Christian Laforsch

List of Publications by Year in descending order

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98 papers

8,693 citations

71102 41 h-index 90 g-index

99 all docs 99 docs citations 99 times ranked 8326 citing authors

#	Article	IF	CITATIONS
1	Tackling the Challenge of Extracting Microplastics from Soils: A Protocol to Purify Soil Samples for Spectroscopic Analysis. Environmental Toxicology and Chemistry, 2022, 41, 844-857.	4.3	49
2	Classification of target tissues of Eisenia fetida using sequential multimodal chemical analysis and machine learning. Histochemistry and Cell Biology, 2022, 157, 127-137.	1.7	6
3	Supposedly identical microplastic particles substantially differ in their material properties influencing particle-cell interactions and cellular responses. Journal of Hazardous Materials, 2022, 425, 127961.	12.4	29
4	Airborne microplastic concentrations and deposition across the Weser River catchment. Science of the Total Environment, 2022, 818, 151812.	8.0	47
5	From properties to toxicity: Comparing microplastics to other airborne microparticles. Journal of Hazardous Materials, 2022, 428, 128151.	12.4	47
6	Shape, size, and polymer dependent effects of microplastics on Daphnia magna. Journal of Hazardous Materials, 2022, 426, 128136.	12.4	68
7	Improving the proteome coverage of <i>Daphnia magna</i> ―implications for future ecotoxicoproteomics studies. Proteomics, 2022, 22, e2100289.	2.2	4
8	Computer-Assisted Analysis of Microplastics in Environmental Samples Based on î¼FTIR Imaging in Combination with Machine Learning. Environmental Science and Technology Letters, 2022, 9, 90-95.	8.7	41
9	Microplastic sample purification methods - Assessing detrimental effects of purification procedures on specific plastic types. Science of the Total Environment, 2022, 833, 154824.	8.0	33
10	Flooding frequency and floodplain topography determine abundance of microplastics in an alluvial Rhine soil. Science of the Total Environment, 2022, 836, 155141.	8.0	19
11	The Beauty is a beast: Does leachate from the invasive terrestrial plant <i>Impatiens glandulifera</i> affect aquatic food webs?. Ecology and Evolution, 2022, 12, e8781.	1.9	2
12	Impacts on food web properties of island invertebrate communities vary between different human land uses. Science of the Total Environment, 2022, 831, 154838.	8.0	5
13	Taking advantage of transparency: A proof-of-principle for the analysis of the uptake of labeled microplastic particles by organisms of different functional feeding guilds using an adapted CUBIC protocol. Science of the Total Environment, 2022, 832, 154922.	8.0	1
14	MALDI mass spectrometry imaging workflow for the aquatic model organisms Danio rerio and Daphnia magna. Scientific Reports, 2022, 12, 7288.	3.3	2
15	Municipal biowaste treatment plants contribute to the contamination of the environment with residues of biodegradable plastics with putative higher persistence potential. Scientific Reports, 2022, 12, .	3.3	18
16	Repulsive Interactions of Eco-corona-Covered Microplastic Particles Quantitatively Follow Modeling of Polymer Brushes. Langmuir, 2022, 38, 8748-8756.	3.5	9
17	Analysis of microplastics of a broad size range in commercially important mussels by combining FTIR and Raman spectroscopy approaches. Environmental Pollution, 2021, 269, 116147.	7. 5	64
18	Compartmentalized organization of ecological niche occupation in insular invertebrate communities. Ecology and Evolution, 2021, 11, 471-480.	1.9	5

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19	Microplastics: A Novel Suite of Environmental Contaminants but Present for Decades., 2021,, 1-26.		2
20	Microplastic contamination of the drilling bivalve Hiatella arctica in Arctic rhodolith beds. Scientific Reports, 2021, 11, 14574.	3.3	16
21	Allochthonous resources are less important for faunal communities on highly productive, small tropical islands. Ecology and Evolution, 2021, 11, 13128-13138.	1.9	1
22	Diversity Patterns and Community Structure of the Ground-Associated Macrofauna along the Beach-Inland Transition Zone of Small Tropical Islands. Diversity, 2021, 13, 377.	1.7	2
23	Long-term exposure of Daphnia magna to polystyrene microplastic (PS-MP) leads to alterations of the proteome, morphology and life-history. Science of the Total Environment, 2021, 795, 148822.	8.0	53
24	Microplastics: A Novel Suite of Environmental Contaminants but Present for Decades. , 2021, , $1185-1210$.		0
25	Tourism and urban development as drivers for invertebrate diversity loss on tropical islands. Royal Society Open Science, 2021, 8, 210411.	2.4	12
26	In situ Prokaryotic and Eukaryotic Communities on Microplastic Particles in a Small Headwater Stream in Germany. Frontiers in Microbiology, 2021, 12, 660024.	3.5	12
27	Structural Diversity in Early-Stage Biofilm Formation on Microplastics Depends on Environmental Medium and Polymer Properties. Water (Switzerland), 2020, 12, 3216.	2.7	29
28	Phenotypic plasticity of senescence in <i>Daphnia</i> when the perceived risk decreases with age. Royal Society Open Science, 2020, 7, 191382.	2.4	4
29	Pitfalls and Limitations in Microplastic Analyses. Handbook of Environmental Chemistry, 2020, , 13-42.	0.4	13
30	Environmental exposure enhances the internalization of microplastic particles into cells. Science Advances, 2020, 6, .	10.3	176
31	Predatorâ€specific inducible morphological defenses of a water flea against two freshwater predators. Journal of Morphology, 2020, 281, 653-661.	1.2	10
32	Shell resource partitioning as a mechanism of coexistence in two co-occurring terrestrial hermit crab species. BMC Ecology, 2020, 20, 1.	3.0	41
33	Finding Microplastics in Soils: A Review of Analytical Methods. Environmental Science & Emp; Technology, 2020, 54, 2078-2090.	10.0	288
34	Knowing the Enemy: Inducible Defences in Freshwater Zooplankton. Diversity, 2020, 12, 147.	1.7	35
35	Uncovering the chemistry behind inducible morphological defences in the crustacean Daphnia magna via micro-Raman spectroscopy. Scientific Reports, 2020, 10, 22408.	3.3	5
36	First record of a wolf spider, <i>Draposa lyrivulva</i> (Bösenberg & Strand 1906) (Araneae: Lycosidae), from the Maldivian Islands, Indian Ocean. Acta Arachnologica, 2020, 69, 115-119.	0.2	1

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37	Occurence of microplastics in the hyporheic zone of rivers. Scientific Reports, 2019, 9, 15256.	3.3	136
38	Preface: Blasts from the past and back to the future. Hydrobiologia, 2019, 846, 1-3.	2.0	0
39	Abundance and distribution of large microplastics (1–5†mm) within beach sediments at the Po River Delta, northeast Italy. Marine Pollution Bulletin, 2019, 149, 110515.	5.0	46
40	Disentangling the environmental impact of different human disturbances: a case study on islands. Scientific Reports, 2019, 9, 13712.	3.3	18
41	Effects of microplastic particles and leaching additive on the life history and morphology of Daphnia magna. Environmental Pollution, 2019, 255, 113233.	7.5	138
42	Coastal accumulation of microplastic particles emitted from the Po River, Northern Italy: Comparing remote sensing and hydrodynamic modelling with in situ sample collections. Marine Pollution Bulletin, 2019, 138, 561-574.	5.0	103
43	Plastic waste interferes with chemical communication in aquatic ecosystems. Scientific Reports, 2019, 9, 5889.	3.3	41
44	A methodology for the fast identification and monitoring of microplastics in environmental samples using random decision forest classifiers. Analytical Methods, 2019, 11, 2277-2285.	2.7	83
45	Daytime activity and habitat preferences of two sympatric hermit crab species (Decapoda: Anomura:) Tj ETQq1 I	l 0.784314	1 rgBT /Overl
46	Proteomic analysis in the model organism Daphnia has the potential to unravel molecular pathways involved in phenotypic changes in response to changing environmental conditions. Hydrobiologia, 2019, 846, 27-38.	2.0	3
47	Organic fertilizer as a vehicle for the entry of microplastic into the environment. Science Advances, 2018, 4, eaap8060.	10.3	617
48	The influence of gravity and light on locomotion and orientation of Heterocypris incongruens and Notodromas monacha (Crustacea, Ostracoda). Npj Microgravity, 2018, 4, 3.	3.7	5
49	Variation in plastic abundance at different lake beach zones - A case study. Science of the Total Environment, 2018, 613-614, 530-537.	8.0	47
50	The role of turbulent hydrodynamics and surface morphology on heat and mass transfer in corals. Journal of the Royal Society Interface, 2018, 15, 20180448.	3.4	23
51	Identification and quantification of macro- and microplastics on an agricultural farmland. Scientific Reports, 2018, 8, 17950.	3.3	470
52	Spatial and temporal variation of macro-, meso- and microplastic abundance on a remote coral island of the Maldives, Indian Ocean. Marine Pollution Bulletin, 2017, 116, 340-347.	5.0	195
53	Life History Responses and Feeding Behavior of Microcrustacea in Altered Gravity – Applicability in Bioregenerative Life Support Systems (BLSS). Microgravity Science and Technology, 2017, 29, 241-249.	1.4	4
54	Fate of Soâ€Called Biodegradable Polymers in Seawater and Freshwater. Global Challenges, 2017, 1, 1700048.	3.6	202

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55	Enzymatic Purification of Microplastics in Environmental Samples. Environmental Science & Emp; Technology, 2017, 51, 14283-14292.	10.0	338
56	Do microplastic particles affect Daphnia magna at the morphological, life history and molecular level?. PLoS ONE, 2017, 12, e0187590.	2.5	147
57	The Influence of Water Currents on Movement Patterns on Sand in the Crown-of-Thorns Seastar (Acanthaster cf. solaris). Diversity, 2016, 8, 25.	1.7	8
58	The role of vision for navigation in the crown-of-thorns seastar, Acanthaster planci. Scientific Reports, 2016, 6, 30834.	3.3	14
59	A sugar biomarker proxy for assessing terrestrial versus aquatic sedimentary input. Organic Geochemistry, 2016, 98, 98-104.	1.8	16
60	Pigments and plastic in limnetic ecosystems: A qualitative and quantitative study on microparticles of different size classes. Water Research, 2016, 98, 64-74.	11.3	359
61	Hazardous or not $\hat{a}\in$ Are adult and juvenile individuals of Potamopyrgus antipodarum affected by non-buoyant microplastic particles?. Environmental Pollution, 2016, 218, 383-391.	7.5	81
62	Daphnia magna transcriptome by RNA-Seq across 12 environmental stressors. Scientific Data, 2016, 3, 160030.	5.3	89
63	Predator-specific reversibility of morphological defenses in <i>Daphnia barbata</i> . Journal of Plankton Research, 2016, 38, 771-780.	1.8	21
64	Responses of Microcrustaceans to Simulated Microgravity (2D-Clinorotation) - Preliminary Assessments for the Development of Bioregenerative Life Support Systems (BLSS). Microgravity Science and Technology, 2016, 28, 337-344.	1.4	7
65	Inducible Defenses with a "Twist": Daphnia barbata Abandons Bilateral Symmetry in Response to an Ancient Predator. PLoS ONE, 2016, 11, e0148556.	2.5	25
66	Density-dependent adjustment of inducible defenses. Scientific Reports, 2015, 5, 12736.	3.3	53
67	The influence of simulated microgravity on the proteome of Daphnia magna. Npj Microgravity, 2015, 1, 15016.	3.7	14
68	Interclonal proteomic responses to predator exposure in <i>Daphnia magna</i> may depend on predator composition of habitats. Molecular Ecology, 2015, 24, 3901-3917.	3.9	21
69	Biofilm and Diatom Succession on Polyethylene (PE) and Biodegradable Plastic Bags in Two Marine Habitats: Early Signs of Degradation in the Pelagic and Benthic Zone?. PLoS ONE, 2015, 10, e0137201.	2.5	152
70	Dopamine is a key regulator in the signalling pathway underlying predator-induced defences in <i>Daphnia</i> . Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151440.	2.6	40
71	Proteomic analysis of Daphnia magna hints at molecular pathways involved in defensive plastic responses. BMC Genomics, 2014, 15, 306.	2.8	50
72	Sublethal effects of the betaâ€blocker sotalol at environmentally relevant concentrations on the New Zealand mudsnail <i>Potamopyrgus antipodarum</i> . Environmental Toxicology and Chemistry, 2014, 33, 2510-2515.	4.3	9

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73	Daphnia longicephala neuropeptides: Morphological description of crustacean cardioactive peptide (CCAP) and periviscerokinins in the Ctenodaphnia central nervous system. Neuropeptides, 2014, 48, 287-293.	2.2	5
74	A novel, non-invasive and in vivo approach to determine morphometric data in starfish. Journal of Experimental Marine Biology and Ecology, 2013, 449, 1-9.	1.5	11
75	Contamination of beach sediments of a subalpine lake with microplastic particles. Current Biology, 2013, 23, R867-R868.	3.9	519
76	Uncovering Ultrastructural Defences in Daphnia magna – An Interdisciplinary Approach to Assess the Predator-Induced Fortification of the Carapace. PLoS ONE, 2013, 8, e67856.	2.5	40
77	Changes in water chemistry can disable plankton prey defenses. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15377-15382.	7.1	66
78	A novel, highly efficient method for the separation and quantification of plastic particles in sediments of aquatic environments. Limnology and Oceanography: Methods, 2012, 10, 524-537.	2.0	468
79	Effect of water currents on organic matter release by two scleractinian corals. Aquatic Ecology, 2012, 46, 335-341.	1.5	11
80	Morphology of the <i>Daphnia</i> nervous system: A comparative study on <idaphnia i="" pulex<="">, <i>Daphnia lumholtzi</i>, and <i>Daphnia longicephala</i>. Journal of Morphology, 2012, 273, 1392-1405.</idaphnia>	1.2	21
81	Interclonal variation, effectiveness and long-term implications of Triops-induced morphological defences in Daphnia magna Strauss. Journal of Plankton Research, 2012, 34, 152-160.	1.8	25
82	Chaoborus and Gasterosteus Anti-Predator Responses in Daphnia pulex Are Mediated by Independent Cholinergic and Gabaergic Neuronal Signals. PLoS ONE, 2012, 7, e36879.	2.5	45
83	Neckteeth formation in two species of the Daphnia curvirostris complex (Crustacea: Cladocera). Journal of Limnology, 2011, 70, 359.	1.1	19
84	Growing large and bulky in the presence of the enemy: Daphnia magna gradually switches the mode of inducible morphological defences. Functional Ecology, 2011, 25, 1137-1143.	3.6	56
85	The Ecoresponsive Genome of <i>Daphnia pulex</i> . Science, 2011, 331, 555-561.	12.6	1,086
86	Effects of a pharmaceutical mixture at environmentally relevant concentrations on the amphipod Gammarus fossarum. Marine and Freshwater Research, 2010, 61, 196.	1.3	16
87	A <i>Daphnia</i> Parasite (<i>Caullerya mesnili</i>) Constitutes a New Member of the Ichthyosporea, a Group of Protists near the Animal–Fungi Divergence. Journal of Eukaryotic Microbiology, 2010, 57, 328-336.	1.7	35
88	Coral surface area quantification–evaluation of established techniques by comparison with computer tomography. Coral Reefs, 2009, 28, 109-117.	2.2	150
89	A "crown of thorns―is an inducible defense that protects <i>Daphnia</i> Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 2248-2252.	7.1	115
90	"Crown of thorns―of Daphnia. Communicative and Integrative Biology, 2009, 2, 379-381.	1.4	4

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91	A precise and non-destructive method to calculate the surface area in living scleractinian corals using X-ray computed tomography and 3D modeling. Coral Reefs, 2008, 27, 811-820.	2.2	37
92	Detection and enumeration of microbial cells within highly porous calcareous reef sands. Marine and Freshwater Research, 2006, 57, 415.	1.3	48
93	Inducible defenses: The relevance of chemical alarm cues in <i>Daphnia</i> . Limnology and Oceanography, 2006, 51, 1466-1472.	3.1	106
94	An acoustic microscopy technique reveals hidden morphological defenses in <i>Daphnia</i> . Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 15911-15914.	7.1	89
95	Extreme helmet formation in Daphnia cucullata induced by small-scale turbulence. Journal of Plankton Research, 2004, 26, 81-87.	1.8	40
96	Embryological aspects of inducible morphological defenses in Daphnia. Journal of Morphology, 2004, 262, 701-707.	1.2	65
97	INDUCIBLE DEFENSES IN MULTIPREDATOR ENVIRONMENTS: CYCLOMORPHOSIS IN DAPHNIA CUCULLATA. Ecology, 2004, 85, 2302-2311.	3.2	133
98	Transgenerational induction of defences in animals and plants. Nature, 1999, 401, 60-63.	27.8	732