# Carles M Borrego

## List of Publications by Year in Descending Order



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| 93 papers | 3,684 citations | 32 h-index | 59 g-index |
| 93 ext. papers | 4,477 ext. citations | 6 avg, IF | 5.56 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 93 | Dynamics of SARS-CoV-2 Alpha (B.1.1.7) variant spread: The wastewater surveillance approach.. *Environmental Research*, **2022**, 208, 112720 | 7.9 | 5 |
| 92 | Genome analysis of a new Escherichia phage vB_EcoM_C2-3 with lytic activity against multidrug-resistant Escherichia coli. *Virus Research*, **2022**, 307, 198623 | 6.4 | 1 |
| 91 | Global dispersal and potential sources of antibiotic resistance genes in atmospheric remote depositions.. *Environment International*, **2022**, 160, 107077 | 12.9 | 1 |
| 90 | Impact of nitrate addition on the resistome and mobilome from a full-scale sewer. *Chemical Engineering Journal*, **2022**, 439, 135653 | 14.7 | 0 |
| 89 | Antimicrobial Resistance and Bacteriophages: An Overlooked Intersection in Water Disinfection. *Trends in Microbiology*, **2021**, 29, 517-527 | 12.4 | 11 |
| 88 | Side effects of free nitrous acid on the sewer resistome and mobilome. *Chemical Engineering Journal*, **2021**, 405, 126657 | 14.7 | 3 |
| 87 | 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 | 10.2 | 25 |
| 86 | The relevance of environment vs. composition on dissolved organic matter degradation in freshwaters. *Limnology and Oceanography*, **2021**, 66, 306-320 | 4.8 | 6 |
| 85 | Faecal microbiota and antibiotic resistance genes in migratory waterbirds with contrasting habitat use. *Science of the Total Environment*, **2021**, 783, 146872 | 10.2 | 8 |
| 84 | Water safety screening via multiplex LAMP-Au-nanoprobe integrated approach. *Science of the Total Environment*, **2020**, 741, 140447 | 10.2 | 0 |
| 83 | Lifestyle preferences drive the structure and diversity of bacterial and archaeal communities in a small riverine reservoir. *Scientific Reports*, **2020**, 10, 11288 | 4.9 | 3 |
| 82 | Effect of Urban Wastewater Discharge on the Abundance of Antibiotic Resistance Genes and Antibiotic-Resistant in Two Italian Rivers. *International Journal of Environmental Research and Public Health*, **2020**, 17, | 4.6 | 5 |
| 81 | Metabolic versatility of freshwater sedimentary archaea feeding on different organic carbon sources. *PLoS ONE*, **2020**, 15, e0231238 | 3.7 | 2 |
| 80 | Fate of pharmaceuticals and antibiotic resistance genes in a full-scale on-farm livestock waste treatment plant. *Journal of Hazardous Materials*, **2019**, 378, 120716 | 12.8 | 32 |
| 79 | High-quality treated wastewater causes remarkable changes in natural microbial communities and intI1 gene abundance. *Water Research*, **2019**, 167, 114895 | 12.5 | 23 |
| 78 | Metal contaminations impact archaeal community composition, abundance and function in remote alpine lakes. *Environmental Microbiology*, **2018**, 20, 2422-2437 | 5.2 | 3 |
| 77 | Antibiotic resistance along an urban river impacted by treated wastewaters. *Science of the Total Environment*, **2018**, 628-629, 453-466 | 10.2 | 55 |

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| 76 | Dry habitats sustain high CO emissions from temporary ponds across seasons. *Scientific Reports*, **2018**, 8, 3015 | 4.9 | 22 |
| 75 | 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 | 10.2 | 18 |
| 74 | Metagenomic exploration reveals a marked change in the river resistome and mobilome after treated wastewater discharges. *Environmental Pollution*, **2018**, 234, 538-542 | 9.3 | 32 |
| 73 | 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 | 12.5 | 44 |
| 72 | A universal bacterial inoculum for dissolved organic carbon biodegradation experiments in freshwaters. *Limnology and Oceanography: Methods*, **2018**, 16, 421-433 | 2.6 | 3 |
| 71 | Occurrence et devenir des polluants émergents (antibiotiques) dans un aquifère alluvial et leur influence sur les bactéries multi-résistantes (Bas-Fluvià-Catalogne). *Houille Blanche*, **2018**, 104, 47-52 | 0.3 | |
| 70 | 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 | 12.8 | 41 |
| 69 | Real-time PCR assays for the detection and quantification of carbapenemase genes (bla , bla , and bla ) in environmental samples. *Environmental Science and Pollution Research*, **2017**, 24, 6710-6714 | 5.1 | 32 |
| 68 | Abundance of carbapenemase genes (bla, bla and bla) in wastewater effluents from Tunisian hospitals. *Environmental Pollution*, **2017**, 229, 371-374 | 9.3 | 32 |
| 67 | 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 | 4.4 | 11 |
| 66 | 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 | 10.2 | 58 |
| 65 | Detection and quantification of the plasmid-mediated mcr-1 gene conferring colistin resistance in wastewater. *International Journal of Antimicrobial Agents*, **2017**, 50, 734-736 | 14.3 | 26 |
| 64 | Sewers as potential reservoirs of antibiotic resistance. *Science of the Total Environment*, **2017**, 605-606, 1047-1054 | 10.2 | 70 |
| 63 | Wastewater pollution differently affects the antibiotic resistance gene pool and biofilm bacterial communities across streambed compartments. *Molecular Ecology*, **2017**, 26, 5567-5581 | 5.7 | 35 |
| 62 | Exploring the contribution of bacteriophages to antibiotic resistance. *Environmental Pollution*, **2017** , 220, 981-984 | 9.3 | 81 |
| 61 | Insights in the ecology and evolutionary history of the Miscellaneous Crenarchaeotic Group lineage. *ISME Journal*, **2016**, 10, 665-77 | 11.9 | 70 |
| 60 | Abundance of antibiotic resistance genes in five municipal wastewater treatment plants in the Monastir Governorate, Tunisia. *Environmental Pollution*, **2016**, 219, 353-358 | 9.3 | 69 |
| 59 | Metagenomic analysis reveals that bacteriophages are reservoirs of antibiotic resistance genes. *International Journal of Antimicrobial Agents*, **2016**, 48, 163-7 | 14.3 | 89 |

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| 58 | High Bacterial Diversity and Phylogenetic Novelty in Dark Euxinic Freshwaters Analyzed by 16S Tag Community Profiling. *Microbial Ecology*, **2016**, 71, 566-74 | 4.4 | 5 |
| 57 | 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 | 10.2 | 25 |
| 56 | Occurrence and persistence of antibiotic resistance genes in river biofilms after wastewater inputs in small rivers. *Environmental Pollution*, **2016**, 210, 121-8 | 9.3 | 106 |
| 55 | Stream Biofilm Responses to Flow Intermittency: From Cells to Ecosystems. *Frontiers in Environmental Science*, **2016**, 4, | 4.8 | 59 |
| 54 | Diversity of freshwater Epsilonproteobacteria and dark inorganic carbon fixation in the sulphidic redoxcline of a meromictic karstic lake. *FEMS Microbiology Ecology*, **2015**, 91, | 4.3 | 16 |
| 53 | Diversity of Miscellaneous Crenarchaeotic Group archaea in freshwater karstic lakes and their segregation between planktonic and sediment habitats. *FEMS Microbiology Ecology*, **2015**, 91, | 4.3 | 35 |
| 52 | Changes in Microbial Biofilm Communities during Colonization of Sewer Systems. *Applied and Environmental Microbiology*, **2015**, 81, 7271-80 | 4.8 | 35 |
| 51 | 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 | 12.5 | 844 |
| 50 | Implications of Downstream Nitrate Dosage in anaerobic sewers to control sulfide and methane emissions. *Water Research*, **2015**, 68, 522-32 | 12.5 | 48 |
| 49 | Application of Microcosm and Mesocosm Experiments to Pollutant Effects in Biofilms. *Springer Protocols*, **2015**, 135-151 | 0.3 | |
| 48 | Pelagic photoferrotrophy and iron cycling in a modern ferruginous basin. *Scientific Reports*, **2015**, 5, 13803 | 4.9 | 57 |
| 47 | Collection and Processing of River Organisms and Water Column Organisms. *Springer Protocols*, **2015**, 219-228 | 0.3 | 1 |
| 46 | The role of biofilms as environmental reservoirs of antibiotic resistance. *Frontiers in Microbiology*, **2015**, 6, 1216 | 5.7 | 207 |
| 45 | Patterns in Abundance, Cell Size and Pigment Content of Aerobic Anoxygenic Phototrophic Bacteria along Environmental Gradients in Northern Lakes. *PLoS ONE*, **2015**, 10, e0124035 | 3.7 | 27 |
| 44 | Connecting biodiversity and potential functional role in modern euxinic environments by microbial metagenomics. *ISME Journal*, **2015**, 9, 1648-61 | 11.9 | 73 |
| 43 | Marked seasonality of aerobic anoxygenic phototrophic bacteria in the coastal NW Mediterranean Sea as revealed by cell abundance, pigment concentration and pyrosequencing of pufM gene. *Environmental Microbiology*, **2014**, 16, 2953-65 | 5.2 | 41 |
| 42 | The dynamics of biofilm bacterial communities is driven by flow wax and wane in a temporary stream. *Limnology and Oceanography*, **2014**, 59, 2057-2067 | 4.8 | 25 |
| 41 | Shifts in microbial community structure and function in light- and dark-grown biofilms driven by warming. *Environmental Microbiology*, **2014**, 16, 2550-67 | 5.2 | 29 |

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| 40 | Specific Archaeal Communities are Selected on the Root Surfaces of Ruppia spp. and Phragmites australis. *Wetlands*, **2014**, 34, 403-411 | 1.7 | 16 |
| 39 | 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 | 3 | 3 |
| 38 | 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 | 2.5 | 26 |
| 37 | Microbial Ecology of Lake Kivu **2012**, 85-105 | | 8 |
| 36 | Active bacteria and archaea cells fixing bicarbonate in the dark along the water column of a stratified eutrophic lagoon. *FEMS Microbiology Ecology*, **2011**, 77, 370-84 | 4.3 | 21 |
| 35 | Maintenance of previously uncultured freshwater archaea from anoxic waters under laboratory conditions. *Antonie Van Leeuwenhoek*, **2011**, 99, 403-8 | 2.1 | 6 |
| 34 | Phosphorus deficiency and kinetics of alkaline phosphatase in isolates and natural populations of phototrophic sulphur bacteria. *FEMS Microbiology Ecology*, **2010**, 73, 243-53 | 4.3 | 4 |
| 33 | 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, 6853-63 | 4.8 | 75 |
| 32 | Availability of glucose and light modulates the structure and function of a microbial biofilm. *FEMS Microbiology Ecology*, **2009**, 69, 27-42 | 4.3 | 59 |
| 31 | 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 | 4.3 | 28 |
| 30 | 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, 321-31 | 3.6 | 20 |
| 29 | New phylotypes of mesophilic filamentous anoxygenic phototrophic bacteria enriched from sulfide-containing environments. *Environmental Microbiology Reports*, **2009**, 1, 86-93 | 3.7 | 7 |
| 28 | New phylotypes of mesophilic filamentous anoxygenic phototrophic bacteria enriched from sulfide-containing environments. *Environmental Microbiology Reports*, **2009**, 1, 169-169 | 3.7 | |
| 27 | 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, 2527-36 | 5.2 | 28 |
| 26 | High archaeal richness in the water column of a freshwater sulfurous karstic lake along an interannual study. *FEMS Microbiology Ecology*, **2008**, 66, 331-42 | 4.3 | 78 |
| 25 | Flow cytometric identification and enumeration of photosynthetic sulfur bacteria and potential for ecophysiological studies at the single-cell level. *Environmental Microbiology*, **2007**, 9, 1969-85 | 5.2 | 30 |
| 24 | 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 CL1401¶. *Photochemistry and Photobiology* , **2007**, 72, 669-675 | 3.6 | 3 |
| 23 | Bacteriochlorophyll e Monomers, but Not Aggregates, Sensitize Singlet Oxygen: Implications for a Self-photoprotection Mechanism in Chlorosomes¶. *Photochemistry and Photobiology*, **2007**, 76, 373-380 | 3.6 | |

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| 22 | Internal structure of chlorosomes from brown-colored chlorobium species and the role of carotenoids in their assembly. *Biophysical Journal*, **2006**, 91, 1433-40 | 2.9 | 65 |
| 21 | Signature pigments of green sulfur bacteria in lower Pleistocene deposits from the Banyoles lacustrine area (Spain). *Journal of Paleolimnology*, **2005**, 34, 271-280 | 2.1 | 18 |
| 20 | Characterization of the chlorosome antenna of the filamentous anoxygenic phototrophic bacterium Chloronema sp. strain UdG9001. *Archives of Microbiology*, **2003**, 180, 417-26 | 3 | 19 |
| 19 | Determination of the topography and biometry of chlorosomes by atomic force microscopy. *Photosynthesis Research*, **2002**, 71, 83-90 | 3.7 | 72 |
| 18 | Bacteriochlorophyll e monomers, but not aggregates, sensitize singlet oxygen: implications for a self-photoprotection mechanism in chlorosomes. *Photochemistry and Photobiology*, **2002**, 76, 373-80 | 3.6 | 12 |
| 17 | Effect of carotenoid deficiency on cells and chlorosomes of Chlorobium phaeobacteroides. *Archives of Microbiology*, **2001**, 175, 226-33 | 3 | 20 |
| 16 | Light responses in the green sulfur bacterium Prosthecochloris aestuarii: changes in prosthecae length, ultrastructure, and antenna pigment composition. *Archives of Microbiology*, **2001**, 176, 278-84 | 3 | 17 |
| 15 | Identification of the bacteriochlorophyll homologues of Chlorobium phaeobacteroides strain UdG6053 grown at low light intensity. *Photosynthesis Research*, **2001**, 70, 221-30 | 3.7 | 28 |
| 14 | Variability of the photosynthetic antenna of a Pelodictyon clathratiforme population from a freshwater holomictic pond. *FEMS Microbiology Ecology*, **2001**, 37, 11-19 | 4.3 | 6 |
| 13 | Effect of Carotenoid Biosynthesis Inhibition on the Chlorosome Organization in Chlorobium phaeobacteroides Strain CL1401. *Photochemistry and Photobiology*, **2000**, 71, 715-723 | 3.6 | 33 |
| 12 | 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 | 4.6 | 23 |
| 11 | Effect of carotenoid biosynthesis inhibition on the chlorosome organization in Chlorobium phaeobacteroides strain CL1401. *Photochemistry and Photobiology*, **2000**, 71, 715-23 | 3.6 | 13 |
| 10 | 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 CL1401. *Photochemistry and Photobiology*, **2000**, 72, 669-75 | 3.6 | 21 |
| 9 | Evidence for spatially separate bacteriochlorophyll c and bacteriochlorophyll d pools within the chlorosomal aggregate of the green sulfur bacterium Chlorobium limicola. *Photosynthesis Research*, **1999**, 59, 231-241 | 3.7 | 17 |
| 8 | Light intensity effects on pigment composition and organisation in the green sulfur bacterium Chlorobium tepidum. *Photosynthesis Research*, **1999**, 59, 159-166 | 3.7 | 73 |
| 7 | The molar extinction coefficient of bacteriochlorophyll e and the pigment stoichiometry in Chlorobium phaeobacteroides. *Photosynthesis Research*, **1999**, 60, 257-264 | 3.7 | 52 |
| 6 | Growth-rate-dependent bacteriochlorophyll c/d ratio in the antenna of Chlorobium limicola strain UdG6040. *Archives of Microbiology*, **1999**, 171, 350-354 | 3 | 15 |
| 5 | Temporal variability of Chlorobium phaeobacteroides antenna pigments in a meromictic karstic lake. *Aquatic Microbial Ecology*, **1999**, 17, 121-129 | 1.1 | 14 |

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| 4 | Vertical distribution of photosynthetic sulphur bacteria linked to saline gradients in Lake UEl TobarU (Cuenca, Spain). *Aquatic Microbial Ecology*, **1999**, 20, 299-303 | 1.1 | 8 |
| 3 | Occurrence of new bacteriochlorophyll d forms in natural populations of green photosynthetic sulfur bacteria. *FEMS Microbiology Ecology*, **1998**, 26, 257-267 | 4.3 | 25 |
| 2 | Rearrangement of light harvesting bacteriochlorophyll homologues as a response of green sulfur bacteria to low light intensities. *Photosynthesis Research*, **1995**, 45, 21-30 | 3.7 | 81 |
| 1 | Separation of bacteriochlorophyll homologues from green photosynthetic sulfur bacteria by reversed-phase HPLC. *Photosynthesis Research*, **1994**, 41, 157-64 | 3.7 | 91 |