Arnaud Chaumot

List of Publications by Year
in descending order

88 papers	3,692 citations	201674 27 h-index	144013 57 g-index
91 all docs	91 docs citations	91 times ranked	4885 citing authors

#	Article	IF	Citations
1	The genome of the model beetle and pest Tribolium castaneum. Nature, 2008, 452, 949-955.	27.8	1,255
2	Unexpected Novel Relational Links Uncovered by Extensive Developmental Profiling of Nuclear Receptor Expression. PLoS Genetics, 2007, 3, e188.	3.5	188
3	Non-model organisms, a species endangered by proteogenomics. Journal of Proteomics, 2014, 105, 5-18.	2.4	145
4	Structural and functional characterization of a novel type of ligand-independent RXR-USP receptor. EMBO Journal, 2007, 26, 3770-3782.	7.8	120
5	Ovarian cycle and embryonic development in <i>Gammarus fossarum</i>: Application for reproductive toxicity assessment. Environmental Toxicology and Chemistry, 2010, 29, 2249-2259.	4.3	87
6	Caged Gammarus fossarum (Crustacea) as a robust tool for the characterization of bioavailable contamination levels in continental waters: Towards the determination of threshold values. Water Research, 2013, 47, 650-660.	11.3	87
7	Acetylcholinesterase activity in Gammarus fossarum (Crustacea Amphipoda). Aquatic Toxicology, 2009, 93, 225-233.	4.0	78
8	In situ feeding assay with Gammarus fossarum (Crustacea): Modelling the influence of confounding factors to improve water quality biomonitoring. Water Research, 2011, 45, 6417-6429.	11.3	78
9	Towards a renewed research agenda in ecotoxicology. Environmental Pollution, 2012, 160, 201-206.	7.5	78
10	Ecotoxicoproteomics: A decade of progress in our understanding of anthropogenic impact on the environment. Journal of Proteomics, 2019, 198, 66-77.	2.4	66
11	Annotation of Tribolium nuclear receptors reveals an increase in evolutionary rate of a network controlling the ecdysone cascade. Insect Biochemistry and Molecular Biology, 2008, 38, 416-429.	2.7	56
12	Proteomic Investigation of Male <i>Gammarus fossarum</i>, a Freshwater Crustacean, in Response to Endocrine Disruptors. Journal of Proteome Research, 2015, 14, 292-303.	3.7	56
13	Next-Generation Proteomics: Toward Customized Biomarkers for Environmental Biomonitoring. Environmental Science & Technology, 2014, 48, 13560-13572.	10.0	52
14	Continental-scale patterns of hyper-cryptic diversity within the freshwater model taxon Gammarus fossarum (Crustacea, Amphipoda). Scientific Reports, 2020, 10, 16536.	3.3	51
15	Ecotoxicology and population dynamics: Using DEBtox models in a Leslie modeling approach. Ecological Modelling, 2005, 188, 30-40.	2.5	50
16	Proteogenomics of Gammarus fossarum to Document the Reproductive System of Amphipods. Molecular and Cellular Proteomics, 2014, 13, 3612-3625.	3.8	50
17	Structural and Evolutionary Innovation of the Heterodimerization Interface between USP and the Ecdysone Receptor ECR in Insects. Molecular Biology and Evolution, 2009, 26, 753-768.	8.9	45
18	Conserved Features and Evolutionary Shifts of the EDA Signaling Pathway Involved in Vertebrate Skin Appendage Development. Molecular Biology and Evolution, 2008, 25, 912-928.	8.9	42

#	ARTICLE	IF	CITATIONS
19	Vitellogenin-like proteins in the freshwater amphipod Gammarus fossarum (Koch, 1835): Functional characterization throughout reproductive process, potential for use as an indicator of oocyte quality and endocrine disruption biomarker in males. Aquatic Toxicology, 2012, 112-113, 72-82.	4.0	39
20	Vitellogenin-like gene expression in freshwater amphipod Gammarus fossarum (Koch, 1835): functional characterization in females and potential for use as an endocrine disruption biomarker in males. Ecotoxicology, 2011, 20, 1286-1299.	2.4	38
21	Influence of Molting and Starvation on Digestive Enzyme Activities and Energy Storage in Gammarus fossarum. PLoS ONE, 2014, 9, e96393.	2.5	37
22	In situ isobaric lipid mapping by MALDIâ€“ion mobility separationâ€“mass spectrometry imaging. Journal of Mass Spectrometry, 2020, 55, e4531.	1.6	35
23	Evolution of cadmium tolerance and associated costs in a Gammarus fossarum population inhabiting a low-level contaminated stream. Ecotoxicology, 2015, 24, 1239-1249.	2.4	32
24	Ecotoxico-Proteomics for Aquatic Environmental Monitoring: First in Situ Application of a New Proteomics-Based Multibiomarker Assay Using Caged Amphipods. Environmental Science & Technology, 2017, 51, 13417-13426.	10.0	32
25	Effects of chronic dietary and waterborne cadmium exposures on the contamination level and reproduction of <i>daphnia magna</i>. Environmental Toxicology and Chemistry, 2008, 27, 1128-1134.	4.3	30
26	Vitellogenin-like protein measurement in caged Gammarus fossarum males as a biomarker of endocrine disruptor exposure: Inconclusive experience. Aquatic Toxicology, 2012, 122-123, 9-18.	4.0	30
27	Proteogenomic insights into the core-proteome of female reproductive tissues from crustacean amphipods. Journal of Proteomics, 2016, 135, 51-61.	2.4	30
28	Validation of a two-generational reproduction test in Daphnia magna: An interlaboratory exercise. Science of the Total Environment, 2017, 579, 1073-1083.	8.0	29
29	Mass spectrometry assay as an alternative to the enzyme-linked immunosorbent assay test for biomarker quantitation in ecotoxicology: Application to vitellogenin in Crustacea (Gammarus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	1.7	28
30	Biomarkers as tools for monitoring within the Water Framework Directive context: concept, opinions and advancement of expertise. Environmental Science and Pollution Research, 2019, 26, 32759-32763.	5.3	28
31	Gammarids as Reference Species for Freshwater Monitoring. , 2015, , 253-280.		27
32	Combined effects of drought and the fungicide tebuconazole on aquatic leaf litter decomposition. Aquatic Toxicology, 2016, 173, 120-131.	4.0	26
33	Caged Gammarus as biomonitors identifying thresholds of toxic metal bioavailability that affect gammarid densities at the French national scale. Water Research, 2017, 118, 131-140.	11.3	26
34	Food availability effect on population dynamics of the midge Chironomus riparius: a Leslie modeling approach. Ecological Modelling, 2004, 175, 217-229.	2.5	25
35	Impact of micropollutants on the life-history traits of the mosquito Aedes aegypti: On the relevance of transgenerational studies. Environmental Pollution, 2017, 220, 242-254.	7.5	24
36	De novo transcriptomes of 14 gammarid individuals for proteogenomic analysis of seven taxonomic groups. Scientific Data, 2019, 6, 184.	5.3	23

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37	Effect of water quality and confounding factors on digestive enzyme activities in Gammarus fossarum. Environmental Science and Pollution Research, 2013, 20, 9044-9056.	5.3	21
38	Multisubstance Indicators Based on Caged <i>Gammarus</i> Bioaccumulation Reveal the Influence of Chemical Contamination on Stream Macroinvertebrate Abundances across France. Environmental Science & Technology, 2019, 53, 5906-5915.	10.0	21
39	Combining proteogenomics and metaproteomics for deep taxonomic and functional characterization of microbiomes from a non-sequenced host. Npj Biofilms and Microbiomes, 2020, 6, 23.	6.4	20
40	Ecotoxicology and spatial modeling in population dynamics: An illustration with brown trout. Environmental Toxicology and Chemistry, 2003, 22, 958-969.	4.3	18
41	Do migratory or demographic disruptions rule the population impact of pollution in spatial networks?. Theoretical Population Biology, 2003, 64, 473-480.	1.1	18
42	Assessing the relevance of a multiplexed methodology for proteomic biomarker measurement in the invertebrate species Gammarus fossarum: A physiological and ecotoxicological study. Aquatic Toxicology, 2017, 190, 199-209.	4.0	18
43	Additive vs non-additive genetic components in lethal cadmium tolerance of Gammarus (Crustacea): Novel light on the assessment of the potential for adaptation to contamination. Aquatic Toxicology, 2009, 94, 294-299.	4.0	17
44	Linking feeding inhibition with reproductive impairment in <i>Gammarus</i> confirms the ecological relevance of feeding assays in environmental monitoring. Environmental Toxicology and Chemistry, 2015, 34, 1031-1038.	4.3	17
45	Multiplexed assay for protein quantitation in the invertebrate Gammarus fossarum by liquid chromatography coupled to tandem mass spectrometry. Analytical and Bioanalytical Chemistry, 2017, 409, 3969-3991.	3.7	17
46	Ecological Modeling for the Extrapolation of Ecotoxicological Effects Measured during in Situ Assays in <i>Gammarus</i>. Environmental Science & Technology, 2014, 48, 6428-6436.	10.0	16
47	Environmental relevance of laboratory-derived kinetic models to predict trace metal bioaccumulation in gammarids: Field experimentation at a large spatial scale (France). Water Research, 2016, 95, 330-339.	11.3	16
48	Application of a multidisciplinary and integrative weight-of-evidence approach to a 1-year monitoring survey of the Seine River. Environmental Science and Pollution Research, 2018, 25, 23404-23429.	5.3	16
49	Interactive Effects of Pesticides and Nutrients on Microbial Communities Responsible of Litter Decomposition in Streams. Frontiers in Microbiology, 2018, 9, 2437.	3.5	16
50	Comparative proteomics in the wild: Accounting for intrapopulation variability improves describing proteome response in a Gammarus pulex field population exposed to cadmium. Aquatic Toxicology, 2019, 214, 105244.	4.0	16
51	Consequences of Lower Food Intake on the Digestive Enzymes Activities, the Energy Reserves and the Reproductive Outcome in Gammarus fossarum. PLoS ONE, 2015, 10, e0125154.	2.5	16
52	High-throughput proteome dynamics for discovery of key proteins in sentinel species: Unsuspected vitellogenins diversity in the crustacean Gammarus fossarum. Journal of Proteomics, 2016, 146, 207-214.	2.4	15
53	Shotgun lipidomics and mass spectrometry imaging unveil diversity and dynamics in Gammarus fossarum lipid composition. IScience, 2021, 24, 102115.	4.1	15
54	Interest of a multispecies approach in active biomonitoring: Application in the Meuse watershed. Science of the Total Environment, 2022, 808, 152148.	8.0	14

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55	Vitellogenin-like Proteins among Invertebrate Species Diversity: Potential of Proteomic Mass Spectrometry for Biomarker Development. Environmental Science & Technology, 2012, 46, 6315-6323.	10.0	13
56	Role of cellular compartmentalization in the trophic transfer of mercury species in a freshwater plant-crustacean food chain. Journal of Hazardous Materials, 2016, 320, 401-407.	12.4	13
57	Digging Deeper Into the Pyriproxyfen-Response of the Amphipod Gammarus fossarum With a Next-Generation Ultra-High-Field Orbitrap Analyser: New Perspectives for Environmental Toxicoproteomics. Frontiers in Environmental Science, 2018, 6, .	3.3	13
58	Co-expression network analysis identifies gonad- and embryo-associated protein modules in the sentinel species Gammarus fossarum. Scientific Reports, 2019, 9, 7862.	3.3	13
59	Molecular adaptation and resilience of the insectâ€™s nuclear receptor USP. BMC Evolutionary Biology, 2012, 12, 199.	3.2	12
60	Natural variability and modulation by environmental stressors of global genomic cytosine methylation levels in a freshwater crustacean, Gammarus fossarum. Aquatic Toxicology, 2018, 205, 11-18.	4.0	12
61	In Situ Reproductive Bioassay with Caged <i>Gammarus fossarum</i> (Crustacea): Part 1â€"Gauging the Confounding Influence of Temperature and Water Hardness. Environmental Toxicology and Chemistry, 2020, 39, 667-677.	4.3	12
62	First step of a modeling approach to evaluate spatial heterogeneity in a fish (Cottus gobio) population dynamics. Ecological Modelling, 2006, 197, 263-273.	2.5	11
63	Matrix Population Models as Relevant Modeling Tools in Ecotoxicology. Emerging Topics in Ecotoxicology, 2009, , 261-298.	1.5	10
64	Comparison in waterborne Cu, Ni and Pb bioaccumulation kinetics between different gammarid species and populations: Natural variability and influence of metal exposure history. Aquatic Toxicology, 2017, 193, 245-255.	4.0	10
65	Use of sperm DNA integrity as a marker for exposure to contamination in Palaemon serratus (Pennant) Tj ETQq1 1 0.784314 rgBT /Ov	11.3	10
66	Nongenetic inheritance of increased Cd tolerance in a field Gammarus fossarum population: Parental exposure steers offspring sensitivity. Aquatic Toxicology, 2019, 209, 91-98.	4.0	10
67	High-multiplexed monitoring of protein biomarkers in the sentinel Gammarus fossarum by targeted scout-MRM assay, a new vision for ecotoxicoproteomics. Journal of Proteomics, 2020, 226, 103901.	2.4	10
68	Use of <i>Gammarus fossarum</i> (Amphipoda) embryo for toxicity testing: A case study with cadmium. Environmental Toxicology and Chemistry, 2017, 36, 2436-2443.	4.3	9
69	Additive effect of calcium depletion and low resource quality on Gammarus fossarum (Crustacea,) Tj ETQq1 1 0.784314 rgBT /Overlock	5.3	9
70	In Situ Reproductive Bioassay with Caged Gammarus fossarum (Crustacea): Part 2â€"Evaluating the Relevance of Using a Molt Cycle Temperatureâ€Dependent Model as a Reference to Assess Toxicity in Freshwater Monitoring. Environmental Toxicology and Chemistry, 2020, 39, 678-691.	4.3	9
71	Co-expression network analysis identifies novel molecular pathways associated with cadmium and pyriproxyfen testicular toxicity in Gammarus fossarum. Aquatic Toxicology, 2021, 235, 105816.	4.0	9
72	Lifeâ€history phenology strongly influences population vulnerability to toxicants: A case study with the mudsnail <i>Potamopyrgus antipodarum</i>. Environmental Toxicology and Chemistry, 2013, 32, 1727-1736.	4.3	7

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73	Osmoregulatory responses to cadmium in reference and historically metal contaminated Gammarus fossarum (Crustacea, Amphipoda) populations. Chemosphere, 2017, 180, 412-422.	8.2	7
74	Phenotypic defects in newborn Gammarus fossarum (Amphipoda) following embryonic exposure to fenoxycarb. Ecotoxicology and Environmental Safety, 2017, 144, 193-199.	6.0	7
75	Proteogenomicsâ€Guided Evaluation of RNAâ€Seq Assembly and Protein Database Construction for Emergent Model Organisms. Proteomics, 2020, 20, e1900261.	2.2	7
76	Mothers and not genes determine inherited differences inÂcadmium sensitivities within unexposed populations ofÂthe freshwater crustacean <i>Gammarus fossarum</i>. Evolutionary Applications, 2016, 9, 355-366.	3.1	6
77	Assessment of sperm DNA integrity within the Palaemon longirostris (H.) population of the Seine estuary. Environmental Pollution, 2019, 245, 485-493.	7.5	6
78	How to quantify the links between bioavailable contamination in watercourses and pressures of anthropogenic land cover, contamination sources and hydromorphology at multiple scales?. Science of the Total Environment, 2020, 735, 139492.	8.0	5
79	Quantification of multi-scale links of anthropogenic pressures with PAH and PCB bioavailable contamination in French freshwaters. Water Research, 2021, 203, 117546.	11.3	5
80	Data for comparative proteomics of ovaries from five non-model, crustacean amphipods. Data in Brief, 2015, 5, 1-6.	1.0	4
81	Shotgun proteomics datasets acquired on Gammarus pulex animals sampled from the wild. Data in Brief, 2019, 27, 104650.	1.0	4
82	A â€œPopulation Dynamicsâ€•Perspective on the Delayed Life-History Effects of Environmental Contaminations: An Illustration with a Preliminary Study of Cadmium Transgenerational Effects over Three Generations in the Crustacean Gammarus. International Journal of Molecular Sciences, 2020, 21, 4704.	4.1	4
83	Subcellular Distribution of Dietary Methyl-Mercury in <i>Gammarus fossarum</i> and Its Impact on the Amphipod Proteome. Environmental Science & Technology, 2021, 55, 10514-10523.	10.0	4
84	<scp>ArdiÃ¨resâ€Morcille</scp> in the Beaujolais, France: A research catchment dedicated to study of the transport and impacts of diffuse agricultural pollution in rivers. Hydrological Processes, 2021, 35, e14384.	2.6	3
85	On-Line Solid Phase Extraction Liquid Chromatography-Mass Spectrometry Method for Multiplexed Proteins Quantitation in an Ecotoxicology Test Specie: Gammarus fossarum. Journal of Applied Bioanalysis, 2018, 4, 81-101.	0.2	3
86	From Extrapolation to Precision Chemical Hazard Assessment: The Ecdysone Receptor Case Study. Toxics, 2022, 10, 6.	3.7	2
87	Metal bioavailable contamination engages richness decline, species turnover but unchanged functional diversity of stream macroinvertebrates at the scale of a French region. Environmental Pollution, 2022, 308, 119565.	7.5	2
88	Ovary and embryo proteogenomic dataset revealing diversity of vitellogenins in the crustacean Gammarus fossarum. Data in Brief, 2016, 8, 1259-1262.	1.0	1