A critical overview of the analytical approaches to the o behavior of microplastics in the environment

TrAC - Trends in Analytical Chemistry

65, 47-53

DOI: 10.1016/j.trac.2014.10.011

Citation Report

#	Article	IF	Citations
2	Microplastics in sediments: A review of techniques, occurrence and effects. Marine Environmental Research, 2015, 111, 5-17.	1.1	824
3	Microplastics in commercial bivalves from China. Environmental Pollution, 2015, 207, 190-195.	3.7	688
4	Abundance, size and polymer composition of marine microplastics â‰¥ 10 Î¼m in the Atlantic Ocean and their modelled vertical distribution. Marine Pollution Bulletin, 2015, 100, 70-81.	2.3	560
5	Abundance and Distribution Characteristics of Microplastics in Surface Seawaters of the Incheon/Kyeonggi Coastal Region. Archives of Environmental Contamination and Toxicology, 2015, 69, 269-278.	2.1	127
6	Beyond the ocean: contamination of freshwater ecosystems with (micro-)plastic particles. Environmental Chemistry, 2015, 12, 539.	0.7	393
7	Microplastics in coastal and marine environments of the western tropical and sub-tropical Atlantic Ocean. Environmental Sciences: Processes and Impacts, 2015, 17, 1868-1879.	1.7	56
8	Marine microplastic-associated biofilms â€“ a review. Environmental Chemistry, 2015, 12, 551.	0.7	346
9	A critical assessment of visual identification of marine microplastic using Raman spectroscopy for analysis improvement. Marine Pollution Bulletin, 2015, 100, 82-91.	2.3	561
10	Plastic Pollution from Ships. Journal of Maritime & Transportation Science, 2016, 51, 57-66.	0.2	8
11	Microplastics in Taihu Lake, China. Environmental Pollution, 2016, 216, 711-719.	3.7	807
12	Microplastics as vectors for bioaccumulation of hydrophobic organic chemicals in the marine environment: A stateâ€ofâ€theâ€science review. Environmental Toxicology and Chemistry, 2016, 35, 1667-1676.	2.2	369
13	Release of primary microplastics from consumer products to wastewater in the Netherlands. Environmental Toxicology and Chemistry, 2016, 35, 1627-1631.	2.2	125
14	Microplastics profile along the Rhine River. Scientific Reports, 2016, 5, 17988.	1.6	670
15	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.	1.2	238
16	Wastewater Treatment Works (WwTW) as a Source of Microplastics in the Aquatic Environment. Environmental Science & Technology, 2016, 50, 5800-5808.	4.6	1,320
17	(Nano)plastics in the environment â€“ Sources, fates and effects. Science of the Total Environment, 2016, 566-567, 15-26.	3.9	725
18	Microplastics in mussels along the coastal waters of China. Environmental Pollution, 2016, 214, 177-184.	3.7	600
19	Pigments and plastic in limnetic ecosystems: A qualitative and quantitative study on microparticles of different size classes. Water Research, 2016, 98, 64-74.	5.3	359

#	Article	IF	Citations
20	A Procedure for Measuring Microplastics using Pressurized Fluid Extraction. Environmental Science & Technology, 2016, 50, 5774-5780.	4.6	722
21	Hyperspectral Imaging and Data Analysis for Detecting and Determining Plastic Contamination in Seawater Filtrates. Journal of Near Infrared Spectroscopy, 2016, 24, 141-149.	0.8	63
22	Towards the suitable monitoring of ingestion of microplastics by marine biota: A review. Environmental Pollution, 2016, 218, 1200-1208.	3.7	195
23	Sources and sinks of plastic debris in estuaries: A conceptual model integrating biological, physical and chemical distribution mechanisms. Marine Pollution Bulletin, 2016, 113, 7-16.	2.3	147
24	Standardized methods are required to assess and manage microplastic contamination of the Great Lakes system. Journal of Great Lakes Research, 2016, 42, 921-925.	0.8	19
25	Microplastic Ingestion by Wild and Cultured Manila Clams (Venerupis philippinarum) from Baynes Sound, British Columbia. Archives of Environmental Contamination and Toxicology, 2016, 71, 147-156.	2.1	227
26	Ingestion of microplastics by demersal fish from the Spanish Atlantic and Mediterranean coasts. Marine Pollution Bulletin, 2016, 109, 55-60.	2.3	439
27	Determination of microplastic polyethylene (PE) and polypropylene (PP) in environmental samples using thermal analysis (TGA-DSC). Science of the Total Environment, 2016, 568, 507-511.	3.9	254
28	Microplastic contamination in the San Francisco Bay, California, USA. Marine Pollution Bulletin, 2016, 109, 230-235.	2.3	298
29	Transport and fate of microplastic particles in wastewater treatment plants. Water Research, 2016, 91, 174-182.	5.3	1,197
30	FTIR spectroscopy supported by statistical techniques for the structural characterization of plastic debris in the marine environment: Application to monitoring studies. Marine Pollution Bulletin, 2016, 106, 155-161.	2.3	114
31	The influence of cosmetic microbeads on the sorptive behavior of cadmium and lead within intertidal sediments: A laboratory study. Regional Studies in Marine Science, 2016, 3, 1-7.	0.4	32
32	Is there any consistency between the microplastics found in the field and those used in laboratory experiments?. Environmental Pollution, 2016, 211, 111-123.	3.7	392
33	Microplastics in the aquatic and terrestrial environment: sources (with a specific focus on personal) Tj ETQq1 1 0.784314 rgBT /Overlock	2.6	1,061
34	Assessment of microplastic-sorbed contaminant bioavailability through analysis of biomarker gene expression in larval zebrafish. Marine Pollution Bulletin, 2017, 116, 291-297.	2.3	157
35	Wastewater treatment plants as a pathway for microplastics: Development of a new approach to sample wastewater-based microplastics. Water Research, 2017, 112, 93-99.	5.3	849
37	Biodegradation of polyethylene microplastics by the marine fungus Zalerion maritimum. Science of the Total Environment, 2017, 586, 10-15.	3.9	421
38	Microplastics as vectors for environmental contaminants: Exploring sorption, desorption, and transfer to biota. Integrated Environmental Assessment and Management, 2017, 13, 488-493.	1.6	443

#	Article	IF	Citations
39	Microplastics Sampling and Sample Handling. Comprehensive Analytical Chemistry, 2017, 75, 25-47.	0.7	15
40	Rapid and Efficient Method for the Detection of Microplastic in the Gastrointestinal Tract of Fishes. Environmental Science & Technology, 2017, 51, 4522-4530.	4.6	128
41	A review of analytical techniques for quantifying microplastics in sediments. Analytical Methods, 2017, 9, 1369-1383.	1.3	305
42	Microplastics and mesoplastics in fish from coastal and fresh waters of China. Environmental Pollution, 2017, 221, 141-149.	3.7	657
43	Characterization and Quantification of Microplastics by Infrared Spectroscopy. Comprehensive Analytical Chemistry, 2017, 75, 67-118.	0.7	31
44	Morphological and Physical Characterization of Microplastics. Comprehensive Analytical Chemistry, 2017, 75, 49-66.	0.7	46
45	Ingestion of Microplastics by Freshwater Tubifex Worms. Environmental Science & Technology, 2017, 51, 12844-12851.	4.6	199
46	Mixture Toxicity of Nickel and Microplastics with Different Functional Groups on Daphnia magna. Environmental Science & Technology, 2017, 51, 12852-12858.	4.6	216
47	Evaluation of the Munich Plastic Sediment Separator efficiency in extraction of microplastics from natural marine bottom sediments. Limnology and Oceanography: Methods, 2017, 15, 967-978.	1.0	53
48	A New Chemometric Approach for Automatic Identification of Microplastics from Environmental Compartments Based on FT-IR Spectroscopy. Analytical Chemistry, 2017, 89, 12045-12053.	3.2	81
49	Microplastic pollution in deposited urban dust, Tehran metropolis, Iran. Environmental Science and Pollution Research, 2017, 24, 20360-20371.	2.7	354
50	Investigation of microrubbers, microplastics and heavy metals in street dust: a study in Bushehr city, Iran. Environmental Earth Sciences, 2017, 76, 1.	1.3	168
51	A Simple Method for Quantifying Polycarbonate and Polyethylene Terephthalate Microplastics in Environmental Samples by Liquid Chromatographyâ€“Tandem Mass Spectrometry. Environmental Science and Technology Letters, 2017, 4, 530-534.	3.9	130
52	The uptake of macroplastic & microplastic by demersal & pelagic fish in the Northeast Atlantic around Scotland. Marine Pollution Bulletin, 2017, 122, 353-359.	2.3	164
53	Release of polyester and cotton fibers from textiles in machine washings. Environmental Science and Pollution Research, 2017, 24, 19313-19321.	2.7	170
54	Validation of density separation for the rapid recovery of microplastics from sediment. Analytical Methods, 2017, 9, 1491-1498.	1.3	302
55	Sampling, isolating and identifying microplastics ingested by fish and invertebrates. Analytical Methods, 2017, 9, 1346-1360.	1.3	691
56	Microplastics and potentially toxic elements in coastal sediments of Iran's main oil terminal (Khark) Tj ETQq1 1 0.784314 rgBT /Overlo	3.7	126

#	Article	IF	Citations
57	Histopathological and molecular effects of microplastics in Eisenia andrei BouchÃ©. Environmental Pollution, 2017, 220, 495-503.	3.7	412
58	Grab vs. neuston tow net: a microplastic sampling performance comparison and possible advances in the field. Analytical Methods, 2017, 9, 1446-1453.	1.3	216
59	Plastic pollution on the Baltic beaches of Kaliningrad region, Russia. Marine Pollution Bulletin, 2017, 114, 1072-1080.	2.3	145
60	Microplastics pollution in inland freshwaters of China: A case study in urban surface waters of Wuhan, China. Science of the Total Environment, 2017, 575, 1369-1374.	3.9	701
61	Identification methods in microplastic analysis: a review. Analytical Methods, 2017, 9, 1384-1391.	1.3	628
62	Water Pollution Control Technologies. , 2017, , 3-22.		9
63	Application of Pyrolysis-Gas Chromatography/Mass Spectrometry (Py-GC/MS). Comprehensive Analytical Chemistry, 2017, 75, 169-207.	0.7	29
64	The Role of Laboratory Experiments in the Validation of Field Data. Comprehensive Analytical Chemistry, 2017, 75, 241-273.	0.7	6
65	Presencia de microplÃ¡sticos en cuatro playas arenosas de PerÃº. Revista Peruana De Biologia, 2017, 24, 101-106.	0.1	25
66	Microplastics in the environment: Challenges in analytical chemistry - A review. Analytica Chimica Acta, 2018, 1017, 1-19.	2.6	546
67	Effectiveness of a methodology of microplastics isolation for environmental monitoring in freshwater systems. Ecological Indicators, 2018, 89, 488-495.	2.6	78
68	Characterization of microplastic litter from oceans by an innovative approach based on hyperspectral imaging. Waste Management, 2018, 76, 117-125.	3.7	130
69	Advancement and Challenges of Microplastic Pollution in the Aquatic Environment: a Review. Water, Air, and Soil Pollution, 2018, 229, 1.	1.1	56
70	Identification and quantitation of semi-crystalline microplastics using image analysis and differential scanning calorimetry. Environmental Science and Pollution Research, 2018, 25, 16767-16775.	2.7	61
71	Spatial and temporal distribution of microplastics in water and sediments of a freshwater system (AntuÃ£ River, Portugal). Science of the Total Environment, 2018, 633, 1549-1559.	3.9	560
72	Degradation of polyethylene microplastics in seawater: Insights into the environmental degradation of polymers. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2018, 53, 866-875.	0.9	148
73	Ingestion of plastic by fish destined for human consumption in remote South Pacific Islands. Australian Journal of Maritime and Ocean Affairs, 2018, 10, 81-97.	1.1	41
74	Identification and quantification of microplastics in table sea salts using micro-NIR imaging methods. Analytical Methods, 2018, 10, 2881-2887.	1.3	29

#	Article	IF	Citations
75	Microplastics in Swiss Floodplain Soils. Environmental Science & Technology, 2018, 52, 3591-3598.	4.6	820
76	Microplastic Abundance and Composition in Western Lake Superior As Determined via Microscopy, Pyr-GC/MS, and FTIR. Environmental Science & Technology, 2018, 52, 1787-1796.	4.6	277
77	Micro- and nanoplastics in the environment: Research and policymaking. Current Opinion in Environmental Science and Health, 2018, 1, 12-16.	2.1	63
78	Micro(nano)plastics: A threat to human health?. Current Opinion in Environmental Science and Health, 2018, 1, 17-23.	2.1	450
79	Microplastics in freshwater systems: A review on occurrence, environmental effects, and methods for microplastics detection. Water Research, 2018, 137, 362-374.	5.3	1,259
80	Analytical methodologies for monitoring micro(nano)plastics: Which are fit for purpose?. Current Opinion in Environmental Science and Health, 2018, 1, 55-61.	2.1	185
81	A new approach in separating microplastics from environmental samples based on their electrostatic behavior. Environmental Pollution, 2018, 234, 20-28.	3.7	163
82	Fate and occurrence of micro(nano)plastics in soils: Knowledge gaps and possible risks. Current Opinion in Environmental Science and Health, 2018, 1, 6-11.	2.1	391
83	â€œSampling of micro(nano)plastics in environmental compartments: How to define standard procedures?â€• Current Opinion in Environmental Science and Health, 2018, 1, 36-40.	2.1	24
84	Zooplankton and Plastic Additivesâ€”Insights into the Chemical Pollution of the Low-Trophic Level of the Mediterranean Marine Food Web. Springer Water, 2018, , 121-129.	0.2	4
85	Biotechnology advances for dealing with environmental pollution by micro(nano)plastics: Lessons on theory and practices. Current Opinion in Environmental Science and Health, 2018, 1, 30-35.	2.1	46
87	Microplastics in a Marine Environment: Review of Methods for Sampling, Processing, and Analyzing Microplastics in Water, Bottom Sediments, and Coastal Deposits. Oceanology, 2018, 58, 137-143.	0.3	77
88	A novel way to rapidly monitor microplastics in soil by hyperspectral imaging technology and chemometrics. Environmental Pollution, 2018, 238, 121-129.	3.7	138
89	Quantification and characterization of microplastics in blue mussels (Mytilus edulis): protocol setup and preliminary data on the contamination of the French Atlantic coast. Environmental Science and Pollution Research, 2018, 25, 6135-6144.	2.7	104
90	Investigating a probable relationship between microplastics and potentially toxic elements in fish muscles from northeast of Persian Gulf. Environmental Pollution, 2018, 232, 154-163.	3.7	263
91	Molecular identification of polymers and anthropogenic particles extracted from oceanic water and fish stomach â€“ A Raman micro-spectroscopy study. Environmental Pollution, 2018, 233, 1113-1124.	3.7	93
92	Modeling the Fate and Transport of Plastic Debris in Freshwaters: Review and Guidance. Handbook of Environmental Chemistry, 2018, , 125-152.	0.2	78
93	Analysis, Occurrence, and Degradation of Microplastics in the Aqueous Environment. Handbook of Environmental Chemistry, 2018, , 51-67.	0.2	130

#	Article	IF	Citations
94	Microplastic Pollution in Inland Waters Focusing on Asia. Handbook of Environmental Chemistry, 2018, , 85-99.	0.2	46
95	A simple method for the extraction and identification of light density microplastics from soil. Science of the Total Environment, 2018, 616-617, 1056-1065.	3.9	325
96	How Valuable Are Organic Amendments as Tools for the Phytomanagement of Degraded Soils? The Knowns, Known Unknowns, and Unknowns. Frontiers in Sustainable Food Systems, 2018, 2, .	1.8	58
97	Microplastic Detection in Soil Amended With Municipal Solid Waste Composts as Revealed by Transmission Electronic Microscopy and Pyrolysis/GC/MS. Frontiers in Sustainable Food Systems, 2018, 2, .	1.8	109
98	Poor extraction efficiencies of polystyrene nano- and microplastics from biosolids and soil. PLoS ONE, 2018, 13, e0208009.	1.1	58
99	Selective determination of poly(styrene) and polyolefin microplastics in sandy beach sediments by gel permeation chromatography coupled with fluorescence detection. Marine Pollution Bulletin, 2018, 136, 269-275.	2.3	25
100	Microplastic in marine organism: Environmental and toxicological effects. Environmental Toxicology and Pharmacology, 2018, 64, 164-171.	2.0	481
101	Raman microspectroscopy as a tool for microplastic particle analysis. TrAC - Trends in Analytical Chemistry, 2018, 109, 214-226.	5.8	185
102	The combined toxicity effect of nanoplastics and glyphosate on Microcystis aeruginosa growth. Environmental Pollution, 2018, 243, 1106-1112.	3.7	202
103	Up and away: ontogenic transference as a pathway for aerial dispersal of microplastics. Biology Letters, 2018, 14, 20180479.	1.0	88
104	Influence of Nano- and Microplastic Particles on the Transport and Deposition Behaviors of Bacteria in Quartz Sand. Environmental Science & Technology, 2018, 52, 11555-11563.	4.6	32
105	Quantification of microplastic mass and removal rates at wastewater treatment plants applying Focal Plane Array (FPA)-based Fourier Transform Infrared (FT-IR) imaging. Water Research, 2018, 142, 1-9.	5.3	518
106	Toxicities of polystyrene nano- and microplastics toward marine bacterium Halomonas alkaliphila. Science of the Total Environment, 2018, 642, 1378-1385.	3.9	248
107	Application of nuclear techniques to environmental plastics research. Journal of Environmental Radioactivity, 2018, 192, 368-375.	0.9	36
108	Optimization, performance, and application of a pyrolysis-GC/MS method for the identification of microplastics. Analytical and Bioanalytical Chemistry, 2018, 410, 6663-6676.	1.9	196
109	Integration of a Copper-Containing Biohybrid (CuHARS) with Cellulose for Subsequent Degradation and Biomedical Control. International Journal of Environmental Research and Public Health, 2018, 15, 844.	1.2	8
110	Abundance and distribution of microplastics within surface sediments of a key shellfish growing region of Canada. PLoS ONE, 2018, 13, e0196005.	1.1	54
111	Preferential accumulation of small (<300â€Î¼m) microplastics in the sediments of a coastal plain river network in eastern China. Water Research, 2018, 144, 393-401.	5.3	160

#	Article	IF	Citations
112	Sea Water Contamination in the Vicinity of the Italian Minor Islands Caused by Microplastic Pollution. Water (Switzerland), 2018, 10, 1108.	1.2	36
113	Nanomaterials and Microplastics. , 2018, , 117-117.		0
114	Worldwide distribution and abundance of microplastic: How dire is the situation?. Waste Management and Research, 2018, 36, 873-897.	2.2	276
115	Microplastic in riverine fish is connected to species traits. Scientific Reports, 2018, 8, 11639.	1.6	231
116	Microplastics in Galway Bay: A comparison of sampling and separation methods. Marine Pollution Bulletin, 2018, 135, 932-940.	2.3	56
117	First evaluation of floating microplastics in the Northwestern Adriatic Sea. Environmental Science and Pollution Research, 2018, 25, 28546-28561.	2.7	55
118	Microplastic abundance and characteristics in French Atlantic coastal sediments using a new extraction method. Environmental Pollution, 2018, 243, 228-237.	3.7	97
119	Behavior of Microplastics in Coastal Zones. , 2018, , 175-223.		31
120	Identification of microplastics using Raman spectroscopy: Latest developments and future prospects. Water Research, 2018, 142, 426-440.	5.3	512
121	Validation of a Method for Extracting Microplastics from Complex, Organic-Rich, Environmental Matrices. Environmental Science & Technology, 2018, 52, 7409-7417.	4.6	551
122	Comparison of Î¼-ATR-FTIR spectroscopy and py-GCMS as identification tools for microplastic particles and fibers isolated from river sediments. Analytical and Bioanalytical Chemistry, 2018, 410, 5313-5327.	1.9	189
123	Microplastics in the environment: A critical review of current understanding and identification of future research needs. Environmental Pollution, 2019, 254, 113011.	3.7	379
124	Investigating microplastics bioaccumulation and biomagnification in seafood from the Persian Gulf: a threat to human health?. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2019, 36, 1696-1708.	1.1	134
125	Geochemistry and environmental effects of potentially toxic elements, polycyclic aromatic hydrocarbons and microplastics in coastal sediments of the Persian Gulf. Environmental Earth Sciences, 2019, 78, 1.	1.3	34
126	Sorption properties of hydrophobic organic chemicals to micro-sized polystyrene particles. Science of the Total Environment, 2019, 690, 565-572.	3.9	47
127	A method for extracting soil microplastics through circulation of sodium bromide solutions. Science of the Total Environment, 2019, 691, 341-347.	3.9	121
128	Copolymerization of vegetable oils and bio-based monomers with elemental sulfur: A new promising route for bio-based polymers. Sustainable Chemistry and Pharmacy, 2019, 13, 100158.	1.6	33
129	Distribution and characteristics of microplastics in the sediments of Poyang Lake, China. Water Science and Technology, 2019, 79, 1868-1877.	1.2	64

#	Article	IF	Citations
130	Glitters as a Source of Primary Microplastics: An Approach to Environmental Responsibility and Ethics. Journal of Agricultural and Environmental Ethics, 2019, 32, 459-478.	0.9	58
131	Robust Automatic Identification of Microplastics in Environmental Samples Using FTIR Microscopy. Analytical Chemistry, 2019, 91, 9656-9664.	3.2	53
132	Brain food? Trophic transfer and tissue retention of microplastics by the velvet swimming crab (Necora puber). Journal of Experimental Marine Biology and Ecology, 2019, 519, 151187.	0.7	34
133	Tracking the distribution of microfiber pollution in a southern Lake Michigan watershed through the analysis of water, sediment and air. Environmental Sciences: Processes and Impacts, 2019, 21, 1549-1559.	1.7	28
134	Evaluation of non-invasive toxicological analysis of nano-polystyrene in relativein vivoconditions toD. magna. Environmental Science: Nano, 2019, 6, 2832-2849.	2.2	8
135	Raman Tweezers for Small Microplastics and Nanoplastics Identification in Seawater. Environmental Science & Technology, 2019, 53, 9003-9013.	4.6	194
136	Microplasticâ€“toxic chemical interaction: a review study on quantified levels, mechanism and implication. SN Applied Sciences, 2019, 1, 1.	1.5	241
137	Low levels of microplastics recorded from the common periwinkle, Littorina littorea on the west coast of Ireland. Marine Pollution Bulletin, 2019, 149, 110645.	2.3	29
138	Evidence for non-selective ingestion of microplastic in demersal fish. Marine Pollution Bulletin, 2019, 149, 110523.	2.3	53
139	Microplastics: What Drinking Water Utilities Need to Know. Journal - American Water Works Association, 2019, 111, 26-37.	0.2	4
140	FTIR and Raman imaging for microplastics analysis: State of the art, challenges and prospects. TrAC - Trends in Analytical Chemistry, 2019, 119, 115629.	5.8	301
141	Wastewater treatment plants as a source of plastics in the environment: a review of occurrence, methods for identification, quantification and fate. Environmental Science: Water Research and Technology, 2019, 5, 1908-1931.	1.2	112
142	Elemental Analyzer/Isotope Ratio Mass Spectrometry (EA/IRMS) as a Tool to Characterize Plastic Polymers in a Marine Environment. , 2019, , .		4
143	Identification of Microfibers in the Environment Using Multiple Lines of Evidence. Environmental Science & Technology, 2019, 53, 11877-11887.	4.6	54
144	Effects of polyethylene microplastics on the gut microbial community, reproduction and avoidance behaviors of the soil springtail, Folsomia candida. Environmental Pollution, 2019, 247, 890-897.	3.7	230
145	Sampling techniques and preparation methods for microplastic analyses in the aquatic environment â€“ A review. TrAC - Trends in Analytical Chemistry, 2019, 113, 84-92.	5.8	248
146	Microplastic pollution in estuaries across a gradient of human impact. Environmental Pollution, 2019, 247, 457-466.	3.7	139
147	Nano/microplastics in water and wastewater treatment processes â€“ Origin, impact and potential solutions. Water Research, 2019, 161, 621-638.	5.3	372

#	Article	IF	Citations
148	Simulating human exposure to indoor airborne microplastics using a Breathing Thermal Manikin. Scientific Reports, 2019, 9, 8670.	1.6	407
149	A machine learning algorithm for high throughput identification of FTIR spectra: Application on microplastics collected in the Mediterranean Sea. Chemosphere, 2019, 234, 242-251.	4.2	98
150	An assessment of the toxicity of polypropylene microplastics in human derived cells. Science of the Total Environment, 2019, 684, 657-669.	3.9	359
151	Microplastic distribution in surface sediments along the Spanish Mediterranean continental shelf. Environmental Science and Pollution Research, 2019, 26, 21264-21273.	2.7	67
152	Fusion of microplastics into the mussel byssus. Environmental Pollution, 2019, 252, 420-426.	3.7	65
153	Microplastics in the marine environment: Current trends in environmental pollution and mechanisms of toxicological profile. Environmental Toxicology and Pharmacology, 2019, 68, 61-74.	2.0	481
154	Promising techniques and open challenges for microplastic identification and quantification in environmental matrices. Analytical and Bioanalytical Chemistry, 2019, 411, 3743-3756.	1.9	145
155	Microplastics undergo accelerated vertical migration in sand soil due to small size and wet-dry cycles. Environmental Pollution, 2019, 249, 527-534.	3.7	287
156	Baseline Assessment of Marine Litter and Microplastic Ingestion by Cold-Water Coral Reef Benthos at the East Mingulay Marine Protected Area (Sea of the Hebrides, Western Scotland). Frontiers in Marine Science, 2019, 6, .	1.2	36
157	Microplastics as Contaminant in Freshwater Ecosystem: A Modern Environmental Issue. , 2019, , 1-24.		0
158	Detection of ultrafine plastics ingested by seabirds using tissue digestion. Marine Pollution Bulletin, 2019, 142, 470-474.	2.3	27
159	Identification of marine microplastics in Eastern Harbor, Mediterranean Coast of Egypt, using differential scanning calorimetry. Marine Pollution Bulletin, 2019, 142, 494-503.	2.3	55
160	Analysis and Prevention of Microplastics Pollution in Water: Current Perspectives and Future Directions. ACS Omega, 2019, 4, 6709-6719.	1.6	208
161	Current research trends on microplastic pollution from wastewater systems: a critical review. Reviews in Environmental Science and Biotechnology, 2019, 18, 207-230.	3.9	103
162	Separation and Analysis of Microplastics and Nanoplastics in Complex Environmental Samples. Accounts of Chemical Research, 2019, 52, 858-866.	7.6	418
163	Microplastics in a municipal wastewater treatment plant: Fate, dynamic distribution, removal efficiencies, and control strategies. Journal of Cleaner Production, 2019, 225, 579-586.	4.6	322
164	Techniques for separation of plastic wastes. , 2019, , 9-37.		33
165	Microplastics in Mediterranean Sea: A protocol to robustly assess contamination characteristics. PLoS ONE, 2019, 14, e0212088.	1.1	43

#	Article	IF	Citations
166	Mass spectra database of polymers for bismuth-cluster ToF-SIMS. Surface Science Spectra, 2019, 26, 025003.	0.3	9
167	The Problem of Microplastics and Regulatory Strategies in Italy. Handbook of Environmental Chemistry, 2019, , 1.	0.2	7
168	Nano- and microplastic analysis: Focus on their occurrence in freshwater ecosystems and remediation technologies. TrAC - Trends in Analytical Chemistry, 2019, 113, 409-425.	5.8	165
169	Energy transition from molecules to atoms and photons. Engineering Science and Technology, an International Journal, 2019, 22, 185-214.	2.0	23
170	Significance of interactions between microplastics and POPs in the marine environment: A critical overview. TrAC - Trends in Analytical Chemistry, 2019, 111, 252-260.	5.8	313
171	Microplastic contamination in surface waters in Guanabara Bay, Rio de Janeiro, Brazil. Marine Pollution Bulletin, 2019, 139, 157-162.	2.3	83
172	Microplastics in wastewater treatment plants: Detection, occurrence and removal. Water Research, 2019, 152, 21-37.	5.3	1,069
173	Comparison of microplastic pollution in different water bodies from urban creeks to coastal waters. Environmental Pollution, 2019, 246, 174-182.	3.7	310
174	Methods for sampling and detection of microplastics in water and sediment: A critical review. TrAC - Trends in Analytical Chemistry, 2019, 110, 150-159.	5.8	643
175	Colour and size influences plastic microbead underestimation, regardless of sediment grain size. Science of the Total Environment, 2019, 655, 567-570.	3.9	32
176	Microplastic contamination in an urban estuary: Abundance and distribution of microplastics and fish larvae in the Douro estuary. Science of the Total Environment, 2019, 659, 1071-1081.	3.9	79
177	Integrated electrokinetic processes for the remediation of phthalate esters in river sediments: A mini-review. Science of the Total Environment, 2019, 659, 963-972.	3.9	23
178	Data preprocessing & evaluation used in the microplastics identification process: A critical review & practical guide. TrAC - Trends in Analytical Chemistry, 2019, 111, 229-238.	5.8	96
179	Removal characteristics of microplastics by Fe-based coagulants during drinking water treatment. Journal of Environmental Sciences, 2019, 78, 267-275.	3.2	235
180	Quantifying ecological risks of aquatic micro- and nanoplastic. Critical Reviews in Environmental Science and Technology, 2019, 49, 32-80.	6.6	329
181	Examining effects of ontogenic microplastic transference on Culex mosquito mortality and adult weight. Science of the Total Environment, 2019, 651, 871-876.	3.9	58
182	Functional response quantifies microplastic uptake by a widespread African fish species. Science of the Total Environment, 2020, 700, 134522.	3.9	18
183	Microplastic concentrations, size distribution, and polymer types in the surface waters of a northern European lake. Water Environment Research, 2020, 92, 149-156.	1.3	105

#	Article	IF	Citations
184	An overview of microplastics characterization by thermal analysis. Chemosphere, 2020, 242, 125170.	4.2	109
185	Seagrass beds acting as a trap of microplastics - Emerging hotspot in the coastal region?. Environmental Pollution, 2020, 257, 113450.	3.7	116
186	Microplastic occurrence and effects in commercially harvested North American finfish and shellfish: Current knowledge and future directions. Limnology and Oceanography Letters, 2020, 5, 113-136.	1.6	46
187	Detection of microplastics using inductively coupled plasma-mass spectrometry (ICP-MS) operated in single-event mode. Journal of Analytical Atomic Spectrometry, 2020, 35, 455-460.	1.6	84
188	Wastewater treatment plant as microplastics release source â€“ Quantification and identification techniques. Journal of Environmental Management, 2020, 255, 109739.	3.8	90
189	Effects of spatial and seasonal factors on the characteristics and carbonyl index of (micro)plastics in a sandy beach in Aveiro, Portugal. Science of the Total Environment, 2020, 709, 135892.	3.9	63
190	A new thermoanalytical method for the quantification of microplastics in industrial wastewater. Environmental Pollution, 2020, 259, 113862.	3.7	33
191	Data on microplastic contamination of the Baltic Sea bottom sediment samples in 2015â€“2016. Data in Brief, 2020, 28, 104887.	0.5	26
192	Identification of microplastics in the sediments of southern coasts of the Caspian Sea, north of Iran. Environmental Pollution, 2020, 258, 113738.	3.7	73
193	Rapid fingerprinting of source and environmental microplastics using direct analysis in real time-high resolution mass spectrometry. Analytica Chimica Acta, 2020, 1100, 107-117.	2.6	27
194	Marine debris â€" An emerging threat to the reef areas of Gulf of Mannar, India. Marine Pollution Bulletin, 2020, 151, 110793.	2.3	23
195	Microplastics and Nanoplastics in the Freshwater and Terrestrial Environment: A Review. Water (Switzerland), 2020, 12, 2633.	1.2	126
196	Microplastics from lagooning sludge to composts as revealed by fluorescent staining- image analysis, Raman spectroscopy and pyrolysis-GC/MS. Journal of Environmental Management, 2020, 275, 111249.	3.8	65
197	Factors affecting microplastic retention and emission by a wastewater treatment plant on the southern coast of Caspian Sea. Chemosphere, 2020, 261, 128179.	4.2	56
198	Occurrence and distribution of microplastics in Chinaâ€™s largest freshwater lake system. Chemosphere, 2020, 261, 128186.	4.2	72
199	Identification and characterization of micro-plastics in the marine environment: A mini review. Marine Pollution Bulletin, 2020, 160, 111704.	2.3	27
200	(Nano)microplastics promote the propagation of antibiotic resistance genes in landfill leachate. Environmental Science: Nano, 2020, 7, 3536-3546.	2.2	63
201	An overview of analytical methods for detecting microplastics in the atmosphere. TrAC - Trends in Analytical Chemistry, 2020, 130, 115981.	5.8	122

#	Article	IF	Citations
202	Thermal analysis and enhanced visual technique for assessment of microplastics in fish from an Urban Harbor, Mediterranean Coast of Egypt. Marine Pollution Bulletin, 2020, 159, 111465.	2.3	48
203	Microplastics in Agricultural Soils. Handbook of Environmental Chemistry, 2020, , 63-76.	0.2	3
204	Data on the microplastics contamination in water and sediments along the Haraz River estuary, Iran. Data in Brief, 2020, 32, 106155.	0.5	6
205	The importance of contamination control in airborne fibers and microplastic sampling: Experiences from indoor and outdoor air sampling in Aveiro, Portugal. Marine Pollution Bulletin, 2020, 159, 111522.	2.3	88
206	Recent advancements in microalgal-induced remediation of wastewaters. , 2020, , 205-217.		2
207	Removal of Microplastics from Wastewater. , 2020, , 1-20.		1
208	An emerging class of air pollutants: Potential effects of microplastics to respiratory human health?. Science of the Total Environment, 2020, 749, 141676.	3.9	204
209	Riverine microplastics: Behaviour, spatio-temporal variability, and recommendations for standardised sampling and monitoring. Journal of Water Process Engineering, 2020, 38, 101600.	2.6	61
210	Microplastic Monitoring at Different Stages in a Wastewater Treatment Plant Using Reflectance Micro-FTIR Imaging. Frontiers in Environmental Science, 2020, 8, .	1.5	42
211	Microplastics removal in wastewater treatment plants: a critical review. Environmental Science: Water Research and Technology, 2020, 6, 2664-2675.	1.2	147
212	Validation of Sample Preparation Methods for Microplastic Analysis in Wastewater Matricesâ€"Reproducibility and Standardization. Water (Switzerland), 2020, 12, 2445.	1.2	79
213	Microplastics pollution in China water ecosystems: a review of the abundance, characteristics, fate, risk and removal. Water Science and Technology, 2020, 82, 1495-1508.	1.2	8
214	Isolation and Extraction of Microplastics from Environmental Samples: An Evaluation of Practical Approaches and Recommendations for Further Harmonization. Applied Spectroscopy, 2020, 74, 1049-1065.	1.2	104
215	Occurrence, Sources, Transport, and Fate of Microplastics in the Great Lakesâ€"St. Lawrence River Basin. Handbook of Environmental Chemistry, 2020, , 15-47.	0.2	5
216	Microplastic Detection in Soil and Water Using Resonance Microwave Spectroscopy: A Feasibility Study. IEEE Sensors Journal, 2020, 20, 14817-14826.	2.4	26
217	Microplastic Contamination of Seafood Intended for Human Consumption: A Systematic Review and Meta-Analysis. Environmental Health Perspectives, 2020, 128, 126002.	2.8	126
218	Preliminary Results From Detection of Microplastics in Liquid Samples Using Flow Cytometry. Frontiers in Marine Science, 2020, 7, .	1.2	45
219	Physiological response of cucumber (Cucumis sativus L.) leaves to polystyrene nanoplastics pollution. Chemosphere, 2020, 255, 127041.	4.2	164

#	Article	IF	Citations
220	A Critical Review of Extraction and Identification Methods of Microplastics in Wastewater and Drinking Water. Environmental Science & Technology, 2020, 54, 7037-7049.	4.6	121
221	Pump-underway ship intake: An unexploited opportunity for Marine Strategy Framework Directive (MSFD) microplastic monitoring needs on coastal and oceanic waters. PLoS ONE, 2020, 15, e0232744.	1.1	16
222	Recent advances in the analysis methodologies for microplastics in aquatic organisms: current knowledge and research challenges. Analytical Methods, 2020, 12, 2944-2957.	1.3	38
223	First evidence of microplastic pollution in the El Quetzalito sand beach of the Guatemalan Caribbean. Marine Pollution Bulletin, 2020, 156, 111220.	2.3	32
224	Long-term assessment of nanoplastic particle and microplastic fiber flux through a pilot wastewater treatment plant using metal-doped plastics. Water Research, 2020, 182, 115860.	5.3	80
225	Identification of microplastics in white wines capped with polyethylene stoppers using micro-Raman spectroscopy. Food Chemistry, 2020, 331, 127323.	4.2	95
226	Microplastics from effluents of sewage treatment works and stormwater discharging into the Victoria Harbor, Hong Kong. Marine Pollution Bulletin, 2020, 157, 111181.	2.3	74
227	Review of microplastic occurrence and toxicological effects in marine environment: Experimental evidence of inflammation. Chemical Engineering Research and Design, 2020, 142, 1-14.	2.7	152
228	Research Progress of Microplastics in Freshwater Sediments in China. Environmental Science and Pollution Research, 2020, 27, 31046-31060.	2.7	37
229	Analysis of microplastics in a remote region of the Tibetan Plateau: Implications for natural environmental response to human activities. Science of the Total Environment, 2020, 739, 140087.	3.9	170
230	Acute and chronic effects of polystyrene microplastics on brine shrimp: First evidence highlighting the molecular mechanism through transcriptome analysis. Journal of Hazardous Materials, 2020, 400, 123220.	6.5	100
231	First quantification of semi-crystalline microplastics in industrial wastewaters. Chemosphere, 2020, 258, 127388.	4.2	46
232	Aquatic Microplastic Researchâ€"A Critique and Suggestions for the Future. Water (Switzerland), 2020, 12, 1475.	1.2	25
233	Toward an Improved Understanding of the Ingestion and Trophic Transfer of Microplastic Particles: Critical Review and Implications for Future Research. Environmental Toxicology and Chemistry, 2020, 39, 1119-1137.	2.2	96
234	Transfer and transport of microplastics from biosolids to agricultural soils and the wider environment. Science of the Total Environment, 2020, 724, 138334.	3.9	210
235	Microplastics in waters and soils: Occurrence, analytical methods and ecotoxicological effects. Ecotoxicology and Environmental Safety, 2020, 202, 110910.	2.9	89
236	Study of Analysis Method on Microplastic Identification in Bottled Drinking Water. Macromolecular Symposia, 2020, 391, 1900195.	0.4	20
237	Varying levels of microplastics in benthic sediments within a shallow coastal embayment. Estuarine, Coastal and Shelf Science, 2020, 243, 106915.	0.9	23

#	Article	IF	Citations
238	Coastal zone use influences the spatial distribution of microplastics in Hangzhou Bay, China. Environmental Pollution, 2020, 266, 115137.	3.7	91
239	Types, occurrence, and distribution of microplastics and metals contamination in sediments from south west of Kerkennah archipelago, Tunisia. Environmental Science and Pollution Research, 2021, 28, 46477-46487.	2.7	17
240	ToFâ€SIMS characterization of microplastics in soils. Surface and Interface Analysis, 2020, 52, 293-300.	0.8	42
241	Source, migration and toxicology of microplastics in soil. Environment International, 2020, 137, 105263.	4.8	603
242	Microplastics in fishes of commercial and ecological importance from the Western Arabian Gulf. Marine Pollution Bulletin, 2020, 152, 110920.	2.3	58
243	The occurrence and distribution characteristics of microplastics in the agricultural soils of Shaanxi Province, in north-western China. Science of the Total Environment, 2020, 720, 137525.	3.9	275
244	The emerging risk of exposure to nano(micro)plastics on endocrine disturbance and reproductive toxicity: From a hypothetical scenario to a global public health challenge. Environmental Pollution, 2020, 261, 114158.	3.7	141
245	Worldwide bottled water occurrence of emerging contaminants: A review of the recent scientific literature. Journal of Hazardous Materials, 2020, 392, 122271.	6.5	149
246	Assessment of microplastics release from polyester fabrics: The impact of different washing conditions. Environmental Pollution, 2020, 264, 113960.	3.7	87
247	The way of microplastic through the environment â€“ Application of the source-pathway-receptor model (review). Science of the Total Environment, 2020, 713, 136584.	3.9	158
248	Adverse effects of plastic ingestion on the Mediterranean small-spotted catshark (Scyliorhinus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 34	1.1	55
249	Finding Microplastics in Soils: A Review of Analytical Methods. Environmental Science & Technology, 2020, 54, 2078-2090.	4.6	288
250	Improved methodology to determine the fate and transport of microplastics in a secondary wastewater treatment plant. Water Research, 2020, 173, 115549.	5.3	156
251	Pollution Characteristics of Microplastics in Soils in Southeastern Suburbs of Baoding City, China. International Journal of Environmental Research and Public Health, 2020, 17, 845.	1.2	56
252	Sulfur-modified biochar as a soil amendment to stabilize mercury pollution: An accelerated simulation of long-term aging effects. Environmental Pollution, 2020, 264, 114687.	3.7	71
253	Sources, transport, measurement and impact of nano and microplastics in urban watersheds. Reviews in Environmental Science and Biotechnology, 2020, 19, 275-336.	3.9	69
254	Microplastic contamination in east Antarctic sea ice. Marine Pollution Bulletin, 2020, 154, 111130.	2.3	171
255	Characterization of microplastics in the surface seawater of the South Yellow Sea as affected by season. Science of the Total Environment, 2020, 724, 138375.	3.9	66

#	Article	IF	Citations
256	Microplastics in aquatic environment: characterization, ecotoxicological effect, implications for ecosystems and developments in South Africa. Environmental Science and Pollution Research, 2020, 27, 22271-22291.	2.7	40
257	Microplastics and their affiliated PAHs in the sea surface connected to the southwest coast of Taiwan. Chemosphere, 2020, 254, 126818.	4.2	55
258	Hydrodynamic modelling of traffic-related microplastics discharged with stormwater into the GÃ¶ta River in Sweden. Environmental Science and Pollution Research, 2020, 27, 24218-24230.	2.7	33
259	The combined toxicity influence of microplastics and nonylphenol on microalgae Chlorella pyrenoidosa. Ecotoxicology and Environmental Safety, 2020, 195, 110484.	2.9	159
260	Microplastics in fishes and their living environments surrounding a plastic production area. Science of the Total Environment, 2020, 727, 138662.	3.9	65
261	Current state of marine plastic pollution and its technology for more eminent evidence: A review. Journal of Cleaner Production, 2021, 278, 123537.	4.6	38
262	Pre-detection of microplastics using active thermography. Chemosphere, 2021, 262, 127648.	4.2	5
263	Contamination issues as a challenge in quality control and quality assurance in microplastics analytics. Journal of Hazardous Materials, 2021, 403, 123660.	6.5	155
264	Spatially resolved indiffusion behavior of Cu 2+ and Ni 2+ in polypropylene. Journal of Applied Polymer Science, 2021, 138, 49655.	1.3	5
265	Environmental fate, ecotoxicity biomarkers, and potential health effects of micro- and nano-scale plastic contamination. Journal of Hazardous Materials, 2021, 403, 123910.	6.5	107
266	Microplastic content of Kutum fish, Rutilus frisii kutum in the southern Caspian Sea. Science of the Total Environment, 2021, 752, 141542.	3.9	43
267	The effect of sewage sludge containing microplastics on growth and fruit development of tomato plants. Environmental Pollution, 2021, 268, 115779.	3.7	88
268	Hazardous microplastic characteristics and its role as a vector of heavy metal in groundwater and surface water of coastal south India. Journal of Hazardous Materials, 2021, 402, 123786.	6.5	198
269	The occurrence of microplastic in Mu Us Sand Land soils in northwest China: Different soil types, vegetation cover and restoration years. Journal of Hazardous Materials, 2021, 403, 123982.	6.5	114
270	Suspended fine particulate matter (PM2.5), microplastics (MPs), and polycyclic aromatic hydrocarbons (PAHs) in air: Their possible relationships and health implications. Environmental Research, 2021, 192, 110339.	3.7	217
271	Screening of suspected micro(nano)plastics in the Ebro Delta (Mediterranean Sea). Journal of Hazardous Materials, 2021, 404, 124022.	6.5	35
272	Occurrence and distribution of microplastics on recreational beaches of Haichow Bay, China. Environmental Science and Pollution Research, 2021, 28, 6132-6145.	2.7	27
273	Microplastics and metal burdens in freshwater Tilapia (Oreochromis niloticus) of a metropolitan reservoir in Central Mexico: Potential threats for human health. Chemosphere, 2021, 266, 128968.	4.2	30

#	Article	IF	Citations
274	Identification, extraction of microplastics from edible salts and its removal from contaminated seawater. Environmental Technology and Innovation, 2021, 21, 101253.	3.0	35
275	A review of the removal of microplastics in global wastewater treatment plants: Characteristics and mechanisms. Environment International, 2021, 146, 106277.	4.8	268
276	Methods for separating microplastics from complex solid matrices: Comparative analysis. Journal of Hazardous Materials, 2021, 409, 124640.	6.5	69
277	Environmental prevalence, fate, impacts, and mitigation of microplasticsâ€"a critical review on present understanding and future research scope. Environmental Science and Pollution Research, 2021, 28, 4951-4974.	2.7	35
278	The distribution and impact of polystyrene nanoplastics on cucumber plants. Environmental Science and Pollution Research, 2021, 28, 16042-16053.	2.7	114
279	Prevalence and characteristics of microplastics present in the street dust collected from Chennai metropolitan city, India. Chemosphere, 2021, 269, 128757.	4.2	82
280	Biodegradation and metabolic pathway of anthraquinone dyes by Trametes hirsuta D7 immobilized in light expanded clay aggregate and cytotoxicity assessment. Journal of Hazardous Materials, 2021, 405, 124176.	6.5	40
281	Selective enrichment of antibiotic resistance genes and pathogens on polystyrene microplastics in landfill leachate. Science of the Total Environment, 2021, 765, 142775.	3.9	74
282	Overview of global status of plastic presence in marine vertebrates. Global Change Biology, 2021, 27, 728-737.	4.2	64
283	Microplastics in freshwater sediment: A review on methods, occurrence, and sources. Science of the Total Environment, 2021, 754, 141948.	3.9	245
284	Challenge for the detection of microplastics in the environment. Water Environment Research, 2021, 93, 5-15.	1.3	89
285	Microplastic Pollution in Water. Environmental Chemistry for A Sustainable World, 2021, , 1-44.	0.3	0
286	Investigating microplastics and potentially toxic elements contamination in canned Tuna, Salmon, and Sardine fishes from Taif markets, KSA. Open Life Sciences, 2021, 16, 827-837.	0.6	17
287	A Review of Microplastics in Aquatic Sediments: Occurrence, Fate, Transport, and Ecological Impact. Current Pollution Reports, 2021, 7, 40-53.	3.1	24
288	Size distribution measurement of microplastics using a temporally and spatially resolved inductively coupled plasma optical emission spectrometer (ICP-OES). Journal of Analytical Atomic Spectrometry, 2021, 36, 1594-1599.	1.6	4
289	Conversion of palm oil to new sulfur-based polymer by inverse vulcanization. E3S Web of Conferences, 2021, 287, 02014.	0.2	5
290	From Sampling to Analysis: A Critical Review of Techniques Used in the Detection of Micro- and Nanoplastics in Aquatic Environments. ACS ES&T Water, 2021, 1, 748-764.	2.3	27
291	Impact of Plastic Debris on the Gut Microbiota of Caretta caretta From Northwestern Adriatic Sea. Frontiers in Marine Science, 2021, 8, .	1.2	23

#	Article	IF	Citations
292	Occurrence and distribution of microplastic particles and the concentration of Di 2-ethyl hexyl phthalate (DEHP) in microplastics and wastewater in the wastewater treatment plant. Journal of Environmental Management, 2021, 280, 111851.	3.8	113
293	Microplastics in wastewater treatment plants: Occurrence, fate and identification. Chemical Engineering Research and Design, 2021, 146, 77-84.	2.7	82
294	Microfibers from synthetic textiles as a major source of microplastics in the environment: A review. Textile Reseach Journal, 2021, 91, 2136-2156.	1.1	99
295	Detection and removal of microplastics in wastewater: evolution and impact. Environmental Science and Pollution Research, 2021, 28, 16925-16947.	2.7	123
296	Long-term trends of microplastics in seawater and farmed oysters in the Maowei Sea, China. Environmental Pollution, 2021, 273, 116450.	3.7	35
297	A Thermal Analysis-Based Approach to Identify Different Waste Macroplastics in Beach Litter: The Case Study of Aquatina di Frigole NATURA 2000 Site (IT9150003, Italy). Sustainability, 2021, 13, 3186.	1.6	10
298	A Review of Analytical Methods Used in Microplastics Quantification. IOP Conference Series: Earth and Environmental Science, 2021, 665, 012064.	0.2	4
299	A novel approach based on multiple fish species and water column compartments in assessing vertical microlitter distribution and composition. Environmental Pollution, 2021, 272, 116419.	3.7	17
300	Sediment trapping â€“ An attempt to monitor temporal variation of microplastic flux rates in aquatic systems. Environmental Pollution, 2021, 274, 116568.	3.7	17
301	Microplastics in composting of rural domestic waste: abundance, characteristics, and release from the surface of macroplastics. Environmental Pollution, 2021, 274, 116553.	3.7	98
302	Effects of acute microplastic exposure on physiological parameters in Tubastrea aurea corals. Marine Pollution Bulletin, 2021, 165, 112173.	2.3	34
303	Microplastic pollution and quantitative source apportionment in the Jiangsu coastal area, China. Marine Pollution Bulletin, 2021, 166, 112237.	2.3	29
304	Microplastic pollution in African countriesâ€™ water systems: a review on findings, applied methods, characteristics, impacts, and managements. SN Applied Sciences, 2021, 3, 629.	1.5	32
305	Bio-Based Crosslinked Polymers Synthesized from Functionalized Soybean Oil and Squalene by Thiolâ€“Ene UV Curing. Materials, 2021, 14, 2675.	1.3	12
306	The Dual Role of Microplastics in Marine Environment: Sink and Vectors of Pollutants. Journal of Marine Science and Engineering, 2021, 9, 642.	1.2	31
307	Microplastics in the Aquatic Environmentâ€”The Occurrence, Sources, Ecological Impacts, Fate, and Remediation Challenges. Pollutants, 2021, 1, 95-118.	1.0	27
308	Coastal ecosystem inventory with characterization and identification of plastic contamination and additives from aquaculture materials. Marine Pollution Bulletin, 2021, 167, 112286.	2.3	17
309	Environmental emission, fate and transformation of microplastics in biotic and abiotic compartments: Global status, recent advances and future perspectives. Science of the Total Environment, 2021, 791, 148422.	3.9	37

#	Article	IF	Citations
310	Notes on Common Misconceptions in Microplastics Removal from Water. Applied Sciences (Switzerland), 2021, 11, 5833.	1.3	8
311	Microplastics around an Arctic seabird colony: Particle community composition varies across environmental matrices. Science of the Total Environment, 2021, 773, 145536.	3.9	42
312	Microplastics and fibers from three areas under different anthropogenic pressures in Douro river. Science of the Total Environment, 2021, 776, 145999.	3.9	37
313	A One Health perspective of the impacts of microplastics on animal, human and environmental health. Science of the Total Environment, 2021, 777, 146094.	3.9	130
314	Looking Back, Looking Forward: Materials Science in Art, Archaeology, and Art Conservation. Annual Review of Materials Research, 2021, 51, 435-460.	4.3	6
315	A comprehensive review on assessment of plastic debris in aquatic environment and its prevalence in fishes and other aquatic animals in India. Science of the Total Environment, 2021, 779, 146421.	3.9	17
316	How do humans recognize and face challenges of microplastic pollution in marine environments? A bibliometric analysis. Environmental Pollution, 2021, 280, 116959.	3.7	24
317	Abundance, interaction, ingestion, ecological concerns, and mitigation policies of microplastic pollution in riverine ecosystem: A review. Science of the Total Environment, 2021, 782, 146695.	3.9	147
318	Microplastics in polar regions: An early warning to the world's pristine ecosystem. Science of the Total Environment, 2021, 784, 147149.	3.9	88
319	Microplastics menace: the new emerging lurking environmental issue, a review on sampling and quantification in aquatic environments. International Journal of Environmental Science and Technology, 2023, 20, 1081-1094.	1.8	4
320	Preparation of biological samples for microplastic identification by Nile Red. Science of the Total Environment, 2021, 783, 147065.	3.9	36
321	Size dependent impacts of a model microplastic on nitrification induced by interaction with nitrifying bacteria. Journal of Hazardous Materials, 2022, 424, 127363.	6.5	14
322	Microplastics: An overview on separation, identification and characterization of microplastics. Marine Pollution Bulletin, 2021, 170, 112604.	2.3	124
323	Spatio-seasonal microplastics distribution along a shallow coastal lagoon ecocline within a marine conservation unit. Marine Pollution Bulletin, 2021, 170, 112644.	2.3	10
324	Comparison of the effects of continuous and accumulative exposure to nanoplastics on microalga Chlorella pyrenoidosa during chronic toxicity. Science of the Total Environment, 2021, 788, 147934.	3.9	29
325	Toxic effects of acute exposure to polystyrene microplastics and nanoplastics on the model insect, silkworm Bombyx mori. Environmental Pollution, 2021, 285, 117255.	3.7	49
326	Microplastic pollution in show cave sediments: First evidence and detection technique. Environmental Pollution, 2022, 292, 118261.	3.7	37
327	Extraction and identification methods of microplastics and nanoplastics in agricultural soil: A review. Journal of Environmental Management, 2021, 294, 112997.	3.8	66

#	Article	IF	Citations
328	Microwaveâ€Assisted Extraction for Quantification of Microplastics Using Pyrolysisâ€“Gas Chromatography/Mass Spectrometry. Environmental Toxicology and Chemistry, 2021, 40, 2733-2741.	2.2	18
329	Transport and accumulation of microplastics through wastewater treatment sludge processes. Chemosphere, 2021, 278, 130471.	4.2	62
330	A baseline for microplastic particle occurrence and distribution in Great Bay Estuary. Marine Pollution Bulletin, 2021, 170, 112653.	2.3	15
331	The extraction of microplastics from sediments: An overview of existing methods and the proposal of a new and green alternative. Chemosphere, 2021, 278, 130357.	4.2	53
332	Inclusion of shape parameters increases the accuracy of 3D models for microplastics mass quantification. Marine Pollution Bulletin, 2021, 171, 112749.	2.3	7
333	Sewage sludge as a source of microplastics in the environment: A review of occurrence and fate during sludge treatment. Journal of Environmental Management, 2021, 295, 113028.	3.8	52
334	Biodegradable and re-usable sponge materials made from chitin for efficient removal of microplastics. Journal of Hazardous Materials, 2021, 420, 126599.	6.5	77
335	Marine macrophytes retain microplastics. Marine Pollution Bulletin, 2021, 171, 112738.	2.3	31
336	Microplastics contamination in pearl-farming lagoons of French Polynesia. Journal of Hazardous Materials, 2021, 419, 126396.	6.5	28
337	Analysis of microplastics and nanoplastics: How green are the methodologies used?. Current Opinion in Green and Sustainable Chemistry, 2021, 31, 100503.	3.2	15
338	Microplastics in inland freshwater environments with different regional functions: A case study on the Chengdu Plain. Science of the Total Environment, 2021, 789, 147938.	3.9	35
339	Factors driving the abundance and distribution of microplastics on sandy beaches in a Southwest Atlantic seaside resort. Marine Environmental Research, 2021, 171, 105472.	1.1	16
340	Microplastics prevalence, interactions, and remediation in the aquatic environment: A critical review. Journal of Environmental Chemical Engineering, 2021, 9, 106224.	3.3	60
341	Identification and removal of micro- and nano-plastics: Efficient and cost-effective methods. Chemical Engineering Journal, 2021, 421, 129816.	6.6	50
342	Microplastics fouling and interaction with polymeric membranes: A review. Chemosphere, 2021, 283, 131185.	4.2	49
343	Abundance and characteristics of microplastics in commercially important bottom dwelling finfishes and shellfish of the Vembanad Lake, India. Marine Pollution Bulletin, 2021, 172, 112803.	2.3	41
344	A critical review on microplastics, interaction with organic and inorganic pollutants, impacts and effectiveness of advanced oxidation processes applied for their removal from aqueous matrices. Chemical Engineering Journal, 2021, 424, 130282.	6.6	106
345	Small microplastics (<100 Î¼m), plasticizers and additives in seawater and sediments: Oleo-extraction, purification, quantification, and polymer characterization using Micro-FTIR. Science of the Total Environment, 2021, 797, 148937.	3.9	27

#	Article	IF	Citations
346	Occurrence, distribution and affecting factors of microplastics in agricultural soils along the lower reaches of Yangtze River, China. Science of the Total Environment, 2021, 794, 148694.	3.9	105
347	Microplastic adulteration in homogenized fish and seafood - a mid-infrared and machine learning proof of concept. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 260, 119985.	2.0	8
348	Overview on the occurrence of microplastics in air and implications from the use of face masks during the COVID-19 pandemic. Science of the Total Environment, 2021, 800, 149555.	3.9	66
349	Understanding the fate of nano-plastics in wastewater treatment plants and their removal using membrane processes. Chemosphere, 2021, 284, 131430.	4.2	57
350	Microplastics and trace metals in fish species of the Gulf of Mannar (Indian Ocean) and evaluation of human health. Environmental Pollution, 2021, 291, 118089.	3.7	45
351	Microplastics and environmental pollutants: Key interaction and toxicology in aquatic and soil environments. Journal of Hazardous Materials, 2022, 422, 126843.	6.5	220
352	Photodegradation of microplastics mediated by different types of soil: The effect of soil components. Science of the Total Environment, 2022, 802, 149840.	3.9	23
353	Training and evaluating machine learning algorithms for ocean microplastics classification through vibrational spectroscopy. Chemosphere, 2022, 287, 131903.	4.2	21
354	The seasonal cycle of micro and meso-plastics in surface waters in a coastal environment (RÃa de Vigo,) Tj ETQq0 0 0 rgBT /Overlock 10	3.9	14
355	Marine microplastics as vectors of major ocean pollutants and its hazards to the marine ecosystem and humans. Progress in Earth and Planetary Science, 2021, 8, .	1.1	225
356	New methodologies for the detection, identification, and quantification of microplastics and their environmental degradation by-products. Environmental Science and Pollution Research, 2021, 28, 46764-46780.	2.7	43
357	Microplastic abundance in beach sediments of the Kiel Fjord, Western Baltic Sea. Environmental Science and Pollution Research, 2021, 28, 26515-26528.	2.7	35
358	Microplastics â€“ Occurrence, Fate and Behaviour in the Environment. Comprehensive Analytical Chemistry, 2017, , 1-24.	0.7	67
359	Sorption and release process of polybrominated diphenyl ethers (PBDEs) from different composition microplastics in aqueous medium: Solubility parameter approach. Environmental Pollution, 2020, 262, 114377.	3.7	32
360	MICROPLASTIC IN THE DEEP-SEA SEDIMENT OF SOUTHWESTERN SUMATRAN WATERS. Marine Research in Indonesia, 2016, 41, 27-35.	0.2	41
361	Particle sources and transport in stratified Nordic coastal seas in the Anthropocene. Elementa, 2018, 6, .	1.1	25
362	Ecological Effects of Soil Microplastic Pollution. Science Insights, 2019, 30, 70-84.	0.1	20
363	Microplastic pollution on the strandline of urban and natural city beaches: The role of local activities. International Journal of Environmental Impacts Management Mitigation and Recovery, 2020, 3, 155-167.	0.1	2

#	Article	IF	Citations
364	Understanding individual and population-level effects of plastic pollution on marine megafauna. Endangered Species Research, 2020, 43, 234-252.	1.2	72
365	Improving microplastic research. AIMS Environmental Science, 2019, 6, 326-340.	0.7	22
366	Microplastics as Emerging Contaminants. Advances in Environmental Engineering and Green Technologies Book Series, 2020, , 31-44.	0.3	1
367	Polymer quantification using the Rock-EvalÂ® device for identification of plastics in sediments. Science of the Total Environment, 2022, 807, 151068.	3.9	3
368	Application of hyperspectral imaging technology in the rapid identification of microplastics in farmland soil. Science of the Total Environment, 2022, 807, 151030.	3.9	30
369	Review of Microplastic Distribution, Toxicity, Analysis Methods, and Removal Technologies. Water (Switzerland), 2021, 13, 2736.	1.2	40
370	Field evidence for microplastic interactions in marine benthic invertebrates. Scientific Reports, 2021, 11, 20900.	1.6	21
371	Characteristics, Toxic Effects, and Analytical Methods of Microplastics in the Atmosphere. Nanomaterials, 2021, 11, 2747.	1.9	26
372	Quantitively Analyzing the Variation of Micrometer-Sized Microplastic during Water Treatment with the Flow Cytometry-Fluorescent Beads Method. ACS ES&T Engineering, 2021, 1, 1668-1677.	3.7	12
373	Progress, prospects, and challenges in standardization of sampling and analysis of micro- and nano-plastics in the environment. Journal of Cleaner Production, 2021, 325, 129321.	4.6	20
374	Current status of studies on microplastics in the world's marine environments. Journal of Cleaner Production, 2021, 327, 129394.	4.6	13
375	Microplastic contamination of fish gills and the assessment of both quality assurance and quality control during laboratory analyses. Marine Pollution Bulletin, 2021, 173, 113051.	2.3	9
376	EXPERIMENTING ON SETTLING VELOCITIES OF NEGATIVELY BUOYANT MICROPLASTICS. , 2017, , .		0
377	ACCUMULATION OF PLASTIC FRAGMENTS AND MICROPLASTICS ON THE BEACHES IN THE SOUTH-EAST BALTIC SEA. , 2017, , .		0
378	Microplastics Pollution: Scientists On The Road To Consensus. , 2018, , .		0
379	Microplastics as Contaminant in FreshWater Ecosystem: A Modern Environmental Issue. , 2019, , 355-377.		1
380	Plastic waste monitoring and recycling by hyperspectral imaging technology. , 2019, , .		4
381	Qualitative and quantitative evaluation of residual microplastics in ark shell. Korean Journal of Food Preservation, 2020, 27, 416-421.	0.2	2

#	Article	IF	Citations
382	An assessment of micro- and nanoplastics in the biosphere: A review of detection, monitoring, and remediation technology. Chemical Engineering Journal, 2022, 430, 132913.	6.6	42
383	Challenges in the Analysis of Micro and Nanoplastics. , 2020, , 1-26.		1
384	ACCUMULATION OF PLASTIC FRAGMENTS AND MICROPLASTICS ON THE BEACHES IN THE SOUTH-EAST BALTIC SEA. , 2017, , .		0
385	EXPERIMENTING ON SETTLING VELOCITIES OF NEGATIVELY BUOYANT MICROPLASTICS. , 2017, , .		0
386	Microplastic in the subsurface system: Extraction and characterization from sediments of River Ganga near Patna, Bihar. , 2022, , 191-217.		6
387	Distributions of microplastics and larger anthropogenic debris in Norfolk Canyon, Baltimore Canyon, and the adjacent continental slope (Western North Atlantic Margin, U.S.A.). Marine Pollution Bulletin, 2022, 174, 113047.	2.3	11
388	Field application of pure polyethylene microplastic has no significant short-term effect on soil biological quality and function. Soil Biology and Biochemistry, 2022, 165, 108496.	4.2	45
389	The development and application of advanced analytical methods in microplastics contamination detection: A critical review. Science of the Total Environment, 2022, 818, 151851.	3.9	38
390	Adsorption of environmental contaminants on micro- and nano-scale plastic polymers and the influence of weathering processes on their adsorptive attributes. Journal of Hazardous Materials, 2022, 427, 127903.	6.5	35
391	What have we known so far for fluorescence staining and quantification of microplastics: A tutorial review. Frontiers of Environmental Science and Engineering, 2022, 16, 1.	3.3	41
392	Design of 2,5-furandicarboxylic based polyesters degraded in different environmental conditions: Comprehensive experimental and theoretical study. Journal of Hazardous Materials, 2022, 425, 127752.	6.5	28
393	A critical review of microplastics in the soil-plant system: Distribution, uptake, phytotoxicity and prevention. Journal of Hazardous Materials, 2022, 424, 127750.	6.5	109
394	Microplastics in Sewage Sludge: A Known but Underrated Pathway in Wastewater Treatment Plants. Sustainability, 2021, 13, 12591.	1.6	18
395	Study of the Degradation Behaviour of Virgin and Biodegradable Plastic Films in Marine Environment Using ASTM D 6691. Journal of Polymers and the Environment, 2022, 30, 2329-2340.	2.4	5
396	Acute and subacute repeated oral toxicity study of fragmented microplastics in Sprague-Dawley rats. Ecotoxicology and Environmental Safety, 2021, 228, 112964.	2.9	17
397	Quantifying spatial variation in the uptake of microplastic by mussels using biodeposit traps: A field-based study. Marine Pollution Bulletin, 2022, 174, 113305.	2.3	1
398	Critical review of microplastics removal from the environment. Chemosphere, 2022, 293, 133557.	4.2	89
399	Emerging investigator series: microplastic sources, fate, toxicity, detection, and interactions with micropollutants in aquatic ecosystems â€“ a review of reviews. Environmental Sciences: Processes and Impacts, 2022, 24, 172-195.	1.7	22

#	Article	IF	Citations
400	An affordable method for monitoring plastic fibre ingestion in Nephrops norvegicus (Linnaeus, 1758) and implementation on wide temporal and geographical scale comparisons. Science of the Total Environment, 2022, 810, 152264.	3.9	13
401	The contamination of microplastics in China's aquatic environment: Occurrence, detection and implications for ecological risk. Environmental Pollution, 2022, 296, 118737.	3.7	37
402	Behavior and mechanism of atrazine adsorption on pristine and aged microplastics in the aquatic environment: Kinetic and thermodynamic studies. Chemosphere, 2022, 292, 133425.	4.2	36
403	Methods for sampling, processing, identification,and quantification of microplastics in the marine environment. Oceanography in Japan, 2020, 29, 129-151.	0.5	7
404	Detection of microplastics in a digested complex organic medium by Raman Tweezers. , 2021, , .		0
405	A review of atmospheric microplastics pollution: In-depth sighting of sources, analytical methods, physiognomies, transport and risks. Science of the Total Environment, 2022, 822, 153339.	3.9	52
406	A Critical Review of the Performance and Soil Biodegradability Profiles of Biobased Natural and Chemically Synthesized Polymers in Industrial Applications. Environmental Science & Technology, 2022, 56, 2071-2095.	4.6	33
407	Methods and challenges in the detection of microplastics and nanoplastics: a miniâ€review. Polymer International, 2022, 71, 543-551.	1.6	43
408	Determination of the pharmaceuticalsâ€“nano/microplastics in aquatic systems by analytical and instrumental methods. Environmental Monitoring and Assessment, 2022, 194, 93.	1.3	11
410	Investigation of mini-hydrocyclone performance in removing small-size microplastics. Particuology, 2022, 71, 1-10.	2.0	22
411	Assessment of Microplastics in Irish River Sediment. SSRN Electronic Journal, 0, , .	0.4	0
413	Seasonal tendencies of microplastics around coral reefs in selected Marine Protected National Parks of Gulf of California, Mexico. Marine Pollution Bulletin, 2022, 175, 113333.	2.3	10
414	Occurrence of Microplastic Pollution in the Beibu Gulf, the Northern South China Sea. Frontiers in Marine Science, 2022, 8, .	1.2	10
415	Coagulation-flocculation performance and floc properties for microplastics removal by magnesium hydroxide and PAM. Journal of Environmental Chemical Engineering, 2022, 10, 107263.	3.3	17
416	Methods to recover and characterize microplastics in wastewater treatment plants. Case Studies in Chemical and Environmental Engineering, 2022, 5, 100183.	2.9	18
417	Atmospheric microplastic fallout in outdoor and indoor environments in SÃ£o Paulo megacity. Science of the Total Environment, 2022, 821, 153450.	3.9	43
418	Effects of microplastics on the terrestrial environment: A critical review. Environmental Research, 2022, 209, 112734.	3.7	112
419	Extraction, characterisation and remediation of microplastics from organic solid matrices. Environmental Geotechnics, 0, , 1-34.	1.3	11

#	Article	IF	Citations
420	Quantification of polyethylene terephthalate microplastics and nanoplastics in sands, indoor dust and sludge using a simplified in-matrix depolymerization method. Marine Pollution Bulletin, 2022, 175, 113403.	2.3	17
421	Airborne and marine microplastics from an oceanographic survey at the Baltic Sea: An emerging role of air-sea interaction?. Science of the Total Environment, 2022, 824, 153709.	3.9	44
423	Challenges in the Analysis of Micro- and Nanoplastics. , 2022, , 477-501.		0
425	Removal of Microplastics from Wastewater. , 2022, , 1153-1172.		0
426	Measurement of microplastic settling velocities and implications for residence times in thermally stratified lakes. Limnology and Oceanography, 2022, 67, 934-945.	1.6	26
427	A screening-level human health risk assessment for microplastics and organic contaminants in near-shore marine environments in American Samoa. Heliyon, 2022, 8, e09101.	1.4	11
428	Detection in influx sources and estimation of microplastics abundance in surface waters of Rawal Lake, Pakistan. Heliyon, 2022, 8, e09166.	1.4	13
429	Lagrangian Modeling of Marine Microplastics Fate and Transport: The State of the Science. Journal of Marine Science and Engineering, 2022, 10, 481.	1.2	13
430	Influence of Different Microplastic Forms on pH and Mobility of Cu2+ and Pb2+ in Soil. Molecules, 2022, 27, 1744.	1.7	27
431	Curbing plastic consumption: A review of single-use plastic behaviour change interventions. Journal of Cleaner Production, 2022, 344, 131077.	4.6	30
432	Capturing colloidal nano- and microplastics with plant-based nanocellulose networks. Nature Communications, 2022, 13, 1814.	5.8	25
433	Micro(Nano)plastic analysis: a green and sustainable perspective. Journal of Hazardous Materials Advances, 2022, 6, 100058.	1.2	5
434	A review of microplastic impacts on seagrasses, epiphytes, and associated sediment communities. Environmental Pollution, 2022, 303, 119108.	3.7	21
435	(Micro) nanoplastics promote the risk of antibiotic resistance gene propagation in biological phosphorus removal system. Journal of Hazardous Materials, 2022, 431, 128547.	6.5	11
436	Microplastics in the environment: Recent developments in characteristic, occurrence, identification and ecological risk. Chemosphere, 2022, 298, 134161.	4.2	38
437	Occurrence and exposure assessment of microplastics in indoor dusts of buildings with different applications in Bushehr and Shiraz cities, Iran. Science of the Total Environment, 2022, 829, 154651.	3.9	78
438	Advanced instrumental approaches for chemical characterization of indoor particulate matter. Applied Spectroscopy Reviews, 2022, 57, 705-745.	3.4	13
439	ContaminaciÃ³n por microplÃ¡sticos en playas del PacÃfico de Guatemala: abundancia y caracterÃsticas. Ciencia, TecnologÃa Y Salud, 2021, 8, 260-268.	0.0	0

#	Article	IF	Citations
441	Current Progress of Microplastics in Sewage Sludge. Handbook of Environmental Chemistry, 2022, , 1.	0.2	0
443	Systematic Evaluation of Physical Parameters Affecting the Terminal Settling Velocity of Microplastic Particles in Lakes Using CFD. Frontiers in Environmental Science, 2022, 10, .	1.5	8
444	Microplastics in freshwater environment: occurrence, analysis, impact, control measures and challenges. International Journal of Environmental Science and Technology, 2023, 20, 6865-6896.	1.8	10
458	Evaluation of Membrane Fouling by Microplastic Particles in Tertiary Wastewater Treatment Processes. ACS ES&T Water, 2022, 2, 955-966.	2.3	8
459	Photochlorination-induced degradation of microplastics and interaction with Cr(VI) and amlodipine. Science of the Total Environment, 2022, 835, 155499.	3.9	10
460	A review of microplastics in soil: Occurrence, analytical methods, combined contamination and risks. Environmental Pollution, 2022, 306, 119374.	3.7	31
461	Potential Risks of Microplastic Fomites to Aquatic Organisms with Special Emphasis on Polyethylene-Microplastic-Glyphosate Exposure Case in Aquacultured Shrimp. Applied Sciences (Switzerland), 2022, 12, 5135.	1.3	7
462	Occurrence, analysis of microplastics in sewage sludge and their fate during composting: A literature review. Journal of Environmental Management, 2022, 317, 115364.	3.8	32
463	Validation of sample preparation methods for small microplastics (â‰10ÂÂµm) in wastewater effluents. Chemical Engineering Journal, 2022, 446, 137082.	6.6	5
465	Engineered Approaches to Facile Identification of Tiny Microplastics in Polymeric and Ceramic Membrane Filtrations for Wastewater Treatment. Membranes, 2022, 12, 565.	1.4	13
466	A Review of Future Household Waste Management for Sustainable Environment in Malaysian Cities. Sustainability, 2022, 14, 6517.	1.6	7
467	Evaluation of Istanbul from the environmental componentsâ€™ perspective: what has changed during the pandemic?. Environmental Monitoring and Assessment, 2022, 194, .	1.3	2
468	Microbial adaptation to extreme temperatures: an overview of molecular mechanisms to industrial application. , 2022, , 115-139.		1
469	Application of a microplastic trap to the determination of the factors controlling the lakebed deposition of microplastics. Science of the Total Environment, 2022, 843, 156883.	3.9	9
470	Urban mangrove ecosystems are under severe threat from microplastic pollution: a case study from Mangalavanam, Kerala, India. Environmental Science and Pollution Research, 2022, 29, 80568-80580.	2.7	14
471	Embryotoxicity of Polystyrene Microspheres of Different Sizes to the Marine Medaka Oryzias melastigma (McClelland, 1839). Water (Switzerland), 2022, 14, 1831.	1.2	3
472	Plastics in the environment as potential threat to life: an overview. Environmental Science and Pollution Research, 2022, 29, 56928-56947.	2.7	17
473	Analysis of Microplastics. Health Information Systems and the Advancement of Medical Practice in Developing Countries, 2022, , 284-305.	0.1	0

#	Article	IF	Citations
474	Occurrence, seasonal distribution, and ecological risk assessment of microplastics and phthalate esters in leachates of a landfill site located near the marine environment: Bushehr port, Iran as a case. Science of the Total Environment, 2022, 842, 156838.	3.9	85
475	Evidences of microplastics in aerosols and street dust: a case study of Varanasi City, India. Environmental Science and Pollution Research, 2022, 29, 82006-82013.	2.7	16
476	Synergistic Adsorption of Organic Pollutants on Weathered Polyethylene Microplastics. Polymers, 2022, 14, 2674.	2.0	16
477	Visual Detection of Microplastics Derived from Plastic Mulch in Soil. Ziraat MÃ¼hendisliÄŸi, 2022, , 67-74.	0.3	2
478	Assessment of microplastics in Irish river sediment. Heliyon, 2022, 8, e09853.	1.4	7
479	Microplastics: Identification, Toxicity and Their Remediation from Aqueous Streams. Separation and Purification Reviews, 2023, 52, 283-304.	2.8	13
480	Selection of Suitable Methods for the Detection of Microplastics in the Environment. Journal of Analytical Chemistry, 2022, 77, 830-843.	0.4	3
481	Effects of microplastics on water infiltration in agricultural soil on the Loess Plateau, China. Agricultural Water Management, 2022, 271, 107818.	2.4	11
482	Microbial biodegradation of plastics: Challenges, opportunities, and a critical perspective. Frontiers of Environmental Science and Engineering, 2022, 16, .	3.3	25
483	Microplastics distribution in different habitats of Ximen Island and the trapping effect of blue carbon habitats on microplastics. Marine Pollution Bulletin, 2022, 181, 113912.	2.3	13
484	Image processing tools in the study of environmental contamination by microplastics: reliability and perspectives. Environmental Science and Pollution Research, 2023, 30, 298-309.	2.7	9
485	A Novel Impedimetric Sensor Based on Cyanobacterial Extracellular Polymeric Substances for Microplastics Detection. Journal of Polymers and the Environment, 2022, 30, 4738-4748.	2.4	8
486	Evaluation of the status of marine plastic pollution along a tourist beach of Bay of Bengal during lockdown and post lockdown. Marine Pollution Bulletin, 2022, 182, 113970.	2.3	12
487	Nanoplastics: Detection and impacts in aquatic environments â€“ A review. Science of the Total Environment, 2022, 849, 157852.	3.9	24
488	Presence and implications of plastics in wild commercial fishes in the Alboran Sea (Mediterranean) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.9	6
489	Algal degradation of microplastic from the environment: Mechanism, challenges, and future prospects. Algal Research, 2022, 67, 102848.	2.4	13
490	Environmental Toxicity, Health Hazards, and Bioremediation Strategies for Removal of Microplastics from Wastewater. , 2022, , 149-186.		0
491	Collection and separation analysis of airborne microplastics. Comprehensive Analytical Chemistry, 2022, , .	0.7	1

#	Article	IF	Citations
492	Micro- and Nanoplasticsâ€™ Effects on Protein Folding and Amyloidosis. International Journal of Molecular Sciences, 2022, 23, 10329.	1.8	11
493	Mitigation Approaches to Prevent Microplastics Effects in the Aquatic Environment: Exploration of Microbeads from Personal Care and Cosmetic Products. International Journal of Environmental Research, 2022, 16, .	1.1	3
494	Analytical methods for microplastics in the environment: a review. Environmental Chemistry Letters, 2023, 21, 383-401.	8.3	44
495	An insight on sampling, identification, quantification and characteristics of microplastics in solid wastes. Trends in Environmental Analytical Chemistry, 2022, 36, e00181.	5.3	20
496	Sparkling plastic: Effects of exposure to glitter on the Mediterranean mussel Mytilus galloprovincialis. Environmental Toxicology and Pharmacology, 2022, 96, 103994.	2.0	7
497	Maximizing Realism: Mapping Plastic Particles at the Ocean Surface Using Mixtures of Normal Distributions. Environmental Science & Technology, 2022, 56, 15552-15562.	4.6	9
498	Atmospheric micro (nano) plastics: future growing concerns for human health. Air Quality, Atmosphere and Health, 2023, 16, 233-262.	1.5	28
499	Which factors mainly drive the photoaging of microplastics in freshwater?. Science of the Total Environment, 2023, 858, 159845.	3.9	14
500	Detection of Microplastics by Various Types of Whiteleg Shrimp (Litopenaeus vannamei) in the Korean Sea. Separations, 2022, 9, 332.	1.1	7
501	Microfibers: Environmental Problems and Textile Solutions. Microplastics, 2022, 1, 626-639.	1.6	7
502	Aging Process of Microplastics in the Aquatic Environments: Aging Pathway, Characteristic Change, Compound Effect, and Environmentally Persistent Free Radicals Formation. Water (Switzerland), 2022, 14, 3515.	1.2	15
503	Seasonal and daily occurrence of microplastic pollution in urban road dust. Journal of Cleaner Production, 2022, 380, 135025.	4.6	10
504	Analytical methodologies used for screening micro(nano)plastics in (eco)toxicity tests. , 2022, 3, 100037.		4
505	Microplastic in the Baltic Sea: A review of distribution processes, sources, analysis methods and regulatory policies. Environmental Pollution, 2022, 315, 120453.	3.7	10
506	Nanomaterials-based adsorbents for remediation of microplastics and nanoplastics in aqueous media: A review. Separation and Purification Technology, 2023, 305, 122453.	3.9	25
507	Representative subsampling methods for the chemical identification of microplastic particles in environmental samples. Chemosphere, 2023, 310, 136772.	4.2	16
508	Effects of plastic particles on aquatic invertebrates and fish â€“ A review. Environmental Toxicology and Pharmacology, 2022, 96, 104013.	2.0	42
509	Microplastic in Sediments and Ingestion Rates in Three Edible Bivalve Mollusc Species in a Southern Philippine Estuary. Water, Air, and Soil Pollution, 2022, 233, .	1.1	6

#	Article	IF	Citations
510	Assessment of microplastics as contaminants in a coal mining region. Heliyon, 2022, 8, e11666.	1.4	4
511	Microplastics and nanoplastics in food, water, and beverages, part II. Methods. TrAC - Trends in Analytical Chemistry, 2022, 157, 116819.	5.8	27
512	Microplastics in marine beach and seabed sediments along the coasts of Dar es Salaam and Zanzibar in Tanzania. Marine Pollution Bulletin, 2022, 185, 114305.	2.3	5
513	Various advanced wastewater treatment methods to remove microplastics and prevent transmission of SARS-CoV-2 to airborne microplastics. International Journal of Environmental Science and Technology, 2023, 20, 2229-2246.	1.8	10
514	Application of hyperspectral and deep learning in farmland soil microplastic detection. Journal of Hazardous Materials, 2023, 445, 130568.	6.5	12
515	Magnetic Extraction of Weathered Tire Wear Particles and Polyethylene Microplastics. Polymers, 2022, 14, 5189.	2.0	8
516	Pyrolytic Depolymerization Mechanisms for Post-Consumer Plastic Wastes. Energies, 2022, 15, 8821.	1.6	7
517	A sustainable approach on thermal and catalytic conversion of waste plastics into fuels. Fuel, 2023, 339, 126977.	3.4	4
518	An investigation into the aging of disposable face masks in landfill leachate. Journal of Hazardous Materials, 2023, 446, 130671.	6.5	6
519	Experimental Insight into the Containment of Plastic Waste in Cement-Stabilised Soil as a Road Pavement Layer Material. Infrastructures, 2022, 7, 172.	1.4	2
520	Exudation of microplastics from commonly used face masks in COVID-19 pandemic. Environmental Science and Pollution Research, 2023, 30, 35258-35268.	2.7	11
521	Microplastic as an Emerging Environmental Threat: A Critical Review on Sampling and Identification Techniques Focusing on Aquactic Ecoystem. Journal of Polymers and the Environment, 2023, 31, 1725-1747.	2.4	4
522	Magnetism-Assisted Density Gradient Separation of Microplastics. Analytical Chemistry, 2022, 94, 17947-17955.	3.2	4
523	Prevalence and implications of microplastics in potable water system: An update. Chemosphere, 2023, 317, 137848.	4.2	14
524	Current status of the direct detection of microplastics in environments and implications for toxicological effects. Chemical Engineering Journal Advances, 2023, 14, 100449.	2.4	11
525	High temporal resolution records of outdoor and indoor airborne microplastics. Environmental Science and Pollution Research, 2023, 30, 39246-39257.	2.7	11
526	Occurrence of Microplastics in River Water in Southern Thailand. Journal of Marine Science and Engineering, 2023, 11, 90.	1.2	3
527	A spectroscopic study on orthodontic aligners: First evidence of secondary microplastic detachment after seven days of artificial saliva exposure. Science of the Total Environment, 2023, 866, 161356.	3.9	3

#	Article	IF	Citations
528	Assessment of Micro- and Nanoplastic Composition (Polymers and Additives) in the Gastrointestinal Tracts of Ebro River Fishes. Molecules, 2023, 28, 239.	1.7	6
529	A review on state-of-the-art detection techniques for micro- and nano-plastics with prospective use in point-of-site detection. Comprehensive Analytical Chemistry, 2023, , 143-196.	0.7	1
530	Use of coupled TG-FTIR and Py-GC/MS to study combustion characteristics of conveyor belts in coal mines. Journal of Thermal Analysis and Calorimetry, 2023, 148, 4779-4789.	2.0	4
531	Assessment on the pollution level and risk of microplastics on bathing beaches: a case study of Liandao, China. Environmental Monitoring and Assessment, 2023, 195, .	1.3	6
532	Photo-reforming and degradation of waste plastics under UV and visible light for H2 production using nanocomposite photocatalysts. Journal of Environmental Chemical Engineering, 2023, 11, 109580.	3.3	7
533	Key drivers of the textile and clothing industry decarbonisation within the EU-27. Journal of Environmental Management, 2023, 334, 117438.	3.8	3
534	Identification of factors influencing the microplastic distribution in agricultural soil on Hainan Island. Science of the Total Environment, 2023, 874, 162426.	3.9	15
535	Source, occurrence, distribution, fate, and implications of microplastic pollutants in freshwater on environment: A critical review and way forward. Chemosphere, 2023, 325, 138367.	4.2	28
536	Rapid urbanization affects microplastic communities in lake sediments: A case study of Lake Aha in southwest China. Journal of Environmental Management, 2023, 338, 117824.	3.8	13
537	Mangrove and microplastic pollution: A case study from a small island (Mauritius). Regional Studies in Marine Science, 2023, 62, 102906.	0.4	1
538	Automated characterization and identification of microplastics through spectroscopy and chemical imaging in combination with chemometric: Latest developments and future prospects. TrAC - Trends in Analytical Chemistry, 2023, 160, 116956.	5.8	5
539	Multi-Analytical Approach to Characterize the Degradation of Different Types of Microplastics: Identification and Quantification of Released Organic Compounds. Molecules, 2023, 28, 1382.	1.7	7
540	Micro and nanoplastics ravaging our agroecosystem: A review of occurrence, fate, ecological impacts, detection, remediation, and prospects. Heliyon, 2023, 9, e13296.	1.4	9
541	Importance of Blue Carbon in Mitigating Climate Change and Plastic/Microplastic Pollution and Promoting Circular Economy. Sustainability, 2023, 15, 2682.	1.6	17
542	Microplastics and leaf litter decomposition dynamics: New insights from a lotic ecosystem (Northeastern Italy). Ecological Indicators, 2023, 147, 109995.	2.6	5
543	Microplastics: The stemming environmental challenge and the quest for the missing mitigation strategies. International Biodeterioration and Biodegradation, 2023, 179, 105581.	1.9	4
544	Substantial burial of terrestrial microplastics in the Three Gorges Reservoir, China. Communications Earth & Environment, 2023, 4, .	2.6	11
545	Molecular mechanisms of toxicity and detoxification in rice (Oryza sativa L.) exposed to polystyrene nanoplastics. Plant Physiology and Biochemistry, 2023, 199, 107605.	2.8	6

#	Article	IF	Citations
546	Recent trends on microplastics abundance and risk assessment in coastal Antarctica: Regional meta-analysis. Environmental Pollution, 2023, 324, 121385.	3.7	8
547	Ecological Impacts and Toxicity of Micro- and Nanoplastics in Agroecosystem. , 2023, , 221-236.		1
548	Abundance and Distribution of MPs and NPs in Soil: A Global Scenario. , 2023, , 35-57.		0
549	Metal-organic frameworks and plastic: an emerging synergic partnership. Science and Technology of Advanced Materials, 2023, 24, .	2.8	1
550	Research status and prospects of microplastic pollution in lakes. Environmental Monitoring and Assessment, 2023, 195, .	1.3	1
551	Topological network design toward highâ€performance vegetable oilâ€“based elastomers. SusMat, 2023, 3, 320-333.	7.8	2
552	Comparative evaluation of the carbonyl index of microplastics around the Japan coast. Marine Pollution Bulletin, 2023, 190, 114818.	2.3	10
553	Sporadic Emerging Infectious and Non-Infectious Diseases and Disorders. , 2023, , 315-350.		2
554	Microplastics in Sediments from a Sandy Beach in Costa Nova (Aveiro, Portugal). Sustainability, 2023, 15, 6186.	1.6	1
555	An Analysis of Microplastics Ingested by the Mediterranean Detritivore Holothuria tubulosa (Echinodermata: Holothuroidea) Sheds Light on Patterns of Contaminant Distribution in Different Marine Areas. Water (Switzerland), 2023, 15, 1597.	1.2	1
556	Microplastics in the Mediterranean and elsewhere in coastal seas. , 2024, , 669-705.		4
559	Size and Types Distribution of Marine Debris in the Mangrove Ecosystem of Bintan Island - Indonesia. , 2023, , 144-155.		0
560	Bioremediation of Heavy Metal in Paper Mill Effluent. , 2023, , 65-96.		0
562	Status of Safety Concerns of Microplastic Detection Strategies. , 2023, , 727-749.		0
565	Principles and Methods for the Removal of Microplastics in Wastewater. , 2023, , 1-15.		0
568	Adverse health effects and mechanisms of microplastics on female reproductive system: a descriptive review. Environmental Science and Pollution Research, 2023, 30, 76283-76296.	2.7	2
585	Microplastics in Soil-Plant Systems. Environmental Chemistry for A Sustainable World, 2023, , 251-280.	0.3	0
600	Tools and Techniques to Analyse Microplastic Pollution in Aquatic and Terrestrial Ecosystems. , 2023, , 1-17.		0

#	Article	IF	Citations
605	An RF MEMS Sensor Driver/Readout SoC with Resonant Frequency Shift and Closed-Loop Envelope Regulation for Microplastic Detection. , 2023, , .		0
619	Indoor microplastics: a comprehensive review and bibliometric analysis. Environmental Science and Pollution Research, 2023, 30, 121269-121291.	2.7	4
624	Soil Microplastic Remediation: Exploring the Role of Microorganism/PGPR in Sustainable Cleanup. ACS Symposium Series, 0, , 57-70.	0.5	0
630	Microplastics particles in coastal zone: Approach of physical oceanography. , 2024, , 249-310.		0
633	Soil pollution and climate change. , 2024, , 289-302.		0
634	Soil pollution and management practices. , 2024, , 187-236.		0