

# CITATION REPORT

List of articles citing

## Dissemination of Antimicrobial Resistance in Microbial Ecosystems through Horizontal Gene Transfer

DOI: 10.3389/fmicb.2016.00173  
Frontiers in Microbiology, 2016, 7, 173.

**Source:** <https://exaly.com/paper-pdf/63228385/citation-report.pdf>

**Version:** 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
837	A Review of SHV Extended-Spectrum $\beta$ -Lactamases: Neglected Yet Ubiquitous. <i>Frontiers in Microbiology</i> , <b>2016</b> , 7, 1374	5.7	83
836	Prevalence of the Antibiotic Resistance Genes in Coagulase-Positive-and Negative- in Chicken Meat Retailed to Consumers. <i>Frontiers in Microbiology</i> , <b>2016</b> , 7, 1846	5.7	34
835	Insights on the Horizontal Gene Transfer of Carbapenemase Determinants in the Opportunistic Pathogen <i>Acinetobacter baumannii</i> . <b>2016</b> , 4,		51
834	Dissecting the effects of antibiotics on horizontal gene transfer: Analysis suggests a critical role of selection dynamics. <b>2016</b> , 38, 1283-1292		29
833	Acyldepsipeptide antibiotics as a potential therapeutic agent against <i>Clostridium difficile</i> recurrent infections. <b>2016</b> , 11, 1179-89		9
832	Detection of the plasmid-mediated colistin-resistance gene <i>mcr-1</i> in faecal metagenomes of Dutch travellers. <b>2016</b> , 71, 3416-3419		51
831	Exploring divergent antibiotic resistance genes in ancient metagenomes and discovery of a novel beta-lactamase family. <b>2016</b> , 8, 886-895		15
830	The antimicrobial resistance crisis: management through gene monitoring. <b>2016</b> , 6,		5
829	Fate and Persistence of a Pathogenic NDM-1-Positive <i>Escherichia coli</i> Strain in Anaerobic and Aerobic Sludge Microcosms. <b>2017</b> , 83,		13
828	Antimicrobial resistance and genetic diversity of the SXT element in <i>Vibrio cholerae</i> from clinical and environmental water samples in northeastern Thailand. <b>2017</b> , 52, 89-95		13
827	Unraveling Antimicrobial Susceptibility of Bacterial Networks on Micropillar Architectures Using Intrinsic Phase-Shift Spectroscopy. <b>2017</b> , 11, 6167-6177		38
826	Cryo-EM Structure of a Relaxase Reveals the Molecular Basis of DNA Unwinding during Bacterial Conjugation. <b>2017</b> , 169, 708-721.e12		35
825	Glycopeptide resistance: Links with inorganic phosphate metabolism and cell envelope stress. <b>2017</b> , 133, 74-85		7
824	Stormwater loadings of antibiotic resistance genes in an urban stream. <b>2017</b> , 123, 144-152		60
823	The Candidatus <i>Liberibacter</i> -Host Interface: Insights into Pathogenesis Mechanisms and Disease Control. <b>2017</b> , 55, 451-482		161
822	A Microbiological Assay for Assessing the Applicability of Advanced Oxidation Processes for Eliminating the Sublethal Effects of Antibiotics on Selection of Resistant Bacteria. <b>2017</b> , 4, 251-255		8
821	A kinetic model for horizontal transfer and bacterial antibiotic resistance. <b>2017</b> , 10, 1750051		8

820	Occurrence of antibiotics in rural catchments. <b>2017</b> , 168, 483-490	56
819	Antimicrobial resistance and virulence profile of enterococci isolated from poultry and cattle sources in Nigeria. <b>2017</b> , 49, 451-458	23
818	Sampling the mobile gene pool: innovation via horizontal gene transfer in bacteria. <b>2017</b> , 372,	88
817	The Mobile Resistome in Wastewater Treatment Facilities and Downstream Environments. <b>2017</b> , 129-155	7
816	Untangling the cecal microbiota of feral chickens by culturomic and metagenomic analyses. <b>2017</b> , 19, 4771-4783	33
815	Antibiotics Promote Escherichia coli-Pseudomonas aeruginosa Conjugation through Inhibiting Quorum Sensing. <b>2017</b> , 61,	19
814	Mechanisms of antibiotic resistance in bacteria mediated by silver nanoparticles. <b>2017</b> , 80, 1276-1289	79
813	Evolutionary Rescue. <b>2017</b> , 48, 605-627	129
812	Antimicrobial Resistance in Hospital Wastewaters. <b>2017</b> , 309-319	
811	Marine Microbial Community Adaptation and Resiliency to Anthropogenic Stresses Through Horizontal Gene Transfer. <b>2017</b> , 109-131	
810	Monitoring of genetically modified Escherichia coli in laboratory wastewater. <b>2017</b> , 24, 23725-23734	2
809	Structural and Functional Survey of Environmental Aminoglycoside Acetyltransferases Reveals Functionality of Resistance Enzymes. <b>2017</b> , 3, 653-665	6
808	Infectious disease management must be evolutionary. <b>2017</b> , 1, 1053-1055	3
807	The Distribution, Evolution, and Roles of Gene Transfer Agents in Prokaryotic Genetic Exchange. <b>2017</b> , 4, 87-104	56
806	Phenotypic and genetic heterogeneity within biofilms with particular emphasis on persistence and antimicrobial tolerance. <b>2017</b> , 12, 1087-1107	14
805	Persistence and reversal of plasmid-mediated antibiotic resistance. <b>2017</b> , 8, 1689	139
804	Assessing the Impact of Wastewater Treatment Plants on Environmental Levels of Antibiotic Resistance. <b>2017</b> , 55-72	1
803	Characterization of antibiotic resistant and pathogenic Escherichia coli in irrigation water and vegetables in household farms. <b>2017</b> , 257, 192-200	62

802	Introducing the sporobiota and sporobiome. <b>2017</b> , 9, 38		30
801	Translational metagenomics and the human resistome: confronting the menace of the new millennium. <b>2017</b> , 95, 41-51		16
800	Genome-based insights into the resistome and mobilome of multidrug-resistant <i>Aeromonas</i> sp. ARM81 isolated from wastewater. <b>2017</b> , 199, 177-183		10
799	Antibiotic resistance. <b>2017</b> , 10, 369-378		362
798	Plasmids can transfer to <i>Clostridium difficile</i> CD37 and 630 $\beta$ rm both by a DNase resistant conjugation-like mechanism and a DNase sensitive mechanism. <b>2017</b> , 364,		1
797	Prevalence of multidrug resistant <i>Staphylococcus aureus</i> in GonoShastho Nagar Hospital, Dhaka, Bangladesh. <b>2017</b> , 11, 1223-1229		2
796	Genomic Analysis of Third Generation Cephalosporin Resistant <i>Escherichia coli</i> from Dairy Cow Manure. <b>2017</b> , 4,		6
795	Is Genetic Mobilization Considered When Using Bacteriophages in Antimicrobial Therapy?. <b>2017</b> , 6,		7
794	The Complex Relationship between Virulence and Antibiotic Resistance. <b>2017</b> , 8,		129
793	A Preliminary List of Horizontally Transferred Genes in Prokaryotes Determined by Tree Reconstruction and Reconciliation. <b>2017</b> , 8, 112		10
792	Differential Ability of Bovine Antimicrobial Cathelicidins to Mediate Nucleic Acid Sensing by Epithelial Cells. <b>2017</b> , 8, 59		11
791	Group 1 Capsular Polysaccharide Exportation Nanomachinery as a Plausible Antivirulence Target in the Perspective of Emerging Antimicrobial Resistance. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 70	5-7	22
790	Bacteriophages Contribute to the Spread of Antibiotic Resistance Genes among Foodborne Pathogens of the Family - A Review. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 1108	5-7	96
789	Horizontally Acquired Genes Are Often Shared between Closely Related Bacterial Species. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 1536	5-7	9
788	Antibacterial Activity of Endophytic Actinomycetes Isolated from the Medicinal Plant (Pantanal, Brazil). <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 1642	5-7	33
787	Prion-Like Domains in Phagobiota. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 2239	5-7	19
786	Revisiting Antibiotic Resistance Spreading in Wastewater Treatment Plants - Bacteriophages as a Much Neglected Potential Transmission Vehicle. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 2298	5-7	47
785	Conjugation Inhibitors and Their Potential Use to Prevent Dissemination of Antibiotic Resistance Genes in Bacteria. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 2329	5-7	26

784	Detection of antibiotic resistance genes in the feces of young adult Japanese. <b>2017</b> , 36, 151-154	3
783	Phylloxerids share ancestral carotenoid biosynthesis genes of fungal origin with aphids and adelgids. <b>2017</b> , 12, e0185484	15
782	Multi-drug resistance and extended spectrum beta lactamase producing Gram negative bacteria from chicken meat in Bharatpur Metropolitan, Nepal. <b>2017</b> , 10, 574	27
781	Effects of earthworms on the fate of tetracycline and fluoroquinolone resistance genes of sewage sludge during vermicomposting. <b>2018</b> , 259, 32-39	50
780	PCR screening of antimicrobial resistance genes in faecal samples from Australian and Chinese children. <b>2018</b> , 14, 178-181	2
779	Botulinum neurotoxin-encoding plasmids can be conjugatively transferred to diverse clostridial strains. <b>2018</b> , 8, 3100	13
778	Toward prediction and control of antibiotic-resistance evolution. <b>2018</b> , 54, 45-49	37
777	Metagenomics Reveals the Impact of Wastewater Treatment Plants on the Dispersal of Microorganisms and Genes in Aquatic Sediments. <b>2018</b> , 84,	84
776	Biochemical mechanisms determine the functional compatibility of heterologous genes. <b>2018</b> , 9, 522	43
775	Impacts of biochar on the environmental risk of antibiotic resistance genes and mobile genetic elements during anaerobic digestion of cattle farm wastewater. <b>2018</b> , 256, 342-349	74
774	Environmental Dissemination of Multidrug Methicillin-Resistant Staphylococcus sciuri After Application of Manure from Commercial Swine Production Systems. <b>2018</b> , 15, 210-217	17
773	Anti-biofilm and anti-virulence potential of 3,7-dimethyloct-6-enal derived from Citrus hystrix against bacterial blight of rice caused by Xanthomonas oryzae pv. oryzae. <b>2018</b> , 115, 264-271	5
772	Novel environmental class 1 integrons and cassette arrays recovered from an on-farm bio-purification plant. <b>2018</b> , 94,	6
771	Phage particles harboring antibiotic resistance genes in fresh-cut vegetables and agricultural soil. <b>2018</b> , 115, 133-141	52
770	Antimicrobial resistance mechanisms and potential synthetic treatments. <b>2018</b> , 4, FSO290	46
769	Alternatives to antibiotics in poultry feed: molecular perspectives. <b>2018</b> , 44, 318-335	96
768	Sub-inhibitory concentrations of fluoroquinolones increase conjugation frequency. <b>2018</b> , 114, 57-62	25
767	Ecological and evolutionary dynamics of a model facultative pathogen: Agrobacterium and crown gall disease of plants. <b>2018</b> , 20, 16-29	36

766	Prevalence and transmission of antibiotic resistance and microbiota between humans and water environments. <b>2018</b> , 121, 1155-1161		62
765	Antimicrobial Consumption and Susceptibility of : A Global Ecological Analysis. <b>2018</b> , 5, 329		18
764	Antibiotic Resistance Mechanisms in Bacteria: Relationships Between Resistance Determinants of Antibiotic Producers, Environmental Bacteria, and Clinical Pathogens. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 2928	5.7	282
763	Genomic Study of a Multidrug Resistant Outbreak-Related Clone Reveals Novel Determinants of Resistance. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 2994	5.7	16
762	Genome-wide analysis of horizontally acquired genes in the genus Mycobacterium. <b>2018</b> , 8, 14817		14
761	Pull in and Push Out: Mechanisms of Horizontal Gene Transfer in Bacteria. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 2154	5.7	43
760	Evaluating biological plausibility in supporting evidence for action through systematic reviews in public health. <b>2018</b> , 165, 48-57		2
759	Modified U-Tube for Ruling out Naked DNA Transfer during Conjugation and Application in Antibiotic Resistance Genes Transfer Research. <b>2018</b> , 10, 1313		
758	In vivo competition and horizontal gene transfer among distinct Staphylococcus aureus lineages as major drivers for adaptational changes during long-term persistence in humans. <b>2018</b> , 18, 152		11
757	Horizontal Plasmid Transfer by Transformation in : Environmental Factors and Possible Mechanisms. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 2365	5.7	31
756	Comparative genome analysis reveals key genetic factors associated with probiotic property in Enterococcus faecium strains. <b>2018</b> , 19, 652		26
755	Effects of Sexual Network Connectivity and Antimicrobial Drug Use on Antimicrobial Resistance in Neisseria gonorrhoeae. <b>2018</b> , 24, 1195-1203		44
754	Bacterial Sexuality at the Nanoscale. <b>2018</b> , 18, 5821-5826		8
753	Relationship between modification of activated sludge wastewater treatment and changes in antibiotic resistance of bacteria. <b>2018</b> , 639, 304-315		77
752	ISAbal and Tn6168 acquisition by natural transformation leads to third-generation cephalosporins resistance in Acinetobacter baumannii. <b>2018</b> , 63, 13-16		6
751	Evolution of Salmonella within Hosts. <b>2018</b> , 26, 986-998		32
750	Multi-Drug Resistant Coliform: Water Sanitary Standards and Health Hazards. <b>2018</b> , 9, 311		14
749	Alterations of Salmonella enterica Serovar Typhimurium Antibiotic Resistance under Environmental Pressure. <b>2018</b> , 84,		19

748	Biodegradation and Bioremediation: An Introduction. <b>2018</b> , 1-21		1
747	Nitrogen removal, microbial community and electron transport in an integrated nitrification and denitrification system for ammonium-rich wastewater treatment. <b>2018</b> , 133, 202-209		30
746	Strategies to Combat Antibiotic Resistance in the Wastewater Treatment Plants. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 2603	5-7	131
745	Light as a Broad-Spectrum Antimicrobial. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 119	5-7	36
744	A Novel Strategy for Detecting Recent Horizontal Gene Transfer and Its Application to Strains. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 973	5-7	9
743	The Effect of Primary, Secondary, and Tertiary Wastewater Treatment Processes on Antibiotic Resistance Gene (ARG) Concentrations in Solid and Dissolved Wastewater Fractions. <b>2018</b> , 10, 37		43
742	Antibiotic Resistance Characterization of Environmental Isolated from River Mula-Mutha, Pune District, India. <b>2018</b> , 15,		18
741	Acquisition and dissemination of cephalosporin-resistant E. coli in migratory birds sampled at an Alaska landfill as inferred through genomic analysis. <b>2018</b> , 8, 7361		40
740	Relating Phage Genomes to Population Structure: General Steps Using Whole-Genome Sequencing Data. <b>2018</b> , 19,		6
739	Molecular epidemiology of isolates with multiple mcr plasmids from a pig farm in Great Britain: the effects of colistin withdrawal in the short and long term. <b>2018</b> , 73, 3025-3033		26
738	Improved genomic island predictions with IslandPath-DIMOB. <b>2018</b> , 34, 2161-2167		42
737	Water and sanitation: an essential battlefield in the war on antimicrobial resistance. <b>2018</b> , 94,		64
736	Contribution of Healthy Chickens to Antimicrobial-Resistant Escherichia coli Associated with Human Extraintestinal Infections in Egypt. <b>2018</b> , 18, 408-416		8
735	A novel microfluidic system enables visualization and analysis of antibiotic resistance gene transfer to activated sludge bacteria in biofilm. <b>2018</b> , 642, 582-590		34
734	Microbial genomic island discovery, visualization and analysis. <b>2019</b> , 20, 1685-1698		36
733	Reducing water use by alternate-furrow irrigation with livestock wastewater reduces antibiotic resistance gene abundance in the rhizosphere but not in the non-rhizosphere. <b>2019</b> , 648, 12-24		10
732	Ag@SnO <sub>2</sub> @ZnO core-shell nanocomposites assisted solar-photocatalysis downregulates multidrug resistance in Bacillus sp.: A catalytic approach to impede antibiotic resistance. <b>2019</b> , 259, 118065		29
731	Antimicrobial susceptibility profile of selected Enterobacteriaceae in wastewater samples from health facilities, abattoir, downstream rivers and a WWTP in Addis Ababa, Ethiopia. <b>2019</b> , 8, 134		11

730	Antibiotic Resistance in Lactic Acid Bacteria. <b>2019</b> ,		13
729	Prevalence and molecular epidemiology of ESBLs, plasmid-determined AmpC-type $\beta$ -lactamases and carbapenemases among diarrhoeagenic <i>Escherichia coli</i> isolates from children in Gwangju, Korea: 2007-16. <b>2019</b> , 74, 2181-2187		8
728	Exploration of activated sludge resistome using metagenomics. <b>2019</b> , 692, 1155-1164		15
727	Parenting. <b>2019</b> , 9-38		
726	Effects of nano-zerovalent iron on antibiotic resistance genes during the anaerobic digestion of cattle manure. <b>2019</b> , 289, 121688		41
725	Comparative Genomics of Convergent Evolution. <b>2019</b> , 307-325		
724	Occurrence of antibiotics and their associations with antibiotic resistance genes and bacterial communities in Guangdong coastal areas. <b>2019</b> , 186, 109796		22
723	Antibiotic Resistance Patterns of Diverse Phylogenetic Groups Isolated from the Al-Hillah River in Babylon Province, Iraq. <b>2019</b> , 2019, 5927059		2
722	Pneumonia due to <i>Pandoraea Apista</i> after evacuation of traumatic intracranial hematomas: a case report and literature review. <b>2019</b> , 19, 869		4
721	One System for All: Is Mass Spectrometry a Future Alternative for Conventional Antibiotic Susceptibility Testing?. <i>Frontiers in Microbiology</i> , <b>2019</b> , 10, 2711	5-7	13
720	Insights into the Bacterial Profiles and Resistome Structures Following the Severe 2018 Flood in Kerala, South India. <b>2019</b> , 7,		2
719	Transposon-Mediated Horizontal Transfer of the Host-Specific Virulence Protein ToxA between Three Fungal Wheat Pathogens. <b>2019</b> , 10,		28
718	Antibiotic-Induced, Increased Conjugative Transfer Is Common to Diverse Naturally Occurring ESBL Plasmids in. <i>Frontiers in Microbiology</i> , <b>2019</b> , 10, 2119	5-7	23
717	Host-transposon interactions: conflict, cooperation, and cooption. <b>2019</b> , 33, 1098-1116		101
716	Antibiotic Resistant Spp. Spoilers in Fresh Dairy Products: An Underestimated Risk and the Control Strategies. <b>2019</b> , 8,		31
715	Human Milk Microbiota: Transferring the Antibiotic Resistome to Infants. <b>2019</b> , 59, 410-416		2
714	Mathematical modelling to study the horizontal transfer of antimicrobial resistance genes in bacteria: current state of the field and recommendations. <b>2019</b> , 16, 20190260		20
713	Infectious phage particles packaging antibiotic resistance genes found in meat products and chicken feces. <b>2019</b> , 9, 13281		43



712	Tradeoffs between resistance to antimicrobials in public health and their use in agriculture: Moving towards sustainability assessment. <b>2019</b> , 166, 106427	6
711	Comparison of Antibiotic Resistance Mechanisms in Antibiotic-Producing and Pathogenic Bacteria. <b>2019</b> , 24,	29
710	Self-Sterilizing Laser-Induced Graphene Bacterial Air Filter. <b>2019</b> , 13, 11912-11920	65
709	Competence for Natural Transformation Is Common among Clinical Strains of Resistant spp. <b>2019</b> , 7,	17
708	Mycoplasmas under experimental antimicrobial selection: The unpredicted contribution of horizontal chromosomal transfer. <b>2019</b> , 15, e1007910	18
707	Rare earth oxide nanoparticles promote soil microbial antibiotic resistance by selectively enriching antibiotic resistance genes. <b>2019</b> , 6, 456-466	22
706	Antimicrobial Silver Nanoparticles: Future of Nanomaterials. <b>2019</b> , 89-119	11
705	NanoARG: a web service for detecting and contextualizing antimicrobial resistance genes from nanopore-derived metagenomes. <b>2019</b> , 7, 88	32
704	Antibiotic resistance in major rivers in the world: A systematic review on occurrence, emergence, and management strategies. <b>2019</b> , 234, 1484-1505	139
703	Exploring the persistence and spreading of antibiotic resistance from manure to biocompost, soils and vegetables. <b>2019</b> , 688, 262-269	25
702	Bartonella gene transfer agent: Evolution, function, and proposed role in host adaptation. <b>2019</b> , 21, e13068	7
701	Stopping Untreatable Pathogen Infections Using Peptide Ligands to Sabotage Pathogenic Cell Surface Proteins. <b>2019</b> , 61, 602-609	2
700	The Rise and Fall of Antibiotics in Aquaculture. <b>2019</b> , 1-19	5
699	Effects of inoculation with lignocellulose-degrading microorganisms on antibiotic resistance genes and the bacterial community during co-composting of swine manure with spent mushroom substrate. <b>2019</b> , 252, 110-118	36
698	Multidrug-Resistant Bacteria from Raw Meat of Buffalo and Chicken, Nepal. <b>2019</b> , 2019, 7960268	16
697	CO promotes the conjugative transfer of multiresistance genes by facilitating cellular contact and plasmid transfer. <b>2019</b> , 129, 333-342	25
696	Copper nanoparticles and copper ions promote horizontal transfer of plasmid-mediated multi-antibiotic resistance genes across bacterial genera. <b>2019</b> , 129, 478-487	78
695	Literature-based, manually-curated database of PCR primers for the detection of antibiotic resistance genes in various environments. <b>2019</b> , 161, 211-221	8

694	Effect of antibiotic use and composting on antibiotic resistance gene abundance and resistome risks of soils receiving manure-derived amendments. <b>2019</b> , 128, 233-243	61
693	Growth and selection of the cyanobacterium <i>Synechococcus</i> sp. PCC 7002 using alternative nitrogen and phosphorus sources. <b>2019</b> , 54, 255-263	22
692	Comparative assessment of the therapeutic drug targets of <i>C. botulinum</i> ATCC 3502 and <i>C. difficile</i> str. 630 using in silico subtractive proteomics approach. <b>2019</b> , 120, 16160-16184	6
691	Factors that affect the occurrence and distribution of antibiotic resistance genes in soils from livestock and poultry farms. <b>2019</b> , 180, 114-122	40
690	Water Disinfection Byproducts Increase Natural Transformation Rates of Environmental DNA in <i>Acinetobacter baylyi</i> ADP1. <b>2019</b> , 53, 6520-6528	38
689	Microbial Diversity and Antimicrobial Resistance Profile in Microbiota From Soils of Conventional and Organic Farming Systems. <i>Frontiers in Microbiology</i> , <b>2019</b> , 10, 892	5-7 43
688	Development of antimicrobial resistance: future challenges. <b>2019</b> , 383-408	1
687	Pharmaceuticals and personal care products mediated antimicrobial resistance: future challenges. <b>2019</b> , 409-428	4
686	Co-Occurrence of crAssphage with Antibiotic Resistance Genes in an Impacted Urban Watershed. <b>2019</b> , 6, 216-221	32
685	Assessing evolutionary risks of resistance for new antimicrobial therapies. <b>2019</b> , 3, 515-517	29
684	Peptoid drug discovery and optimization via surface X-ray scattering. <b>2019</b> , 110, e23274	6
683	Diversity and abundance of antibiotic resistance of bacteria during the seedling period in marine fish cage-culture areas of Hainan, China. <b>2019</b> , 141, 343-349	14
682	MetaCHIP: community-level horizontal gene transfer identification through the combination of best-match and phylogenetic approaches. <b>2019</b> , 7, 36	27
681	Antimicrobial-Resistant from Environmental Waters in Northern Colorado. <b>2019</b> , 2019, 3862949	30
680	Antibiotic Resistance in the Neonatal Intensive Care Unit. <b>2019</b> , 20, e135-e144	12
679	Bacterial 'Grounded' Prophages: Hotspots for Genetic Renovation and Innovation. <b>2019</b> , 10, 65	53
678	VERA: agent-based modeling transmission of antibiotic resistance between human pathogens and gut microbiota. <b>2019</b> , 35, 3803-3811	3
677	The Molecular Mechanisms Underlying Hidden Phenotypic Variation among Metallo- $\beta$ -Lactamases. <b>2019</b> , 431, 1172-1185	12

676	Pathogenic potential of non-typhoidal Salmonella serovars isolated from aquatic environments in Mexico. <b>2019</b> , 41, 767-779	2
675	De novo Assembly Vastly Expands the Known Microbial Universe. <b>2019</b> , 27, 385-386	
674	Antibiotic Usage in Poultry Production and Antimicrobial-Resistant Salmonella in Poultry. <b>2019</b> , 47-66	4
673	Biological and Structural Diversity of Type IV Secretion Systems. <b>2019</b> , 7,	25
672	Two Component Regulatory Systems and Antibiotic Resistance in Gram-Negative Pathogens. <b>2019</b> , 20,	51
671	Antibiotic resistome profile based on metagenomics in raw surface drinking water source and the influence of environmental factor: A case study in Huaihe River Basin, China. <b>2019</b> , 248, 438-447	31
670	Multidrug resistance and multivirulence plasmids in enterotoxigenic and hybrid Shiga toxin-producing/enterotoxigenic Escherichia coli isolated from diarrheic pigs in Switzerland. <b>2019</b> , 244, 60-68	11
669	Comparative removal of antibiotic resistance genes during chlorination, ozonation, and UV treatment. <b>2019</b> , 222, 541-548	62
668	Metagenomic analysis of bacterial communities and antibiotic resistance genes in the Eriocheir sinensis freshwater aquaculture environment. <b>2019</b> , 224, 202-211	41
667	DNA Traffic in the Environment and Antimicrobial Resistance. <b>2019</b> , 245-271	0
666	Evolutionary Model of Cluster Divergence of the Emergent Marine Pathogen : From Genotype to Ecotype. <b>2019</b> , 10,	27
665	La recherche en stratégies antibactériennes : nouvelles pistes, nouveaux enjeux ?. <b>2019</b> , 203, 179-185	1
664	Selection and Transmission of Antibiotic-Resistant Bacteria. <b>2019</b> , 117-137	1
663	Bacteriophages in Engineered Bioreactors. <b>2019</b> , 1-11	
662	Biological and Structural Diversity of Type IV Secretion Systems. <b>2019</b> , 277-289	1
661	Antibiotic-Resistant Enteric Infections. <b>2019</b> , 33, 1105-1123	13
660	Gut Bacteriophage: Current Understanding and Challenges. <b>2019</b> , 10, 784	66
659	Microbial transmission from mother to child: improving infant intestinal microbiota development by identifying the obstacles. <b>2019</b> , 45, 613-648	13

658	Relationship Between Structure And Antimicrobial Activity Of Zinc Oxide Nanoparticles: An Overview. <b>2019</b> , 14, 9395-9410	78
657	Anthropogenic environmental drivers of antimicrobial resistance in wildlife. <b>2019</b> , 649, 12-20	67
656	Solid-state anaerobic digestion facilitates the removal of antibiotic resistance genes and mobile genetic elements from cattle manure. <b>2019</b> , 274, 287-295	38
655	Ethnographic Decision Modeling to Understand Smallholder Antibiotic Use for Poultry in Guatemala. <b>2019</b> , 38, 295-310	3
654	Modelling environmental antibiotic-resistance gene abundance: A meta-analysis. <b>2019</b> , 659, 335-341	19
653	Microbial life beyond the grave: 16S rRNA gene-based metagenomic analysis of bacteria diversity and their functional profiles in cemetery environments. <b>2019</b> , 655, 831-841	28
652	Assessing Transmission of Antimicrobial-Resistant in Wild Giraffe Contact Networks. <b>2019</b> , 85,	9
651	Analysis of bacteriological pollution and the detection of antibiotic resistance genes of prevailing bacteria emanating from pig farm seepage. <b>2019</b> , 8, e00737	2
650	Conjugative potential of antibiotic resistance plasmids to activated sludge bacteria from wastewater treatment plants. <b>2019</b> , 138, 33-40	14
649	Phenotypic and genotypic characterization of antimicrobial resistant Escherichia coli isolated from ready-to-eat food in Singapore using disk diffusion, broth microdilution and whole genome sequencing methods. <b>2019</b> , 99, 89-97	20
648	Contributions and Challenges of High Throughput qPCR for Determining Antimicrobial Resistance in the Environment: A Critical Review. <b>2019</b> , 24,	44
647	A Curated, Comprehensive Database of Plasmid Sequences. <b>2019</b> , 8,	29
646	Deciphering Determinants in Ribosomal Methyltransferases That Confer Antimicrobial Resistance. <b>2019</b> , 141, 1425-1429	10
645	New insights into antibiotic resistome in drinking water and management perspectives: A metagenomic based study of small-sized microbes. <b>2019</b> , 152, 191-201	60
644	Real time monitoring of Aeromonas salmonicida evolution in response to successive antibiotic therapies in a commercial fish farm. <b>2019</b> , 21, 1113-1123	12
643	Inhibiting conjugation as a tool in the fight against antibiotic resistance. <b>2019</b> , 80, 19-23	20
642	Analysis of milk-derived isolates of E. coli indicating drug resistance in central Ethiopia. <b>2019</b> , 51, 661-667	5
641	Genus-Wide Assessment of Antibiotic Resistance in spp. <b>2019</b> , 85,	89

640	Antibiotics as both friends and foes of the human gut microbiome: The microbial community approach. <b>2019</b> , 80, 86-97	31
639	Antibiotic-resistant Shiga toxin-producing <i>Escherichia coli</i> : An overview of prevalence and intervention strategies. <b>2019</b> , 66, 1-13	29
638	A review of methods for the detection of pathogenic microorganisms. <b>2019</b> , 144, 396-411	162
637	Antiepileptic drug carbamazepine promotes horizontal transfer of plasmid-borne multi-antibiotic resistance genes within and across bacterial genera. <b>2019</b> , 13, 509-522	121
636	Selection and Transmission of Antibiotic-Resistant Bacteria. <b>2017</b> , 5,	26
635	Sources, behaviour and health risks of antimicrobial resistance genes in wastewaters: A hotspot reservoir. <b>2020</b> , 8, 102220	26
634	Raw wastewater irrigation for urban agriculture in three African cities increases the abundance of transferable antibiotic resistance genes in soil, including those encoding extended spectrum $\beta$ -lactamases (ESBLs). <b>2020</b> , 698, 134201	25
633	Recent updates on drug resistance in <i>Mycobacterium tuberculosis</i> . <b>2020</b> , 128, 1547-1567	73
632	Antibiotic resistance in <i>Vibrio cholerae</i> : Understanding the ecology of resistance genes and mechanisms. <b>2020</b> , 38 Suppl 1, A83-A92	51
631	MEGARes 2.0: a database for classification of antimicrobial drug, biocide and metal resistance determinants in metagenomic sequence data. <b>2020</b> , 48, D561-D569	73
630	Antibiotic resistance genes, class 1 integrons, and IncP-1/IncQ-1 plasmids in irrigation return flows. <b>2020</b> , 257, 113568	7
629	Think before you prescribe: how dentistry contributes to antibiotic resistance. <b>2020</b> , 65, 21-29	11
628	The role of hosts, plasmids and environment in determining plasmid transfer rates: A meta-analysis. <b>2020</b> , 108, 102489	16
627	Microbial community and antibiotic resistance profiles of biomass and effluent are distinctly affected by antibiotic addition to an anaerobic membrane bioreactor. <b>2020</b> , 6, 724-736	11
626	Tracking microbial evolution in the human gut using Hi-C reveals extensive horizontal gene transfer, persistence and adaptation. <b>2020</b> , 5, 343-353	48
625	Antimicrobial activity of endophytic fungi from the medicinal plants <i>Mammea americana</i> (Calophyllaceae) and <i>Moringa oleifera</i> (Moringaceae). <b>2020</b> , 40, 55-71	7
624	In Vitro Susceptibility of Multidrug Resistant Strains of <i>Salmonella</i> to Essential Oils. <b>2020</b> , 15, 1934578X1987890	
623	Clinical class 1 integron-integrase gene - A promising indicator to monitor the abundance and elimination of antibiotic resistance genes in an urban wastewater treatment plant. <b>2020</b> , 135, 105372	40

622	Antibiotics resistance mechanism. <b>2020</b> , 292-312		1
621	Antimicrobial pharmaceuticals in the aquatic environment - occurrence and environmental implications. <b>2020</b> , 866, 172813		109
620	Phage Transduction is Involved in the Intergeneric Spread of Antibiotic Resistance-Associated bla, mel, and tetM Loci in Natural Populations of Some Human and Animal Bacterial Pathogens. <b>2020</b> , 77, 185-193		11
619	Evidence of mutations conferring resistance to clarithromycin in wastewater and activated sludge. <b>2020</b> , 10, 7		2
618	The Role of Gut Microbiota in Antimicrobial Resistance: A Mini-Review. <b>2020</b> , 18, 201-206		1
617	Co-selection and stability of bacterial antibiotic resistance by arsenic pollution accidents in source water. <b>2020</b> , 135, 105351		20
616	Antimicrobial Resistance in and Resistance Genes in Coliphages from a Small Animal Clinic and in a Patient Dog with Chronic Urinary Tract Infection. <b>2020</b> , 9,		2
615	Tackling Multidrug Resistance in Streptococci - From Novel Biotherapeutic Strategies to Nanomedicines. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 579916	5-7	10
614	The 'thanato-resistome' - The funeral industry as a potential reservoir of antibiotic resistance: Early insights and perspectives. <b>2020</b> , 749, 141120		20
613	Antimicrobial Resistance in Escherichia coli. <b>2020</b> ,		7
612	Relationship between Virulence and Resistance among Gram-Negative Bacteria. <b>2020</b> , 9,		17
611	A converging subset of soil bacterial taxa is permissive to the IncP-1 plasmid pJK5 across a range of soil copper contamination. <b>2020</b> , 96,		0
610	Bacteriophages isolated from hospital wastewater and its role in controlling drug-resistant pathogens. <b>2020</b> , 327-376		1
609	The Conjugation Window in an Escherichia coli K-12 Strain with an IncFII Plasmid. <b>2020</b> , 86,		6
608	The role of during co-infection with avian pathogenic in avian colibacillosis. <b>2020</b> , 49, 589-599		8
607	Living Therapeutics: The Next Frontier of Precision Medicine. <b>2020</b> , 9, 3184-3201		2
606	State-of-the-Art of the Nutritional Alternatives to the Use of Antibiotics in Humans and Monogastric Animals. <b>2020</b> , 10,		4
605	Antibiotic Sensitivity Screening of spp. and spp. Isolated from Marine Bivalve Molluscs Reveal Presence of CTX-M-Producing. <b>2020</b> , 8,		5

604	Multiple plasmid origin-of-transfer regions might aid the spread of antimicrobial resistance to human pathogens. <b>2020</b> , 9, e1129		5
603	The Roles of Microbial Cell-Cell Chemical Communication Systems in the Modulation of Antimicrobial Resistance. <b>2020</b> , 9,		7
602	Correlation between Exogenous Compounds and the Horizontal Transfer of Plasmid-Borne Antibiotic Resistance Genes. <b>2020</b> , 8,		17
601	High diversity and variability of pipolins among a wide range of pathogenic Escherichia coli strains. <b>2020</b> , 10, 12452		3
600	Farm dust resistomes and bacterial microbiomes in European poultry and pig farms. <b>2020</b> , 143, 105971		23
599	Genetic relatedness, phylogenetic groups, antibiotic resistance, and virulence genes associated with ExPEC in Escherichia coli isolates from finfish and shellfish. <b>2020</b> , 44, e14837		0
598	MCR-1 Gene Encoded Colistin-Resistant in Raw Chicken Meat and Bean Sprouts in Malaysia. <b>2020</b> , 2020, 8853582		6
597	Three Years of Evaluation to Determine Reduction of Antibiotic Resistance in Gram-Negative Bacteria by the Saudi National Action Plan. <b>2020</b> , 13, 3657-3667		3
596	Extended Spectrum $\beta$ -Lactamase (ESBL) Producing in Pigs and Pork Meat in the European Union. <b>2020</b> , 9,		13
595	Carbapenem-resistant bacilli in a hospital in southern Brazil: prevalence and therapeutic implications. <b>2020</b> , 24, 380-385		
594	Antimicrobial resistance in fecal Escherichia coli isolated from poultry chicks in northern Iran. <b>2020</b> , 21, 100926		1
593	CryoEM structure of the type IVa pilus secretin required for natural competence in Vibrio cholerae. <b>2020</b> , 11, 5080		8
592	Secondary Effects of Antibiotics on Microbial Biofilms. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 2109	5-7	12
591	The Association between Insertion Sequences and Antibiotic Resistance Genes. <b>2020</b> , 5,		24
590	Characterization of Antibiotic Resistance and Metal Homeostasis Genes in Midwest USA Agricultural Sediments. <b>2020</b> , 12, 2476		0
589	Diversity and genetic lineages of environmental staphylococci: a surface water overview. <b>2020</b> , 96,		8
588	A Review of Antimicrobial Resistance in Poultry Farming within Low-Resource Settings. <b>2020</b> , 10,		32
587	Assessment of bacterial diversity and their antibiotic resistance profiles in wastewater treatment plants and their receiving Ganges River in Prayagraj (Allahabad), India. <b>2020</b> , 33, 744-749		1

586	Genes on the Move: In Vitro Transduction of Antimicrobial Resistance Genes between Human and Canine Staphylococcal Pathogens. <b>2020</b> , 8,		6
585	Simulated Winter Incubation of Soil With Swine Manure Differentially Affects Multiple Antimicrobial Resistance Elements. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 611912	5-7	2
584	Immunization of Chickens with the Enterobactin Conjugate Vaccine Reduced Colonization in the Intestine. <b>2020</b> , 8,		3
583	Singularities of Pyogenic Streptococcal Biofilms - From Formation to Health Implication. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 584947	5-7	3
582	Performance of Layer-by-Layer-Modified Multibore Ultrafiltration Capillary Membranes for Salt Retention and Removal of Antibiotic Resistance Genes. <b>2020</b> , 10,		4
581	Bioinformatics and machine learning in gastrointestinal microbiome research and clinical application. <b>2020</b> , 176, 141-178		4
580	Large-Scale Metagenome Assembly Reveals Novel Animal-Associated Microbial Genomes, Biosynthetic Gene Clusters, and Other Genetic Diversity. <b>2020</b> , 5,		21
579	Community-Acquired Antimicrobial Resistant Enterobacteriaceae in Central America: A One Health Systematic Review. <b>2020</b> , 17,		3
578	Non-antibiotic pharmaceuticals enhance the transmission of exogenous antibiotic resistance genes through bacterial transformation. <b>2020</b> , 14, 2179-2196		53
577	Large-scale network analysis captures biological features of bacterial plasmids. <b>2020</b> , 11, 2452		25
576	Antimicrobial Resistance in ESKAPE Pathogens. <b>2020</b> , 33,		290
575	Freshwater viral metagenome reveals novel and functional phage-borne antibiotic resistance genes. <b>2020</b> , 8, 75		50
574	An African perspective on the prevalence, fate and effects of carbapenem resistance genes in hospital effluents and wastewater treatment plant (WWTP) final effluents: A critical review. <b>2020</b> , 6, e03899		7
573	Phenol Removal Capacity of the Common Duckweed ( <i>L.</i> ) and Six Phenol-Resistant Bacterial Strains From Its Rhizosphere: In Vitro Evaluation at High Phenol Concentrations. <b>2020</b> , 9,		3
572	Antivirulence compounds: a future direction to overcome antibiotic resistance?. <b>2020</b> , 15, 299-301		15
571	Phylogenetic background and habitat drive the genetic diversification of <i>Escherichia coli</i> . <b>2020</b> , 16, e1008866		52
570	Research Note: Repetitive element-based polymerase chain reaction genotyping improves efficiency of <i>Salmonella</i> surveillance in a model broiler production system. <b>2020</b> , 99, 2684-2689		3
569	No Prescription, No Problem! A Mixed-Methods Study of Antimicrobial Stewardship Relating to Working Equines in Drug Retail Outlets of Northern India. <b>2020</b> , 9,		3



568	Effects of concentrated poultry operations and cropland manure application on antibiotic resistant <i>Escherichia coli</i> and nutrient pollution in Chesapeake Bay watersheds. <b>2020</b> , 735, 139401		4
567	Dissemination of the blaCTX-M-15 gene among Enterobacteriaceae via outer membrane vesicles. <b>2020</b> , 75, 2442-2451		9
566	Characterization of KPC-Producing in an Intensive Care Unit of a Brazilian Tertiary Hospital. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 956	5-7	9
565	Horizontal Gene Transfer as a Source of Conflict and Cooperation in Prokaryotes. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 1569	5-7	14
564	Horizontal transfer of antibiotic resistance genes in the human gut microbiome. <b>2020</b> , 53, 35-43		65
563	Shifts in microbial community, pathogenicity-related genes and antibiotic resistance genes during dairy manure piled up. <b>2020</b> , 13, 1039-1053		4
562	Potential risks of antibiotic resistant bacteria and genes in bioremediation of petroleum hydrocarbon contaminated soils. <b>2020</b> , 22, 1110-1124		14
561	Antibiogram and beta-lactamase genes among cefotaxime resistant <i>E. coli</i> from wastewater treatment plant. <b>2020</b> , 9, 46		10
560	The effects of offshore petroleum exploitation on microbial community and antibiotic resistome of adjacent marine sediments. <b>2020</b> , 81, 2501-2510		1
559	Mobilization of Antibiotic Resistance: Are Current Approaches for Colocalizing Resistomes and Mobilomes Useful?. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 1376	5-7	14
558	Effect of donor-recipient relatedness on the plasmid conjugation frequency: a meta-analysis. <b>2020</b> , 20, 135		17
557	Prevalence of Colistin-Resistant, Carbapenem-Hydrolyzing Proteobacteria in Hospital Water Bodies and Out-Falls of West Bengal, India. <b>2020</b> , 17,		10
556	Design, Synthesis, and Antimicrobial Activities of 1,2,3-Triazole Glycoside Clickamers. <b>2020</b> , 25,		38
555	Impact of nano-TiO <sub>2</sub> on horizontal transfer of resistance genes mediated by filamentous phage transduction. <b>2020</b> , 7, 1214-1224		13
554	Biofilms: hot spots of horizontal gene transfer (HGT) in aquatic environments, with a focus on a new HGT mechanism. <b>2020</b> , 96,		80
553	Silicon dioxide nanoparticles have contrasting effects on the temporal dynamics of sulfonamide and $\beta$ -lactam resistance genes in soils amended with antibiotics. <b>2020</b> , 15, 034001		1
552	Proposal for rational antibacterial use in the diagnosis and treatment of dogs with chronic diarrhoea. <b>2020</b> , 61, 211-215		16
551	Influence of environmental conditions on extracellular and intracellular antibiotic resistance genes in manure-amended soil: A microcosm study. <b>2020</b> , 84, 747-759		3

550	Prevalence of extended-spectrum $\beta$ -lactamases in the local farm environment and livestock: challenges to mitigate antimicrobial resistance. <b>2020</b> , 46, 1-14	18
549	Spread of chloramphenicol and tetracycline resistance genes by plasmid mobilization in agricultural soil. <b>2020</b> , 260, 113998	11
548	Occurrence, distribution, and source track of antibiotics and antibiotic resistance genes in the main rivers of Chongqing city, Southwest China. <b>2020</b> , 389, 122110	26
547	Imidazolium salts as alternative compounds to control diseases caused by plant pathogenic bacteria. <b>2020</b> , 128, 1236-1247	7
546	Consecutive ultrafiltration and silica adsorption for recovery of extracellular antibiotic resistance genes from an urban river. <b>2020</b> , 260, 114062	7
545	Antimicrobial Resistance and Food Animals: Influence of Livestock Environment on the Emergence and Dissemination of Antimicrobial Resistance. <b>2020</b> , 9,	24
544	High variability of plasmid uptake rates in <i>Escherichia coli</i> isolated from sewage and river sediments. <b>2020</b> , 15, e0232130	2
543	Prevalence and seasonal dynamics of blaCTX-M antibiotic resistance genes and fecal indicator organisms in the lower Lahn River, Germany. <b>2020</b> , 15, e0232289	6
542	Antimicrobial Metal Nanomaterials: From Passive to Stimuli-Activated Applications. <b>2020</b> , 7, 1902913	79
541	Understanding the Underlying Psychosocial Determinants of Safe Food Handling among Consumers to Mitigate the Transmission Risk of Antimicrobial-Resistant Bacteria. <b>2020</b> , 17,	3
540	Antibiotic Susceptibility Profiles of Lactic Acid Bacteria from the Human Vagina and Genetic Basis of Acquired Resistances. <b>2020</b> , 21,	14
539	4-Amino-1,2,4-triazole-3-thione as a Promising Scaffold for the Inhibition of Serine and Metallo- $\beta$ -Lactamases. <b>2020</b> , 13,	5
538	The Aquatic Ecosystem, a Good Environment for the Horizontal Transfer of Antimicrobial Resistance and Virulence-Associated Factors Among Extended Spectrum $\beta$ -Lactamases Producing. <b>2020</b> , 8,	3
537	Bacterial Transformation Buffers Environmental Fluctuations through the Reversible Integration of Mobile Genetic Elements. <b>2020</b> , 11,	11
536	Effects of Cefazolin and Meropenem in Eradication Biofilms of Clinical and Environmental Isolates of <i>Proteus mirabilis</i> . <b>2020</b> , 77, 1681-1688	2
535	Starter cultures as a reservoir of antibiotic resistant microorganisms. <b>2020</b> , 127, 109424	11
534	Analysis of COMPASS, a New Comprehensive Plasmid Database Revealed Prevalence of Multireplicon and Extensive Diversity of IncF Plasmids. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 483	5-7 19
533	Determining Hosts of Antibiotic Resistance Genes: A Review of Methodological Advances. <b>2020</b> , 7, 282-291	35

532	Antibiotic resistome in the livestock and aquaculture industries: Status and solutions. <b>2021</b> , 51, 2159-2196	30
531	Dynamics of the antibiotic resistome in agricultural soils amended with different sources of animal manures over three consecutive years. <b>2021</b> , 401, 123399	21
530	Impacts of cadmium addition on the alteration of microbial community and transport of antibiotic resistance genes in oxytetracycline contaminated soil. <b>2021</b> , 99, 51-58	8
529	Intracellular versus extracellular antibiotic resistance genes in the environment: Prevalence, horizontal transfer, and mitigation strategies. <b>2021</b> , 319, 124181	37
528	The maturity period is the main stage of antibiotic resistance genes reduction in aerobic composting process of swine manure in sub-scale farms. <b>2021</b> , 319, 124139	10
527	The microbial community, its biochemical potential, and the antimicrobial resistance of <i>Enterococcus</i> spp. in Arctic lakes under natural and anthropogenic impact (West Spitsbergen). <b>2021</b> , 763, 142998	3
526	Impact of metallic nanoparticles on anaerobic digestion: A systematic review. <b>2021</b> , 757, 143747	24
525	Recombination proteins differently control the acquisition of homeologous DNA during <i>Bacillus subtilis</i> natural chromosomal transformation. <b>2021</b> , 23, 512-524	1
524	Antimicrobial drug resistance mechanisms among Mollicutes. <b>2021</b> , 57, 106253	4
523	Integron mediated antimicrobial resistance in diarrheagenic <i>Escherichia coli</i> in children: in vitro and in silico analysis. <b>2021</b> , 150, 104680	2
522	Prevalence of multi-resistant plasmids in hospital inhalable particulate matter (PM) and its impact on horizontal gene transfer. <b>2021</b> , 270, 116296	9
521	TiO photoexcitation promoted horizontal transfer of resistance genes mediated by phage transduction. <b>2021</b> , 760, 144040	6
520	Antibiotic and antibiotic-resistant gene loads in swine slurries and their digestates: Implications for their use as fertilizers in agriculture. <b>2021</b> , 194, 110513	2
519	Silver decorated green nanocolloids as potent antibacterial and antibiofilm agent against antibiotic resistant organisms isolated from tannery effluent. <b>2021</b> , 51, 823-831	8
518	Biofilm and Antimicrobial Resistance. <b>2021</b> , 183-208	0
517	Plasmid-mediated quinolone resistance genes transfer among enteric bacteria isolated from human and animal sources. <b>2021</b> , 7, 200-215	0
516	A genomic data resource for predicting antimicrobial resistance from laboratory-derived antimicrobial susceptibility phenotypes. <b>2021</b> , 22,	2
515	Predominance of III/ST19 and Ib/ST10 Lineages With High Multidrug Resistance in Fluoroquinolone-Resistant Group B Isolates in Which a New Integrative and Conjugative Element Was Identified. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 609526	5.7 2

514	Antibiotic resistance plasmid composition and architecture in Escherichia coli isolates from meat. <b>2021</b> , 11, 2136	11
513	Analysis of the condition of microbiocenoses and antibiotic resistance on a dairy farm in three-year dynamics. <b>2021</b> , 36, 06017	
512	Detection of carbapenem-resistance genes in bacteria isolated from wastewater in Ontario. <b>2021</b> , 6, 569-591	1
511	Plasmids shape the diverse accessory resistomes of ST131. <b>2021</b> , 3, acmi000179	4
510	Comparison of antibiotic resistance in the influent and effluent of two wastewater treatment plants. <b>2021</b> , 8, 101-116	2
509	Approaches for the inhibition and elimination of microbial biofilms using macromolecular agents. <b>2021</b> , 50, 1587-1616	28
508	Wastewater Treatment Plants as emerging source of antibiotic resistance. <b>2021</b> , 239-269	1
507	Metagenomic Approaches to Analyze Antimicrobial Resistance: An Overview. <b>2020</b> , 11, 575592	10
506	Nanotheranostics: A Possible Solution for Drug-Resistant and their Biofilms?. <b>2021</b> , 11,	9
505	Targeting evolution of antibiotic resistance by SOS response inhibition. <b>2021</b> , 19, 777-783	3
504	Detection of Antibiotic Residues in Food Using Biosensors. <b>2021</b> , 33, 1699-1708	1
503	One is not enough: On the effects of reference genome for the mapping and subsequent analyses of short-reads. <b>2021</b> , 17, e1008678	10
502	The oralome and its dysbiosis: New insights into oral microbiome-host interactions. <b>2021</b> , 19, 1335-1360	45
501	Flanker: a tool for comparative genomics of gene flanking regions.	0
500	Gene flux and acid-imposed selection are the main drivers of antimicrobial resistance in broiler chicks infected with Salmonella enterica serovar Heidelberg.	0
499	Approaches for characterizing and tracking hospital-associated multidrug-resistant bacteria. <b>2021</b> , 78, 2585-2606	5
498	Antibiotic Resistance in Shiga Toxigenic Isolates from Surface Waters and Sediments in a Mixed Use Urban Agricultural Landscape. <b>2021</b> , 10,	5
497	Assessment of Antimicrobial Resistance Dissemination Dynamics during Multidrug-Resistant-Bacterium Invasion Events by Using a Continuous-Culture Device. <b>2021</b> , 87,	2

496	The Role of Interspecies recombinations in the evolution of antibiotic-resistant pneumococci.	0
495	Impacts of Mechanical Stiffness of Bacteriophage-Loaded Hydrogels on Their Antibacterial Activity.. <b>2021</b> , 4, 2614-2627	1
494	Influence of Human Eating Habits on Antimicrobial Resistance Phenomenon: Aspects of Clinical Resistome of Gut Microbiota in Omnivores, Ovovore, and Strict Vegetarians. <b>2021</b> , 10,	1
493	Characterization of Environmental and Cultivable Antibiotic-Resistant Microbial Communities Associated with Wastewater Treatment. <b>2021</b> , 10,	3
492	Decreased colistin resistance and mcr-1 prevalence in pig-derived Escherichia coli in Japan after banning colistin as a feed additive. <b>2021</b> , 24, 383-386	9
491	Antimicrobial resistance in commensal Escherichia coli and Enterococcus spp. is influenced by production system, antimicrobial use, and biosecurity measures on Spanish pig farms. <b>2021</b> , 7, 27	3
490	Microbial Interactions in Pollution Control Ecosystems. <b>2021</b> , 7, 104-114	2
489	Prevalence and hazardous impact of pharmaceutical and personal care products and antibiotics in environment: A review on emerging contaminants. <b>2021</b> , 194, 110664	73
488	Antibiotic resistance: Global health crisis and metagenomics. <b>2021</b> , 29, e00604	15
487	Antimicrobial Resistance Profile and ExPEC Virulence Potential in Commensal of Multiple Sources. <b>2021</b> , 10,	9
486	Identification of Vibrio alginolyticus as a causative pathogen associated with mass summer mortality of the Pacific Oyster (Crassostrea gigas) in China. <b>2021</b> , 535, 736363	14
485	Non-antibiotic pharmaceuticals promote the transmission of multidrug resistance plasmids through intra- and intergenera conjugation. <b>2021</b> , 15, 2493-2508	15
484	Genetic diversity of extended-spectrum cephalosporin resistance in Salmonella enterica and E. coli isolates in a single broiler chicken. <b>2021</b> , 254, 109010	1
483	Indole Inhibits IncP-1 Conjugation System Mainly Through Promoting and Expression. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 628133	5-7 1
482	Poly(ionic liquid)/Ce-Based Antimicrobial Nanofibrous Membrane for Blocking Drug-Resistance Dissemination from MRSA-Infected Wounds. <b>2021</b> , 31, 2100336	10
481	Agricultural Soils Amended With Thermally-Dried Anaerobically-Digested Sewage Sludge Showed Increased Risk of Antibiotic Resistance Dissemination. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 666854	5-7 2
480	Effect of Antimicrobial Treatment on the Dynamics of Ceftiofur Resistance in Enterobacteriaceae from Adult California Dairy Cows. <b>2021</b> , 9,	0
479	Rapid Screening of Essential Oils as Substances Which Enhance Antibiotic Activity Using a Modified Well Diffusion Method. <b>2021</b> , 10,	3

478	Molecular characterization of water-borne multi-drug resistant Escherichia coli. <b>2021</b> , 15, 203-208	
477	Plasmidome AMR screening (PAMRS) workflow: a rapid screening workflow for phenotypic characterization of antibiotic resistance in plasmidomes. 4, 18	
476	Prevalence of antibiotic resistance genes and bacterial pathogens along the soil-mangrove root continuum. <b>2021</b> , 408, 124985	10
475	Uncertainties in synthetic DNA-based data storage. <b>2021</b> , 49, 5451-5469	5
474	Assembly of cationic and amphiphilic $\beta$ -sheet FKF tripeptide confers antibacterial activity. <b>2021</b> , 125, 231-241	6
473	Antimicrobial Resistance in Humans, Animals, Water and Household Environs in Rural Andean Peru: Exploring Dissemination Pathways through the One Health Lens. <b>2021</b> , 18,	4
472	Nosocomial Infections: Pathogenicity, Resistance and Novel Antimicrobials. <b>2021</b> , 5, 73-84	1
471	Hidden Resistome: Enrichment Reveals the Presence of Clinically Relevant Antibiotic Resistance Determinants in Treated Wastewater-Irrigated Soils. <b>2021</b> , 55, 6814-6827	7
470	Extended-Spectrum $\beta$ -Lactamase and Carbapenemase Genes are Substantially and Sequentially Reduced during Conveyance and Treatment of Urban Sewage. <b>2021</b> , 55, 5939-5949	3
469	Emerging role of ferrous iron in bacterial growth and host-pathogen interaction: New tools for chemical (micro)biology and antibacterial therapy. <b>2021</b> , 61, 170-178	1
468	A MODEL ON BACTERIAL RESISTANCE CONSIDERING A GENERALIZED LAW OF MASS ACTION FOR PLASMID REPLICATION. <b>2021</b> , 29, 375-412	1
467	Roadmap on biology in time varying environments. <b>2021</b> , 18,	2
466	Pollutants affect algae-bacteria interactions: A critical review. <b>2021</b> , 276, 116723	18
465	Diverse and abundant antibiotic resistance genes in mangrove area and their relationship with bacterial communities - A study in Hainan Island, China. <b>2021</b> , 276, 116704	6
464	Chlorine disinfection facilitates natural transformation through ROS-mediated oxidative stress. <b>2021</b> , 15, 2969-2985	23
463	The dilution effect limits plasmid horizontal transmission in multispecies bacterial communities.	
462	Properties affecting transfer and expression of degradative plasmids for the purpose of bioremediation. <b>2021</b> , 32, 361-375	0
461	Effects of Antibiotics on Impacted Aquatic Environment Microorganisms.	

460	Fate of antibiotic resistance genes during high solid anaerobic digestion with pig manure: Focused on different starting modes. <b>2021</b> , 328, 124849	6
459	Influence of typical pollutants in soil on the spread of antibiotic resistance genes. <b>2021</b> , 769, 022022	
458	Antibiotic-Resistant Bacteria in Aquaculture and Climate Change: A Challenge for Health in the Mediterranean Area. <b>2021</b> , 18,	21
457	Residual antimicrobial agents in food originating from animals. <b>2021</b> , 111, 141-150	16
456	Antimicrobial Resistance Profiles of Human Commensal Species. <b>2021</b> , 10,	3
455	Fish farm effluents as a source of antibiotic resistance gene dissemination on Jeju Island, South Korea. <b>2021</b> , 276, 116764	10
454	Enterococcal PrgU Provides Additional Regulation of Pheromone-Inducible Conjugative Plasmids. <b>2021</b> , 6, e0026421	1
453	The occurrence of antibiotic resistance genes in the microbiota of yak, beef and dairy cattle characterized by a metagenomic approach. <b>2021</b> , 74, 508-518	2
452	Conjugal Transfer of Antibiotic Resistances in <i>Lactobacillus</i> spp. <b>2021</b> , 78, 2839-2849	5
451	Identical sequences found in distant genomes reveal frequent horizontal transfer across the bacterial domain. <b>2021</b> , 10,	2
450	Seasonal Dynamics of Microbial Contamination and Antibiotic Resistance in the Water at the Tiet" Ecological Park, Brazil. <b>2021</b> , 232, 1	5
449	Environmental Stress Selects for Innovations That Drive <i>Vibrio</i> Symbiont Diversity. <b>2021</b> , 9,	0
448	Conjugal transfer of macrolide-lincosamide-streptogramin resistance from lactic acid bacteria isolated from food materials. <b>2021</b> ,	0
447	Thermophilic rather than mesophilic sludge anaerobic digesters possess lower antibiotic resistant genes abundance. <b>2021</b> , 329, 124924	9
446	Foodborne Pathogenic Vibrios: Antimicrobial Resistance. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 638331	5-7 6
445	Modeling bacterial resistance to antibiotics: bacterial conjugation and drug effects. <b>2021</b> , 2021,	0
444	Can heavy metal pollution induce bacterial resistance to heavy metals and antibiotics in soils from an ancient land-mine?. <b>2021</b> , 411, 124962	8
443	Treatment of wastewater effluents from Bogotá Colombia by the photo-electro-Fenton process: Elimination of bacteria and pharmaceutical. <b>2021</b> , 772, 144890	14

442	Potentials of metallic nanoparticles for the removal of antibiotic resistant bacteria and antibiotic resistance genes from wastewater: A critical review. <b>2021</b> , 41, 102041	6
441	as a Dynamic Vehicle for the Dissemination of Antimicrobial-Resistance Determinants: Review and In Silico Analysis. <b>2021</b> , 9,	3
440	Technologies towards antibiotic resistance genes (ARGs) removal from aquatic environment: A critical review. <b>2021</b> , 411, 125148	42
439	The dual nature of bacteriophage: growth-dependent predation and generalised transduction of antimicrobial resistance.	0
438	Nationwide surveillance reveals frequent detection of carbapenemase-producing Enterobacterales in Dutch municipal wastewater. <b>2021</b> , 776, 145925	3
437	The role of interspecies recombination in the evolution of antibiotic-resistant pneumococci. <b>2021</b> , 10,	1
436	The biological and chemical contents of atmospheric particulate matter and implication of its role in the transmission of bacterial pathogenesis. <b>2021</b> , 23, 5481-5486	1
435	Upgrading residues from wastewater and drinking water treatment plants as low-cost adsorbents to remove extracellular DNA and microorganisms carrying antibiotic resistance genes from treated effluents. <b>2021</b> , 778, 146364	6
434	Similar Antimicrobial Resistance of Strains Isolated from Retail Chickens and Poultry Farms. <b>2021</b> , 18, 489-496	1
433	Polystyrene microplastics alleviate the effects of sulfamethazine on soil microbial communities at different CO concentrations. <b>2021</b> , 413, 125286	10
432	The Interactions Between Antibiotic Resistance Genes and Heavy Metal Pollution Under Co-Selective Pressure Influenced the Bio-Enzyme Activity. <b>2021</b> , 9, 691565	0
431	Antimicrobial Susceptibility of Lactic Acid Bacteria Strains of Potential Use as Feed Additives - The Basic Safety and Usefulness Criterion. <b>2021</b> , 8, 687071	5
430	On the triad of air PM pollution, pathogenic bioaerosols, and lower respiratory infection. <b>2021</b> , 1	2
429	Fighting Antibiotic Resistance in Hospital-Acquired Infections: Current State and Emerging Technologies in Disease Prevention, Diagnostics and Therapy. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 707330 <sup>5-7</sup>	14
428	Reducing the Risk of Transmission of Critical Antimicrobial Resistance Determinants From Contaminated Pork Products to Humans in South-East Asia. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 689015 <sup>5-7</sup>	3
427	Antibiotic Resistance in Wastewater and Its Impact on a Receiving River: A Case Study of WWTP Brno-Modřice, Czech Republic. <b>2021</b> , 13, 2309	0
426	Horizontal Gene Transfer Is the Main Driver of Antimicrobial Resistance in Broiler Chicks Infected with <i>Salmonella enterica</i> Serovar Heidelberg. <b>2021</b> , 6, e0072921	1
425	Driving to Safety: CRISPR-Based Genetic Approaches to Reducing Antibiotic Resistance. <b>2021</b> , 37, 745-757	2



424	Diversity of Multidrug-Resistant Bacteria in an Urbanized River: A Case Study of the Potential Risks from Combined Sewage Overflows. <b>2021</b> , 13, 2122	2
423	Biocide-tolerance and antibiotic-resistance in community environments and risk of direct transfers to humans: Unintended consequences of community-wide surface disinfecting during COVID-19?. <b>2021</b> , 283, 117074	17
422	The optimal standard protocols for whole-genome sequencing of antibiotic-resistant pathogenic bacteria using third-generation sequencing platforms. <b>2021</b> , 17, 493-501	
421	A Type I Restriction Modification System Influences Genomic Evolution Driven by Horizontal Gene Transfer in. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 709571	5-7
420	Recent advances in droplet microfluidics for microbiology. <b>2021</b> ,	2
419	Assessing the impact of heat treatment on antimicrobial resistant (AMR) genes and their potential uptake by other $\beta$ lactamase-producing bacteria.	2
418	Degradation of antibiotic resistance genes and mobile gene elements in dairy manure anaerobic digestion. <b>2021</b> , 16, e0254836	5
417	Linking reservoir ecosystems research to the sustainable development goals. <b>2021</b> , 781, 146769	7
416	Involvement of the Histone-Like Nucleoid Structuring Protein (H-NS) in Natural Transformation. <b>2021</b> , 10,	0
415	The dilution effect limits plasmid horizontal transmission in multispecies bacterial communities. <b>2021</b> , 167,	3
414	Genomic Sequence Analysis of Methicillin- and Carbapenem-Resistant Bacteria Isolated from Raw Sewage. <b>2021</b> , 9, e0012821	1
413	Trends in ESBLs and PABLs among enteric Salmonella isolates from children in Gwangju, Korea: 2014-2018. <b>2021</b> ,	0
412	Quantifying and predicting antimicrobials and antimicrobial resistance genes in waterbodies through a holistic approach: a study in Minnesota, United States. <b>2021</b> , 11, 18747	1
411	Flanker: a tool for comparative genomics of gene flanking regions. <b>2021</b> , 7,	1
410	Flavobacterium erciyesense sp. nov., a putative non-pathogenic fish symbiont. <b>2021</b> , 203, 5783-5792	1
409	Antibiotics and antibiotic resistance genes in landfills: A review. <b>2022</b> , 806, 150647	12
408	Prevalence of and risk factors for extended-spectrum beta-lactamase genes carriage in a population-based cohort of middle-aged and elderly. <b>2021</b> , 58, 106388	0
407	Computational resources in the management of antibiotic resistance: Speeding up drug discovery. <b>2021</b> , 26, 2138-2151	4

406	The transcription regulator BsrR serves as a network hub of natural competence protein-protein interactions in. <b>2021</b> , 118,	0
405	Effects and relevant mechanisms of non-antibiotic factors on the horizontal transfer of antibiotic resistance genes in water environments: A review. <b>2022</b> , 806, 150568	6
404	Development of a real-time PCR marker targeting a new unauthorized genetically modified microorganism producing protease identified by DNA walking. <b>2021</b> , 354, 109330	1
403	Changes in Antibiotic-Resistance Genes Induced by the Grazing Effect in Three Cladoceran Species. <b>2021</b> , 9,	1
402	Vegetation structure determines cyanobacterial communities during soil development across global biomes.	
401	Transmission and stable inheritance of carbapenemase gene (bla or bla)-encoding and mcr-1-encoding plasmids in clinical Enterobacteriaceae strains. <b>2021</b> , 26, 255-261	1
400	Microbial biofilm: formation, architecture, antibiotic resistance, and control strategies. <b>2021</b> , 52, 1701-1718	10
399	Ubiquitous Conjugative Mega-Plasmids of Species and Their Role in Horizontal Transfer of Multi-Drug Resistance. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 728644	5-7 0
398	Artificial sweeteners stimulate horizontal transfer of extracellular antibiotic resistance genes through natural transformation. <b>2021</b> ,	8
397	Bacterial evolution during human infection: Adapt and live or adapt and die. <b>2021</b> , 17, e1009872	9
396	Commensal inter-bacterial interactions shaping the microbiota. <b>2021</b> , 63, 158-171	4
395	The Evolution of Plasmid Transfer Rate in Bacteria and Its Effect on Plasmid Persistence. <b>2021</b> , 198, 473-488	0
394	Viral Community and Virus-Associated Antibiotic Resistance Genes in Soils Amended with Organic Fertilizers. <b>2021</b> , 55, 13881-13890	2
393	Key factors driving the fate of antibiotic resistance genes and controlling strategies during aerobic composting of animal manure: A review. <b>2021</b> , 791, 148372	15
392	Effects of emerging pollutants on the occurrence and transfer of antibiotic resistance genes: A review. <b>2021</b> , 420, 126602	20
391	Mechanisms of metabolic performance enhancement and ARGs attenuation during nZVI-assisted anaerobic chloramphenicol wastewater treatment. <b>2021</b> , 419, 126508	1
390	Technological advancement for eliminating antibiotic resistance genes from wastewater: A review of their mechanisms and progress. <b>2021</b> , 9, 106183	6
389	Effect of cattle farm exposure on oropharyngeal and gut microbial communities and antibiotic resistance genes in workers. <b>2022</b> , 806, 150685	1

388	The role of antibiotics and heavy metals on the development, promotion, and dissemination of antimicrobial resistance in drinking water biofilms. <b>2021</b> , 282, 131048	3
387	A review of the bioelectrochemical system as an emerging versatile technology for reduction of antibiotic resistance genes. <b>2021</b> , 156, 106689	8
386	Antibiotic resistance of culturable heterotrophic bacteria isolated from shrimp ( <i>Penaeus vannamei</i> ) aquaculture ponds. <b>2021</b> , 172, 112887	6
385	Phenolic compounds promote the horizontal transfer of antibiotic resistance genes in activated sludge. <b>2021</b> , 800, 149549	2
384	Microbial community competition rather than high-temperature predominates ARGs elimination in swine manure composting. <b>2022</b> , 423, 127149	7
383	Biochar effectively inhibits the horizontal transfer of antibiotic resistance genes via transformation. <b>2022</b> , 423, 127150	7
382	Bacteriophage-Mediated Horizontal Gene Transfer: Transduction. <b>2021</b> , 151-192	5
381	Nanopore-based metagenomics analysis reveals prevalence of mobile antibiotic and heavy metal resistome in wastewater. <b>2021</b> , 30, 1572-1585	3
380	Molecular determinants of antibiotic resistance in <i>Salmonella enterica</i> antibiotic resistance.	
379	Using membrane perturbing small molecules to target chronic persistent infections. <b>2021</b> , 12, 1312-1324	1
378	Tn transposition in the course of natural transformation enables horizontal antibiotic resistance spread in. <b>2021</b> , 167,	4
377	Nanomaterials to Overcome Emergence and Re-Emergence of Superbugs. <b>2021</b> , 227-268	
376	Antimicrobial-specific response from resistance gene carriers studied in a natural, highly diverse microbiome. <b>2021</b> , 9, 29	3
375	Global Scenario of Plant Microbiome for Sustainable Agriculture: Current Advancements and Future Challenges. <b>2020</b> , 425-443	7
374	Surveillance and Environmental Risk Assessment of Antibiotics and AMR/ARGs Related with MRSA: One Health Perspective. <b>2020</b> , 271-295	4
373	The Ecology of <i>Bdellovibrio</i> and Like Organisms in Wastewater Treatment Plants. <b>2020</b> , 37-64	4
372	Bacteriophage-Mediated Horizontal Gene Transfer: Transduction. <b>2017</b> , 1-42	5
371	Microbiology of hospital wastewater. <b>2020</b> , 103-148	4

370	Survival of staphylococci and transmissibility of their antimicrobial resistance genes in milk after heat treatments. <b>2020</b> , 129, 109584	6
369	Genomic and phenotypic analyses of multidrug-resistant NCCP 16007 isolated from a patient with a urinary tract infection. <b>2021</b> , 12, 150-164	8
368	Glyphosate escalates horizontal transfer of conjugative plasmid harboring antibiotic resistance genes. <b>2021</b> , 12, 63-69	9
367	MOB-suite: software tools for clustering, reconstruction and typing of plasmids from draft assemblies. <b>2018</b> , 4,	115
366	Where the plasmids roam: large-scale sequence analysis reveals plasmids with large host ranges. <b>2019</b> , 5,	3
365	Metagenome-assembled genome binning methods with short reads disproportionately fail for plasmids and genomic Islands. <b>2020</b> , 6,	24
364	The rifampicin-inactivating mono-ADP-ribosyl transferase of <i>Mycobacterium smegmatis</i> significantly influences reactive oxygen species levels in the actively growing cells.	3
363	Phylogenetic background and habitat drive the genetic diversification of <i>Escherichia coli</i> .	4
362	Estimating plasmid conjugation rates: a new computational tool and a critical comparison of methods.	2
361	Metagenome-Assembled Genome Binning Methods with Short Reads Disproportionately Fail for Plasmids and Genomic Islands.	3
360	Large scale metagenome assembly reveals novel animal-associated microbial genomes, biosynthetic gene clusters, and other genetic diversity.	2
359	Antibiotic resistance genes and mobile genetic elements removal from treated wastewater by sewage-sludge biochar and iron-oxide coated sand.	2
358	Synonymous lysine codon usage modification in a mobile antibiotic resistance gene similarly alters protein production in bacterial species with divergent lysine codon usage biases because it removes a duplicate AAA lysine codon.	2
357	The genomic architecture of introgression among sibling species of bacteria.	4
356	Tracking microbial evolution in the human gut using Hi-C.	2
355	Raw wastewater irrigation for urban agriculture in Africa increases the diversity of transferable antibiotic resistances genes in soil, including those encoding ESBLs.	1
354	Insights into the bacterial profiles and resistome structures following severe 2018 flood in Kerala, South India.	1
353	Non-antibiotic pharmaceuticals can enhance the spread of antibiotic resistance via conjugation.	2

352	Large-scale network analysis captures biological features of bacterial plasmids.		1
351	Jump around: transposons in and out of the laboratory. <b>2020</b> , 9,		3
350	Antimicrobial resistance of commensal from food-producing animals in Russia. <b>2020</b> , 13, 2053-2061		3
349	Antimicrobial Resistance, the COVID-19 Pandemic, and Lessons for the Orthopaedic Community. <b>2021</b> , 103, 4-9		2
348	Overcoming bacterial resistance to antibiotics: the urgent need. <b>2020</b> ,		2
347	Fluoroquinolone Metalloantibiotics to Bypass Antimicrobial Resistance Mechanisms: Decreased Permeation through Porins. <b>2020</b> , 11,		3
346	Plasmid Identification and Plasmid-Mediated Antimicrobial Gene Detection in Norwegian Isolates. <b>2020</b> , 9,		7
345	Antibiotic Susceptibility Profiles of <i>Pediococcus pentosaceus</i> from Various Origins and Their Implications for the Safety Assessment of Strains with Food-Technology Applications. <b>2021</b> , 84, 1160-1168		6
344	Screening of antibiotic resistance genes in pathogenic bacteria isolated from tiny freshwater shrimp () and "Kung Ten", the uncooked Thai food. <b>2020</b> , 7, 83-91		0
343	Silent Genes: Antimicrobial Resistance and Antibiotic Production.. <b>2021</b> , 70, 421-429		2
342	Influence of Typical Pollutants in Soil on the Spread of Antibiotic Resistance Genes. <b>2021</b> , 11, 1014-1019		
341	Persisting antibiotic resistance gene pollution and its association with human sewage sources in tropical marine beach waters. <b>2021</b> , 238, 113859		0
340	Antibiotic resistance in microbes: History, mechanisms, therapeutic strategies and future prospects. <b>2021</b> , 14, 1750-1766		22
339	Probiotic lactobacilli in formulas and hygiene products for the health of the urogenital tract. <b>2021</b> , 9, e00787		3
338	A Review on Occurrence and Spread of Antibiotic Resistance in Wastewaters and in Wastewater Treatment Plants: Mechanisms and Perspectives. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 717809	5-7	7
337	Monitoring Bacterial Conjugation by Optical Microscopy. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 750200	5-7	0
336	Profiles of antimicrobial resistance of enterobacteria isolated at livestock enterprises of the Ural region. <b>2021</b> , 36-41		
335	Antimicrobial resistance acquisition via natural transformation: context is everything. <b>2021</b> , 64, 133-138		2

- 334 VERA: agent-based modeling transmission of antibiotic resistance between human pathogens and gut microbiota.
- 333 The molecular mechanisms underlying hidden phenotypic variation among metallo- $\beta$ -lactamases.
- 332 Association Between Horizontal Gene Transfer and Adaptation of Gastric Human Pathogen *Helicobacter pylori* to the Host. **2019**, 257-267
- 331 Knowledge Gaps and Research Needs in Bacterial Co-Resistance in the Environment. **2019**, 39-59 1
- 330 Biodegradation and Bioremediation: An Introduction. **2019**, 1-20
- 329 Encyclopedia of Animal Cognition and Behavior. **2019**, 1-7
- 328 Phenotypic and Genotypic Determinants of Antibiotic Resistance of Gram-Negative Bacteria - Etiological Factors of Infectious Complications of War Wounds. **2019**, 81, 61-71
- 327 Optimal dynamic empirical therapy in a health care facility: an artificial intelligence approach. 0
- 326 Growth and selection of the cyanobacterium *Synechococcus* sp. PCC 7002 using alternative nitrogen and phosphorus sources.
- 325 Resistencia a antibióticos: cuando nuestro armamento se torna ineficiente. **2019**, 20,
- 324 React Native: acortando las distancias entre desarrollo y diseño móvil multiplataforma. **2019**, 20, 0
- 323 Microbial biofilms in the human: Diversity and potential significances in health and disease. **2020**, 89-124 0
- 322 Wider Context of Antimicrobial Resistance, Including Molecular Biology Perspective and Implications for Clinical Practice. **2020**, 233-279
- 321 Antimicrobial Resistance Strategies: Are We Approaching the End?. **2020**, 14, 93-102
- 320 One is not enough: on the effects of reference genome for the mapping and subsequent analyses of short-reads.
- 319 Plasmids shape the diverse accessory resistomes of *Escherichia coli* ST131. 0
- 318 Whole-genome sequence analysis reveals evolution of antimicrobial resistance in a Ugandan colistin resistant *Acinetobacter baumannii*.
- 317 Long identical sequences found in multiple bacterial genomes reveal frequent and widespread exchange of genetic material between distant species. 0

316	Status and Prospect of Lactic Acid Bacteria with Antibiotic Resistance. <b>2020</b> , 38, 70-88	3
315	Efficiency of combined action of antimicrobial preparations against poly-resistant strains of conditionally-pathogenic bacteria isolated from wounds of surgery patients. <b>2020</b> , 11,	
314	An Agricultural Perspective for Combating Antibiotic Resistance: A Literature Review. <b>2020</b> , 4, 1-10	
313	Effects of voltage on the emergence and spread of antibiotic resistance genes in microbial electrolysis cells: From mutation to horizontal gene transfer. <b>2021</b> , 291, 132703	1
312	Algae-mediated treatment offers apparent removal of a model antibiotic resistance gene. <b>2021</b> , 60, 102540	1
311	CryoEM structure of the <i>Vibrio cholerae</i> Type IV competence pilus secretin PilQ.	0
310	Multiple plasmid origin-of-transfer substrates enable the spread of natural antimicrobial resistance to human pathogens.	
309	High diversity and variability of pipolins among a wide range of pathogenic <i>Escherichia coli</i> strains.	
308	Challenges of Phage Therapy as a Strategic Tool for the Control of <i>Salmonella</i> Kentucky and Repertoire of Antibiotic Resistance Genes in Africa.	1
307	Antibiotic Susceptibility, Biofilm Production, and Detection of A Gene among Isolates from Different Clinical Specimens. <b>2021</b> , 9,	4
306	A mixed blessing of viruses in wastewater treatment plants.	
305	Enterococcal PrgU mitigates PrgB overexpression toxicity by binding to intergenic RNA downstream of the PQ promoter.	
304	Antibiotic resistance fate in the full-scale drinking water and municipal wastewater treatment processes: A review. <b>2021</b> , 26, 200324-0	1
303	One Health, One Hive: A scoping review of honey bees, climate change, pollutants, and antimicrobial resistance.	
302	Risk factors for canine magnesium ammonium phosphate urolithiasis associated with bacterial infection.. <b>2022</b> , 23, e6	0
301	Impact of engineered nanoparticles on the fate of antibiotic resistance genes in wastewater and receiving environments: A comprehensive review. <b>2022</b> , 204, 112373	4
300	Comparing Optimization Criteria in Antibiotic Allocation Protocols.	
299	UV-aging of microplastics increases proximal ARG donor-recipient adsorption and leaching of chemicals that synergistically enhance antibiotic resistance propagation. <b>2021</b> , 127895	3

298	The mycobacterial mutasome: composition and recruitment in live cells.	1
297	Assessing the Impact of Heat Treatment of Food on Antimicrobial Resistance Genes and Their Potential Uptake by Other Bacteria-A Critical Review.. <b>2021</b> , 10,	1
296	Mobilome-driven segregation of the resistome in biological wastewater treatment.	0
295	Bacterial Concentrations and Water Turbulence Influence the Importance of Conjugation Versus Phage-Mediated Antibiotic Resistance Gene Transfer in Suspended Growth Systems.	3
294	CRISPR-Cas is associated with fewer antibiotic resistance genes in bacterial pathogens. <b>2022</b> , 377, 20200464	3
293	Antibiotic resistance in bacterial communities of the oyster <i>Crassostrea rivularis</i> from different salinity zones in Qinzhou Bay, Beibu Gulf, China. <b>2021</b> , 9,	0
292	Profiles of Non- Staphylococci in Retail Pork and Slaughterhouse Carcasses: Prevalence, Antimicrobial Resistance, and Genetic Determinant of Fusidic Acid Resistance.. <b>2022</b> , 42, 225-239	3
291	Antibiotic resistance genes and antibiotic sensitivity in bacterial aerosols and their comparisons with known respiratory pathogens. <b>2022</b> , 161, 105931	3
290	Animal corpse degradation enriches antibiotic resistance genes but remains recalcitrant in drinking water microcosm. <b>2022</b> , 168, 105372	1
289	Characterization and Epidemiological Subtyping of Shiga Toxin-Producing <i>Escherichia Coli</i> Isolated from the Beef Production Chain in Gauteng, South Africa.	
288	Trends in Antimicrobial Therapy. 111	
287	Beads and Biomes. <b>2021</b> , 83, 594-599	
286	Antibiotic Discovery and Resistance: The Chase and the Race.. <b>2022</b> , 11,	6
285	Antimicrobial and Antibiotic Resistance from the Perspective of Polish Veterinary Students: An Inter-University Study.. <b>2022</b> , 11,	0
284	Combined functional additives for farm animals are an important segment in the implementation of the antibiotic resistance strategy and an effective mechanism for restoring animal homeostasis in mixed pathologies. <b>2022</b> , 354, 8-17	
283	The Role of Bacteriophages as Important Reservoirs of Extended-Spectrum Beta-Lactamase Genes in Azerbaijan Hospitals.. <b>2022</b> ,	1
282	Towards a better understanding of antimicrobial resistance dissemination: what can be learnt from studying model conjugative plasmids?. <b>2022</b> , 9, 3	0
281	Membrane vesicles (MVs) from antibiotic-resistant <i>Staphylococcus aureus</i> transfer antibiotic-resistance to antibiotic-susceptible <i>Escherichia coli</i> .. <b>2022</b> ,	1



280	Evolutionary paths to macrolide resistance in a <i>Neisseria</i> commensal converge on ribosomal genes through short sequence duplications.. <b>2022</b> , 17, e0262370	0
279	Parasite co-infection: an ecological, molecular and experimental perspective.. <b>2022</b> , 289, 20212155	0
278	Bacteriophages Roam the Wheat Phyllosphere.. <b>2022</b> , 14,	0
277	Meta-analysis reveals the global picture of antibiotic resistance gene prevalence across environments.	0
276	Plant-Assisted Plasmid Curing Strategies for Reversal of Antibiotic Resistance. <b>2022</b> , 559-575	
275	Impact of Antibiotic Resistance of Bacteria in Biofilms and Microbial Fuel Cell: Confronting the Dark Box for Global Health Threat. <b>2022</b> , 137-152	
274	From Conventional Disinfection to Antibiotic Resistance Control-Status of the Use of Chlorine and UV Irradiation during Wastewater Treatment.. <b>2022</b> , 19,	2
273	Antimicrobial Agents in Agriculture and Their Implications in Antimicrobial Resistance. <b>2022</b> , 47-78	
272	Multi-drug resistance, integron and transposon-mediated gene transfer in heterotrophic bacteria from <i>Penaeus vannamei</i> and its culture environment.. <b>2022</b> , 1	1
271	Decreasing the abundance of tetracycline-resistant in pig feces during nursery using flavophospholipol as a pig feed additive.. <b>2022</b> , 15, 100236	0
270	Wastewater treatment plants as reservoirs and sources for antibiotic resistance genes: A review on occurrence, transmission and removal. <b>2022</b> , 46, 102539	1
269	Microbial Ecology of Sheep Milk, Artisanal Feta, and Kefalograviera Cheeses. Part II: Technological, Safety, and Probiotic Attributes of Lactic Acid Bacteria Isolates.. <b>2022</b> , 11,	4
268	Antimicrobial resistance and virulence genes in <i>Salmonella enterica</i> serovars isolated from droppings of layer chicken in two farms in Nigeria.. <b>2022</b> ,	1
267	Sensitivity Patterns, Plasmid Profiles and Clonal Relatedness of Multi-Drug Resistant Isolated From the Ashanti Region, Ghana.. <b>2022</b> , 16, 11786302221078117	0
266	One Health, One Hive: A scoping review of honey bees, climate change, pollutants, and antimicrobial resistance.. <b>2022</b> , 17, e0242393	1
265	Gut Virome of the World's Highest-Elevation Lizard Species ( and ) Reveals Versatile Commensal Viruses.. <b>2022</b> , 10, e0187221	2
264	Population Dynamics of a Two Phages-One Host Infection System Using Strain ECOR57 and Phages vB_EcoP_SU10 and vB_EcoD_SU57.. <b>2022</b> , 15,	1
263	Surveillance of Antimicrobial Resistance in Hospital Wastewater: Identification of Carbapenemase-Producing spp.. <b>2022</b> , 11,	1

- 262 Development of a Taxon-Specific Real-Time PCR Method Targeting the *Bacillus subtilis* Group to Strengthen the Control of Genetically Modified Bacteria in Fermentation Products. **2022**, 8, 78 0
- 261 Whole Genome Analysis of 335 New Bacterial Species from Human Microbiota Reveals a Huge Reservoir of Transferable Antibiotic Resistance Determinants.. **2022**, 23,
- 260 Global distribution and diversity of prevalent sewage water plasmidomes.
- 259 HopE and HopD Porin-Mediated Drug Influx Contributes to Intrinsic Antimicrobial Susceptibility and Inhibits Streptomycin Resistance Acquisition by Natural Transformation in *Helicobacter pylori*.. **2022**, e0198721 0
- 258 Comparing optimization criteria in antibiotic allocation protocols.. **2022**, 9, 220181
- 257 Intra- and interpopulation transposition of mobile genetic elements driven by antibiotic selection.. **2022**, 0
- 256 Subinhibitory Concentration of Colistin Promotes the Conjugation Frequencies of and -Positive Plasmids.. **2022**, e0216021 3
- 255 Clinical Perspective of Antimicrobial Resistance in Bacteria.. **2022**, 15, 735-746 6
- 254 Multidrug-Resistant Bacteria and Count in Abattoir Wastes and Its Receiving Waters in Limbe Municipality, Cameroon: Public Health Implications.. **2022**, 2022, 9977371 0
- 253 Modelling the synergistic effect of bacteriophage and antibiotics on bacteria: killers and drivers of resistance evolution. 1
- 252 Genome plasticity as a paradigm of antibiotic resistance spread in ESKAPE pathogens.. **2022**, 1 1
- 251 Gut Commensal , a High-Risk Reservoir of Transferable Plasmid-Mediated Antimicrobial Resistance Traits.. **2022**, 15, 1077-1091 1
- 250 Microfluidic hotspots in bacteria research: A review of soil and related advances. 1
- 249 Dead but Not Forgotten: How Extracellular DNA, Moisture, and Space Modulate the Horizontal Transfer of Extracellular Antibiotic Resistance Genes in Soil.. **2022**, e0228021 3
- 248 Microbial communities form rich extracellular metabolomes that foster metabolic interactions and promote drug tolerance.. **2022**, 4
- 247 Infiltration of hidden antimicrobial resistance among healthy people in a Japanese community.. **2022**, 4, dlac031
- 246 Antibiotic Resistance in the Drinking Water: Old and New Strategies to Remove Antibiotics, Resistant Bacteria, and Resistance Genes.. **2022**, 15, 0
- 245 Existing evidence on antibiotic resistance exposure and transmission to humans from the environment: a systematic map.. **2022**, 11, 8 2

244	Occurrence of Antibiotic Resistant Bacteria in Urban Karst Groundwater Systems. <b>2022</b> , 14, 960		1
243	Growth-Dependent Predation and Generalized Transduction of Antimicrobial Resistance by Bacteriophage.. <b>2022</b> , e0013522		2
242	Distribution, Dissemination and Fate of Antibiotic Resistance Genes During Sewage Sludge Processing Review. <b>2022</b> , 233, 1		0
241	Antibiotic resistance in the viral fraction of dairy products and a nut-based milk.. <b>2022</b> , 367, 109590		1
240	Pathogenic and Endosymbiotic Bacteria and Their Associated Antibiotic Resistance Biomarkers in and Ticks Infesting Nguni Cattle ( spp.).. <b>2022</b> , 11,		
239	Response mechanisms of different antibiotic-resistant bacteria with different resistance action targets to the stress from photocatalytic oxidation.. <b>2022</b> , 218, 118407		1
238	Editorial: Computational Predictions, Dynamic Tracking, and Evolutionary Analysis of Antibiotic Resistance Through the Mining of Microbial Genomes and Metagenomic Data.. <i>Frontiers in Microbiology</i> , <b>2022</b> , 13, 880967	5-7	0
237	A mixed blessing of viruses in wastewater treatment plants.. <b>2022</b> , 215, 118237		0
236	An Extraction Method to Quantify the Fraction of Extracellular and Intracellular Antibiotic Resistance Genes in Aquatic Environments. <b>2022</b> , 148,		0
235	Effectiveness of a novel, non-intrusive, continuous-use air decontamination technology to reduce microbial contamination in clinical settings: a multi-centric study.. <b>2022</b> , 123, 15-22		0
234	Insights into the microbial community of treated wastewater, its year-round variability and impact on the receiver, using cultivation, microscopy and amplicon-based methods.. <b>2022</b> , 154630		2
233	The Role of Minor Pilins in Assembly and Function of the Competence Pilus of .. <b>2021</b> , 11, 808601		
232	Antimicrobial-induced horizontal transfer of antimicrobial resistance genes in bacteria: a mini-review. <b>2021</b> ,		0
231	and : Trajectories of Transposable Elements in Genomes.. <b>2021</b> , 10,		3
230	Review on Multiple Facets of Drug Resistance: A Rising Challenge in the 21st Century.. <b>2021</b> , 11, 197-214		8
229	Diversity of Human-Associated Bifidobacterial Prophage Sequences.. <b>2021</b> , 9,		1
228	Evaluation of Potential Probiotic Properties of a Strain of for Shrimp Farming: From Beneficial Functions to Safety Assessment.. <i>Frontiers in Microbiology</i> , <b>2022</b> , 13, 854131	5-7	1
227	Effects of iron mineral adhesion on bacterial conjugation: Interfering the transmission of antibiotic resistance genes through an interfacial process.. <b>2022</b> , 435, 128889		0

226	Metatranscriptomic Analysis of the Chicken Gut Resistome Response to In-Feed Antibiotics and Natural Feed Additives.. <i>Frontiers in Microbiology</i> , <b>2022</b> , 13, 833790	5.7	0
225	Plasmid-Mediated Transfer of Antibiotic Resistance Genes in Soil.. <b>2022</b> , 11,		4
224	Litter Commensal Bacteria Can Limit the Horizontal Gene Transfer of Antimicrobial Resistance to Salmonella in Chickens.. <b>2022</b> , e0251721		1
223	Mobile Genetic Elements of Prokaryotes and Their Role in the Formation of Antibiotic Resistance in Pathogenic Bacteria. <b>2022</b> , 67, 62-74		2
222	Precise genotyping of circular mobile elements from metagenomic data uncovers human-associated plasmids with recent common ancestors.. <b>2022</b> ,		
221	High Genetic Diversity and Antimicrobial Resistance in Highlight (Pisces: Arapaimidae) as a Reservoir of Quinolone-Resistant Strains in Brazilian Amazon Rivers.. <b>2022</b> , 10,		0
220	Pneumococcal Evasion of Antibiotics via Metabolic Adaptation During Infection.		
219	Tidal flat aquaculture pollution governs sedimentary antibiotic resistance gene profiles but not bacterial community based on metagenomic data.. <b>2022</b> , 155206		0
218	Table_1.XLSX. <b>2019</b> ,		
217	Data_Sheet_1.docx. <b>2019</b> ,		
216	Data_Sheet_2.xlsx. <b>2019</b> ,		
215	Data_Sheet_1.docx. <b>2019</b> ,		
214	Image_1.TIF. <b>2018</b> ,		
213	Image_2.TIF. <b>2018</b> ,		
212	Image_3.TIF. <b>2018</b> ,		
211	Image_4.TIF. <b>2018</b> ,		
210	Image_5.TIF. <b>2018</b> ,		
209	Table_1.XLSX. <b>2018</b> ,		

208 Table\_2.XLSX. 2018,

207 Table\_3.XLSX. 2018,

206 Table\_4.XLSX. 2018,

205 Table\_5.XLSX. 2018,

204 Table\_6.XLSX. 2018,

203 Table\_7.XLSX. 2018,

202 Table\_8.XLSX. 2018,

201 Table\_9.XLSX. 2018,

200 Data\_Sheet\_1.PDF. 2020,

199 Data\_Sheet\_2.PDF. 2020,

198 Table\_1.XLS. 2018,

197 Data\_Sheet\_1.PDF. 2019,

196 Data\_Sheet\_2.PDF. 2019,

195 Table\_1.XLSX. 2019,

194 Table\_2.DOCX. 2019,

193 Table\_3.DOCX. 2019,

192 Data\_Sheet\_1.zip. 2020,

191 Image\_1.TIF. 2020,

190 Image\_10.TIF. 2020,

189 Image\_2.TIF. 2020,

188 Image\_3.TIF. 2020,

187 Image\_4.TIF. 2020,

186 Image\_5.TIF. 2020,

185 Image\_6.TIF. 2020,

184 Image\_7.TIF. 2020,

183 Image\_8.TIF. 2020,

182 Image\_9.TIF. 2020,

181 Table\_1.XLSX. 2020,

180 Table\_2.XLSX. 2020,

179 Table\_3.XLSX. 2020,

178 Table\_4.XLSX. 2020,

177 Table\_5.XLSX. 2020,

176 Table\_6.XLSX. 2020,

175 Table\_7.XLSX. 2020,

174 Prevalence of Antimicrobial Resistant and Extended-Spectrum Beta-Lactamase-producing in Dairy Cattle Farms in East Tennessee.. 2022,

1

173 Environmental Biofilms as Reservoir of Antibiotic Resistance and Hotspot for Genetic Exchange in Bacteria. 2022, 237-265

172	Antimicrobials and Antibiotic Resistance Genes in Water Bodies: Pollution, Risk, and Control. <b>2022</b> , 10,	1
171	Global epidemiology of CTX-M-type $\beta$ lactam resistance in human and animal. <b>2022</b> , 101815	2
170	Antimicrobial Resistance Profile by Metagenomic and Metatranscriptomic Approach in Clinical Practice: Opportunity and Challenge. <b>2022</b> , 11, 654	1
169	Isolation and Characterization of Lytic Bacteriophages Specific for <i>Campylobacter jejuni</i> and <i>Campylobacter coli</i> . <b>2022</b> , 2, 59-72	
168	Microbial Resistance to Antibiotics and Effective Antibiotherapy. <b>2022</b> , 10, 1121	0
167	Plasmid profile analysis of and isolated from pigs, pork, and humans.. <b>2022</b> , 1-31	1
166	<i>Pseudomonas</i> species prevalence, protein analysis, and antibiotic resistance: an evolving public health challenge.. <b>2022</b> , 12, 53	1
165	Organic fertilizer potentiates the transfer of typical antibiotic resistance gene among special bacterial species.. <b>2022</b> , 435, 128985	0
164	Multidrug-resistant <i>Escherichia coli</i> from free-living pigeons ( <i>Columba livia</i> ): Insights into antibiotic environmental contamination and detection of resistance genes.. <b>2022</b> ,	0
163	Long-term manure inputs induce a deep selection on agroecosystem soil antibiotic resistome. <b>2022</b> , 129163	0
162	The Notable Achievements and the Prospects of Bacterial Pathogen Genomics. <b>2022</b> , 10, 1040	1
161	AMR-meta: a k-mer and metafeature approach to classify antimicrobial resistance from high-throughput short-read metagenomics data.. <b>2022</b> , 11,	1
160	Conjugation. <b>2022</b> , 1619-1625	
159	Antibiotic Resistance via Bacterial Cell Shape-Shifting.	1
158	CHARACTERIZATION AND EPIDEMIOLOGICAL SUBTYPING OF SHIGA TOXIN-PRODUCING <i>ESCHERICHIA COLI</i> ISOLATED FROM THE BEEF PRODUCTION CHAIN IN GAUTENG, SOUTH AFRICA. <b>2022</b> , 105681	
157	Profiles of antibiotic- and heavy metal-related resistance genes in animal manure revealed using a metagenomic analysis. <b>2022</b> , 239, 113655	0
156	Long-term ecological and evolutionary dynamics in the gut microbiomes of carbapenemase-producing <i>Enterobacteriaceae</i> colonized subjects.	0
155	A synthetic communication system uncovers self-jamming of bacteriophage transmission.	

154	Microbial Biofilms. <b>2022</b> , 249-267		
153	Degradation of Bacterial Antibiotic Resistance Genes during Exposure to Non-Thermal Atmospheric Pressure Plasma. <b>2022</b> , 11, 747		0
152	Use of antimicrobials in Chilean Salmon farming: Facts, myths and perspectives.		1
151	Deciphering environmental resistome and mobilome risks on the stone monument: A reservoir of antimicrobial resistance genes. <b>2022</b> , 156443		0
150	Horizontal Gene Transfer of Triazole Resistance in <i>Aspergillus fumigatus</i> .		0
149	Biocides Used as Material Preservatives Modify Rates of de novo Mutation and Horizontal Gene Transfer in Bacteria. <b>2022</b> , 129280		0
148	How heavy metal stress promotes dissemination of antibiotic resistance genes in the activated sludge process. <b>2022</b> , 129279		0
147	Exploring the abundance and influencing factors of antimicrobial resistance genes in manure plasmidome from swine farms. <b>2023</b> , 124, 462-471		0
146	Bacteriophages vehiculate a high amount of antibiotic resistance determinants of bacterial origin in the Orne River ecosystem.		1
145	ExplorePipolin: reconstruction and annotation of bacterial mobile elements from draft genomes.		
144	Insights into microbial contamination in multi-type manure-amended soils: The profile of human bacterial pathogens, virulence factor genes and antibiotic resistance genes. <b>2022</b> , 437, 129356		1
143	Co-driving factors of tidal effect on the abundance and distribution of antibiotic resistance genes in the Yongjiang Estuary, China. <b>2022</b> , 213, 113649		0
142	Models for Gut-Mediated Horizontal Gene Transfer by Bacterial Plasmid Conjugation. <i>Frontiers in Microbiology</i> , 13,	5-7	1
141	Occurrence of antibiotics and bacterial resistance genes in wastewater: resistance mechanisms and antimicrobial resistance control approaches. <b>2022</b> , 38,		2
140	Metagenomic Characterization of Resistance Genes in Deception Island and Their Association with Mobile Genetic Elements. <b>2022</b> , 10, 1432		1
139	The Spread of Antibiotic Resistance Genes In Vivo Model. <b>2022</b> , 2022, 1-11		0
138	Differential Overlap in Human and Animal Fecal Microbiomes and Resistomes in Rural versus Urban Bangladesh.		
137	Microbial Journey: Mount Everest to Mars.		0



136	Link Between Antibiotic Persistence and Antibiotic Resistance in Bacterial Pathogens. 12,	1
135	Bacteriophage and Bacterial Susceptibility, Resistance, and Tolerance to Antibiotics. <b>2022</b> , 14, 1425	2
134	Biogeographical variation in antimicrobial resistance in rivers is influenced by agriculture and is spread through bacteriophages.	0
133	Evolution of horizontal transmission in antimicrobial resistance plasmids. <b>2022</b> , 168,	0
132	In-Depth Analysis of an Obligate Anaerobe <i>Paraclostridium bifermentans</i> Isolated from Uterus of <i>Bubalus bubalis</i> . <b>2022</b> , 12, 1765	
131	Antimicrobial resistance in urban river ecosystems. <b>2022</b> , 127135	0
130	Antidepressants promote the spread of extracellular antibiotic resistance genes via transformation. <b>2022</b> , 2,	1
129	Novel Insights into bla GES Mobilome Reveal Extensive Genetic Variation in Hospital Effluents.	0
128	High Rates of Multidrug-Resistant <i>Escherichia coli</i> in Great Cormorants ( <i>Phalacrocorax carbo</i> ) of the German Baltic and North Sea Coasts: Indication of Environmental Contamination and a Potential Public Health Risk. <b>2022</b> , 11, 836	
127	Horizontal Gene Transfer of an IncP1 Plasmid to Soil Bacterial Community Introduced by <i>Escherichia coli</i> through Manure Amendment in Soil Microcosms. <b>2022</b> , 56, 11398-11408	1
126	The Application of the CRISPR-Cas System in Antibiotic Resistance. Volume 15, 4155-4168	2
125	Functional and safety characterization of beneficial vaginal lactic acid bacteria for the design of vaginal hygiene products.	
124	Human Colonization with Antibiotic-Resistant Bacteria from Nonoccupational Exposure to Domesticated Animals in Low- and Middle-Income Countries: A Critical Review.	0
123	Non-antibiotic pharmaceuticals promote conjugative plasmid transfer at a community-wide level. <b>2022</b> , 10,	1
122	Bacteriophages: Underestimated vehicles of antibiotic resistance genes in the soil. 13,	1
121	Distribution and Genomic Characterization of Third-Generation Cephalosporin-Resistant <i>Escherichia coli</i> Isolated from A Single Family and Home Environment: A 2-Year Longitudinal Study. <b>2022</b> , 11, 1152	
120	A novel, magnetic bead-based extraction method for the isolation of antimicrobial resistance genes with a case study in river water in Malawi.	
119	The Exploration of Complement-Resistance Mechanisms of Pathogenic Gram-Negative Bacteria to Support the Development of Novel Therapeutics. <b>2022</b> , 11, 931	

118	Dynamics of bacterial recombination in the human gut microbiome.	
117	Effects of voltage and tetracycline on horizontal transfer of ARGs in microbial electrolysis cells. 1-10	
116	Evaluation of antimicrobial resistance and risk factors for recovery of intrauterine Escherichia coli from cows with metritis on California commercial dairy farms. <b>2022</b> , 12,	
115	ExplorePipolin: reconstruction and annotation of piPolB-encoding bacterial mobile elements from draft genomes.	
114	Biochar Effectively Inhibits the Horizontal Transfer of Antibiotic Resistance Genes via Restraining the Energy Supply for Conjugative Plasmid Transfer.	1
113	Environmentally relevant concentrations of mercury facilitate the horizontal transfer of plasmid-mediated antibiotic resistance genes. <b>2022</b> , 158272	0
112	The Effect of Heavy Metals on Conjugation Efficiency of an F-Plasmid in Escherichia coli. <b>2022</b> , 11, 1123	1
111	How Metagenomics Has Transformed Our Understanding of Bacteriophages in Microbiome Research. <b>2022</b> , 10, 1671	0
110	Unraveling the impact and mechanism of antipyretic paracetamol on intergenera conjugative plasmid transfer. <b>2022</b> , 215, 114263	0
109	Fate of antibiotic resistance genes (ARGs) in wastewater treatment plant: Preliminary study on identification before and after ultrasonication. <b>2022</b> , 215, 114281	0
108	Short-term stress of quaternary ammonium compounds on intracellular and extracellular resistance genes in denitrification systems. <b>2023</b> , 452, 139166	0
107	Effects of functional modules and bacterial clusters response on transmission performance of antibiotic resistance genes under antibiotic stress during anaerobic digestion of livestock wastewater. <b>2023</b> , 441, 129870	0
106	Systemic Surveillance and Meta-Analysis of Antimicrobial Resistance and Food Sources from China and USA.	0
105	Addressing main challenges in the tertiary treatment of urban wastewater: are homogeneous photodriven AOPs the answer?. <b>2022</b> , 8, 2145-2169	1
104	Environmentally Relevant Concentrations of Mercury Facilitate the Horizontal Transfer of Plasmid-Mediated Antibiotic Resistance Genes.	0
103	Metagenomics Analysis of Microbial Species and Antibiotic Resistance Genes (ARGs) in Untreated Wastewater from Different Types of Hospitals in Hangzhou. <b>2022</b> , 2022, 1-13	0
102	Global Distribution and Diversity of Prevalent Sewage Water Plasmidomes.	0
101	Occurrence and driving mechanism of antibiotic resistance genes in marine recreational water around Qinhuangdao, China. 9,	0

100	Mobilome-driven segregation of the resistome in biological wastewater treatment. 11,	1
99	Integrans, plasmids, and resistance genes in equine faecal bacteria.	0
98	Canary in the Coal Mine: How Resistance Surveillance in Commensals Could Help Curb the Spread of AMR in Pathogenic Neisseria.	1
97	Factors promoting and limiting antimicrobial resistance in the environment [Existing knowledge gaps. 13,	1
96	Longitudinal analysis of exposure to a low concentration of oxytetracycline on the zebrafish gut microbiome. 13,	0
95	The mobilizable plasmid P3 of <i>Salmonella enterica</i> serovar Typhimurium SL1344 depends on the P2 plasmid for conjugative transfer into a broad range of bacteria in vitro and in vivo.	0
94	Long-term ecological and evolutionary dynamics in the gut microbiomes of carbapenemase-producing Enterobacteriaceae colonized subjects. <b>2022</b> , 7, 1516-1524	1
93	<i>Acinetobacter baylyi</i> Strain BD413 Can Acquire an Antibiotic Resistance Gene by Natural Transformation on Lettuce Phylloplane and Enter the Endosphere. <b>2022</b> , 11, 1231	0
92	Antimicrobial resistance: new insights and therapeutic implications. <b>2022</b> , 106, 6427-6440	0
91	The Diversity and Ubiquity of Antibiotic Resistance Genes in Finfish Culture Ponds in Bangladesh.	0
90	Structure and function response of bacterial communities towards antibiotic contamination in hyporheic zone sediments. <b>2022</b> , 309, 136606	1
89	Systematic Surveillance and Meta-Analysis of Antimicrobial Resistance and Food Sources from China and the USA. <b>2022</b> , 11, 1471	0
88	Clinically Relevant $\beta$ -Lactam Resistance Genes in Wastewater Treatment Plants. <b>2022</b> , 19, 13829	2
87	Triclosan Promotes Conjugative Transfer of Antibiotic Resistance Genes to Opportunistic Pathogens in Environmental Microbiome. <b>2022</b> , 56, 15108-15119	0
86	<i>Brucella ceti</i> and <i>Brucella pinnipedialis</i> genome characterization unveils genetic features that highlight their zoonotic potential. <b>2022</b> , 11,	0
85	Bacterial motility governs the evolution of antibiotic resistance in spatially heterogeneous environments.	0
84	Aquatic Environments as Hotspots of Transferable Low-Level Quinolone Resistance and Their Potential Contribution to High-Level Quinolone Resistance. <b>2022</b> , 11, 1487	1
83	Long-Term Effects of Single-Dose Cephalosporin or Macrolide Use on the Prevalence of AmpC and Extended-Spectrum $\beta$ -Lactamase Producing <i>Escherichia coli</i> in the Feces of Beef Cattle. <b>2022</b> , 10, 2071	0

- 82 Effects of trace PFOA on microbial community and metabolisms: Microbial selectivity, regulations and risks. **2022**, 226, 119273 ○
- 81 Non-corresponding contaminants in marine surface sediments as a factor of ARGs spread in the Sea of Azov. **2022**, 184, 114196 ○
- 80 Bioaccumulation of antibiotics and resistance genes in lettuce following cattle manure and digestate fertilization and their effects on soil and phyllosphere microbial communities. **2022**, 315, 120413 1
- 79 Transmission of antibiotic resistance genes through mobile genetic elements in *Acinetobacter baumannii* and gene-transfer prevention. **2023**, 857, 159497 1
- 78 Drug-resistant bacteria from farm to fork—impact of antibiotic use in animal production. **2023**, 871-892 ○
- 77 Removal of antibiotic resistant bacteria, genes and inhibition of plasmid-mediated horizontal transfer by peroxymonosulfate: Efficiency and mechanisms. **2023**, 453, 139728 ○
- 76 Tracking antibiotic resistance genes in microplastic-contaminated soil. **2023**, 312, 137235 ○
- 75 Docosaheptaenoic acid inhibits pheromone-responsive-plasmid-mediated conjugative transfer of antibiotic resistance genes in *Enterococcus faecalis*. **2022**, 130390 ○
- 74 Conjugation across *Bacillus cereus* and kin: A review. 13, ○
- 73 Subinhibitory antibiotic concentrations promote the horizontal transfer of plasmid-borne resistance genes from *Klebsiellae pneumoniae* to *Escherichia coli*. 13, 1
- 72 Prevalence, antimicrobial susceptibility, and antibiotic resistance gene transfer of *Bacillus* strains isolated from pasteurized milk. **2022**, 1
- 71 Defeat undefeatable: ionic liquids as novel antimicrobial agents. **2022**, 120782 ○
- 70 Metagenomic insights into microorganisms and antibiotic resistance genes of waste antibiotic fermentation residues along production, storage and treatment processes. **2022**, 1
- 69 Risk factors for extended-spectrum beta-lactamase (ESBL) producing *E. coli* carriage among children in a food animal producing region of Quito, Ecuador. ○
- 68 The Mobilizable Plasmid P3 of *Salmonella enterica* Serovar Typhimurium SL1344 Depends on the P2 Plasmid for Conjugative Transfer into a Broad Range of Bacteria In Vitro and In Vivo. ○
- 67 Molecular Insights into the Mode of Action of Antibacterial Peptides Derived from Chicken Plasma Hydrolysates. **2022**, 11, 3564 ○
- 66 Prospects of biosynthesized nanoparticles in treating pharmaceutical wastewater in relation to human health. **2023**, 75-120 ○
- 65 Multiple roles of nanomaterials along with their based nanotechnologies in the elimination and dissemination of antibiotic resistance. **2023**, 455, 140927 ○

- 64 Efficient remediation of meropenem using *Bacillus tropicus* EMB20  $\beta$ -lactamase immobilized on magnetic nanoparticles. **2023**, 329, 117054 ○
- 63 Multidrug Drug Resistance of *Escherichia coli* and *Klebsiella*; Isolated from Iraqi Patients and Microbiota. **2022**, 10, 240-252 ○
- 62 Zoonotic and Multidrug-Resistant Bacteria in Companion Animals Challenge Infection Medicine and Biosecurity. **2022**, 1-21 ○
- 61 The role of bacterial membrane vesicles in antibiotic resistance. ○
- 60 Prevalence of classes 1 and 2 integrons in multidrug-resistant *Acinetobacter baumannii* isolates recovered from some aquatic environment in South Africa. **2022**, 12, ○
- 59 Actinomycetes as a promising candidate bacterial group for the health management of aquaculture systems: A review. ○
- 58 Defining the Benefits of Antibiotic Resistance in Commensals and the Scope for Resistance Optimization. ○
- 57 Metagenomic-based surveillance systems for antibiotic resistance in non-clinical settings. 13, ○
- 56 Extended-spectrum beta-lactamase-producing *Escherichia coli* from pork in Muang district, Chiang Mai Province, Thailand. 2903-2909 ○
- 55 The Development of Technology to Prevent, Diagnose, and Manage Antimicrobial Resistance in Healthcare-Associated Infections. **2022**, 10, 2100 ○
- 54 A Scoping Review of the Distribution and Frequency of Extended-Spectrum  $\beta$ -lactamase (ESBL)-Producing Enterobacteriaceae in Shrimp and Salmon. 1-36 ○
- 53 An Emerging Lineage of Uropathogenic Extended Spectrum  $\beta$ -lactamase *Escherichia coli* ST127. **2022**, 10, ○
- 52 Lewis Acid-Base Interaction Triggering Electron Delocalization to Enhance the Photodegradation of Extracellular Antibiotic Resistance Genes Adsorbed on Clay Minerals. **2022**, 56, 17684-17693 ○
- 51 Evaluating the effects of antimicrobial drug use on the ecology of antimicrobial resistance and microbial community structure in beef feedlot cattle. 13, ○
- 50 Metagenomic insights into antibiotic resistance-related changes in microbial communities, resistome and mobilome under a modified A2/O treatment process for hospital sewage. **2022**, 109216 ○
- 49 The prevalence and distribution of aminoglycoside resistance genes. **2023**, ○
- 48 Inactivation of antibiotic-resistant bacteria and antibiotic-resistance genes in wastewater streams: Current challenges and future perspectives. 13, ○
- 47 Environment as Sink for Antimicrobial Resistance and Genes. **2023**, 1-18 ○

- 46 Techniques to stop spread and removal of resistance from wastewater. **2023**, 101-130 ○
- 45 Antibiotic pollution and antibiotic-resistant bacteria in water bodies. **2023**, 179-201 ○
- 44 An expectation-maximization algorithm for estimating proportions of deletions among bacterial populations with application to study antibiotic resistance gene transfer in *Enterococcus faecalis*. ○
- 43 Bioconversion of hazardous organic wastes using invertebrates. **2023**, 297-357 ○
- 42 Assessing Antimicrobial and Metal Resistance Genes in *Escherichia Coli* from Domestic Groundwater Supplies in Rural Ireland. ○
- 41 CRISPR-Cas system as a promising player against bacterial infection and antibiotic resistance. **2023**, 68, 100948 ○
- 40 Repurposing Anthelmintics: Rafoxanide- and Copper-Functionalized SBA-15 Carriers against Methicillin-Resistant *Staphylococcus aureus*. **2023**, 15, 17459-17469 ○
- 39 Convergence of resistance and evolutionary responses in *Escherichia coli* and *Salmonella enterica* inhabiting chicken farms in China. ○
- 38 Preceding Host History of Conjugative Resistance Plasmids Affects Intra- and Interspecific Transfer Potential from Biofilm. ○
- 37 Occurrence and removal of antibiotic resistant *Escherichia coli* and antibiotic resistance genes in an urban wastewater treatment plant. ○
- 36 Antibiotic resistance gene abundance and bacterial community composition in macroinvertebrates of an urban stream. ○
- 35 Metagenomic evidence for antibiotics-driven co-evolution of microbial community, resistome and mobilome in hospital sewage. **2023**, 327, 121539 ○
- 34 Microplastics exacerbate co-occurrence and horizontal transfer of antibiotic resistance genes. **2023**, 451, 131130 ○
- 33 Risk control of antibiotics, antibiotic resistance genes (ARGs) and antibiotic resistant bacteria (ARB) during sewage sludge treatment and disposal: A review. **2023**, 877, 162772 ○
- 32 Addressing antibiotic resistance: computational answers to a biological problem?. **2023**, 74, 102305 ○
- 31 Anaerobic sludge digestion elevates dissemination risks of bacterial antibiotic resistance in effluent supernatant. **2023**, 338, 117854 ○
- 30 Environmental antimicrobial resistance gene detection from wild bird habitats using two methods: A commercially available culture-independent qPCR assay and culture of indicator bacteria followed by whole-genome sequencing. **2023**, 33, 186-193 ○
- 29 Ecology and evolution of phages encoding anti-CRISPR proteins. **2023**, 435, 167974 ○

- 28 Metagenomic assessment of the diversity and ubiquity of antimicrobial resistance genes in Bangladeshi aquaculture ponds. **2023**, 29, 101462 ○
- 27 Antibiotic resistance of probiotics isolated from Chinese corn stover silage. **2023**, 51, 102-114 ○
- 26 Does increasing the organic fertilizer application rate always boost the antibiotic resistance level in agricultural soils?. **2023**, 322, 121251 ○
- 25 Overuse of food-grade disinfectants threatens a global spread of antimicrobial-resistant bacteria. 1-10 ○
- 24 Antimicrobial resistomes in food chain microbiomes. 1-22 ○
- 23 Effects of co-selection of antibiotic-resistance and metal-resistance genes on antibiotic-resistance potency of environmental bacteria and related ecological risk factors. **2023**, 98, 104081 ○
- 22 A diverse repertoire of anti-defense systems is encoded in the leading region of plasmids. ○
- 21 The Pathfinder plasmid toolkit for genetically engineering newly isolated bacteria enables the study of *Drosophila*-colonizing *Orbaceae*. ○
- 20 Investigating bio-remediation capabilities of a constructed wetland through spatial successional study of the sediment microbiome. **2023**, 6, 1
- 19 Collection of Annotated *Acinetobacter* Genome Sequences. **2023**, 12, ○
- 18 Fungicide exposure accelerated horizontal transfer of antibiotic resistance genes via plasmid-mediated conjugation. **2023**, 233, 119789 ○
- 17 *TcpA* from the *Clostridium perfringens* plasmid pCW3 is more closely related to the DNA translocase FtsK than to coupling proteins. **2023**, 31, 455-463.e4 ○
- 16 Temporal dynamics of the cecal and litter microbiome of chickens raised in two separate broiler houses. 14, ○
- 15 Riverine antibacterial resistance gradient determined by environmental factors. **2023**, 30, 53685-53701 ○
- 14 A comprehensive review on quinolone contamination in environments: current research progress. **2023**, 30, 48778-48792 ○
- 13 One Health WASH: an AMR-smart integrative approach to preventing and controlling infection in farming communities. **2023**, 8, e011263 ○
- 12 Impacts of Domestication and Veterinary Treatment on Mobile Genetic Elements and Resistance Genes in Equine Fecal Bacteria. **2023**, 89, ○
- 11 Antibiotic Resistance Gene Variant Sequencing is Necessary to Reveal the Complex Dynamics of Immigration from Sewers to Activated Sludge. ○

- 10 Quantitative 16S rRNA Gene Amplicon Sequencing for Comprehensive Pathogenic Bacterial Tracking in a Municipal Wastewater Treatment Plant. **2023**, 3, 923-933
- 9 Emerging issues in probiotic safety: 2023 perspectives. **2023**, 15,
- 8 Prevention of horizontal transfer of laboratory plasmids to environmental bacteria: comparison of the effectiveness of a few disinfection approaches to degrade DNA..
- 7 Toxin-linked mobile genetic elements in major enteric bacterial pathogens. **2023**, 4,
- 6 Sensing Antibiotics in Wastewater Using Surface-Enhanced Raman Scattering. **2023**, 57, 4880-4891
- 5 The persistence and stabilization of auxiliary genes in the human skin virome. **2023**, 20,
- 4 Cooperative antibiotic resistance facilitates horizontal gene transfer.
- 3 Assessing synchronous removal of nutrients and SMX based on novel Mn-C composites: Impact of different proportion of manganese dioxide. **2023**, 465, 142884
- 2 Simulated Gastric Acid Promotes the Horizontal Transfer of Multidrug Resistance Genes across Bacteria in the Gastrointestinal Tract at Elevated pH Levels.
- 1 Prophage rates in the human microbiome vary by body site and host health.