

Peter K J Robertson

List of Publications by Citations

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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	The application of TiO ₂ photocatalysis for disinfection of water contaminated with pathogenic micro-organisms: a review. <i>Research on Chemical Intermediates</i> , 2007 , 33, 359-375	2.8	274
102	Overview of the current ISO tests for photocatalytic materials. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2012 , 237, 7-23	4.7	197
101	Photocatalytic reactors for environmental remediation: a review. <i>Journal of Chemical Technology and Biotechnology</i> , 2011 , 86, 1002-1017	3.5	191
100	A comparison of the effectiveness of TiO ₂ photocatalysis and UVA photolysis for the destruction of three pathogenic micro-organisms. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2005 , 175, 51-56	4.7	180
99	Hydrogen peroxide enhanced photocatalytic oxidation of microcystin-LR using titanium dioxide. <i>Applied Catalysis B: Environmental</i> , 2000 , 25, 59-67	21.8	168
98	Physico-chemical treatment methods for the removal of microcystins (cyanobacterial hepatotoxins) from potable waters. <i>Chemical Society Reviews</i> , 1999 , 28, 217-224	58.5	166
97	Removal of microorganisms and their chemical metabolites from water using semiconductor photocatalysis. <i>Journal of Hazardous Materials</i> , 2012 , 211-212, 161-71	12.8	152
96	Mechanistic studies of the photocatalytic oxidation of microcystin-LR: an investigation of byproducts of the decomposition process. <i>Environmental Science & Technology</i> , 2003 , 37, 3214-9	10.3	121
95	Detoxification of Microcystins (Cyanobacterial Hepatotoxins) Using TiO ₂ Photocatalytic Oxidation. <i>Environmental Science & Technology</i> , 1999 , 33, 771-775	10.3	120
94	Processes influencing surface interaction and photocatalytic destruction of microcystins on titanium dioxide photocatalysts. <i>Journal of Catalysis</i> , 2003 , 213, 109-113	7.3	95
93	Semiconductor photocatalysis: an environmentally acceptable alternative production technique and effluent treatment process. <i>Journal of Cleaner Production</i> , 1996 , 4, 203-212	10.3	90
92	Development of a biocidal treatment regime to inhibit biological growths on cultural heritage: BIODAM. <i>Environmental Geology</i> , 2008 , 56, 631-641		67
91	Simultaneous cellulose conversion and hydrogen production assisted by cellulose decomposition under UV-light photocatalysis. <i>Chemical Communications</i> , 2016 , 52, 1673-6	5.8	66
90	Comparative assessment of visible light and UV active photocatalysts by hydroxyl radical quantification. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2017 , 334, 13-19	4.7	60
89	Factors affecting the photoelectrochemical fixation of carbon dioxide with semiconductor colloids. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1998 , 118, 31-40	4.7	57
88	Destruction of cyanobacterial toxins by semiconductor photocatalysis. <i>Chemical Communications</i> , 1997 , 393-394	5.8	56
87	The destruction of 2-methylisoborneol and geosmin using titanium dioxide photocatalysis. <i>Applied Catalysis B: Environmental</i> , 2003 , 44, 9-13	21.8	53

86	Mechanistic and toxicity studies of the photocatalytic oxidation of microcystin-LR. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002 , 148, 349-354	4.7	48
85	Mechanisms of Simultaneous Hydrogen Production and Formaldehyde Oxidation in H ₂ O and D ₂ O over Platinized TiO ₂ . <i>ACS Catalysis</i> , 2017 , 7, 4753-4758	13.1	48
84	The photocatalytic decomposition of microcystin-LR using selected titanium dioxide materials. <i>Chemosphere</i> , 2009 , 76, 549-53	8.4	46
83	Development of a slurry continuous flow reactor for photocatalytic treatment of industrial waste water. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2010 , 211, 42-46	4.7	44
82	Variables to be considered when assessing the photocatalytic destruction of bacterial pathogens. <i>Chemosphere</i> , 2009 , 74, 1374-8	8.4	43
81	The alteration of the structural properties and photocatalytic activity of TiO ₂ following exposure to non-linear irradiation sources. <i>Applied Catalysis B: Environmental</i> , 2003 , 44, 173-184	21.8	43
80	In situ ATR-FTIR study of H ₂ O and D ₂ O adsorption on TiO ₂ under UV irradiation. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 22940-6	3.6	42
79	The application of Raman and anti-stokes Raman spectroscopy for in situ monitoring of structural changes in laser irradiated titanium dioxide materials. <i>Applied Surface Science</i> , 2006 , 252, 7948-7952	6.7	42
78	Removal of phthalates from aqueous solution by semiconductor photocatalysis: A review. <i>Journal of Hazardous Materials</i> , 2021 , 402, 123461	12.8	39
77	Cellulose II as bioethanol feedstock and its advantages over native cellulose. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 77, 182-192	16.2	38
76	Effect of controlled periodic-based illumination on the photonic efficiency of photocatalytic degradation of methyl orange. <i>Journal of Catalysis</i> , 2012 , 290, 138-142	7.3	37
75	Characterization of novel Ag on TiO ₂ films for surface-enhanced Raman scattering. <i>Applied Spectroscopy</i> , 2004 , 58, 922-8	3.1	34
74	Photocatalytic degradation of eleven microcystin variants and nodularin by TiO ₂ coated glass microspheres. <i>Journal of Hazardous Materials</i> , 2015 , 300, 347-353	12.8	33
73	The degradation of microcystin-LR using doped visible light absorbing photocatalysts. <i>Chemosphere</i> , 2010 , 78, 1182-5	8.4	33
72	Photoreduction of carbon dioxide on zinc sulfide to give four-carbon and two-carbon acids. <i>Journal of the Chemical Society Chemical Communications</i> , 1993 , 349		33
71	The application of a novel fluidised photo reactor under UV-visible and natural solar irradiation in the photocatalytic generation of hydrogen. <i>Chemical Engineering Journal</i> , 2016 , 286, 610-621	14.7	29
70	The photocatalytic destruction of the cyanotoxin, nodularin using TiO ₂ . <i>Applied Catalysis B: Environmental</i> , 2005 , 60, 245-252	21.8	29
69	Modification and enhanced photocatalytic activity of TiO ₂ following exposure to non-linear irradiation sources. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1999 , 122, 69-71	4.7	29

68	The Involvement of Phycocyanin Pigment in the Photodecomposition of the Cyanobacterial Toxin, Microcystin-LR. <i>Journal of Porphyrins and Phthalocyanines</i> , 1999 , 03, 544-551	1.8	29
67	A continuous flow packed bed photocatalytic reactor for the destruction of 2-methylisoborneol and geosmin utilising pelletised TiO ₂ . <i>Chemical Engineering Journal</i> , 2014 , 235, 293-298	14.7	28
66	A study of the kinetic solvent isotope effect on the destruction of microcystin-LR and geosmin using TiO ₂ photocatalysis. <i>Applied Catalysis B: Environmental</i> , 2011 , 108-109, 1-5	21.8	24
65	Synthesis of Visible-Light-Activated Yellow AmorphousTiO ₂ Photocatalyst. <i>International Journal of Photoenergy</i> , 2008 , 2008, 1-6	2.1	23
64	Photoelectrochemistry using quinone radical anions. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1994 , 90, 2249		23
63	Processes influencing the destruction of microcystin-LR by TiO ₂ photocatalysis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1998 , 116, 215-219	4.7	22
62	Controlled periodic illumination in semiconductor photocatalysis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2016 , 319-320, 96-106	4.7	21
61	The effect of pH on the photonic efficiency of the destruction of methyl orange under controlled periodic illumination with UV-LED sources. <i>Chemical Engineering Journal</i> , 2014 , 246, 337-342	14.7	20
60	Novel Photocatalytic Reactor Development for Removal of Hydrocarbons from Water. <i>International Journal of Photoenergy</i> , 2008 , 2008, 1-7	2.1	20
59	Voltammetric in situ measurements of heavy metals in soil using a portable electrochemical instrument. <i>Measurement: Journal of the International Measurement Confederation</i> , 2007 , 40, 960-967	4.6	20
58	Photosensitized destruction of <i>Chlorella vulgaris</i> by Methylene Blue or Nuclear Fast Red combined with hydrogen peroxide under visible light irradiation. <i>Environmental Science & Technology</i> , 2006 , 40, 2421-5	10.3	20
57	Pathways of the photocatalytic reaction of acetate in H ₂ O and D ₂ O: A combined EPR and ATR-FTIR study. <i>Journal of Catalysis</i> , 2016 , 344, 831-840	7.3	19
56	Development of a doped titania immobilised thin film multi tubular photoreactor. <i>Applied Catalysis B: Environmental</i> , 2013 , 130-131, 99-105	21.8	19
55	Photobactericidal effects of TiO ₂ thin films at low temperatures – a preliminary study. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2010 , 216, 290-294	4.7	18
54	Photocatalytic OH radical formation and quantification over TiO ₂ P25: Producing a robust and optimised screening method. <i>Chinese Chemical Letters</i> , 2018 , 29, 773-777	8.1	17
53	Photo-dynamic biocidal action of methylene blue and hydrogen peroxide on the cyanobacterium <i>Synechococcus leopoliensis</i> under visible light irradiation. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2006 , 83, 63-8	6.7	17
52	Photocatalytic removal of the cyanobacterium <i>Microcystis aeruginosa</i> PCC7813 and four microcystins by TiO coated porous glass beads with UV-LED irradiation. <i>Science of the Total Environment</i> , 2020 , 745, 141154	10.2	17
51	Exploring the photocatalytic hydrogen production potential of titania doped with alumina derived from foil waste. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 34494-34502	6.7	15

50	Mathematical modelling of quantum yield enhancements of methyl orange photooxidation in aqueous TiO ₂ suspensions under controlled periodic UV LED illumination. <i>Applied Catalysis B: Environmental</i> , 2014 , 156-157, 398-403	21.8	15
49	An investigation of the role of pH in the rapid photocatalytic degradation of MCPA and its primary intermediate by low-power UV LED irradiation. <i>Chemical Engineering Journal</i> , 2019 , 359, 112-118	14.7	14
48	A new generation of biocides for control of crustacea in fish farms. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2009 , 95, 58-63	6.7	13
47	Remediation of oily wastewater from an interceptor tank using a novel photocatalytic drum reactor. <i>Desalination and Water Treatment</i> , 2011 , 26, 87-91		13
46	A one-pot method for building colloidal nanoparticles into bulk dry powders with nanoscale magnetic, plasmonic and catalytic functionalities. <i>Applied Materials Today</i> , 2019 , 15, 398-404	6.6	12
45	UV LED Sources for Heterogeneous Photocatalysis. <i>Handbook of Environmental Chemistry</i> , 2014 , 159-179	9.8	12
44	Photocatalytic Detoxification of Water and Air	367-423	10
43	Removal of microcystins from a waste stabilisation lagoon: Evaluation of a packed-bed continuous flow TiO ₂ reactor. <i>Chemosphere</i> , 2020 , 245, 125575	8.4	10
42	Using cellulose polymorphs for enhanced hydrogen production from photocatalytic reforming. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 1971-1975	5.8	9
41	A photocatalytic impeller reactor for gas phase heterogeneous photocatalysis. <i>Journal of Environmental Chemical Engineering</i> , 2017 , 5, 3942-3948	6.8	9
40	Quantification of hydroxyl radicals in photocatalysis and acoustic cavitation: Utility of coumarin as a chemical probe. <i>Chemical Engineering Journal</i> , 2021 , 420, 127560	14.7	9
39	On-Site Monitoring and Cartographical Mapping of Heavy Metals. <i>Instrumentation Science and Technology</i> , 2006 , 34, 489-499	1.4	8
38	Ionic liquids tethered to a preorganised 1,2-diamide motif for extraction of lanthanides. <i>Green Chemistry</i> , 2019 , 21, 2583-2588	10	7
37	Graphitic-C ₃ N ₄ coated floating glass beads for photocatalytic destruction of synthetic and natural organic compounds in water under UV light. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2021 , 405, 112935	4.7	7
36	From Ideal Reactor Concepts to Reality: The Novel Drum Reactor for Photocatalytic Wastewater Treatment. <i>International Journal of Chemical Reactor Engineering</i> , 2013 , 11, 621-632	1.2	6
35	All in one photo-reactor pod containing TiO ₂ coated glass beads and LEDs for continuous photocatalytic destruction of cyanotoxins in water. <i>Environmental Science: Water Research and Technology</i> , 2020 , 6, 945-950	4.2	6
34	Enhanced photocatalytic degradation of 2-methyl-4-chlorophenoxyacetic acid (MCPA) by the addition of HO ₂ . <i>Chemosphere</i> , 2021 , 275, 130082	8.4	6
33	The use of titanium dioxide nanotubes as photoanodes for chloride oxidation. <i>Materials Science in Semiconductor Processing</i> , 2020 , 109, 104930	4.3	5

32	The influence of microbial factors on the susceptibility of bacteria to photocatalytic destruction. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2015 , 311, 53-58	4.7	5
31	Intelligent potentiostat for identification of heavy metals in situ. <i>Review of Scientific Instruments</i> , 2006 , 77, 014103	1.7	5
30	A Multi-capability Sensor for Hydrocarbons, Synthetic-based Fluids and Heavy Metals: Applications for Environmental Monitoring During Removal of Drill Cuttings Piles. <i>Underwater Technology</i> , 2002 , 25, 69-76	0.3	5
29	Photoelectrochemistry with quinone radical anions photoassisted reduction of halobenzenes and carbonyl compounds. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1994 , 1829-1832		5
28	Mixing regime simulation and cellulose particle tracing in a stacked frame photocatalytic reactor. <i>Chemical Engineering Journal</i> , 2017 , 313, 301-308	14.7	4
27	Influence of bacterial, environmental and physical factors in design of photocatalytic reactors for water disinfection. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018 , 366, 136-141	4.7	4
26	Halogen-bond mediated efficient storage of extremely volatile perfluoroiodides in ionic liquids. <i>Chemical Communications</i> , 2019 , 55, 9088-9091	5.8	4
25	Effect of Polyethylenimine, a Cell Permeabilizer, on the Photosensitized Destruction of Algae by Methylene Blue and Nuclear Fast Red. <i>Photochemistry and Photobiology</i> , 2006 , 82, 1662-1667	3.6	4
24	On-line monitoring of laser modification of titanium dioxide using optical surface second harmonic. <i>Applied Surface Science</i> , 2004 , 222, 33-42	6.7	4
23	Observation of stimulated emission from Rhodamine 6G-polymer aggregate adsorbed at foam interfaces. <i>JPhys Energy</i> , 2019 , 1, 015007	4.9	4
22	Effect of Ball-Milling Pretreatment of Cellulose on Its Photoreforming for H Production.. <i>ACS Sustainable Chemistry and Engineering</i> , 2022 , 10, 4862-4871	8.3	4
21	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. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 2727-2740	3.9	3
20	Photocatalytic Destruction of Geosmin Using Novel Pelleted Titanium Dioxide. <i>Journal of Advanced Oxidation Technologies</i> , 2008 , 11,		3
19	. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002 , 148, 1-3	4.7	3
18	Photoelectrochemistry with quinone radical anions: kinetics of homogeneous redox catalysis. <i>Analyst, The</i> , 1994 , 119, 827	5	3
17	Isotope Effects in Photocatalysis: An Underexplored Issue. <i>ACS Omega</i> , 2021 , 6, 11113-11121	3.9	3
16	Exploring lignin valorisation: the application of photocatalysis for the degradation of the β linkage. <i>JPhys Energy</i> , 2021 , 3, 035002	4.9	3
15	In Situ ATR-FTIR Investigation of the Effects of H ₂ O and D ₂ O Adsorption on the TiO ₂ Surface. <i>ECS Transactions</i> , 2017 , 75, 101-113	1	2

14	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
13	Photocatalytic reforming of glycerol to H ₂ in a thin film Pt-TiO ₂ recirculating photoreactor. <i>Journal of Chemical Technology and Biotechnology</i> , 2020 , 95, 2619	3.5	2
12	The use of a novel compact fluorosensor for in situ monitoring of the photocatalytic destruction of methylene blue dye effluents. <i>Sensors and Actuators B: Chemical</i> , 2012 , 168, 118-122	8.5	1
11	Energy efficient operation of photocatalytic reactors based on UV LEDs for pollution remediation in water 2017 ,		1
10	Environmental Forensic Investigations: The Potential Use of a Novel Heavy Metal Sensor and Novel Taggants 2009 , 477-490		1
9	Multi-bubble sonoluminescence: laboratory curiosity, or real world application? 2008 ,		1
8	Acidity compensation of electrochemical measurements for on-site monitoring of heavy metals. <i>Transactions of the Institute of Measurement and Control</i> , 2006 , 28, 323-333	1.8	1
7	Antisolvent Crystallization using a Fluidic Oscillator: Modeling and Validation. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 12752-12766	3.9	1
6	Cellulose Photocatalysis for Renewable Energy Production. <i>Environmental Chemistry for A Sustainable World</i> , 2021 , 1-34	0.8	0
5	Photocatalytic radical species: An overview of how they are generated, detected, and measured 2021 , 85-118		0
4	Comparison of UV-A photolytic and UV/TiO photocatalytic effects on <i>Microcystis aeruginosa</i> PCC7813 and four microcystin analogues: A pilot scale study. <i>Journal of Environmental Management</i> , 2021 , 298, 113519	7.9	0
3	Kinetic Modelling of the Photocatalytic Degradation of Diisobutyl Phthalate and Coupling with Acoustic Cavitation. <i>Chemical Engineering Journal</i> , 2022 , 136494	14.7	0
2	Preface to the Special Issue on Selected Papers from the Second International Conference on Semiconductor Photochemistry SP-2. <i>International Journal of Photoenergy</i> , 2008 , 2008, 1-2	2.1	
1	Effect of polyethylenimine, a cell permeabilizer, on the photosensitized destruction of algae by methylene blue and nuclear fast red. <i>Photochemistry and Photobiology</i> , 2006 , 82, 1662-7	3.6	