MarÃ-a Inmaculada Polo-LÃ³pez

List of Publications by Year
in descending order

56 papers	3,613 citations	109311 35 h-index	155644 55 g-index
57 all docs	57 docs citations	57 times ranked	3428 citing authors

#	Article	IF	Citations
1	Recent advances in solar photochemical processes for water and wastewater disinfection. Chemical Engineering Journal Advances, 2022, 10, 100248.	5.2	18
2	Simultaneous disinfection and microcontaminants elimination of urban wastewater secondary effluent by solar advanced oxidation sequential treatment at pilot scale. Journal of Hazardous Materials, 2022, 436, 129134.	12.4	13
3	Sulfate radical anion: Laser flash photolysis study and application in water disinfection and decontamination. Applied Catalysis B: Environmental, 2022, 315, 121519.	20.2	11
4	Natural solar activation of modified zinc oxides with rare earth elements (Ce, Yb) and Fe for the simultaneous disinfection and decontamination of urban wastewater. Chemosphere, 2022, 303, 135017.	8.2	4
5	Perspectives of the solar photo-Fenton process against the spreading of pathogens, antibiotic-resistant bacteria and genes in the environment. Current Opinion in Green and Sustainable Chemistry, 2021, 27, 100416.	5.9	13
6	Simultaneous removal of contaminants of emerging concern and pathogens from urban wastewater by homogeneous solar driven advanced oxidation processes. Science of the Total Environment, 2021, 766, 144320.	8.0	28
7	Sunlight advanced oxidation processes vs ozonation for wastewater disinfection and safe reclamation. Science of the Total Environment, 2021, 787, 147531.	8.0	25
8	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
9	Direct oxidation of peroxymonosulfate under natural solar radiation: Accelerating the simultaneous removal of organic contaminants and pathogens from water. Chemosphere, 2021, 279, 130555.	8.2	32
10	Fresh-cut wastewater reclamation: Techno-Economical assessment of solar driven processes at pilot plant scale. Applied Catalysis B: Environmental, 2020, 278, 119334.	20.2	18
11	Photocatalytic inactivation of microorganisms in water. , 2020, , 229-248.		3
12	Investigating the impact of UV-C/H2O2 and sunlight/H2O2 on the removal of antibiotics, antibiotic resistance determinants and toxicity present in urban wastewater. Chemical Engineering Journal, 2020, 388, 124383.	12.7	64
13	Inactivation of E. coli and E. faecalis by solar photo-Fenton with EDDS complex at neutral pH in municipal wastewater effluents. Journal of Hazardous Materials, 2019, 372, 85-93.	12.4	48
14	Reclamation of Real Urban Wastewater Using Solar Advanced Oxidation Processes: An Assessment of Microbial Pathogens and 74 Organic Microcontaminants Uptake in Lettuce and Radish. Environmental Science & Technology, 2019, 53, 9705-9714.	10.0	23
15	Inactivation of the waterborne pathogen Cryptosporidium parvum by photo-Fenton process under natural solar conditions. Applied Catalysis B: Environmental, 2019, 253, 341-347.	20.2	18
16	Tertiary treatment of urban wastewater by solar and UV-C driven advanced oxidation with peracetic acid: Effect on contaminants of emerging concern and antibiotic resistance. Water Research, 2019, 149, 272-281.	11.3	108
17	Homogeneous Fenton and Photo-Fenton Disinfection of Surface and Groundwater. Handbook of Environmental Chemistry, 2018, , 155-177.	0.4	4
18	Solar treatment (H2O2, TiO2-P25 and GO-TiO2 photocatalysis, photo-Fenton) of organic micropollutants, human pathogen indicators, antibiotic resistant bacteria and related genes in urban wastewater. Water Research, 2018, 135, 195-206.	11.3	197

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19	Validation of a solar-thermal water disinfection model for Escherichia coli inactivation in pilot scale solar reactors and real conditions. Chemical Engineering Journal, 2018, 331, 831-840.	12.7	37
20	Validation and application of a multiresidue method based on liquid chromatography-tandem mass spectrometry for evaluating the plant uptake of 74 microcontaminants in crops irrigated with treated municipal wastewater. Journal of Chromatography A, 2018, 1534, 10-21.	3.7	51
21	Mechanistic model of the Escherichia coli inactivation by solar disinfection based on the photo-generation of internal ROS and the photo-inactivation of enzymes: CAT and SOD. Chemical Engineering Journal, 2017, 318, 214-223.	12.7	65
22	Mechanistic modeling of UV and mild-heat synergistic effect on solar water disinfection. Chemical Engineering Journal, 2017, 316, 111-120.	12.7	51
23	Integration of Membrane Distillation with solar photo-Fenton for purification of water contaminated with Bacillus sp. and Clostridium sp. spores. Science of the Total Environment, 2017, 595, 110-118.	8.0	21
24	Advanced microbial analysis for wastewater quality monitoring: metagenomics trend. Applied Microbiology and Biotechnology, 2017, 101, 7445-7458.	3.6	23
25	Solar photocatalytic disinfection of agricultural pathogenic fungi (Curvularia sp.) in real urban wastewater. Science of the Total Environment, 2017, 607-608, 1213-1224.	8.0	32
26	Legionella jordanis inactivation in water by solar driven processes: EMA-qPCR versus culture-based analyses for new mechanistic insights. Catalysis Today, 2017, 287, 15-21.	4.4	15
27	Assessment of solar photocatalysis using $Ag/BiVO_4$ at pilot solar Compound Parabolic Collector for inactivation of pathogens in well water and secondary effluents. Catalysis Today, 2017, 281, 124-134.	4.4	44
28	Photocatalytic inactivation of the waterborne protozoan parasite Cryptosporidium parvum using TiO_2/H_2O_2 under simulated and natural solar conditions. Catalysis Today, 2017, 280, 132-138.	4.4	19
29	Intracellular mechanisms of solar water disinfection. Scientific Reports, 2016, 6, 38145.	3.3	84
30	Solar disinfection is an augmentable, in situ -generated photo-Fenton reactionâ€"Part 1: A review of the mechanisms and the fundamental aspects of the process. Applied Catalysis B: Environmental, 2016, 199, 199-223.	20.2	253
31	Solar disinfection is an augmentable, in situ-generated photo-Fenton reactionâ€"Part 2: A review of the applications for drinking water and wastewater disinfection. Applied Catalysis B: Environmental, 2016, 198, 431-446.	20.2	160
32	Urban wastewater disinfection for agricultural reuse: effect of solar driven AOPs in the inactivation of a multidrug resistant E. coli strain. Applied Catalysis B: Environmental, 2015, 178, 65-73.	20.2	113
33	Capability of 19-L polycarbonate plastic water cooler containers for efficient solar water disinfection (SODIS): Field case studies in India, Bahrain and Spain. Solar Energy, 2015, 116, 1-11.	6.1	49
34	Inactivation and regrowth of multidrug resistant bacteria in urban wastewater after disinfection by solar-driven and chlorination processes. Journal of Photochemistry and Photobiology B: Biology, 2015, 148, 43-50.	3.8	122
35	A Review of Heterogeneous Photocatalysis for Water and Surface Disinfection. Molecules, 2015, 20, 5574-5615.	3.8	186
36	Cross-Contamination of Residual Emerging Contaminants and Antibiotic Resistant Bacteria in Lettuce Crops and Soil Irrigated with Wastewater Treated by Sunlight/H₂O₂. Environmental Science & Technology, 2015, 49, 11096-11104.	10.0	57

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37	Assessing the validity of solar membrane distillation for disinfection of contaminated water. Desalination and Water Treatment, 2015, 55, 2792-2799.	1.0	21
38	Solar photocatalytic disinfection of water using titanium dioxide graphene composites. Chemical Engineering Journal, 2015, 261, 36-44.	12.7	145
39	Disinfection of urban effluents using solar TiO2 photocatalysis: A study of significance of dissolved oxygen, temperature, type of microorganism and water matrix. Catalysis Today, 2015, 240, 30-38.	4.4	78
40	Disinfection of real and simulated urban wastewater effluents using a mild solar photo-Fenton. Applied Catalysis B: Environmental, 2014, 150-151, 619-629.	20.2	120
41	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.	3.9	98
42	Solar photocatalysis for water disinfection: materials and reactor design. Catalysis Science and Technology, 2014, 4, 1211-1226.	4.1	165
43	Assessment of solar photo-Fenton, photocatalysis, and H2O2 for removal of phytopathogen fungi spores in synthetic and real effluents of urban wastewater. Chemical Engineering Journal, 2014, 257, 122-130.	12.7	49
44	Solar photocatalytic inactivation of Fusarium Solani over TiO2 nanomaterials with controlled morphologyâ€"Formic acid effect. Catalysis Today, 2013, 209, 147-152.	4.4	16
45	Benefits of photo-Fenton at low concentrations for solar disinfection of distilled water. A case study: Phytophthora capsici. Catalysis Today, 2013, 209, 181-187.	4.4	39
46	Solar Advanced Oxidation Processes as disinfection tertiary treatments for real wastewater: Implications for water reclamation. Applied Catalysis B: Environmental, 2013, 136-137, 341-350.	20.2	95
47	Solar disinfection of wastewater to reduce contamination of lettuce crops by Escherichia coli in reclaimed water irrigation. Water Research, 2012, 46, 6040-6050.	11.3	101
48	Water disinfection using photo-Fenton: Effect of temperature on Enterococcus faecalis survival. Water Research, 2012, 46, 6154-6162.	11.3	63
49	Solar photocatalytic disinfection of water with immobilised titanium dioxide in re-circulating flow CPC reactors. Applied Catalysis B: Environmental, 2012, 128, 126-134.	20.2	89
50	Mild solar photo-Fenton: An effective tool for the removal of Fusarium from simulated municipal effluents. Applied Catalysis B: Environmental, 2012, 111-112, 545-554.	20.2	66
51	Bacteria and fungi inactivation using Fe3+/sunlight, H2O2/sunlight and near neutral photo-Fenton: A comparative study. Applied Catalysis B: Environmental, 2012, 121-122, 20-29.	20.2	115
52	Solar disinfection of fungal spores in water aided by low concentrations of hydrogen peroxide. Photochemical and Photobiological Sciences, 2011, 10, 381-388.	2.9	54
53	Elimination of water pathogens with solar radiation using an automated sequential batch CPC reactor. Journal of Hazardous Materials, 2011, 196, 16-21.	12.4	49
54	Resistance of <i>Fusarium sp</i> spores to solar TiO₂ photocatalysis: influence of spore type and water (scalingâ€up results). Journal of Chemical Technology and Biotechnology, 2010, 85, 1038-1048.	3.2	45

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55	Photocatalytic disinfection of natural well water contaminated by Fusarium solani using TiO2 slurry in solar CPC photo-reactors. Catalysis Today, 2009, 144, 62-68.	4.4	81
56	Solar disinfection of drinking water (SODIS): an investigation of the effect of UV-A dose on inactivation efficiency. Photochemical and Photobiological Sciences, 2009, 8, 587-595.	2.9	107