Albert A Koelmans

List of Publications by Year in descending order

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215 papers

28,079 citations

75 h-index

10070

161

219 all docs

219 docs citations

219 times ranked 17841 citing authors

g-index

#	Article	IF	CITATIONS
1	Microplastics in freshwaters and drinking water: Critical review and assessment of data quality. Water Research, 2019, 155, 410-422.	5.3	1,366
2	Extensive Sorption of Organic Compounds to Black Carbon, Coal, and Kerogen in Sediments and Soils:Â Mechanisms and Consequences for Distribution, Bioaccumulation, and Biodegradation. Environmental Science & Environmental S	4.6	1,235
3	Microplastic as a Vector for Chemicals in the Aquatic Environment: Critical Review and Model-Supported Reinterpretation of Empirical Studies. Environmental Science & Environm	4.6	1,031
4	Nanoplastic Affects Growth of <i>S. obliquus</i> and Reproduction of <id. i="" magna<=""> Environmental Science & December 2014, 48, 12336-12343.</id.>	4.6	868
5	Microplastics in the Terrestrial Ecosystem: Implications for <i>Lumbricus terrestris</i> (Oligochaeta,) Tj ETQq1 1	0.784314	rgBT ₄ /Over <mark>l</mark> o
6	Effects of Microplastic on Fitness and PCB Bioaccumulation by the Lugworm <i>Arenicola marina</i> (L.). Environmental Science & Echnology, 2013, 47, 593-600.	4.6	797
7	Plastic in North Sea Fish. Environmental Science & Technology, 2013, 47, 8818-8824.	4.6	738
8	Strong Sorption of PCBs to Nanoplastics, Microplastics, Carbon Nanotubes, and Fullerenes. Environmental Science & Environmenta	4.6	716
9	Fate of nano- and microplastic in freshwater systems: A modeling study. Environmental Pollution, 2017, 220, 540-548.	3.7	601
10	Ups and Downs in the Ocean: Effects of Biofouling on Vertical Transport of Microplastics. Environmental Science & Environmenta	4.6	566
11	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, 3725-3734.	4.6	532
12	Field evidence for transfer of plastic debris along a terrestrial food chain. Scientific Reports, 2017, 7, 14071.	1.6	523
13	Potential scenarios for nanomaterial release and subsequent alteration in the environment. Environmental Toxicology and Chemistry, 2012, 31, 50-59.	2.2	498
14	Incorporation of microplastics from litter into burrows of Lumbricus terrestris. Environmental Pollution, 2017, 220, 523-531.	3.7	479
15	The physical oceanography of the transport of floating marine debris. Environmental Research Letters, 2020, 15, 023003.	2.2	469
16	Black carbon: The reverse of its dark side. Chemosphere, 2006, 63, 365-377.	4.2	452
17	Effects of nanopolystyrene on the feeding behavior of the blue mussel (<i>Mytilus edulis</i> L.). Environmental Toxicology and Chemistry, 2012, 31, 2490-2497.	2.2	435
18	Plastic as a Carrier of POPs to Aquatic Organisms: A Model Analysis. Environmental Science & Emp; Technology, 2013, 47, 7812-7820.	4.6	415

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19	Export of microplastics from land to sea. A modelling approach. Water Research, 2017, 127, 249-257.	5.3	402
20	Analysis of engineered nanomaterials in complex matrices (environment and biota): General considerations and conceptual case studies. Environmental Toxicology and Chemistry, 2012, 31, 32-49.	2.2	390
21	Quality Criteria for the Analysis of Microplastic in Biota Samples: A Critical Review. Environmental Science & Environmental &	4.6	371
22	Leaching of plastic additives to marine organisms. Environmental Pollution, 2014, 187, 49-54.	3.7	359
23	Simplifying Microplastic via Continuous Probability Distributions for Size, Shape, and Density. Environmental Science and Technology Letters, 2019, 6, 551-557.	3.9	335
24	Quantifying ecological risks of aquatic micro- and nanoplastic. Critical Reviews in Environmental Science and Technology, 2019, 49, 32-80.	6.6	329
25	Microplastic in a macro filter feeder: Humpback whale Megaptera novaeangliae. Marine Pollution Bulletin, 2015, 95, 248-252.	2.3	327
26	Aging of microplastics promotes their ingestion by marine zooplankton. Environmental Pollution, 2017, 231, 987-996.	3.7	322
27	Risk assessment of microplastics in the ocean: Modelling approach and first conclusions. Environmental Pollution, 2018, 242, 1930-1938.	3.7	313
28	Risk assessment of microplastic particles. Nature Reviews Materials, 2022, 7, 138-152.	23.3	306
29	Paradigms to assess the environmental impact of manufactured nanomaterials. Environmental Toxicology and Chemistry, 2012, 31, 3-14.	2.2	294
30	Ecotoxicity test methods for engineered nanomaterials: Practical experiences and recommendations from the bench. Environmental Toxicology and Chemistry, 2012, 31, 15-31.	2.2	273
31	Polyoxymethylene Solid Phase Extraction as a Partitioning Method for Hydrophobic Organic Chemicals in Sediment and Soot. Environmental Science & Envir	4.6	270
32	Nanoplastics in the Aquatic Environment. Critical Review., 2015,, 325-340.		261
33	Risks of Plastic Debris: Unravelling Fact, Opinion, Perception, and Belief. Environmental Science & Technology, 2017, 51, 11513-11519.	4.6	250
34	Microplastic Effect Thresholds for Freshwater Benthic Macroinvertebrates. Environmental Science & Envi	4.6	240
35	Lifetime Accumulation of Microplastic in Children and Adults. Environmental Science & Emp; Technology, 2021, 55, 5084-5096.	4.6	233
36	All is not lost: deriving a top-down mass budget of plastic at sea. Environmental Research Letters, 2017, 12, 114028.	2.2	231

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37	Effects of nanoplastics and microplastics on the growth of sediment-rooted macrophytes. Science of the Total Environment, 2019, 654, 1040-1047.	3.9	223
38	Negligible Impact of Ingested Microplastics on Tissue Concentrations of Persistent Organic Pollutants in Northern Fulmars off Coastal Norway. Environmental Science & Enp.; Technology, 2016, 50, 1924-1933.	4.6	215
39	Extraction of Polycyclic Aromatic Hydrocarbons from Soot and Sediment:Â Solvent Evaluation and Implications for Sorption Mechanism. Environmental Science & Extraction of Polycyclic Aromatic Hydrocarbons from Soot and Sediment:Â Solvent Evaluation and Implications for Sorption Mechanism.	4.6	211
40	Accumulation of Plastic Debris and Associated Contaminants in Aquatic Food Webs. Environmental Science & Environmental Science	4.6	210
41	Heteroaggregation and sedimentation rates for nanomaterials in natural waters. Water Research, 2014, 48, 269-279.	5.3	205
42	Sorption of polycyclic aromatic hydrocarbons to polystyrene nanoplastic. Environmental Toxicology and Chemistry, 2016, 35, 1650-1655.	2.2	196
43	The effect of particle properties on the depth profile of buoyant plastics in the ocean. Scientific Reports, 2016, 6, 33882.	1.6	194
44	Distribution of Perfluorinated Compounds in Aquatic Systems in The Netherlands. Environmental Science & Environmental Science	4.6	189
45	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.	2.2	186
46	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.	6.6	172
47	Quality Criteria for Microplastic Effect Studies in the Context of Risk Assessment: A Critical Review. Environmental Science & Technology, 2020, 54, 11692-11705.	4.6	172
48	Multimedia Modeling of Engineered Nanoparticles with SimpleBox4nano: Model Definition and Evaluation. Environmental Science & Evaluation. Environmental Science & Evaluation. Environmental Science & Evaluation. Environmental Science & Evaluation.	4.6	169
49	Detection of low numbers of microplastics in North Sea fish using strict quality assurance criteria. Marine Pollution Bulletin, 2017, 122, 253-258.	2.3	162
50	Integrated Modelling of Eutrophication and Organic Contaminant Fate & Effects in Aquatic Ecosystems. A Review. Water Research, 2001, 35, 3517-3536.	5.3	155
51	Solving the Nonalignment of Methods and Approaches Used in Microplastic Research to Consistently Characterize Risk. Environmental Science & Environmen	4.6	154
52	Plastic ingestion by marine fish in the wild. Critical Reviews in Environmental Science and Technology, 2020, 50, 657-697.	6.6	145
53	Risks of floating microplastic in the global ocean. Environmental Pollution, 2020, 267, 115499.	3.7	127
54	Transfer of PCBs from Microplastics under Simulated Gut Fluid Conditions Is Biphasic and Reversible. Environmental Science & E	4.6	126

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55	A systems approach to understand microplastic occurrence and variability in Dutch riverine surface waters. Water Research, 2020, 176, 115723.	5.3	126
56	Creating a safe operating space for wetlands in a changing climate. Frontiers in Ecology and the Environment, 2017, 15, 99-107.	1.9	125
57	EFFECTS OF SEDIMENTARY SOOTLIKE MATERIALS ON BIOACCUMULATION AND SORPTION OF POLYCHLORINATED BIPHENYLS. Environmental Toxicology and Chemistry, 2004, 23, 2563.	2.2	124
58	Current Insights into Monitoring, Bioaccumulation, and Potential Health Effects of Microplastics Present in the Food Chain. Foods, 2020, 9, 72.	1.9	124
59	Combined effects of nanoplastics and copper on the freshwater alga Raphidocelis subcapitata. Aquatic Toxicology, 2019, 210, 179-187.	1.9	122
60	Pollutants in Plastics within the North Pacific Subtropical Gyre. Environmental Science & Emp; Technology, 2018, 52, 446-456.	4.6	121
61	The Effect of Microplastic on the Uptake of Chemicals by the Lugworm <i>Arenicola marina </i> (L.) under Environmentally Relevant Exposure Conditions. Environmental Science & Exposure Conditions. Environmental Exposu	4.6	119
62	Plastics in the marine environment. Environmental Toxicology and Chemistry, 2014, 33, 5-10.	2.2	115
63	Extremely Slowly Desorbing Polycyclic Aromatic Hydrocarbons from Soot and Soot-like Materials: Evidence by Supercritical Fluid Extraction. Environmental Science & Eamp; Technology, 2005, 39, 7889-7895.	4.6	109
64	Plastic debris and policy: Using current scientific understanding to invoke positive change. Environmental Toxicology and Chemistry, 2016, 35, 1617-1626.	2.2	108
65	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.	3.9	107
66	Comparison of manufactured and black carbon nanoparticle concentrations in aquatic sediments. Environmental Pollution, 2009, 157, 1110-1116.	3.7	106
67	Nano- and microplastics affect the composition of freshwater benthic communities in the long term. Science Advances, 2020, 6, eaay4054.	4.7	104
68	In situ remediation of contaminated sediments using carbonaceous materials. Environmental Toxicology and Chemistry, 2012, 31, 693-704.	2.2	97
69	Black Carbon and Ecological Factors Affect In Situ Biota to Sediment Accumulation Factors for Hydrophobic Organic Compounds in Flood Plain Lakes. Environmental Science & Echnology, 2005, 39, 3101-3109.	4.6	92
70	Spatially explicit fate modelling of nanomaterials in natural waters. Water Research, 2015, 80, 200-208.	5.3	90
71	Ingestion and Chronic Effects of Car Tire Tread Particles on Freshwater Benthic Macroinvertebrates. Environmental Science & En	4.6	90
72	Attenuation of Polychlorinated Biphenyl Sorption to Charcoal by Humic Acids. Environmental Science & E	4.6	86

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73	Rapid settling of nanoparticles due to heteroaggregation with suspended sediment. Environmental Toxicology and Chemistry, 2014, 33, 1766-1773.	2.2	86
74	Modeling the Role of Microplastics in Bioaccumulation of Organic Chemicals to Marine Aquatic Organisms. A Critical Review., 2015, , 309-324.		85
75	Urbanization: an increasing source of multiple pollutants to rivers in the 21st century. Npj Urban Sustainability, 2021, 1, .	3.7	84
76	Sorption of Polycyclic Aromatic Hydrocarbons to Oil Contaminated Sediment:Â Unresolved Complex?. Environmental Science & Envir	4.6	82
77	Evaluation of Bioaccumulation Using In Vivo Laboratory and Field Studies. Integrated Environmental Assessment and Management, 2009, 5, 598-623.	1.6	81
78	Global multi-pollutant modelling of water quality: scientific challenges and future directions. Current Opinion in Environmental Sustainability, 2019, 36, 116-125.	3.1	80
79	Characterizing the multidimensionality of microplastics across environmental compartments. Water Research, 2021, 202, 117429.	5. 3	79
80	Modeling the Fate and Transport of Plastic Debris in Freshwaters: Review and Guidance. Handbook of Environmental Chemistry, 2018, , 125-152.	0.2	78
81	Ecotoxicological Effects of Activated Carbon Amendments on Macroinvertebrates in Nonpolluted and Polluted Sediments. Environmental Science & Environme	4.6	73
82	Simplifying modeling of nanoparticle aggregation–sedimentation behavior in environmental systems: A theoretical analysis. Water Research, 2014, 62, 193-201.	5. 3	72
83	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, 3336-3346.	3.7	70
84	Global Modeled Sinking Characteristics of Biofouled Microplastic. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC017098.	1.0	69
85	Quantification methods of Black Carbon: Comparison of Rock-Eval analysis with traditional methods. Journal of Chromatography A, 2009, 1216, 613-622.	1.8	66
86	Multimedia environmental fate and speciation of engineered nanoparticles: a probabilistic modeling approach. Environmental Science: Nano, 2016, 3, 715-727.	2.2	66
87	A systems analysis of microplastic pollution in Laizhou Bay, China. Science of the Total Environment, 2020, 745, 140815.	3.9	64
88	Habitat selection by chironomid larvae: fast growth requires fast food. Journal of Animal Ecology, 2006, 75, 148-155.	1.3	63
89	WEATHERING AND TOXICITY OF MARINE SEDIMENTS CONTAMINATED WITH OILS AND POLYCYCLIC AROMATIC HYDROCARBONS. Environmental Toxicology and Chemistry, 2006, 25, 1345.	2.2	63
90	Global Plastic Pollution Observation System to Aid Policy. Environmental Science & Emp; Technology, 2021, 55, 7770-7775.	4.6	59

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91	Sorption of organic compounds to activated carbons. Evaluation of isotherm models. Chemosphere, 2006, 65, 2343-2351.	4.2	58
92	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.	1.6	57
93	Sorption of perfluorooctane sulfonate to carbon nanotubes in aquatic sediments. Chemosphere, 2013, 90, 1631-1636.	4.2	57
94	Proxies for nanoplastic. Nature Nanotechnology, 2019, 14, 307-308.	15.6	57
95	Uptake of Sediment-Bound Bioavailable Polychlorobiphenyls by Benthivorous Carp (Cyprinus carpio). Environmental Science & Envi	4.6	56
96	Risk-based management framework for microplastics in aquatic ecosystems. Microplastics and Nanoplastics, 2022, 2 , .	4.1	56
97	Measuring acid volatile sulphide in floodplain lake sediments: effect of reaction time, sample size and aeration. Chemosphere, 2002, 47, 395-400.	4.2	55
98	Modeling Maximum Adsorption Capacities of Soot and Soot-like Materials for PAHs and PCBs. Environmental Science & Environmenta	4.6	54
99	Microplastics in Freshwater Biota: A Critical Review of Isolation, Characterization, and Assessment Methods. Global Challenges, 2020, 4, 1800118.	1.8	53
100	Distribution, speciation, and bioavailability of lanthanides in the Rhineâ€Meuse estuary, The Netherlands. Environmental Toxicology and Chemistry, 2001, 20, 1916-1926.	2.2	51
101	Global modelling of surface water quality: a multi-pollutant approach. Current Opinion in Environmental Sustainability, 2016, 23, 35-45.	3.1	50
102	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.	1.1	50
103	Guidance for the prognostic risk assessment of nanomaterials in aquatic ecosystems. Science of the Total Environment, 2015, 535, 141-149.	3.9	49
104	Prediction ofln SituTrace Metal Distribution Coefficients for Suspended Solids in Natural Waters. Environmental Science & Envi	4.6	47
105	Temporal dynamics of AVS and SEM in sediment of shallow freshwater floodplain lakes. Applied Geochemistry, 2006, 21, 632-642.	1.4	47
106	In situ Treatment with Activated Carbon Reduces Bioaccumulation in Aquatic Food Chains. Environmental Science & Environmental	4.6	47
107	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.	6.6	47
108	Organic carbon normalisation of PCB, PAH and pesticide concentrations in suspended solids. Water Research, 1997, 31, 461-470.	5.3	46

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109	External Nutrient Sources for Lake Tanganyika. Journal of Great Lakes Research, 2003, 29, 169-180.	0.8	46
110	Estimation of In Situ Sediment-to-Water Fluxes of Polycyclic Aromatic Hydrocarbons, Polychlorobiphenyls and Polybrominated Diphenylethers. Environmental Science & Environmental Science & 2010, 44, 3014-3020.	4.6	45
111	Quantifying seasonal export and retention of nutrients in West European lowland rivers at catchment scale. Hydrological Processes, 2011, 25, 2102-2111.	1.1	44
112	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.	3.7	44
113	Water Quality Impacts of Sediment Pollution and the Role of Early Diagenesis. Water Science and Technology, 1993, 28, 1-12.	1.2	43
114	Combined effects of copper and food on the midge Chironomus riparius in whole-sediment bioassays. Environmental Pollution, 2004, 127, 99-107.	3.7	43
115	Bioturbation and Dissolved Organic Matter Enhance Contaminant Fluxes from Sediment Treated with Powdered and Granular Activated Carbon. Environmental Science & Technology, 2013, 47, 5092-5100.	4.6	43
116	Environmental risks of car tire microplastic particles and other road runoff pollutants. Microplastics and Nanoplastics, 2021, 1, .	4.1	43
117	Dynamics of Organic Micropollutant Biosorption to Cyanobacteria and Detritus. Environmental Science &	4.6	42
118	Evaluation of bioassays versus contaminant concentrations in explaining the macroinvertebrate community structure in the Rhineâ€Meuse delta, The Netherlands. Environmental Toxicology and Chemistry, 2001, 20, 2883-2891.	2.2	42
119	TRACE METAL AVAILABILITY AND EFFECTS ON BENTHIC COMMUNITY STRUCTURE IN FLOODPLAIN LAKES. Environmental Toxicology and Chemistry, 2004, 23, 668.	2.2	42
120	Effects of flow regime and flooding on heavy metal availability in sediment and soil of a dynamic river system. Environmental Pollution, 2007, 148, 779-787.	3.7	42
121	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, 503-517.	3.9	42
122	Development of screening criteria for microplastic particles in air and atmospheric deposition: critical review and applicability towards assessing human exposure. Microplastics and Nanoplastics, $2021, 1, \ldots$	4.1	42
123	Spatial variation of metals and acid volatile sulfide in floodplain lake sediment. Environmental Toxicology and Chemistry, 2003, 22, 457-465.	2.2	41
124	Modeling Decreased Resilience of Shallow Lake Ecosystems toward Eutrophication due to Microplastic Ingestion across the Food Web. Environmental Science & Echnology, 2019, 53, 13822-13831.	4.6	41
125	Responses of benthic invertebrates to combined toxicant and food input in floodplain lake sediments. Environmental Toxicology and Chemistry, 2002, 21, 2165-2171.	2.2	39
126	Production of dissolved organic carbon in aquatic sediment suspensions. Water Research, 2003, 37, 2217-2222.	5.3	39

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127	Temporal variation of trace metal geochemistry in floodplain lake sediment subject to dynamic hydrological conditions. Environmental Pollution, 2005, 137, 281-294.	3.7	39
128	Towards validation of the NanoDUFLOW nanoparticle fate model for the river Dommel, The Netherlands. Environmental Science: Nano, 2016, 3, 434-441.	2.2	39
129	Including Sorption to Black Carbon in Modeling Bioaccumulation of Polycyclic Aromatic Hydrocarbons:Â Uncertainty Analysis and Comparison to Field Data. Environmental Science & Emp; Technology, 2007, 41, 2738-2744.	4.6	37
130	Sorption of Hydrophobic Organic Compounds to Plastics in the Marine Environment: Equilibrium. Handbook of Environmental Chemistry, 2016, , 185-204.	0.2	37
131	Contribution of trace metals in structuring in situ macroinvertebrate community composition along a salinity gradient. Environmental Toxicology and Chemistry, 2000, 19, 1002-1010.	2,2	36
132	IMPACT OF POLYCHLORINATED BIPHENYL AND POLYCYCLIC AROMATIC HYDROCARBON SEQUESTRATION IN SEDIMENT ON BIOACCUMULATION IN AQUATIC FOOD WEBS. Environmental Toxicology and Chemistry, 2007, 26, 607.	2,2	36
133	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, 1761-1765.	2,2	36
134	Development and application of a health-based framework for informing regulatory action in relation to exposure of microplastic particles in California drinking water. Microplastics and Nanoplastics, 2022, 2, .	4.1	35
135	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.	2,2	33
136	Community effects of carbon nanotubes in aquatic sediments. Environment International, 2011, 37, 1126-1130.	4.8	32
137	Explaining PAH desorption from sediments using Rock Eval analysis. Environmental Pollution, 2014, 193, 247-253.	3.7	32
138	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.	2.3	32
139	Multimedia fate modeling of perfluorooctanoic acid (PFOA) and perfluorooctane sulphonate (PFOS) in the shallow lake Chaohu, China. Environmental Pollution, 2018, 237, 339-347.	3.7	32
140	Sorption of chlorobenzenes to mineralizing phytoplankton. Environmental Toxicology and Chemistry, 1993, 12, 1425-1439.	2.2	31
141	Sampling method, storage and pretreatment of sediment affect AVS concentrations with consequences for bioassay responses. Environmental Pollution, 2008, 151, 243-251.	3.7	31
142	Positioning activated carbon amendment technologies in a novel framework for sediment management. Integrated Environmental Assessment and Management, 2015, 11, 221-234.	1.6	31
143	Paradigms to assess the human health risks of nano- and microplastics. Microplastics and Nanoplastics, 2021, $1,\ldots$	4.1	31
144	Impact of triphenyltin acetate in microcosms simulating floodplain lakes. I. Influence of sediment quality. Ecotoxicology, 2006, 15, 267-293.	1,1	30

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145	Long-Term Recovery of Benthic Communities in Sediments Amended with Activated Carbon. Environmental Science & Environmental Sc	4.6	30
146	Modeling Decreased Food Chain Accumulation of PAHs Due to Strong Sorption to Carbonaceous Materials and Metabolic Transformation. Environmental Science & Eamp; Technology, 2007, 41, 6185-6191.	4.6	29
147	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.	5.3	29
148	Multiwalled Carbon Nanotubes at Environmentally Relevant Concentrations Affect the Composition of Benthic Communities. Environmental Science & Environmental Science & 2013, 47, 7475-7482.	4.6	27
149	Modeling of Bioaccumulation in Marine Benthic Invertebrates Using a Multispecies Experimental Approach. Environmental Science & Experimental Science & Experimen	4.6	27
150	Influence of salinity and mineralization on trace metal sorption to cyanobacteria in natural waters. Water Research, 1996, 30, 853-864.	5.3	26
151	Modeling polychlorinated biphenyl sorption isotherms for soot and coal. Environmental Pollution, 2010, 158, 2672-2678.	3.7	26
152	In situ sorption of hydrophobic organic compounds to sediment amended with activated carbon. Environmental Pollution, 2012, 161, 23-29.	3.7	26
153	Extraction of sedimentâ€associated polycyclic aromatic hydrocarbons with granular activated carbon. Environmental Toxicology and Chemistry, 2013, 32, 304-311.	2.2	26
154	Sorption mechanisms of sulfamethazine to soil humin and its subfractions after sequential treatments. Environmental Pollution, 2017, 221, 266-275.	3.7	26
155	Sorption of 1,2,3,4-tetrachlorobenzene to sediments: The application of a simple three phase model. Chemosphere, 1992, 25, 313-325.	4.2	25
156	Negative food dilution and positive biofilm carrier effects of microplastic ingestion by D. magna cause tipping points at the population level. Environmental Pollution, 2022, 294, 118622.	3.7	25
157	Sorption of 1,2,3,4-tetrachlorobenzene and cadmium to sediments and suspended solids in Lake Volkerak/Zoom. Water Research, 1992, 26, 327-337.	5.3	24
158	Comparison of thermal stratification, light attenuation, and chlorophyll- a dynamics between the ends of Lake Tanganyika. Aquatic Ecosystem Health and Management, 2002, 5, 255-265.	0.3	24
159	Trait-based modelling of bioaccumulation by freshwater benthic invertebrates. Aquatic Toxicology, 2016, 176, 88-96.	1.9	24
160	Microplastics in brown trout (Salmo trutta Linnaeus, 1758) from an Irish riverine system. Environmental Pollution, 2020, 267, 115572.	3.7	24
161	Metal-doping of nanoplastics enables accurate assessment of uptake and effects on <i>Gammarus pulex</i> . Environmental Science: Nano, 2021, 8, 1761-1770.	2.2	24
162	SPATIAL VARIATION OF METALS AND ACID VOLATILE SULFIDE IN FLOODPLAIN LAKE SEDIMENT. Environmental Toxicology and Chemistry, 2003, 22, 457.	2.2	24

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163	The impact of sediment reworking by opportunistic chironomids on specialised mayflies. Freshwater Biology, 2005, 50, 770-780.	1.2	23
164	Triple Domain in Situ Sorption Modeling of Organochlorine Pesticides, Polychlorobiphenyls, Polyaromatic Hydrocarbons, Polychlorinated Dibenzo-p-Dioxins, and Polychlorinated Dibenzofurans in Aquatic Sediments. Environmental Science & Environmental	4.6	22
165	Effects of black carbon on bioturbation-induced benthic fluxes of polychlorinated biphenyls. Chemosphere, 2011, 84, 1150-1157.	4.2	22
166	Nonequilibrium of Organic Compounds in Sediment–Water Systems. Consequences for Risk Assessment and Remediation Measures. Environmental Science & E	4.6	22
167	Assessing seasonal nitrogen export to large tropical lakes. Science of the Total Environment, 2020, 731, 139199.	3.9	22
168	Communicating the absence of evidence for microplastics risk: Balancing sensation and reflection. Environment International, 2021, 150, 106116.	4.8	22
169	Modelling submerged biofouled microplastics and their vertical trajectories. Biogeosciences, 2022, 19, 2211-2234.	1.3	22
170	Limited Reversibility of Bioconcentration of Hydrophobic Organic Chemicals in Phytoplankton. Environmental Science & Environme	4.6	21
171	Automated 14 FTIR Imaging Demonstrates Taxon-Specific and Selective Uptake of Microplastic by Freshwater Invertebrates. Environmental Science & Environmental Science & 2021, 55, 9916-9925.	4.6	21
172	Longâ€term bioconcentration kinetics of hydrophobic chemicals in <i>Selenastrum capricornutum</i> and <i>Microcystis aeruginosa</i> . Environmental Toxicology and Chemistry, 1999, 18, 1164-1172.	2.2	20
173	Assessing microplastic as a vector for chemical entry into fish larvae using a novel tube-feeding approach. Chemosphere, 2021, 265, 129144.	4.2	20
174	Desorption of Chlorobenzenes from Natural Suspended Solids and Sediments. Water Science and Technology, 1993, 28, 171-180.	1.2	20
175	A living tool for the continued exploration of microplastic toxicity. Microplastics and Nanoplastics, 2022, 2, .	4.1	20
176	Interactions between nutrients and organic micro-pollutants in shallow freshwater model ecosystems. Science of the Total Environment, 2008, 406, 436-442.	3.9	19
177	Impacts of manipulated regime shifts in shallow lake model ecosystems on the fate of hydrophobic organic compounds. Water Research, 2010, 44, 6153-6163.	5.3	19
178	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, 307-314.	2.1	18
179	Uptake, Translocation, and Elimination in Sediment-Rooted Macrophytes: A Model-Supported Analysis of Whole Sediment Test Data. Environmental Science & Environmental Science & 2014, 48, 12344-12353.	4.6	18
180	Black Carbon Inclusive Multichemical Modeling of PBDE and PCB Biomagnification and -Transformation in Estuarine Food Webs. Environmental Science & Environmental Science & 2010, 44, 7548-7554.	4.6	17

#	Article	IF	CITATIONS
181	Kinetics of hydrophobic organic contaminant extraction from sediment by granular activated carbon. Water Research, 2014, 51, 86-95.	5.3	17
182	Equilibrium and kinetic modeling of contaminant immobilization by activated carbon amended to sediments in the field. Water Research, 2014, 67, 96-104.	5. 3	17
183	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, 235-238.	3.9	17
184	Modeling Trade-off between PAH Toxicity Reduction and Negative Effects of Sorbent Amendments to Contaminated Sediments. Environmental Science & Enviro	4.6	16
185	Geochemistry of suspended and settling solids in two freshwater lakes. Hydrobiologia, 1997, 364, 15-29.	1.0	15
186	MODELING THE VERTICAL DISTRIBUTION OF CARBENDAZIM IN SEDIMENTS. Environmental Toxicology and Chemistry, 2000, 19, 793.	2.2	15
187	Risk characterization of microplastics in San Francisco Bay, California. Microplastics and Nanoplastics, 2022, 2, .	4.1	15
188	A kinetic approach to evaluate the association of acid volatile sulfide and simultaneously extracted metals in aquatic sediments. Environmental Toxicology and Chemistry, 2009, 28, 711-717.	2.2	14
189	Bioaccumulation of polycyclic aromatic hydrocarbons by arctic and temperate benthic species. Environmental Toxicology and Chemistry, 2019, 38, 883-895.	2.2	14
190	Lake retention of manufactured nanoparticles. Environmental Pollution, 2015, 196, 171-175.	3.7	13
191	Prospective Environmental Risk Assessment for Sediment-Bound Organic Chemicals: A Proposal for Tiered Effect Assessment. Reviews of Environmental Contamination and Toxicology, 2016, 239, 1-77.	0.7	13
192	Modelling the transfer and accumulation of microplastics in a riverine freshwater food web. Environmental Advances, 2022, 8, 100192.	2.2	13
193	Water Quality of Lake Tana Basin, Upper Blue Nile, Ethiopia. A Review of Available Data. AESS Interdisciplinary Environmental Studies and Sciences Series, 2017, , 127-141.	0.2	12
194	Clarifying the absence of evidence regarding human health risks to microplastic particles in drinking-water: High quality robust data wanted. Environment International, 2021, 150, 106141.	4.8	12
195	Binding constants of chlorobenzenes and polychlorobiphenyls for algal exudates. Water Science and Technology, 1998, 37, 67-73.	1.2	11
196	Weight of Evidence for the Microplastic Vector Effect in the Context of Chemical Risk Assessment. Environmental Contamination Remediation and Management, 2022, , 155-197.	0.5	11
197	Molecular Assessment of Bacterial Community Dynamics and Functional End Points during Sediment Bioaccumulation Tests. Environmental Science & Environm	4.6	10
198	INFLUENCE OF SEDIMENT QUALITY ON THE RESPONSES OF BENTHIC INVERTEBRATES AFTER TREATMENT WITH THE FUNGICIDE TRIPHENYLTIN ACETATE. Environmental Toxicology and Chemistry, 2005, 24, 1133.	2.2	9

#	Article	IF	Citations
199	Evaluation of bioassays versus contaminant concentrations in explaining the macroinvertebrate community structure in the Rhine-Meuse delta, The Netherlands. , 2001, 20, 2883.		9
200	Correction of experimental sorption coefficients using doc measurements and apparent solubility enhancements. Environmental Toxicology and Chemistry, 1995, 14, 2015-2016.	2.2	8
201	Uptake and elimination of 1,2,4-trichlorobenzene in the guppy () at sublethal and lethal aqueous concentrations. Chemosphere, 1997, 34, 2259-2270.	4.2	8
202	Analyzing the Limitations and the Applicability Domain of Water–Sediment Transformation Tests like OECD 308. Environmental Science & Echnology, 2016, 50, 10335-10342.	4.6	7
203	Dynamics and recovery of a sediment-exposed Chironomus riparius population: A modelling approach. Environmental Pollution, 2016, 213, 741-750.	3.7	7
204	Response to Comment on "Modeling Maximum Adsorption Capacities of Soot and Soot-like Materials for PAHs and PCBs― Environmental Science & Environmental Science & Sout and PCBs― Environmental Science & Sout and PCBs⧕ Environmental Sci	4.6	6
205	Avoidance tests as a tool to detect sublethal effects of oilâ€impacted sediments. Environmental Toxicology and Chemistry, 2018, 37, 1757-1766.	2.2	6
206	Biomarker responses and biotransformation capacity in Arctic and temperate benthic species exposed to polycyclic aromatic hydrocarbons. Science of the Total Environment, 2019, 662, 631-638.	3.9	6
207	Contribution of trace metals in structuring in situ macroinvertebrate community composition along a salinity gradient., 2000, 19, 1002.		6
208	Spatial variation of metals and acid volatile sulfide in floodplain lake sediment. Environmental Toxicology and Chemistry, 2003, 22, 457-65.	2.2	6
209	Turbulent mixing accelerates PAH desorption due to fragmentation of sediment particle aggregates. Journal of Soils and Sediments, 2017, 17, 277-285.	1.5	5
210	LONG-TERM BIOCONCENTRATION KINETICS OF HYDROPHOBIC CHEMICALS IN SELENASTRUM CAPRICORNUTUM AND MICROCYSTIS AERUGINOSA. Environmental Toxicology and Chemistry, 1999, 18, 1164.	2.2	5
211	Response to Comment on "Modeling Maximum Adsorption Capacities of Soot and Soot-like Materials for PAHs and PCBs― Environmental Science & Technology, 2004, 38, 6176-6176.	4.6	4
212	Modeling the vertical distribution of carbendazim in sediments. Environmental Toxicology and Chemistry, 2000, 19, 793-800.	2.2	4
213	Responses of benthic invertebrates to combined toxicant and food input in floodplain lake sediments. , 2002, 21, 2165.		4
214	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, 2883-91.	2.2	4
215	Responses of benthic invertebrates to combined toxicant and food input in floodplain lake sediments. Environmental Toxicology and Chemistry, 2002, 21, 2165-71.	2.2	3