Christophe Merlin

List of Publications by Year in Descending Order

52 papers	5,594 citations	29 h-index	54 g-index
54 ext. papers	6,639 ext. citations	7.2 avg, IF	5.5 L-index

#	Paper	IF	Citations
52	Identification of antibiotics triggering the dissemination of antibiotic resistance genes by SXT/R391 elements using a dedicated high-throughput whole-cell biosensor assay. *Journal of Antimicrobial Chemotherapy*, **2021**,	5.1	2
51	F-Specific RNA Bacteriophage Transport in Stream Water: Hydro-Meteorological Controls and Association with Suspended Solids. *Water (Switzerland)*, **2021**, 13, 2250	3	0
50	Abundance and environmental host range of the SXT/R391 ICEs in aquatic environmental communities. *Environmental Pollution*, **2021**, 288, 117673	9.3	2
49	Reducing the Consumption of Antibiotics: Would That Be Enough to Slow Down the Dissemination of Resistances in the Downstream Environment?. *Frontiers in Microbiology*, **2020**, 11, 33	5.7	15
48	Cell-Free DNA: An Underestimated Source of Antibiotic Resistance Gene Dissemination at the Interface Between Human Activities and Downstream Environments in the Context of Wastewater Reuse. *Frontiers in Microbiology*, **2020**, 11, 671	5.7	22
47	Zn leakage and photo-induced reactive oxidative species do not explain the full toxicity of ZnO core Quantum Dots. *Journal of Hazardous Materials*, **2020**, 396, 122616	12.8	6
46	A global multinational survey of cefotaxime-resistant coliforms in urban wastewater treatment plants. *Environment International*, **2020**, 144, 106035	12.9	17
45	Inter-laboratory calibration of quantitative analyses of antibiotic resistance genes. *Journal of Environmental Chemical Engineering*, **2020**, 8, 102214	6.8	29
44	Antibiotic resistance genes in treated wastewater and in the receiving water bodies: A pan-European survey of urban settings. *Water Research*, **2019**, 162, 320-330	12.5	117
43	Suspended Materials in River Waters Differentially Enrich Class 1 Integron- and IncP-1 Plasmid-Carrying Bacteria in Sediments. *Frontiers in Microbiology*, **2018**, 9, 1443	5.7	10
42	ZnO Nanorods with High Photocatalytic and Antibacterial Activity under Solar Light Irradiation. *Materials*, **2018**, 11,	3.5	16
41	Inducibility of Tn916 conjugative transfer in Enterococcus faecalis by subinhibitory concentrations of ribosome-targeting antibiotics. *Journal of Antimicrobial Chemotherapy*, **2017**, 72, 2722-2728	5.1	32
40	Comparing TiO photocatalysis and UV-C radiation for inactivation and mutant formation of Salmonella typhimurium TA102. *Environmental Science and Pollution Research*, **2017**, 24, 1871-1879	5.1	11
39	Deciphering the aggregation mechanism of bacteria (Shewanella oneidensis MR1) in the presence of polyethyleneimine: Effects of the exopolymeric superstructure and polymer molecular weight. *Colloids and Surfaces B: Biointerfaces*, **2016**, 139, 285-93	6	6
38	Trace amounts of Cu□+ ions influence ROS production and cytotoxicity of ZnO quantum dots. *Journal of Hazardous Materials*, **2016**, 304, 532-42	12.8	29
37	Chronic impact of sulfamethoxazole on the metabolic activity and composition of enriched nitrifying microbial culture. *Water Research*, **2016**, 100, 546-555	12.5	30
36	High Throughput Analysis of Integron Gene Cassettes in Wastewater Environments. *Environmental Science & Technology*, **2016**, 50, 11825-11836	10.3	59

35	Tackling antibiotic resistance: the environmental framework. *Nature Reviews Microbiology*, **2015**, 13, 310-7	22.2	1092
34	Stability and toxicity of ZnO quantum dots: interplay between nanoparticles and bacteria. *Journal of Hazardous Materials*, **2015**, 283, 110-6	12.8	38
33	Chronic impact of tetracycline on nitrification kinetics and the activity of enriched nitrifying microbial culture. *Water Research*, **2015**, 72, 227-38	12.5	41
32	Incidence of the core composition on the stability, the ROS production and the toxicity of CdSe quantum dots. *Journal of Hazardous Materials*, **2014**, 268, 246-55	12.8	46
31	Comparison of seven methods for extraction of bacterial DNA from fecal and cecal samples of mice. *Journal of Microbiological Methods*, **2014**, 105, 180-5	2.8	32
30	Demonstrating plasmid-based horizontal gene transfer in complex environmental matrices: a practical approach for a critical review. *Science of the Total Environment*, **2014**, 493, 872-82	10.2	57
29	Natural microbial communities supporting the transfer of the IncP-1 plasmid pB10 exhibit a higher initial content of plasmids from the same incompatibility group. *Frontiers in Microbiology*, **2014**, 5, 637	5.7	11
28	Atypical stress response to temperature and NaOCl exposure leading to septation defect during cell division in Cupriavidus metallidurans CH34. *FEMS Microbiology Letters*, **2014**, 353, 32-9	2.9	2
27	Urban wastewater treatment plants as hotspots for antibiotic resistant bacteria and genes spread into the environment: a review. *Science of the Total Environment*, **2013**, 447, 345-60	10.2	1383
26	Impact of certain household micropollutants on bacterial behavior. Toxicity tests/study of extracellular polymeric substances in sludge. *Science of the Total Environment*, **2013**, 463-464, 355-65	10.2	27
25	Urban wastewater treatment plants as hotspots for the release of antibiotics in the environment: a review. *Water Research*, **2013**, 47, 957-95	12.5	1189
24	Patterned hydrophobic domains in the exopolymer matrix of Shewanella oneidensis MR-1 biofilms. *Applied and Environmental Microbiology*, **2013**, 79, 1400-2	4.8	21
23	Polyethyleneimine-mediated flocculation of Shewanella oneidensis MR-1: impacts of cell surface appendage and polymer concentration. *Water Research*, **2012**, 46, 1838-46	12.5	13
22	Physicochemical properties and cellular toxicity of (poly)aminoalkoxysilanes-functionalized ZnO quantum dots. *Nanotechnology*, **2012**, 23, 335101	3.4	64
21	Aqueous Route to Biocompatible ZnSe:Mn/ZnO Core/Shell Quantum Dots Using 1-Thioglycerol As Stabilizer. *Chemistry of Materials*, **2011**, 23, 3706-3713	9.6	74
20	Persistence and dissemination of the multiple-antibiotic-resistance plasmid pB10 in the microbial communities of wastewater sludge microcosms. *Water Research*, **2011**, 45, 2897-905	12.5	55
19	Bacterial surface appendages strongly impact nanomechanical and electrokinetic properties of Escherichia coli cells subjected to osmotic stress. *PLoS ONE*, **2011**, 6, e20066	3.7	59
18	Impact of internal RNA on aggregation and electrokinetics of viruses: comparison between MS2 phage and corresponding virus-like particles. *Applied and Environmental Microbiology*, **2011**, 77, 4939-48	4.8	58

17	Monitoring the dissemination of the broad-host-range plasmid pB10 in sediment microcosms by quantitative PCR. *Applied and Environmental Microbiology*, **2010**, 76, 378-82	4.8	22
16	Biocompatible and stable ZnO quantum dots generated by functionalization with siloxane-core PAMAM dendrons. *Journal of Materials Chemistry*, **2010**, 20, 1147-1155		122
15	Improving the recovery of qPCR-grade DNA from sludge and sediment. *Applied Microbiology and Biotechnology*, **2010**, 87, 2303-11	5.7	10
14	Assessment of Damage to Nucleic Acids and Repair Machinery in Salmonella typhimurium Exposed to Chlorine. *International Journal of Microbiology*, **2009**, 2009, 201868	3.6	3
13	The exposure of bacteria to CdTe-core quantum dots: the importance of surface chemistry on cytotoxicity. *Nanotechnology*, **2009**, 20, 225101	3.4	83
12	Tracking antibiotic resistance gene transfers in activated sludge reactors. *Proceedings of the Water Environment Federation*, **2008**, 2008, 7524-7537		
11	Why is carbonic anhydrase essential to Escherichia coli?. *Journal of Bacteriology*, **2003**, 185, 6415-24	3.5	163
10	The biphenyl- and 4-chlorobiphenyl-catabolic transposon Tn4371, a member of a new family of genomic islands related to IncP and Ti plasmids. *Applied and Environmental Microbiology*, **2003**, 69, 4837-45	4.8	91
9	Mobile elements as a combination of functional modules. *Plasmid*, **2002**, 47, 26-35	3.3	113
8	Tools for characterization of Escherichia coli genes of unknown function. *Journal of Bacteriology*, **2002**, 184, 4573-81	3.5	69
7	The Escherichia coli metD locus encodes an ABC transporter which includes Abc (MetN), YaeE (MetI), and YaeC (MetQ). *Journal of Bacteriology*, **2002**, 184, 5513-7	3.5	80
6	Occurrence of Tn4371-related mobile elements and sequences in (chloro)biphenyl-degrading bacteria. *Applied and Environmental Microbiology*, **2001**, 67, 42-50	4.8	29
5	Tn4371: A modular structure encoding a phage-like integrase, a Pseudomonas-like catabolic pathway, and RP4/Ti-like transfer functions. *Plasmid*, **1999**, 41, 40-54	3.3	51
4	A GntR-like negative regulator of the biphenyl degradation genes of the transposon Tn4371. *Molecular Genetics and Genomics*, **1999**, 262, 790-9		41
3	Organisation of the bph gene cluster of transposon Tn4371, encoding enzymes for the degradation of biphenyl and 4-chlorobiphenyl compounds. *Molecular Genetics and Genomics*, **1997**, 253, 499-506		30
2	Introduction of Pseudomonas aeruginosa mutator phage D3112 into Alcaligenes eutrophus strain CH34. *Research in Microbiology*, **1995**, 146, 245-50	4	4
1	Characterization of a temperate phage hosted by Alcaligenes eutrophus strain A5. *Research in Microbiology*, **1993**, 144, 627-31	4	5