Cesar Pulgarin

List of Publications by Year
in descending order

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161 papers	9,082 citations	30070 54 h-index	49909 87 g-index
163 all docs	163 docs citations	163 times ranked	7674 citing authors

#	Article	IF	Citations
1	Bactericidal action of illuminated TiO2 on pure Escherichia coli and natural bacterial consortia: post-irradiation events in the dark and assessment of the effective disinfection time. Applied Catalysis B: Environmental, 2004, 49, 99-112.	20.2	294
2	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
3	The effect of Fe2+, Fe3+, H2O2 and the photo-Fenton reagent at near neutral pH on the solar disinfection (SODIS) at low temperatures of water containing Escherichia coli K12. Applied Catalysis B: Environmental, 2010, 96, 126-141.	20.2	250
4	Recent developments in the coupling of photoassisted and aerobic biological processes for the treatment of biorecalcitrant compounds. Catalysis Today, 2002, 76, 301-315.	4.4	244
5	Ultrasonic cavitation applied to the treatment of bisphenol A. Effect of sonochemical parameters and analysis of BPA by-products. Ultrasonics Sonochemistry, 2008, 15, 605-611.	8.2	238
6	The bactericidal effect of TiO2 photocatalysis involves adsorption onto catalyst and the loss of membrane integrity. FEMS Microbiology Letters, 2006, 258, 18-24.	1.8	229
7	Bisphenol A Mineralization by Integrated Ultrasound-UV-Iron (II) Treatment. Environmental Science & Technology, 2007, 41, 297-302.	10.0	185
8	Electrochemical detoxification of a 1,4-benzoquinone solution in wastewater treatment. Water Research, 1994, 28, 887-893.	11.3	182
9	Effect of advanced oxidation processes on the micropollutants and the effluent organic matter contained in municipal wastewater previously treated by three different secondary methods. Water Research, 2015, 84, 295-306.	11.3	174
10	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
11	Electrochemical degradation of p-substituted phenols of industrial interest on Pt electrodes.. Chemosphere, 2003, 50, 97-104.	8.2	148
12	Field solar E. coli inactivation in the absence and presence of TiO2: is UV solar dose an appropriate parameter for standardization of water solar disinfection?. Solar Energy, 2004, 77, 635-648.	6.1	141
13	Comparative evaluation of Fe3+ and TiO2 photoassisted processes in solar photocatalytic disinfection of water. Applied Catalysis B: Environmental, 2006, 63, 222-231.	20.2	140
14	Interaction between E. coli inactivation and DBP-precursors â€" dihydroxybenzene isomers â€" in the photocatalytic process of drinking-water disinfection with TiO2. Journal of Photochemistry and Photobiology A: Chemistry, 2001, 139, 233-241.	3.9	133
15	Solar photo-Fenton disinfection of 11 antibiotic-resistant bacteria (ARB) and elimination of representative AR genes. Evidence that antibiotic resistance does not imply resistance to oxidative treatment. Water Research, 2018, 143, 334-345.	11.3	133
16	Influence of TiO2 concentration on the synergistic effect between photocatalysis and high-frequency ultrasound for organic pollutant mineralization in water. Applied Catalysis B: Environmental, 2008, 80, 168-175.	20.2	132
17	Use of coaxial photocatalytic reactor (CAPHORE) in the TiO2 photo-assisted treatment of mixed E. coli and Bacillus sp. and bacterial community present in wastewater. Catalysis Today, 2005, 101, 331-344.	4.4	126
18	An innovative coupled solar-biological system at field pilot scale for the treatment of biorecalcitrant pollutants. Journal of Photochemistry and Photobiology A: Chemistry, 2003, 159, 89-99.	3.9	125

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19	Photo-Fenton treatment of a biorecalcitrant wastewater generated in textile activities: biodegradability of the photo-treated solution. Journal of Photochemistry and Photobiology A: Chemistry, 2002, 151, 129-135.	3.9	122
20	Enhancing biodegradability of priority substances (pesticides) by solar photo-Fenton. Water Research, 2006, 40, 1086-1094.	11.3	120
21	Enhanced sonochemical degradation of bisphenol-A by bicarbonate ions. Ultrasonics Sonochemistry, 2010, 17, 111-115.	8.2	117
22	Flame-assisted synthesis of nanoscale, amorphous and crystalline, spherical BiVO4 with visible-light photocatalytic activity. Applied Catalysis B: Environmental, 2010, 95, 335-347.	20.2	116
23	Iron oxide-mediated semiconductor photocatalysis vs. heterogeneous photo-Fenton treatment of viruses in wastewater. Impact of the oxide particle size.. Journal of Hazardous Materials, 2017, 339, 223-231.	12.4	111
24	Solar-assisted bacterial disinfection and removal of contaminants of emerging concern by Fe2+-activated HSO5- vs. S2O82- in drinking water. Applied Catalysis B: Environmental, 2019, 248, 62-72.	20.2	100
25	Chemisorption of phenols and acids on TiO2 surface. Applied Surface Science, 2000, 167, 51-58.	6.1	99
26	Synthesis, Characterization, and Photocatalytic Activities of Nanoparticulate N, S-Codoped TiO₂ Having Different Surface-to-Volume Ratios. Journal of Physical Chemistry C, 2010, 114, 2717-2723.	3.1	99
27	Effects of sonochemical parameters and inorganic ions during the sonochemical degradation of crystal violet in water. Ultrasonics Sonochemistry, 2011, 18, 440-446.	8.2	99
28	An innovative ultrasound, Fe2+ and TiO2 photoassisted process for bisphenol a mineralization. Water Research, 2010, 44, 2245-2252.	11.3	98
29	An innovative, highly stable Ag/ZIF-67@GO nanocomposite with exceptional peroxymonosulfate (PMS) activation efficacy, for the destruction of chemical and microbiological contaminants under visible light. Journal of Hazardous Materials, 2021, 413, 125308.	12.4	98
30	A green solar photo-Fenton process for the elimination of bacteria and micropollutants in municipal wastewater treatment using mineral iron and natural organic acids. Applied Catalysis B: Environmental, 2017, 219, 538-549.	20.2	96
31	Light-Assisted Advanced Oxidation Processes for the Elimination of Chemical and Microbiological Pollution of Wastewaters in Developed and Developing Countries. Molecules, 2017, 22, 1070.	3.8	93
32	Accelerated methylene blue (MB) degradation by Fenton reagent exposed to UV or VUV/UV light in an innovative micro photo-reactor. Applied Catalysis B: Environmental, 2016, 187, 83-89.	20.2	89
33	Absence of E. coli regrowth after Fe3+ and TiO2 solar photoassisted disinfection of water in CPC solar photoreactor. Catalysis Today, 2007, 124, 204-214.	4.4	88
34	Photo-Fenton and biological integrated process for degradation of a mixture of pesticides. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 186, 34-40.	3.9	83
35	Micropollutant degradation, bacterial inactivation and regrowth risk in wastewater effluents: Influence of the secondary (pre)treatment on the efficiency of Advanced Oxidation Processes. Water Research, 2016, 102, 505-515.	11.3	81
36	Dramatic enhancement of solar disinfection (SODIS) of wild Salmonella sp. in PET bottles by H2O2 addition on natural water of Burkina Faso containing dissolved iron. Chemosphere, 2010, 78, 1186-1191.	8.2	80

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37	Effect of Î¼M Fe addition, mild heat and solar UV on sulfate radical-mediated inactivation of bacteria, viruses, and micropollutant degradation in water. Water Research, 2018, 140, 220-231.	11.3	79
38	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.	6.1	78
39	Effect of Fe(II)/Fe(III) species, pH, irradiance and bacterial presence on viral inactivation in wastewater by the photo-Fenton process: Kinetic modeling and mechanistic interpretation. Applied Catalysis B: Environmental, 2017, 204, 156-166.	20.2	77
40	Bacterial disinfection by the photo-Fenton process: Extracellular oxidation or intracellular photo-catalysis?. Applied Catalysis B: Environmental, 2018, 227, 285-295.	20.2	75
41	Bacterial inactivation with iron citrate complex: A new source of dissolved iron in solar photo-Fenton process at near-neutral and alkaline pH. Applied Catalysis B: Environmental, 2016, 180, 379-390.	20.2	72
42	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.	4.4	70
43	Simultaneous E. coli inactivation and NOM degradation in river water via photo-Fenton process at natural pH in solar CPC reactor. A new way for enhancing solar disinfection of natural water. Chemosphere, 2009, 77, 296-300.	8.2	70
44	Growth of TiO2/Cu films by HiPIMS for accelerated bacterial loss of viability. Surface and Coatings Technology, 2013, 232, 804-813.	4.8	70
45	Preparation and Mechanism of Cu-Decorated TiO₂â€“ZrO₂ Films Showing Accelerated Bacterial Inactivation. ACS Applied Materials & Interfaces, 2015, 7, 12832-12839.	8.0	68
46	Fe3+ and TiO2 solar-light-assisted inactivation of E. coli at field scale. Catalysis Today, 2007, 122, 128-136.	4.4	65
47	Detrimental vs. beneficial influence of ions during solar (SODIS) and photo-Fenton disinfection of E. coli in water: (Bi)carbonate, chloride, nitrate and nitrite effects. Applied Catalysis B: Environmental, 2020, 270, 118877.	20.2	64
48	Degradation of eight relevant micropollutants in different water matrices by neutral photo-Fenton process under UV254 and simulated solar light irradiation â€“ A comparative study. Applied Catalysis B: Environmental, 2014, 158-159, 30-37.	20.2	63
49	Solar photo-Fenton and UV/H 2 O 2 processes against the antidepressant Venlafaxine in urban wastewaters and human urine. Intermediates formation and biodegradability assessment. Chemical Engineering Journal, 2017, 308, 492-504.	12.7	63
50	Degradation of DBPs' precursors in river water before and after slow sand filtration by photo-Fenton process at pH 5 in a solar CPC reactor. Water Research, 2008, 42, 4125-4132.	11.3	62
51	TiON and TiON-Ag sputtered surfaces leading to bacterial inactivation under indoor actinic light. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 256, 52-63.	3.9	62
52	Neutral solar photo-Fenton degradation of 4-nitrophenol on iron-enriched hybrid montmorillonite-alginate beads (Fe-MABs). Journal of Photochemistry and Photobiology A: Chemistry, 2014, 282, 33-40.	3.9	57
53	FeOx magnetization enhancing E. coli inactivation by orders of magnitude on Ag-TiO2 nanotubes under sunlight. Applied Catalysis B: Environmental, 2017, 202, 438-445.	20.2	57
54	On the photocatalytic degradation of phenol and dichloroacetate by BiVO4: The need of a sacrificial electron acceptor. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 216, 221-227.	3.9	56

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55	Microstructure of Cuâ€“Ag Uniform Nanoparticulate Films on Polyurethane 3D Catheters: Surface Properties. ACS Applied Materials & Interfaces, 2016, 8, 56-63.	8.0	56
56	Experimental design approach to the optimization of ultrasonic degradation of alachlor and enhancement of treated water biodegradability. Ultrasonics Sonochemistry, 2009, 16, 425-430.	8.2	54
57	Remarkable enhancement of bacterial inactivation in wastewater through promotion of solar photo-Fenton at near-neutral pH by natural organic acids. Applied Catalysis B: Environmental, 2017, 205, 219-227.	20.2	54
58	Castles fall from inside: Evidence for dominant internal photo-catalytic mechanisms during treatment of Saccharomyces cerevisiae by photo-Fenton at near-neutral pH. Applied Catalysis B: Environmental, 2016, 185, 150-162.	20.2	53
59	Natural iron ligands promote a metal-based oxidation mechanism for the Fenton reaction in water environments. Journal of Hazardous Materials, 2020, 393, 122413.	12.4	53
60	Quasi-Instantaneous Bacterial Inactivation on Cuâ€“Ag Nanoparticulate 3D Catheters in the Dark and Under Light: Mechanism and Dynamics. ACS Applied Materials & Interfaces, 2016, 8, 47-55.	8.0	51
61	Synchronic coupling of Cu2O(p)/CuO(n) semiconductors leading to Norfloxacin degradation under visible light: Kinetics, mechanism and film surface properties. Journal of Catalysis, 2017, 353, 133-140.	6.2	51
62	Shift from heterogeneous to homogeneous catalysis during resorcinol degradation using the solar photo-Fenton process initiated at circumneutral pH. Applied Catalysis B: Environmental, 2015, 165, 620-627.	20.2	49
63	Evidence for a dual mechanism in the TiO2/CuxO photocatalyst during the degradation of sulfamethazine under solar or visible light: Critical issues. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 375, 270-279.	3.9	48
64	Sequential helio-photo-Fenton and sonication processes for the treatment of bisphenol A. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 199, 197-203.	3.9	47
65	Improving visible light photocatalytic inactivation of E. coli by inducing highly efficient radical pathways through peroxymonosulfate activation using 3-D, surface-enhanced, reduced graphene oxide (rGO) aerogels. Chemical Engineering Journal, 2020, 396, 125189.	12.7	47
66	Solar disinfection of wild Salmonella sp. in natural water with a 18L CPC photoreactor: Detrimental effect of non-sterile storage of treated water. Solar Energy, 2011, 85, 1399-1408.	6.1	45
67	Comparison of Methods for Evaluation of the Bactericidal Activity of Copper-Sputtered Surfaces against Methicillin-Resistant Staphylococcus aureus. Applied and Environmental Microbiology, 2012, 78, 8176-8182.	3.1	45
68	Low-frequency ultrasound induces oxygen vacancies formation and visible light absorption in TiO2 P-25 nanoparticles. Ultrasonics Sonochemistry, 2012, 19, 383-386.	8.2	45
69	New evidence for TiO 2 uniform surfaces leading to complete bacterial reduction in the dark: Critical issues. Colloids and Surfaces B: Biointerfaces, 2014, 123, 593-599.	5.0	45
70	A systematic investigation on the bactericidal transient species generated by photo-sensitization of natural organic matter (NOM) during solar and photo-Fenton disinfection of surface waters. Applied Catalysis B: Environmental, 2019, 244, 983-995.	20.2	45
71	Employing bacterial mutations for the elucidation of photo-Fenton disinfection: Focus on the intracellular and extracellular inactivation mechanisms induced by UVA and H2O2. Water Research, 2020, 182, 116049.	11.3	45
72	Innovative transparent non-scattering TiO2 bactericide thin films inducing increased E. coli cell wall fluidity. Surface and Coatings Technology, 2014, 254, 333-343.	4.8	44

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73	Visible light plays a significant role during bacterial inactivation by the photo-fenton process, even at sub-critical light intensities. Water Research, 2020, 174, 115636.	11.3	44
74	Evaluating MicrotoxÂ© as a tool for biodegradability assessment of partially treated solutions of pesticides using Fe3+ and TiO2 solar photo-assisted processes. Ecotoxicology and Environmental Safety, 2008, 69, 546-555.	6.0	43
75	Biodegradability assessment of several priority hazardous substances: Choice, application and relevance regarding toxicity and bacterial activity. Chemosphere, 2006, 65, 682-690.	8.2	42
76	Iohexol degradation in wastewater and urine by UV-based Advanced Oxidation Processes (AOPs): Process modeling and by-products identification. Journal of Environmental Management, 2017, 195, 174-185.	7.8	42
77	Fe and Cu in humic acid extracts modify bacterial inactivation pathways during solar disinfection and photo-Fenton processes in water. Applied Catalysis B: Environmental, 2018, 235, 75-83.	20.2	41
78	Solar light and the photo-Fenton process against antibiotic resistant bacteria in wastewater: A kinetic study with a Streptomycin-resistant strain. Catalysis Today, 2018, 313, 86-93.	4.4	41
79	Solar disinfection modeling and post-irradiation response of Escherichia coli in wastewater. Chemical Engineering Journal, 2015, 281, 588-598.	12.7	40
80	The detrimental influence of bacteria (E. coli, Shigella and Salmonella) on the degradation of organic compounds (and vice versa) in TiO2 photocatalysis and near-neutral photo-Fenton processes under simulated solar light. Photochemical and Photobiological Sciences, 2012, 11, 821-827.	2.9	39
81	Monitoring the post-irradiation E. coli survival patterns in environmental water matrices: Implications in handling solar disinfected wastewater. Chemical Engineering Journal, 2014, 253, 366-376.	12.7	39
82	The antagonistic and synergistic effects of temperature during solar disinfection of synthetic secondary effluent. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 280, 14-26.	3.9	37
83	<i>In Vitro</i> and <i>In Vivo</i> Effectiveness of an Innovative Silver-Copper Nanoparticle Coating of Catheters To Prevent Methicillin-Resistant Staphylococcus aureus Infection. Antimicrobial Agents and Chemotherapy, 2016, 60, 5349-5356.	3.2	37
84	Duality in the Mechanism of Hexagonal ZnO/CuxO Nanowires Inducing Sulfamethazine Degradation under Solar or Visible Light. Catalysts, 2019, 9, 916.	3.5	37
85	Solar Photolytic and Photocatalytic Disinfection of Water at Laboratory and Field Scale. Effect of the Chemical Composition of Water and Study of the Postirradiation Events. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 100-110.	1.8	36
86	Bacterial inactivation and organic oxidation via immobilized photo-Fenton reagent on structured silica surfaces. Applied Catalysis B: Environmental, 2008, 84, 577-583.	20.2	36
87	Photo-Fenton degradation of resorcinol mediated by catalysts based on iron species supported on polymers. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 217, 201-206.	3.9	36
88	Effect of surface pretreatment of TiO ₂ films on interfacial processes leading to bacterial inactivation in the dark and under light irradiation. Interface Focus, 2015, 5, 20140046.	3.0	36
89	Selecting the best AOP for isoxazolyl penicillins degradation as a function of water characteristics: Effects of pH, chemical nature of additives and pollutant concentration. Journal of Environmental Management, 2017, 190, 72-79.	7.8	36
90	Wastewater and urine treatment by UVC-based advanced oxidation processes: Implications from the interactions of bacteria, viruses, and chemical contaminants. Chemical Engineering Journal, 2018, 343, 270-282.	12.7	36

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91	Enhancing solar disinfection (SODIS) with the photo-Fenton or the Fe2+/peroxymonosulfate-activation process in large-scale plastic bottles leads to toxicologically safe drinking water. Water Research, 2020, 186, 116387.	11.3	36
92	Elucidating bacterial regrowth: Effect of disinfection conditions in dark storage of solar treated secondary effluent. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 290, 43-53.	3.9	35
93	New evidence for hybrid acrylic/TiO2 films inducing bacterial inactivation under low intensity simulated sunlight. Colloids and Surfaces B: Biointerfaces, 2015, 135, 1-7.	5.0	34
94	Recent Developments in Accelerated Antibacterial Inactivation on 2D Cu-Titania Surfaces under Indoor Visible Light. Coatings, 2017, 7, 20.	2.6	34
95	New Fe-immobilized natural bentonite plate used as photo-Fenton catalyst for organic pollutant degradation. Chemosphere, 2011, 82, 1185-1189.	8.2	33
96	Significant decrease of THMs generated during chlorination of river water by previous photo-Fenton treatment at near neutral pH. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 229, 46-52.	3.9	32
97	Coupling between high-frequency ultrasound and solar photo-Fenton at pilot scale for the treatment of organic contaminants: An initial approach. Ultrasonics Sonochemistry, 2015, 22, 527-534.	8.2	32
98	Comparative effect of growth media on the monitoring of E. coli inactivation and regrowth after solar and photo-Fenton treatment. Chemical Engineering Journal, 2017, 313, 109-120.	12.7	32
99	Ultrasound enhancement of near-neutral photo-Fenton for effective E. coli inactivation in wastewater. Ultrasonics Sonochemistry, 2015, 22, 515-526.	8.2	31
100	Photoinduced disinfection in sunlit natural waters: Measurement of the second order inactivation rate constants between E.Âcoli and photogenerated transient species. Water Research, 2018, 147, 242-253.	11.3	29
101	Impact of different light intermittence regimes on bacteria during simulated solar treatment of secondary effluent: Implications of the inserted dark periods. Solar Energy, 2013, 98, 572-581.	6.1	28
102	Comparison of HIPIMS sputtered Ag- and Cu-surfaces leading to accelerated bacterial inactivation in the dark. Surface and Coatings Technology, 2014, 250, 14-20.	4.8	28
103	Unfolding the action mode of light and homogeneous vs. heterogeneous photo-Fenton in bacteria disinfection and concurrent elimination of micropollutants in urban wastewater, mediated by iron oxides in Raceway Pond Reactors. Applied Catalysis B: Environmental, 2020, 263, 118158.	20.2	28
104	Photocatalytic Degradation ofp-Halophenols in TiO2Aqueous Suspensions: Halogen Effect on Removal Rate, Aromatic Intermediates and Toxicity Variations. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2006, 41, 1009-1025.	1.7	27
105	Advantages of highly ionized pulse plasma magnetron sputtering (HIPIMS) of silver for improved E. coli inactivation. Thin Solid Films, 2012, 520, 3567-3573.	1.8	27
106	Kinetic modeling of lag times during photo-induced inactivation of E.Âcoli in sunlit surface waters: Unraveling the pathways of exogenous action. Water Research, 2019, 163, 114894.	11.3	26
107	Insights into the Photocatalytic Bacterial Inactivation by Flower-Like Bi2WO6 under Solar or Visible Light, Through in Situ Monitoring and Determination of Reactive Oxygen Species (ROS). Water (Switzerland), 2020, 12, 1099.	2.7	26
108	Bactericidal activity and mechanism of action of copper-sputtered flexible surfaces against multidrug-resistant pathogens. Applied Microbiology and Biotechnology, 2016, 100, 5945-5953.	3.6	25

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109	A Comparison of Solar Photocatalytic Inactivation of Waterborne E. coli Using Tris (2,2â€²-bipyridine)ruthenium(II), Rose Bengal, and TiO2. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 135-140.	1.8	24
110	Uniform TiO2/In2O3 surface films effective in bacterial inactivation under visible light. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 279, 1-7.	3.9	24
111	Temperature-dependent change of light dose effects on E. coli inactivation during simulated solar treatment of secondary effluent. Chemical Engineering Science, 2015, 126, 483-487.	3.8	24
112	Environmental considerations on solar disinfection of wastewater and the subsequent bacterial (re)growth. Photochemical and Photobiological Sciences, 2015, 14, 618-625.	2.9	24
113	Flower-like magnetized photocatalysts accelerating an emerging pollutant removal under indoor visible light and related phenomena. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 378, 105-113.	3.9	23
114	Decrypting the photocatalytic bacterial inactivation of hierarchical flower-like Bi2WO6 microspheres induced by surface properties: Experimental studies and ab initio calculations. Chemical Engineering Journal, 2022, 427, 131768.	12.7	23
115	Elimination of the iodinated contrast agent iohexol in water, wastewater and urine matrices by application of photo-Fenton and ultrasound advanced oxidation processes. Journal of Environmental Chemical Engineering, 2015, 3, 2002-2009.	6.7	22
116	Insight into the catalyst/photocatalyst microstructure presenting the same composition but leading to a variance in bacterial reduction under indoor visible light. Applied Catalysis B: Environmental, 2017, 208, 135-147.	20.2	22
117	Fungicidal activity of copper-sputtered flexible surfaces under dark and actinic light against azole-resistant Candida albicans and Candida glabrata. Journal of Photochemistry and Photobiology B: Biology, 2017, 174, 229-234.	3.8	22
118	Modification of titania nanoparticles for photocatalytic antibacterial activity via a colloidal route with glycine and subsequent annealing. Journal of Materials Research, 2013, 28, 354-361.	2.6	21
119	Solar heterogeneous and homogeneous photocatalysis as a pre-treatment option for biotreatment. Research on Chemical Intermediates, 2007, 33, 407-420.	2.7	20
120	TiO₂and TiO₂-Doped Films Able to Kill Bacteria by Contact: New Evidence for the Dynamics of Bacterial Inactivation in the Dark and under Light Irradiation. International Journal of Photoenergy, 2014, 2014, 1-17.	2.5	19
121	Escherichia coli inactivation by neutral solar heterogeneous photo-Fenton (HPF) over hybrid iron/montmorillonite/alginate beads. Journal of Environmental Chemical Engineering, 2015, 3, 317-324.	6.7	19
122	Stable Photocatalytic Paints Prepared from Hybrid Core-Shell Fluorinated/Acrylic/TiO2 Waterborne Dispersions. Crystals, 2016, 6, 136.	2.2	19
123	Self-Sterilizing Sputtered Films for Applications in Hospital Facilities. Molecules, 2017, 22, 1074.	3.8	19
124	A novel proposition for a citrate-modified photo-Fenton process against bacterial contamination of microalgae cultures. Applied Catalysis B: Environmental, 2020, 265, 118615.	20.2	19
125	New helio-photocatalyticâ€“photovoltaic hybrid system for simultaneous water decontamination and solar energy conversion. Solar Energy, 2005, 79, 353-359.	6.1	18
126	Innovative photo-Fenton catalysis by PE-FeOx films leading to methylene blue (MB) degradation: Kinetics, surface properties and mechanism. Applied Catalysis A: General, 2016, 519, 68-77.	4.3	18

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127	Modeling and treatment optimization of pharmaceutically active compounds by the photo-Fenton process: The case of the antidepressant Venlafaxine. Journal of Environmental Chemical Engineering, 2017, 5, 818-828.	6.7	18
128	Accelerated <i>Escherichia coli</i> inactivation in the dark on uniform copper flexible surfaces. Biointerphases, 2014, 9, 029012.	1.6	17
129	A New Perspective in the Use of FeOx-TiO2 Photocatalytic Films: Indole Degradation in the Absence of Fe-Leaching. Journal of Catalysis, 2016, 342, 184-192.	6.2	17
130	FeOx-TiO2 Film with Different Microstructures Leading to Femtosecond Transients with Different Properties: Biological Implications under Visible Light. Scientific Reports, 2016, 6, 30113.	3.3	17
131	Enhancing solar disinfection of water in PET bottles by optimized in-situ formation of iron oxide films. From heterogeneous to homogeneous action modes with H2O2 vs. O2 â€" Part 1: Iron salts as oxide precursors. Chemical Engineering Journal, 2019, 358, 211-224.	12.7	17
132	Identifying the mediators of intracellular E. coli inactivation under UVA light: The (photo) Fenton process and singlet oxygen. Water Research, 2022, 221, 118740.	11.3	17
133	Antibacterial surfaces based on functionally graded photocatalytic Fe₃O₄@TiO₂ coreâ€"shell nanoparticle/epoxy composites. RSC Advances, 2015, 5, 105416-105421.	3.6	16
134	Beneficial effect of Cu on Ti-Nb-Ta-Zr sputtered uniform/adhesive gum films accelerating bacterial inactivation under indoor visible light. Colloids and Surfaces B: Biointerfaces, 2017, 152, 152-158.	5.0	14
135	Light wavelength-dependent E. coli survival changes after simulated solar disinfection of secondary effluent. Photochemical and Photobiological Sciences, 2015, 14, 2238-2250.	2.9	12
136	E. coli â€" MS2 bacteriophage interactions during solar disinfection of wastewater and the subsequent post-irradiation period. Chemical Engineering Journal, 2019, 359, 1224-1233.	12.7	11
137	Biodegradation of Xenobiotics in a fixed bed reactor. Environmental Progress, 1993, 12, 306-311.	0.7	10
138	Irreversible inactivation of carbapenem-resistant Klebsiella pneumoniae and its genes in water by photo-electro-oxidation and photo-electro-Fenton - Processes action modes. Science of the Total Environment, 2021, 792, 148360.	8.0	10
139	SynthÃ¨se des pseudocyphellarines A et B, deux depsides du lichenPseudocyphellaria endochrysea. Helvetica Chimica Acta, 1985, 68, 1948-1951.	1.6	9
140	SynthÃ¨se de l'acide dÃ©carboxythamnolique. Helvetica Chimica Acta, 1988, 71, 876-880.	1.6	9
141	SynthÃ¨se du virensate de mÃ©thyle. Helvetica Chimica Acta, 1989, 72, 1061-1065.	1.6	9
142	Preparation, kinetics, mechanism and properties of semi-transparent photocatalytic stable films active in dye degradation. Applied Catalysis A: General, 2016, 516, 70-80.	4.3	9
143	SynthÃ¨se de l'Ã©riodermine. Helvetica Chimica Acta, 1985, 68, 945-948.	1.6	8
144	Accelerated bacterial inactivation obtained by HIPIMS sputtering on low cost surfaces with concomitant reduction in the metal/semiconductor content. RSC Advances, 2013, 3, 13127.	3.6	8

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145	Inoculum standardization for biodegradability tests. Biotechnology Letters, 1993, 7, 217-222.	0.5	7
146	Fe vs. TiO2 Photo-assisted Processes for Enhancing the Solar Inactivation of Bacteria in Water. Chimia, 2015, 69, 7-9.	0.6	7
147	New evidence for disinfection, self-cleaning and pollutant degradation mediated by GF-TiO 2 -Cu mats under solar/visible light in mild oxidative conditions. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 346, 351-363.	3.9	7
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