

Christian Laforsch

List of Publications by Year in descending order

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Version: 2024-02-01

98
papers

8,693
citations

71102

41
h-index

45317

90
g-index

99
all docs

99
docs citations

99
times ranked

8326
citing authors

#	ARTICLE	IF	CITATIONS
1	The Ecoresponsive Genome of <i>Daphnia pulex</i> . <i>Science</i> , 2011, 331, 555-561.	12.6	1,086
2	Transgenerational induction of defences in animals and plants. <i>Nature</i> , 1999, 401, 60-63.	27.8	732
3	Organic fertilizer as a vehicle for the entry of microplastic into the environment. <i>Science Advances</i> , 2018, 4, eaap8060.	10.3	617
4	Contamination of beach sediments of a subalpine lake with microplastic particles. <i>Current Biology</i> , 2013, 23, R867-R868.	3.9	519
5	Identification and quantification of macro- and microplastics on an agricultural farmland. <i>Scientific Reports</i> , 2018, 8, 17950.	3.3	470
6	A novel, highly efficient method for the separation and quantification of plastic particles in sediments of aquatic environments. <i>Limnology and Oceanography: Methods</i> , 2012, 10, 524-537.	2.0	468
7	Pigments and plastic in limnetic ecosystems: A qualitative and quantitative study on microparticles of different size classes. <i>Water Research</i> , 2016, 98, 64-74.	11.3	359
8	Enzymatic Purification of Microplastics in Environmental Samples. <i>Environmental Science & Technology</i> , 2017, 51, 14283-14292.	10.0	338
9	Finding Microplastics in Soils: A Review of Analytical Methods. <i>Environmental Science & Technology</i> , 2020, 54, 2078-2090.	10.0	288
10	Fate of So-called Biodegradable Polymers in Seawater and Freshwater. <i>Global Challenges</i> , 2017, 1, 1700048.	3.6	202
11	Spatial and temporal variation of macro-, meso- and microplastic abundance on a remote coral island of the Maldives, Indian Ocean. <i>Marine Pollution Bulletin</i> , 2017, 116, 340-347.	5.0	195
12	Environmental exposure enhances the internalization of microplastic particles into cells. <i>Science Advances</i> , 2020, 6, .	10.3	176
13	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?. <i>PLoS ONE</i> , 2015, 10, e0137201.	2.5	152
14	Coral surface area quantification – evaluation of established techniques by comparison with computer tomography. <i>Coral Reefs</i> , 2009, 28, 109-117.	2.2	150
15	Do microplastic particles affect <i>Daphnia magna</i> at the morphological, life history and molecular level?. <i>PLoS ONE</i> , 2017, 12, e0187590.	2.5	147
16	Effects of microplastic particles and leaching additive on the life history and morphology of <i>Daphnia magna</i> . <i>Environmental Pollution</i> , 2019, 255, 113233.	7.5	138
17	Occurrence of microplastics in the hyporheic zone of rivers. <i>Scientific Reports</i> , 2019, 9, 15256.	3.3	136
18	INDUCIBLE DEFENSES IN MULTIPREDATOR ENVIRONMENTS: CYCLOMORPHOSIS IN <i>DAPHNIA CUCULLATA</i> . <i>Ecology</i> , 2004, 85, 2302-2311.	3.2	133

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19	A "crown of thorns" is an inducible defense that protects <i>Daphnia</i> against an ancient predator. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 2248-2252.	7.1	115
20	Inducible defenses: The relevance of chemical alarm cues in <i>Daphnia</i> . <i>Limnology and Oceanography</i> , 2006, 51, 1466-1472.	3.1	106
21	Coastal accumulation of microplastic particles emitted from the Po River, Northern Italy: Comparing remote sensing and hydrodynamic modelling with in situ sample collections. <i>Marine Pollution Bulletin</i> , 2019, 138, 561-574.	5.0	103
22	An acoustic microscopy technique reveals hidden morphological defenses in <i>Daphnia</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 15911-15914.	7.1	89
23	<i>Daphnia magna</i> transcriptome by RNA-Seq across 12 environmental stressors. <i>Scientific Data</i> , 2016, 3, 160030.	5.3	89
24	A methodology for the fast identification and monitoring of microplastics in environmental samples using random decision forest classifiers. <i>Analytical Methods</i> , 2019, 11, 2277-2285.	2.7	83
25	Hazardous or not " Are adult and juvenile individuals of <i>Potamopyrgus antipodarum</i> affected by non-buoyant microplastic particles?. <i>Environmental Pollution</i> , 2016, 218, 383-391.	7.5	81
26	Shape, size, and polymer dependent effects of microplastics on <i>Daphnia magna</i> . <i>Journal of Hazardous Materials</i> , 2022, 426, 128136.	12.4	68
27	Changes in water chemistry can disable plankton prey defenses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 15377-15382.	7.1	66
28	Embryological aspects of inducible morphological defenses in <i>Daphnia</i> . <i>Journal of Morphology</i> , 2004, 262, 701-707.	1.2	65
29	Analysis of microplastics of a broad size range in commercially important mussels by combining FTIR and Raman spectroscopy approaches. <i>Environmental Pollution</i> , 2021, 269, 116147.	7.5	64
30	Growing large and bulky in the presence of the enemy: <i>Daphnia magna</i> gradually switches the mode of inducible morphological defences. <i>Functional Ecology</i> , 2011, 25, 1137-1143.	3.6	56
31	Density-dependent adjustment of inducible defenses. <i>Scientific Reports</i> , 2015, 5, 12736.	3.3	53
32	Long-term exposure of <i>Daphnia magna</i> to polystyrene microplastic (PS-MP) leads to alterations of the proteome, morphology and life-history. <i>Science of the Total Environment</i> , 2021, 795, 148822.	8.0	53
33	Proteomic analysis of <i>Daphnia magna</i> hints at molecular pathways involved in defensive plastic responses. <i>BMC Genomics</i> , 2014, 15, 306.	2.8	50
34	Tackling the Challenge of Extracting Microplastics from Soils: A Protocol to Purify Soil Samples for Spectroscopic Analysis. <i>Environmental Toxicology and Chemistry</i> , 2022, 41, 844-857.	4.3	49
35	Detection and enumeration of microbial cells within highly porous calcareous reef sands. <i>Marine and Freshwater Research</i> , 2006, 57, 415.	1.3	48
36	Variation in plastic abundance at different lake beach zones - A case study. <i>Science of the Total Environment</i> , 2018, 613-614, 530-537.	8.0	47

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37	Airborne microplastic concentrations and deposition across the Weser River catchment. <i>Science of the Total Environment</i> , 2022, 818, 151812.	8.0	47
38	From properties to toxicity: Comparing microplastics to other airborne microparticles. <i>Journal of Hazardous Materials</i> , 2022, 428, 128151.	12.4	47
39	Abundance and distribution of large microplastics (1â€“5â€“mm) within beach sediments at the Po River Delta, northeast Italy. <i>Marine Pollution Bulletin</i> , 2019, 149, 110515.	5.0	46
40	Chaoborus and Gasterosteus Anti-Predator Responses in <i>Daphnia pulex</i> Are Mediated by Independent Cholinergic and Gabaergic Neuronal Signals. <i>PLoS ONE</i> , 2012, 7, e36879.	2.5	45
41	Plastic waste interferes with chemical communication in aquatic ecosystems. <i>Scientific Reports</i> , 2019, 9, 5889.	3.3	41
42	Shell resource partitioning as a mechanism of coexistence in two co-occurring terrestrial hermit crab species. <i>BMC Ecology</i> , 2020, 20, 1.	3.0	41
43	Computer-Assisted Analysis of Microplastics in Environmental Samples Based on 1/4FTIR Imaging in Combination with Machine Learning. <i>Environmental Science and Technology Letters</i> , 2022, 9, 90-95.	8.7	41
44	Extreme helmet formation in <i>Daphnia cucullata</i> induced by small-scale turbulence. <i>Journal of Plankton Research</i> , 2004, 26, 81-87.	1.8	40
45	Uncovering Ultrastructural Defences in <i>Daphnia magna</i> â€“ An Interdisciplinary Approach to Assess the Predator-Induced Fortification of the Carapace. <i>PLoS ONE</i> , 2013, 8, e67856.	2.5	40
46	Dopamine is a key regulator in the signalling pathway underlying predator-induced defences in <i>Daphnia</i> . <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20151440.	2.6	40
47	A precise and non-destructive method to calculate the surface area in living scleractinian corals using X-ray computed tomography and 3D modeling. <i>Coral Reefs</i> , 2008, 27, 811-820.	2.2	37
48	A <i>Daphnia</i> Parasite (<i>Caulleya mesnili</i>) Constitutes a New Member of the Ichthyosporea, a Group of Protists near the Animalâ€“Fungi Divergence. <i>Journal of Eukaryotic Microbiology</i> , 2010, 57, 328-336.	1.7	35
49	Knowing the Enemy: Inducible Defences in Freshwater Zooplankton. <i>Diversity</i> , 2020, 12, 147.	1.7	35
50	Microplastic sample purification methods - Assessing detrimental effects of purification procedures on specific plastic types. <i>Science of the Total Environment</i> , 2022, 833, 154824.	8.0	33
51	Structural Diversity in Early-Stage Biofilm Formation on Microplastics Depends on Environmental Medium and Polymer Properties. <i>Water (Switzerland)</i> , 2020, 12, 3216.	2.7	29
52	Supposedly identical microplastic particles substantially differ in their material properties influencing particle-cell interactions and cellular responses. <i>Journal of Hazardous Materials</i> , 2022, 425, 127961.	12.4	29
53	Interclonal variation, effectiveness and long-term implications of Triops-induced morphological defences in <i>Daphnia magna</i> Strauss. <i>Journal of Plankton Research</i> , 2012, 34, 152-160.	1.8	25
54	Inducible Defenses with a "Twist": <i>Daphnia barbata</i> Abandons Bilateral Symmetry in Response to an Ancient Predator. <i>PLoS ONE</i> , 2016, 11, e0148556.	2.5	25

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55	The role of turbulent hydrodynamics and surface morphology on heat and mass transfer in corals. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180448.	3.4	23
56	Morphology of the <i>Daphnia</i> nervous system: A comparative study on <i>Daphnia pulex</i> , <i>Daphnia lumholtzi</i> , and <i>Daphnia longicephala</i> . <i>Journal of Morphology</i> , 2012, 273, 1392-1405.	1.2	21
57	Interclonal proteomic responses to predator exposure in <i>Daphnia magna</i> may depend on predator composition of habitats. <i>Molecular Ecology</i> , 2015, 24, 3901-3917.	3.9	21
58	Predator-specific reversibility of morphological defenses in <i>Daphnia barbata</i> . <i>Journal of Plankton Research</i> , 2016, 38, 771-780.	1.8	21
59	Neckteeth formation in two species of the <i>Daphnia curvirostris</i> complex (Crustacea: Cladocera). <i>Journal of Limnology</i> , 2011, 70, 359.	1.1	19
60	Flooding frequency and floodplain topography determine abundance of microplastics in an alluvial Rhine soil. <i>Science of the Total Environment</i> , 2022, 836, 155141.	8.0	19
61	Disentangling the environmental impact of different human disturbances: a case study on islands. <i>Scientific Reports</i> , 2019, 9, 13712.	3.3	18
62	Municipal biowaste treatment plants contribute to the contamination of the environment with residues of biodegradable plastics with putative higher persistence potential. <i>Scientific Reports</i> , 2022, 12, .	3.3	18
63	Effects of a pharmaceutical mixture at environmentally relevant concentrations on the amphipod <i>Gammarus fossarum</i> . <i>Marine and Freshwater Research</i> , 2010, 61, 196.	1.3	16
64	A sugar biomarker proxy for assessing terrestrial versus aquatic sedimentary input. <i>Organic Geochemistry</i> , 2016, 98, 98-104.	1.8	16
65	Microplastic contamination of the drilling bivalve <i>Hiatella arctica</i> in Arctic rhodolith beds. <i>Scientific Reports</i> , 2021, 11, 14574.	3.3	16
66	The influence of simulated microgravity on the proteome of <i>Daphnia magna</i> . <i>Npj Microgravity</i> , 2015, 1, 15016.	3.7	14
67	The role of vision for navigation in the crown-of-thorns seastar, <i>Acanthaster planci</i> . <i>Scientific Reports</i> , 2016, 6, 30834.	3.3	14
68	Pitfalls and Limitations in Microplastic Analyses. <i>Handbook of Environmental Chemistry</i> , 2020, , 13-42.	0.4	13
69	Tourism and urban development as drivers for invertebrate diversity loss on tropical islands. <i>Royal Society Open Science</i> , 2021, 8, 210411.	2.4	12
70	In situ Prokaryotic and Eukaryotic Communities on Microplastic Particles in a Small Headwater Stream in Germany. <i>Frontiers in Microbiology</i> , 2021, 12, 660024.	3.5	12
71	Effect of water currents on organic matter release by two scleractinian corals. <i>Aquatic Ecology</i> , 2012, 46, 335-341.	1.5	11
72	A novel, non-invasive and in vivo approach to determine morphometric data in starfish. <i>Journal of Experimental Marine Biology and Ecology</i> , 2013, 449, 1-9.	1.5	11

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73	Predator-specific inducible morphological defenses of a water flea against two freshwater predators. <i>Journal of Morphology</i> , 2020, 281, 653-661.	1.2	10
74	Sublethal effects of the beta-blocker sotalol at environmentally relevant concentrations on the New Zealand mudsnail <i>Potamopyrgus antipodarum</i> . <i>Environmental Toxicology and Chemistry</i> , 2014, 33, 2510-2515.	4.3	9
75	Repulsive Interactions of Eco-corona-Covered Microplastic Particles Quantitatively Follow Modeling of Polymer Brushes. <i>Langmuir</i> , 2022, 38, 8748-8756.	3.5	9
76	The Influence of Water Currents on Movement Patterns on Sand in the Crown-of-Thorns Seastar (<i>Acanthaster cf. solaris</i>). <i>Diversity</i> , 2016, 8, 25.	1.7	8
77	Responses of Microcrustaceans to Simulated Microgravity (2D-Clinorotation) - Preliminary Assessments for the Development of Bioregenerative Life Support Systems (BLSS). <i>Microgravity Science and Technology</i> , 2016, 28, 337-344.	1.4	7
78	Classification of target tissues of <i>Eisenia fetida</i> using sequential multimodal chemical analysis and machine learning. <i>Histochemistry and Cell Biology</i> , 2022, 157, 127-137.	1.7	6
79	<i>Daphnia longicephala</i> neuropeptides: Morphological description of crustacean cardioactive peptide (CCAP) and periviscerokinins in the <i>Ctenodaphnia</i> central nervous system. <i>Neuropeptides</i> , 2014, 48, 287-293.	2.2	5
80	The influence of gravity and light on locomotion and orientation of <i>Heterocypris incongruens</i> and <i>Notodromas monacha</i> (Crustacea, Ostracoda). <i>Npj Microgravity</i> , 2018, 4, 3.	3.7	5
81	Compartmentalized organization of ecological niche occupation in insular invertebrate communities. <i>Ecology and Evolution</i> , 2021, 11, 471-480.	1.9	5
82	Uncovering the chemistry behind inducible morphological defences in the crustacean <i>Daphnia magna</i> via micro-Raman spectroscopy. <i>Scientific Reports</i> , 2020, 10, 22408.	3.3	5
83	Impacts on food web properties of island invertebrate communities vary between different human land uses. <i>Science of the Total Environment</i> , 2022, 831, 154838.	8.0	5
84	“Crown of thorns” of <i>Daphnia</i> . <i>Communicative and Integrative Biology</i> , 2009, 2, 379-381.	1.4	4
85	Life History Responses and Feeding Behavior of Microcrustacea in Altered Gravity “ Applicability in Bioregenerative Life Support Systems (BLSS). <i>Microgravity Science and Technology</i> , 2017, 29, 241-249.	1.4	4
86	Daytime activity and habitat preferences of two sympatric hermit crab species (Decapoda: Anomura: <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf</i>	2.1	4
87	Phenotypic plasticity of senescence in <i>Daphnia</i> under predation impact: no ageing acceleration when the perceived risk decreases with age. <i>Royal Society Open Science</i> , 2020, 7, 191382.	2.4	4
88	Improving the proteome coverage of <i>Daphnia magna</i> – implications for future ecotoxicoproteomics studies. <i>Proteomics</i> , 2022, 22, e2100289.	2.2	4
89	Proteomic analysis in the model organism <i>Daphnia</i> has the potential to unravel molecular pathways involved in phenotypic changes in response to changing environmental conditions. <i>Hydrobiologia</i> , 2019, 846, 27-38.	2.0	3
90	Microplastics: A Novel Suite of Environmental Contaminants but Present for Decades. , 2021, , 1-26.		2

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91	Diversity Patterns and Community Structure of the Ground-Associated Macrofauna along the Beach-Inland Transition Zone of Small Tropical Islands. <i>Diversity</i> , 2021, 13, 377.	1.7	2
92	The Beauty is a beast: Does leachate from the invasive terrestrial plant <i>Impatiens glandulifera</i> affect aquatic food webs?. <i>Ecology and Evolution</i> , 2022, 12, e8781.	1.9	2
93	MALDI mass spectrometry imaging workflow for the aquatic model organisms <i>Danio rerio</i> and <i>Daphnia magna</i> . <i>Scientific Reports</i> , 2022, 12, 7288.	3.3	2
94	Allochthonous resources are less important for faunal communities on highly productive, small tropical islands. <i>Ecology and Evolution</i> , 2021, 11, 13128-13138.	1.9	1
95	First record of a wolf spider, <i>Draposa lyrivulva</i> (BÅrjensenberg & Strand 1906) (Araneae: Lycosidae), from the Maldivian Islands, Indian Ocean. <i>Acta Arachnologica</i> , 2020, 69, 115-119.	0.2	1
96	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. <i>Science of the Total Environment</i> , 2022, 832, 154922.	8.0	1
97	Preface: Blasts from the past and back to the future. <i>Hydrobiologia</i> , 2019, 846, 1-3.	2.0	0
98	Microplastics: A Novel Suite of Environmental Contaminants but Present for Decades. , 2021, , 1185-1210.		0