# Sixto Malato

List of Publications by Year
in descending order

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| 328 papers | 28,463 citations | 4370 86 h-index | 6630 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. Catalysis Today, 2009, 147, 1-59. | 2.2 | 2,574 |
| 2 | Combination of Advanced Oxidation Processes and biological treatments for wastewater decontaminationâ€"A review. Science of the Total Environment, 2011, 409, 4141-4166. | 3.9 | 1,946 |
| 3 | Advanced oxidation processes for water treatment: advances and trends for R&D. Journal of Chemical Technology and Biotechnology, 2008, 83, 769-776. | 1.6 | 755 |
| 4 | Photocatalysis with solar energy at a pilot-plant scale: an overview. Applied Catalysis B: Environmental, 2002, 37, 1-15. | 10.8 | 648 |
| 5 | Solar photocatalysis: Materials, reactors, some commercial, and pre-industrialized applications. A comprehensive approach. Applied Catalysis B: Environmental, 2015, 170-171, 90-123. | 10.8 | 541 |
| 6 | Consolidated vs new advanced treatment methods for the removal of contaminants of emerging concern from urban wastewater. Science of the Total Environment, 2019, 655, 986-1008. | 3.9 | 515 |
| 7 | Photo-Fenton Degradation of Diclofenac:Â Identification of Main Intermediates and Degradation Pathway. Environmental Science & Technology, 2005, 39, 8300-8306. | 4.6 | 349 |
| 8 | Degradation of sulfamethoxazole in water by solar photo-Fenton. Chemical and toxicological evaluation. Water Research, 2009, 43, 3922-3931. | 5.3 | 308 |
| 9 | Photocatalytic treatment of water-soluble pesticides by photo-Fenton and TiO2 using solar energy. Catalysis Today, 2002, 76, 209-220. | 2.2 | 293 |
| 10 | Degradation of fifteen emerging contaminants at Î¼gLâ^'1 initial concentrations by mild solar photo-Fenton in MWTP effluents. Water Research, 2010, 44, 545-554. | 5.3 | 293 |
| 11 | Degradation of the antibiotic amoxicillin by photo-Fenton process â€" Chemical and toxicological assessment. Water Research, 2011, 45, 1394-1402. | 5.3 | 289 |
| 12 | Degradation and inactivation of tetracycline by TiO2 photocatalysis. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 184, 141-146. | 2.0 | 285 |
| 13 | The photo-fenton reaction and the TiO2/UV process for waste water treatment â^' novel developments. Catalysis Today, 1999, 53, 131-144. | 2.2 | 280 |
| 14 | Solar photocatalytic treatment of synthetic municipal wastewater. Water Research, 2004, 38, 1147-1154. | 5.3 | 271 |
| 15 | Photocatalytic degradation of emerging contaminants in municipal wastewater treatment plant effluents using immobilized TiO2 in a solar pilot plant. Applied Catalysis B: Environmental, 2011, 103, 294-301. | 10.8 | 268 |
| 16 | Application of solar AOPs and ozonation for elimination of micropollutants in municipal wastewater treatment plant effluents. Water Research, 2013, 47, 1521-1528. | 5.3 | 254 |
| 17 | Photocatalytic decontamination and disinfection of water with solar collectors. Catalysis Today, 2007, 122, 137-149. | 2.2 | 252 |
| 18 | Solar photocatalysis: a clean process for water detoxification. Science of the Total Environment, 2002, 291, 85-97. | 3.9 | 251 |

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| 19 | Decontamination industrial pharmaceutical wastewater by combining solar photo-Fenton and biological treatment. Water Research, 2009, 43, 661-668. | 5.3 | 243 |
| 20 | Mature landfill leachate treatment by coagulation/flocculation combined with Fenton and solar photo-Fenton processes. Journal of Hazardous Materials, 2015, 286, 261-268. | 6.5 | 239 |
| 21 | Photo-Fenton and modified photo-Fenton at neutral pH for the treatment of emerging contaminants in wastewater treatment plant effluents: A comparison. Water Research, 2013, 47, 833-840. | 5.3 | 238 |
| 22 | Applied studies in solar photocatalytic detoxification: an overview. Solar Energy, 2003, 75, 329-336. | 2.9 | 233 |
| 23 | Engineering of solar photocatalytic collectors. Solar Energy, 2004, 77, 513-524. | 2.9 | 220 |
| 24 | Application of the colloidal stability of TiO2 particles for recovery and reuse in solar photocatalysis. Water Research, 2003, 37, 3180-3188. | 5.3 | 217 |
| 25 | Azo-dyes photocatalytic degradation in aqueous suspension of TiO2 under solar irradiation. Chemosphere, 2002, 49, 1223-1230. | 4.2 | 215 |
| 26 | Photo-Fenton treatment of water containing natural phenolic pollutants. Chemosphere, 2003, 50, 71-78. | 4.2 | 204 |
| 27 | Treatment of emerging contaminants in wastewater treatment plants (WWTP) effluents by solar photocatalysis using low TiO2 concentrations. Journal of Hazardous Materials, 2012, 211-212, 131-137. | 6.5 | 199 |
| 28 | Enhancement of the rate of solar photocatalytic mineralization of organic pollutants by inorganic oxidizing species. Applied Catalysis B: Environmental, 1998, 17, 347-356. | 10.8 | 198 |
| 29 | TiO2-based solar photocatalytic detoxification of water containing organic pollutants. Case studies of 2,4-dichlorophenoxyaceticacid (2,4-D) and of benzofuran. Applied Catalysis B: Environmental, 1998, 17, 15-23. | 10.8 | 195 |
| 30 | Application of time-of-flight mass spectrometry to the analysis of phototransformation products of diclofenac in water under natural sunlight. Journal of Mass Spectrometry, 2005, 40, 908-915. | 0.7 | 186 |
| 31 | Degradation of Imidacloprid in Water by Photo-Fenton and TiO2Photocatalysis at a Solar Pilot Plant:Â A Comparative Study. Environmental Science & Technology, 2001, 35, 4359-4366. | 4.6 | 184 |
| 32 | Solar Photocatalytic Detoxification and Disinfection of Water: Recent Overview. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 4-15. | 1.1 | 183 |
| 33 | Solar photocatalytic degradation of 4-chlorophenol using the synergistic effect between titania and activated carbon in aqueous suspension. Catalysis Today, 1999, 54, 255-265. | 2.2 | 177 |
| 34 | Review of feasible solar energy applications to water processes. Renewable and Sustainable Energy Reviews, 2009, 13, 1437-1445. | 8.2 | 177 |
| 35 | Solar efficiency of a new deposited titania photocatalyst: chlorophenol, pesticide and dye removal applications. Applied Catalysis B: Environmental, 2003, 46, 319-332. | 10.8 | 174 |
| 36 | Effect of water-matrix composition on Trimethoprim solar photodegradation kinetics and pathways. Water Research, 2010, 44, 2735-2744. | 5.3 | 171 |

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| 37 | Solar photocatalytic degradation of some hazardous water-soluble pesticides at pilot-plant scale. Journal of Hazardous Materials, 2006, 138, 507-517. | 6.5 | 170 |
| 38 | Best available technologies and treatment trains to address current challenges in urban wastewater reuse for irrigation of crops in EU countries. Science of the Total Environment, 2020, 710, 136312. | 3.9 | 167 |
| 39 | Water disinfection by solar photocatalysis using compound parabolic collectors. Catalysis Today, 2005, 101, 345-352. | 2.2 | 166 |
| 40 | Application of Photo-Fenton as a Tertiary Treatment of Emerging Contaminants in Municipal Wastewater.. Environmental Science & Technology, 2010, 44, 1792-1798. | 4.6 | 166 |
| 41 | Applicability of the Photo-Fenton method for treating water containing pesticides. Catalysis Today, 1999, 54, 309-319. | 2.2 | 159 |
| 42 | Pilot-plant treatment of olive mill wastewater (OMW) by solar TiO2 photocatalysis and solar photo-Fenton. Solar Energy, 2004, 77, 567-572. | 2.9 | 158 |
| 43 | Degradation of some biorecalcitrant pesticides by homogeneous and heterogeneous photocatalytic ozonation. Chemosphere, 2005, 58, 1127-1133. | 4.2 | 155 |
| 44 | Decontamination and disinfection of water by solar photocatalysis: The pilot plants of the Plataforma Solar de Almeria. Materials Science in Semiconductor Processing, 2016, 42, 15-23. | 1.9 | 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. Environmental Science & Technology, 2012, 46, 2885-2892. | 4.6 | 146 |
| 46 | Solar photocatalytic degradation of persistent pharmaceuticals at pilot-scale: Kinetics and characterization of major intermediate products. Applied Catalysis B: Environmental, 2009, 89, 255-264. | 10.8 | 145 |
| 47 | Solar photocatalytic disinfection of water using titanium dioxide graphene composites. Chemical Engineering Journal, 2015, 261, 36-44. | 6.6 | 145 |
| 48 | Fe-zeolites as heterogeneous catalysts in solar Fenton-like reactions at neutral pH. Applied Catalysis B: Environmental, 2012, 125, 51-58. | 10.8 | 141 |
| 49 | Photochemical versus coupled photochemicalâ€“biological flow system for the treatment of two biorecalcitrant herbicides: metobromuron and isoproturon. Applied Catalysis B: Environmental, 2000, 27, 153-168. | 10.8 | 140 |
| 50 | Photocatalytic Treatment of Diuron by Solar Photocatalysis:Â Evaluation of Main Intermediates and Toxicity. Environmental Science & Technology, 2003, 37, 2516-2524. | 4.6 | 140 |
| 51 | Decomposition of diclofenac by solar driven photocatalysis at pilot plant scale. Catalysis Today, 2005, 101, 219-226. | 2.2 | 138 |
| 52 | Degradation study of 15 emerging contaminants at low concentration by immobilized TiO2 in a pilot plant. Catalysis Today, 2010, 151, 107-113. | 2.2 | 138 |
| 53 | Comparison of various titania samples of industrial origin in the solar photocatalytic detoxification of water containing 4-chlorophenol. Catalysis Today, 1999, 54, 217-228. | 2.2 | 137 |
| 54 | Toxicity assays: a way for evaluating AOPs efficiency. Water Research, 2002, 36, 4255-4262. | 5.3 | 136 |

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| 55 | Solar photocatalytic degradation and detoxification of EU priority substances. Catalysis Today, 2005, 101, 203-210. | 2.2 | 135 |
| 56 | Degradation of a four-pesticide mixture by combined photo-Fenton and biological oxidation. Water Research, 2009, 43, 653-660. | 5.3 | 133 |
| 57 | 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. | 6.5 | 132 |
| 58 | Removal of pharmaceuticals from MWTP effluent by nanofiltration and solar photo-Fenton using two different iron complexes at neutral pH. Water Research, 2014, 64, 23-31. | 5.3 | 131 |
| 59 | Degradation of pesticides in water using solar advanced oxidation processes. Applied Catalysis B: Environmental, 2006, 64, 272-281. | 10.8 | 130 |
| 60 | Large solar plant photocatalytic water decontamination: Degradation of pentachlorophenol. Chemosphere, 1993, 26, 2103-2119. | 4.2 | 128 |
| 61 | SOLAR PHOTOCATALYTIC DEGRADATION OF WATER AND AIR POLLUTANTS: CHALLENGES AND PERSPECTIVES. Solar Energy, 1999, 66, 169-182. | 2.9 | 128 |
| 62 | Solar photo-Fenton treatmentâ€"Process parameters and process control. Applied Catalysis B: Environmental, 2006, 64, 121-130. | 10.8 | 128 |
| 63 | Degradation of emerging contaminants at low concentrations in MWTPs effluents with mild solar photo-Fenton and TiO2. Catalysis Today, 2009, 144, 124-130. | 2.2 | 126 |
| 64 | Compound parabolic concentrator technology development to commercial solar detoxification applications. Solar Energy, 1999, 67, 317-330. | 2.9 | 122 |
| 65 | New integrated photocatalytic-biological flow system using supported TiO2 and fixed bacteria for the mineralization of isoproturon. Applied Catalysis B: Environmental, 2002, 36, 131-144. | 10.8 | 120 |
| 66 | Enhancing biodegradability of priority substances (pesticides) by solar photo-Fenton. Water Research, 2006, 40, 1086-1094. | 5.3 | 120 |
| 67 | New industrial titania photocatalysts for the solar detoxification of water containing various pollutants. Applied Catalysis B: Environmental, 2002, 35, 281-294. | 10.8 | 115 |
| 68 | Photocatalytic degradation of industrial residual waters. Solar Energy, 1996, 56, 401-410. | 2.9 | 114 |
| 69 | Photodegradation of malachite green under natural sunlight irradiation: Kinetic and toxicity of the transformation products. Chemosphere, 2008, 70, 2068-2075. | 4.2 | 113 |
| 70 | Optimising solar photocatalytic mineralisation of pesticides by adding inorganic oxidising species; application to the recycling of pesticide containers. Applied Catalysis B: Environmental, 2000, 28, 163-174. | 10.8 | 112 |
| 71 | Degradation of lincomycin in aqueous medium: Coupling of solar photocatalysis and membrane separation. Solar Energy, 2005, 79, 402-408. | 2.9 | 111 |
| 72 | Regeneration approaches for TiO2 immobilized photocatalyst used in the elimination of emerging contaminants in water. Catalysis Today, 2014, 230, 27-34. | 2.2 | 111 |

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| 73 | Comparison of several combined/integrated biological-AOPs setups for the treatment of municipal landfill leachate: Minimization of operating costs and effluent toxicity. Chemical Engineering Journal, 2011, 172, 250-257. | 6.6 | 110 |
| 74 | Effect of operating parameters on the testing of new industrial titania catalysts at solar pilot plant scale. Applied Catalysis B: Environmental, 2003, 42, 349-357. | 10.8 | 107 |
| 75 | Solar photo-Fenton treatment of pesticides in water: Effect of iron concentration on degradation and assessment of ecotoxicity and biodegradability. Applied Catalysis B: Environmental, 2009, 88, 448-454. | 10.8 | 107 |
| 76 | Effects of experimental conditions on E. coli survival during solar photocatalytic water disinfection. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 189, 239-246. | 2.0 | 105 |
| 77 | Detoxification of wastewater containing five common pesticides by solar AOPsâ€“biological coupled system. Catalysis Today, 2007, 129, 69-78. | 2.2 | 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. Journal of Chromatography A, 2017, 1507, 84-94. | 1.8 | 100 |
| 79 | Large solar plant photocatalytic water decontamination: Effect of operational parameters. Solar Energy, 1996, 56, 421-428. | 2.9 | 98 |
| 80 | Solar photocatalysis: A green technology for E. coli contaminated water disinfection. Effect of concentration and different types of suspended catalyst. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 276, 31-40. | 2.0 | 98 |
| 81 | Oxidation mechanisms of amoxicillin and paracetamol in the photo-Fenton solar process. Water Research, 2019, 156, 232-240. | 5.3 | 96 |
| 82 | Large solar plant photocatalytic water decontamination: Degradation of atrazine. Solar Energy, 1996, 56, 411-419. | 2.9 | 95 |
| 83 | Life cycle assessment of a coupled solar photocatalyticâ€“biological process for wastewater treatment. Water Research, 2006, 40, 3533-3540. | 5.3 | 91 |
| 84 | Photocatalytic degradation of EU priority substances: A comparison between TiO2 and Fenton plus photo-Fenton in a solar pilot plant. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 185, 354-363. | 2.0 | 90 |
| 85 | Evaluation of operational parameters involved in solar photo-Fenton degradation of a commercial pesticide mixture. Catalysis Today, 2009, 144, 94-99. | 2.2 | 90 |
| 86 | Low-concentrating CPC collectors for photocatalytic water detoxification: comparison with a medium concentrating solar collector. Water Science and Technology, 1997, 35, 157-164. | 1.2 | 88 |
| 87 | Fe(III)-solar light induced degradation of diethyl phthalate (DEP) in aqueous solutions. Chemosphere, 2002, 49, 525-532. | 4.2 | 86 |
| 88 | Economic evaluation of a combined photo-Fenton/MBR process using pesticides as model pollutant. Factors affecting costs. Journal of Hazardous Materials, 2013, 244-245, 195-203. | 6.5 | 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. Applied Catalysis B: Environmental, 2004, 53, 127-137. | 10.8 | 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). Separation and Purification Technology, 2014, 122, 515-522. | 3.9 | 84 |

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| 91 | Paracetamol degradation intermediates and toxicity during photo-Fenton treatment using different iron species. Water Research, 2012, 46, 5374-5380. | 5.3 | 83 |
| 92 | Solar photocatalytic treatment of trimethoprim in four environmental matrices at a pilot scale: Transformation products and ecotoxicity evaluation. Science of the Total Environment, 2012, 430, 167-173. | 3.9 | 83 |
| 93 | Optimization of electrocatalytic H2O2 production at pilot plant scale for solar-assisted water treatment. Applied Catalysis B: Environmental, 2019, 242, 327-336. | 10.8 | 83 |
| 94 | Solar photodegradation of pesticides in water by sodium decatungstate. Catalysis Today, 1999, 54, 297-307. | 2.2 | 82 |
| 95 | Optimization of pre-industrial solar photocatalytic mineralization of commercial pesticides. Applied Catalysis B: Environmental, 2000, 25, 31-38. | 10.8 | 81 |
| 96 | A novel TiO2-assisted solar photocatalytic batch-process disinfection reactor for the treatment of biological and chemical contaminants in domestic drinking water in developing countries. Solar Energy, 2004, 77, 649-655. | 2.9 | 80 |
| 97 | Combination of nanofiltration and ozonation for the remediation of real municipal wastewater effluents: Acute and chronic toxicity assessment. Journal of Hazardous Materials, 2017, 323, 442-451. | 6.5 | 79 |
| 98 | Optimizing the solar photo-Fenton process in the treatment of contaminated water. Determination of intrinsic kinetic constants for scale-up. Solar Energy, 2005, 79, 360-368. | 2.9 | 78 |
| 99 | Decontamination of industrial wastewater containing pesticides by combining large-scale homogeneous solar photocatalysis and biological treatment. Chemical Engineering Journal, 2010, 160, 447-456. | 6.6 | 77 |
| 100 | Reduction of clarithromycin and sulfamethoxazole-resistant Enterococcus by pilot-scale solar-driven Fenton oxidation. Science of the Total Environment, 2014, 468-469, 19-27. | 3.9 | 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. Chemical Engineering Journal, 2019, 366, 141-149. | 6.6 | 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. Chemical Engineering Journal, 2017, 318, 161-170. | 6.6 | 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. Science of the Total Environment, 2013, 461-462, 39-48. | 3.9 | 74 |
| 104 | Degradation of alachlor and pyrimethanil by combined photo-Fenton and biological oxidation. Journal of Hazardous Materials, 2008, 155, 342-349. | 6.5 | 73 |
| 105 | Solar photocatalytic treatment of simulated dyestuff effluents. Solar Energy, 2004, 77, 591-600. | 2.9 | 72 |
| 106 | Efficiency of different solar advanced oxidation processes on the oxidation of bisphenol A in water. Applied Catalysis B: Environmental, 2010, 95, 228-237. | 10.8 | 72 |
| 107 | Modified photo-Fenton for degradation of emerging contaminants in municipal wastewater effluents. Catalysis Today, 2011, 161, 241-246. | 2.2 | 72 |
| 108 | New approach to solar photo-Fenton operation. Raceway ponds as tertiary treatment technology. Journal of Hazardous Materials, 2014, 279, 322-329. | 6.5 | 71 |

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| 109 | Relationship between TiO2 particle size and reactor diameter in solar photoreactors efficiency. Catalysis Today, 1999, 54, 195-204. | 2.2 | 70 |
| 110 | Supported Fe/C and Fe/Nafion/C catalysts for the photo-Fenton degradation of Orange II under solar irradiation. Catalysis Today, 2005, 101, 375-382. | 2.2 | 70 |
| 111 | Development of TiO2-C photocatalysts for solar treatment of polluted water. Carbon, 2017, 122, 361-373. | 5.4 | 68 |
| 112 | Low-concentrating CPC collectors for photocatalytic water detoxification: Comparison with a medium concentrating solar collector. Water Science and Technology, 1997, 35, 157. | 1.2 | 67 |
| 113 | Photoelectrochemical reactors for the solar decontamination of water. Catalysis Today, 1999, 54, 329-339. | 2.2 | 67 |
| 114 | Degradation of dipyrone and its main intermediates by solar AOPs. Catalysis Today, 2007, 129, 207-214. | 2.2 | 67 |
| 115 | A combined solar photocatalytic-biological field system for the mineralization of an industrial pollutant at pilot scale. Catalysis Today, 2007, 122, 150-159. | 2.2 | 67 |
| 116 | TiO2/Cu(II) photocatalytic production of benzaldehyde from benzyl alcohol in solar pilot plant reactor. Applied Catalysis B: Environmental, 2013, 136-137, 56-63. | 10.8 | 67 |
| 117 | Landfill leachate treatment: Comparison of standalone electrochemical degradation and combined with a novel biofilter. Chemical Engineering Journal, 2016, 288, 87-98. | 6.6 | 67 |
| 118 | Comparison of UV/H 2 O 2 , UV/S 2 O 8 2â˜ , solar/Fe(II)/H 2 O 2 and solar/Fe(II)/S 2 O 8 2â˜ at pilot plant scale for the elimination of micro-contaminants in natural water: An economic assessment. Chemical Engineering Journal, 2017, 310, 514-524. | 6.6 | 67 |
| 119 | Solar Photo-Fenton as Finishing Step for Biological Treatment of a Pharmaceutical Wastewater. Environmental Science & Technology, 2009, 43, 1185-1191. | 4.6 | 66 |
| 120 | Evaluation of operating parameters involved in solar photo-Fenton treatment of wastewater: Interdependence of initial pollutant concentration, temperature and iron concentration. Applied Catalysis B: Environmental, 2010, 97, 292-298. | 10.8 | 65 |
| 121 | Performance of different advanced oxidation processes for tertiary wastewater treatment to remove the pesticide acetamiprid. Journal of Chemical Technology and Biotechnology, 2016, 91, 72-81. | 1.6 | 64 |
| 122 | Tertiary treatment of pulp mill wastewater by solar photo-Fenton. Journal of Hazardous Materials, 2012, 225-226, 173-181. | 6.5 | 63 |
| 123 | Advanced Oxidation Processes at Laboratory Scale: Environmental and Economic Impacts. ACS Sustainable Chemistry and Engineering, 2015, 3, 3188-3196. | 3.2 | 63 |
| 124 | Photocatalytic disinfection of water using low cost compound parabolic collectors. Solar Energy, 2004, 77, 625-633. | 2.9 | 62 |
| 125 | Application of high intensity UVC-LED for the removal of acetamiprid with the photo-Fenton process. Chemical Engineering Journal, 2015, 264, 690-696. | 6.6 | 62 |
| 126 | Photocatalytic hydrogen production in a solar pilot plant using a Au/TiO2 photo catalyst. International Journal of Hydrogen Energy, 2016, 41, 11933-11940. | 3.8 | 62 |

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| 127 | 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. | 10.8 | 62 |
| 128 | Combined nanofiltration and photo-Fenton treatment of water containing micropollutants. Chemical Engineering Journal, 2013, 224, 89-95. | 6.6 | 61 |
| 129 | Heterogeneous photocatalytic hydrogen generation in a solar pilot plant. International Journal of Hydrogen Energy, 2013, 38, 12718-12724. | 3.8 | 61 |
| 130 | Photocatalytic degradation of phenol: Comparison between pilot-plant-scale and laboratory results. Solar Energy, 1996, 56, 387-400. | 2.9 | 60 |
| 131 | Solar photocatalytic mineralization of commercial pesticides: acrinathrin. Chemosphere, 2000, 40, 403-409. | 4.2 | 60 |
| 132 | Solar disinfection of contaminated water: a comparison of three small-scale reactors. Solar Energy, 2004, 77, 657-664. | 2.9 | 59 |
| 133 | Abatement of ibuprofen by solar photocatalysis process: Enhancement and scale up. Catalysis Today, 2009, 144, 112-116. | 2.2 | 59 |
| 134 | Study of application of titania catalysts on solar photocatalysis: Influence of type of pollutants and water matrices. Chemical Engineering Journal, 2016, 291, 64-73. | 6.6 | 59 |
| 135 | Pilot-plant evaluation of TiO2 and TiO2-based hybrid photocatalysts for solar treatment of polluted water. Journal of Hazardous Materials, 2016, 320, 469-478. | 6.5 | 58 |
| 136 | EDDS as complexing agent for enhancing solar advanced oxidation processes in natural water: Effect of iron species and different oxidants. Journal of Hazardous Materials, 2019, 372, 129-136. | 6.5 | 58 |
| 137 | Concentrating versus non-concentrating reactors for solar photocatalytic degradation of p-nitrotoluene-o-sulfonic acid. Water Science and Technology, 2001, 44, 219-227. | 1.2 | 57 |
| 138 | Scale-up strategy for a combined solar photo-Fenton/biological system for remediation of pesticide-contaminated water. Catalysis Today, 2010, 151, 100-106. | 2.2 | 57 |
| 139 | Evaluation of photocatalytic degradation of imidacloprid in industrial water by GC-MS and LC-MS. Analusis - European Journal of Analytical Chemistry, 1998, 26, 245-250. | 0.4 | 56 |
| 140 | Solar photocatalytic mineralization of commercial pesticides: Oxamyl. Solar Energy Materials and Solar Cells, 2000, 64, 1-14. | 3.0 | 56 |
| 141 | Solar photo-Fenton at mild conditions to treat a mixture of six emerging pollutants. Chemical Engineering Journal, 2012, 198-199, 65-72. | 6.6 | 56 |
| 142 | Modelling of the operation of raceway pond reactors for micropollutant removal by solar photo-Fenton as a function of photon absorption. Applied Catalysis B: Environmental, 2015, 178, 210-217. | 10.8 | 56 |
| 143 | Solar photocatalytic degradation of pesticides over TiO2-rGO nanocomposites at pilot plant scale. Science of the Total Environment, 2020, 737, 140286. | 3.9 | 56 |
| 144 | Solar Photochemical Treatment of Winery Wastewater in a CPC Reactor. Journal of Agricultural and Food Chemistry, 2009, 57, 11242-11248. | 2.4 | 55 |

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| 145 | Remediation of agro-food industry effluents by biotreatment combined with supported TiO2/H2O2 solar photocatalysis. Chemical Engineering Journal, 2015, 273, 205-213. | 6.6 | 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. Chemosphere, 2015, 130, 73-81. | 4.2 | 55 |
| 147 | Mechanistic modeling of solar photo-Fenton process with Fe3+-EDDS at neutral pH. Applied Catalysis B: Environmental, 2018, 233, 234-242. | 10.8 | 55 |
| 148 | Titanium Dioxide/Electrolyte Solution Interface: Electron Transfer Phenomena. Journal of Colloid and Interface Science, 2000, 227, 510-516. | 5.0 | 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. Environmental Science & Technology, 2000, 34, 1563-1571. | 4.6 | 54 |
| 150 | Dissolved oxygen concentration: A key parameter in monitoring the photo-Fenton process. Applied Catalysis B: Environmental, 2011, 104, 316-323. | 10.8 | 53 |
| 151 | On ozone-photocatalysis synergism in black-light induced reactions: Oxidizing species production in photocatalytic ozonation versus heterogeneous photocatalysis. Chemical Engineering Journal, 2012, 204-206, 131-140. | 6.6 | 52 |
| 152 | Solar photocatalytic mineralization of commercial pesticides: Methamidophos. Chemosphere, 1999, 38, 1145-1156. | 4.2 | 51 |
| 153 | A reliable monitoring of the biocompatibility of an effluent along an oxidative pre-treatment by sequential bioassays and chemical analyses. Water Research, 2009, 43, 784-792. | 5.3 | 51 |
| 154 | Coupling solar photo-Fenton and biotreatment at industrial scale: Main results of a demonstration plant. Journal of Hazardous Materials, 2007, 146, 440-446. | 6.5 | 50 |
| 155 | Effect of pesticide concentration on the degradation process by combined solar photo-Fenton and biological treatment. Water Research, 2009, 43, 3838-3848. | 5.3 | 50 |
| 156 | New large solar photocatalytic plant: set-up and preliminary results. Chemosphere, 2002, 47, 235-240. | 4.2 | 49 |
| 157 | Solar treatment of cork boiling and bleaching wastewaters in a pilot plant. Water Research, 2009, 43, 4050-4062. | 5.3 | 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. Water Research, 2010, 44, 3029-3038. | 5.3 | 49 |
| 159 | Microcontaminant removal in secondary effluents by solar photo-Fenton at circumneutral pH in raceway pond reactors. Catalysis Today, 2017, 287, 10-14. | 2.2 | 49 |
| 160 | Environmental assessment of solar photo-Fenton processes in combination with nanofiltration for the removal of micro-contaminants from real wastewaters. Science of the Total Environment, 2019, 650, 2210-2220. | 3.9 | 49 |
| 161 | New trend on open solar photoreactors to treat micropollutants by photo-Fenton at circumneutral pH: Increasing optical pathway. Chemical Engineering Journal, 2020, 385, 123982. | 6.6 | 49 |
| 162 | Treatment of chlorinated solvents by TiO2 photocatalysis and photo-Fenton: influence of operating conditions in a solar pilot plant. Chemosphere, 2005, 58, 391-398. | 4.2 | 48 |

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