applied Catalysis B: Environmental</i> , 2002, 36, 131-144.	20.2	120
66	Enhancing biodegradability of priority substances (pesticides) by solar photo-Fenton. <i>Water Research</i> , 2006, 40, 1086-1094.	11.3	120
67	New industrial titania photocatalysts for the solar detoxification of water containing various pollutants. <i>Applied Catalysis B: Environmental</i> , 2002, 35, 281-294.	20.2	115
68	Photocatalytic degradation of industrial residual waters. <i>Solar Energy</i> , 1996, 56, 401-410.	6.1	114
69	Photodegradation of malachite green under natural sunlight irradiation: Kinetic and toxicity of the transformation products. <i>Chemosphere</i> , 2008, 70, 2068-2075.	8.2	113
70	Optimising solar photocatalytic mineralisation of pesticides by adding inorganic oxidising species; application to the recycling of pesticide containers. <i>Applied Catalysis B: Environmental</i> , 2000, 28, 163-174.	20.2	112
71	Degradation of lincomycin in aqueous medium: Coupling of solar photocatalysis and membrane separation. <i>Solar Energy</i> , 2005, 79, 402-408.	6.1	111
72	Regeneration approaches for TiO <sub>2</sub> immobilized photocatalyst used in the elimination of emerging contaminants in water. <i>Catalysis Today</i> , 2014, 230, 27-34.	4.4	111

#	ARTICLE	IF	CITATIONS
73	Comparison of several combined/integrated biological-AOPs setups for the treatment of municipal landfill leachate: Minimization of operating costs and effluent toxicity. <i>Chemical Engineering Journal</i> , 2011, 172, 250-257.	12.7	110
74	Effect of operating parameters on the testing of new industrial titania catalysts at solar pilot plant scale. <i>Applied Catalysis B: Environmental</i> , 2003, 42, 349-357.	20.2	107
75	Solar photo-Fenton treatment of pesticides in water: Effect of iron concentration on degradation and assessment of ecotoxicity and biodegradability. <i>Applied Catalysis B: Environmental</i> , 2009, 88, 448-454.	20.2	107
76	Effects of experimental conditions on <i>E. coli</i> survival during solar photocatalytic water disinfection. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2007, 189, 239-246.	3.9	105
77	Detoxification of wastewater containing five common pesticides by solar AOPsâ€“biological coupled system. <i>Catalysis Today</i> , 2007, 129, 69-78.	4.4	101
78	Fast determination of pesticides and other contaminants of emerging concern in treated wastewater using direct injection coupled to highly sensitive ultra-high performance liquid chromatography-tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2017, 1507, 84-94.	3.7	100
79	Large solar plant photocatalytic water decontamination: Effect of operational parameters. <i>Solar Energy</i> , 1996, 56, 421-428.	6.1	98
80	Solar photocatalysis: A green technology for <i>E. coli</i> contaminated water disinfection. Effect of concentration and different types of suspended catalyst. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2014, 276, 31-40.	3.9	98
81	Oxidation mechanisms of amoxicillin and paracetamol in the photo-Fenton solar process. <i>Water Research</i> , 2019, 156, 232-240.	11.3	96
82	Large solar plant photocatalytic water decontamination: Degradation of atrazine. <i>Solar Energy</i> , 1996, 56, 411-419.	6.1	95
83	Life cycle assessment of a coupled solar photocatalyticâ€“biological process for wastewater treatment. <i>Water Research</i> , 2006, 40, 3533-3540.	11.3	91
84	Photocatalytic degradation of EU priority substances: A comparison between TiO <sub>2</sub> and Fenton plus photo-Fenton in a solar pilot plant. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2007, 185, 354-363.	3.9	90
85	Evaluation of operational parameters involved in solar photo-Fenton degradation of a commercial pesticide mixture. <i>Catalysis Today</i> , 2009, 144, 94-99.	4.4	90
86	Low-concentrating CPC collectors for photocatalytic water detoxification: comparison with a medium concentrating solar collector. <i>Water Science and Technology</i> , 1997, 35, 157-164.	2.5	88
87	Fe(III)-solar light induced degradation of diethyl phthalate (DEP) in aqueous solutions. <i>Chemosphere</i> , 2002, 49, 525-532.	8.2	86
88	Economic evaluation of a combined photo-Fenton/MBR process using pesticides as model pollutant. Factors affecting costs. <i>Journal of Hazardous Materials</i> , 2013, 244-245, 195-203.	12.4	85
89	Solar photocatalytic degradation of humic acids as a model of organic compounds of landfill leachate in pilot-plant experiments: influence of inorganic salts. <i>Applied Catalysis B: Environmental</i> , 2004, 53, 127-137.	20.2	84
90	Pharmaceuticals removal from natural water by nanofiltration combined with advanced tertiary treatments (solar photo-Fenton, photo-Fenton-like Fe(III)â€“EDDS complex and ozonation). <i>Separation and Purification Technology</i> , 2014, 122, 515-522.	7.9	84

#	ARTICLE	IF	CITATIONS
91	Paracetamol degradation intermediates and toxicity during photo-Fenton treatment using different iron species. <i>Water Research</i> , 2012, 46, 5374-5380.	11.3	83
92	Solar photocatalytic treatment of trimethoprim in four environmental matrices at a pilot scale: Transformation products and ecotoxicity evaluation. <i>Science of the Total Environment</i> , 2012, 430, 167-173.	8.0	83
93	Optimization of electrocatalytic H <sub>2</sub> O <sub>2</sub> production at pilot plant scale for solar-assisted water treatment. <i>Applied Catalysis B: Environmental</i> , 2019, 242, 327-336.	20.2	83
94	Solar photodegradation of pesticides in water by sodium decatungstate. <i>Catalysis Today</i> , 1999, 54, 297-307.	4.4	82
95	Optimization of pre-industrial solar photocatalytic mineralization of commercial pesticides. <i>Applied Catalysis B: Environmental</i> , 2000, 25, 31-38.	20.2	81
96	A novel TiO <sub>2</sub> -assisted solar photocatalytic batch-process disinfection reactor for the treatment of biological and chemical contaminants in domestic drinking water in developing countries. <i>Solar Energy</i> , 2004, 77, 649-655.	6.1	80
97	Combination of nanofiltration and ozonation for the remediation of real municipal wastewater effluents: Acute and chronic toxicity assessment. <i>Journal of Hazardous Materials</i> , 2017, 323, 442-451.	12.4	79
98	Optimizing the solar photo-Fenton process in the treatment of contaminated water. Determination of intrinsic kinetic constants for scale-up. <i>Solar Energy</i> , 2005, 79, 360-368.	6.1	78
99	Decontamination of industrial wastewater containing pesticides by combining large-scale homogeneous solar photocatalysis and biological treatment. <i>Chemical Engineering Journal</i> , 2010, 160, 447-456.	12.7	77
100	Reduction of clarithromycin and sulfamethoxazole-resistant <i>Enterococcus</i> by pilot-scale solar-driven Fenton oxidation. <i>Science of the Total Environment</i> , 2014, 468-469, 19-27.	8.0	77
101	Assessment of solar raceway pond reactors for removal of contaminants of emerging concern by photo-Fenton at circumneutral pH from very different municipal wastewater effluents. <i>Chemical Engineering Journal</i> , 2019, 366, 141-149.	12.7	77
102	Strategies for reducing cost by using solar photo-Fenton treatment combined with nanofiltration to remove microcontaminants in real municipal effluents: Toxicity and economic assessment. <i>Chemical Engineering Journal</i> , 2017, 318, 161-170.	12.7	75
103	Light-induced catalytic transformation of ofloxacin by solar Fenton in various water matrices at a pilot plant: Mineralization and characterization of major intermediate products. <i>Science of the Total Environment</i> , 2013, 461-462, 39-48.	8.0	74
104	Degradation of alachlor and pyrimethanil by combined photo-Fenton and biological oxidation. <i>Journal of Hazardous Materials</i> , 2008, 155, 342-349.	12.4	73
105	Solar photocatalytic treatment of simulated dyestuff effluents. <i>Solar Energy</i> , 2004, 77, 591-600.	6.1	72
106	Efficiency of different solar advanced oxidation processes on the oxidation of bisphenol A in water. <i>Applied Catalysis B: Environmental</i> , 2010, 95, 228-237.	20.2	72
107	Modified photo-Fenton for degradation of emerging contaminants in municipal wastewater effluents. <i>Catalysis Today</i> , 2011, 161, 241-246.	4.4	72
108	New approach to solar photo-Fenton operation. Raceway ponds as tertiary treatment technology. <i>Journal of Hazardous Materials</i> , 2014, 279, 322-329.	12.4	71

#	ARTICLE	IF	CITATIONS
109	Relationship between TiO <sub>2</sub> particle size and reactor diameter in solar photoreactors efficiency. <i>Catalysis Today</i> , 1999, 54, 195-204.	4.4	70
110	Supported Fe/C and Fe/Nafion/C catalysts for the photo-Fenton degradation of Orange II under solar irradiation. <i>Catalysis Today</i> , 2005, 101, 375-382.	4.4	70
111	Development of TiO <sub>2</sub> -C photocatalysts for solar treatment of polluted water. <i>Carbon</i> , 2017, 122, 361-373.	10.3	68
112	Low-concentrating CPC collectors for photocatalytic water detoxification: Comparison with a medium concentrating solar collector. <i>Water Science and Technology</i> , 1997, 35, 157.	2.5	67
113	Photoelectrochemical reactors for the solar decontamination of water. <i>Catalysis Today</i> , 1999, 54, 329-339.	4.4	67
114	Degradation of dipyrone and its main intermediates by solar AOPs. <i>Catalysis Today</i> , 2007, 129, 207-214.	4.4	67
115	A combined solar photocatalytic-biological field system for the mineralization of an industrial pollutant at pilot scale. <i>Catalysis Today</i> , 2007, 122, 150-159.	4.4	67
116	TiO <sub>2</sub> /Cu(II) photocatalytic production of benzaldehyde from benzyl alcohol in solar pilot plant reactor. <i>Applied Catalysis B: Environmental</i> , 2013, 136-137, 56-63.	20.2	67
117	Landfill leachate treatment: Comparison of standalone electrochemical degradation and combined with a novel biofilter. <i>Chemical Engineering Journal</i> , 2016, 288, 87-98.	12.7	67
118	Comparison of UV/H <sub>2</sub> O <sub>2</sub> , UV/S <sub>2</sub> O <sub>8</sub> <sup>2-</sup> , solar/Fe(II)/H <sub>2</sub> O <sub>2</sub> and solar/Fe(II)/S <sub>2</sub> O <sub>8</sub> <sup>2-</sup> at pilot plant scale for the elimination of micro-contaminants in natural water: An economic assessment. <i>Chemical Engineering Journal</i> , 2017, 310, 514-524.	12.7	67
119	Solar Photo-Fenton as Finishing Step for Biological Treatment of a Pharmaceutical Wastewater. <i>Environmental Science &amp; Technology</i> , 2009, 43, 1185-1191.	10.0	66
120	Evaluation of operating parameters involved in solar photo-Fenton treatment of wastewater: Interdependence of initial pollutant concentration, temperature and iron concentration. <i>Applied Catalysis B: Environmental</i> , 2010, 97, 292-298.	20.2	65
121	Performance of different advanced oxidation processes for tertiary wastewater treatment to remove the pesticide acetamiprid. <i>Journal of Chemical Technology and Biotechnology</i> , 2016, 91, 72-81.	3.2	64
122	Tertiary treatment of pulp mill wastewater by solar photo-Fenton. <i>Journal of Hazardous Materials</i> , 2012, 225-226, 173-181.	12.4	63
123	Advanced Oxidation Processes at Laboratory Scale: Environmental and Economic Impacts. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 3188-3196.	6.7	63
124	Photocatalytic disinfection of water using low cost compound parabolic collectors. <i>Solar Energy</i> , 2004, 77, 625-633.	6.1	62
125	Application of high intensity UVC-LED for the removal of acetamiprid with the photo-Fenton process. <i>Chemical Engineering Journal</i> , 2015, 264, 690-696.	12.7	62
126	Photocatalytic hydrogen production in a solar pilot plant using a Au/TiO <sub>2</sub> photo catalyst. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 11933-11940.	7.1	62



#	ARTICLE	IF	CITATIONS
127	Solar pilot plant scale hydrogen generation by irradiation of Cu/TiO <sub>2</sub> composites in presence of sacrificial electron donors. <i>Applied Catalysis B: Environmental</i> , 2018, 229, 15-23.	20.2	62
128	Combined nanofiltration and photo-Fenton treatment of water containing micropollutants. <i>Chemical Engineering Journal</i> , 2013, 224, 89-95.	12.7	61
129	Heterogeneous photocatalytic hydrogen generation in a solar pilot plant. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 12718-12724.	7.1	61
130	Photocatalytic degradation of phenol: Comparison between pilot-plant-scale and laboratory results. <i>Solar Energy</i> , 1996, 56, 387-400.	6.1	60
131	Solar photocatalytic mineralization of commercial pesticides: acrinathrin. <i>Chemosphere</i> , 2000, 40, 403-409.	8.2	60
132	Solar disinfection of contaminated water: a comparison of three small-scale reactors. <i>Solar Energy</i> , 2004, 77, 657-664.	6.1	59
133	Abatement of ibuprofen by solar photocatalysis process: Enhancement and scale up. <i>Catalysis Today</i> , 2009, 144, 112-116.	4.4	59
134	Study of application of titania catalysts on solar photocatalysis: Influence of type of pollutants and water matrices. <i>Chemical Engineering Journal</i> , 2016, 291, 64-73.	12.7	59
135	Pilot-plant evaluation of TiO <sub>2</sub> and TiO <sub>2</sub> -based hybrid photocatalysts for solar treatment of polluted water. <i>Journal of Hazardous Materials</i> , 2016, 320, 469-478.	12.4	58
136	EDDS as complexing agent for enhancing solar advanced oxidation processes in natural water: Effect of iron species and different oxidants. <i>Journal of Hazardous Materials</i> , 2019, 372, 129-136.	12.4	58
137	Concentrating versus non-concentrating reactors for solar photocatalytic degradation of p-nitrotoluene-o-sulfonic acid. <i>Water Science and Technology</i> , 2001, 44, 219-227.	2.5	57
138	Scale-up strategy for a combined solar photo-Fenton/biological system for remediation of pesticide-contaminated water. <i>Catalysis Today</i> , 2010, 151, 100-106.	4.4	57
139	Evaluation of photocatalytic degradation of imidacloprid in industrial water by GC-MS and LC-MS. <i>Analisis - European Journal of Analytical Chemistry</i> , 1998, 26, 245-250.	0.4	56
140	Solar photocatalytic mineralization of commercial pesticides: Oxamyl. <i>Solar Energy Materials and Solar Cells</i> , 2000, 64, 1-14.	6.2	56
141	Solar photo-Fenton at mild conditions to treat a mixture of six emerging pollutants. <i>Chemical Engineering Journal</i> , 2012, 198-199, 65-72.	12.7	56
142	Modelling of the operation of raceway pond reactors for micropollutant removal by solar photo-Fenton as a function of photon absorption. <i>Applied Catalysis B: Environmental</i> , 2015, 178, 210-217.	20.2	56
143	Solar photocatalytic degradation of pesticides over TiO <sub>2</sub> -rGO nanocomposites at pilot plant scale. <i>Science of the Total Environment</i> , 2020, 737, 140286.	8.0	56
144	Solar Photochemical Treatment of Winery Wastewater in a CPC Reactor. <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 11242-11248.	5.2	55

#	ARTICLE	IF	CITATIONS
145	Remediation of agro-food industry effluents by biotreatment combined with supported TiO <sub>2</sub> /H <sub>2</sub> O <sub>2</sub> solar photocatalysis. <i>Chemical Engineering Journal</i> , 2015, 273, 205-213.	12.7	55
146	Degradation and monitoring of acetamiprid, thiabendazole and their transformation products in an agro-food industry effluent during solar photo-Fenton treatment in a raceway pond reactor. <i>Chemosphere</i> , 2015, 130, 73-81.	8.2	55
147	Mechanistic modeling of solar photo-Fenton process with Fe <sup>3+</sup> -EDDS at neutral pH. <i>Applied Catalysis B: Environmental</i> , 2018, 233, 234-242.	20.2	55
148	Titanium Dioxide/Electrolyte Solution Interface: Electron Transfer Phenomena. <i>Journal of Colloid and Interface Science</i> , 2000, 227, 510-516.	9.4	54
149	Photocatalytic Pilot Scale Degradation Study of Pyrimethanil and of Its Main Degradation Products in Waters by Means of Solid-Phase Extraction Followed by Gas and Liquid Chromatography with Mass Spectrometry Detection. <i>Environmental Science &amp; Technology</i> , 2000, 34, 1563-1571.	10.0	54
150	Dissolved oxygen concentration: A key parameter in monitoring the photo-Fenton process. <i>Applied Catalysis B: Environmental</i> , 2011, 104, 316-323.	20.2	53
151	On ozone-photocatalysis synergism in black-light induced reactions: Oxidizing species production in photocatalytic ozonation versus heterogeneous photocatalysis. <i>Chemical Engineering Journal</i> , 2012, 204-206, 131-140.	12.7	52
152	Solar photocatalytic mineralization of commercial pesticides: Methamidophos. <i>Chemosphere</i> , 1999, 38, 1145-1156.	8.2	51
153	A reliable monitoring of the biocompatibility of an effluent along an oxidative pre-treatment by sequential bioassays and chemical analyses. <i>Water Research</i> , 2009, 43, 784-792.	11.3	51
154	Coupling solar photo-Fenton and biotreatment at industrial scale: Main results of a demonstration plant. <i>Journal of Hazardous Materials</i> , 2007, 146, 440-446.	12.4	50
155	Effect of pesticide concentration on the degradation process by combined solar photo-Fenton and biological treatment. <i>Water Research</i> , 2009, 43, 3838-3848.	11.3	50
156	New large solar photocatalytic plant: set-up and preliminary results. <i>Chemosphere</i> , 2002, 47, 235-240.	8.2	49
157	Solar treatment of cork boiling and bleaching wastewaters in a pilot plant. <i>Water Research</i> , 2009, 43, 4050-4062.	11.3	49
158	Field solar degradation of pesticides and emerging water contaminants mediated by polymer films containing titanium and iron oxide with synergistic heterogeneous photocatalytic activity at neutral pH. <i>Water Research</i> , 2010, 44, 3029-3038.	11.3	49
159	Microcontaminant removal in secondary effluents by solar photo-Fenton at circumneutral pH in raceway pond reactors. <i>Catalysis Today</i> , 2017, 287, 10-14.	4.4	49
160	Environmental assessment of solar photo-Fenton processes in combination with nanofiltration for the removal of micro-contaminants from real wastewaters. <i>Science of the Total Environment</i> , 2019, 650, 2210-2220.	8.0	49
161	New trend on open solar photoreactors to treat micropollutants by photo-Fenton at circumneutral pH: Increasing optical pathway. <i>Chemical Engineering Journal</i> , 2020, 385, 123982.	12.7	49
162	Treatment of chlorinated solvents by TiO <sub>2</sub> photocatalysis and photo-Fenton: influence of operating conditions in a solar pilot plant. <i>Chemosphere</i> , 2005, 58, 391-398.	8.2	48

#	ARTICLE	IF	CITATIONS
163	Inactivation of <i>E. coli</i> and <i>E. faecalis</i> by solar photo-Fenton with EDDS complex at neutral pH in municipal wastewater effluents. <i>Journal of Hazardous Materials</i> , 2019, 372, 85-93.	12.4	48
164	Cork boiling wastewater treatment at pilot plant scale: Comparison of solar photo-Fenton and ozone (O <sub>3</sub> , O <sub>3</sub> /H <sub>2</sub> O <sub>2</sub> ). Toxicity and biodegradability assessment. <i>Chemical Engineering Journal</i> , 2013, 234, 232-239.	12.7	47
165	Removal of pharmaceuticals at microg L <sup>-1</sup> by combined nanofiltration and mild solar photo-Fenton. <i>Chemical Engineering Journal</i> , 2014, 239, 68-74.	12.7	47
166	Selective photocatalytic oxidation of 5-hydroxymethyl-2-furfural in aqueous suspension of polymeric carbon nitride and its adduct with H <sub>2</sub> O <sub>2</sub> in a solar pilot plant. <i>Catalysis Today</i> , 2018, 315, 138-148.	4.4	47
167	First experimental results of a new hybrid solar/gas multi-effect distillation system: the AQUASOL project. <i>Desalination</i> , 2008, 220, 619-625.	8.2	46
168	Degradation Pathways of the Commercial Reactive Azo Dye Procion Red H-E7B under Solar-Assisted Photo-Fenton Reaction. <i>Environmental Science &amp; Technology</i> , 2008, 42, 6663-6670.	10.0	46
169	Benefits and limitations of using Fe(III)-EDDS for the treatment of highly contaminated water at near-neutral pH. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2015, 303-304, 1-7.	3.9	46
170	Advanced treatment of urban wastewater by UV-C/free chlorine process: Micro-pollutants removal and effect of UV-C radiation on trihalomethanes formation. <i>Water Research</i> , 2020, 169, 115220.	11.3	46
171	Solar driven degradation of 4-chlorophenol. <i>Catalysis Today</i> , 1999, 54, 321-327.	4.4	45
172	Life-Cycle Assessment of a Coupled Advanced Oxidation-Biological Process for Wastewater Treatment: Comparison with Granular Activated Carbon Adsorption. <i>Environmental Engineering Science</i> , 2007, 24, 638-651.	1.6	45
173	Solar photo-Fenton degradation of nalidixic acid in waters and wastewaters of different composition. Analytical assessment by LC-TOF-MS. <i>Water Research</i> , 2011, 45, 1736-1744.	11.3	45
174	Assessment of solar photocatalysis using Ag/BiVO <sub>4</sub> at pilot solar Compound Parabolic Collector for inactivation of pathogens in well water and secondary effluents. <i>Catalysis Today</i> , 2017, 281, 124-134.	4.4	44
175	Evaluating Microtox <sup>®</sup> as a tool for biodegradability assessment of partially treated solutions of pesticides using Fe <sup>3+</sup> and TiO <sub>2</sub> solar photo-assisted processes. <i>Ecotoxicology and Environmental Safety</i> , 2008, 69, 546-555.	6.0	43
176	Enhancement of the Fenton and photo-Fenton processes by components found in wastewater from the industrial processing of natural products: The possibilities of cork boiling wastewater reuse. <i>Chemical Engineering Journal</i> , 2016, 304, 890-896.	12.7	43
177	Effect of volumetric rate of photon absorption on the kinetics of micropollutant removal by solar photo-Fenton with Fe <sup>3+</sup> -EDDS at neutral pH. <i>Chemical Engineering Journal</i> , 2018, 331, 84-92.	12.7	43
178	Contaminants of emerging concern removal from real wastewater by UV/free chlorine process: A comparison with solar/free chlorine and UV/H <sub>2</sub> O <sub>2</sub> at pilot scale. <i>Chemosphere</i> , 2019, 236, 124354.	8.2	43
179	A comparative study of different tests for biodegradability enhancement determination during AOP treatment of recalcitrant toxic aqueous solutions. <i>Ecotoxicology and Environmental Safety</i> , 2010, 73, 1189-1195.	6.0	42
180	Characterization of intermediate products of solar photocatalytic degradation of ranitidine at pilot-scale. <i>Chemosphere</i> , 2010, 79, 368-376.	8.2	42

#	ARTICLE	IF	CITATIONS
181	Solar photo-Fenton optimization for the treatment of MWTP effluents containing emerging contaminants. <i>Catalysis Today</i> , 2013, 209, 188-194.	4.4	42
182	Microcontaminant removal by solar photo-Fenton at natural pH run with sequential and continuous iron additions. <i>Chemical Engineering Journal</i> , 2014, 235, 132-140.	12.7	41
183	Microcontaminant degradation in municipal wastewater treatment plant secondary effluent by EDDS assisted photo-Fenton at near-neutral pH: An experimental design approach. <i>Catalysis Today</i> , 2015, 252, 61-69.	4.4	41
184	Combined photo-Fenton and biological oxidation for pesticide degradation: Effect of photo-treated intermediates on biodegradation kinetics. <i>Chemosphere</i> , 2008, 70, 1476-1483.	8.2	40
185	Iron dosage as a strategy to operate the photo-Fenton process at initial neutral pH. <i>Chemical Engineering Journal</i> , 2013, 224, 67-74.	12.7	40
186	Is the combination of nanofiltration membranes and AOPs for removing microcontaminants cost effective in real municipal wastewater effluents?. <i>Environmental Science: Water Research and Technology</i> , 2016, 2, 511-520.	2.4	40
187	Photocatalysis and radiation absorption in a solar plant. <i>Solar Energy Materials and Solar Cells</i> , 1996, 44, 199-217.	6.2	39
188	Solar transformation and photocatalytic treatment of cocaine in water: Kinetics, characterization of major intermediate products and toxicity evaluation. <i>Applied Catalysis B: Environmental</i> , 2011, 104, 37-48.	20.2	39
189	Detailed treatment line for a specific landfill leachate remediation. Brief economic assessment. <i>Chemical Engineering Journal</i> , 2015, 261, 60-66.	12.7	39
190	Photo-Fenton applied to the removal of pharmaceutical and other pollutants of emerging concern. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021, 29, 100458.	5.9	39
191	Pre-industrial-scale Combined Solar Photo-Fenton and Immobilized Biomass Activated-Sludge Biotreatment. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 7467-7475.	3.7	38
192	Coupled solar photo-Fenton and biological treatment for the degradation of diuron and linuron herbicides at pilot scale. <i>Chemosphere</i> , 2008, 72, 622-629.	8.2	38
193	Photo-Fenton decomposition of chlorfenvinphos: Determination of reaction pathway. <i>Water Research</i> , 2009, 43, 441-449.	11.3	38
194	Solar photo-Fenton degradation of herbicides partially dissolved in water. <i>Catalysis Today</i> , 2011, 161, 214-220.	4.4	38
195	Phenomenological study and application of the combined influence of iron concentration and irradiance on the photo-Fenton process to remove micropollutants. <i>Science of the Total Environment</i> , 2014, 478, 123-132.	8.0	38
196	Determination of pesticides in sewage sludge from an agro-food industry using QuEChERS extraction followed by analysis with liquid chromatography-tandem mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 6181-6193.	3.7	37
197	Degradation of antibiotic trimethoprim by the combined action of sunlight, TiO <sub>2</sub> and persulfate: A pilot plant study. <i>Catalysis Today</i> , 2019, 328, 216-222.	4.4	37
198	Hydrogen peroxide automatic dosing based on dissolved oxygen concentration during solar photo-Fenton. <i>Catalysis Today</i> , 2011, 161, 247-254.	4.4	34

#	ARTICLE	IF	CITATIONS
199	Influence of iron leaching and oxidizing agent employed on solar photodegradation of phenol over nanostructured iron-doped titania catalysts. <i>Applied Catalysis B: Environmental</i> , 2014, 144, 269-276.	20.2	34
200	Application of solar advanced oxidation processes to the degradation of the antibiotic sulfamethoxazole. <i>Photochemical and Photobiological Sciences</i> , 2009, 8, 1032-1039.	2.9	32
201	Coupling between high-frequency ultrasound and solar photo-Fenton at pilot scale for the treatment of organic contaminants: An initial approach. <i>Ultrasonics Sonochemistry</i> , 2015, 22, 527-534.	8.2	32
202	The influence of location on solar photo-Fenton: Process performance, photoreactor scaling-up and treatment cost. <i>Renewable Energy</i> , 2020, 145, 1890-1900.	8.9	32
203	Solar photocatalytic treatment of quinolones: intermediates and toxicity evaluation. <i>Photochemical and Photobiological Sciences</i> , 2009, 8, 644-651.	2.9	31
204	Photolysis of flumequine: Identification of the major phototransformation products and toxicity measures. <i>Chemosphere</i> , 2012, 88, 627-634.	8.2	31
205	Removal of microcontaminants from MWTP effluents by combination of membrane technologies and solar photo-Fenton at neutral pH. <i>Catalysis Today</i> , 2015, 252, 78-83.	4.4	30
206	Optimization of mild solar TiO <sub>2</sub> photocatalysis as a tertiary treatment for municipal wastewater treatment plant effluents. <i>Applied Catalysis B: Environmental</i> , 2012, 128, 119-125.	20.2	29
207	Photo-Fenton treatment of saccharin in a solar pilot compound parabolic collector: Use of olive mill wastewater as iron chelating agent, preliminary results. <i>Journal of Hazardous Materials</i> , 2019, 372, 137-144.	12.4	29
208	Carbon-based cathodes degradation during electro-Fenton treatment at pilot scale: Changes in H <sub>2</sub> O <sub>2</sub> electrogeneration. <i>Chemosphere</i> , 2021, 275, 129962.	8.2	29
209	Wastewater detoxification of organic and inorganic toxic compounds with solar collectors. <i>Desalination</i> , 1997, 108, 213-220.	8.2	28
210	Photocatalytic oxidation of acetonitrile in aqueous suspension of titanium dioxide irradiated by sunlight. <i>Journal of Environmental Management</i> , 2004, 8, 329-335.	1.7	28
211	Fe/TiO <sub>2</sub> /pH Interactions in Solar Degradation of Imidacloprid with TiO <sub>2</sub> /SiO <sub>2</sub> Photocatalysts at Pilot-Plant Scale. <i>Industrial &amp; Engineering Chemistry Research</i> , 2006, 45, 8900-8908.	3.7	28
212	Formation of chlorinated by-products during photo-Fenton degradation of pyrimethanil under saline conditions. Influence on toxicity and biodegradability. <i>Journal of Hazardous Materials</i> , 2012, 217-218, 217-223.	12.4	28
213	Simultaneous removal of contaminants of emerging concern and pathogens from urban wastewater by homogeneous solar driven advanced oxidation processes. <i>Science of the Total Environment</i> , 2021, 766, 144320.	8.0	28
214	Pre-Industrial Experience in Solar Photocatalytic Mineralization of Real Wastewaters. Application to Pesticide Container Recycling. <i>Water Science and Technology</i> , 1999, 40, 123.	2.5	27
215	Hydrogen generation by irradiation of commercial CuO + TiO <sub>2</sub> mixtures at solar pilot plant scale and in presence of organic electron donors. <i>Applied Catalysis B: Environmental</i> , 2019, 257, 117890.	20.2	27
216	Synthetic fresh-cut wastewater disinfection and decontamination by ozonation at pilot scale. <i>Water Research</i> , 2020, 170, 115304.	11.3	27

#	ARTICLE	IF	CITATIONS
217	Solar photocatalytic degradation of dichloroacetic acid with silica-supported titania at pilot-plant scale. <i>Catalysis Today</i> , 2007, 129, 59-68.	4.4	26
218	Photolytic and photocatalytic transformation of methadone in aqueous solutions under solar irradiation: Kinetics, characterization of major intermediate products and toxicity evaluation. <i>Water Research</i> , 2011, 45, 4815-4826.	11.3	26
219	Solar degradation of 5-amino-6-methyl-2-benzimidazolone by TiO <sub>2</sub> and iron(III) catalyst with H <sub>2</sub> O <sub>2</sub> and O <sub>2</sub> as electron acceptors. <i>Energy</i> , 2004, 29, 853-860.	8.8	25
220	Photocatalytic treatment of dimethoate by solar photocatalysis at pilot plant scale. <i>Environmental Chemistry Letters</i> , 2005, 3, 118-121.	16.2	25
221	COST Action ES1403: New and Emerging challenges and opportunities in wastewater REUse (NEREUS). <i>Environmental Science and Pollution Research</i> , 2015, 22, 7183-7186.	5.3	25
222	Sunlight advanced oxidation processes vs ozonation for wastewater disinfection and safe reclamation. <i>Science of the Total Environment</i> , 2021, 787, 147531.	8.0	25
223	Solar light assisted photodegradation of ethidium bromide over titania-based catalysts. <i>Catalysis Today</i> , 2007, 129, 79-85.	4.4	24
224	A kinetics study on the biodegradation of synthetic wastewater simulating effluent from an advanced oxidation process using <i>Pseudomonas putida</i> CECT 324. <i>Journal of Hazardous Materials</i> , 2008, 151, 780-788.	12.4	24
225	Application of solar photo-Fenton at circumneutral pH to nanofiltration concentrates for removal of pharmaceuticals in MWTP effluents. <i>Environmental Science and Pollution Research</i> , 2015, 22, 846-855.	5.3	24
226	On the design and operation of solar photo-Fenton open reactors for the removal of contaminants of emerging concern from WWTP effluents at neutral pH. <i>Applied Catalysis B: Environmental</i> , 2019, 256, 117801.	20.2	24
227	Natural chelating agents from olive mill wastewater to enable photo-Fenton-like reactions at natural pH. <i>Catalysis Today</i> , 2019, 328, 281-285.	4.4	24
228	Advanced evaluation of landfill leachate treatments by low and high-resolution mass spectrometry focusing on microcontaminant removal. <i>Journal of Hazardous Materials</i> , 2020, 384, 121372.	12.4	24
229	Elimination of the iodinated contrast agent iohexol in water, wastewater and urine matrices by application of photo-Fenton and ultrasound advanced oxidation processes. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 2002-2009.	6.7	22
230	UVC-based advanced oxidation processes for simultaneous removal of microcontaminants and pathogens from simulated municipal wastewater at pilot plant scale. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 2553-2566.	2.4	22
231	Detoxification of aqueous solutions of the pesticide <i>Sevno</i> by solar photocatalysis. <i>Environmental Chemistry Letters</i> , 2006, 3, 169-172.	16.2	21
232	Nanofiltration retentate treatment from urban wastewater secondary effluent by solar electrochemical oxidation processes. <i>Separation and Purification Technology</i> , 2021, 254, 117614.	7.9	21
233	Solar photo-Fenton at circumneutral pH using Fe(III)-EDDS compared to ozonation for tertiary treatment of urban wastewater: Contaminants of emerging concern removal and toxicity assessment. <i>Chemical Engineering Journal</i> , 2022, 431, 133474.	12.7	21
234	Solar heterogeneous and homogeneous photocatalysis as a pre-treatment option for biotreatment. <i>Research on Chemical Intermediates</i> , 2007, 33, 407-420.	2.7	20

#	ARTICLE	IF	CITATIONS
235	New insights on solar photocatalytic degradation of phenol over Fe-TiO <sub>2</sub> catalysts: Photo-complex mechanism of iron lixivates. <i>Applied Catalysis B: Environmental</i> , 2009, 93, 96-105.	20.2	20
236	Commercial fertilizer as effective iron chelate (Fe <sup>3+</sup> -EDDHA) for wastewater disinfection under natural sunlight for reusing in irrigation. <i>Applied Catalysis B: Environmental</i> , 2019, 253, 286-292.	20.2	20
237	Different approaches for the solar photocatalytic removal of micro-contaminants from aqueous environment: Titania vs. hybrid magnetic iron oxides. <i>Catalysis Today</i> , 2019, 328, 164-171.	4.4	20
238	New approaches to solar Advanced Oxidation Processes for elimination of priority substances based on electrooxidation and ozonation at pilot plant scale. <i>Catalysis Today</i> , 2020, 355, 844-850.	4.4	20
239	Electro-oxidation process assisted by solar energy for the treatment of wastewater with high salinity. <i>Science of the Total Environment</i> , 2020, 705, 135831.	8.0	20
240	Application of GC-MS and GC-AED to the evaluation of by-products formed by solar photo-fenton degradation of Methyltert-butyl ether in water. <i>International Journal of Environmental Analytical Chemistry</i> , 2004, 84, 149-159.	3.3	19
241	A Comparative Study of Supported TiO <sub>2</sub> as Photocatalyst in Water Decontamination at Solar Pilot Plant Scale. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2006, 128, 331-337.	1.8	19
242	Integration of Solar Photocatalysis and Membrane Bioreactor for Pesticides Degradation. <i>Separation Science and Technology</i> , 2010, 45, 1571-1578.	2.5	19
243	Cork boiling wastewater treatment and reuse through combination of advanced oxidation technologies. <i>Environmental Science and Pollution Research</i> , 2017, 24, 6317-6328.	5.3	19
244	New helio-photocatalytic-photovoltaic hybrid system for simultaneous water decontamination and solar energy conversion. <i>Solar Energy</i> , 2005, 79, 353-359.	6.1	18
245	Photo-Fenton degradation of alachlor, atrazine, chlorfenvinphos, diuron, isoproturon and pentachlorophenol at solar pilot plant. <i>International Journal of Environment and Pollution</i> , 2006, 27, 135.	0.2	18
246	Solar photocatalytic treatment of landfill leachate using a solid mineral by-product as a catalyst. <i>Chemosphere</i> , 2012, 88, 1090-1096.	8.2	18
247	Fresh-cut wastewater reclamation: Techno-Economical assessment of solar driven processes at pilot plant scale. <i>Applied Catalysis B: Environmental</i> , 2020, 278, 119334.	20.2	18
248	Aluminized surface to improve solar light absorption in open reactors: Application for micropollutants removal in effluents from municipal wastewater treatment plants. <i>Science of the Total Environment</i> , 2021, 755, 142624.	8.0	18
249	Solar light assisted photodegradation of phenol with hydrogen peroxide over iron-doped titania catalysts: Role of iron leached/readsorbed species. <i>Applied Catalysis B: Environmental</i> , 2011, 108-109, 168-176.	20.2	17
250	Development of a photocatalytic zirconia-titania ultrafiltration membrane with anti-fouling and self-cleaning properties. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106671.	6.7	17
251	Treatment of 2,4-Dichlorophenol by Solar Photocatalysis: Comparison of Coupled Photocatalytic-Active Carbon vs. Active Carbon. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2001, 123, 138-142.	1.8	16
252	Practical approach to the evaluation of industrial wastewater treatment by the application of advanced microbiological techniques. <i>Ecotoxicology and Environmental Safety</i> , 2018, 166, 123-131.	6.0	16

#	ARTICLE	IF	CITATIONS
253	Removal of pharmaceuticals in hospital wastewater by solar photo-Fenton with Fe <sup>3+</sup> -EDDS using a pilot raceway pond reactor: Transformation products and in silico toxicity assessment. <i>Microchemical Journal</i> , 2021, 164, 106014.	4.5	16
254	AOPs: recent advances to overcome barriers in the treatment of water, wastewater and air. <i>Environmental Science and Pollution Research</i> , 2017, 24, 5987-5990.	5.3	15
255	Legionella jordanis inactivation in water by solar driven processes: EMA-qPCR versus culture-based analyses for new mechanistic insights. <i>Catalysis Today</i> , 2017, 287, 15-21.	4.4	15
256	Advanced Oxidation Processes as sustainable technologies for the reduction of elderberry agro-industrial water impact. <i>Water Resources and Industry</i> , 2020, 24, 100137.	3.9	15
257	Confirming Pseudomonas putida as a reliable bioassay for demonstrating biocompatibility enhancement by solar photo-oxidative processes of a biorecalcitrant effluent. <i>Journal of Hazardous Materials</i> , 2009, 162, 1223-1227.	12.4	14
258	Effect of salinity on preconcentration of contaminants of emerging concern by nanofiltration: Application of solar photo-Fenton as a tertiary treatment. <i>Science of the Total Environment</i> , 2021, 756, 143593.	8.0	14
259	Solar-driven free chlorine advanced oxidation process for simultaneous removal of microcontaminants and microorganisms in natural water at pilot-scale. <i>Chemosphere</i> , 2022, 288, 132493.	8.2	14
260	Microbiological evaluation of combined advanced chemical-biological oxidation technologies for the treatment of cork boiling wastewater. <i>Science of the Total Environment</i> , 2019, 687, 567-576.	8.0	13
261	Simultaneous disinfection and microcontaminants elimination of urban wastewater secondary effluent by solar advanced oxidation sequential treatment at pilot scale. <i>Journal of Hazardous Materials</i> , 2022, 436, 129134.	12.4	13
262	Solar photo-assisted electrochemical processes applied to actual industrial and urban wastewaters: A practical approach based on recent literature. <i>Chemosphere</i> , 2021, 279, 130560.	8.2	12
263	Monitoring and Removal of Organic Micro-contaminants by Combining Membrane Technologies with Advanced Oxidation Processes. <i>Current Organic Chemistry</i> , 2018, 22, 1103-1119.	1.6	12
264	Integration of Environmental and Economic Performance of Processes. Case Study on Advanced Oxidation Processes for Wastewater Treatment. <i>Journal of Advanced Oxidation Technologies</i> , 2008, 11, .	0.5	11
265	Modeling persulfate activation by iron and heat for the removal of contaminants of emerging concern using carbamazepine as model pollutant. <i>Chemical Engineering Journal</i> , 2020, 389, 124445.	12.7	11
266	Pilot-scale removal of microcontaminants by solar-driven photo-Fenton in treated municipal effluents: Selection of operating variables based on lab-scale experiments. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104788.	6.7	11
267	Pre-Industrial Experience in Solar Photocatalytic Mineralization of Real Wastewaters. Application to Pesticide Container Recycling. <i>Water Science and Technology</i> , 1999, 40, 123-130.	2.5	11
268	A comparison of prototype compound parabolic collector-reactors (CPC) on the road to SOLARDETOX technology. <i>Water Science and Technology</i> , 2001, 44, 271-278.	2.5	10
269	Overview on Pilot-Scale Treatments and New and Innovative Technologies for Hospital Effluent. <i>Handbook of Environmental Chemistry</i> , 2017, , 209-230.	0.4	10
270	Impact of water matrix and oxidant agent on the solar assisted photodegradation of a complex mix of pesticides over titania-reduced graphene oxide nanocomposites. <i>Catalysis Today</i> , 2021, 380, 114-124.	4.4	10



#	ARTICLE	IF	CITATIONS
271	2,4-Dichlorophenol degradation by means of heterogeneous photocatalysis. Comparison between laboratory and pilot plant performance. <i>Chemical Engineering Journal</i> , 2013, 232, 405-417.	12.7	9
272	Application of a multivariate analysis method for non-target screening detection of persistent transformation products during the cork boiling wastewater treatment. <i>Science of the Total Environment</i> , 2018, 633, 508-517.	8.0	9
273	Detoxification of Pesticide Containing Effluents by Solar Driven Fenton Process. <i>Zeitschrift Fur Physikalische Chemie</i> , 1999, 213, 67-74.	2.8	8
274	Dynamic Models for Hydrogen Peroxide Control in Solar Photo-Fenton Systems. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2007, 129, 37-44.	1.8	8
275	Advanced oxidation processâ€œbiological system for wastewater containing a recalcitrant pollutant. <i>Water Science and Technology</i> , 2007, 55, 229-235.	2.5	8
276	Study of iron sources and hydrogen peroxide supply in the photoâ€œFenton process using acetaminophen as model contaminant. <i>Journal of Chemical Technology and Biotechnology</i> , 2013, 88, 636-643.	3.2	8
277	Strategies for hydrogen peroxide dosing based on dissolved oxygen concentration for solar photo-Fenton treatment of complex wastewater. <i>Global Nest Journal</i> , 2014, 16, 553-560.	0.1	8
278	Optimal performance assessment for a photo-Fenton degradation pilot plant driven by solar energy using artificial neural networks. <i>International Journal of Energy Research</i> , 2012, 36, 1314-1324.	4.5	7
279	Potential applications of solar reactions photocatalysed by the decatungstate anion. <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , 1999, 96, 430-436.	0.2	7
280	LC/MS and LC/MS/MS Strategies for the Evaluation of Pesticide Intermediates Formed by Degradative Processes: Photo-Fenton Degradation of Diuron. <i>ACS Symposium Series</i> , 2003, , 66-95.	0.5	6
281	Removal of Xenobiotic Compounds from Water and Wastewater by Advanced Oxidation Processes. <i>Environmental Pollution</i> , 2010, , 387-412.	0.4	6
282	Advanced oxidation processes for environmental protection. <i>Environmental Science and Pollution Research</i> , 2014, 21, 12109-12111.	5.3	6
283	Future Trends in Photocatalysis for Environmental Applications. <i>Journal of Hazardous Materials</i> , 2019, 372, 1-2.	12.4	6
284	Olive mill wastewater reuse to enable solar photo-Fenton-like processes for the elimination of priority substances in municipal wastewater treatment plant effluents. <i>Environmental Science and Pollution Research</i> , 2020, 27, 38148-38154.	5.3	6
285	A Rational Analysis on Key Parameters Ruling Zerovalent Iron-Based Treatment Trains: Towards the Separation of Reductive from Oxidative Phases. <i>Nanomaterials</i> , 2021, 11, 2948.	4.1	6
286	Removal of microcontaminants by zero-valent iron solar processes at natural pH: Water matrix and oxidant agents effect. <i>Science of the Total Environment</i> , 2022, 819, 153152.	8.0	6
287	Solar photocatalytic decontamination of wastewater from the rinsing of pesticide containers. <i>European Physical Journal Special Topics</i> , 1999, 09, Pr3-277-Pr3-282.	0.2	5
288	Techno-economical assessment of solar detoxification systems with compound parabolic collectors. <i>European Physical Journal Special Topics</i> , 1999, 09, Pr3-259-Pr3-264.	0.2	5

#	ARTICLE	IF	CITATIONS
289	Detoxification of Pesticide in Water Using Solar Photocatalysis. ACS Symposium Series, 2003, , 113-126.	0.5	5
290	Dynamic modelling for cork boiling wastewater treatment at pilot plant scale. Environmental Science and Pollution Research, 2014, 21, 12182-12189.	5.3	5
291	Advanced oxidation technologies: advances and challenges in Iberoamerican countries. Environmental Science and Pollution Research, 2015, 22, 759-761.	5.3	5
292	Solar processes and ozonation for fresh-cut wastewater reclamation and reuse: Assessment of chemical, microbiological and chlorosis risks of raw-eaten crops. Water Research, 2021, 203, 117532.	11.3	5
293	Removal of Emerging Contaminants in Waste-water Treatment: Removal by Photo-catalytic Processes. Handbook of Environmental Chemistry, 2008, , 177-197.	0.4	5
294	CHAPTER 4. Solar Photocatalysis: Fundamentals, Reactors and Applications. RSC Energy and Environment Series, 2016, , 92-129.	0.5	5
295	Advanced Technologies for Emerging Contaminants Removal in Urban Wastewater. Handbook of Environmental Chemistry, 2014, , 145-169.	0.4	4
296	A Comparison of the Environmental Impact of Different AOPs: Risk Indexes. Molecules, 2015, 20, 503-518.	3.8	4
297	Evaluation of commercial zerovalent iron sources in combination with solar energy to remove microcontaminants from natural water at circumneutral pH. Chemosphere, 2022, 286, 131557.	8.2	4
298	Interfase Ácido/Electrolito: Fenómeno de transferencia de electrones. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2000, 39, 498-502.	1.9	4
299	Simple Models for the Control of Photo-Fenton by Monitoring H <sub>2</sub> O <sub>2</sub> . Journal of Advanced Oxidation Technologies, 2007, 10, .	0.5	3
300	Technologies for Advanced Wastewater Treatment in the Mediterranean Region. Handbook of Environmental Chemistry, 2010, , 1-28.	0.4	3
301	Removal of Pesticides from Water and Wastewater by Solar-Driven Photocatalysis. Springer Briefs in Molecular Science, 2012, , 59-76.	0.1	3
302	Solar Photocatalytic Processes: Water Decontamination and Disinfection. , 2013, , 371-393.		3
303	Solar chemistry and photocatalysis: environmental applications. Environmental Science and Pollution Research, 2019, 26, 36077-36079.	5.3	3
304	Modelling micropollutant removal by solar photo-Fenton. Global Nest Journal, 2014, 16, 445-454.	0.1	3
305	Valorization of UWWTP effluents for ammonium recovery and MC elimination by advanced AOPs. Science of the Total Environment, 2022, 823, 153693.	8.0	3
306	Assessment of a Novel Photocatalytic TiO <sub>2</sub> -Zirconia Ultrafiltration Membrane and Combination with Solar Photo-Fenton Tertiary Treatment of Urban Wastewater. Catalysts, 2022, 12, 552.	3.5	3

#	ARTICLE	IF	CITATIONS
307	Introduction by guest editors. <i>Catalysis Today</i> , 2005, 101, 185-186.	4.4	2
308	Removal of Emerging Contaminants in Waste-water Treatment: Removal by Photo-catalytic Processes. , 2007, , 177-197.		2
309	Comparison of Photo-Fenton Treatment and Coupled Photo-Fenton and Biological Treatment for Detoxification of Pharmaceutical Industry Contaminants. <i>Journal of Advanced Oxidation Technologies</i> , 2008, 11, .	0.5	2
310	Elimination of organic micro-contaminants in municipal wastewater by a combined immobilized biomass reactor and solar photo-Fenton tertiary treatment. <i>Journal of Advanced Oxidation Technologies</i> , 2017, 20, .	0.5	2
311	Economic Assessment and Possible Industrial Application of a (Photo)catalytic Process. , 2019, , 235-267.		2
312	Removal and Degradation of Pharmaceutically Active Compounds (PhACs) in Wastewaters by Solar Advanced Oxidation Processes. <i>Handbook of Environmental Chemistry</i> , 2020, , 299-326.	0.4	2
313	CHAPTER 6. Process Integration. Concepts of Integration and Coupling of Photocatalysis with Other Processes. <i>RSC Energy and Environment Series</i> , 2016, , 157-173.	0.5	2
314	Introduction by the guest editors. <i>Photochemical and Photobiological Sciences</i> , 2009, 8, 581.	2.9	1
315	An introduction by the guest editor to a selection of papers from the 10th European Meeting on Solar Chemistry & Photocatalysis: Environmental Applications - SPEA10. <i>Photochemical and Photobiological Sciences</i> , 2019, 18, 836-836.	2.9	1
316	Removal of Pharmaceutically Active Compounds (PhACs) in Wastewater by Ozone and Advanced Oxidation Processes. <i>Handbook of Environmental Chemistry</i> , 2020, , 269-298.	0.4	1
317	A comparison of prototype compound parabolic collector-reactors (CPC) on the road to SOLARDETOX technology. <i>Water Science and Technology</i> , 2001, 44, 271-8.	2.5	1
318	Detoxification of Pesticide Containing Effluents by Solar Driven Fenton Process. <i>Zeitschrift Fur Physikalische Chemie</i> , 1998, 1, 287-294.	2.8	0
319	Environmental applications of solar energy (introduction by guest editors). <i>Solar Energy</i> , 2005, 79, 341-342.	6.1	0
320	Introduction by the guest editors. <i>Photochemical and Photobiological Sciences</i> , 2011, 10, 331.	2.9	0
321	Introduction by the guest editors. <i>Photochemical and Photobiological Sciences</i> , 2013, 12, 593.	2.9	0
322	Introduction by guest editors. <i>Photochemical and Photobiological Sciences</i> , 2017, 16, 8-9.	2.9	0
323	Introduction by guest editors. <i>Catalysis Today</i> , 2017, 280, 1.	4.4	0
324	Preface " Mat. for photocatalysis. <i>Catalysis Today</i> , 2017, 284, 1-2.	4.4	0

#	ARTICLE	IF	CITATIONS
325	Introduction by Guest Editors. Catalysis Today, 2019, 328, 1.	4.4	0
326	Solar Detoxification and Disinfection of Water. , 2021, , 1-28.		0
327	Compound Parabolic Concentrator Technology Development To Commercial Solar Detoxification Applications. , 2000, , 427-436.		0
328	Photoelectrochemical experiments under various solar light concentration ratios. European Physical Journal Special Topics, 1999, 09, Pr3-301-Pr3-306.	0.2	0
329	Solar Detoxification and Disinfection of Water. , 2022, , 453-480.		0