Carles M Borrego

List of Publications by Year
in descending order

93 papers	5,095 citations	94269 37 h-index	91712 69 g-index
94 all docs	94 docs citations	94 times ranked	5987 citing authors

#	Article	IF	Citations
1	Occurrence of antibiotics and antibiotic resistance genes in hospital and urban wastewaters and their impact on the receiving river. Water Research, 2015, 69, 234-242.	5.3	1,187
2	The role of biofilms as environmental reservoirs of antibiotic resistance. Frontiers in Microbiology, 2015, 6, 1216.	1.5	321
3	Occurrence and persistence of antibiotic resistance genes in river biofilms after wastewater inputs in small rivers. Environmental Pollution, 2016, 210, 121-128.	3.7	142
4	Connecting biodiversity and potential functional role in modern euxinic environments by microbial metagenomics. ISME Journal, 2015, 9, 1648-1661.	4.4	123
5	Metagenomic analysis reveals that bacteriophages are reservoirs of antibiotic resistance genes. International Journal of Antimicrobial Agents, 2016, 48, 163-167.	1.1	121
6	Abundance of antibiotic resistance genes in five municipal wastewater treatment plants in the Monastir Governorate, Tunisia. Environmental Pollution, 2016, 219, 353-358.	3.7	107
7	Exploring the contribution of bacteriophages to antibiotic resistance. Environmental Pollution, 2017, 220, 981-984.	3.7	107
8	Insights in the ecology and evolutionary history of the Miscellaneous Crenarchaeotic Group lineage. ISME Journal, 2016, 10, 665-677.	4.4	100
9	Separation of bacteriochlorophyll homologues from green photosynthetic sulfur bacteria by reversed-phase HPLC. Photosynthesis Research, 1994, 41, 157-164.	1.6	99
10	Sewers as potential reservoirs of antibiotic resistance. Science of the Total Environment, 2017, 605-606, 1047-1054.	3.9	99
11	Contribution of bacteriophage and plasmid DNA to the mobilization of antibiotic resistance genes in a river receiving treated wastewater discharges. Science of the Total Environment, 2017, 601-602, 206-209.	3.9	97
12	Antibiotic resistance along an urban river impacted by treated wastewaters. Science of the Total Environment, 2018, 628-629, 453-466.	3.9	91
13	Stream Biofilm Responses to Flow Intermittency: From Cells to Ecosystems. Frontiers in Environmental Science, 2016, 4, .	1.5	88
14	Rearrangement of light harvesting bacteriochlorophyll homologues as a response of green sulfur bacteria to low light intensities. Photosynthesis Research, 1995, 45, 21-30.	1.6	87
15	Emerging contaminants and nutrients synergistically affect the spread of class 1 integron-integrase (intI1) and sul1 genes within stable streambed bacterial communities. Water Research, 2018, 138, 77-85.	5.3	82
16	High archaeal richness in the water column of a freshwater sulfurous karstic lake along an interannual study. FEMS Microbiology Ecology, 2008, 66, 331-342.	1.3	81
17	Vertical Distribution of Ammonia-Oxidizing Crenarchaeota and Methanogens in the Epipelagic Waters of Lake Kivu (Rwanda-Democratic Republic of the Congo). Applied and Environmental Microbiology, 2010, 76, 6853-6863.	1.4	81
18	Title is missing!. Photosynthesis Research, 1999, 59, 159-166.	1.6	80

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19	Pelagic photoferrotrophy and iron cycling in a modern ferruginous basin. Scientific Reports, 2015, 5, 13803.	1.6	80
20	Determination of the topography and biometry of chlorosomes by atomic force microscopy. Photosynthesis Research, 2002, 71, 83-90.	1.6	76
21	Internal Structure of Chlorosomes from Brown-Colored Chlorobium Species and the Role of Carotenoids in Their Assembly. Biophysical Journal, 2006, 91, 1433-1440.	0.2	68
22	Occurrence and persistence of carbapenemases genes in hospital and wastewater treatment plants and propagation in the receiving river. Journal of Hazardous Materials, 2018, 358, 33-43.	6.5	68
23	Implications of Downstream Nitrate Dosage in anaerobic sewers to control sulfide and methane emissions. Water Research, 2015, 68, 522-532.	5.3	67
24	Availability of glucose and light modulates the structure and function of a microbial biofilm. FEMS Microbiology Ecology, 2009, 69, 27-42.	1.3	65
25	New insights on the combined removal of antibiotics and ARGs in urban wastewater through the use of two configurations of vertical subsurface flow constructed wetlands. Science of the Total Environment, 2021, 755, 142554.	3.9	64
26	Title is missing!. Photosynthesis Research, 1999, 60, 257-264.	1.6	62
27	Fate of pharmaceuticals and antibiotic resistance genes in a full-scale on-farm livestock waste treatment plant. Journal of Hazardous Materials, 2019, 378, 120716.	6.5	61
28	Marked seasonality of aerobic anoxygenic phototrophic bacteria in the coastal <scp>NW M</scp>editerranean <scp>S</scp>ea as revealed by cell abundance, pigment concentration and pyrosequencing of puf<scp>M</scp> gene. Environmental Microbiology, 2014, 16, 2953-2965.	1.8	56
29	Abundance of carbapenemase genes (blaKPC, blaNDM and blaOXA-48) in wastewater effluents from Tunisian hospitals. Environmental Pollution, 2017, 229, 371-374.	3.7	49
30	Wastewater pollution differently affects the antibiotic resistance gene pool and biofilm bacterial communities across streambed compartments. Molecular Ecology, 2017, 26, 5567-5581.	2.0	47
31	Patterns in Abundance, Cell Size and Pigment Content of Aerobic Anoxygenic Phototrophic Bacteria along Environmental Gradients in Northern Lakes. PLoS ONE, 2015, 10, e0124035.	1.1	45
32	Diversity of Miscellaneous Crenarchaeotic Group archaea in freshwater karstic lakes and their segregation between planktonic and sediment habitats. FEMS Microbiology Ecology, 2015, 91, .	1.3	44
33	Metagenomic exploration reveals a marked change in the river resistome and mobilome after treated wastewater discharges. Environmental Pollution, 2018, 234, 538-542.	3.7	44
34	Changes in Microbial Biofilm Communities during Colonization of Sewer Systems. Applied and Environmental Microbiology, 2015, 81, 7271-7280.	1.4	43
35	Real-time PCR assays for the detection and quantification of carbapenemase genes (bla KPC, bla NDM,) Tj ETQq1 1 0.784314 rgBT /O 6710-6714.	2.7	43
36	Contribution of deep dark fixation processes to overall CO2 incorporation and large vertical changes of microbial populations in stratified karstic lakes. Aquatic Sciences, 2012, 74, 61-75.	0.6	40

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37	Effect of Carotenoid Biosynthesis Inhibition on the Chlorosome Organization in Chlorobium phaeobacteroides Strain CL1401. Photochemistry and Photobiology, 2000, 71, 715-723.	1.3	39
38	Flow cytometric identification and enumeration of photosynthetic sulfur bacteria and potential for ecophysiological studies at the single-cell level. Environmental Microbiology, 2007, 9, 1969-1985.	1.8	38
39	Shifts in microbial community structure and function in lightâ€•and darkâ€grown biofilms driven by warming. Environmental Microbiology, 2014, 16, 2550-2567.	1.8	38
40	Faecal microbiota and antibiotic resistance genes in migratory waterbirds with contrasting habitat use. Science of the Total Environment, 2021, 783, 146872.	3.9	38
41	Dry habitats sustain high CO2 emissions from temporary ponds across seasons. Scientific Reports, 2018, 8, 3015.	1.6	35
42	High-quality treated wastewater causes remarkable changes in natural microbial communities and intl1 gene abundance. Water Research, 2019, 167, 114895.	5.3	33
43	Identification of the bacteriochlorophyll homologues of Chlorobium phaeobacteroides strain UdG6053 grown at low light intensity. Photosynthesis Research, 2001, 70, 221-230.	1.6	32
44	Control of sulfide and methane production in anaerobic sewer systems by means of Downstream Nitrite Dosage. Science of the Total Environment, 2016, 550, 1116-1125.	3.9	32
45	Detection and quantification of the plasmid-mediated mcr-1 gene conferring colistin resistance in wastewater. International Journal of Antimicrobial Agents, 2017, 50, 734-736.	1.1	32
46	Fingerprinting the genetic diversity of the biotin carboxylase gene (accC) in aquatic ecosystems as a potential marker for studies of carbon dioxide assimilation in the dark. Environmental Microbiology, 2008, 10, 2527-2536.	1.8	31
47	Active bacteria and archaea cells fixing bicarbonate in the dark along the water column of a stratified eutrophic lagoon. FEMS Microbiology Ecology, 2011, 77, 370-384.	1.3	31
48	The relevance of environment vs. composition on dissolved organic matter degradation in freshwaters. Limnology and Oceanography, 2021, 66, 306-320.	1.6	31
49	Occurrence of new bacteriochlorophyll d forms in natural populations of green photosynthetic sulfur bacteria. FEMS Microbiology Ecology, 1998, 26, 257-267.	1.3	30
50	The dynamics of biofilm bacterial communities is driven by flow wax and wane in a temporary stream. Limnology and Oceanography, 2014, 59, 2057-2067.	1.6	30
51	Predation impact of ciliated and flagellated protozoa during a summer bloom of brown sulfur bacteria in a meromictic coastal lake. FEMS Microbiology Ecology, 2009, 70, 42-53.	1.3	29
52	Unraveling the potential of a combined nitritation-anammox biomass towards the biodegradation of pharmaceutically active compounds. Science of the Total Environment, 2018, 624, 722-731.	3.9	25
53	Fast energy transfer between BChl d and BChl c in chlorosomes of the green sulfur bacterium Chlorobium limicola. Biochimica Et Biophysica Acta - Bioenergetics, 2000, 1457, 71-80.	0.5	24
54	Antimicrobial Resistance and Bacteriophages: An Overlooked Intersection in Water Disinfection. Trends in Microbiology, 2021, 29, 517-527.	3.5	24

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55	Nanosecond Laser Photolysis Studies of Chlorosomes and Artificial Aggregates Containing Bacteriochlorophyll e: Evidence for the Proximity of Carotenoids and Bacteriochlorophyll a in Chlorosomes from Chlorobium phaeobacteroides strain CL1401Â¶. Photochemistry and Photobiology, 2000, 72, 669.	1.3	24
56	Characterization of the chlorosome antenna of the filamentous anoxygenic phototrophic bacterium Chloronema sp. strain UdG9001. Archives of Microbiology, 2003, 180, 417-426.	1.0	22
57	Diversity of freshwaterEpsilonproteobacteriaand dark inorganic carbon fixation in the sulphidic redoxcline of a meromictic karstic lake. FEMS Microbiology Ecology, 2015, 91, fiv086.	1.3	22
58	Signature pigments of green sulfur bacteria in lower Pleistocene deposits from the Banyoles lacustrine area (Spain). Journal of Paleolimnology, 2005, 34, 271-280.	0.8	21
59	Effect of carotenoid deficiency on cells and chlorosomes of Chlorobium phaeobacteroides. Archives of Microbiology, 2001, 175, 226-233.	1.0	20
60	Quantification of the Effect of Nonphotochemical Quenching on the Determination of In Vivo Chl a from Phytoplankton Along the Water Column of a Freshwater Reservoir. Photochemistry and Photobiology, 2009, 85, 321-331.	1.3	20
61	High Bacterial Diversity and Phylogenetic Novelty in Dark Euxinic Freshwaters Analyzed by 16S Tag Community Profiling. Microbial Ecology, 2016, 71, 566-574.	1.4	18
62	Title is missing!. Photosynthesis Research, 1999, 59, 231-241.	1.6	17
63	Light responses in the green sulfur bacterium Prosthecochloris aestuarii : changes in prosthecae length, ultrastructure, and antenna pigment composition. Archives of Microbiology, 2001, 176, 278-284.	1.0	17
64	Specific Archaeal Communities are Selected on the Root Surfaces of Ruppia spp. and Phragmites australis. Wetlands, 2014, 34, 403-411.	0.7	17
65	Effect of Urban Wastewater Discharge on the Abundance of Antibiotic Resistance Genes and Antibiotic-Resistant Escherichia coli in Two Italian Rivers. International Journal of Environmental Research and Public Health, 2020, 17, 6813.	1.2	16
66	Dynamics of SARS-CoV-2 Alpha (B.1.1.7) variant spread: The wastewater surveillance approach. Environmental Research, 2022, 208, 112720.	3.7	16
67	Growth-rate-dependent bacteriochlorophyll c / d ratio in the antenna of Chlorobium limicola strain UdG6040. Archives of Microbiology, 1999, 171, 350-354.	1.0	15
68	Abundance and Co-Distribution of Widespread Marine Archaeal Lineages in Surface Sediments of Freshwater Water Bodies across the Iberian Peninsula. Microbial Ecology, 2017, 74, 776-787.	1.4	15
69	Temporal variability of Chlorobium phaeobacteroides antenna pigments in a meromictic karstic lake. Aquatic Microbial Ecology, 1999, 17, 121-129.	0.9	15
70	Vertical distribution of photosynthetic sulphur bacteria linked to saline gradients in Lake 'El Tobar' (Cuenca, Spain). Aquatic Microbial Ecology, 1999, 20, 299-303.	0.9	14
71	Effect of carotenoid biosynthesis inhibition on the chlorosome organization in Chlorobium phaeobacteroides strain CL1401. Photochemistry and Photobiology, 2000, 71, 715-23.	1.3	13
72	Bacteriochlorophyll e Monomers, but Not Aggregates, Sensitize Singlet Oxygen: Implications for a Self-photoprotection Mechanism in ChlorosomesÂ¶. Photochemistry and Photobiology, 2002, 76, 373.	1.3	13

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73	Microbial Ecology of Lake Kivu. , 2012, , 85-105.		12
74	New phylotypes of mesophilic filamentous anoxygenic phototrophic bacteria enriched from sulfideâ€containing environments. Environmental Microbiology Reports, 2009, 1, 86-93.	1.0	8
75	Lifestyle preferences drive the structure and diversity of bacterial and archaeal communities in a small riverine reservoir. Scientific Reports, 2020, 10, 11288.	1.6	8
76	Global dispersal and potential sources of antibiotic resistance genes in atmospheric remote depositions. Environment International, 2022, 160, 107077.	4.8	8
77	Variability of the photosynthetic antenna of a Pelodictyon clathratiforme population from a freshwater holomictic pond. FEMS Microbiology Ecology, 2001, 37, 11-19.	1.3	7
78	Phosphorus deficiency and kinetics of alkaline phosphatase in isolates and natural populations of phototrophic sulphur bacteria. FEMS Microbiology Ecology, 2010, 73, no-no.	1.3	6
79	Maintenance of previously uncultured freshwater archaea from anoxic waters under laboratory conditions. Antonie Van Leeuwenhoek, 2011, 99, 403-408.	0.7	6
80	Metabolic versatility of freshwater sedimentary archaea feeding on different organic carbon sources. PLoS ONE, 2020, 15, e0231238.	1.1	6
81	Metal contaminations impact archaeal community composition, abundance and function in remote alpine lakes. Environmental Microbiology, 2018, 20, 2422-2437.	1.8	5
82	Genome analysis of a new Escherichia phage vB_EcoM_C2-3 with lytic activity against multidrug-resistant Escherichia coli. Virus Research, 2022, 307, 198623.	1.1	5
83	A universal bacterial inoculum for dissolved organic carbon biodegradation experiments in freshwaters. Limnology and Oceanography: Methods, 2018, 16, 421-433.	1.0	4
84	Nanosecond Laser Photolysis Studies of Chlorosomes and Artificial Aggregates Containing Bacteriochlorophyll e: Evidence for the Proximity of Carotenoids and Bacteriochlorophyll a in Chlorosomes from Chlorobium phaeobacteroides strain CL1401Â¶. Photochemistry and Photobiology, 2007, 72, 669-675.	1.3	3
85	Side effects of free nitrous acid on the sewer resistome and mobilome. Chemical Engineering Journal, 2021, 405, 126657.	6.6	3
86	Phylogenetic characterization and quantification of ammonia-oxidizing archaea and bacteria from Lake Kivu in a long-term microcosm incubation. International Microbiology, 2013, 16, 177-89.	1.1	3
87	Impact of nitrate addition on the resistome and mobilome from a full-scale sewer. Chemical Engineering Journal, 2022, 439, 135653.	6.6	3
88	Water safety screening via multiplex LAMP-Au-nanoprobe integrated approach. Science of the Total Environment, 2020, 741, 140447.	3.9	2
89	Application of Microcosm and Mesocosm Experiments to Pollutant Effects in Biofilms. Springer Protocols, 2015, , 135-151.	0.1	1
90	Collection and Processing of River Organisms and Water Column Organisms. Springer Protocols, 2015, , 219-228.	0.1	1

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91	Bacteriochlorophyll e Monomers, but Not Aggregates, Sensitize Singlet Oxygen: Implications for a Self-photoprotection Mechanism in ChlorosomesÂ¶. Photochemistry and Photobiology, 2007, 76, 373-380.	1.3	0
92	New phylotypes of mesophilic filamentous anoxygenic phototrophic bacteria enriched from sulfide-containing environments. Environmental Microbiology Reports, 2009, 1, 169-169.	1.0	0
93	Occurrence et devenir des polluants Ã©mergents (antibiotiques) dans un aquifÃ¨re alluvial et leur influence sur les bactÃ©ries multi-rÃ©sistantes (Bas-FluviÃ, Catalogne). Houille Blanche, 2018, 104, 47-52.	0.3	0