Damian E Helbling

List of Publications by Citations

66 papers	3,841 citations	31 h-index	61 g-index
70 ext. papers	4,713 ext. citations	10.1 avg, IF	5.98 L-index

#	Paper	IF	Citations
66	Rapid removal of organic micropollutants from water by a porous β-cyclodextrin polymer. *Nature*, **2016**, 529, 190-4	50.4	1038
65	Is biological treatment a viable alternative for micropollutant removal in drinking water treatment processes?. *Water Research*, **2013**, 47, 5955-76	12.5	217
64	High-throughput identification of microbial transformation products of organic micropollutants. *Environmental Science & Technology*, **2010**, 44, 6621-7	10.3	207
63	β-Cyclodextrin Polymer Network Sequesters Perfluorooctanoic Acid at Environmentally Relevant Concentrations. *Journal of the American Chemical Society*, **2017**, 139, 7689-7692	16.4	184
62	Removal of GenX and Perfluorinated Alkyl Substances from Water by Amine-Functionalized Covalent Organic Frameworks. *Journal of the American Chemical Society*, **2018**, 140, 12677-12681	16.4	165
61	Micropollutant biotransformation kinetics associate with WWTP process parameters and microbial community characteristics. *Environmental Science & Technology*, **2012**, 46, 10579-88	10.3	134
60	A tiered procedure for assessing the formation of biotransformation products of pharmaceuticals and biocides during activated sludge treatment. *Journal of Environmental Monitoring*, **2010**, 12, 2100-11		104
59	Relative contribution of ammonia oxidizing bacteria and other members of nitrifying activated sludge communities to micropollutant biotransformation. *Water Research*, **2017**, 109, 217-226	12.5	87
58	Benchmarking Micropollutant Removal by Activated Carbon and Porous β-Cyclodextrin Polymers under Environmentally Relevant Scenarios. *Environmental Science & Technology*, **2017**, 51, 7590-7598	10.3	82
57	Systematic Exploration of Biotransformation Reactions of Amine-Containing Micropollutants in Activated Sludge. *Environmental Science & Technology*, **2016**, 50, 2908-20	10.3	80
56	Structure-based interpretation of biotransformation pathways of amide-containing compounds in sludge-seeded bioreactors. *Environmental Science & Technology*, **2010**, 44, 6628-35	10.3	80
55	Association of biodiversity with the rates of micropollutant biotransformations among full-scale wastewater treatment plant communities. *Applied and Environmental Microbiology*, **2015**, 81, 666-75	4.8	75
54	Free chlorine demand and cell survival of microbial suspensions. *Water Research*, **2007**, 41, 4424-34	12.5	67
53	Emerging chemicals and the evolution of biodegradation capacities and pathways in bacteria. *Current Opinion in Biotechnology*, **2014**, 27, 8-14	11.4	64
52	Reduction of a Tetrafluoroterephthalonitrile-β-Cyclodextrin Polymer to Remove Anionic Micropollutants and Perfluorinated Alkyl Substances from Water. *Angewandte Chemie - International Edition*, **2019**, 58, 12049-12053	16.4	63
51	The activity level of a microbial community function can be predicted from its metatranscriptome. *ISME Journal*, **2012**, 6, 902-4	11.9	58
50	Widespread Micropollutant Monitoring in the Hudson River Estuary Reveals Spatiotemporal Micropollutant Clusters and Their Sources. *Environmental Science & Technology*, **2018**, 52, 6187-6196	10.3	52

49	pH-dependent biotransformation of ionizable organic micropollutants in activated sludge. *Environmental Science & Technology*, **2014**, 48, 13760-8	10.3	50
48	The functional and taxonomic richness of wastewater treatment plant microbial communities are associated with each other and with ambient nitrogen and carbon availability. *Environmental Microbiology*, **2015**, 17, 4851-60	5.2	49
47	Bioremediation of pesticide-contaminated water resources: the challenge of low concentrations. *Current Opinion in Biotechnology*, **2015**, 33, 142-8	11.4	47
46	Biotransformation of Two Pharmaceuticals by the Ammonia-Oxidizing Archaeon Nitrososphaera gargensis. *Environmental Science & Technology*, **2016**, 50, 4682-92	10.3	47
45	Genetic and metabolic analysis of the carbofuran catabolic pathway in Novosphingobium sp. KN65.2. *Applied Microbiology and Biotechnology*, **2014**, 98, 8235-52	5.7	42
44	Emerging analytical methods for the characterization and quantification of organic contaminants in flowback and produced water. *Trends in Environmental Analytical Chemistry*, **2017**, 15, 12-23	12	42
43	Modeling Residual Chlorine Response to a Microbial Contamination Event in Drinking Water Distribution Systems. *Journal of Environmental Engineering, ASCE*, **2009**, 135, 918-927	2	39
42	Phenolation of cyclodextrin polymers controls their lead and organic micropollutant adsorption. *Chemical Science*, **2018**, 9, 8883-8889	9.4	39
41	Cross-linker Chemistry Determines the Uptake Potential of Perfluorinated Alkyl Substances by Cyclodextrin Polymers. *Macromolecules*, **2019**, 52, 3747-3752	5.5	38
40	Continuous monitoring of residual chlorine concentrations in response to controlled microbial intrusions in a laboratory-scale distribution system. *Water Research*, **2008**, 42, 3162-72	12.5	36
39	Cyclodextrin Polymers on Microcrystalline Cellulose as a Granular Media for Organic Micropollutant Removal from Water. *ACS Applied Materials & Interfaces*, **2019**, 11, 8089-8096	9.5	35
38	Emerging investigators series: prioritization of suspect hits in a sensitive suspect screening workflow for comprehensive micropollutant characterization in environmental samples. *Environmental Science: Water Research and Technology*, **2017**, 3, 54-65	4.2	35
37	QSARs to predict adsorption affinity of organic micropollutants for activated carbon and cyclodextrin polymer adsorbents. *Water Research*, **2019**, 154, 217-226	12.5	32
36	A non-target approach to identify disinfection byproducts of structurally similar sulfonamide antibiotics. *Water Research*, **2016**, 102, 241-251	12.5	31
35	Systems toxicology approach to understand the kinetics of benzo(a)pyrene uptake, biotransformation, and DNA adduct formation in a liver cell model. *Chemical Research in Toxicology*, **2014**, 27, 443-53	4	31
34	Fall Creek Monitoring Station: Highly Resolved Temporal Sampling to Prioritize the Identification of Nontarget Micropollutants in a Small Stream. *Environmental Science & Technology*, **2019**, 53, 77-87	10.3	31
33	Tetrafluoroterephthalonitrile-crosslinked cyclodextrin polymers for efficient extraction and recovery of organic micropollutants from water. *Journal of Chromatography A*, **2018**, 1541, 52-56	4.5	28
32	Kinetics and yields of pesticide biodegradation at low substrate concentrations and under conditions restricting assimilable organic carbon. *Applied and Environmental Microbiology*, **2014**, 80, 1306-13	4.8	28

31	Biotransformation of antibiotics: Exploring the activity of extracellular and intracellular enzymes derived from wastewater microbial communities. *Water Research*, **2019**, 155, 115-123	12.5	27
30	Exploring the factors that influence the adsorption of anionic PFAS on conventional and emerging adsorbents in aquatic matrices. *Water Research*, **2020**, 182, 115950	12.5	27
29	Cyclodextrin Polymers with Nitrogen-Containing Tripodal Crosslinkers for Efficient PFAS Adsorption **2020**, 2, 1240-1245		26
28	Removal of micropollutants in biofilters: Hydrodynamic effects on biofilm assembly and functioning. *Water Research*, **2017**, 120, 211-221	12.5	24
27	Polymerized Molecular Receptors as Adsorbents to Remove Micropollutants from Water. *Accounts of Chemical Research*, **2020**, 53, 2314-2324	24.3	23
26	Target and Nontarget Analysis of Per- and Polyfluoralkyl Substances in Wastewater from Electronics Fabrication Facilities. *Environmental Science & Technology*, **2021**, 55, 2346-2356	10.3	23
25	Reduction of a Tetrafluoroterephthalonitrile-Cyclodextrin Polymer to Remove Anionic Micropollutants and Perfluorinated Alkyl Substances from Water. *Angewandte Chemie*, **2019**, 131, 12177-12181	2.6	22
24	Cyclodextrin Polymers with Different Cross-Linkers and Ion-Exchange Resins Exhibit Variable Adsorption of Anionic, Zwitterionic, and Nonionic PFASs. *Environmental Science & Technology*, **2020**, 54, 12693-12702	10.3	22
23	A framework for establishing predictive relationships between specific bacterial 16S rRNA sequence abundances and biotransformation rates. *Water Research*, **2015**, 70, 471-84	12.5	21
22	Can meta-omics help to establish causality between contaminant biotransformations and genes or gene products?. *Environmental Science: Water Research and Technology*, **2015**, 1, 272-278	4.2	21
21	Evaluating the effects of water matrix constituents on micropollutant removal by activated carbon and cyclodextrin polymer adsorbents. *Water Research*, **2020**, 173, 115551	12.5	21
20	Evaluating the environmental parameters that determine aerobic biodegradation half-lives of pesticides in soil with a multivariable approach. *Chemosphere*, **2018**, 209, 430-438	8.4	21
19	Best Practices for Evaluating New Materials as Adsorbents for Water Treatment **2020**, 2, 1532-1544		18
18	Evaluating the Removal of Per- and Polyfluoroalkyl Substances from Contaminated Groundwater with Different Adsorbents Using a Suspect Screening Approach. *Environmental Science and Technology Letters*, **2020**, 7, 954-960	11	14
17	Fall Creek Monitoring Station: Using Environmental Covariates To Predict Micropollutant Dynamics and Peak Events in Surface Water Systems. *Environmental Science & Technology*, **2019**, 53, 8599-8610	10.3	13
16	A model framework to describe growth-linked biodegradation of trace-level pollutants in the presence of coincidental carbon substrates and microbes. *Environmental Science & Technology*, **2014**, 48, 13358-66	10.3	13
15	Clustering micropollutants based on initial biotransformations for improved prediction of micropollutant removal during conventional activated sludge treatment. *Environmental Science: Water Research and Technology*, **2020**, 6, 554-565	4.2	11
14	Impact of Hurricane Maria on Drinking Water Quality in Puerto Rico. *Environmental Science & Technology*, **2020**, 54, 9495-9509	10.3	11

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13	Exploring matrix effects and quantifying organic additives in hydraulic fracturing associated fluids using liquid chromatography electrospray ionization mass spectrometry. *Environmental Sciences: Processes and Impacts*, **2019**, 21, 195-205	4.3	10
12	Environmental Source Tracking of Per- and Polyfluoroalkyl Substances within a Forensic Context: Current and Future Techniques. *Environmental Science & Technology*, **2021**, 55, 7237-7245	10.3	10
11	Exploring co-occurrence patterns between organic micropollutants and bacterial community structure in a mixed-use watershed. *Environmental Sciences: Processes and Impacts*, **2019**, 21, 867-880	4.3	8
10	Modelling carbofuran biotransformation by Novosphingobium sp. KN65.2 in the presence of coincidental carbon and indigenous microbes. *Environmental Science: Water Research and Technology*, **2019**, 5, 798-807	4.2	3
9	Microbial biotransformation of aqueous film-forming foam derived polyfluoroalkyl substances.. *Science of the Total Environment*, **2022**, 824, 153711	10.2	3
8	Surface water and groundwater analysis using aryl hydrocarbon and endocrine receptor biological assays and liquid chromatography-high resolution mass spectrometry in Susquehanna County, PA. *Environmental Sciences: Processes and Impacts*, **2019**, 21, 988-998	4.3	2
7	Identifying the physicochemical properties of Ecyclodextrin polymers that determine the adsorption of perfluoroalkyl acids.. *Water Research*, **2021**, 209, 117938	12.5	2
6	Evaluation, optimization, and application of three independent suspect screening workflows for the characterization of PFASs in water. *Environmental Sciences: Processes and Impacts*, **2021**, 23, 1554-1565	4.3	2
5	Engineering of managed aquifer recharge systems to optimize biotransformation of trace organic chemicals. *Current Opinion in Environmental Science and Health*, **2022**, 27, 100343	8.1	1
4	Exploring the Specificity of Extracellular Wastewater Peptidases to Improve the Design of Sustainable Peptide-Based Antibiotics. *Environmental Science & Technology*, **2020**, 54, 11201-11209	10.3	0
3	Chlorine Residual Management for Water Distribution System Security **2011**, 185-203		
2	Control of Pharmaceuticals, Personal Care Products, and Other Micropollutants: Probing the Ability of Restored Riparian Systems to Remove Trace Pollutants. *Proceedings of the Water Environment Federation*, **2017**, 2017, 3537-3550		
1	Target and suspect screening for biocides in drinking water resources of Honduras. *H2Open Journal* , **2022**, 5, 84-97	1.4	