

Explosive cell lysis as a mechanism for the biogenesis of biofilms

Nature Communications

7, 11220

DOI: [10.1038/ncomms11220](https://doi.org/10.1038/ncomms11220)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Dynamic cell-matrix interactions modulate microbial biofilm and tissue 3D microenvironments. <i>Current Opinion in Cell Biology</i> , 2016, 42, 102-112.	2.6	90
2	Have exploding cells blown up MV dogma?. <i>Nature Reviews Microbiology</i> , 2016, 14, 334-335.	13.6	5
3	Extracellular aggregation of polyelectrolytes escaped from the cell interior: Mechanisms and physiological consequences. <i>Current Opinion in Colloid and Interface Science</i> , 2016, 26, 84-89.	3.4	6
4	Environmentally controlled bacterial vesicle-mediated export. <i>Cellular Microbiology</i> , 2016, 18, 1525-1536.	1.1	162
5	Living together in biofilms: the microbial cell factory and its biotechnological implications. <i>Microbial Cell Factories</i> , 2016, 15, 165.	1.9	206
6	Bacterial membrane vesicles: Biogenesis, immune regulation and pathogenesis. <i>Cellular Microbiology</i> , 2016, 18, 1518-1524.	1.1	161
7	Optical and force nanoscopy in microbiology. <i>Nature Microbiology</i> , 2016, 1, 16186.	5.9	84
8	A Two-Component Regulatory System Impacts Extracellular Membrane-Derived Vesicle Production in Group A Streptococcus. <i>MBio</i> , 2016, 7, .	1.8	132
9	Biogenesis and Functions of Membrane Vesicles Actively Produced by Microbes. <i>Kagaku To Seibutsu</i> , 2016, 54, 812-819.	0.0	0
10	Functions and biosynthesis of membrane vesicles produced actively by Gram-positive bacteria. <i>Japanese Journal of Lactic Acid Bacteria</i> , 2016, 27, 10-16.	0.1	0
11	Nanowire Arrays as Cell Force Sensors To Investigate Adhesin-Enhanced Holdfast of Single Cell Bacteria and Biofilm Stability. <i>Nano Letters</i> , 2016, 16, 4656-4664.	4.5	65
12	Multifaceted Interfaces of Bacterial Competition. <i>Journal of Bacteriology</i> , 2016, 198, 2145-2155.	1.0	208
13	<i>Pseudomonas aeruginosa</i> Oligoribonuclease Contributes to Tolerance to Ciprofloxacin by Regulating Pyocin Biosynthesis. <i>Antimicrobial Agents and Chemotherapy</i> , 2017, 61, .	1.4	19
14	Vesicles Spread Susceptibility to Phages. <i>Cell</i> , 2017, 168, 13-15.	13.5	39
15	A Natural Chimeric <i>Pseudomonas</i> Bacteriocin with Novel Pore-Forming Activity Parasitizes the Ferrichrome Transporter. <i>MBio</i> , 2017, 8, .	1.8	24
16	Immunoactive Clostridial Membrane Vesicle Production Is Regulated by a Sporulation Factor. <i>Infection and Immunity</i> , 2017, 85, .	1.0	26
17	Membrane vesicle-mediated bacterial communication. <i>ISME Journal</i> , 2017, 11, 1504-1509.	4.4	131
18	Spheres of Hope, Packets of Doom: the Good and Bad of Outer Membrane Vesicles in Interspecies and Ecological Dynamics. <i>Journal of Bacteriology</i> , 2017, 199, .	1.0	69

#	ARTICLE	IF	CITATIONS
19	Biofilm formation by <i>Paracoccus denitrificans</i> requires a type I secretion system-dependent adhesin BapA. <i>FEMS Microbiology Letters</i> , 2017, 364, .	0.7	17
20	Hyperbiofilm phenotype of <i>Pseudomonas aeruginosa</i> defective for the PlcB and PlcN secreted phospholipases. <i>Canadian Journal of Microbiology</i> , 2017, 63, 780-787.	0.8	8
21	Induction of Invertebrate Larval Settlement; Different Bacteria, Different Mechanisms?. <i>Scientific Reports</i> , 2017, 7, 42557.	1.6	90
22	Pathogen-derived extracellular vesicles coordinate social behaviour and host manipulation. <i>Seminars in Cell and Developmental Biology</i> , 2017, 67, 83-90.	2.3	33
23	Acquisition of Phage Sensitivity by Bacteria through Exchange of Phage Receptors. <i>Cell</i> , 2017, 168, 186-199.e12.	13.5	102
24	Phage Tail-Like Bacteriocins. <i>Annual Review of Virology</i> , 2017, 4, 453-467.	3.0	121
25	Structural Characterization of <i>Clostridium sordellii</i> Spores of Diverse Human, Animal, and Environmental Origin and Comparison to <i>Clostridium difficile</i> Spores. <i>MSphere</i> , 2017, 2, .	1.3	16
26	Extracellular DNA and lipoteichoic acids interact with exopolysaccharides in the extracellular matrix of <i>Streptococcus mutans</i> biofilms. <i>Biofouling</i> , 2017, 33, 722-740.	0.8	63
27	Prophage-triggered membrane vesicle formation through peptidoglycan damage in <i>Bacillus subtilis</i> . <i>Nature Communications</i> , 2017, 8, 481.	5.8	224
28	Elongation factor Tu is a multifunctional and processed moonlighting protein. <i>Scientific Reports</i> , 2017, 7, 11227.	1.6	82
29	A Link between Linearmycin Biosynthesis and Extracellular Vesicle Genesis Connects Specialized Metabolism and Bacterial Membrane Physiology. <i>Cell Chemical Biology</i> , 2017, 24, 1238-1249.e7.	2.5	41
30	An early mechanical coupling of planktonic bacteria in dilute suspensions. <i>Nature Communications</i> , 2017, 8, 213.	5.8	20
31	Genetic cargo and bacterial species set the rate of vesicle-mediated horizontal gene transfer. <i>Scientific Reports</i> , 2017, 7, 8813.	1.6	64
32	A Human Biofilm-Disrupting Monoclonal Antibody Potentiates Antibiotic Efficacy in Rodent Models of both <i>Staphylococcus aureus</i> and <i>Acinetobacter baumannii</i> Infections. <i>Antimicrobial Agents and Chemotherapy</i> , 2017, 61, .	1.4	34
33	Bacterial membrane vesicles transport their DNA cargo into host cells. <i>Scientific Reports</i> , 2017, 7, 7072.	1.6	267
34	<i>Pseudomonas</i> predators: understanding and exploiting phage-host interactions. <i>Nature Reviews Microbiology</i> , 2017, 15, 517-530.	13.6	156
35	Nontypeable <i>Haemophilus influenzae</i> releases DNA and DNABII proteins via a T4SS-like complex and ComE of the type IV pilus machinery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E6632-E6641.	3.3	55
36	Membrane vesicles in sea water: heterogeneous DNA content and implications for viral abundance estimates. <i>ISME Journal</i> , 2017, 11, 394-404.	4.4	96

#	ARTICLE	IF	CITATIONS
37	A Critical Role for Extracellular DNA in Dental Plaque Formation. <i>Journal of Dental Research</i> , 2017, 96, 208-216.	2.5	33
38	Biofilms formed by microbiota recovered from fresh produce: Bacterial biodiversity, and inactivation by benzalkonium chloride and enterocin AS-48. <i>LWT - Food Science and Technology</i> , 2017, 77, 80-84.	2.5	9
39	New insights in the early extracellular events in hydrocarbon and lipid biodegradation. <i>Environmental Microbiology</i> , 2017, 19, 15-18.	1.8	8
40	A new look at bubbles during biofilm inoculation reveals pronounced effects on growth and patterning. <i>Biomicrofluidics</i> , 2017, 11, 064109.	1.2	11
41	Bacterial Biofilms on Wounds, a Major Factor That Delays Wound Healing and a Potential Threat to Human Life and Economy. <i>Recent Clinical Techniques, Results, and Research in Wounds</i> , 2017, , 69-88.	0.1	1
42	Survival Strategy of <i>Escherichia coli</i> in Stationary Phase: Involvement of σ^E -Dependent Programmed Cell Death. , 2017, , .		2
43	The Therapeutic Benefit of Bacterial Membrane Vesicles. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1287.	1.8	119
44	Super-Resolution Imaging of Protein Secretion Systems and the Cell Surface of Gram-Negative Bacteria. <i>Frontiers in Cellular and Infection Microbiology</i> , 2017, 7, 220.	1.8	19
45	Characterization of the Prophage Repertoire of African <i>Salmonella</i> Typhimurium ST313 Reveals High Levels of Spontaneous Induction of Novel Phage BTP1. <i>Frontiers in Microbiology</i> , 2017, 8, 235.	1.5	73
46	Interaction of Bacterial Membrane Vesicles with Specific Species and Their Potential for Delivery to Target Cells. <i>Frontiers in Microbiology</i> , 2017, 8, 571.	1.5	78
47	Detection and Physicochemical Characterization of Membrane Vesicles (MVs) of <i>Lactobacillus reuteri</i> DSM 17938. <i>Frontiers in Microbiology</i> , 2017, 8, 1040.	1.5	80
48	Mechanisms and Regulation of Extracellular DNA Release and Its Biological Roles in Microbial Communities. <i>Frontiers in Microbiology</i> , 2017, 8, 1390.	1.5	235
49	Glutathione Enhances Antibiotic Efficiency and Effectiveness of DNase I in Disrupting <i>Pseudomonas aeruginosa</i> Biofilms While Also Inhibiting Pyocyanin Activity, Thus Facilitating Restoration of Cell Enzymatic Activity, Confluence and Viability. <i>Frontiers in Microbiology</i> , 2017, 8, 2429.	1.5	28
50	The biological functions of DNA: from the sublime to the slime. <i>Arthritis Research and Therapy</i> , 2017, 19, 275.	1.6	3
51	Extracellular DNA and Type IV Pilus Expression Regulate the Structure and Kinetics of Biofilm Formation by Nontypeable <i>Haemophilus influenzae</i> . <i>MBio</i> , 2017, 8, .	1.8	30
52	What will membrane vesicles (MVs) bring to bacterial communication?. <i>Microbes and Environments</i> , 2017, 32, 185-187.	0.7	7
53	Mixed Communities of Mucoid and Nonmucoid <i>Pseudomonas aeruginosa</i> Exhibit Enhanced Resistance to Host Antimicrobials. <i>MBio</i> , 2018, 9, .	1.8	59
54	Secreted bacterial RNA: an unexplored avenue. <i>FEMS Microbiology Letters</i> , 2018, 365, .	0.7	7

#	ARTICLE	IF	CITATIONS
55	The functional RNA cargo of bacterial membrane vesicles. <i>FEMS Microbiology Letters</i> , 2018, 365, .	0.7	64
56	Nanomaterials and molecular transporters to overcome the bacterial envelope barrier: Towards advanced delivery of antibiotics. <i>Advanced Drug Delivery Reviews</i> , 2018, 136-137, 28-48.	6.6	91
57	Implant infections: adhesion, biofilm formation and immune evasion. <i>Nature Reviews Microbiology</i> , 2018, 16, 397-409.	13.6	1,342
58	Mycobacterial extracellular vesicles and host pathogen interactions. <i>Pathogens and Disease</i> , 2018, 76, .	0.8	21
59	The expanding horizon of alkyl quinolone signalling and communication in polycellular interactomes. <i>FEMS Microbiology Letters</i> , 2018, 365, .	0.7	20
60	Extracellular Vesicle RNA: A Universal Mediator of Microbial Communication?. <i>Trends in Microbiology</i> , 2018, 26, 401-410.	3.5	162
61	Spatially dependent alkyl quinolone signaling responses to antibiotics in <i>Pseudomonas aeruginosa</i> swarms. <i>Journal of Biological Chemistry</i> , 2018, 293, 9544-9552.	1.6	33
62	Versatile effects of bacterium-released membrane vesicles on mammalian cells and infectious/inflammatory diseases. <i>Acta Pharmacologica Sinica</i> , 2018, 39, 514-533.	2.8	95
63	Metaproteomics of marine viral concentrates reveals key viral populations and abundant periplasmic proteins in the oligotrophic deep chlorophyll maximum of the South China Sea. <i>Environmental Microbiology</i> , 2018, 20, 477-491.	1.8	3
64	Oral Biofilms: Pathogens, Matrix, and Polymicrobial Interactions in Microenvironments. <i>Trends in Microbiology</i> , 2018, 26, 229-242.	3.5	600
65	<i>Clostridium acetobutylicum</i> grows vegetatively in a biofilm rich in heteropolysaccharides and cytoplasmic proteins. <i>Biotechnology for Biofuels</i> , 2018, 11, 315.	6.2	18
66	Delivery of genome editing tools by bacterial extracellular vesicles. <i>Microbial Biotechnology</i> , 2019, 12, 71-73.	2.0	12
67	Dual Transcriptomics of Host-Pathogen Interaction of Cystic Fibrosis Isolate <i>Pseudomonas aeruginosa</i> PASS1 With Zebrafish. <i>Frontiers in Cellular and Infection Microbiology</i> , 2018, 8, 406.	1.8	21
68	Minimal attachment of <i>Pseudomonas aeruginosa</i> to DNA modified surfaces. <i>Biointerphases</i> , 2018, 13, 06E405.	0.6	12
69	Both toxic and beneficial effects of pyocyanin contribute to the lifecycle of <i>Pseudomonas aeruginosa</i> . <i>Molecular Microbiology</i> , 2018, 110, 995-1010.	1.2	95
70	The "hole" story of predatory outer-membrane vesicles. <i>Canadian Journal of Microbiology</i> , 2018, 64, 589-599.	0.8	16
71	New Techniques for the Generation and Analysis of Tailored Microbial Systems on Surfaces. <i>Biochemistry</i> , 2018, 57, 3017-3026.	1.2	10
72	Outer Membrane Vesicle Proteome of <i>Porphyromonas gingivalis</i> Is Differentially Modulated Relative to the Outer Membrane in Response to Heme Availability. <i>Journal of Proteome Research</i> , 2018, 17, 2377-2389.	1.8	34

#	ARTICLE	IF	CITATIONS
73	Reciprocal cross-species induction of outer membrane vesicle biogenesis via secreted factors. <i>Scientific Reports</i> , 2018, 8, 9873.	1.6	32
74	Characterizing interactions of <i>Leptospira interrogans</i> with proximal renal tubule epithelial cells. <i>BMC Microbiology</i> , 2018, 18, 64.	1.3	29
75	Mechanisms of biofilm stimulation by subinhibitory concentrations of antimicrobials. <i>Current Opinion in Microbiology</i> , 2018, 45, 164-169.	2.3	87
76	Extracellular DNA release from the genome-reduced pathogen <i>Mycoplasma hyopneumoniae</i> is essential for biofilm formation on abiotic surfaces. <i>Scientific Reports</i> , 2018, 8, 10373.	1.6	24
77	The <i>Pseudomonas</i> Quinolone Signal (PQS): Not Just for Quorum Sensing Anymore. <i>Frontiers in Cellular and Infection Microbiology</i> , 2018, 8, 230.	1.8	178
78	Substrate Binding Protein DppA1 of ABC Transporter DppBCDF Increases Biofilm Formation in <i>Pseudomonas aeruginosa</i> by Inhibiting Pf5 Prophage Lysis. <i>Frontiers in Microbiology</i> , 2018, 9, 30.	1.5	20
79	<i>Staphylococcus aureus</i> Membrane-Derived Vesicles Promote Bacterial Virulence and Confer Protective Immunity in Murine Infection Models. <i>Frontiers in Microbiology</i> , 2018, 9, 262.	1.5	65
80	Microbial Interactions With Dissolved Organic Matter Drive Carbon Dynamics and Community Succession. <i>Frontiers in Microbiology</i> , 2018, 9, 1234.	1.5	107
81	Small extracellular particles with big potential for horizontal gene transfer: membrane vesicles and gene transfer agents. <i>FEMS Microbiology Letters</i> , 2018, 365, .	0.7	32
82	Nitric Oxide, an Old Molecule With Noble Functions in <i>Pseudomonas aeruginosa</i> Biology. <i>Advances in Microbial Physiology</i> , 2018, 72, 117-145.	1.0	19
83	RNA language in <i>Caenorhabditis elegans</i> and bacteria interspecies communication and memory. <i>Current Opinion in Systems Biology</i> , 2019, 13, 16-22.	1.3	4
84	Symbiosis of a P2 family phage and deep-sea <i>Shewanella putrefaciens</i> . <i>Environmental Microbiology</i> , 2019, 21, 4212-4232.	1.8	16
85	<i>Pseudomonas aeruginosa</i> Polynucleotide Phosphorylase Contributes to Ciprofloxacin Resistance by Regulating PrtR. <i>Frontiers in Microbiology</i> , 2019, 10, 1762.	1.5	12
86	Bacterial Stern layer diffusion: experimental determination with spectral induced polarization and sensitivity to nitrite toxicity. <i>Near Surface Geophysics</i> , 2019, 17, 623-635.	0.6	8
87	Cellulosomes localise on the surface of membrane vesicles from the cellulolytic bacterium <i>Clostridium thermocellum</i> . <i>FEMS Microbiology Letters</i> , 2019, 366, .	0.7	7
88	Human antibody repertoire frequently includes antibodies to a bacterial biofilm associated protein. <i>PLoS ONE</i> , 2019, 14, e0219256.	1.1	9
89	Ts2631 Endolysin from the Extremophilic <i>Thermus scotoductus</i> Bacteriophage vB_Tsc2631 as an Antimicrobial Agent against Gram-Negative Multidrug-Resistant Bacteria. <i>Viruses</i> , 2019, 11, 657.	1.5	47
90	Surface-Induced Formation and Redox-Dependent Staining of Outer Membrane Extensions in <i>Shewanella oneidensis</i> MR-1. <i>Frontiers in Energy Research</i> , 2019, 7, .	1.2	12

#	ARTICLE	IF	CITATIONS
91	Natural and engineered bacterial outer membrane vesicles. <i>Biophysics Reports</i> , 2019, 5, 184-198.	0.2	51
92	Bacterial membrane vesicles as promising vaccine candidates. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2019, 145, 1-6.	2.0	24
93	Outer Membrane Vesicle-Host Cell Interactions. <i>Microbiology Spectrum</i> , 2019, 7, .	1.2	120
94	IgA-enhancing effects of membrane vesicles derived from <i>Lactobacillus sakei</i> subsp. <i>sakei</i> ; NBRC15893. <i>Bioscience of Microbiota, Food and Health</i> , 2019, 38, 23-29.	0.8	40
95	Catabolism of Nucleic Acids by a Cystic Fibrosis <i>Pseudomonas aeruginosa</i> Isolate: An Adaptive Pathway to Cystic Fibrosis Sputum Environment. <i>Frontiers in Microbiology</i> , 2019, 10, 1199.	1.5	11
96	Making the Best of Aggression: The Many Dimensions of Bacterial Toxin Regulation. <i>Trends in Microbiology</i> , 2019, 27, 897-905.	3.5	31
97	Cystic Fibrosis and <i>Pseudomonas aeruginosa</i> : the Host-Microbe Interface. <i>Clinical Microbiology Reviews</i> , 2019, 32, .	5.7	264
98	Big Impact of the Tiny: Bacteriophage-Bacteria Interactions in Biofilms. <i>Trends in Microbiology</i> , 2019, 27, 739-752.	3.5	98
99	Current Status of In Vitro Models and Assays for Susceptibility Testing for Wound Biofilm Infections. <i>Biomedicines</i> , 2019, 7, 34.	1.4	42
100	Pushing beyond the Envelope: the Potential Roles of OprF in <i>Pseudomonas aeruginosa</i> Biofilm Formation and Pathogenicity. <i>Journal of Bacteriology</i> , 2019, 201, .	1.0	29
101	Bacterial communication through membrane vesicles. <i>Bioscience, Biotechnology and Biochemistry</i> , 2019, 83, 1599-1605.	0.6	37
102	Visualization and characterization of <i>Pseudomonas syringae</i> pv. tomato DC3000 pellicles. <i>Microbial Biotechnology</i> , 2019, 12, 688-702.	2.0	20
103	Evolution of altruistic cooperation among nascent multicellular organisms. <i>Evolution; International Journal of Organic Evolution</i> , 2019, 73, 1012-1024.	1.1	7
104	Analysis of <i>Pseudomonas aeruginosa</i> biofilm membrane vesicles supports multiple mechanisms of biogenesis. <i>PLoS ONE</i> , 2019, 14, e0212275.	1.1	92
105	Characterization of membrane vesicles released by <i>Mycobacterium avium</i> in response to environment mimicking the macrophage phagosome. <i>Future Microbiology</i> , 2019, 14, 293-313.	1.0	23
106	Localization of Outer Membrane Proteins in <i>Treponema denticola</i> by Quantitative Proteome Analyses of Outer Membrane Vesicles and Cellular Fractions. <i>Journal of Proteome Research</i> , 2019, 18, 1567-1581.	1.8	11
107	Outer Membrane Vesicle-Host Cell Interactions. , 0, , 201-214.		7
108	Detection and Quantification of eDNA-Associated Bacterial Membrane Vesicles by Flow Cytometry. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5307.	1.8	21

#	ARTICLE	IF	CITATIONS
109	Extracellular Vesiclesâ€”Connecting Kingdoms. International Journal of Molecular Sciences, 2019, 20, 5695.	1.8	177
110	The Diverse Functional Roles of Elongation Factor Tu (EF-Tu) in Microbial Pathogenesis. Frontiers in Microbiology, 2019, 10, 2351.	1.5	118
111	Molecular and Evolutionary Determinants of Bacteriophage Host Range. Trends in Microbiology, 2019, 27, 51-63.	3.5	277
112	Types and origins of bacterial membrane vesicles. Nature Reviews Microbiology, 2019, 17, 13-24.	13.6	706
113	Bacterial Excretion of Cytoplasmic Proteins (ECP): Occurrence, Mechanism, and Function. Trends in Microbiology, 2019, 27, 176-187.	3.5	63
114	Extracellular membrane vesicles in the three domains of life and beyond. FEMS Microbiology Reviews, 2019, 43, 273-303.	3.9	289
115	Antibiotics Stimulate Formation of Vesicles in <i>Staphylococcus aureus</i> in both Phage-Dependent and -Independent Fashions and via Different Routes. Antimicrobial Agents and Chemotherapy, 2019, 63, .	1.4	86
116	Extracellular polymeric substances of biofilms: Suffering from an identity crisis. Water Research, 2019, 151, 1-7.	5.3	228
117	Mechanism of bacterial adhesion on ultrafiltration membrane modified by natural antimicrobial polymers (chitosan) and combination with activated carbon (PAC). Reviews in Chemical Engineering, 2019, 35, 421-443.	2.3	26
118	New insights of the bacterial response to exposure of differently sized silver nanomaterials. Water Research, 2020, 169, 115205.	5.3	29
119	Characterization of Gardnerella vaginalis membrane vesicles reveals a role in inducing cytotoxicity in vaginal epithelial cells. Anaerobe, 2020, 61, 102090.	1.0	15
120	Isolation of a Novel Bacterial Strain Capable of Producing Abundant Extracellular Membrane Vesicles Carrying a Single Major Cargo Protein and Analysis of Its Transport Mechanism. Frontiers in Microbiology, 2019, 10, 3001.	1.5	16
121	Host- and Microbiota-Derived Extracellular Vesicles, Immune Function, and Disease Development. International Journal of Molecular Sciences, 2020, 21, 107.	1.8	142
122	Stoking the Fire: How Dying Cells Propagate Inflammatory Signalling through Extracellular Vesicle Trafficking. International Journal of Molecular Sciences, 2020, 21, 7256.	1.8	12
123	Biofilm formation and extracellular microvesiclesâ€”The way of foodborne pathogens toward resistance. Electrophoresis, 2020, 41, 1718-1739.	1.3	16
124	Influence of interspecies interactions on the spatial organization of dual species bacterial communities. Biofilm, 2020, 2, 100035.	1.5	18
125	Role of Tobramycin in the Induction and Maintenance of Viable but Non-Culturable Pseudomonas aeruginosa in an In Vitro Biofilm Model. Antibiotics, 2020, 9, 399.	1.5	8
126	Pseudomonas aeruginosa Biofilms. International Journal of Molecular Sciences, 2020, 21, 8671.	1.8	322

#	ARTICLE	IF	CITATIONS
127	<i>Pseudomonas</i> Quinolone Signal-Induced Outer Membrane Vesicles Enhance Biofilm Dispersion in <i>Pseudomonas aeruginosa</i> . <i>MSphere</i> , 2020, 5, .	1.3	47
128	Improved understanding of biofilm development by <i>Piscirickettsia salmonis</i> reveals potential risks for the persistence and dissemination of piscirickettsiosis. <i>Scientific Reports</i> , 2020, 10, 12224.	1.6	21
129	Role of Bacterial Cytoskeleton and Other Apparatuses in Cell Communication. <i>Frontiers in Molecular Biosciences</i> , 2020, 7, 158.	1.6	8
130	Extracellular Vesicles Produced by <i>Bifidobacterium longum</i> Export Mucin-Binding Proteins. <i>Applied and Environmental Microbiology</i> , 2020, 86, .	1.4	37
131	The DNA Damage Inducible SOS Response Is a Key Player in the Generation of Bacterial Persister Cells and Population Wide Tolerance. <i>Frontiers in Microbiology</i> , 2020, 11, 1785.	1.5	112
132	Extracellular Vesicles: An Overlooked Secretion System in Cyanobacteria. <i>Life</i> , 2020, 10, 129.	1.1	13
133	The Russian Doll Model: How Bacteria Shape Successful and Sustainable Inter-Kingdom Relationships. <i>Frontiers in Microbiology</i> , 2020, 11, 573759.	1.5	9
134	Component Identification and Functional Analysis of Outer Membrane Vesicles Released by <i>Avibacterium paragallinarum</i> . <i>Frontiers in Microbiology</i> , 2020, 11, 518060.	1.5	6
135	Bacteriocins Targeting Gram-Negative Phytopathogenic Bacteria: Plantibiotics of the Future. <i>Frontiers in Microbiology</i> , 2020, 11, 575981.	1.5	20
136	Extracellular RNAs in Bacterial Infections: From Emerging Key Players on Host-Pathogen Interactions to Exploitable Biomarkers and Therapeutic Targets. <i>International Journal of Molecular Sciences</i> , 2020, 21, 9634.	1.8	14
137	Membrane Vesicle Production as a Bacterial Defense Against Stress. <i>Frontiers in Microbiology</i> , 2020, 11, 600221.	1.5	51
138	The Antimicrobial Peptide Human Beta-Defensin 2 Inhibits Biofilm Production of <i>Pseudomonas aeruginosa</i> Without Compromising Metabolic Activity. <i>Frontiers in Immunology</i> , 2020, 11, 805.	2.2	28
139	Release mechanisms and molecular interactions of <i>Pseudomonas aeruginosa</i> extracellular DNA. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 6549-6564.	1.7	35
140	Rapid detection of <i>Escherichia coli</i> using bacteriophage-induced lysis and image analysis. <i>PLoS ONE</i> , 2020, 15, e0233853.	1.1	12
141	Resolving Bioâ€“Nano Interactions of <i>E. coli</i> Bacteriaâ€“Dragonfly Wing Interface with Helium Ion and 3D-Structured Illumination Microscopy to Understand Bacterial Death on Nanotopography. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 3925-3932.	2.6	25
142	Bacterially produced metabolites protect <i>C. elegans</i> neurons from degeneration. <i>PLoS Biology</i> , 2020, 18, e3000638.	2.6	48
143	Secretion and Delivery of Intestinal Pathogenic <i>Escherichia coli</i> Virulence Factors via Outer Membrane Vesicles. <i>Frontiers in Cellular and Infection Microbiology</i> , 2020, 10, 91.	1.8	50
144	Diversity of physical properties of bacterial extracellular membrane vesicles revealed through atomic force microscopy phase imaging. <i>Nanoscale</i> , 2020, 12, 7950-7959.	2.8	29

#	ARTICLE	IF	CITATIONS
145	Bacterial RNA in extracellular vesicles: A new regulator of host-pathogen interactions?. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2020, 1863, 194519.	0.9	26
146	The Basis for Natural Multiresistance to Phage in <i>Pseudomonas aeruginosa</i> . <i>Antibiotics</i> , 2020, 9, 339.	1.5	12
147	Characterizing the Mechanism of Action of an Ancient Antimicrobial, Manuka Honey, against <i>Pseudomonas aeruginosa</i> Using Modern Transcriptomics. <i>MSystems</i> , 2020, 5, .	1.7	30
148	Biofilms: hot spots of horizontal gene transfer (HGT) in aquatic environments, with a focus on a new HGT mechanism. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	1.3	198
149	Outer membrane vesicles of <i>Porphyromonas gingivalis</i> attenuate insulin sensitivity by delivering gingipains to the liver. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2020, 1866, 165731.	1.8	67
150	Novel Bacterial Diversity and Fragmented eDNA Identified in Hyperbiofilm-Forming <i>Pseudomonas aeruginosa</i> Rugose Small Colony Variant. <i>IScience</i> , 2020, 23, 100827.	1.9	31
151	Cracking Open Bacterial Membrane Vesicles. <i>Frontiers in Microbiology</i> , 2019, 10, 3026.	1.5	121
152	Glycine significantly enhances bacterial membrane vesicle production: a powerful approach for isolation of LPS-reduced membrane vesicles of probiotic <i>Escherichia coli</i> . <i>Microbial Biotechnology</i> , 2020, 13, 1162-1178.	2.0	31
153	Division of labour in a matrix, rather than phagocytosis or endosymbiosis, as a route for the origin of eukaryotic cells. <i>Biology Direct</i> , 2020, 15, 8.	1.9	3
154	Protect thy host: Pf4 phages shield <i>Pseudomonas aeruginosa</i> from antibiotics. <i>Environmental Microbiology</i> , 2020, 22, 2461-2462.	1.8	7
155	Progresses on bacterial secretomes enlighten research on <i>Mycoplasma</i> secretome. <i>Microbial Pathogenesis</i> , 2020, 144, 104160.	1.3	8
156	Fis Contributes to Resistance of <i>Pseudomonas aeruginosa</i> to Ciprofloxacin by Regulating Pyocin Synthesis. <i>Journal of Bacteriology</i> , 2020, 202, .	1.0	7
157	Role of Outer Membrane Vesicles in Bacterial Physiology and Host Cell Interactions. <i>Infectious Microbes & Diseases</i> , 2020, 2, 3-9.	0.5	13
158	The future of quantum dot fluorescent labelling of extracellular vesicles for biomedical applications. <i>Nano Futures</i> , 2020, 4, 022001.	1.0	5
159	Biofilm Matrixome: Extracellular Components in Structured Microbial Communities. <i>Trends in Microbiology</i> , 2020, 28, 668-681.	3.5	637
160	The Contribution of Membrane Vesicles to Bacterial Pathogenicity in Cystic Fibrosis Infections and Healthcare Associated Pneumonia. <i>Frontiers in Microbiology</i> , 2020, 11, 630.	1.5	25
161	Characterization and proteomic analysis of outer membrane vesicles from a commensal microbe, <i>Enterobacter cloacae</i> . <i>Journal of Proteomics</i> , 2021, 231, 103994.	1.2	27
162	Relationship Between Membrane Vesicles, Extracellular ATP and Biofilm Formation in Antarctic Gram-Negative Bacteria. <i>Microbial Ecology</i> , 2021, 81, 645-656.	1.4	13

#	ARTICLE	IF	CITATIONS
163	Eco-evolutionary feedbacks mediated by bacterial membrane vesicles. <i>FEMS Microbiology Reviews</i> , 2021, 45, .	3.9	13
164	Microbial vesicle-mediated communication: convergence to understand interactions within and between domains of life. <i>Environmental Sciences: Processes and Impacts</i> , 2021, 23, 664-677.	1.7	9
165	The composition and function of <i>Enterococcus faecalis</i> membrane vesicles. <i>MicroLife</i> , 2021, 2, .	1.0	8
167	Pathogenesis Mediated by Bacterial Membrane Vesicles. <i>Sub-Cellular Biochemistry</i> , 2021, 97, 101-150.	1.0	6
168	Real-time tracking of bacterial membrane vesicles reveals enhanced membrane traffic upon antibiotic exposure. <i>Science Advances</i> , 2021, 7, .	4.7	36
169	The DNA-binding protein HU is a molecular glue that attaches bacteria to extracellular DNA in biofilms. <i>Journal of Biological Chemistry</i> , 2021, 296, 100532.	1.6	13
170	Roadmap on emerging concepts in the physical biology of bacterial biofilms: from surface sensing to community formation. <i>Physical Biology</i> , 2021, 18, 051501.	0.8	46
171	Live cell dynamics of production, explosive release and killing activity of phage tail-like weapons for <i>Pseudomonas</i> kin exclusion. <i>Communications Biology</i> , 2021, 4, 87.	2.0	34
172	Polymeric antibacterial materials: design, platforms and applications. <i>Journal of Materials Chemistry B</i> , 2021, 9, 2802-2815.	2.9	86
173	Mycolic acid-containing bacteria trigger distinct types of membrane vesicles through different routes. <i>IScience</i> , 2021, 24, 102015.	1.9	16
174	Inhibition of Biofilm Formation. , 2021, , 209-237.		1
175	Contribution of Drugs Interfering with Protein and Cell Wall Synthesis to the Persistence of <i>Pseudomonas aeruginosa</i> Biofilms: An In Vitro Model. <i>International Journal of Molecular Sciences</i> , 2021, 22, 1628.	1.8	1
176	Identification of a Putative Sensor Protein Involved in Regulation of Vesicle Production by a Hypervesiculating Bacterium, <i>Shewanella vesiculosa</i> HM13. <i>Frontiers in Microbiology</i> , 2021, 12, 629023.	1.5	3
177	Microbial Musings – February 2021. <i>Microbiology (United Kingdom)</i> , 2021, 167, .	0.7	0
180	The Two-Component System O9 Regulates Pneumococcal Carbohydrate Metabolism and Capsule Expression. <i>Microorganisms</i> , 2021, 9, 468.	1.6	7
181	New Provisional Function of OmpA from <i>Acinetobacter</i> sp. Strain SA01 Based on Environmental Challenges. <i>MSystems</i> , 2021, 6, .	1.7	11
182	Multiple holins contribute to extracellular DNA release in <i>Pseudomonas aeruginosa</i> biofilms. <i>Microbiology (United Kingdom)</i> , 2021, 167, .	0.7	21
184	The role of extracellular DNA in the formation, architecture, stability, and treatment of bacterial biofilms. <i>Biotechnology and Bioengineering</i> , 2021, 118, 2129-2141.	1.7	58

#	ARTICLE	IF	CITATIONS
185	The dental plaque biofilm matrix. <i>Periodontology</i> 2000, 2021, 86, 32-56.	6.3	153
186	Bursting and Reassembly of Giant Double Emulsion Drops Form Polymer Vesicles. <i>ACS Macro Letters</i> , 2021, 10, 401-405.	2.3	4
187	<scp>RNA</scp> release <i>via</i> membrane vesicles in <scp><i>Pseudomonas aeruginosa</i> PAO1</scp> is associated with the growth phase. <i>Environmental Microbiology</i> , 2021, 23, 5030-5041.	1.8	10
188	Biofilm Formation in <i>Xanthomonas arboricola</i> pv. <i>pruni</i> : Structure and Development. <i>Agronomy</i> , 2021, 11, 546.	1.3	4
189	Control of a programmed cell death pathway in <i>Pseudomonas aeruginosa</i> by an antiterminator. <i>Nature Communications</i> , 2021, 12, 1702.	5.8	12
190	The biofilm matrix scaffold of <i>Pseudomonas aeruginosa</i> contains G-quadruplex extracellular DNA structures. <i>Npj Biofilms and Microbiomes</i> , 2021, 7, 27.	2.9	40
191	Bacterial membrane vesicle and its diversity. <i>Drug Delivery System</i> , 2021, 36, 138-144.	0.0	1
192	Outer Membrane Vesicles (OMVs) Produced by Gram-Negative Bacteria: Structure, Functions, Biogenesis, and Vaccine Application. <i>BioMed Research International</i> , 2021, 2021, 1-16.	0.9	52
193	Plant holobiont interactions mediated by the type <scp>VI</scp> secretion system and the membrane vesicles: promising tools for a greener agriculture. <i>Environmental Microbiology</i> , 2021, 23, 1830-1836.	1.8	11
194	Bacterial and eukaryotic extracellular vesicles and nonalcoholic fatty liver disease: new players in the gut-liver axis?. <i>American Journal of Physiology - Renal Physiology</i> , 2021, 320, G485-G495.	1.6	17
195	Membrane vesicles from periodontal pathogens and their potential roles in periodontal disease and systemic illnesses. <i>Journal of Periodontal Research</i> , 2021, 56, 646-655.	1.4	15
196	Bacteriophage infection of <i>Escherichia coli</i> leads to the formation of membrane vesicles via both explosive cell lysis and membrane blebbing. <i>Microbiology (United Kingdom)</i> , 2021, 167, .	0.7	23
197	Single- or double-membrane-bound vesicles and P, Ca, and Fe-containing granules in <i>Xanthomonas citri</i> cultured on a solid medium. <i>Micron</i> , 2021, 143, 103024.	1.1	1
199	Autolysisâ€‘mediated membrane vesicle formation in <i>Bacillus subtilis</i>. <i>Environmental Microbiology</i> , 2021, 23, 2632-2647.	1.8	23
200	The Heritability of Behaviors Associated With the Host Gut Microbiota. <i>Frontiers in Immunology</i> , 2021, 12, 658551.	2.2	7
201	Phages and their lysins: Toolkits in the battle against foodborne pathogens in the postantibiotic era. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2021, 20, 3319-3343.	5.9	13
202	Biogenesis of Outer Membrane Vesicles Concentrates the Unsaturated Fatty Acid of Phosphatidylinositol in <i>Capnocytophaga ochracea</i> . <i>Frontiers in Microbiology</i> , 2021, 12, 682685.	1.5	9
203	Investigation of <i>Burkholderia cepacia</i> Complex Methylomes via Single-Molecule, Real-Time Sequencing and Mutant Analysis. <i>Journal of Bacteriology</i> , 2021, 203, e0068320.	1.0	4

#	ARTICLE	IF	CITATIONS
204	Microbiota-host communications: Bacterial extracellular vesicles as a common language. <i>PLoS Pathogens</i> , 2021, 17, e1009508.	2.1	110
206	Reaching out in anticipation: bacterial membrane extensions represent a permanent investment in polysaccharide sensing and utilization. <i>Environmental Microbiology</i> , 2021, 23, 3149-3163.	1.8	10
207	Extracellular vesicles as novel assay tools to study cellular interactions of anti-infective compounds – A perspective. <i>Advanced Drug Delivery Reviews</i> , 2021, 173, 492-503.	6.6	6
208	Immunomodulatory roles and novel applications of bacterial membrane vesicles. <i>Molecular Immunology</i> , 2021, 134, 72-85.	1.0	40
209	Recent Advances of Nanotechnology-Facilitated Bacteria-Based Drug and Gene Delivery Systems for Cancer Treatment. <i>Pharmaceutics</i> , 2021, 13, 940.	2.0	16
210	Surfaceome and Exoproteome Dynamics in Dual-Species <i>Pseudomonas aeruginosa</i> and <i>Staphylococcus aureus</i> Biofilms. <i>Frontiers in Microbiology</i> , 2021, 12, 672975.	1.5	11
211	A novel decoy strategy for polymyxin resistance in <i>Acinetobacter baumannii</i> . <i>ELife</i> , 2021, 10, .	2.8	26
212	Single-molecule imaging of LexA degradation in <i>Escherichia coli</i> elucidates regulatory mechanisms and heterogeneity of the SOS response. <i>Nature Microbiology</i> , 2021, 6, 981-990.	5.9	31
213	Carboxy-Terminal Processing Protease Controls Production of Outer Membrane Vesicles and Biofilm in <i>Acinetobacter baumannii</i> . <i>Microorganisms</i> , 2021, 9, 1336.	1.6	4
214	The role of bacterial extracellular vesicles in chronic wound infections: Current knowledge and future challenges. <i>Wound Repair and Regeneration</i> , 2021, 29, 864-880.	1.5	5
216	Interspecies RNA Interactome of Pathogen and Host in a Heritable Defensive Strategy. <i>Frontiers in Microbiology</i> , 2021, 12, 649858.	1.5	1
217	<i>Pseudomonas aeruginosa</i> biofilms and their partners in crime. <i>Biotechnology Advances</i> , 2021, 49, 107734.	6.0	64
220	Disruption of the <i>Pseudomonas aeruginosa</i> Tat system perturbs PQS-dependent quorum sensing and biofilm maturation through lack of the Rieske cytochrome bc1 sub-unit. <i>PLoS Pathogens</i> , 2021, 17, e1009425.	2.1	8
222	Targeting Bacterial Gyrase with Cystobactamid, Fluoroquinolone, and Aminocoumarin Antibiotics Induces Distinct Molecular Signatures in <i>Pseudomonas aeruginosa</i> . <i>MSystems</i> , 2021, 6, e0061021.	1.7	3
223	Spatial transcriptomics of planktonic and sessile bacterial populations at single-cell resolution. <i>Science</i> , 2021, 373, .	6.0	140
224	Outer Membrane Vesicles Derived from <i>Klebsiella pneumoniae</i> Are a Driving Force for Horizontal Gene Transfer. <i>International Journal of Molecular Sciences</i> , 2021, 22, 8732.	1.8	29
225	Molecular genetics for probiotic engineering: dissecting lactic acid bacteria. <i>Trends in Microbiology</i> , 2022, 30, 293-306.	3.5	35
226	Dosage-Dependent Antimicrobial Activity of DNA-Histone Microwebs Against <i>Staphylococcus Aureus</i> . <i>Advanced Materials Interfaces</i> , 2021, 8, 2100717.	1.9	4

#	ARTICLE	IF	CITATIONS
227	Biomimetic Bacterial Membrane Vesicles for Drug Delivery Applications. <i>Pharmaceutics</i> , 2021, 13, 1430.	2.0	22
228	The clinical role of host and bacterial-derived extracellular vesicles in pneumonia. <i>Advanced Drug Delivery Reviews</i> , 2021, 176, 113811.	6.6	11
229	Isolation and Characterization of Outer Membrane Vesicles of <i>Pectobacterium brasiliense</i> 1692. <i>Microorganisms</i> , 2021, 9, 1918.	1.6	10
230	The Holin-Endolysin Lysis System of the OP2-Like Phage X2 Infecting <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> . <i>Viruses</i> , 2021, 13, 1949.	1.5	13
231	Positively-charged microcrystalline cellulose microparticles: Rapid killing effect on bacteria, trapping behavior and excellent elimination efficiency of biofilm matrix from water environment. <i>Journal of Hazardous Materials</i> , 2022, 424, 127299.	6.5	14
232	Interaction of bacterial extracellular microvesicles with eukaryotic cells.. <i>Medical Immunology (Russia)</i> , 2021, 22, 1065-1084.	0.1	0
233	Cluster and conquer: the morphodynamics of invasion of a compliant substrate by active rods. <i>Soft Matter</i> , 2021, 17, 7459-7465.	1.2	1
234	Loss of cell wall integrity genes <i>cpxA</i> and <i>mrcB</i> causes flocculation in <i>Escherichia coli</i> . <i>Biochemical Journal</i> , 2021, 478, 41-59.	1.7	5
235	Introduction, History, and Discovery of Bacterial Membrane Vesicles. , 2020, , 1-21.		4
236	Biogenesis of Gram-Negative OMVs. , 2020, , 23-46.		3
237	Biogenesis and Function of Extracellular Vesicles in Gram-Positive Bacteria, Mycobacteria, and Fungi. , 2020, , 47-74.		5
238	Functions of MVs in Inter-Bacterial Communication. , 2020, , 101-117.		4
239	Delivery of Virulence Factors by Bacterial Membrane Vesicles to Mammalian Host Cells. , 2020, , 131-158.		4
240	Outer membrane vesicle-associated lipase FtIA enhances cellular invasion and virulence in <i>Francisella tularensis</i> LVS. <i>Emerging Microbes and Infections</i> , 2017, 6, 1-12.	3.0	31
241	<i>Pseudomonas aeruginosa</i> is capable of natural transformation in biofilms. <i>Microbiology (United Kingdom)</i> , 2017, 153, 1075-1083.	0.7	37
246	Extracellular Vesicle Biogenesis and Functions in Gram-Positive Bacteria. <i>Infection and Immunity</i> , 2020, 88, .	1.0	112
247	Isolation and characterization of a novel bacterial strain from a Tris-Acetate-Phosphate agar medium plate of the green micro-alga <i>Chlamydomonas reinhardtii</i> that can utilize common environmental pollutants as a carbon source. <i>F1000Research</i> , 2020, 9, 656.	0.8	8
248	Outer membrane vesicles from <i>Neisseria gonorrhoeae</i> target PorB to mitochondria and induce apoptosis. <i>PLoS Pathogens</i> , 2018, 14, e1006945.	2.1	105

#	ARTICLE	IF	CITATIONS
249	Multicellular and unicellular responses of microbial biofilms to stress. <i>Biological Chemistry</i> , 2020, 401, 1365-1374.	1.2	22
250	Bacterial RNA as a signal to eukaryotic cells as part of the infection process. <i>Discoveries</i> , 2016, 4, e70.	1.5	8
251	Exploiting Quorum Sensing Inhibition for the Control of <i>Pseudomonas aeruginosa</i> and <i>Acinetobacter baumannii</i> Biofilms. <i>Current Topics in Medicinal Chemistry</i> , 2017, 17, 1915-1927.	1.0	30
252	THE CYTOTOXICITY EFFECTS OF OUTER MEMBRANE VESICLES ISOLATED FROM HOSPITAL AND LABORATORY STRAINS OF <i>PSEUDOMONAS AERUGINOSA</i> ON HUMAN KERATINOCYTE CELL LINE. <i>Malaysian Journal of Science</i> , 2020, 39, 45-53.	0.2	6
253	Proteomic Analysis of Vesicle-Producing <i>Pseudomonas aeruginosa</i> PAO1 Exposed to X-Ray Irradiation. <i>Frontiers in Microbiology</i> , 2020, 11, 558233.	1.5	7
254	Quorum sensing controls <i>Vibrio cholerae</i> multicellular aggregate formation. <i>ELife</i> , 2018, 7, .	2.8	51
255	The Origin of Plasma-Derived Bacterial Extracellular Vesicles in Healthy Individuals and Patients with Inflammatory Bowel Disease: A Pilot Study. <i>Genes</i> , 2021, 12, 1636.	1.0	17
256	Role of extracellular polymeric substances in the immobilization of hexavalent chromium by <i>Shewanella putrefaciens</i> CN32 unsaturated biofilms. <i>Science of the Total Environment</i> , 2022, 810, 151184.	3.9	15
257	The extracellular vesicle generation paradox: a bacterial point of view. <i>EMBO Journal</i> , 2021, 40, e108174.	3.5	58
258	Phage-Mediated Explosive Cell Lysis Induces the Formation of a Different Type of O-IMV in <i>Shewanella vesiculosa</i> M7T. <i>Frontiers in Microbiology</i> , 2021, 12, 713669.	1.5	12
259	A Novel Pathway for Bacterial Membrane Vesicle Formation. <i>Oleoscience</i> , 2018, 18, 227-231.	0.0	0
260	Selective Interaction Using Extracellular Nanostructure in Bacteria. <i>Oleoscience</i> , 2018, 18, 221-225.	0.0	0
261	꺁°èĈĖĖĖ”3/4â†°ãĴMā,è†œâ°èfžã®æ–°ãŸã±•é–ċ. <i>Kagaku To Seibutsu</i> , 2018, 56, 79-81.	0.0	0
263	BACTERIAL MOONLIGHTING PROTEINS. <i>Postepy Mikrobiologii</i> , 2019, 56, 226-232.	0.1	0
266	Methods to Identify and Analyze Vesicle-Protected DNA Transfer. <i>Methods in Molecular Biology</i> , 2020, 2075, 209-221.	0.4	1
269	Bacterial Extracellular Vesicles in Gastrointestinal Tract Cancer: An Unexplored Territory. <i>Cancers</i> , 2021, 13, 5450.	1.7	14
270	pH Stress Mediated Alteration in Protein Composition and Reduction in Cytotoxic Potential of <i>Gardnerella vaginalis</i> Membrane Vesicles. <i>Frontiers in Microbiology</i> , 2021, 12, 723909.	1.5	3
271	Comparative genomics of wild-type and laboratory-evolved biofilm-overproducing <i>Deinococcus metallilatus</i> strains. <i>Microbial Genomics</i> , 2020, 6, .	1.0	0

#	ARTICLE	IF	CITATIONS
273	Preparation of Bacterial Outer Membrane Vesicles for Characterisation of Periplasmic Proteins in Their Native Environment. <i>Bio-protocol</i> , 2020, 10, e3853.	0.2	3
274	Extracellular Vesicles in the Environment. , 2020, , 75-99.		4
276	Biofilm formation of <i>Staphylococcus epidermidis</i> imaged using atmospheric scanning electron microscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 7549-7558.	1.9	8
277	Microbiota-derived extracellular vesicles in interkingdom communication in the gut. <i>Journal of Extracellular Vesicles</i> , 2021, 10, e12161.	5.5	102
279	6-Methylcoumarin attenuates quorum sensing and biofilm formation in <i>Pseudomonas aeruginosa</i> PAO1 and its applications on solid surface coatings with polyurethane. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 8647-8661.	1.7	20
283	Delivery of Toxins and Effectors by Bacterial Membrane Vesicles. <i>Toxins</i> , 2021, 13, 845.	1.5	12
284	SOS-Independent Pyocin Production in <i>P. aeruginosa</i> Is Induced by XerC Recombinase Deficiency. <i>MBio</i> , 2021, 12, e0289321.	1.8	7
285	Tracing the origins of extracellular DNA in bacterial biofilms: story of death and predation to community benefit. <i>Biofouling</i> , 2021, 37, 1022-1039.	0.8	20
286	Incorporation of Plasmid DNA Into Bacterial Membrane Vesicles by Peptidoglycan Defects in <i>Escherichia coli</i> . <i>Frontiers in Microbiology</i> , 2021, 12, 747606.	1.5	13
287	Glycine Induction Method: Effective Production of Immunoactive Bacterial Membrane Vesicles with Low Endotoxin Content. <i>Methods in Molecular Biology</i> , 2022, 2414, 207-226.	0.4	2
288	Contributions of Extracellular Vesicles to Fungal Biofilm Pathogenesis. <i>Current Topics in Microbiology and Immunology</i> , 2021, 432, 67-79.	0.7	2
289	eDNA Inactivation and Biofilm Inhibition by the Polymeric Biocide Polyhexamethylene Guanidine Hydrochloride (PHMG-Cl). <i>International Journal of Molecular Sciences</i> , 2022, 23, 731.	1.8	14
290	Interbacterial Transfer of Carbapenem Resistance and Large Antibiotic Resistance Islands by Natural Transformation in Pathogenic <i>Acinetobacter</i> . <i>MBio</i> , 2022, 13, e0263121.	1.8	15
292	Generation of Distinct Differentially Culturable Forms of <i>Burkholderia</i> following Starvation at Low Temperature. <i>Microbiology Spectrum</i> , 2022, , e0211021.	1.2	5
293	Phage Genes Induce Quorum Sensing Signal Release through Membrane Vesicle Formation. <i>Microbes and Environments</i> , 2022, 37, n/a.	0.7	6
294	Interaction with mammalian enteric viruses alters outer membrane vesicle production and content by commensal bacteria. <i>Journal of Extracellular Vesicles</i> , 2022, 11, e12172.	5.5	16
295	Outer Membrane Vesicles (OMVs) of <i>Pseudomonas aeruginosa</i> Provide Passive Resistance but Not Sensitization to LPS-Specific Phages. <i>Viruses</i> , 2022, 14, 121.	1.5	18
296	Identification of genes involved in exoprotein release using a high-throughput exoproteome screening assay in <i>Yersinia entomophaga</i> . <i>PLoS ONE</i> , 2022, 17, e0263019.	1.1	7

#	ARTICLE	IF	CITATIONS
297	ECF Sigma Factor Hxul Is Critical for <i>In Vivo</i> Fitness of <i>Pseudomonas aeruginosa</i> during Infection. <i>Microbiology Spectrum</i> , 2022, 10, e0162021.	1.2	6
298	Exposure to lysed bacteria can promote or inhibit growth of neighboring live bacteria depending on local abiotic conditions. <i>FEMS Microbiology Ecology</i> , 2022, 98, .	1.3	7
299	Commensal and Pathogenic Bacterial-Derived Extracellular Vesicles in Host-Bacterial and Interbacterial Dialogues: Two Sides of the Same Coin. <i>Journal of Immunology Research</i> , 2022, 2022, 1-15.	0.9	14
300	Should Bacteriophages Be Classified as Parasites or Predators?. <i>Polish Journal of Microbiology</i> , 2022, 71, 3-9.	0.6	11
301	Biological Functions and Applications of Virus-Related Bacterial Nanoparticles: A Review. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2595.	1.8	4
302	Biogenesis and Biological Functions of Extracellular Vesicles in Cellular and Organismal Communication With Microbes. <i>Frontiers in Microbiology</i> , 2022, 13, 817844.	1.5	18
303	A novel bioactive postbiotics: from microbiota-derived extracellular nanoparticles to health promoting. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 6885-6899.	5.4	4
304	Raman Microspectroscopy Imaging Analysis of Extracellular Vesicles Biogenesis by Filamentous Fungus <i>Penicillium chrysogenum</i> . <i>Advanced Biology</i> , 2022, 6, e2101322.	1.4	9
305	The Role of Bacterial Membrane Vesicles in Human Health and Disease. <i>Frontiers in Microbiology</i> , 2022, 13, 828704.	1.5	15
306	Plasmid-Mediated Stabilization of Prophages. <i>MSphere</i> , 2022, 7, e0093021.	1.3	2
307	Biofilm through the Looking Glass: A Microbial Food Safety Perspective. <i>Pathogens</i> , 2022, 11, 346.	1.2	20
308	The structural role of bacterial eDNA in the formation of biofilm streamers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2113723119.	3.3	30
309	Bacterial extracellular vesicles as bioactive nanocarriers for drug delivery: Advances and perspectives. <i>Bioactive Materials</i> , 2022, 14, 169-181.	8.6	65
311	Immunogenic Proteins of Group B <i>Streptococcus</i> —Potential Antigens in Immunodiagnostic Assay for GBS Detection. <i>Pathogens</i> , 2022, 11, 43.	1.2	5
312	Enhancement of membrane vesicle production by disrupting the degP gene in <i>Meiothermus ruber</i> H328. <i>AMB Express</i> , 2021, 11, 170.	1.4	3
313	Considerations for the Analysis of Bacterial Membrane Vesicles: Methods of Vesicle Production and Quantification Can Influence Biological and Experimental Outcomes. <i>Microbiology Spectrum</i> , 2021, 9, e0127321.	1.2	30
315	Outer Membrane Vesicles of Avian Pathogenic <i>Escherichia coli</i> Mediate the Horizontal Transmission of blaCTX-M-55. <i>Pathogens</i> , 2022, 11, 481.	1.2	12
316	Role of Extracellular DNA in Dalbavancin Activity against Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) Biofilms in Patients with Skin and Soft Tissue Infections. <i>Microbiology Spectrum</i> , 2022, 10, e0035122.	1.2	19

#	ARTICLE	IF	CITATIONS
317	Role of extracellular vesicles in severe pneumonia and sepsis. <i>Expert Opinion on Biological Therapy</i> , 2022, 22, 747-762.	1.4	8
318	The <i>Mycoplasma</i> spp. "Releasome": A New Concept for a Long-Known Phenomenon. <i>Frontiers in Microbiology</i> , 2022, 13, 853440.	1.5	6
342	Tracking the Origins of <i>Pseudomonas aeruginosa</i> Phylogroups by Diversity and Evolutionary Analysis of Important Pathogenic Marker Genes. <i>Diversity</i> , 2022, 14, 345.	0.7	3
345	Contribution of Membrane Vesicle to Reprogramming of Bacterial Membrane Fluidity in <i>Pseudomonas aeruginosa</i> . <i>MSphere</i> , 2022, 7, .	1.3	8
346	Regulation of Biofilm Exopolysaccharide Biosynthesis and Degradation in <i>Pseudomonas aeruginosa</i> . <i>Annual Review of Microbiology</i> , 2022, 76, 413-433.	2.9	37
347	Benzoxazole styrylcyanine dye as a fluorescent probe for functional amyloid visualization in <i>Staphylococcus aureus</i> ATCC25923 biofilm. <i>Biopolymers and Cell</i> , 2022, 37, 447-458.	0.1	0
348	A competitive advantage through fast dead matter elimination in confined cellular aggregates. <i>New Journal of Physics</i> , 2022, 24, 073003.	1.2	3
349	The role of peptidoglycan hydrolases in the formation and toxicity of <i>Pseudomonas aeruginosa</i> membrane vesicles. <i>MicroLife</i> , 2022, 3, .	1.0	4
350	Bacterial membrane vesicles in inflammatory bowel disease. <i>Life Sciences</i> , 2022, 306, 120803.	2.0	6
351	Molecular Targets for Antibody-Based Anti-Biofilm Therapy in Infective Endocarditis. <i>Polymers</i> , 2022, 14, 3198.	2.0	3
353	<i>Indigofera tinctoria</i> L. leaf powder promotes initiation of indigo reduction by inducing of rapid transition of the microbial community. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	1
354	Bacterial nucleoid-associated protein HU as an extracellular player in host-pathogen interaction. <i>Frontiers in Cellular and Infection Microbiology</i> , 0, 12, .	1.8	4
355	Engineered bacterial extracellular vesicles for osteoporosis therapy. <i>Chemical Engineering Journal</i> , 2022, 450, 138309.	6.6	22
357	Sub-inhibitory concentrations of cefotaxime treatment enhances biofilm formation of monophasic <i>Salmonella</i> Typhimurium variant strain SH16SP46. <i>FEMS Microbiology Letters</i> , 2022, 369, .	0.7	1
358	Phage-tail-like bacteriocins as a biomedical platform to counter anti-microbial resistant pathogens. <i>Biomedicine and Pharmacotherapy</i> , 2022, 155, 113720.	2.5	3
359	Bacterial extracellular vesicles-based therapeutic strategies for bone and soft tissue tumors therapy. <i>Theranostics</i> , 2022, 12, 6576-6594.	4.6	31
360	Outer Membrane Vesicles of <i>Actinobacillus pleuropneumoniae</i> Exert Immunomodulatory Effects on Porcine Alveolar Macrophages. <i>Microbiology Spectrum</i> , 2022, 10, .	1.2	4
361	Outer Membrane Vesicles: Biogenesis, Functions, and Issues. <i>Microbiology and Molecular Biology Reviews</i> , 2022, 86, .	2.9	26

#	ARTICLE	IF	CITATIONS
363	Spontaneous Prophage Induction Contributes to the Production of Membrane Vesicles by the Gram-Positive Bacterium <i>Lactocaseibacillus casei</i> BL23. <i>MBio</i> , 2022, 13, .	1.8	9
364	Protection of DNase in the shell of a pH-responsive, antibiotic-loaded micelle for biofilm targeting, dispersal and eradication. <i>Chemical Engineering Journal</i> , 2023, 452, 139619.	6.6	6
365	Antimicrobial Weapons of <i>Pseudomonas aeruginosa</i> . <i>Advances in Experimental Medicine and Biology</i> , 2022, , 223-256.	0.8	4
366	Research Progress on Bacterial Membrane Vesicles and Antibiotic Resistance. <i>International Journal of Molecular Sciences</i> , 2022, 23, 11553.	1.8	9
367	Reductions in bacterial viability stimulate the production of Extra-intestinal Pathogenic <i>Escherichia coli</i> (ExPEC) cytoplasm-carrying Extracellular Vesicles (EVs). <i>PLoS Pathogens</i> , 2022, 18, e1010908.	2.1	9
368	Monochloramine Induces Release of DNA and RNA from Bacterial Cells: Quantification, Sequencing Analyses, and Implications. <i>Environmental Science & Technology</i> , 2022, 56, 15791-15804.	4.6	1
369	Interplay between biofilm microenvironment and pathogenicity of <i>Pseudomonas aeruginosa</i> in cystic fibrosis lung chronic infection. <i>Biofilm</i> , 2022, 4, 100089.	1.5	11
370	Bacterial extracellular vesicles and their novel therapeutic applications in health and cancer. <i>Frontiers in Cellular and Infection Microbiology</i> , 0, 12, .	1.8	18
371	Membrane-Binding Biomolecules Influence the Rate of Vesicle Exchange between Bacteria. <i>Applied and Environmental Microbiology</i> , 2022, 88, .	1.4	1
372	The Origin, Function, Distribution, Quantification, and Research Advances of Extracellular DNA. <i>International Journal of Molecular Sciences</i> , 2022, 23, 13690.	1.8	4
373	Geobacter-associated prophages confer beneficial effect on dissimilatory reduction of Fe(III) oxides. <i>Fundamental Research</i> , 2022, , .	1.6	2
374	Development of a ternary cyclodextrin-arginine-ciprofloxacin antimicrobial complex with enhanced stability. <i>Communications Biology</i> , 2022, 5, .	2.0	4
375	Physical Properties and Shifting of the Extracellular Membrane Vesicles Attached to Living Bacterial Cell Surfaces. <i>Microbiology Spectrum</i> , 0, , .	1.2	1
376	Dissecting the invasion of <i>Galleria mellonella</i> by <i>Yersinia enterocolitica</i> reveals metabolic adaptations and a role of a phage lysis cassette in insect killing. <i>PLoS Pathogens</i> , 2022, 18, e1010991.	2.1	6
377	A Single Shot of Vesicles. <i>Microbes and Environments</i> , 2022, 37, n/a.	0.7	0
378	Surface modification of bio-orderly CrTiN thin films with periodic corrugated nanopod structures by picosecond laser ablation. <i>Journal of Alloys and Compounds</i> , 2023, 938, 168193.	2.8	2
379	The role of bacterial membrane vesicles in antibiotic resistance. <i>Annals of the New York Academy of Sciences</i> , 2023, 1519, 63-73.	1.8	7
380	Visualizing extracellular vesicle biogenesis in gram-positive bacteria using super-resolution microscopy. <i>BMC Biology</i> , 2022, 20, .	1.7	9

#	ARTICLE	IF	CITATIONS
381	Suicidal chemotaxis in bacteria. <i>Nature Communications</i> , 2022, 13, .	5.8	5
382	Involvement of Bacterial Outer Membrane Vesicles in Cell-Cell Interactions and Their Role in Multi-Species Communities. <i>Springer Series on Biofilms</i> , 2023, , 165-193.	0.0	1
383	Characterization of membrane vesicles in <i>Alteromonas macleodii</i> indicates potential roles in their copiotrophic lifestyle. <i>MicroLife</i> , 2023, 4, .	1.0	3
384	Horizontal gene transfer via OMVs co-carrying virulence and antimicrobial-resistant genes is a novel way for the dissemination of carbapenem-resistant hypervirulent <i>Klebsiella pneumoniae</i> . <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	8
385	Temperature-specific adaptations and genetic requirements in a biofilm formed by <i>Pseudomonas aeruginosa</i> . <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	5
386	Impact of c-di-GMP on the Extracellular Proteome of <i>Rhizobium etli</i> . <i>Biology</i> , 2023, 12, 44.	1.3	3
387	Bacterial Membrane Mimetics: From Biosensing to Disease Prevention and Treatment. <i>Biosensors</i> , 2023, 13, 189.	2.3	3
388	Membrane vesicles released by <i>Lactocaseibacillus casei</i> BL23 inhibit the biofilm formation of <i>Salmonella Enteritidis</i> . <i>Scientific Reports</i> , 2023, 13, .	1.6	6
389	L-form conversion in Gram-positive bacteria enables escape from phage infection. <i>Nature Microbiology</i> , 0, , .	5.9	7
390	Novel Insights into Microbial Behavior Gleaned Using Microfluidics. <i>Microbes and Environments</i> , 2023, 38, n/a.	0.7	1
391	Extracellular Vesicles of <i>Pseudomonas</i> : Friends and Foes. <i>Antibiotics</i> , 2023, 12, 703.	1.5	3
392	Microbiota and plant-derived vesicles that serve as therapeutic agents and delivery carriers to regulate metabolic syndrome. <i>Advanced Drug Delivery Reviews</i> , 2023, 196, 114774.	6.6	4
393	Bio-Inspired Drug Delivery Systems: From Synthetic Polypeptide Vesicles to Outer Membrane Vesicles. <i>Pharmaceutics</i> , 2023, 15, 368.	2.0	12
394	Interactions between extracellular vesicles and microbiome in human diseases: New therapeutic opportunities. , 2023, 2, .		6
396	Stochastic effects in bacterial communication mediated by extracellular vesicles. <i>Physical Review E</i> , 2023, 107, .	0.8	1
397	The mechanism of <i>Pseudomonas aeruginosa</i> outer membrane vesicle biogenesis determines their protein composition. <i>Proteomics</i> , 2023, 23, .	1.3	6
398	Extracellular vesicles in bacterial and fungal diseases – Pathogenesis to diagnostic biomarkers. <i>Virulence</i> , 2023, 14, .	1.8	1
400	Composition and functions of bacterial membrane vesicles. <i>Nature Reviews Microbiology</i> , 2023, 21, 415-430.	13.6	72

#	ARTICLE	IF	CITATIONS
401	Applying enzyme treatments in <i>Bacillus cereus</i> biofilm removal. <i>LWT - Food Science and Technology</i> , 2023, 180, 114667.	2.5	2
402	Murine Norovirus Interaction with <i>Enterobacter cloacae</i> Leads to Changes in Membrane Stability and Packaging of Lipid and Metabolite Vesicle Content. <i>Microbiology Spectrum</i> , 2023, 11, .	1.2	4
403	Lysis Cassette-Mediated Exoprotein Release in <i>Yersinia entomophaga</i> Is Controlled by a PhoB-Like Regulator. <i>Microbiology Spectrum</i> , 2023, 11, .	1.2	4
405	Approaching the Geometric Limit of Bacteriophage Conjugation to Gold: Synergy of Purification with Covalent and Physisorption Strategies. <i>ACS Biomaterials Science and Engineering</i> , 2023, 9, 2335-2346.	2.6	1
406	A Robust Protocol to Isolate Outer Membrane Vesicles from Nontypeable <i>Haemophilus influenzae</i> . <i>Methods and Protocols</i> , 2023, 6, 42.	0.9	0
421	Use of epifluorescence widefield deconvolution microscopy for imaging and three-dimensional rendering of <i>Pseudomonas aeruginosa</i> biofilms and extracellular matrix materials. <i>Methods in Microbiology</i> , 2023, , 309-324.	0.4	0
464	Membrane Vesicles of <i>Clostridioides difficile</i> and Other Clostridial Species. <i>Advances in Experimental Medicine and Biology</i> , 2024, , 315-327.	0.8	0
469	Mechanisms of horizontal gene transfer and DNA recombination. , 2024, , 309-324.		0
470	Isolation, Quantification, and Visualization of Extracellular Membrane Vesicles in Rhizobia Under Free-Living Conditions. <i>Methods in Molecular Biology</i> , 2024, , 219-228.	0.4	1
471	Structural Determinants of Small Extracellular Vesicles (Exosomes) and Their Role in Biological Functions. <i>Neurochemical Journal</i> , 2023, 17, 547-559.	0.2	0