

Christophe Merlin

List of Publications by Year in descending order

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53
papers

7,463
citations

136740

32
h-index

168136

53
g-index

54
all docs

54
docs citations

54
times ranked

9493
citing authors

#	ARTICLE	IF	CITATIONS
1	Urban wastewater treatment plants as hotspots for antibiotic resistant bacteria and genes spread into the environment: A review. <i>Science of the Total Environment</i> , 2013, 447, 345-360.	3.9	1,784
2	Tackling antibiotic resistance: the environmental framework. <i>Nature Reviews Microbiology</i> , 2015, 13, 310-317.	13.6	1,612
3	Urban wastewater treatment plants as hotspots for the release of antibiotics in the environment: A review. <i>Water Research</i> , 2013, 47, 957-995.	5.3	1,518
4	Antibiotic resistance genes in treated wastewater and in the receiving water bodies: A pan-European survey of urban settings. <i>Water Research</i> , 2019, 162, 320-330.	5.3	231
5	Why Is Carbonic Anhydrase Essential to <i>Escherichia coli</i> ?. <i>Journal of Bacteriology</i> , 2003, 185, 6415-6424.	1.0	210
6	Biocompatible and stable ZnO quantum dots generated by functionalization with siloxane-core PAMAM dendrons. <i>Journal of Materials Chemistry</i> , 2010, 20, 1147-1155.	6.7	141
7	Mobile Elements as a Combination of Functional Modules. <i>Plasmid</i> , 2002, 47, 26-35.	0.4	134
8	The Biphenyl- and 4-Chlorobiphenyl-Catabolic Transposon Tn 4371 , a Member of a New Family of Genomic Islands Related to IncP and Ti Plasmids. <i>Applied and Environmental Microbiology</i> , 2003, 69, 4837-4845.	1.4	101
9	The <i>Escherichia coli</i> metD Locus Encodes an ABC Transporter Which Includes Abc (MetN), YaeE (MetI), and YaeC (MetQ). <i>Journal of Bacteriology</i> , 2002, 184, 5513-5517.	1.0	96
10	The exposure of bacteria to CdTe-core quantum dots: the importance of surface chemistry on cytotoxicity. <i>Nanotechnology</i> , 2009, 20, 225101.	1.3	93
11	Tools for Characterization of <i>Escherichia coli</i> Genes of Unknown Function. <i>Journal of Bacteriology</i> , 2002, 184, 4573-4581.	1.0	86
12	Physicochemical properties and cellular toxicity of (poly)aminoalkoxysilanes-functionalized ZnO quantum dots. <i>Nanotechnology</i> , 2012, 23, 335101.	1.3	81
13	Aqueous Route to Biocompatible ZnSe:Mn/ZnO Core/Shell Quantum Dots Using 1-Thioglycerol As Stabilizer. <i>Chemistry of Materials</i> , 2011, 23, 3706-3713.	3.2	78
14	Impact of Internal RNA on Aggregation and Electrokinetics of Viruses: Comparison between MS2 Phage and Corresponding Virus-Like Particles. <i>Applied and Environmental Microbiology</i> , 2011, 77, 4939-4948.	1.4	77
15	Demonstrating plasmid-based horizontal gene transfer in complex environmental matrices: A practical approach for a critical review. <i>Science of the Total Environment</i> , 2014, 493, 872-882.	3.9	75
16	Bacterial Surface Appendages Strongly Impact Nanomechanical and Electrokinetic Properties of <i>Escherichia coli</i> Cells Subjected to Osmotic Stress. <i>PLoS ONE</i> , 2011, 6, e20066.	1.1	69
17	High Throughput Analysis of Integron Gene Cassettes in Wastewater Environments. <i>Environmental Science & Technology</i> , 2016, 50, 11825-11836.	4.6	68
18	Persistence and dissemination of the multiple-antibiotic-resistance plasmid pB10 in the microbial communities of wastewater sludge microcosms. <i>Water Research</i> , 2011, 45, 2897-2905.	5.3	63

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19	Tn4371: A Modular Structure Encoding a Phage-like Integrase, a Pseudomonas-like Catabolic Pathway, and RP4/Ti-like Transfer Functions. <i>Plasmid</i> , 1999, 41, 40-54.	0.4	56
20	Incidence of the core composition on the stability, the ROS production and the toxicity of CdSe quantum dots. <i>Journal of Hazardous Materials</i> , 2014, 268, 246-255.	6.5	55
21	A global multinational survey of cefotaxime-resistant coliforms in urban wastewater treatment plants. <i>Environment International</i> , 2020, 144, 106035.	4.8	55
22	Chronic impact of tetracycline on nitrification kinetics and the activity of enriched nitrifying microbial culture. <i>Water Research</i> , 2015, 72, 227-238.	5.3	50
23	Inducibility of Tn916 conjugative transfer in <i>Enterococcus faecalis</i> by subinhibitory concentrations of ribosome-targeting antibiotics. <i>Journal of Antimicrobial Chemotherapy</i> , 2017, 72, 2722-2728.	1.3	48
24	Stability and toxicity of ZnO quantum dots: Interplay between nanoparticles and bacteria. <i>Journal of Hazardous Materials</i> , 2015, 283, 110-116.	6.5	45
25	Inter-laboratory calibration of quantitative analyses of antibiotic resistance genes. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 102214.	3.3	45
26	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. <i>Frontiers in Microbiology</i> , 2020, 11, 671.	1.5	45
27	A GntR-like negative regulator of the biphenyl degradation genes of the transposon Tn4371. <i>Molecular Genetics and Genomics</i> , 1999, 262, 790-799.	2.4	44
28	Comparison of seven methods for extraction of bacterial DNA from fecal and cecal samples of mice. <i>Journal of Microbiological Methods</i> , 2014, 105, 180-185.	0.7	44
29	Chronic impact of sulfamethoxazole on the metabolic activity and composition of enriched nitrifying microbial culture. <i>Water Research</i> , 2016, 100, 546-555.	5.3	43
30	Trace amounts of Cu ²⁺ ions influence ROS production and cytotoxicity of ZnO quantum dots. <i>Journal of Hazardous Materials</i> , 2016, 304, 532-542.	6.5	42
31	Organisation of the bph gene cluster of transposon Tn4371, encoding enzymes for the degradation of biphenyl and 4-chlorobiphenyl compounds. <i>Molecular Genetics and Genomics</i> , 1997, 253, 499-506.	2.4	36
32	Impact of certain household micropollutants on bacterial behavior. Toxicity tests/study of extracellular polymeric substances in sludge. <i>Science of the Total Environment</i> , 2013, 463-464, 355-365.	3.9	35
33	Occurrence of Tn 4371 -Related Mobile Elements and Sequences in (Chloro)biphenyl-Degrading Bacteria. <i>Applied and Environmental Microbiology</i> , 2001, 67, 42-50.	1.4	31
34	Monitoring the Dissemination of the Broad-Host-Range Plasmid pB10 in Sediment Microcosms by Quantitative PCR. <i>Applied and Environmental Microbiology</i> , 2010, 76, 378-382.	1.4	27
35	Reducing the Consumption of Antibiotics: Would That Be Enough to Slow Down the Dissemination of Resistances in the Downstream Environment?. <i>Frontiers in Microbiology</i> , 2020, 11, 33.	1.5	25
36	ZnO Nanorods with High Photocatalytic and Antibacterial Activity under Solar Light Irradiation. <i>Materials</i> , 2018, 11, 2158.	1.3	24

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37	Patterned Hydrophobic Domains in the Exopolymer Matrix of <i>Shewanella oneidensis</i> MR-1 Biofilms. <i>Applied and Environmental Microbiology</i> , 2013, 79, 1400-1402.	1.4	23
38	Natural microbial communities supporting the transfer of the IncP-1 plasmid pB10 exhibit a higher initial content of plasmids from the same incompatibility group. <i>Frontiers in Microbiology</i> , 2014, 5, 637.	1.5	23
39	Comparing TiO ₂ photocatalysis and UV-C radiation for inactivation and mutant formation of <i>Salmonella typhimurium</i> TA102. <i>Environmental Science and Pollution Research</i> , 2017, 24, 1871-1879.	2.7	22
40	Zn ²⁺ leakage and photo-induced reactive oxidative species do not explain the full toxicity of ZnO core Quantum Dots. <i>Journal of Hazardous Materials</i> , 2020, 396, 122616.	6.5	18
41	Polyethyleneimine-mediated flocculation of <i>Shewanella oneidensis</i> MR-1: Impacts of cell surface appendage and polymer concentration. <i>Water Research</i> , 2012, 46, 1838-1846.	5.3	17
42	Suspended Materials in River Waters Differentially Enrich Class 1 Integron- and IncP-1 Plasmid-Carrying Bacteria in Sediments. <i>Frontiers in Microbiology</i> , 2018, 9, 1443.	1.5	15
43	Improving the recovery of qPCR-grade DNA from sludge and sediment. <i>Applied Microbiology and Biotechnology</i> , 2010, 87, 2303-2311.	1.7	14
44	Characterization of a temperate phage hosted by <i>Alcaligenes eutrophus</i> strain A5. <i>Research in Microbiology</i> , 1993, 144, 627-631.	1.0	10
45	Abundance and environmental host range of the SXT/R391 ICEs in aquatic environmental communities. <i>Environmental Pollution</i> , 2021, 288, 117673.	3.7	8
46	Deciphering the aggregation mechanism of bacteria (<i>Shewanella oneidensis</i> MR1) in the presence of polyethyleneimine: Effects of the exopolymeric superstructure and polymer molecular weight. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 139, 285-293.	2.5	7
47	EpicPCR 2.0: Technical and Methodological Improvement of a Cutting-Edge Single-Cell Genomic Approach. <i>Microorganisms</i> , 2021, 9, 1649.	1.6	7
48	Introduction of <i>Pseudomonas aeruginosa</i> mutator phage D3112 into <i>Alcaligenes eutrophus</i> strain CH34. <i>Research in Microbiology</i> , 1995, 146, 245-250.	1.0	5
49	Assessment of Damage to Nucleic Acids and Repair Machinery in <i>Salmonella typhimurium</i> Exposed to Chlorine. <i>International Journal of Microbiology</i> , 2009, 2009, 1-5.	0.9	4
50	Identification of antibiotics triggering the dissemination of antibiotic resistance genes by SXT/R391 elements using a dedicated high-throughput whole-cell biosensor assay. <i>Journal of Antimicrobial Chemotherapy</i> , 2021, 77, 112-123.	1.3	3
51	Atypical stress response to temperature and NaOCl exposure leading to septation defect during cell division in <i>Cupriavidus metallidurans</i> CH34. <i>FEMS Microbiology Letters</i> , 2014, 353, 33-39.	0.7	2
52	F-Specific RNA Bacteriophage Transport in Stream Water: Hydro-Meteorological Controls and Association with Suspended Solids. <i>Water (Switzerland)</i> , 2021, 13, 2250.	1.2	2
53	Tracking antibiotic resistance gene transfers in activated sludge reactors. <i>Proceedings of the Water Environment Federation</i> , 2008, 2008, 7524-7537.	0.0	0