James A Mcdonald

List of Publications by Year
in descending order

78 papers	3,970 citations	109264 35 h-index	118793 62 g-index
79 all docs	79 docs citations	79 times ranked	3961 citing authors

#	Article	IF	Citations
1	Removal of trace organics by MBR treatment: The role of molecular properties. Water Research, 2011, 45, 2439-2451.	5.3	402
2	Combining MBR and NF/RO membrane filtration for the removal of trace organics in indirect potable water reuse applications. Journal of Membrane Science, 2010, 365, 206-215.	4.1	212
3	Sorption of emerging trace organic compounds onto wastewater sludge solids. Water Research, 2011, 45, 3417-3426.	5.3	203
4	Performance of a novel osmotic membrane bioreactor (OMBR) system: Flux stability and removal of trace organics. Bioresource Technology, 2012, 113, 201-206.	4.8	164
5	Removal of trace organics by anaerobic membrane bioreactors. Water Research, 2014, 49, 103-112.	5.3	147
6	Removal of trace organic contaminants by the forward osmosis process. Separation and Purification Technology, 2013, 103, 258-266.	3.9	144
7	Effect of mixed liquor pH on the removal of trace organic contaminants in a membrane bioreactor. Bioresource Technology, 2010, 101, 1494-1500.	4.8	135
8	Development of a predictive framework to assess the removal of trace organic chemicals by anaerobic membrane bioreactor. Bioresource Technology, 2015, 189, 391-398.	4.8	107
9	Long-Lived Charge-Separated State Produced by Photoinduced Electron Transfer in a Zinc Imidazoporphyrin-C60Dyad. Organic Letters, 2003, 5, 2719-2721.	2.4	96
10	Disinfectant residual stability leading to disinfectant decay and by-product formation in drinking water distribution systems: A systematic review. Water Research, 2019, 153, 335-348.	5.3	95
11	Occurrence of trace organic contaminants in wastewater sludge and their removals by anaerobic digestion. Bioresource Technology, 2016, 210, 153-159.	4.8	94
12	Removal of pharmaceuticals and endocrine disrupting chemicals by a submerged membrane photocatalysis reactor (MPR). Separation and Purification Technology, 2014, 127, 131-139.	3.9	93
13	An anaerobic membrane bioreactor â€“ membrane distillation hybrid system for energy recovery and water reuse: Removal performance of organic carbon, nutrients, and trace organic contaminants. Science of the Total Environment, 2018, 628-629, 358-365.	3.9	92
14	Effects of salinity build-up on the performance of an anaerobic membrane bioreactor regarding basic water quality parameters and removal of trace organic contaminants. Bioresource Technology, 2016, 216, 399-405.	4.8	83
15	Effects of caustic cleaning on pore size of nanofiltration membranes and their rejection of trace organic chemicals. Journal of Membrane Science, 2013, 447, 153-162.	4.1	82
16	Nanofiltration of trace organic chemicals: A comparison between ceramic and polymeric membranes. Separation and Purification Technology, 2014, 136, 258-264.	3.9	74
17	Analysis of N-nitrosamines in water by isotope dilution gas chromatographyâ€“electron ionisation tandem mass spectrometry. Talanta, 2012, 99, 146-154.	2.9	70
18	Effects of feed solution characteristics on the rejection of N-nitrosamines by reverse osmosis membranes. Journal of Membrane Science, 2012, 409-410, 66-74.	4.1	65

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19	An assessment of endocrine activity in Australian rivers using chemical and in vitro analyses. Environmental Science and Pollution Research, 2014, 21, 12951-12967.	2.7	62
20	N-nitrosamine rejection by nanofiltration and reverse osmosis membranes: The importance of membrane characteristics. Desalination, 2013, 316, 67-75.	4.0	61
21	A National Survey of Trace Organic Contaminants in Australian Rivers. Journal of Environmental Quality, 2014, 43, 1702-1712.	1.0	60
22	Effects of membrane fouling on N-nitrosamine rejection by nanofiltration and reverse osmosis membranes. Journal of Membrane Science, 2013, 427, 311-319.	4.1	59
23	The fate of trace organic contaminants during anaerobic digestion of primary sludge: A pilot scale study. Bioresource Technology, 2018, 256, 384-390.	4.8	55
24	Quinoxalino[2,3-bâ€˜]porphyrins Behave as Ï€-Expanded Porphyrins upon One-Electron Reduction:â€‰ Broad Control of the Degree of Delocalization through Substitution at the Macrocycle Periphery. Journal of Physical Chemistry B, 2007, 111, 8762-8774.	1.2	54
25	N-nitrosamine rejection by reverse osmosis membranes: A full-scale study. Water Research, 2013, 47, 6141-6148.	5.3	53
26	Fate of trace organic compounds during treatment by nanofiltration. Journal of Membrane Science, 2011, 373, 130-139.	4.1	52
27	Nutrient and trace organic contaminant removal from wastewater of a resort town: Comparison between a pilot and a full scale membrane bioreactor. International Biodeterioration and Biodegradation, 2015, 102, 40-48.	1.9	51
28	Is halogen content the most important factor in the removal of halogenated trace organics by MBR treatment?. Bioresource Technology, 2011, 102, 6299-6303.	4.8	47
29	Effects of sulphur on the performance of an anaerobic membrane bioreactor: Biological stability, trace organic contaminant removal, and membrane fouling. Bioresource Technology, 2018, 250, 171-177.	4.8	47
30	Fused porphyrin-imidazole systems: new building blocks for synthesis of porphyrin arrays. Journal of the Chemical Society Perkin Transactions 1, 1999, , 2429-2431.	0.9	45
31	Porphyrin-Mediated Cell Surface Heme Capture from Hemoglobin by Porphyromonas gingivalis. Journal of Bacteriology, 2003, 185, 2528-2537.	1.0	42
32	Distinct Enantiomeric Signals of Ibuprofen and Naproxen in Treated Wastewater and Sewer Overflow. Chirality, 2014, 26, 739-746.	1.3	42
33	Physiological and Proteomic Responses of Continuous Cultures of Microcystis aeruginosa PCC 7806 to Changes in Iron Bioavailability and Growth Rate. Applied and Environmental Microbiology, 2016, 82, 5918-5929.	1.4	42
34	Surface modification of nanofiltration membranes to improve the removal of organic micropollutants: Linking membrane characteristics to solute transmission. Water Research, 2021, 203, 117520.	5.3	40
35	Rejection of trace organic chemicals by a hollow fibre cellulose triacetate reverse osmosis membrane. Desalination, 2015, 368, 69-75.	4.0	37
36	Removal of N-nitrosamines by an aerobic membrane bioreactor. Bioresource Technology, 2013, 141, 41-45.	4.8	36

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37	New insights into the relationship between draw solution chemistry and trace organic rejection by forward osmosis. Journal of Membrane Science, 2019, 587, 117184.	4.1	34
38	Biocatalytic metalâ€“organic framework nanomotors for active water decontamination. Chemical Communications, 2020, 56, 14837-14840.	2.2	34
39	Effects of thermal pre-treatment and recuperative thickening on the fate of trace organic contaminants during anaerobic digestion of sewage sludge. International Biodeterioration and Biodegradation, 2017, 124, 146-154.	1.9	30
40	Concentrations of levonorgestrel and ethinylestradiol in wastewater effluents: Is the progestin also cause for concern?. Environmental Toxicology and Chemistry, 2016, 35, 1378-1385.	2.2	28
41	Electrochemistry and Spectroelectrochemistry of Î²,Î²â€²-Fused Quinoxalinoporphyrins and Related Extended Bis-porphyrins with Co(III), Co(II), and Co(I) Central Metal Ions. Inorganic Chemistry, 2010, 49, 1027-1038.	1.9	27
42	Removal of organic matter from wastewater reverse osmosis concentrate using granular activated carbon and anion exchange resin adsorbent columns in sequence. Chemosphere, 2020, 261, 127549.	4.2	27
43	Control of the site and potential of reduction and oxidation processes in Ï€-expanded quinoxalinoporphyrins. Physical Chemistry Chemical Physics, 2008, 10, 268-280.	1.3	26
44	Diffusion coefficients of the monomer and oligomers in hydroxyethyl methacrylate. Journal of Polymer Science Part A, 2003, 41, 2491-2501.	2.5	25
45	N-nitrosamine rejection by reverse osmosis: Effects of membrane exposure to chemical cleaning reagents. Desalination, 2014, 343, 60-66.	4.0	25
46	Enhanced nanofiltration rejection of inorganic and organic compounds from a wastewater-reclamation plantâ€™s micro-filtered water using adsorption pre-treatment. Separation and Purification Technology, 2021, 260, 118207.	3.9	25
47	Enantiomeric analysis of polycyclic musks in water by chiral gas chromatographyâ€“tandem mass spectrometry. Journal of Chromatography A, 2013, 1303, 66-75.	1.8	24
48	Biological performance and trace organic contaminant removal by a side-stream ceramic nanofiltration membrane bioreactor. International Biodeterioration and Biodegradation, 2016, 113, 49-56.	1.9	23
49	A multivariate Bayesian network analysis of water quality factors influencing trihalomethanes formation in drinking water distribution systems. Water Research, 2021, 190, 116712.	5.3	23
50	Rejection of small solutes by reverse osmosis membranes for water reuse applications: A pilot-scale study. Desalination, 2014, 350, 28-34.	4.0	22
51	Analysis of organophosphate flame retardants and plasticisers in water by isotope dilution gas chromatographyâ€“electron ionisation tandem mass spectrometry. Talanta, 2015, 143, 114-120.	2.9	22
52	Synthetically tuneable biomimetic artificial photosynthetic reaction centres that closely resemble the natural system in purple bacteria. Chemical Science, 2016, 7, 6534-6550.	3.7	22
53	Occurrence and bioconcentration of micropollutants in Silver Perch (Bidyanus bidyanus) in a reclaimed water reservoir. Science of the Total Environment, 2019, 650, 585-593.	3.9	22
54	Modelling the rejection of N-nitrosamines by a spiral-wound reverse osmosis system: Mathematical model development and validation. Journal of Membrane Science, 2014, 454, 212-219.	4.1	20

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55	Rejection of trace organic chemicals by a nanofiltration membrane: the role of molecular properties and effects of caustic cleaning. Environmental Science: Water Research and Technology, 2015, 1, 846-854.	1.2	20
56	ASSESSMENT OF TRACE ORGANIC CHEMICAL REMOVAL BY A MEMBRANE BIOREACTOR USING GAS CHROMATOGRAPHY/MASS SPECTROMETRY AND A YEAST SCREEN BIOASSAY. Environmental Toxicology and Chemistry, 2009, 28, 2537.	2.2	19
57	Fate of trace organic contaminants in oxic-settling-anoxic (OSA) process applied for biosolids reduction during wastewater treatment. Bioresource Technology, 2017, 240, 181-191.	4.8	19
58	Histopathology, vitellogenin and chemical body burden in mosquitofish (Gambusia holbrooki) sampled from six river sites receiving a gradient of stressors. Science of the Total Environment, 2018, 616-617, 1638-1648.	3.9	19
59	Impact of hazardous events on the removal of nutrients and trace organic contaminants by an anoxicâ€“aerobic membrane bioreactor receiving real wastewater. Bioresource Technology, 2015, 192, 192-201.	4.8	18
60	The fate of trace organic contaminants in sewage sludge during recuperative thickening anaerobic digestion. Bioresource Technology, 2017, 240, 197-206.	4.8	18
61	Continuous transformation of chiral pharmaceuticals in enzymatic membrane bioreactors for advanced wastewater treatment. Water Science and Technology, 2017, 76, 1816-1826.	1.2	18
62	Quantifying human exposure to contaminants for multiple-barrier water reuse systems. Water Science and Technology, 2010, 61, 77-83.	1.2	17
63	Aerobic biotransformation of 6:2 fluorotelomer sulfonate by Dietzia aurantiaca J3 under sulfur-limiting conditions. Science of the Total Environment, 2022, 829, 154587.	3.9	15
64	Effects of salinity on the removal of trace organic contaminants by membrane bioreactor treatment for water reuse. Desalination and Water Treatment, 2013, 51, 5164-5171.	1.0	13
65	Effect of fouling on removal of trace organic compounds by nanofiltration. Drinking Water Engineering and Science, 2011, 4, 71-82.	0.8	12
66	Ozonation of N-Nitrosamines in the Reverse Osmosis Concentrate from Water Recycling Applications. Ozone: Science and Engineering, 2014, 36, 174-180.	1.4	12
67	Glycerol dialkyl glycerol tetraethers (GDGT) distributions from soil to cave: Refining the speleothem paleothermometer. Organic Geochemistry, 2019, 136, 103890.	0.9	12
68	Validating the rejection of trace organic chemicals by reverse osmosis membranes using a pilot-scale system. Desalination, 2015, 358, 18-26.	4.0	10
69	Multivariate experimental design provides insights for the optimisation of rechloramination conditions and water age to control disinfectant decay and disinfection by-product formation in treated drinking water. Science of the Total Environment, 2022, 830, 154324.	3.9	9
70	An Introduction to the Scientific Process: Preparation of Poly(vinyl acetate) Glue. Journal of Chemical Education, 2001, 78, 1370.	1.1	8
71	Assessing the potential for trace organic contaminants commonly found in Australian rivers to induce vitellogenin in the native rainbowfish (Melanotaenia fluviatilis) and the introduced mosquitofish (Gambusia holbrooki). Aquatic Toxicology, 2017, 185, 105-120.	1.9	8
72	Occurrence and risk assessment of trace organic contaminants and metals in anaerobically co-digested sludge. Science of the Total Environment, 2022, 816, 151533.	3.9	4

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73	Chiral inversion of 2-arylpropionoic acid (2-APA) enantiomers during simulated biological wastewater treatment. Water Research, 2022, 209, 117871.	5.3	4
74	Structural requirements for recognition of essential porphyrin byPorphyromonas gingivalis. Journal of Porphyrins and Phthalocyanines, 2002, 06, 774-782.	0.4	3
75	Chemical monitoring strategy for the assessment of advanced water treatment plant performance. Water Science and Technology: Water Supply, 2010, 10, 961-968.	1.0	3
76	Chemical monitoring strategy for the assessment of advanced water treatment plant performance. Water Science and Technology, 2011, 63, 573-579.	1.2	3
77	Control of the site and potential of reduction and oxidation processes in pi-expanded quinoxalinoporphyrins. Physical Chemistry Chemical Physics, 2008, 10, 268-80.	1.3	2
78	Chiral Inversion of 2-Arylpropionic Acid Enantiomers under Anaerobic Conditions. Environmental Science & Technology, 2022, 56, 8197-8208.	4.6	2