Albert A Koelmans

List of Publications by Citations

211 papers	19,353 citations	66 h-index	136 g-index
219 ext. papers	23,648 ext. citations	8.2 avg, IF	7.48 L-index

#	Paper	IF	Citations
211	Extensive sorption of organic compounds to black carbon, coal, and kerogen in sediments and soils: mechanisms and consequences for distribution, bioaccumulation, and biodegradation. *Environmental Science & Technology*, **2005**, 39, 6881-95	10.3	1133
210	Microplastic as a Vector for Chemicals in the Aquatic Environment: Critical Review and Model-Supported Reinterpretation of Empirical Studies. *Environmental Science & Technology*, **2016**, 50, 3315-26	10.3	704
209	Microplastics in freshwaters and drinking water: Critical review and assessment of data quality. *Water Research*, **2019**, 155, 410-422	12.5	692
208	Nanoplastic affects growth of S. obliquus and reproduction of D. magna. *Environmental Science & Technology*, **2014**, 48, 12336-43	10.3	610
207	Effects of microplastic on fitness and PCB bioaccumulation by the lugworm Arenicola marina (L.). *Environmental Science & Technology*, **2013**, 47, 593-600	10.3	599
206	Plastic in north sea fish. *Environmental Science & Technology*, **2013**, 47, 8818-24	10.3	546
205	Microplastics in the Terrestrial Ecosystem: Implications for Lumbricus terrestris (Oligochaeta, Lumbricidae). *Environmental Science & Technology*, **2016**, 50, 2685-91	10.3	526
204	Strong sorption of PCBs to nanoplastics, microplastics, carbon nanotubes, and fullerenes. *Environmental Science & Technology*, **2014**, 48, 4869-76	10.3	500
203	Sorption of polycyclic aromatic hydrocarbons and polychlorinated biphenyls to soot and soot-like materials in the aqueous environment: mechanistic considerations. *Environmental Science & Technology*, **2002**, 36, 3725-34	10.3	489
202	Potential scenarios for nanomaterial release and subsequent alteration in the environment. *Environmental Toxicology and Chemistry*, **2012**, 31, 50-9	3.8	457
201	Black carbon: the reverse of its dark side. *Chemosphere*, **2006**, 63, 365-77	8.4	413
200	Fate of nano- and microplastic in freshwater systems: A modeling study. *Environmental Pollution*, **2017**, 220, 540-548	9.3	360
199	Analysis of engineered nanomaterials in complex matrices (environment and biota): general considerations and conceptual case studies. *Environmental Toxicology and Chemistry*, **2012**, 31, 32-49	3.8	355
198	Ups and Downs in the Ocean: Effects of Biofouling on Vertical Transport of Microplastics. *Environmental Science & Technology*, **2017**, 51, 7963-7971	10.3	351
197	Effects of nanopolystyrene on the feeding behavior of the blue mussel (Mytilus edulis L.). *Environmental Toxicology and Chemistry*, **2012**, 31, 2490-7	3.8	334
196	Plastic as a carrier of POPs to aquatic organisms: a model analysis. *Environmental Science & Technology*, **2013**, 47, 7812-20	10.3	310
195	Incorporation of microplastics from litter into burrows of Lumbricus terrestris. *Environmental Pollution*, **2017**, 220, 523-531	9.3	305

194	Leaching of plastic additives to marine organisms. *Environmental Pollution*, **2014**, 187, 49-54	9.3	275
193	Field evidence for transfer of plastic debris along a terrestrial food chain. *Scientific Reports*, **2017**, 7, 14071	4.9	274
192	Paradigms to assess the environmental impact of manufactured nanomaterials. *Environmental Toxicology and Chemistry*, **2012**, 31, 3-14	3.8	263
191	Polyoxymethylene solid phase extraction as a partitioning method for hydrophobic organic chemicals in sediment and soot. *Environmental Science & Technology*, **2001**, 35, 3742-8	10.3	261
190	Ecotoxicity test methods for engineered nanomaterials: practical experiences and recommendations from the bench. *Environmental Toxicology and Chemistry*, **2012**, 31, 15-31	3.8	240
189	Export of microplastics from land to sea. A modelling approach. *Water Research*, **2017**, 127, 249-257	12.5	234
188	Microplastic in a macro filter feeder: Humpback whale Megaptera novaeangliae. *Marine Pollution Bulletin*, **2015**, 95, 248-52	6.7	234
187	Quality Criteria for the Analysis of Microplastic in Biota Samples: A Critical Review. *Environmental Science & Technology*, **2018**, 52, 10230-10240	10.3	228
186	Aging of microplastics promotes their ingestion by marine zooplankton. *Environmental Pollution*, **2017**, 231, 987-996	9.3	201
185	Extraction of polycyclic aromatic hydrocarbons from soot and sediment: solvent evaluation and implications for sorption mechanism. *Environmental Science & Technology*, **2002**, 36, 4107-13	10.3	198
184	The physical oceanography of the transport of floating marine debris. *Environmental Research Letters*, **2020**, 15, 023003	6.2	186
183	Heteroaggregation and sedimentation rates for nanomaterials in natural waters. *Water Research*, **2014**, 48, 269-79	12.5	179
182	Risks of Plastic Debris: Unravelling Fact, Opinion, Perception, and Belief. *Environmental Science & Technology*, **2017**, 51, 11513-11519	10.3	176
181	Nanoplastics in the Aquatic Environment. Critical Review **2015**, 325-340		173
180	Distribution of perfluorinated compounds in aquatic systems in the Netherlands. *Environmental Science & Technology*, **2010**, 44, 3746-51	10.3	171
179	Risk assessment of microplastics in the ocean: Modelling approach and first conclusions. *Environmental Pollution*, **2018**, 242, 1930-1938	9.3	167
178	Quantifying ecological risks of aquatic micro- and nanoplastic. *Critical Reviews in Environmental Science and Technology*, **2019**, 49, 32-80	11.1	167
177	Negligible Impact of Ingested Microplastics on Tissue Concentrations of Persistent Organic Pollutants in Northern Fulmars off Coastal Norway. *Environmental Science & Technology*, **2016**, 50, 1924-33	10.3	157

176	Microplastic Effect Thresholds for Freshwater Benthic Macroinvertebrates. *Environmental Science & Technology*, **2018**, 52, 2278-2286	10.3	150
175	All is not lost: deriving a top-down mass budget of plastic at sea. *Environmental Research Letters*, **2017**, 12, 114028	6.2	148
174	Multimedia modeling of engineered nanoparticles with SimpleBox4nano: model definition and evaluation. *Environmental Science & Technology*, **2014**, 48, 5726-36	10.3	146
173	A Review of the Properties and Processes Determining the Fate of Engineered Nanomaterials in the Aquatic Environment. *Critical Reviews in Environmental Science and Technology*, **2015**, 45, 2084-2134	11.1	145
172	Integrated modelling of eutrophication and organic contaminant fate & effects in aquatic ecosystems. A review. *Water Research*, **2001**, 35, 3517-36	12.5	137
171	Sorption of polycyclic aromatic hydrocarbons to polystyrene nanoplastic. *Environmental Toxicology and Chemistry*, **2016**, 35, 1650-5	3.8	132
170	Accumulation of Plastic Debris and Associated Contaminants in Aquatic Food Webs. *Environmental Science & Technology*, **2018**, 52, 8510-8520	10.3	132
169	Closing the gap between small and smaller: towards a framework to analyse nano- and microplastics in aqueous environmental samples. *Environmental Science: Nano*, **2018**, 5, 1640-1649	7.1	128
168	The effect of particle properties on the depth profile of buoyant plastics in the ocean. *Scientific Reports*, **2016**, 6, 33882	4.9	125
167	Detection of low numbers of microplastics in North Sea fish using strict quality assurance criteria. *Marine Pollution Bulletin*, **2017**, 122, 253-258	6.7	121
166	Effects of sedimentary sootlike materials on bioaccumulation and sorption of polychlorinated biphenyls. *Environmental Toxicology and Chemistry*, **2004**, 23, 2563-70	3.8	119
165	Effects of nanoplastics and microplastics on the growth of sediment-rooted macrophytes. *Science of the Total Environment*, **2019**, 654, 1040-1047	10.2	114
164	Simplifying Microplastic via Continuous Probability Distributions for Size, Shape, and Density. *Environmental Science and Technology Letters*, **2019**, 6, 551-557	11	112
163	Extremely slowly desorbing polycyclic aromatic hydrocarbons from soot and soot-like materials: evidence by supercritical fluid extraction. *Environmental Science & Technology*, **2005**, 39, 7889-95	10.3	106
162	Comparison of manufactured and black carbon nanoparticle concentrations in aquatic sediments. *Environmental Pollution*, **2009**, 157, 1110-6	9.3	98
161	Plastics in the marine environment. *Environmental Toxicology and Chemistry*, **2014**, 33, 5-10	3.8	90
160	Black carbon and ecological factors affect in situ biota to sediment accumulation factors for hydrophobic organic compounds in flood plain lakes. *Environmental Science & Technology*, **2005** , 39, 3101-9	10.3	87
159	Pollutants in Plastics within the North Pacific Subtropical Gyre. *Environmental Science & Technology*, **2018**, 52, 446-456	10.3	85

158	Creating a safe operating space for wetlands in a changing climate. *Frontiers in Ecology and the Environment*, **2017**, 15, 99-107	5.5	84
157	In situ remediation of contaminated sediments using carbonaceous materials. *Environmental Toxicology and Chemistry*, **2012**, 31, 693-704	3.8	84
156	The Effect of Microplastic on the Uptake of Chemicals by the Lugworm Arenicola marina (L.) under Environmentally Relevant Exposure Conditions. *Environmental Science & Technology*, **2017**, 51, 8795-8804	10.3	82
155	Transfer of PCBs from Microplastics under Simulated Gut Fluid Conditions Is Biphasic and Reversible. *Environmental Science & Technology*, **2019**, 53, 1874-1883	10.3	81
154	Rapid settling of nanoparticles due to heteroaggregation with suspended sediment. *Environmental Toxicology and Chemistry*, **2014**, 33, 1766-73	3.8	79
153	Attenuation of polychlorinated biphenyl sorption to charcoal by humic acids. *Environmental Science & Technology*, **2009**, 43, 736-42	10.3	75
152	Spatially explicit fate modelling of nanomaterials in natural waters. *Water Research*, **2015**, 80, 200-8	12.5	74
151	Combined effects of nanoplastics and copper on the freshwater alga Raphidocelis subcapitata. *Aquatic Toxicology*, **2019**, 210, 179-187	5.1	70
150	Sorption of polycyclic aromatic hydrocarbons to oil contaminated sediment: unresolved complex?. *Environmental Science & Technology*, **2003**, 37, 5197-203	10.3	70
149	Plastic ingestion by marine fish in the wild. *Critical Reviews in Environmental Science and Technology*, **2020**, 50, 657-697	11.1	70
148	Quality Criteria for Microplastic Effect Studies in the Context of Risk Assessment: A Critical Review. *Environmental Science & Technology*, **2020**, 54, 11692-11705	10.3	69
147	Evaluation of bioaccumulation using in vivo laboratory and field studies. *Integrated Environmental Assessment and Management*, **2009**, 5, 598-623	2.5	68
146	Plastic debris and policy: Using current scientific understanding to invoke positive change. *Environmental Toxicology and Chemistry*, **2016**, 35, 1617-26	3.8	68
145	A systems approach to understand microplastic occurrence and variability in Dutch riverine surface waters. *Water Research*, **2020**, 176, 115723	12.5	66
144	Ecotoxicological effects of activated carbon amendments on macroinvertebrates in nonpolluted and polluted sediments. *Environmental Science & Technology*, **2011**, 45, 8567-74	10.3	66
143	Current Insights into Monitoring, Bioaccumulation, and Potential Health Effects of Microplastics Present in the Food Chain. *Foods*, **2020**, 9,	4.9	65
142	Lifetime Accumulation of Microplastic in Children and Adults. *Environmental Science & Technology*, **2021**, 55, 5084-5096	10.3	61
141	Simplifying modeling of nanoparticle aggregation-sedimentation behavior in environmental systems: a theoretical analysis. *Water Research*, **2014**, 62, 193-201	12.5	60

140	Multimedia environmental fate and speciation of engineered nanoparticles: a probabilistic modeling approach. *Environmental Science: Nano*, **2016**, 3, 715-727	7.1	55
139	Quantification methods of Black Carbon: comparison of Rock-Eval analysis with traditional methods. *Journal of Chromatography A*, **2009**, 1216, 613-22	4.5	55
138	Explaining differences between bioaccumulation measurements in laboratory and field data through use of a probabilistic modeling approach. *Integrated Environmental Assessment and Management*, **2012**, 8, 42-63	2.5	54
137	Weathering and toxicity of marine sediments contaminated with oils and polycyclic aromatic hydrocarbons. *Environmental Toxicology and Chemistry*, **2006**, 25, 1345-53	3.8	54
136	How do long-term development and periodical changes of river-floodplain systems affect the fate of contaminants? Results from European rivers. *Environmental Pollution*, **2009**, 157, 3336-46	9.3	53
135	Modeling the Role of Microplastics in Bioaccumulation of Organic Chemicals to Marine Aquatic Organisms. A Critical Review **2015**, 309-324		53
134	Ingestion and Chronic Effects of Car Tire Tread Particles on Freshwater Benthic Macroinvertebrates. *Environmental Science & Technology*, **2018**, 52, 13986-13994	10.3	53
133	Sorption of organic compounds to activated carbons. Evaluation of isotherm models. *Chemosphere*, **2006**, 65, 2343-51	8.4	52
132	Uptake of sediment-bound bioavailable polychlorobiphenyls by benthivorous carp (Cyprinus carpio). *Environmental Science & Technology*, **2004**, 38, 4503-9	10.3	51
131	Modeling maximum adsorption capacities of soot and soot-like materials for PAHs and PCBs. *Environmental Science & Technology*, **2004**, 38, 3305-9	10.3	51
130	Solving the Nonalignment of Methods and Approaches Used in Microplastic Research to Consistently Characterize Risk. *Environmental Science & Technology*, **2020**, 54, 12307-12315	10.3	49
129	Distribution of microplastic and small macroplastic particles across four fish species and sediment in an African lake. *Science of the Total Environment*, **2020**, 741, 140527	10.2	48
128	Distribution, speciation, and bioavailability of lanthanides in the Rhine-Meuse estuary, The Netherlands. *Environmental Toxicology and Chemistry*, **2001**, 20, 1916-1926	3.8	48
127	Nano- and microplastics affect the composition of freshwater benthic communities in the long term. *Science Advances*, **2020**, 6, eaay4054	14.3	47
126	Habitat selection by chironomid larvae: fast growth requires fast food. *Journal of Animal Ecology*, **2006**, 75, 148-55	4.7	47
125	Measuring acid volatile sulphide in floodplain lake sediments: effect of reaction time, sample size and aeration. *Chemosphere*, **2002**, 47, 395-400	8.4	46
124	Risks of floating microplastic in the global ocean. *Environmental Pollution*, **2020**, 267, 115499	9.3	46
123	Sediment Toxicity Testing of Organic Chemicals in the Context of Prospective Risk Assessment: A Review. *Critical Reviews in Environmental Science and Technology*, **2014**, 44, 255-302	11.1	45

122	Global multi-pollutant modelling of water quality: scientific challenges and future directions. *Current Opinion in Environmental Sustainability*, **2019**, 36, 116-125	7.2	45
121	In situ treatment with activated carbon reduces bioaccumulation in aquatic food chains. *Environmental Science & Technology*, **2013**, 47, 4563-71	10.3	44
120	Sorption of perfluorooctane sulfonate to carbon nanotubes in aquatic sediments. *Chemosphere*, **2013**, 90, 1631-6	8.4	43
119	Estimation of in situ sediment-to-water fluxes of polycyclic aromatic hydrocarbons, polychlorobiphenyls and polybrominated diphenylethers. *Environmental Science & Technology*, **2010**, 44, 3014-20	10.3	42
118	Organic carbon normalisation of PCB, PAH and pesticide concentrations in suspended solids. *Water Research*, **1997**, 31, 461-470	12.5	42
117	Prediction of In Situ Trace Metal Distribution Coefficients for Suspended Solids in Natural Waters. *Environmental Science & Technology*, **1998**, 32, 753-759	10.3	42
116	Modeling the Fate and Transport of Plastic Debris in Freshwaters: Review and Guidance. *Handbook of Environmental Chemistry*, **2018**, 125-152	0.8	42
115	Temporal dynamics of AVS and SEM in sediment of shallow freshwater floodplain lakes. *Applied Geochemistry*, **2006**, 21, 632-642	3.5	40
114	Combined effects of copper and food on the midge Chironomus riparius in whole-sediment bioassays. *Environmental Pollution*, **2004**, 127, 99-107	9.3	40
113	Trace metal availability and effects on benthic community structure in floodplain lakes. *Environmental Toxicology and Chemistry*, **2004**, 23, 668-81	3.8	39
112	Evaluation of bioassays versus contaminant concentrations in explaining the macroinvertebrate community structure in the Rhine-Meuse delta, The Netherlands. *Environmental Toxicology and Chemistry*, **2001**, 20, 2883-2891	3.8	38
111	Dynamics of organic micropollutant biosorption to cyanobacteria and detritus. *Environmental Science & Technology*, **1995**, 29, 933-40	10.3	38
110	Water Quality Impacts of Sediment Pollution and the Role of Early Diagenesis. *Water Science and Technology*, **1993**, 28, 1-12	2.2	38
109	Global modelling of surface water quality: a multi-pollutant approach. *Current Opinion in Environmental Sustainability*, **2016**, 23, 35-45	7.2	38
108	Quantifying seasonal export and retention of nutrients in West European lowland rivers at catchment scale. *Hydrological Processes*, **2011**, 25, 2102-2111	3.3	37
107	Ecological effects of diffuse mixed pollution are site-specific and require higher-tier risk assessment to improve site management decisions: a discussion paper. *Science of the Total Environment*, **2008**, 406, 503-17	10.2	37
106	Guidance for the prognostic risk assessment of nanomaterials in aquatic ecosystems. *Science of the Total Environment*, **2015**, 535, 141-9	10.2	36
105	Temporal variation of trace metal geochemistry in floodplain lake sediment subject to dynamic hydrological conditions. *Environmental Pollution*, **2005**, 137, 281-94	9.3	36

104	Responses of benthic invertebrates to combined toxicant and food input in floodplain lake sediments. *Environmental Toxicology and Chemistry*, **2002**, 21, 2165-2171	3.8	36
103	Bioturbation and dissolved organic matter enhance contaminant fluxes from sediment treated with powdered and granular activated carbon. *Environmental Science & Technology*, **2013**, 47, 5092-100	10.3	35
102	Impact of polychlorinated biphenyl and polycyclic aromatic hydrocarbon sequestration in sediment on bioaccumulation in aquatic food webs. *Environmental Toxicology and Chemistry*, **2007**, 26, 607-15	3.8	35
101	External Nutrient Sources for Lake Tanganyika. *Journal of Great Lakes Research*, **2003**, 29, 169-180	3	35
100	Contribution of trace metals in structuring in situ macroinvertebrate community composition along a salinity gradient. *Environmental Toxicology and Chemistry*, **2000**, 19, 1002-1010	3.8	35
99	Towards validation of the NanoDUFLOW nanoparticle fate model for the river Dommel, The Netherlands. *Environmental Science: Nano*, **2016**, 3, 434-441	7.1	34
98	Including sorption to black carbon in modeling bioaccumulation of polycyclic aromatic hydrocarbons: uncertainty analysis and comparison to field data. *Environmental Science & Technology*, **2007**, 41, 2738-44	10.3	34
97	Spatial variation of metals and acid volatile sulfide in floodplain lake sediment. *Environmental Toxicology and Chemistry*, **2003**, 22, 457-465	3.8	34
96	Production of dissolved organic carbon in aquatic sediment suspensions. *Water Research*, **2003**, 37, 2217-22	12.5	34
95	Microplastics in Freshwater Biota: A Critical Review of Isolation, Characterization, and Assessment Methods. *Global Challenges*, **2020**, 4, 1800118	4.3	34
94	Managing the analytical challenges related to micro- and nanoplastics in the environment and food: filling the knowledge gaps. *Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment*, **2020**, 37, 1-10	3.2	34
93	Effects of flow regime and flooding on heavy metal availability in sediment and soil of a dynamic river system. *Environmental Pollution*, **2007**, 148, 779-87	9.3	33
92	Proxies for nanoplastic. *Nature Nanotechnology*, **2019**, 14, 307-308	28.7	31
91	Community effects of carbon nanotubes in aquatic sediments. *Environment International*, **2011**, 37, 1126-30	12.9	31
90	Dynamic modeling of food-chain accumulation of brominated flame retardants in fish from the Ebro River Basin, Spain. *Environmental Toxicology and Chemistry*, **2006**, 25, 2553-60	3.8	30
89	Long-term recovery of benthic communities in sediments amended with activated carbon. *Environmental Science & Technology*, **2012**, 46, 10735-42	10.3	29
88	Sampling method, storage and pretreatment of sediment affect AVS concentrations with consequences for bioassay responses. *Environmental Pollution*, **2008**, 151, 243-51	9.3	28
87	Impact of triphenyltin acetate in microcosms simulating floodplain lakes. I. Influence of sediment quality. *Ecotoxicology*, **2006**, 15, 267-93	2.9	28

86	Positioning activated carbon amendment technologies in a novel framework for sediment management. *Integrated Environmental Assessment and Management*, **2015**, 11, 221-34	2.5	27
85	Partitioning of perfluorooctanesulfonate and perfluorohexanesulfonate in the aquatic environment after an accidental release of aqueous film forming foam at Schiphol Amsterdam Airport. *Environmental Toxicology and Chemistry*, **2014**, 33, 1761-5	3.8	27
84	Multiwalled carbon nanotubes at environmentally relevant concentrations affect the composition of benthic communities. *Environmental Science & Technology*, **2013**, 47, 7475-82	10.3	27
83	Modeling decreased food chain accumulation of PAHs due to strong sorption to carbonaceous materials and metabolic transformation. *Environmental Science & Technology*, **2007**, 41, 6185-91	10.3	27
82	Sorption of chlorobenzenes to mineralizing phytoplankton. *Environmental Toxicology and Chemistry* , **1993**, 12, 1425-1439	3.8	27
81	Explaining PAH desorption from sediments using Rock Eval analysis. *Environmental Pollution*, **2014**, 193, 247-253	9.3	26
80	A systems analysis of microplastic pollution in Laizhou Bay, China. *Science of the Total Environment*, **2020**, 745, 140815	10.2	26
79	Sorption of Hydrophobic Organic Compounds to Plastics in the Marine Environment: Equilibrium. *Handbook of Environmental Chemistry*, **2016**, 185-204	0.8	26
78	Multimedia fate modeling of perfluorooctanoic acid (PFOA) and perfluorooctane sulphonate (PFOS) in the shallow lake Chaohu, China. *Environmental Pollution*, **2018**, 237, 339-347	9.3	25
77	Bioaccumulation of polycyclic aromatic hydrocarbons, polychlorinated biphenyls and hexachlorobenzene by three Arctic benthic species from Kongsfjorden (Svalbard, Norway). *Marine Pollution Bulletin*, **2016**, 112, 65-74	6.7	25
76	Modeling Decreased Resilience of Shallow Lake Ecosystems toward Eutrophication due to Microplastic Ingestion across the Food Web. *Environmental Science & Technology*, **2019**, 53, 13822-13831	10.3	24
75	Modeling polychlorinated biphenyl sorption isotherms for soot and coal. *Environmental Pollution*, **2010**, 158, 2672-8	9.3	24
74	Influence of salinity and mineralization on trace metal sorption to cyanobacteria in natural waters. *Water Research*, **1996**, 30, 853-864	12.5	24
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70	Sorption of 1,2,3,4-tetrachlorobenzene to sediments: The application of a simple three phase model. *Chemosphere*, **1992**, 25, 313-325	8.4	23
69	Integrated ecological and chemical food web accumulation modeling explains PAH temporal trends during regime shifts in a shallow lake. *Water Research*, **2017**, 119, 73-82	12.5	22

68	Extraction of sediment-associated polycyclic aromatic hydrocarbons with granular activated carbon. *Environmental Toxicology and Chemistry*, **2013**, 32, 304-11	3.8	22
67	Effects of black carbon on bioturbation-induced benthic fluxes of polychlorinated biphenyls. *Chemosphere*, **2011**, 84, 1150-7	8.4	21
66	Modeling of Bioaccumulation in Marine Benthic Invertebrates Using a Multispecies Experimental Approach. *Environmental Science & Technology*, **2015**, 49, 13575-85	10.3	20
65	Sorption of 1,2,3,4-tetrachlorobenzene and cadmium to sediments and suspended solids in Lake Volkerak/Zoom. *Water Research*, **1992**, 26, 327-337	12.5	20
64	Sorption mechanisms of sulfamethazine to soil humin and its subfractions after sequential treatments. *Environmental Pollution*, **2017**, 221, 266-275	9.3	19
63	Trait-based modelling of bioaccumulation by freshwater benthic invertebrates. *Aquatic Toxicology*, **2016**, 176, 88-96	5.1	19
62	Nonequilibrium of organic compounds in sediment-water systems. Consequences for risk assessment and remediation measures. *Environmental Science & Technology*, **2012**, 46, 10900-8	10.3	19
61	Triple domain in situ sorption modeling of organochlorine pesticides, polychlorobiphenyls, polyaromatic hydrocarbons, polychlorinated dibenzo-p-dioxins, and polychlorinated dibenzofurans in aquatic sediments. *Environmental Science & Technology*, **2009**, 43, 8847-53	10.3	19
60	The impact of sediment reworking by opportunistic chironomids on specialised mayflies. *Freshwater Biology*, **2005**, 50, 770-780	3.1	19
59	Impact of polystyrene nanoparticles on marine diatom Skeletonema marinoi chain assemblages and consequences on their ecological role in marine ecosystems. *Environmental Pollution*, **2020**, 262, 114268	9.3	18
58	Limited reversibility of bioconcentration of hydrophobic organic chemicals in phytoplankton. *Environmental Science & Technology*, **2014**, 48, 7341-8	10.3	18
57	Impacts of manipulated regime shifts in shallow lake model ecosystems on the fate of hydrophobic organic compounds. *Water Research*, **2010**, 44, 6153-63	12.5	18
56	Long-term bioconcentration kinetics of hydrophobic chemicals in Selenastrum capricornutum and Microcystis aeruginosa. *Environmental Toxicology and Chemistry*, **1999**, 18, 1164-1172	3.8	18
55	Interactions between nutrients and organic micro-pollutants in shallow freshwater model ecosystems. *Science of the Total Environment*, **2008**, 406, 436-42	10.2	17
54	Global Modeled Sinking Characteristics of Biofouled Microplastic. *Journal of Geophysical Research: Oceans*, **2021**, 126, e2020JC017098	3.3	17
53	Urbanization: an increasing source of multiple pollutants to rivers in the 21st century. *Npj Urban Sustainability*, **2021**, 1,		17
52	Modeling trade-off between PAH toxicity reduction and negative effects of sorbent amendments to contaminated sediments. *Environmental Science & Technology*, **2012**, 46, 4975-84	10.3	16
51	Black carbon inclusive multichemical modeling of PBDE and PCB biomagnification and -transformation in estuarine food webs. *Environmental Science & Technology*, **2010**, 44, 7548-54	10.3	16

50	Effects of benzo(a)pyrene and size of organic matter particles on bioaccumulation and growth of Asellus aquaticus. *Archives of Environmental Contamination and Toxicology*, **2000**, 39, 307-14	3.2	16
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47	. *Environmental Toxicology and Chemistry*, **2000**, 19, 793	3.8	15
46	Global Plastic Pollution Observation System to Aid Policy. *Environmental Science & Technology*, **2021**, 55, 7770-7775	10.3	15
45	Equilibrium and kinetic modeling of contaminant immobilization by activated carbon amended to sediments in the field. *Water Research*, **2014**, 67, 96-104	12.5	14
44	Geochemistry of suspended and settling solids in two freshwater lakes. *Hydrobiologia*, **1997**, 364, 15-29	2.4	13
43	Development of screening criteria for microplastic particles in air and atmospheric deposition: critical review and applicability towards assessing human exposure. *Microplastics and Nanoplastics*, **2021**, 1,		13
42	Communicating the absence of evidence for microplastics risk: Balancing sensation and reflection. *Environment International*, **2021**, 150, 106116	12.9	13
41	Lake retention of manufactured nanoparticles. *Environmental Pollution*, **2015**, 196, 171-5	9.3	12
40	Analysis of organic contaminant desorption kinetic data for sediments and soils: implications for the Tenax extraction time for the determination of bioavailable concentrations. *Science of the Total Environment*, **2014**, 490, 235-8	10.2	12
39	A kinetic approach to evaluate the association of acid volatile sulfide and simultaneously extracted metals in aquatic sediments. *Environmental Toxicology and Chemistry*, **2009**, 28, 711-7	3.8	12
38	Risk assessment of microplastic particles. *Nature Reviews Materials*, **2022**, 7, 138-152	73.3	12
37	Desorption of Chlorobenzenes from Natural Suspended Solids and Sediments. *Water Science and Technology*, **1993**, 28, 171-180	2.2	12
36	Microplastics in brown trout (Salmo trutta Linnaeus, 1758) from an Irish riverine system. *Environmental Pollution*, **2020**, 267, 115572	9.3	12
35	Binding constants of chlorobenzenes and polychlorobiphenyls for algal exudates. *Water Science and Technology*, **1998**, 37, 67-73	2.2	11
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