Frederic Dl Leusch

List of Publications by Year in Descending Order

115 papers	4,755 citations	40 h-index	66 g-index
120 ext. papers	5,794 ext. citations	7.8 avg, IF	6.12 L-index

#	Paper	IF	Citations
115	Letter to the Editor regarding "Microplastics: A review of analytical methods, occurrence and characteristics in food, and potential toxicities to biota" by Bai et al. (2022).. *Science of the Total Environment*, **2022**, 152706	10.2	
114	Anaerobic digestion of sewage sludge has no effect on glucocorticoid and anti-progestagenic activity but increases estrogenicity three-fold. *Chemosphere*, **2022**, 286, 131753	8.4	1
113	Optimisation of an automated high-throughput micronucleus (HiTMiN) assay to measure genotoxicity of environmental contaminants.. *Chemosphere*, **2022**, 298, 134349	8.4	0
112	Chiral inversion of 2-arylpropionoic acid (2-APA) enantiomers during simulated biological wastewater treatment. *Water Research*, **2021**, 209, 117871	12.5	0
111	Estrogenic mixtures induce alterations in lipidomic profiles in the gonads of female oysters. *Chemosphere*, **2021**, 291, 132997	8.4	
110	Systematic assessment of data quality and quality assurance/quality control (QA/QC) of current research on microplastics in biosolids and agricultural soils. *Environmental Pollution*, **2021**, 294, 118629	9.3	3
109	Combining analytical and in□vitro techniques for comprehensive assessments of chemical exposure and effect in green sea turtles (Chelonia mydas). *Chemosphere*, **2021**, 274, 129752	8.4	3
108	An audit of microplastic abundance throughout three Australian wastewater treatment plants. *Chemosphere*, **2021**, 263, 128294	8.4	57
107	Exposure to estrogenic mixtures results in tissue-specific alterations to the metabolome of oysters. *Aquatic Toxicology*, **2021**, 231, 105722	5.1	4
106	Changes in global protein expression in sea turtle cells exposed to common contaminants indicates new biomarkers of chemical exposure. *Science of the Total Environment*, **2021**, 751, 141680	10.2	5
105	Converting mg/L to Particles/L: Reconciling the Occurrence and Toxicity Literature on Microplastics. *Environmental Science & Technology*, **2021**, 55, 11470-11472	10.3	6
104	A systematic review of freshwater microplastics in water and sediments: Recommendations for harmonisation to enhance future study comparisons. *Science of the Total Environment*, **2021**, 781, 146693	10.2	29
103	Terrestrial dissolved organic matter source affects disinfection by-product formation during water treatment and subsequent toxicity. *Environmental Pollution*, **2021**, 283, 117232	9.3	2
102	Systematic review of reptile reproductive toxicology to inform future research directions on endangered or threatened species, such as sea turtles. *Environmental Pollution*, **2021**, 286, 117470	9.3	2
101	Parental exposure to the synthetic estrogen 17□ethinylestradiol (EE2) affects offspring development in the Sydney rock oyster, Saccostrea glomerata. *Environmental Pollution*, **2020**, 266, 114994	9.3	5
100	Concentrations of some legacy pollutants have increased in South Australian bottlenose dolphins from 1989 to 2014. *Environmental Research*, **2020**, 189, 109834	7.9	1
99	Elucidating the performance of an integrated laccase- and persulfate-assisted process for degradation of trace organic contaminants (TrOCs). *Environmental Science: Water Research and Technology*, **2020**, 6, 1069-1082	4.2	7

98	Carbon dots derived from human hair for ppb level chloroform sensing in water. *Sustainable Materials and Technologies*, **2020**, 25, e00159	5.3	7
97	Microplastic pollution in a stormwater floating treatment wetland: Detection of tyre particles in sediment. *Science of the Total Environment*, **2020**, 713, 136356	10.2	65
96	Deriving safe short-term chemical exposure values (STEV) for drinking water. *Regulatory Toxicology and Pharmacology*, **2020**, 110, 104545	3.4	1
95	Sources, presence and potential effects of contaminants of emerging concern in the marine environments of the Great Barrier Reef and Torres Strait, Australia. *Science of the Total Environment*, **2020**, 719, 135140	10.2	51
94	Assessing species-specific differences for nuclear receptor activation for environmental water extracts. *Water Research*, **2020**, 185, 116247	12.5	4
93	Concentrations of legacy persistent organic pollutants and naturally produced MeO-PBDEs in dugongs (Dugong dugon) from Moreton Bay, Australia. *Chemosphere*, **2019**, 229, 500-508	8.4	10
92	Assessing the role of different dissolved organic carbon and bromide concentrations for disinfection by-product formation using chemical analysis and bioanalysis. *Environmental Science and Pollution Research*, **2019**, 26, 17100-17109	5.1	5
91	Effects of polyethylene microplastics on the acute toxicity of a synthetic pyrethroid to midge larvae (Chironomus tepperi) in synthetic and river water. *Science of the Total Environment*, **2019**, 671, 971-975	10.2	29
90	Persulfate oxidation-assisted membrane distillation process for micropollutant degradation and membrane fouling control. *Separation and Purification Technology*, **2019**, 222, 321-331	8.3	17
89	Degradation of diclofenac, trimethoprim, carbamazepine, and sulfamethoxazole by laccase from Trametes versicolor: Transformation products and toxicity of treated effluent. *Biocatalysis and Biotransformation*, **2019**, 37, 399-408	2.5	34
88	The utility of vitellogenin as a biomarker of estrogenic endocrine disrupting chemicals in molluscs. *Environmental Pollution*, **2019**, 248, 1067-1078	9.3	31
87	Cytotoxicity of organic and inorganic compounds to primary cell cultures established from internal tissues of Chelonia mydas. *Science of the Total Environment*, **2019**, 664, 958-967	10.2	13
86	Evaluating the enantiospecific differences of non-steroidal anti-inflammatory drugs (NSAIDs) using an ecotoxicity bioassay test battery. *Science of the Total Environment*, **2019**, 694, 133659	10.2	12
85	Towards Sustainable Environmental Quality: Priority Research Questions for the Australasian Region of Oceania. *Integrated Environmental Assessment and Management*, **2019**, 15, 917-935	2.5	11
84	Towards the development of standardised sea turtle primary cell cultures for toxicity testing. *Ecotoxicology and Environmental Safety*, **2019**, 173, 63-70	7	10
83	Global Transcriptional Analysis of Nontransformed Human Intestinal Epithelial Cells (FHs 74 Int) after Exposure to Selected Drinking Water Disinfection By-Products. *Environmental Health Perspectives*, **2019**, 127, 117006	8.4	14
82	Transformation of endocrine disrupting chemicals, pharmaceutical and personal care products during drinking water disinfection. *Science of the Total Environment*, **2019**, 657, 1480-1490	10.2	27
81	Primary green turtle (Chelonia mydas) skin fibroblasts as an in vitro model for assessing genotoxicity and oxidative stress. *Aquatic Toxicology*, **2019**, 207, 13-18	5.1	16

80	H NMR-based metabolomics reveals interactive effects between the carrier solvent methanol and a pharmaceutical mixture in an amphibian developmental bioassay with Limnodynastes peronii. *Chemosphere*, **2018**, 199, 372-381	8.4	14
79	Metabolite profiles of striped marsh frog (Limnodynastes peronii) larvae exposed to the anti-androgenic fungicides vinclozolin and propiconazole are consistent with altered steroidogenesis and oxidative stress. *Aquatic Toxicology*, **2018**, 199, 232-239	5.1	15
78	Charting a path towards non-destructive biomarkers in threatened wildlife: A systematic quantitative literature review. *Environmental Pollution*, **2018**, 234, 59-70	9.3	15
77	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	10.2	13
76	In vitro bioassays reveal that additives are significant contributors to the toxicity of commercial household pesticides. *Aquatic Toxicology*, **2018**, 199, 263-268	5.1	17
75	Analysis of endocrine activity in drinking water, surface water and treated wastewater from six countries. *Water Research*, **2018**, 139, 10-18	12.5	56
74	Environmentally relevant concentrations of polyethylene microplastics negatively impact the survival, growth and emergence of sediment-dwelling invertebrates. *Environmental Pollution*, **2018**, 236, 425-431	9.3	125
73	Biocatalytic degradation of pharmaceuticals, personal care products, industrial chemicals, steroid hormones and pesticides in a membrane distillation-enzymatic bioreactor. *Bioresource Technology*, **2018**, 247, 528-536	11	59
72	Downstream trends of in□vitro bioassay responses in a wastewater effluent-dominated river. *Chemosphere*, **2018**, 212, 182-192	8.4	11
71	What is driving the NF-B response in environmental water extracts?. *Chemosphere*, **2018**, 210, 645-652	8.4	5
70	Comparison of in□vitro and in□vivo bioassays to measure thyroid hormone disrupting activity in water extracts. *Chemosphere*, **2018**, 191, 868-875	8.4	26
69	Using fluorescence-parallel factor analysis for assessing disinfection by-product formation and natural organic matter removal efficiency in secondary treated synthetic drinking waters. *Science of the Total Environment*, **2018**, 640-641, 31-40	10.2	34
68	Analysis of the sensitivity of in vitro bioassays for androgenic, progestagenic, glucocorticoid, thyroid and estrogenic activity: Suitability for drinking and environmental waters. *Environment International*, **2017**, 99, 120-130	12.9	52
67	Wastewater treatment plants as a pathway for microplastics: Development of a new approach to sample wastewater-based microplastics. *Water Research*, **2017**, 112, 93-99	12.5	500
66	H NMR-based metabolomics reveals sub-lethal toxicity of a mixture of diabetic and lipid-regulating pharmaceuticals on amphibian larvae. *Aquatic Toxicology*, **2017**, 184, 123-132	5.1	21
65	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	5.1	7
64	Assessment of urban stream sediment pollutants entering estuaries using chemical analysis and multiple bioassays to characterise biological activities. *Science of the Total Environment*, **2017**, 593-594, 498-507	10.2	32
63	Hypothetical scenario exercises to improve planning and readiness for drinking water quality management during extreme weather events. *Water Research*, **2017**, 111, 100-108	12.5	9

62	Lessons and guidance for the management of safe drinking water during extreme weather events. *Environmental Science: Water Research and Technology*, **2017**, 3, 262-277	4.2	11
61	Exploring the oxidative stress response mechanism triggered by environmental water samples. *Environmental Sciences: Processes and Impacts*, **2017**, 19, 1126-1133	4.3	9
60	Applying mixture toxicity modelling to predict bacterial bioluminescence inhibition by non-specifically acting pharmaceuticals and specifically acting antibiotics. *Chemosphere*, **2017**, 173, 387-394	8.4	18
59	Impact of Microplastic Beads and Fibers on Waterflea (Ceriodaphnia dubia) Survival, Growth, and Reproduction: Implications of Single and Mixture Exposures. *Environmental Science & Technology*, **2017**, 51, 13397-13406	10.3	186
58	Photolysis and UV/H 2 O 2 of diclofenac, sulfamethoxazole, carbamazepine, and trimethoprim: Identification of their major degradation products by ESI□CM S and assessment of the toxicity of reaction mixtures. *Chemical Engineering Research and Design*, **2017**, 112, 222-234	5.5	66
57	Analysis of sugarcane herbicides in marine turtle nesting areas and assessment of risk using in□vitro toxicity assays. *Chemosphere*, **2017**, 185, 656-664	8.4	16
56	Development and application of a simple method to detect toxic chemicals in fruits and vegetables that can be implemented in a rudimentary laboratory setting: A proof of concept study. *Food Control*, **2017**, 73, 1023-1031	6.2	4
55	Degradation of Trace Organic Contaminants by a Membrane Distillation□Enzymatic Bioreactor. *Applied Sciences (Switzerland)*, **2017**, 7, 879	2.6	16
54	The current state and future directions of marine turtle toxicology research. *Environment International*, **2016**, 94, 113-123	12.9	44
53	Impacts of redox-mediator type on trace organic contaminants degradation by laccase: Degradation efficiency, laccase stability and effluent toxicity. *International Biodeterioration and Biodegradation*, **2016**, 113, 169-176	4.8	69
52	Concentrations of levonorgestrel and ethinylestradiol in wastewater effluents: Is the progestin also cause for concern?. *Environmental Toxicology and Chemistry*, **2016**, 35, 1378-85	3.8	19
51	Altered bioenergetics and developmental effects in striped marsh frog (Limnodynastes peronii) tadpoles exposed to UV treated sewage. *Aquatic Toxicology*, **2016**, 175, 30-8	5.1	9
50	Behaviour, development and metal accumulation in striped marsh frog tadpoles (Limnodynastes peronii) exposed to coal mine wastewater. *Aquatic Toxicology*, **2016**, 173, 218-227	5.1	20
49	Comparative sensitivity of aquatic invertebrate and vertebrate species to wastewater from an operational coal mine in central Queensland, Australia. *Ecotoxicology and Environmental Safety*, **2016**, 129, 1-9	7	11
48	Effects of coal mine wastewater on locomotor and non-locomotor activities of empire gudgeons (Hypseleotris compressa). *Ecotoxicology and Environmental Safety*, **2016**, 127, 36-42	7	1
47	Locomotor and behavioural responses of empire gudgeons (Hypseleotris compressa) exposed to coal mine wastewater. *Chemosphere*, **2016**, 144, 1560-6	8.4	7
46	Laccase-syringaldehyde-mediated degradation of trace organic contaminants in an enzymatic membrane reactor: Removal efficiency and effluent toxicity. *Bioresource Technology*, **2016**, 200, 477-84	11	59
45	Wastewater treatment plant effluent as a source of microplastics: review of the fate, chemical interactions and potential risks to aquatic organisms. *Water Science and Technology*, **2016**, 74, 2253-2269	2.2	149

44	Bioanalytical Approaches in Assessing Transformation Products. *ACS Symposium Series*, **2016**, 73-87	0.4	1
43	Removal of trace organic contaminants from domestic wastewater: A meta-analysis comparison of sewage treatment technologies. *Environment International*, **2016**, 92-93, 183-8	12.9	68
42	Transcriptomic and physiological changes in Eastern Mosquitofish (Gambusia holbrooki) after exposure to progestins and anti-progestagens. *Aquatic Toxicology*, **2016**, 179, 8-17	5.1	18
41	In vitro bioassays to evaluate complex chemical mixtures in recycled water. *Water Research*, **2015**, 80, 1-11	12.5	73
40	Impact of hazardous events on the removal of nutrients and trace organic contaminants by an anoxic-aerobic membrane bioreactor receiving real wastewater. *Bioresource Technology*, **2015**, 192, 192-201	11	16
39	Understanding the implications of dissolved organic carbon when assessing antagonism in vitro: An example with an estrogen receptor assay. *Chemosphere*, **2015**, 135, 341-6	8.4	19
38	Effect-based trigger values for in vitro bioassays: Reading across from existing water quality guideline values. *Water Research*, **2015**, 81, 137-48	12.5	57
37	Interlaboratory comparison of in vitro bioassays for screening of endocrine active chemicals in recycled water. *Water Research*, **2015**, 83, 303-9	12.5	42
36	Considerations when assessing antagonism in vitro: Why standardizing the agonist concentration matters. *Chemosphere*, **2015**, 135, 20-3	8.4	12
35	In Vitro Cytotoxicity and Adaptive Stress Responses to Selected Haloacetic Acid and Halobenzoquinone Water Disinfection Byproducts. *Chemical Research in Toxicology*, **2015**, 28, 2059-68	4	50
34	Extreme weather events: Should drinking water quality management systems adapt to changing risk profiles?. *Water Research*, **2015**, 85, 124-36	12.5	119
33	Bioanalytical tools: half a century of application for potable reuse. *Environmental Science: Water Research and Technology*, **2015**, 1, 606-621	4.2	29
32	In vitro cytotoxicity assessment of a hydraulic fracturing fluid. *Environmental Chemistry*, **2015**, 12, 286	3.2	5
31	Chemical and bioanalytical assessment of coal seam gas associated water. *Environmental Chemistry*, **2015**, 12, 267	3.2	7
30	A sensitive and high throughput bacterial luminescence assay for assessing aquatic toxicity--the BLT-Screen. *Environmental Sciences: Processes and Impacts*, **2015**, 17, 947-55	4.3	23
29	Degradation of a broad spectrum of trace organic contaminants by an enzymatic membrane reactor: Complementary role of membrane retention and enzymatic degradation. *International Biodeterioration and Biodegradation*, **2015**, 99, 115-122	4.8	50
28	Assessment of wastewater and recycled water quality: a comparison of lines of evidence from in vitro, in vivo and chemical analyses. *Water Research*, **2014**, 50, 420-31	12.5	85
27	Benchmarking organic micropollutants in wastewater, recycled water and drinking water with in vitro bioassays. *Environmental Science & Technology*, **2014**, 48, 1940-56	10.3	295

26	Continuous biotransformation of bisphenol A and diclofenac by laccase in an enzymatic membrane reactor. *International Biodeterioration and Biodegradation*, **2014**, 95, 25-32	4.8	71
25	Enhancement of trace organic contaminant degradation by crude enzyme extract from Trametes versicolor culture: Effect of mediator type and concentration. *Journal of the Taiwan Institute of Chemical Engineers*, **2014**, 45, 1855-1862	5.3	37
24	The effects of mediator and granular activated carbon addition on degradation of trace organic contaminants by an enzymatic membrane reactor. *Bioresource Technology*, **2014**, 167, 169-77	11	54
23	A national survey of trace organic contaminants in Australian rivers. *Journal of Environmental Quality*, **2014**, 43, 1702-12	3.4	49
22	An assessment of endocrine activity in Australian rivers using chemical and in vitro analyses. *Environmental Science and Pollution Research*, **2014**, 21, 12951-67	5.1	55
21	Assessment of the application of bioanalytical tools as surrogate measure of chemical contaminants in recycled water. *Water Research*, **2014**, 49, 300-15	12.5	88
20	Removal of pharmaceuticals, steroid hormones, phytoestrogens, UV-filters, industrial chemicals and pesticides by Trametes versicolor: Role of biosorption and biodegradation. *International Biodeterioration and Biodegradation*, **2014**, 88, 169-175	4.8	119
19	Removal of trace organic contaminants by an MBR comprising a mixed culture of bacteria and white-rot fungi. *Bioresource Technology*, **2013**, 148, 234-41	11	97
18	Chlorine disinfection by-products in wastewater effluent: Bioassay-based assessment of toxicological impact. *Water Research*, **2012**, 46, 6069-83	12.5	118
17	Assessing granular media filtration for the removal of chemical contaminants from wastewater. *Water Research*, **2011**, 45, 3461-72	12.5	50
16	Bioanalytical Tools in Water Quality Assessment. *Water Intelligence Online*, **2011**, 10, 9781780400778		2
15	Comparison of five in vitro bioassays to measure estrogenic activity in environmental waters. *Environmental Science & Technology*, **2010**, 44, 3853-60	10.3	160
14	Balancing the budget of environmental estrogen exposure: the contribution of recycled water. *Water Science and Technology*, **2009**, 60, 1003-12	2.2	12
13	Assessing indoor air exposures using passive sampling with bioanalytical methods for estrogenicity and aryl hydrocarbon receptor activity. *Analytical and Bioanalytical Chemistry*, **2009**, 394, 1413-21	4.4	12
12	Comprehensive study of endocrine disrupting compounds using grab and passive sampling at selected wastewater treatment plants in South East Queensland, Australia. *Environment International*, **2007**, 33, 654-69	12.9	149
11	Modelling of the fate of selected endocrine disruptors in a municipal wastewater treatment plant in South East Queensland, Australia. *Chemosphere*, **2007**, 69, 644-54	8.4	80
10	Anal fin morphology and gonadal histopathology in mosquitofish (Gambusia holbrooki) exposed to treated municipal sewage effluent. *Archives of Environmental Contamination and Toxicology*, **2006**, 50, 562-74	3.2	26
9	A survey of endocrine disrupting chemicals (EDCs) in municipal sewage and animal waste effluents in the Waikato region of New Zealand. *Science of the Total Environment*, **2006**, 355, 135-44	10.2	102

8	Assessment of the reproductive-endocrine disrupting potential of chlorine dioxide oxidation products of plant sterols. *Environmental Science & Technology*, **2006**, 40, 2594-600	10.3	12
7	Determination of the androgenic potency of whole effluents using mosquitofish and trout bioassays. *Aquatic Toxicology*, **2006**, 80, 237-48	5.1	28
6	Development of methods for extraction and in vitro quantification of estrogenic and androgenic activity of wastewater samples. *Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology*, **2006**, 143, 117-26	3.2	18
5	Bioassay-derived androgenic and estrogenic activity in municipal sewage in Australia and New Zealand. *Ecotoxicology and Environmental Safety*, **2006**, 65, 403-11	7	76
4	Quantification of vitellogenin mRNA induction in mosquitofish (Gambusia affinis) by reverse transcription real-time polymerase chain reaction (RT-PCR). *Biomarkers*, **2005**, 10, 429-38	2.6	11
3	Efficacy of an advanced sewage treatment plant in southeast Queensland, Australia, to remove estrogenic chemicals. *Environmental Science & Technology*, **2005**, 39, 5781-6	10.3	50
2	Effects of a phytosterol mixture on male fish plasma lipoprotein fractions and testis P450scc activity. *General and Comparative Endocrinology*, **2003**, 130, 172-84	3	61
1	In vivo implants of beta-sitosterol cause reductions of reactive cholesterol pools in mitochondria isolated from gonads of male goldfish (Carassius auratus). *General and Comparative Endocrinology*, **2003**, 134, 255-63	3	42