Arnaud Chaumot

List of Publications by Citations

86 papers	2,873 citations	23 h-index	52 g-index
91 ext. papers	3,329 ext. citations	6.5 avg, IF	4.49 L-index

#	Paper	IF	Citations
86	The genome of the model beetle and pest Tribolium castaneum. *Nature*, **2008**, 452, 949-55	50.4	1043
85	Unexpected novel relational links uncovered by extensive developmental profiling of nuclear receptor expression. *PLoS Genetics*, **2007**, 3, e188	6	157
84	Non-model organisms, a species endangered by proteogenomics. *Journal of Proteomics*, **2014**, 105, 5-18	3.9	116
83	Structural and functional characterization of a novel type of ligand-independent RXR-USP receptor. *EMBO Journal*, **2007**, 26, 3770-82	13	107
82	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, 650-60	12.5	75
81	Ovarian cycle and embryonic development in Gammarus fossarum: application for reproductive toxicity assessment. *Environmental Toxicology and Chemistry*, **2010**, 29, 2249-59	3.8	73
80	In situ feeding assay with Gammarus fossarum (Crustacea): Modelling the influence of confounding factors to improve water quality biomonitoring. *Water Research*, **2011**, 45, 6417-29	12.5	69
79	Acetylcholinesterase activity in Gammarus fossarum (Crustacea Amphipoda) Intrinsic variability, reference levels, and a reliable tool for field surveys. *Aquatic Toxicology*, **2009**, 93, 225-33	5.1	69
78	Towards a renewed research agenda in ecotoxicology. *Environmental Pollution*, **2012**, 160, 201-6	9.3	65
77	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, 416-29	4.5	47
76	Ecotoxicology and population dynamics: Using DEBtox models in a Leslie modeling approach. *Ecological Modelling*, **2005**, 188, 30-40	3	45
75	Proteogenomics of Gammarus fossarum to document the reproductive system of amphipods. *Molecular and Cellular Proteomics*, **2014**, 13, 3612-25	7.6	44
74	Proteomic investigation of male Gammarus fossarum, a freshwater crustacean, in response to endocrine disruptors. *Journal of Proteome Research*, **2015**, 14, 292-303	5.6	41
73	Next-generation proteomics: toward customized biomarkers for environmental biomonitoring. *Environmental Science & Technology*, **2014**, 48, 13560-72	10.3	41
72	Structural and evolutionary innovation of the heterodimerization interface between USP and the ecdysone receptor ECR in insects. *Molecular Biology and Evolution*, **2009**, 26, 753-68	8.3	40
71	Ecotoxicoproteomics: A decade of progress in our understanding of anthropogenic impact on the environment. *Journal of Proteomics*, **2019**, 198, 66-77	3.9	40
70	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	5.1	37

69	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, 1286-99	2.9	34
68	Influence of molting and starvation on digestive enzyme activities and energy storage in Gammarus fossarum. *PLoS ONE*, **2014**, 9, e96393	3.7	31
67	Conserved features and evolutionary shifts of the EDA signaling pathway involved in vertebrate skin appendage development. *Molecular Biology and Evolution*, **2008**, 25, 912-28	8.3	30
66	Evolution of cadmium tolerance and associated costs in a Gammarus fossarum population inhabiting a low-level contaminated stream. *Ecotoxicology*, **2015**, 24, 1239-49	2.9	28
65	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	5.1	27
64	Effects of chronic dietary and waterborne cadmium exposures on the contamination level and reproduction of Daphnia magna. *Environmental Toxicology and Chemistry*, **2008**, 27, 1128-34	3.8	27
63	Mass spectrometry assay as an alternative to the enzyme-linked immunosorbent assay test for biomarker quantitation in ecotoxicology: application to vitellogenin in Crustacea (Gammarus fossarum). *Journal of Chromatography A*, **2010**, 1217, 5109-15	4.5	23
62	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	12.5	21
61	Food availability effect on population dynamics of the midge Chironomus riparius: a Leslie modeling approach. *Ecological Modelling*, **2004**, 175, 217-229	3	21
60	Proteogenomic insights into the core-proteome of female reproductive tissues from crustacean amphipods. *Journal of Proteomics*, **2016**, 135, 51-61	3.9	20
59	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	10.3	20
58	Combined effects of drought and the fungicide tebuconazole on aquatic leaf litter decomposition. *Aquatic Toxicology*, **2016**, 173, 120-131	5.1	20
57	Validation of a two-generational reproduction test in Daphnia magna: An interlaboratory exercise. *Science of the Total Environment*, **2017**, 579, 1073-1083	10.2	18
56	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	9.3	17
55	Ecotoxicology and spatial modeling in population dynamics: An illustration with brown trout. *Environmental Toxicology and Chemistry*, **2003**, 22, 958-969	3.8	17
54	Do migratory or demographic disruptions rule the population impact of pollution in spatial networks?. *Theoretical Population Biology*, **2003**, 64, 473-80	1.2	17
53	Effect of water quality and confounding factors on digestive enzyme activities in Gammarus fossarum. *Environmental Science and Pollution Research*, **2013**, 20, 9044-56	5.1	16
52	Continental-scale patterns of hyper-cryptic diversity within the freshwater model taxon Gammarus fossarum (Crustacea, Amphipoda). *Scientific Reports*, **2020**, 10, 16536	4.9	16

51	In situ isobaric lipid mapping by MALDI-ion mobility separation-mass spectrometry imaging. *Journal of Mass Spectrometry*, **2020**, 55, e4531	2.2	15
50	Gammarids as Reference Species for Freshwater Monitoring **2015**, 253-280		14
49	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, 207-14	3.9	14
48	Ecological modeling for the extrapolation of ecotoxicological effects measured during in situ assays in Gammarus. *Environmental Science & Technology*, **2014**, 48, 6428-36	10.3	14
47	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, 294-9	5.1	14
46	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	3.7	14
45	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, 330-9	12.5	13
44	De novo transcriptomes of 14 gammarid individuals for proteogenomic analysis of seven taxonomic groups. *Scientific Data*, **2019**, 6, 184	8.2	13
43	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	5.1	13
42	Linking feeding inhibition with reproductive impairment in Gammarus confirms the ecological relevance of feeding assays in environmental monitoring. *Environmental Toxicology and Chemistry*, **2015**, 34, 1031-8	3.8	12
41	Interactive Effects of Pesticides and Nutrients on Microbial Communities Responsible of Litter Decomposition in Streams. *Frontiers in Microbiology*, **2018**, 9, 2437	5.7	12
40	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	4.4	11
39	Multisubstance Indicators Based on Caged Gammarus Bioaccumulation Reveal the Influence of Chemical Contamination on Stream Macroinvertebrate Abundances across France. *Environmental Science & Technology*, **2019**, 53, 5906-5915	10.3	11
38	Combining proteogenomics and metaproteomics for deep taxonomic and functional characterization of microbiomes from a non-sequenced host. *Npj Biofilms and Microbiomes*, **2020**, 6, 23	8.2	11
37	Vitellogenin-like proteins among invertebrate species diversity: potential of proteomic mass spectrometry for biomarker development. *Environmental Science & Technology*, **2012**, 46, 6315-23	10.3	11
36	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	12.8	11
35	First step of a modeling approach to evaluate spatial heterogeneity in a fish (Cottus gobio) population dynamics. *Ecological Modelling*, **2006**, 197, 263-273	3	10
34	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	5.1	9

33	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	5.1	9
32	Molecular adaptation and resilience of the insect's nuclear receptor USP. *BMC Evolutionary Biology*, **2012**, 12, 199	3	9
31	Matrix Population Models as Relevant Modeling Tools in Ecotoxicology. *Emerging Topics in Ecotoxicology*, **2009**, 261-298		9
30	Co-expression network analysis identifies gonad- and embryo-associated protein modules in the sentinel species Gammarus fossarum. *Scientific Reports*, **2019**, 9, 7862	4.9	8
29	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,	4.8	8
28	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	5.1	8
27	Additive effect of calcium depletion and low resource quality on Gammarus fossarum (Crustacea, Amphipoda) life history traits. *Environmental Science and Pollution Research*, **2018**, 25, 11264-11280	5.1	7
26	Life-history phenology strongly influences population vulnerability to toxicants: a case study with the mudsnail Potamopyrgus antipodarum. *Environmental Toxicology and Chemistry*, **2013**, 32, 1727-36	3.8	7
25	Nongenetic inheritance of increased Cd tolerance in a field Gammarus fossarum population: Parental exposure steers offspring sensitivity. *Aquatic Toxicology*, **2019**, 209, 91-98	5.1	7
24	Phenotypic defects in newborn Gammarus fossarum (Amphipoda) following embryonic exposure to fenoxycarb. *Ecotoxicology and Environmental Safety*, **2017**, 144, 193-199	7	6
23	Use of sperm DNA integrity as a marker for exposure to contamination in Palaemon serratus (Pennant 1777): Intrinsic variability, baseline level and in situ deployment. *Water Research*, **2018**, 132, 124-134	12.5	6
22	In Situ Reproductive Bioassay with Caged Gammarus fossarum (Crustacea): Part 2-Evaluating the Relevance of Using a Molt Cycle Temperature-Dependent Model as a Reference to Assess Toxicity in Freshwater Monitoring. *Environmental Toxicology and Chemistry*, **2020**, 39, 678-691	3.8	5
21	In Situ Reproductive Bioassay with Caged Gammarus fossarum (Crustacea): Part 1-Gauging the Confounding Influence of Temperature and Water Hardness. *Environmental Toxicology and Chemistry*, **2020**, 39, 667-677	3.8	4
20	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	5.1	4
19	Assessment of sperm DNA integrity within the Palaemon longirostris (H.) population of the Seine estuary. *Environmental Pollution*, **2019**, 245, 485-493	9.3	4
18	Use of Gammarus fossarum (Amphipoda) embryo for toxicity testing: A case study with cadmium. *Environmental Toxicology and Chemistry*, **2017**, 36, 2436-2443	3.8	3
17	Osmoregulatory responses to cadmium in reference and historically metal contaminated Gammarus fossarum (Crustacea, Amphipoda) populations. *Chemosphere*, **2017**, 180, 412-422	8.4	3
16	Shotgun proteomics datasets acquired on animals sampled from the wild. *Data in Brief*, **2019**, 27, 104650	1.2	3

15	Data for comparative proteomics of ovaries from five non-model, crustacean amphipods. *Data in Brief*, **2015**, 5, 1-6	1.2	3
14	Mothers and not genes determine inherited differences in cadmium sensitivities within unexposed populations of the freshwater crustacean Gammarus fossarum. *Evolutionary Applications*, **2016**, 9, 355-66	4.8	3
13	Shotgun lipidomics and mass spectrometry imaging unveil diversity and dynamics in lipid composition. *IScience*, **2021**, 24, 102115	6.1	3
12	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	3.9	2
11	A "Population Dynamics" 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. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	2
10	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	1.3	2
9	Co-expression network analysis identifies novel molecular pathways associated with cadmium and pyriproxyfen testicular toxicity in Gammarus fossarum. *Aquatic Toxicology*, **2021**, 235, 105816	5.1	2
8	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	10.2	1
7	Proteogenomics-Guided Evaluation of RNA-Seq Assembly and Protein Database Construction for Emergent Model Organisms. *Proteomics*, **2020**, 20, e1900261	4.8	1
6	Interest of a multispecies approach in active biomonitoring: Application in the Meuse watershed. *Science of the Total Environment*, **2021**, 152148	10.2	1
5	Ovary and embryo proteogenomic dataset revealing diversity of vitellogenins in the crustacean Gammarus fossarum. *Data in Brief*, **2016**, 8, 1259-62	1.2	1
4	Quantification of multi-scale links of anthropogenic pressures with PAH and PCB bioavailable contamination in French freshwaters. *Water Research*, **2021**, 203, 117546	12.5	1
3	Subcellular Distribution of Dietary Methyl-Mercury in and Its Impact on the Amphipod Proteome. *Environmental Science & Technology*, **2021**, 55, 10514-10523	10.3	0
2	Ardières-Morcille 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	3.3	0
1	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**, 119565	9.3	