Peter K J Robertson

List of Publications by Year in Descending Order

103 papers	3,426 citations	32 h-index	56 g-index
108 ext. papers	3,831 ext. citations	8.2 avg, IF	5.52 L-index

#	Paper	IF	Citations
103	Effect of Ball-Milling Pretreatment of Cellulose on Its Photoreforming for H Production.. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 4862-4871	8.3	4
102	Kinetic Modelling of the Photocatalytic Degradation of Diisobutyl Phthalate and Coupling with Acoustic Cavitation. *Chemical Engineering Journal*, **2022**, 136494	14.7	0
101	Isotope Effects in Photocatalysis: An Underexplored Issue. *ACS Omega*, **2021**, 6, 11113-11121	3.9	3
100	Exploring lignin valorisation: the application of photocatalysis for the degradation of the β-5 linkage. *JPhys Energy*, **2021**, 3, 035002	4.9	3
99	Enhanced photocatalytic degradation of 2-methyl-4-chlorophenoxyacetic acid (MCPA) by the addition of HO. *Chemosphere*, **2021**, 275, 130082	8.4	6
98	Quantification of hydroxyl radicals in photocatalysis and acoustic cavitation: Utility of coumarin as a chemical probe. *Chemical Engineering Journal*, **2021**, 420, 127560	14.7	9
97	Removal of phthalates from aqueous solution by semiconductor photocatalysis: A review. *Journal of Hazardous Materials*, **2021**, 402, 123461	12.8	39
96	Graphitic-C3N4 coated floating glass beads for photocatalytic destruction of synthetic and natural organic compounds in water under UV light. *Journal of Photochemistry and Photobiology A: Chemistry*, **2021**, 405, 112935	4.7	7
95	Cellulose Photocatalysis for Renewable Energy Production. *Environmental Chemistry for A Sustainable World*, **2021**, 1-34	0.8	0
94	Photocatalytic radical species: An overview of how they are generated, detected, and measured **2021**, 85-118		0
93	Antisolvent Crystallization using a Fluidic Oscillator: Modeling and Validation. *Industrial & Engineering Chemistry Research*, **2021**, 60, 12752-12766	3.9	1
92	Comparison of UV-A photolytic and UV/TiO photocatalytic effects on Microcystis aeruginosa PCC7813 and four microcystin analogues: A pilot scale study. *Journal of Environmental Management* , **2021**, 298, 113519	7.9	0
91	The use of titanium dioxide nanotubes as photoanodes for chloride oxidation. *Materials Science in Semiconductor Processing*, **2020**, 109, 104930	4.3	5
90	Exploring the photocatalytic hydrogen production potential of titania doped with alumina derived from foil waste. *International Journal of Hydrogen Energy*, **2020**, 45, 34494-34502	6.7	15
89	All in one photo-reactor pod containing TiO2 coated glass beads and LEDs for continuous photocatalytic destruction of cyanotoxins in water. *Environmental Science: Water Research and Technology*, **2020**, 6, 945-950	4.2	6
88	Removal of microcystins from a waste stabilisation lagoon: Evaluation of a packed-bed continuous flow TiO reactor. *Chemosphere*, **2020**, 245, 125575	8.4	10
87	Photocatalytic removal of the cyanobacterium Microcystis aeruginosa PCC7813 and four microcystins by TiO coated porous glass beads with UV-LED irradiation. *Science of the Total Environment*, **2020**, 745, 141154	10.2	17

86	Photocatalytic reforming of glycerol to H2 in a thin film Pt-TiO2 recirculating photoreactor. *Journal of Chemical Technology and Biotechnology*, **2020**, 95, 2619	3.5	2
85	Development and Optimization of an Immobilized Photocatalytic System within a Stacked Frame Photoreactor (SFPR) Using Light Distribution and Fluid Mixing Simulation Coupled with Experimental Validation. *Industrial & Engineering Chemistry Research*, **2019**, 58, 2727-2740	3.9	3
84	A one-pot method for building colloidal nanoparticles into bulk dry powders with nanoscale magnetic, plasmonic and catalytic functionalities. *Applied Materials Today*, **2019**, 15, 398-404	6.6	12
83	Ionic liquids tethered to a preorganised 1,2-diamide motif for extraction of lanthanides. *Green Chemistry*, **2019**, 21, 2583-2588	10	7
82	Using cellulose polymorphs for enhanced hydrogen production from photocatalytic reforming. *Sustainable Energy and Fuels*, **2019**, 3, 1971-1975	5.8	9
81	Halogen-bond mediated efficient storage of extremely volatile perfluoroiodides in ionic liquids. *Chemical Communications*, **2019**, 55, 9088-9091	5.8	4
80	An investigation of the role of pH in the rapid photocatalytic degradation of MCPA and its primary intermediate by low-power UV LED irradiation. *Chemical Engineering Journal*, **2019**, 359, 112-118	14.7	14
79	Observation of stimulated emission from Rhodamine 6G-polymer aggregate adsorbed at foam interfaces. *JPhys Energy*, **2019**, 1, 015007	4.9	4
78	Photocatalytic OH radical formation and quantification over TiO2 P25: Producing a robust and optimised screening method. *Chinese Chemical Letters*, **2018**, 29, 773-777	8.1	17
77	Influence of bacterial, environmental and physical factors in design of photocatalytic reactors for water disinfection. *Journal of Photochemistry and Photobiology A: Chemistry*, **2018**, 366, 136-141	4.7	4
76	In Situ ATR-FTIR Investigation of the Effects of H2O and D2O Adsorption on the TiO2Surface. *ECS Transactions*, **2017**, 75, 101-113	1	2
75	Cellulose II as bioethanol feedstock and its advantages over native cellulose. *Renewable and Sustainable Energy Reviews*, **2017**, 77, 182-192	16.2	38
74	Mixing regime simulation and cellulose particle tracing in a stacked frame photocatalytic reactor. *Chemical Engineering Journal*, **2017**, 313, 301-308	14.7	4
73	A photocatalytic impeller reactor for gas phase heterogeneous photocatalysis. *Journal of Environmental Chemical Engineering*, **2017**, 5, 3942-3948	6.8	9
72	Comparative assessment of visible light and UV active photocatalysts by hydroxyl radical quantification. *Journal of Photochemistry and Photobiology A: Chemistry*, **2017**, 334, 13-19	4.7	60
71	Energy efficient operation of photocatalytic reactors based on UV LEDs for pollution remediation in water **2017**,		1
70	Mechanisms of Simultaneous Hydrogen Production and Formaldehyde Oxidation in H2O and D2O over Platinized TiO2. *ACS Catalysis*, **2017**, 7, 4753-4758	13.1	48
69	Pathways of the photocatalytic reaction of acetate in H2O and D2O: A combined EPR and ATR-FTIR study. *Journal of Catalysis*, **2016**, 344, 831-840	7.3	19

68	Controlled periodic illumination in semiconductor photocatalysis. *Journal of Photochemistry and Photobiology A: Chemistry*, **2016**, 319-320, 96-106	4.7	21
67	Simultaneous cellulose conversion and hydrogen production assisted by cellulose decomposition under UV-light photocatalysis. *Chemical Communications*, **2016**, 52, 1673-6	5.8	66
66	The application of a novel fluidised photo reactor under UV□Visible and natural solar irradiation in the photocatalytic generation of hydrogen. *Chemical Engineering Journal*, **2016**, 286, 610-621	14.7	29
65	Photocatalytic degradation of eleven microcystin variants and nodularin by TiO2 coated glass microspheres. *Journal of Hazardous Materials*, **2015**, 300, 347-353	12.8	33
64	In situ ATR-FTIR study of H2O and D2O adsorption on TiO2 under UV irradiation. *Physical Chemistry Chemical Physics*, **2015**, 17, 22940-6	3.6	42
63	The influence of microbial factors on the susceptibility of bacteria to photocatalytic destruction. *Journal of Photochemistry and Photobiology A: Chemistry*, **2015**, 311, 53-58	4.7	5
62	Mathematical modelling of quantum yield enhancements of methyl orange photooxidation in aqueous TiO2 suspensions under controlled periodic UV LED illumination. *Applied Catalysis B: Environmental*, **2014**, 156-157, 398-403	21.8	15
61	UV LED Sources for Heterogeneous Photocatalysis. *Handbook of Environmental Chemistry*, **2014**, 159-179	0.8	12
60	A continuous flow packed bed photocatalytic reactor for the destruction of 2-methylisoborneol and geosmin utilising pelletised TiO2. *Chemical Engineering Journal*, **2014**, 235, 293-298	14.7	28
59	The effect of pH on the photonic efficiency of the destruction of methyl orange under controlled periodic illumination with UV-LED sources. *Chemical Engineering Journal*, **2014**, 246, 337-342	14.7	20
58	The Application of Semiconductor Photocatalysis for the Removal of Cyanotoxins from Water and Design Concepts for Solar Photocatalytic Reactors for Large Scale Water Treatment **2013**, 395-415		2
57	Development of a doped titania immobilised thin film multi tubular photoreactor. *Applied Catalysis B: Environmental*, **2013**, 130-131, 99-105	21.8	19
56	From Ideal Reactor Concepts to Reality: The Novel Drum Reactor for Photocatalytic Wastewater Treatment. *International Journal of Chemical Reactor Engineering*, **2013**, 11, 621-632	1.2	6
55	Effect of controlled periodic-based illumination on the photonic efficiency of photocatalytic degradation of methyl orange. *Journal of Catalysis*, **2012**, 290, 138-142	7.3	37
54	Overview of the current ISO tests for photocatalytic materials. *Journal of Photochemistry and Photobiology A: Chemistry*, **2012**, 237, 7-23	4.7	197
53	The use of a novel compact fluorosensor for in situ monitoring of the photocatalytic destruction of methylene blue dye effluents. *Sensors and Actuators B: Chemical*, **2012**, 168, 118-122	8.5	1
52	Removal of microorganisms and their chemical metabolites from water using semiconductor photocatalysis. *Journal of Hazardous Materials*, **2012**, 211-212, 161-71	12.8	152
51	A study of the kinetic solvent isotope effect on the destruction of microcystin-LR and geosmin using TiO2 photocatalysis. *Applied Catalysis B: Environmental*, **2011**, 108-109, 1-5	21.8	24

50	Photocatalytic reactors for environmental remediation: a review. *Journal of Chemical Technology and Biotechnology*, **2011**, 86, 1002-1017	3.5	191
49	Remediation of oily wastewater from an interceptor tank using a novel photocatalytic drum reactor. *Desalination and Water Treatment*, **2011**, 26, 87-91		13
48	The degradation of microcystin-LR using doped visible light absorbing photocatalysts. *Chemosphere* , **2010**, 78, 1182-5	8.4	33
47	Development of a slurry continuous flow reactor for photocatalytic treatment of industrial waste water. *Journal of Photochemistry and Photobiology A: Chemistry*, **2010**, 211, 42-46	4.7	44
46	Photobactericidal effects of TiO2 thin films at low temperatures□A preliminary study. *Journal of Photochemistry and Photobiology A: Chemistry*, **2010**, 216, 290-294	4.7	18
45	A new generation of biocides for control of crustacea in fish farms. *Journal of Photochemistry and Photobiology B: Biology*, **2009**, 95, 58-63	6.7	13
44	Variables to be considered when assessing the photocatalytic destruction of bacterial pathogens. *Chemosphere*, **2009**, 74, 1374-8	8.4	43
43	The photocatalytic decomposition of microcystin-LR using selected titanium dioxide materials. *Chemosphere*, **2009**, 76, 549-53	8.4	46
42	Environmental Forensic Investigations: The Potential Use of a Novel Heavy Metal Sensor and Novel Taggants **2009**, 477-490		1
41	Preface to the Special Issue on Selected Papers from the Second International Conference on Semiconductor Photochemistry SP-2. *International Journal of Photoenergy*, **2008**, 2008, 1-2	2.1	
40	Synthesis of Visible-Light-Activated Yellow AmorphousTiO2Photocatalyst. *International Journal of Photoenergy*, **2008**, 2008, 1-6	2.1	23
39	Novel Photocatalytic Reactor Development for Removal of Hydrocarbons from Water. *International Journal of Photoenergy*, **2008**, 2008, 1-7	2.1	20
38	Photocatalytic Destruction of Geosmin Using Novel Pelleted Titanium Dioxide. *Journal of Advanced Oxidation Technologies*, **2008**, 11,		3
37	Multi-bubble sonoluminescence: laboratory curiosity, or real world application? **2008**,		1
36	Development of a biocidal treatment regime to inhibit biological growths on cultural heritage: BIODAM. *Environmental Geology*, **2008**, 56, 631-641		67
35	Voltammetric in situ measurements of heavy metals in soil using a portable electrochemical instrument. *Measurement: Journal of the International Measurement Confederation*, **2007**, 40, 960-967	4.6	20
34	The application of TiO2 photocatalysis for disinfection of water contaminated with pathogenic micro-organisms: a review. *Research on Chemical Intermediates*, **2007**, 33, 359-375	2.8	274
33	Intelligent potentiostat for identification of heavy metals in situ. *Review of Scientific Instruments*, **2006**, 77, 014103	1.7	5

32	Acidity compensation of electrochemical measurements for on-site monitoring of heavy metals. *Transactions of the Institute of Measurement and Control*, **2006**, 28, 323-333	1.8	1
31	Photosensitized destruction of Chlorella vulgaris by Methylene Blue or Nuclear Fast Red combined with hydrogen peroxide under visible light irradiation. *Environmental Science & Technology*, **2006**, 40, 2421-5	10.3	20
30	On-Site Monitoring and Cartographical Mapping of Heavy Metals. *Instrumentation Science and Technology*, **2006**, 34, 489-499	1.4	8
29	Effect of Polyethylenimine, a Cell Permeabilizer, on the Photosensitized Destruction of Algae by Methylene Blue and Nuclear Fast Red. *Photochemistry and Photobiology*, **2006**, 82, 1662-1667	3.6	4
28	The application of Raman and anti-stokes Raman spectroscopy for in situ monitoring of structural changes in laser irradiated titanium dioxide materials. *Applied Surface Science*, **2006**, 252, 7948-7952	6.7	42
27	Photo-dynamic biocidal action of methylene blue and hydrogen peroxide on the cyanobacterium Synechococcus leopoliensis under visible light irradiation. *Journal of Photochemistry and Photobiology B: Biology*, **2006**, 83, 63-8	6.7	17
26	Effect of polyethylenimine, a cell permeabilizer, on the photosensitized destruction of algae by methylene blue and nuclear fast red. *Photochemistry and Photobiology*, **2006**, 82, 1662-7	3.6	
25	A comparison of the effectiveness of TiO2 photocatalysis and UVA photolysis for the destruction of three pathogenic micro-organisms. *Journal of Photochemistry and Photobiology A: Chemistry*, **2005**, 175, 51-56	4.7	180
24	The photocatalytic destruction of the cyanotoxin, nodularin using TiO2. *Applied Catalysis B: Environmental*, **2005**, 60, 245-252	21.8	29
23	On-line monitoring of laser modification of titanium dioxide using optical surface second harmonic. *Applied Surface Science*, **2004**, 222, 33-42	6.7	4
22	Characterization of novel Ag on TiO2 films for surface-enhanced Raman scattering. *Applied Spectroscopy*, **2004**, 58, 922-8	3.1	34
21	The destruction of 2-methylisoborneol and geosmin using titanium dioxide photocatalysis. *Applied Catalysis B: Environmental*, **2003**, 44, 9-13	21.8	53
20	The alteration of the structural properties and photocatalytic activity of TiO2 following exposure to non-linear irradiation sources. *Applied Catalysis B: Environmental*, **2003**, 44, 173-184	21.8	43
19	Processes influencing surface interaction and photocatalytic destruction of microcystins on titanium dioxide photocatalysts. *Journal of Catalysis*, **2003**, 213, 109-113	7.3	95
18	Mechanistic studies of the photocatalytic oxidation of microcystin-LR: an investigation of byproducts of the decomposition process. *Environmental Science & Technology*, **2003**, 37, 3214-9	10.3	121
17	Mechanistic and toxicity studies of the photocatalytic oxidation of microcystin-LR. *Journal of Photochemistry and Photobiology A: Chemistry*, **2002**, 148, 349-354	4.7	48
16	. *Journal of Photochemistry and Photobiology A: Chemistry*, **2002**, 148, 1-3	4.7	3
15	A Multi-capability Sensor for Hydrocarbons, Synthetic-based Fluids and Heavy Metals: Applications for Environmental Monitoring During Removal of Drill Cuttings Piles. *Underwater Technology*, **2002**, 25, 69-76	0.3	5

14	Hydrogen peroxide enhanced photocatalytic oxidation of microcystin-LR using titanium dioxide. *Applied Catalysis B: Environmental*, **2000**, 25, 59-67	21.8	168
13	Modification and enhanced photocatalytic activity of TiO2 following exposure to non-linear irradiation sources. *Journal of Photochemistry and Photobiology A: Chemistry*, **1999**, 122, 69-71	4.7	29
12	The Involvement of Phycocyanin Pigment in the Photodecomposition of the Cyanobacterial Toxin, Microcystin-LR. *Journal of Porphyrins and Phthalocyanines*, **1999**, 03, 544-551	1.8	29
11	Physico-chemical treatment methods for the removal of microcystins (cyanobacterial hepatotoxins) from potable waters. *Chemical Society Reviews*, **1999**, 28, 217-224	58.5	166
10	Detoxification of Microcystins (Cyanobacterial Hepatotoxins) Using TiO2 Photocatalytic Oxidation. *Environmental Science & Technology*, **1999**, 33, 771-775	10.3	120
9	Processes influencing the destruction of microcystin-LR by TiO2 photocatalysis. *Journal of Photochemistry and Photobiology A: Chemistry*, **1998**, 116, 215-219	4.7	22
8	Factors affecting the photoelectrochemical fixation of carbon dioxide with semiconductor colloids. *Journal of Photochemistry and Photobiology A: Chemistry*, **1998**, 118, 31-40	4.7	57
7	Destruction of cyanobacterial toxins by semiconductorphotocatalysis. *Chemical Communications*, **1997**, 393-394	5.8	56
6	Semiconductor photocatalysis: an environmentally acceptable alternative production technique and effluent treatment process. *Journal of Cleaner Production*, **1996**, 4, 203-212	10.3	90
5	Photoelectrochemistry with quinone radical anions Photoassisted reduction of halobenzenes and carbonyl compounds. *Journal of the Chemical Society Perkin Transactions II*, **1994**, 1829-1832		5
4	Photoelectrochemistry with quinone radical anions: kinetics of homogeneous redox catalysis. *Analyst, The*, **1994**, 119, 827	5	3
3	Photoelectrochemistry using quinone radical anions. *Journal of the Chemical Society, Faraday Transactions*, **1994**, 90, 2249		23
2	Photoreduction of carbon dioxide on zinc sulfide to give four-carbon and two-carbon acids. *Journal of the Chemical Society Chemical Communications*, **1993**, 349		33
1	Photocatalytic Detoxification of Water and Air367-423		10