Kevin O'Shea

List of Publications by Year
in descending order

68 papers	8,255 citations	126708 33 h-index	98622 67 g-index
70 all docs	70 docs citations	70 times ranked	11078 citing authors

#	Article	IF	Citations
1	A review on the visible light active titanium dioxide photocatalysts for environmental applications. Applied Catalysis B: Environmental, 2012, 125, 331-349.	10.8	3,320
2	New Insights into the Mechanism of Visible Light Photocatalysis. Journal of Physical Chemistry Letters, 2014, 5, 2543-2554.	2.1	569
3	Cr(VI) Adsorption and Reduction by Humic Acid Coated on Magnetite. Environmental Science & Technology, 2014, 48, 8078-8085.	4.6	378
4	Innovative visible light-activated sulfur doped TiO2 films for water treatment. Applied Catalysis B: Environmental, 2011, 107, 77-87.	10.8	338
5	Role of pH on photolytic and photocatalytic degradation of antibiotic oxytetracycline in aqueous solution under visible/solar light: Kinetics and mechanism studies. Applied Catalysis B: Environmental, 2013, 134-135, 83-92.	10.8	214
6	Visible light-sensitized S, N and C co-doped polymorphic TiO2 for photocatalytic destruction of microcystin-LR. Applied Catalysis B: Environmental, 2014, 144, 614-621.	10.8	197
7	Synthesis, structural characterization and evaluation of solâ€“gel-based NF-TiO2 films with visible light-photoactivation for the removal of microcystin-LRâ˜†. Applied Catalysis B: Environmental, 2010, 99, 378-387.	10.8	168
8	Solar photocatalysis for water disinfection: materials and reactor design. Catalysis Science and Technology, 2014, 4, 1211-1226.	2.1	165
9	Use of selected scavengers for the determination of NF-TiO2 reactive oxygen species during the degradation of microcystin-LR under visible light irradiation. Journal of Molecular Catalysis A, 2016, 425, 183-189.	4.8	157
10	Degradation and transformation of bisphenol A in UV/Sodium percarbonate: Dual role of carbonate radical anion. Water Research, 2020, 171, 115394.	5.3	151
11	Advanced Oxidation Processes for Water Treatment. Journal of Physical Chemistry Letters, 2012, 3, 2112-2113.	2.1	148
12	A review on cylindrospermopsin: the global occurrence, detection, toxicity and degradation of a potent cyanotoxin. Environmental Sciences: Processes and Impacts, 2013, 15, 1979.	1.7	147
13	Effects of water parameters on the degradation of microcystin-LR under visible light-activated TiO2 photocatalyst. Water Research, 2011, 45, 3787-3796.	5.3	131
14	Improved charge transport of Nb-doped TiO₂nanorods in methylammonium lead iodide bromide perovskite solar cells. Journal of Materials Chemistry A, 2014, 2, 19616-19622.	5.2	127
15	Effective removal of phosphate from aqueous solution using humic acid coated magnetite nanoparticles. Water Research, 2017, 123, 353-360.	5.3	127
16	Optimization of photocatalytic performance of TiO2 coated glass microspheres using response surface methodology and the application for degradation of dimethyl phthalate. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 262, 7-13.	2.0	122
17	Reductive and oxidative degradation of iopamidol, iodinated X-ray contrast media, by Fe(III)-oxalate under UV and visible light treatment. Water Research, 2014, 67, 144-153.	5.3	107
18	TiO2 photocatalytic degradation of phenylarsonic acid. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 210, 61-68.	2.0	95

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19	Free Radical Mechanisms for the Treatment of Methyl tert-Butyl Ether (MTBE) via Advanced Oxidation/Reductive Processes in Aqueous Solutions. Chemical Reviews, 2009, 109, 1302-1345.	23.0	90
20	Destruction of microcystins (cyanotoxins) by UV-254Ânm-based direct photolysis and advanced oxidation processes (AOPs): Influence of variable amino acids on the degradation kinetics and reaction mechanisms. Water Research, 2015, 74, 227-238.	5.3	88
21	A comparative study on the removal of cylindrospermopsin and microcystins from water with NF-TiO2-P25 composite films with visible and UVâ€“vis light photocatalytic activity. Applied Catalysis B: Environmental, 2012, 121-122, 30-39.	10.8	81
22	Photochemical Transformation of Aminoglycoside Antibiotics in Simulated Natural Waters. Environmental Science & Technology, 2016, 50, 2921-2930.	4.6	80
23	Anion-Doped TiO₂ Nanocatalysts for Water Purification under Visible Light. Industrial & Engineering Chemistry Research, 2013, 52, 13957-13964.	1.8	79
24	Degradation Mechanism of Cyanobacterial Toxin Cylindrospermopsin by Hydroxyl Radicals in Homogeneous UV/H₂O₂ Process. Environmental Science & Technology, 2014, 48, 4495-4504.	4.6	77
25	NF-TiO2 photocatalysis of amitrole and atrazine with addition of oxidants under simulated solar light: Emerging synergies, degradation intermediates, and reusable attributes. Journal of Hazardous Materials, 2013, 260, 569-575.	6.5	73
26	Revealing the degradation intermediates and pathways of visible light-induced NF-TiO2 photocatalysis of microcystin-LR. Applied Catalysis B: Environmental, 2014, 154-155, 259-266.	10.8	69
27	Determination and Environmental Implications of Aqueous-Phase Rate Constants in Radical Reactions. Water Research, 2021, 190, 116746.	5.3	65
28	Kinetic and Mechanistic Evaluation of Inorganic Arsenic Species Adsorption onto Humic Acid Grafted Magnetite Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 13540-13547.	1.5	54
29	TiO2 photocatalytic degradation and detoxification of cylindrospermopsin. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 307-308, 115-122.	2.0	53
30	UV and Visible Light-Driven Production of Hydroxyl Radicals by Reduced Forms of N, F, and P Codoped Titanium Dioxide. Molecules, 2019, 24, 2147.	1.7	46
31	Identification of TiO2 photocatalytic destruction byproducts and reaction pathway of cylindrospermopsin. Applied Catalysis B: Environmental, 2015, 163, 591-598.	10.8	40
32	Ultravioletâ€“Visible Lightâ€“Sensitive High Surface Area Phosphorous-Fluorineâ€“Co-Doped TiO₂ Nanoparticles for the Degradation of Atrazine in Water. Environmental Engineering Science, 2014, 31, 435-446.	0.8	38
33	Novel franklinite-like synthetic zinc-ferrite redox nanomaterial: synthesis, and evaluation for degradation of diclofenac in water. Applied Catalysis B: Environmental, 2020, 275, 119098.	10.8	37
34	Detailed NMR investigation of cyclodextrin-perfluorinated surfactant interactions in aqueous media. Journal of Hazardous Materials, 2017, 329, 57-65.	6.5	34
35	Degradation of cylindrospermopsin by using polymorphic titanium dioxide under UVâ€“Vis irradiation. Catalysis Today, 2014, 224, 49-55.	2.2	32
36	Gamma radiolysis of methyl t-butyl ether: a study of hydroxyl radical mediated reaction pathways. Radiation Physics and Chemistry, 2002, 65, 335-341.	1.4	31

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37	Selective Reduction of Cr(VI) in Chromium, Copper and Arsenic (CCA) Mixed Waste Streams Using UV/TiO2 Photocatalysis. Molecules, 2015, 20, 2622-2635.	1.7	31
38	Industrial synthesis and characterization of nanophotocatalysts materials: titania. Nanotechnology Reviews, 2016, 5, 467-479.	2.6	31
39	Ozonation of Cylindrospermopsin (Cyanotoxin): Degradation Mechanisms and Cytotoxicity Assessments. Environmental Science & Technology, 2016, 50, 1437-1446.	4.6	30
40	Selective oxidation of H1-antihistamines by unactivated peroxymonosulfate (PMS): Influence of inorganic anions and organic compounds. Water Research, 2020, 186, 116401.	5.3	29
41	¹⁹F NMR Characterization of the Encapsulation of Emerging Perfluoroethercarboxylic Acids by Cyclodextrins. Journal of Physical Chemistry B, 2017, 121, 8359-8366.	1.2	27
42	The degradation of MTBEâ€"BTEX mixtures by gamma radiolysis. A kinetic modeling study. Radiation Physics and Chemistry, 2002, 65, 343-347.	1.4	24
43	Mechanistic considerations for the degradation of methyl tert-butyl ether (MTBE) by sonolysis: Effect of argon vs. oxygen saturated solutions. Ultrasonics Sonochemistry, 2012, 19, 959-968.	3.8	24
44	Chapter Green Nanotechnology: Development of Nanomaterials for Environmental and Energy Applications. ACS Symposium Series, 2013, , 201-229.	0.5	24
45	Iron(II)-catalyzed enhancement of ultrasonic-induced degradation of diethylstilbestrol (DES). Catalysis Today, 2005, 101, 369-373.	2.2	20
46	Fundamental Studies of the Singlet Oxygen Reactions with the Potent Marine Toxin Domoic Acid. Environmental Science & Technology, 2020, 54, 6073-6081.	4.6	20
47	UV/Sodium percarbonate for bisphenol A treatment in water: Impact of water quality parameters on the formation of reactive radicals. Water Research, 2022, 219, 118457.	5.3	20
48	Kinetic, product, and computational studies of the ultrasonic induced degradation of 4-methylcyclohexanemethanol (MCHM). Water Research, 2017, 126, 164-171.	5.3	19
49	TiO2 photocatalytic degradation of the flame retardant tris (2-chloroethyl) phosphate (TCEP) in aqueous solution: A detailed kinetic and mechanistic study. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 377, 130-137.	2.0	19
50	Î²-Cyclodextrin Reverses Binding of Perfluorooctanoic Acid to Human Serum Albumin. Chemical Research in Toxicology, 2018, 31, 277-284.	1.7	18
51	Rapid transformation of H1-antihistamines cetirizine (CET) and diphenhydramine (DPH) by direct peroxymonosulfate (PMS) oxidation. Journal of Hazardous Materials, 2020, 398, 123219.	6.5	16
52	Making waves: Defining advanced reduction technologies from the perspective of water treatment. Water Research, 2022, 212, 118101.	5.3	16
53	Irradiation of ultrasound to 5-methylbenzotriazole in aqueous phase: Degradation kinetics and mechanisms. Ultrasonics Sonochemistry, 2016, 31, 227-236.	3.8	15
54	Î²-Cyclodextrin Attenuates Perfluorooctanoic Acid Toxicity in the Zebrafish Embryo Model. Toxics, 2017, 5, 31.	1.6	15

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55	Fundamental study of the ultrasonic induced degradation of the popular antihistamine, diphenhydramine (DPH). Water Research, 2018, 144, 265-273.	5.3	15
56	Enhanced hostâ€“guest complexation of short chain perfluoroalkyl substances with positively charged Î²-cyclodextrin derivatives. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2019, 95, 111-117.	0.9	15
57	Degradation of MTBE and Related Gasoline Oxygenates in Aqueous Media by Ultrasound Irradiation. Journal of Environmental Engineering, ASCE, 2002, 128, 806-812.	0.7	14
58	Analytical methods for assessment of cyanotoxin contamination in drinking water sources. Current Opinion in Environmental Science and Health, 2019, 7, 45-51.	2.1	14
59	Reactions of urocanic acid (UCA) methyl esters with singlet oxygen and 4-methyl-1,2,4-triazoline-3,5-dione (MTAD). Tetrahedron, 2006, 62, 10700-10708.	1.0	13
60	Control of Microcystis aeruginosa growth and associated microcystin cyanotoxin remediation by electron beam irradiation (EBI). RSC Advances, 2015, 5, 31292-31297.	1.7	12
61	Reaction pathways and kinetic parameters of sonolytically induced oxidation of dimethyl methylphosphonate in air saturated aqueous solutions. Research on Chemical Intermediates, 1998, 24, 695-705.	1.3	11
62	Hydroxyl Radical Generation and Partitioning in Degradation of Methylene Blue and DEET by Dual-Frequency Ultrasonic Irradiation. Journal of Environmental Engineering, ASCE, 2019, 145, .	0.7	11
63	Removal of As(III) from Water Using the Adsorptive and Photocatalytic Properties of Humic Acid-Coated Magnetite Nanoparticles. Nanomaterials, 2020, 10, 1604.	1.9	8
64	Elucidation of specific binding sites and extraction of toxic Gen X from HSA employing cyclodextrin. Journal of Hazardous Materials, 2022, 425, 127765.	6.5	8
65	Ultrasound-induced remediation of the second-generation antihistamine, Cetirizine. Journal of Environmental Chemical Engineering, 2020, 8, 103680.	3.3	3
66	Investigation of Ultrasonically Induced Degradation of Tris(2-chloroethyl) Phosphate in Water. Journal of Environmental Engineering, ASCE, 2020, 146, .	0.7	3
67	Oxidative remediation of 4-methylcyclohexanemethanol (MCHM) and propylene glycol phenyl ether (PPh). Evidence of contaminant repair reaction pathways. Physical Chemistry Chemical Physics, 2017, 19, 13324-13332.	1.3	1
68	The Elimination of Methane Phosphonic Acid, Dimethyl Ester (DMMP) from Aqueous Solution Using 60Co-y and Electron Beam Induced Radiolysis: A Model Compound for Evaluating the Effectiveness of the Î•-Beam Process in the Destruction of Organophosphorus Chemical Warfare Agents. Journal of Advanced Oxidation Technologies, 1998, 3, .	0.5	0