

Anna M Roman

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/87975/publications.pdf>

Version: 2024-02-01

113
papers

6,282
citations

66343

42
h-index

74163

75
g-index

115
all docs

115
docs citations

115
times ranked

6186
citing authors

#	ARTICLE	IF	CITATIONS
1	The ecology and biogeochemistry of stream biofilms. <i>Nature Reviews Microbiology</i> , 2016, 14, 251-263.	28.6	746
2	INTERACTIONS OF BACTERIA AND FUNGI ON DECOMPOSING LITTER: DIFFERENTIAL EXTRACELLULAR ENZYME ACTIVITIES. <i>Ecology</i> , 2006, 87, 2559-2569.	3.2	376
3	Monitoring the effect of chemicals on biological communities. The biofilm as an interface. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 1425-1434.	3.7	341
4	Bridging levels of pharmaceuticals in river water with biological community structure in the llobregat river basin (northeast spain). <i>Environmental Toxicology and Chemistry</i> , 2009, 28, 2706-2714.	4.3	166
5	Triclosan persistence through wastewater treatment plants and its potential toxic effects on river biofilms. <i>Aquatic Toxicology</i> , 2010, 100, 346-353.	4.0	149
6	Biofilm Structure and Function and Possible Implications for Riverine DOC Dynamics. <i>Microbial Ecology</i> , 2004, 47, 316-28.	2.8	142
7	Primary and complex stressors in polluted mediterranean rivers: Pesticide effects on biological communities. <i>Journal of Hydrology</i> , 2010, 383, 52-61.	5.4	138
8	Effects of riparian vegetation removal on nutrient retention in a Mediterranean stream. <i>Journal of the North American Benthological Society</i> , 2000, 19, 609-620.	3.1	136
9	The effect of biological factors on the efficiency of river biofilms in improving water quality. <i>Hydrobiologia</i> , 2002, 469, 149-156.	2.0	133
10	Effects of low concentrations of the phenylurea herbicide diuron on biofilm algae and bacteria. <i>Chemosphere</i> , 2009, 76, 1392-1401.	8.2	131
11	Relevance of Polymeric Matrix Enzymes During Biofilm Formation. <i>Microbial Ecology</i> , 2008, 56, 427-436.	2.8	120
12	Effects of pesticides and pharmaceuticals on biofilms in a highly impacted river. <i>Environmental Pollution</i> , 2013, 178, 220-228.	7.5	107
13	Response of biofilm bacterial communities to antibiotic pollutants in a Mediterranean river. <i>Chemosphere</i> , 2013, 92, 1126-1135.	8.2	102
14	Multifunctionality and Diversity in Bacterial Biofilms. <i>PLoS ONE</i> , 2011, 6, e23225.	2.5	99
15	Biofilm formation at warming temperature: acceleration of microbial colonization and microbial interactive effects. <i>Biofouling</i> , 2011, 27, 59-71.	2.2	98
16	Influence of Algal Biomass on Extracellular Enzyme Activity in River Biofilms. <i>Microbial Ecology</i> , 2000, 40, 16-24.	2.8	97
17	Longitudinal development of chlorophyll and phytoplankton assemblages in a regulated large river (the Ebro River). <i>Science of the Total Environment</i> , 2008, 404, 196-206.	8.0	96
18	Effect of primary producers on the heterotrophic metabolism of a stream biofilm. <i>Freshwater Biology</i> , 1999, 41, 729-736.	2.4	95

#	ARTICLE	IF	CITATIONS
19	STRUCTURE AND ACTIVITY OF ROCK AND SAND BIOFILMS IN A MEDITERRANEAN STREAM. <i>Ecology</i> , 2001, 82, 3232-3245.	3.2	93
20	Assessment of multi-chemical pollution in aquatic ecosystems using toxic units: Compound prioritization, mixture characterization and relationships with biological descriptors. <i>Science of the Total Environment</i> , 2014, 468-469, 715-723.	8.0	92
21	STRUCTURE AND FUNCTION OF BENTHIC ALGAL COMMUNITIES IN AN EXTREMELY ACID RIVER1. <i>Journal of Phycology</i> , 2003, 39, 481-489.	2.3	88
22	The influence of substratum type and nutrient supply on biofilm organic matter utilization in streams. <i>Limnology and Oceanography</i> , 2004, 49, 1713-1721.	3.1	85
23	Resistance and recovery of river biofilms receiving short pulses of Triclosan and Diuron. <i>Science of the Total Environment</i> , 2011, 409, 3129-3137.	8.0	81
24	Microbial Availability and Size Fractionation of Dissolved Organic Carbon After Drought in an Intermittent Stream: Biogeochemical Link Across the Stream-Riparian Interface. <i>Microbial Ecology</i> , 2006, 52, 501-512.	2.8	75
25	Microbial biofilm structure and organic matter use in mediterranean streams. <i>Hydrobiologia</i> , 2013, 719, 43-58.	2.0	74
26	Organic matter availability during pre- and post-drought periods in a Mediterranean stream. <i>Hydrobiologia</i> , 2010, 657, 217-232.	2.0	72
27	Availability of glucose and light modulates the structure and function of a microbial biofilm. <i>FEMS Microbiology Ecology</i> , 2009, 69, 27-42.	2.7	65
28	Fluvial biofilms: A pertinent tool to assess β -blockers toxicity. <i>Aquatic Toxicology</i> , 2010, 96, 225-233.	4.0	64
29	Ecological implications of mass growth of benthic cyanobacteria in rivers. <i>Aquatic Microbial Ecology</i> , 2003, 32, 175-184.	1.8	62
30	Organic matter availability structures microbial biomass and activity in a Mediterranean stream. <i>Freshwater Biology</i> , 2009, 54, 2025-2036.	2.4	59
31	Sediment microbial communities rely on different dissolved organic matter sources along a Mediterranean river continuum. <i>Limnology and Oceanography</i> , 2016, 61, 1389-1405.	3.1	58
32	Labile and Recalcitrant Organic Matter Utilization by River Biofilm Under Increasing Water Temperature. <i>Microbial Ecology</i> , 2012, 64, 593-604.	2.8	57
33	A conceptual framework for understanding the biogeochemistry of dry riverbeds through the lens of soil science. <i>Earth-Science Reviews</i> , 2019, 188, 441-453.	9.1	54
34	ALGAL RESPONSE TO NUTRIENT ENRICHMENT IN FORESTED OLIGOTROPHIC STREAM ¹ . <i>Journal of Phycology</i> , 2008, 44, 564-572.	2.3	51
35	Differences in the sensitivity of fungi and bacteria to season and invertebrates affect leaf litter decomposition in a Mediterranean stream. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw121.	2.7	51
36	The Iberian Rivers. , 2009, , 113-149.		48

#	ARTICLE	IF	CITATIONS
37	Effects of Warming on Stream Biofilm Organic Matter Use Capabilities. <i>Microbial Ecology</i> , 2014, 68, 132-145.	2.8	47
38	Quality and reactivity of dissolved organic matter in a Mediterranean river across hydrological and spatial gradients. <i>Science of the Total Environment</i> , 2017, 599-600, 1802-1812.	8.0	47
39	Effect of nutrients on the sporulation and diversity of aquatic hyphomycetes on submerged substrata in a Mediterranean stream. <i>Aquatic Botany</i> , 2008, 88, 32-38.	1.6	46
40	Epilithic ectoenzyme activity in a nutrient-rich Mediterranean river. <i>Aquatic Sciences</i> , 1999, 61, 122.	1.5	44
41	Metabolism recovery of a stromatolitic biofilm after drought in a Mediterranean stream fig: 3. <i>Fundamental and Applied Limnology</i> , 1997, 140, 261-271.	0.7	44
42	Long-term moderate nutrient inputs enhance autotrophy in a forested Mediterranean stream. <i>Freshwater Biology</i> , 2011, 56, 1266-1280.	2.4	43
43	The use of wooden sticks to assess stream ecosystem functioning: Comparison with leaf breakdown rates. <i>Science of the Total Environment</i> , 2012, 440, 115-122.	8.0	43
44	Heterotrophic metabolism in a forest stream sediment: surface versus subsurface zones. <i>Aquatic Microbial Ecology</i> , 1998, 16, 143-151.	1.8	43
45	Metabolic changes associated with biofilm formation in an undisturbed Mediterranean stream. <i>Hydrobiologia</i> , 1996, 335, 107-113.	2.0	42
46	The relevance of the community approach linking chemical and biological analyses in pollution assessment. <i>TrAC - Trends in Analytical Chemistry</i> , 2009, 28, 619-626.	11.4	40
47	Effects of the Dryâ€“Wet Hydrological Shift on Dissolved Organic Carbon Dynamics and Fate Across Streamâ€“Riparian Interface in a Mediterranean Catchment. <i>Ecosystems</i> , 2007, 10, 239-251.	3.4	39
48	Is chemical contamination linked to the diversity of biological communities in rivers?. <i>TrAC - Trends in Analytical Chemistry</i> , 2009, 28, 592-602.	11.4	38
49	Shifts in microbial community structure and function in lightâ€“and darkâ€“grown biofilms driven by warming. <i>Environmental Microbiology</i> , 2014, 16, 2550-2567.	3.8	38
50	Does Grazing Pressure Modify Diuron Toxicity in a Biofilm Community?. <i>Archives of Environmental Contamination and Toxicology</i> , 2010, 58, 955-962.	4.1	37
51	The effects of sediment depth and oxygen concentration on the use of organic matter: An experimental study using an infiltration sediment tank. <i>Science of the Total Environment</i> , 2016, 540, 20-31.	8.0	37
52	Effects of nutrient inputs in a forested Mediterranean stream under moderate light availability. <i>Archiv FÄ¼r Hydrobiologie</i> , 2005, 163, 479-496.	1.1	36
53	Microbial decomposition is highly sensitive to leaf litter emersion in a permanent temperate stream. <i>Science of the Total Environment</i> , 2018, 621, 486-496.	8.0	36
54	Connecting bacterial colonization to physical and biochemical changes in a sand box infiltration experiment. <i>Journal of Hydrology</i> , 2014, 517, 317-327.	5.4	35

#	ARTICLE	IF	CITATIONS
55	Warmer night-time temperature promotes microbial heterotrophic activity and modifies stream sediment community. <i>Global Change Biology</i> , 2017, 23, 3825-3837.	9.5	35
56	Differential effects of nutrients and light on the primary production of stream algae and mosses. <i>Fundamental and Applied Limnology</i> , 2007, 170, 1-10.	0.7	34
57	Organic matter characteristics in a Mediterranean stream through amino acid composition: changes driven by intermittency. <i>Aquatic Sciences</i> , 2011, 73, 523-535.	1.5	34
58	Hydrological conditions control in situ DOM retention and release along a Mediterranean river. <i>Water Research</i> , 2016, 99, 33-45.	11.3	34
59	Drought episode modulates the response of river biofilms to triclosan. <i>Aquatic Toxicology</i> , 2013, 127, 36-45.	4.0	33
60	Interaction between Physical Heterogeneity and Microbial Processes in Subsurface Sediments: A Laboratory-Scale Column Experiment. <i>Environmental Science & Technology</i> , 2017, 51, 6110-6119.	10.0	33
61	Deconvolution model to resolve cytometric microbial community patterns in flowing waters. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2018, 93, 194-200.	1.5	33
62	Different diversity-functioning relationship in lake and stream bacterial communities. <i>FEMS Microbiology Ecology</i> , 2013, 85, 95-103.	2.7	30
63	Nutrients and light effects on stream biofilms: a combined assessment with CLSM, structural and functional parameters. <i>Hydrobiologia</i> , 2012, 695, 281-291.	2.0	29
64	The Biota of Intermittent Rivers and Ephemeral Streams: Prokaryotes, Fungi, and Protozoans. , 2017, , 161-188.		28
65	A bilayer coarse-fine infiltration system minimizes bioclogging: The relevance of depth-dynamics. <i>Science of the Total Environment</i> , 2019, 669, 559-569.	8.0	28
66	Relating nutrient molar ratios of microbial attached communities to organic matter utilization in a forested stream. <i>Fundamental and Applied Limnology</i> , 2009, 173, 255-264.	0.7	27
67	Fungal and Bacterial Colonization of Submerged Leaf Litter in a Mediterranean Stream. <i>International Review of Hydrobiology</i> , 2011, 96, 221-234.	0.9	27
68	Patterns of biofilm formation in two streams from different bioclimatic regions: analysis of microbial community structure and metabolism. <i>Hydrobiologia</i> , 2012, 695, 83-96.	2.0	27
69	Consequences of Warming and Resource Quality on the Stoichiometry and Nutrient Cycling of a Stream Shredder. <i>PLoS ONE</i> , 2015, 10, e0118520.	2.5	27
70	Influence of grazing on triclosan toxicity to stream periphyton. <i>Freshwater Biology</i> , 2016, 61, 2002-2012.	2.4	25
71	Key role of streambed moisture and flash storms for microbial resistance and resilience to long-term drought. <i>Freshwater Biology</i> , 2019, 64, 306-322.	2.4	25
72	Global pressures, specific responses: effects of nutrient enrichment in streams from different biomes. <i>Environmental Research Letters</i> , 2013, 8, 014002.	5.2	24

#	ARTICLE	IF	CITATIONS
73	Responses of microbial activity in hyporheic pore water to biogeochemical changes in a drying headwater stream. <i>Freshwater Biology</i> , 2019, 64, 735-749.	2.4	24
74	Stromatolitic communities in Mediterranean streams: adaptations to a changing environment. <i>Biodiversity and Conservation</i> , 2000, 9, 379-392.	2.6	23
75	Contribution of microbial and invertebrate communities to leaf litter colonization in a Mediterranean stream. <i>Journal of the North American Benthological Society</i> , 2009, 28, 34-43.	3.1	23
76	Factors controlling seasonality in leaf-litter breakdown in a Mediterranean stream. <i>Freshwater Science</i> , 2015, 34, 1245-1258.	1.8	23
77	Arsenic toxicity effects on microbial communities and nutrient cycling in indoor experimental channels mimicking a fluvial system. <i>Aquatic Toxicology</i> , 2015, 166, 72-82.	4.0	23
78	Phosphorus use by planktonic communities in a large regulated Mediterranean river. <i>Science of the Total Environment</i> , 2012, 426, 180-187.	8.0	22
79	Organic matter decomposition by fungi in a Mediterranean forested stream : contribution of streambed substrata. <i>Annales De Limnologie</i> , 2004, 40, 269-277.	0.6	18
80	A compositional analysis approach to phytoplankton composition in coastal Mediterranean wetlands: Influence of salinity and nutrient availability. <i>Estuarine, Coastal and Shelf Science</i> , 2014, 136, 72-81.	2.1	18
81	Responses of microbial decomposers to drought in streams may depend on the environmental context. <i>Environmental Microbiology Reports</i> , 2017, 9, 756-765.	2.4	18
82	Responses of microbially driven leaf litter decomposition to stream nutrients depend on litter quality. <i>Hydrobiologia</i> , 2018, 806, 333-346.	2.0	18
83	Legacy of Summer Drought on Autumnal Leaf Litter Processing in a Temporary Mediterranean Stream. <i>Ecosystems</i> , 2020, 23, 989-1003.	3.4	18
84	Impact of drying/rewetting cycles on the bioavailability of dissolved organic matter molecular-weight fractions in a Mediterranean stream. <i>Freshwater Science</i> , 2015, 34, 263-275.	1.8	17
85	Biofilm phosphorus uptake capacity as a tool for the assessment of pollutant effects in river ecosystems. <i>Ecotoxicology</i> , 2017, 26, 271-282.	2.4	17
86	Microbial Organic Matter Utilization in High-Arctic Streams: Key Enzymatic Controls. <i>Microbial Ecology</i> , 2019, 78, 539-554.	2.8	17
87	Variability of heterotrophic activity in Mediterranean stream biofilms: A multivariate analysis of physical-chemical and biological factors. <i>Aquatic Sciences</i> , 2000, 62, 205-215.	1.5	16
88	Delayed response of microbial epilithic biofilm to nutrient addition in a Pampean stream. <i>Aquatic Microbial Ecology</i> , 2013, 69, 145-155.	1.8	16
89	Extracellular enzymatic activities in epilithic biofilms of the Breitenbach: microhabitat differences. <i>Fundamental and Applied Limnology</i> , 2002, 155, 541-555.	0.7	15
90	The Iberian rivers. , 2022, , 181-224.		15

#	ARTICLE	IF	CITATIONS
91	A stromatolitic cyanobacterial crust in a Mediterranean stream optimizes organic matter use. <i>Aquatic Microbial Ecology</i> , 1998, 16, 131-141.	1.8	14
92	The Use of Attached Microbial Communities to Assess Ecological Risks of Pollutants in River Ecosystems: The Role of Heterotrophs. <i>Handbook of Environmental Chemistry</i> , 2012, , 55-83.	0.4	13
93	A mechanistic model (<scp>BCCâ€PSSICO</scp>) to predict changes in the hydraulic properties for bioâ€amended variably saturated soils. <i>Water Resources Research</i> , 2017, 53, 93-109.	4.2	13
94	The synergistic effect of enzymatic detergents on biofilm cleaning from different surfaces. <i>Biofouling</i> , 2019, 35, 883-899.	2.2	13
95	Bilayer Infiltration System Combines Benefits from Both Coarse and Fine Sands Promoting Nutrient Accumulation in Sediments and Increasing Removal Rates. <i>Environmental Science & Technology</i> , 2018, 52, 5734-5743.	10.0	10
96	Shifts in carbon substrate utilization in sediment microbial communities along the Llobregat River. <i>Fundamental and Applied Limnology</i> , 2014, 185, 247-261.	0.7	10
97	Nutrient and enzymatic adaptations of stream biofilms to changes in nitrogen and phosphorus supply. <i>Aquatic Microbial Ecology</i> , 2015, 75, 91-102.	1.8	10
98	Litter decomposition of three halophytes in a Mediterranean salt marsh: Relevance of litter quality, microbial activity and microhabitat. <i>Science of the Total Environment</i> , 2022, 838, 155743.	8.0	10
99	Establishing potential links between the presence of alkylphenolic compounds and the benthic community in a European river basin. <i>Environmental Science and Pollution Research</i> , 2012, 19, 934-945.	5.3	8
100	Fluvial biofilms from upper and lower river reaches respond differently to wastewater treatment plant inputs. <i>Hydrobiologia</i> , 2016, 765, 169-183.	2.0	8
101	Linking biofilm spatial structure to real-time microscopic oxygen decay imaging. <i>Biofouling</i> , 2018, 34, 200-211.	2.2	7
102	Different microbial functioning in natural versus man-made Mediterranean coastal lagoons in relation to season. <i>Estuarine, Coastal and Shelf Science</i> , 2021, 259, 107434.	2.1	7
103	Interplay between sediment properties and stream flow conditions influences surface sediment organic matter and microbial biomass in a Mediterranean river. <i>Hydrobiologia</i> , 2019, 828, 199-212.	2.0	6
104	Editorial: Extracellular Enzymes in Aquatic Environments: Exploring the Link Between Genomic Potential and Biogeochemical Consequences. <i>Frontiers in Microbiology</i> , 2019, 10, 1463.	3.5	5
105	River biofilms adapted to anthropogenic disturbances are more resistant to WWTP inputs. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	2.7	5
106	Assessing the ecological integrity after nutrient inputs in streams: The relevance of the observation scale. <i>Aquatic Ecosystem Health and Management</i> , 2005, 8, 397-403.	0.6	4
107	Changes of the phenol-degrading bacterial community during the decomposition of submersed <i>Platanus acerifolia</i> leaves. <i>FEMS Microbiology Letters</i> , 2013, 338, 184-191.	1.8	4
108	Microbes in Aquatic Biofilms Under the Effect of Changing Climate. , 2016, , 83-96.		4

#	ARTICLE	IF	CITATIONS
109	Biochemical quality of basal resources in a forested stream: effects of nutrient enrichment. Aquatic Sciences, 2017, 79, 99-112.	1.5	3
110	Aquatic and Riparian Biodiversity in the Ebro Watershed: Prospects and Threats. Handbook of Environmental Chemistry, 2010, , 121-138.	0.4	2
111	Temperature-induced changes in biofilm organic matter utilization in arctic streams (Disko Island,) Tj ETQq1 1 0.784314 rgBT ₂ /Overlo	1.2	2
112	Organic matter availability during pre- and post-drought periods in a Mediterranean stream. , 2010, , 217-232.		1
113	Introduction to Microbial Fouling. , 0, , 121-122.		0