Chelsea M Rochman

List of Publications by Citations

51 papers	6,807 citations	30 h-index	59 g-index
59 ext. papers	9,316 ext. citations	8.9 avg, IF	6.73 L-index

#	Paper	IF	Citations
51	Ingested plastic transfers hazardous chemicals to fish and induces hepatic stress. *Scientific Reports*, **2013**, 3, 3263	4.9	924
50	Policy: Classify plastic waste as hazardous. *Nature*, **2013**, 494, 169-71	50.4	814
49	Anthropogenic debris in seafood: Plastic debris and fibers from textiles in fish and bivalves sold for human consumption. *Scientific Reports*, **2015**, 5, 14340	4.9	677
48	Microplastics research-from sink to source. *Science*, **2018**, 360, 28-29	33.3	436
47	Predicted growth in plastic waste exceeds efforts to mitigate plastic pollution. *Science*, **2020**, 369, 1515-1518	33.3	428
46	Early warning signs of endocrine disruption in adult fish from the ingestion of polyethylene with and without sorbed chemical pollutants from the marine environment. *Science of the Total Environment*, **2014**, 493, 656-61	10.2	396
45	Rethinking microplastics as a diverse contaminant suite. *Environmental Toxicology and Chemistry*, **2019**, 38, 703-711	3.8	337
44	Long-term sorption of metals is similar among plastic types: implications for plastic debris in aquatic environments. *PLoS ONE*, **2014**, 9, e85433	3.7	300
43	The ecological impacts of marine debris: unraveling the demonstrated evidence from what is perceived. *Ecology*, **2016**, 97, 302-12	4.6	283
42	Scientific Evidence Supports a Ban on Microbeads. *Environmental Science & Technology*, **2015**, 49, 10759-61	10.3	217
41	Polystyrene plastic: a source and sink for polycyclic aromatic hydrocarbons in the marine environment. *Environmental Science & Technology*, **2013**, 47, 13976-84	10.3	203
40	Using the Asian clam as an indicator of microplastic pollution in freshwater ecosystems. *Environmental Pollution*, **2018**, 234, 347-355	9.3	203
39	Long-term field measurement of sorption of organic contaminants to five types of plastic pellets: implications for plastic marine debris. *Environmental Science & Technology*, **2013**, 47, 1646-54	10.3	171
38	Impacts of temperature and selected chemical digestion methods on microplastic particles. *Environmental Toxicology and Chemistry*, **2018**, 37, 91-98	3.8	141
37	Polybrominated diphenyl ethers (PBDEs) in fish tissue may be an indicator of plastic contamination in marine habitats. *Science of the Total Environment*, **2014**, 476-477, 622-33	10.2	135
36	Microplastics entering northwestern Lake Ontario are diverse and linked to urban sources. *Water Research*, **2020**, 174, 115623	12.5	92
35	Novel method for the extraction and identification of microplastics in ocean trawl and fish gut matrices. *Analytical Methods*, **2017**, 9, 1479-1490	3.2	84

34	Direct and indirect effects of different types of microplastics on freshwater prey (Corbicula fluminea) and their predator (Acipenser transmontanus). *PLoS ONE*, **2017**, 12, e0187664	3.7	80
33	Reporting Guidelines to Increase the Reproducibility and Comparability of Research on Microplastics. *Applied Spectroscopy*, **2020**, 74, 1066-1077	3.1	77
32	Plastics and priority pollutants: a multiple stressor in aquatic habitats. *Environmental Science & Technology*, **2013**, 47, 2439-40	10.3	75
31	Sampling and Quality Assurance and Quality Control: A Guide for Scientists Investigating the Occurrence of Microplastics Across Matrices. *Applied Spectroscopy*, **2020**, 74, 1099-1125	3.1	75
30	Capturing microfibers - marketed technologies reduce microfiber emissions from washing machines. *Marine Pollution Bulletin*, **2019**, 139, 40-45	6.7	72
29	Plastic debris and policy: Using current scientific understanding to invoke positive change. *Environmental Toxicology and Chemistry*, **2016**, 35, 1617-26	3.8	68
28	Increasing the Accessibility for Characterizing Microplastics: Introducing New Application-Based and Spectral Libraries of Plastic Particles (SLoPP and SLoPP-E). *Analytical Chemistry*, **2020**, 92, 2443-2451	7.8	61
27	Critical Review of Processing and Classification Techniques for Images and Spectra in Microplastic Research. *Applied Spectroscopy*, **2020**, 74, 989-1010	3.1	57
26	Microplastic Spectral Classification Needs an Open Source Community: Open Specy to the Rescue!. *Analytical Chemistry*, **2021**, 93, 7543-7548	7.8	40
25	The uptake of microfibers by freshwater Asian clams (Corbicula fluminea) varies based upon physicochemical properties. *Chemosphere*, **2019**, 221, 107-114	8.4	32
24	Multiyear Water Quality Performance and Mass Accumulation of PCBs, Mercury, Methylmercury, Copper, and Microplastics in a Bioretention Rain Garden. *Journal of Sustainable Water in the Built Environment*, **2019**, 5, 04019004	2.4	31
23	Bioretention cells remove microplastics from urban stormwater. *Water Research*, **2021**, 191, 116785	12.5	31
22	Conservation Needs Diverse Values, Approaches, and Practitioners. *Conservation Letters*, **2015**, 8, 385-387	7.9	29
21	Recommended best practices for collecting, analyzing, and reporting microplastics in environmental media: Lessons learned from comprehensive monitoring of San Francisco Bay. *Journal of Hazardous Materials*, **2021**, 409, 124770	12.8	26
20	Biological Responses to Climate Change and Nanoplastics Are Altered in Concert: Full-Factor Screening Reveals Effects of Multiple Stressors on Primary Producers. *Environmental Science & Technology*, **2020**, 54, 2401-2410	10.3	25
19	Urban Stormwater Runoff: A Major Pathway for Anthropogenic Particles, Black Rubbery Fragments, and Other Types of Microplastics to Urban Receiving Waters. *ACS ES&T Water*, **2021**, 1, 1420-1428		22
18	Microplastic and other anthropogenic microparticles in water and sediments of Lake Simcoe. *Journal of Great Lakes Research*, **2021**, 47, 180-189	3	17
17	Microplastics and other anthropogenic particles are prevalent in mussels from San Francisco Bay, and show no correlation with PAHs. *Environmental Pollution*, **2021**, 271, 116260	9.3	16

16	Evidence of Microplastic Translocation in Wild-Caught Fish and Implications for Microplastic Accumulation Dynamics in Food Webs. *Environmental Science & Technology*, **2021**, 55, 12372-12382	10.3	15
15	Towards Raman Automation for Microplastics: Developing Strategies for Particle Adhesion and Filter Subsampling. *Applied Spectroscopy*, **2020**, 74, 976-988	3.1	12
14	Rapid fingerprinting of source and environmental microplastics using direct analysis in real time-high resolution mass spectrometry. *Analytica Chimica Acta*, **2020**, 1100, 107-117	6.6	11
13	No evidence of spherical microplastics (10-300 μm) translocation in adult rainbow trout (Oncorhynchus mykiss) after a two-week dietary exposure. *PLoS ONE*, **2020**, 15, e0239128	3.7	11
12	ATR-FTIR Spectral Libraries of Plastic Particles (FLOPP and FLOPP-e) for the Analysis of Microplastics. *Analytical Chemistry*, **2021**, 93, 15878-15885	7.8	8
11	Aryl hydrocarbon receptor-mediated potencies in field-deployed plastics vary by type of polymer. *Environmental Science and Pollution Research*, **2019**, 26, 9079-9088	5.1	8
10	Think Global, Act Local: Local Knowledge Is Critical to Inform Positive Change When It Comes to Microplastics. *Environmental Science & Technology*, **2021**, 55, 4-6	10.3	7
9	Plastic pollution in the Arctic. *Nature Reviews Earth & Environment*,	30.2	5
8	Kicking Pellet Emissions to the Curb. *Integrated Environmental Assessment and Management*, **2020**, 16, 788-790	2.5	4
7	Impacts to Larval Fathead Minnows Vary between Preconsumer and Environmental Microplastics. *Environmental Toxicology and Chemistry*, **2021**,	3.8	3
6	Holistic Assessment of Microplastics and Other Anthropogenic Microdebris in an Urban Bay Sheds Light on Their Sources and Fate. *ACS ES&T Water*, **2021**, 1, 1401-1410		3
5	Effects of Hydrogen Peroxide on Cyanobacterium Microcystis aeruginosa in the Presence of Nanoplastics. *ACS ES&T Water*, **2021**, 1, 1596-1607		3
4	Microplastic contamination in Great Lakes fish. *Conservation Biology*, **2021**,	6	3
3	The potential of aerial insectivores for monitoring microplastics in terrestrial environments. *Science of the Total Environment*, **2022**, 807, 150453	10.2	2
2	Association of zoonotic protozoan parasites with microplastics in seawater and implications for human and wildlife health.. *Scientific Reports*, **2022**, 12, 6532	4.9	2
1	Washing Machine Filters Reduce Microfiber Emissions: Evidence From a Community-Scale Pilot in Parry Sound, Ontario. *Frontiers in Marine Science*,8,	4.5	1