Stefanos Giannakis

List of Publications by Year
in descending order

104	5,451	71102	88630
papers	citations	41 h-index	70 g-index

105	105	105	3609
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Predicting the bactericidal efficacy of solar disinfection (SODIS): from kinetic modeling of in vitro tests towards the in silico forecast of E. coli inactivation. Chemical Engineering Journal, 2022, 427, 130866.	12.7	7
2	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
3	Vacuum UV pre-treatment coupled with self-generated peroxide stimulation of biomass: An innovative hybrid system for detoxification and mineralization of toxic compounds. Chemosphere, 2022, 286, 131701.	8.2	6
4	Heterogeneous catalytic ozonation and peroxone-mediated removal of Acetaminophen using natural and modified hematite-rich soil, as efficient and environmentally friendly catalysts. Applied Catalysis B: Environmental, 2022, 301, 120786.	20.2	35
5	Monitoring Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) Levels in Mixed-Use Residential-Commercial Buildings in Shiraz, Iran: Assessing the Carcinogenicity and Non-Carcinogenicity Risk of Their Inhabitants. International Journal of Environmental Research and Public Health, 2022, 19, 723.	2.6	13
6	Development of a percarbonate-enhanced Vacuum UV process for simultaneous fluoroquinolone antibiotics removal and fecal bacteria inactivation under a continuous flow mode of operation. Chemical Engineering Journal, 2022, 431, 134064.	12.7	14
7	Intensification of persulfate-mediated elimination of bisphenol A by a spinel cobalt ferrite-anchored g-C3N4S-scheme photocatalyst: Catalytic synergies and mechanistic interpretation. Separation and Purification Technology, 2022, 285, 120313.	7.9	89
8	Investigation of the Presence Volatile Organic Compounds (BTEX) in the Ambient Air and Biogases Produced by a Shiraz Landfill in Southern Iran. Sustainability, 2022, 14, 1040.	3.2	8
9	Investigating the Electrocoagulation Treatment of Landfill Leachate by Iron/Graphite Electrodes: Process Parameters and Efficacy Assessment. Water (Switzerland), 2022, 14, 205.	2.7	19
10	Catalytic ozonation of Acetaminophen with a magnetic, Cerium-based Metal-Organic framework as a novel, easily-separable nanocomposite. Chemical Engineering Journal, 2022, 434, 134614.	12.7	30
11	Persulfate Application for Landfill Leachate Treatment: Current Status and Challenges. Chemistry in the Environment, 2022, , 252-288.	0.4	4
12	Nitrate in Groundwater Resources of Hormozgan Province, Southern Iran: Concentration Estimation, Distribution and Probabilistic Health Risk Assessment Using Monte Carlo Simulation. Water (Switzerland), 2022, 14, 564.	2.7	18
13	Decrypting the synergistic action of the Fenton process and biochar addition for sustainable remediation of real technogenic soil from PAHs and heavy metals. Environmental Pollution, 2022, 303, 119096.	7.5	11
14	A review of heavy metalsâ€™ removal from aqueous matrices by Metal-Organic Frameworks (MOFs): State-of-the art and recent advances. Journal of Environmental Chemical Engineering, 2022, 10, 107394.	6.7	51
15	Mechanistic modelling of solar disinfection (SODIS) kinetics of Escherichia coli, enhanced with H2O2 â€“ Part 2: Shine on you, crazy peroxide. Chemical Engineering Journal, 2022, 439, 135783.	12.7	2
16	Mechanistic modelling of solar disinfection (SODIS) kinetics of Escherichia coli, enhanced with H2O2 â€“ part 1: The dark side of peroxide. Chemical Engineering Journal, 2022, 439, 135709.	12.7	3
17	Impressive strides in antibacterial performance amelioration of Ti-based implants via plasma electrolytic oxidation (PEO): A review of the recent advancements. Chemical Engineering Journal, 2022, 441, 136003.	12.7	50
18	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

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19	The efficacy of the VUV/O3 process run in a continuous-flow fluidized bed reactor for simultaneous elimination of favipiravir and bacteria in aqueous matrices. Chemosphere, 2022, 304, 135307.	8.2	8
20	Solar Disinfection as a Water Treatment Technology. Encyclopedia of the UN Sustainable Development Goals, 2022, , 563-578.	0.1	0
21	Deriving an É‘-Fe2O3/g-C3N4 nanocomposite from a naturally hematite-rich soil, for dual photocatalytic and photo-Fenton degradation of Acetaminophen under visible light. Separation and Purification Technology, 2022, 299, 121723.	7.9	16
22	Degradation of the antiviral remdesivir by a novel, continuous-flow, helical-baffle incorporating VUV/UVC photoreactor: Performance assessment and enhancement by inorganic peroxides. Separation and Purification Technology, 2022, 298, 121665.	7.9	7
23	Superior visible light-mediated catalytic activity of a novel N-doped, Fe3O4-incorporating MgO nanosheet in presence of PMS: Imidacloprid degradation and implications on simultaneous bacterial inactivation. Applied Catalysis B: Environmental, 2022, 317, 121732.	20.2	38
24	Improving ferrate disinfection and decontamination performance at neutral pH by activating peroxymonosulfate under solar light. Chemical Engineering Journal, 2022, 450, 137904.	12.7	14
25	A review of the recent advances on the treatment of industrial wastewaters by Sulfate Radical-based Advanced Oxidation Processes (SR-AOPs). Chemical Engineering Journal, 2021, 406, 127083.	12.7	747
26	Enhanced vacuum UV-based process (VUV/H2O2/PMS) for the effective removal of ammonia from water: Engineering configuration and mechanistic considerations. Journal of Hazardous Materials, 2021, 402, 123789.	12.4	42
27	A continuous-flow catalytic process with natural hematite-alginate beads for effective water decontamination and disinfection: Peroxymonosulfate activation leading to dominant sulfate radical and minor non-radical pathways. Chemical Engineering Journal, 2021, 411, 127738.	12.7	32
28	A review of the innovations in metal- and carbon-based catalysts explored for heterogeneous peroxymonosulfate (PMS) activation, with focus on radical vs. non-radical degradation pathways of organic contaminants. Chemical Engineering Journal, 2021, 411, 127957.	12.7	458
29	Development of a VUV-UVC/peroxymonosulfate, continuous-flow Advanced Oxidation Process for surface water disinfection and Natural Organic Matter elimination: Application and mechanistic aspects. Journal of Hazardous Materials, 2021, 408, 124634.	12.4	21
30	Efficient photocatalytic degradation of ciprofloxacin under UVA-LED, using S,N-doped MgO nanoparticles: Synthesis, parametrization and mechanistic interpretation. Journal of Molecular Liquids, 2021, 324, 114831.	4.9	29
31	Acetaminophen degradation by a synergistic peracetic acid/UVC-LED/Fe(II) advanced oxidation process: Kinetic assessment, process feasibility and mechanistic considerations. Chemosphere, 2021, 263, 128119.	8.2	80
32	Urban and Industrial Wastewater Disinfection and Decontamination by Advanced Oxidation Processes (AOPs): Current Issues and Future Trends. Water (Switzerland), 2021, 13, 560.	2.7	4
33	Evaluation of the effectiveness, safety, and feasibility of 9 potential biocides to disinfect acidic landfill leachate from algae and bacteria. Water Research, 2021, 191, 116801.	11.3	24
34	A meta-analysis of the scientific literature on (photo)Fenton and persulfate advanced oxidation processes: Where do we stand and where are we heading to?. Current Opinion in Green and Sustainable Chemistry, 2021, 29, 100456.	5.9	14
35	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
36	Synthesis of a novel, ternary AgI/CeO2@g-C3N4 nanocomposite with exceptional stability and reusability for visible light-assisted photocatalytic reduction of hexavalent chromium. Applied Surface Science, 2021, 555, 149692.	6.1	32

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37	Radical-based degradation of sulfamethoxazole via UVA/PMS-assisted photocatalysis, driven by magnetically separable Fe3O4@CeO2@BiOI nanospheres. Separation and Purification Technology, 2021, 267, 118665.	7.9	64
38	Photocatalytic activation of peroxymonosulfate (PMS) by novel mesoporous Ag/ZnO@NiFe2O4 nanorods, inducing radical-mediated acetaminophen degradation under UVA irradiation. Chemosphere, 2021, 277, 130271.	8.2	55
39	SODIS potential: A novel parameter to assess the suitability of solar water disinfection worldwide. Chemical Engineering Journal, 2021, 419, 129889.	12.7	20
40	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
41	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
42	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
43	Solar Disinfection as a Water Treatment Technology. Encyclopedia of the UN Sustainable Development Goals, 2020, , 1-16.	0.1	9
44	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
45	Shedding light on the catalytic synergies between Fe(II) and PMS in vacuum UV (VUV/Fe/PMS) photoreactors for accelerated elimination of pharmaceuticals: The case of metformin. Chemical Engineering Journal, 2020, 400, 125896.	12.7	40
46	A novel CuO/Fe2O3/ZnO composite for visible-light assisted photocatalytic oxidation of Bisphenol A: Kinetics, degradation pathways, and toxicity elimination. Separation and Purification Technology, 2020, 242, 116821.	7.9	52
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	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
49	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
50	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
51	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
52	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
53	Evaluation of process influencing factors, degradation products, toxicity evolution and matrix-related effects during electro-Fenton removal of piroxicam from waters. Journal of Environmental Chemical Engineering, 2019, 7, 103400.	6.7	21
54	VUV/Fe(II)/H2O2 as a novel integrated process for advanced oxidation of methyl tert-butyl ether (MTBE) in water at neutral pH: Process intensification and mechanistic aspects. Water Research, 2019, 166, 115061.	11.3	45

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55	Supported PtxPd1-x bimetallic nanoparticles on ionic liquid-functionalized SiO2@graphene oxide nanocomposite and its application as an effective multiphasic catalyst. Applied Catalysis A: General, 2019, 579, 30-43.	4.3	12
56	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
57	A review of the concepts, recent advances and niche applications of the (photo) Fenton process, beyond water/wastewater treatment: Surface functionalization, biomass treatment, combatting cancer and other medical uses. Applied Catalysis B: Environmental, 2019, 248, 309-319.	20.2	99
58	Enhanced mineralization of atrazine by surface induced hydroxyl radicals over light-weight granular mixed-quartz sands with ozone. Water Research, 2019, 149, 136-148.	11.3	70
59	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
60	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 2: Direct use of (natural) iron oxides. Chemical Engineering Journal, 2019, 360, 1051-1062.	12.7	6
61	Iron-coated polymer films with high antibacterial activity under indoor and outdoor light, prepared by different facile pre-treatment and deposition methods. Applied Catalysis B: Environmental, 2019, 243, 161-174.	20.2	0
62	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
63	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
64	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
65	Bacterial disinfection by the photo-Fenton process: Extracellular oxidation or intracellular photo-catalysis?. Applied Catalysis B: Environmental, 2018, 227, 285-295.	20.2	75
66	Analogies and differences among bacterial and viral disinfection by the photo-Fenton process at neutral pH: a mini review. Environmental Science and Pollution Research, 2018, 25, 27676-27692.	5.3	57
67	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
68	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
69	Evidence for the degradation of an emerging pollutant by a mechanism involving iso-energetic charge transfer under visible light. Applied Catalysis B: Environmental, 2018, 233, 175-183.	20.2	47
70	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
71	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
72	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

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73	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
74	Effect of reactor material and its reuse on photo-Fenton process efficiency at near-neutral pH: Alterations in E. coli inactivation and resorcinol degradation kinetics in water. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 344, 228-237.	3.9	12
75	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
76	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
77	Phototransformation of Acesulfame K in surface waters: Comparison of two techniques for the measurement of the second-order rate constants of indirect photodegradation, and modelling of photoreaction kinetics. Chemosphere, 2017, 186, 185-192.	8.2	23
78	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
79	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
80	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
81	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
82	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
83	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
84	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
85	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
86	Self-Sterilizing Sputtered Films for Applications in Hospital Facilities. Molecules, 2017, 22, 1074.	3.8	19
87	Complex Treatment for the Disposal and Utilization of Process Wastewaters of the Pharmaceutical Industry. Periodica Polytechnica: Chemical Engineering, 2017, , .	1.1	3
88	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
89	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
90	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

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91	Supported TiO2 films deposited at different energies: Implications of the surface compactness on the catalytic kinetics.. Applied Catalysis B: Environmental, 2016, 191, 42-52.	20.2	46
92	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
93	Insight on the photocatalytic bacterial inactivation by co-sputtered TiO 2 â€“Cu in aerobic and anaerobic conditions. Applied Catalysis B: Environmental, 2016, 182, 277-285.	20.2	49
94	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
95	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
96	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
97	Solar disinfection modeling and post-irradiation response of Escherichia coli in wastewater. Chemical Engineering Journal, 2015, 281, 588-598.	12.7	40
98	Environmental considerations on solar disinfection of wastewater and the subsequent bacterial (re)growth. Photochemical and Photobiological Sciences, 2015, 14, 618-625.	2.9	24
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	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
101	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
102	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
103	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
104	Creativity and Innovation Skills in University STEM Education: The CHET Project Approach. , 0, , .		1