Paul Stoodley

List of Publications by Year
in descending order

260 papers	29,892 citations	9775 73 h-index	5249 165 g-index
279 all docs	279 docs citations	279 times ranked	25410 citing authors

#	Article	IF	Citations
1	Bacterial biofilms: from the Natural environment to infectious diseases. Nature Reviews Microbiology, 2004, 2, 95-108.	13.6	5,690
2	Biofilms as Complex Differentiated Communities. Annual Review of Microbiology, 2002, 56, 187-209.	2.9	2,485
3	Survival strategies of infectious biofilms. Trends in Microbiology, 2005, 13, 34-40.	3.5	1,542
4	Evolving concepts in biofilm infections. Cellular Microbiology, 2009, 11, 1034-1043.	1.1	1,197
5	Targeting microbial biofilms: current and prospective therapeutic strategies. Nature Reviews Microbiology, 2017, 15, 740-755.	13.6	1,187
6	Direct Detection of Bacterial Biofilms on the Middle-Ear Mucosa of Children With Chronic Otitis Media. JAMA - Journal of the American Medical Association, 2006, 296, 202.	3.8	754
7	Effects of biofilm structures on oxygen distribution and mass transport. Biotechnology and Bioengineering, 1994, 43, 1131-1138.	1.7	687
8	Biofilm formation and dispersal and the transmission of human pathogens. Trends in Microbiology, 2005, 13, 7-10.	3.5	490
9	Biofilm material properties as related to shear-induced deformation and detachment phenomena. Journal of Industrial Microbiology and Biotechnology, 2002, 29, 361-367.	1.4	415
10	The prevalence of biofilms in chronic wounds: a systematic review and meta-analysis of published data. Journal of Wound Care, 2017, 26, 20-25.	0.5	373
11	Human Leukocytes Adhere to, Penetrate, and Respond to Staphylococcus aureus Biofilms. Infection and Immunity, 2002, 70, 6339-6345.	1.0	364
12	Liquid Flow in Biofilm Systems. Applied and Environmental Microbiology, 1994, 60, 2711-2716.	1.4	332
13	Structural deformation of bacterial biofilms caused by short-term fluctuations in fluid shear: An in situ investigation of biofilm rheology. Biotechnology and Bioengineering, 1999, 65, 83-92.	1.7	317
14	Growth and Detachment of Cell Clusters from Mature Mixed-Species Biofilms. Applied and Environmental Microbiology, 2001, 67, 5608-5613.	1.4	314
15	Influence of hydrodynamics and nutrients on biofilm structure. Journal of Applied Microbiology, 1998, 85, 19S-28S.	1.4	295
16	Influence of Hydrodynamics and Cell Signaling on the Structure and Behavior of Pseudomonas aeruginosa Biofilms. Applied and Environmental Microbiology, 2002, 68, 4457-4464.	1.4	293
17	Towards diagnostic guidelines for biofilm-associated infections. FEMS Immunology and Medical Microbiology, 2012, 65, 127-145.	2.7	288
18	Biofilms in periprosthetic orthopedic infections. Future Microbiology, 2014, 9, 987-1007.	1.0	267

#	Article	IF	Citations
19	Viscoelastic fluid description of bacterial biofilm material properties. Biotechnology and Bioengineering, 2002, 80, 289-296.	1.7	266
20	Mechano-bactericidal actions of nanostructured surfaces. Nature Reviews Microbiology, 2021, 19, 8-22.	13.6	264
21	Liquid flow in heterogeneous biofilms. Biotechnology and Bioengineering, 1994, 44, 636-641.	1.7	243
22	Viscoelasticity of biofilms and their recalcitrance to mechanical and chemical challenges. FEMS Microbiology Reviews, 2015, 39, 234-245.	3.9	237
23	Bacterial biofilms: a diagnostic and therapeutic challenge. Expert Review of Anti-Infective Therapy, 2003, 1, 667-683.	2.0	231
24	Usnic Acid, a Natural Antimicrobial Agent Able To Inhibit Bacterial Biofilm Formation on Polymer Surfaces. Antimicrobial Agents and Chemotherapy, 2004, 48, 4360-4365.	1.4	231
25	Detachment Characteristics and Oxacillin Resistance of Staphyloccocus aureus Biofilm Emboli in an In Vitro Catheter Infection Model. Journal of Bacteriology, 2004, 186, 4486-4491.	1.0	218
26	Developmental regulation of microbial biofilms. Current Opinion in Biotechnology, 2002, 13, 228-233.	3.3	214
27	Characterization of biofilm matrix, degradation by DNase treatment and evidence of capsule downregulation in Streptococcus pneumoniae clinical isolates. BMC Microbiology, 2008, 8, 173.	1.3	211
28	Can laboratory reference strains mirror â€˜real-worldâ€™ pathogenesis?. Trends in Microbiology, 2005, 13, 58-63.	3.5	209
29	Consensus guidelines for the identification and treatment of biofilms in chronic nonhealing wounds. Wound Repair and Regeneration, 2017, 25, 744-757.	1.5	204
30	Measurement of local diffusion coefficients in biofilms by microinjection and confocal microscopy. , 1997, 53, 151-158.		203
31	Prevention and treatment ofStaphylococcus aureusbiofilms. Expert Review of Anti-Infective Therapy, 2015, 13, 1499-1516.	2.0	201
32	Commonality of Elastic Relaxation Times in Biofilms. Physical Review Letters, 2004, 93, 098102.	2.9	199
33	Antibiotic-Loaded Synthetic Calcium Sulfate Beads for Prevention of Bacterial Colonization and Biofilm Formation in Periprosthetic Infections. Antimicrobial Agents and Chemotherapy, 2015, 59, 111-120.	1.4	183
34	Phenotypic differentiation and seeding dispersal in non-mucoid and mucoid Pseudomonas aeruginosa biofilms. Microbiology (United Kingdom), 2005, 151, 1569-1576.	0.7	182
35	Surface-attached cells, biofilms and biocide susceptibility: implications for hospital cleaning andÂdisinfection. Journal of Hospital Infection, 2015, 89, 16-27.	1.4	180
36	Cardiac fibroblasts influence cardiomyocyte phenotype in vitro. American Journal of Physiology - Cell Physiology, 2007, 292, C1799-C1808.	2.1	162

#	Article	IF	Citations
37	Designing biomimetic antifouling surfaces. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 4729-4754.	1.6	162
38	Viscoelasticity of Staphylococcus aureus Biofilms in Response to Fluid Shear Allows Resistance to Detachment and Facilitates Rolling Migration. Applied and Environmental Microbiology, 2005, 71, 2175-2178.	1.4	158
39	The role of biofilms in otolaryngologic infections: update 2007. Current Opinion in Otolaryngology and Head and Neck Surgery, 2007, 15, 347-351.	0.8	155
40	Direct Demonstration of Viable Staphylococcus aureus Biofilms in an Infected Total Joint Arthroplasty. Journal of Bone and Joint Surgery - Series A, 2008, 90, 1751-1758.	1.4	152
41	Insights into the Genome of Large Sulfur Bacteria Revealed by Analysis of Single Filaments. PLoS Biology, 2007, 5, e230.	2.6	151
42	The effect of the chemical, biological, and physical environment on quorum sensing in structured microbial communities. Analytical and Bioanalytical Chemistry, 2007, 387, 371-380.	1.9	149
43	Low-Dose Nitric Oxide as Targeted Anti-biofilm Adjunctive Therapy to Treat Chronic Pseudomonas aeruginosa Infection in Cystic Fibrosis. Molecular Therapy, 2017, 25, 2104-2116.	3.7	149
44	The role of biofilms in otolaryngologic infections. Current Opinion in Otolaryngology and Head and Neck Surgery, 2004, 12, 185-190.	0.8	138
45	New methods for the detection of orthopedic and other biofilm infections. FEMS Immunology and Medical Microbiology, 2011, 61, 133-140.	2.7	137
46	Adenoid Reservoir for Pathogenic Biofilm Bacteria. Journal of Clinical Microbiology, 2011, 49, 1411-1420.	1.8	136
47	Influence of electric fields and pH on biofilm structure as related to the bioelectric effect. Antimicrobial Agents and Chemotherapy, 1997, 41, 1876-1879.	1.4	133
48	Orthopaedic biofilm infections. Current Orthopaedic Practice, 2011, 22, 558-563.	0.1	133
49	Evolving perspectives of biofilm structure. Biofouling, 1999, 14, 75-90.	0.8	132
50	The formation of migratory ripples in a mixed species bacterial biofilm growing in turbulent flow. Environmental Microbiology, 1999, 1, 447-455.	1.8	131
51	Relation between the structure of an aerobic biofilm and transport phenomena. Water Science and Technology, 1995, 32, 11-18.	1.2	128
52	Liquid flow and mass transport in heterogeneous biofilms. Water Research, 1996, 30, 2761-2765.	5.3	126
53	Viscoelastic Properties of a Mixed Culture Biofilm from Rheometer Creep Analysis. Biofouling, 2003, 19, 279-285.	0.8	125
54	Bacterial Plurality as a General Mechanism Driving Persistence in Chronic Infections. Clinical Orthopaedics and Related Research, 2005, &NA;, 20-24.	0.7	120

#	Article	IF	Citations
55	Oscillation characteristics of biofilm streamers in turbulent flowing water as related to drag and pressure drop. , 1998, 57, 536-544.		116
56	2018 international consensus meeting on musculoskeletal infection: Summary from the biofilm workgroup and consensus on biofilm related musculoskeletal infections. Journal of Orthopaedic Research, 2019, 37, 1007-1017.	1.2	113
57	Engineering Approaches for the Detection and Control of Orthopaedic Biofilm Infections. Clinical Orthopaedics and Related Research, 2005, &NA;, 59-66.	0.7	105
58	Extracellular DNA Impedes the Transport of Vancomycin in Staphylococcus epidermidis Biofilms Preexposed to Subinhibitory Concentrations of Vancomycin. Antimicrobial Agents and Chemotherapy, 2014, 58, 7273-7282.	1.4	102
59	Chronic Surgical Site Infection Due to Suture-Associated Polymicrobial Biofilm. Surgical Infections, 2009, 10, 457-461.	0.7	101
60	Molecular and Imaging Techniques for Bacterial Biofilms in Joint Arthroplasty Infections. Clinical Orthopaedics and Related Research, 2005, &NA;, 31-40.	0.7	100
61	Prevention of Staphylococcal Biofilm-associated Infections by the Quorum Sensing Inhibitor RIP. Clinical Orthopaedics and Related Research, 2005, &NA;, 48-54.	0.7	99
62	Influence of the Hydrodynamic Environment on Quorum Sensing in Pseudomonas aeruginosa Biofilms. Journal of Bacteriology, 2007, 189, 8357-8360.	1.0	98
63	Identification of adenoid biofilms with middle ear pathogens in otitis-prone children utilizing SEM and FISH. International Journal of Pediatric Otorhinolaryngology, 2009, 73, 1242-1248.	0.4	97
64	Helicobacter pylori ATCC 43629/NCTC 11639 Outer Membrane Vesicles (OMVs) from Biofilm and Planktonic Phase Associated with Extracellular DNA (eDNA). Frontiers in Microbiology, 2015, 6, 1369.	1.5	97
65	Characterization of a mixed MRSA/MRSE biofilm in an explanted total ankle arthroplasty. FEMS Immunology and Medical Microbiology, 2011, 62, 66-74.	2.7	96
66	Comparing PMMA and calcium sulfate as carriers for the local delivery of antibiotics to infected surgical sites. , 2015, 103, 870-877.		94
67	Salicylic acid-releasing polyurethane acrylate polymers as anti-biofilm urological catheter coatings. Acta Biomaterialia, 2012, 8, 1869-1880.	4.1	93
68	Impact of Nitrate on the Structure and Function of Bacterial Biofilm Communities in Pipelines Used for Injection of Seawater into Oil Fields. Applied and Environmental Microbiology, 2008, 74, 2841-2851.	1.4	90
69	The extracellular DNA lattice of bacterial biofilms is structurally related to Holliday junction recombination intermediates. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 25068-25077.	3.3	89
70	Biofilm mechanics: Implications in infection and survival. Biofilm, 2020, 2, 100017.	1.5	89
71	Rheology of biofilms formed from the dental plaque pathogen Streptococcus mutans. Biofilms, 2004, 1, 49-56.	0.6	86
72	Biofilm removal from silicone tubing: an assessment of the efficacy of dialysis machine decontamination procedures using an in vitro model. Journal of Hospital Infection, 2003, 53, 64-71.	1.4	85

#	Article	IF	Citations
73	Approaches to biofilm-associated infections: the need for standardized and relevant biofilm methods for clinical applications. Expert Review of Anti-Infective Therapy, 2017, 15, 147-156.	2.0	83
74	Effect of low-intensity ultrasound upon biofilm structure from confocal scanning laser microscopy observation. Biomaterials, 1996, 17, 1975-1980.	5.7	82
75	The distributed genome hypothesis as a rubric for understanding evolutionin situduring chronic bacterial biofilm infectious processes. FEMS Immunology and Medical Microbiology, 2010, 59, 269-279.	2.7	80
76	Real-Time Microsensor Measurement of Local Metabolic Activities in Ex Vivo Dental Biofilms Exposed to Sucrose and Treated with Chlorhexidine. Applied and Environmental Microbiology, 2010, 76, 2326-2334.	1.4	80
77	Detection and Physicochemical Characterization of Membrane Vesicles (MVs) of Lactobacillus reuteri DSM 17938. Frontiers in Microbiology, 2017, 8, 1040.	1.5	80
78	Structural deformation of bacterial biofilms caused by short-term fluctuations in fluid shear: an in situ investigation of biofilm rheology. Biotechnology and Bioengineering, 1999, 65, 83-92.	1.7	76
79	Relation between the structure of an aerobic biofilm and transport phenomena. Water Science and Technology, 1995, 32, 11.	1.2	75
80	The influence of fluid shear and AlCl3 on the material properties of Pseudomonas aeruginosa PAO1 and Desulfovibrio sp. EX265 biofilms. Water Science and Technology, 2001, 43, 113-120.	1.2	75
81	Ultrasonically Controlled Release of Ciprofloxacin from Self-Assembled Coatings on Poly(2-Hydroxyethyl Methacrylate) Hydrogels for Pseudomonas aeruginosa Biofilm Prevention. Antimicrobial Agents and Chemotherapy, 2005, 49, 4272-4279.	1.4	75
82	The influence of fluid shear on the structure and material properties of sulphate-reducing bacterial biofilms. Journal of Industrial Microbiology and Biotechnology, 2002, 29, 347-353.	1.4	72
83	Role of biofilms in neurosurgical device-related infections. Neurosurgical Review, 2005, 28, 249-255.	1.2	70
84	Denitrification in human dental plaque. BMC Biology, 2010, 8, 24.	1.7	70
85	Considering hidradenitis suppurativa as a bacterial biofilm disease. FEMS Immunology and Medical Microbiology, 2012, 65, 385-389.	2.7	69
86	Z-form extracellular DNA is a structural component of the bacterial biofilm matrix. Cell, 2021, 184, 5740-5758.e17.	13.5	69
87	Sensing the unreachable: challenges and opportunities in biofilm detection. Current Opinion in Biotechnology, 2020, 64, 79-84.	3.3	65
88	Hydrodynamics and kinetics in biofilm systems - recent advances and new problems. Water Science and Technology, 1994, 29, 223-229.	1.2	64
89	Relationship between mass transfer coefficient and liquid flow velocity in heterogenous biofilms using microelectrodes and confocal microscopy. Biotechnology and Bioengineering, 1997, 56, 681-688.	1.7	63
90	Adjuvant antibioticâ€loaded bone cement: Concerns with current use and research to make it work. Journal of Orthopaedic Research, 2021, 39, 227-239.	1.2	63

#	Article	IF	Citations
91	Who put the film in biofilm? The migration of a term from wastewater engineering to medicine and beyond. Npj Biofilms and Microbiomes, 2021, 7, 10.	2.9	62
92	[21] Detachment, surface migration, and other dynamic behavior in bacterial biofilms revealed by digital time-lapse imaging. Methods in Enzymology, 2001, 337, 306-319.	0.4	59
93	Viscoelastic properties of Pseudomonas aeruginosa variant biofilms. Scientific Reports, 2018, 8, 9691.	1.6	54
94	Statistical Quantification of Detachment Rates and Size Distributions of Cell Clumps from Wild-Type (PAO1) and Cell Signaling Mutant (JP1) Pseudomonas aeruginosa Biofilms. Applied and Environmental Microbiology, 2004, 70, 5847-5852.	1.4	52
95	Anti-Biofilm Performance of Three Natural Products against Initial Bacterial Attachment. International Journal of Molecular Sciences, 2013, 14, 21757-21780.	1.8	51
96	Comparative supragenomic analyses among the pathogens Staphylococcus aureus, Streptococcus pneumoniae, and Haemophilus influenzae Using a modification of the finite supragenome model. BMC Genomics, 2011, 12, 187.	1.2	50
97	Minimum information guideline for spectrophotometric and fluorometric methods to assess biofilm formation in microplates. Biofilm, 2020, 2, 100010.	1.5	50
98	Biofilm Plaque and Hydrodynamic Effects on Mass Transfer, Fluoride Delivery and Caries. Journal of the American Dental Association, 2008, 139, 1182-1190.	0.7	48
99	Modular Spectral Imaging System for Discrimination of Pigments in Cells and Microbial Communities. Applied and Environmental Microbiology, 2009, 75, 758-771.	1.4	48
100	Experimental and conceptual studies on mass transport in biofilms. Water Science and Technology, 1995, 31, 153.	1.2	47
101	Flow induced vibrations, drag force, and pressure drop in conduits covered with biofilm. Water Science and Technology, 1995, 32, 19-26.	1.2	46
102	The high-affinity phosphate transporter Pst in Proteus mirabilis HI4320 and its importance in biofilm formation. Microbiology (United Kingdom), 2009, 155, 1523-1535.	0.7	46
103	Direct Demonstration of Bacterial Biofilms on Prosthetic Mesh after Ventral Herniorrhaphy. Surgical Infections, 2015, 16, 45-53.	0.7	46
104	Fluorescence â€œIn Situâ€•Hybridization for the Detection of Biofilm in the Middle Ear and Upper Respiratory Tract Mucosa. Methods in Molecular Biology, 2009, 493, 191-213.	0.4	46
105	Bacterial Biofilms, Other Structures Seen as Mainstream Concepts. Microbe Magazine, 2007, 2, 231-237.	0.4	45
106	Minimum information about a biofilm experiment (MIABiE): standards for reporting experiments and data on sessile microbial communities living at interfaces. Pathogens and Disease, 2014, 70, 250-256.	0.8	43
107	Removal of Dental Biofilms with an Ultrasonically Activated Water Stream. Journal of Dental Research, 2015, 94, 1303-1309.	2.5	43
108	Flowing biofilms as a transport mechanism for biomass through porous media under laminar and turbulent conditions in a laboratory reactor system. Biofouling, 2005, 21, 161-168.	0.8	42

#	Article	IF	Citations
109	Investigation of synovial fluid induced Staphylococcus aureus aggregate development and its impact on surface attachment and biofilm formation. PLoS ONE, 2020, 15, e0231791.	1.1	42
110	Tonsillolith. Otolaryngology - Head and Neck Surgery, 2009, 141, 316-321.	1.1	41
111	Microbial Biofilms. , 2006, , 904-937.		40
112	A model of fluidâ€“biofilm interaction using a Burger material law. Biotechnology and Bioengineering, 2007, 96, 259-271.	1.7	40
113	The efficacy of topical agents used in wounds for managing chronic biofilm infections: A systematic review. Journal of Infection, 2020, 80, 261-270.	1.7	40
114	The role ofFLO11inSaccharomyces cerevisiaebiofilm development in a laboratory based flow-cell system. FEMS Yeast Research, 2007, 7, 372-379.	1.1	39
115	Revealing a world of biofilms â€" the pioneering research of Bill Costerton. Nature Reviews Microbiology, 2014, 12, 781-787.	13.6	39
116	Intracellular residency of Staphylococcus aureus within mast cells in nasal polyps: A novel observation. Journal of Allergy and Clinical Immunology, 2015, 135, 1648-1651.e5.	1.5	39
117	Bacterial Biofilms on Implanted Suture Material Are a Cause of Surgical Site Infection. Surgical Infections, 2014, 15, 592-600.	0.7	38
118	Temporal expression ofagrB,cidA, andalsSin the early development ofStaphylococcus aureusUAMS-1 biofilm formation and the structural role of extracellular DNA and carbohydrates. Pathogens and Disease, 2014, 70, 414-422.	0.8	38
119	Laser Disruption of Biofilm. Laryngoscope, 2008, 118, 1168-1173.	1.1	37
120	Laser disruption and killing of methicillin-resistant Staphylococcus aureus biofilms. American Journal of Otolaryngology - Head and Neck Medicine and Surgery, 2011, 32, 198-202.	0.6	37
121	Streptococcus mutans biofilm transient viscoelastic fluid behaviour during high-velocity microsprays. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 197-206.	1.5	36
122	The many antibiotic resistance and tolerance strategies of Pseudomonas aeruginosa. Biofilm, 2021, 3, 100056.	1.5	36
123	Biofilm material properties as related to shear-induced deformation and detachment phenomena. Journal of Industrial Microbiology and Biotechnology, 2002, 29, 361-367.	1.4	36
124	Direct Demonstration of <i>Staphylococcus</i> Biofilm in an External Ventricular Drain in a Patient with a History of Recurrent Ventriculoperitoneal Shunt Failure. Pediatric Neurosurgery, 2010, 46, 127-132.	0.4	35
125	Slippery Liquid-Like Solid Surfaces with Promising Antibiofilm Performance under Both Static and Flow Conditions. ACS Applied Materials & Interfaces, 2022, 14, 6307-6319.	4.0	35
126	Antifouling polyurethanes to fight device-related staphylococcal infections: synthesis, characterization, and antibiofilm efficacy. Pathogens and Disease, 2014, 70, 401-407.	0.8	34

#	Article	IF	Citations
127	Biofilms in orthopedic infections: a review of laboratory methods. Apmis, 2017, 125, 418-428.	0.9	33
128	Removal of Interproximal Dental Biofilms by High-velocity Water Microdrops. Journal of Dental Research, 2014, 93, 68-73.	2.5	32
129	Applying the digital image correlation method to estimate the mechanical properties of bacterial biofilms subjected to a wall shear stress. Biofouling, 2009, 25, 695-703.	0.8	31
130	Visualization and characterization of dynamic patterns of flow, growth and activity of biofilms growing in porous media. Water Science and Technology, 2005, 52, 85-90.	1.2	30
131	Laser-Generated Shockwave for Clearing Medical Device Biofilms. Photomedicine and Laser Surgery, 2011, 29, 277-282.	2.1	30
132	Electroceutical Treatment of Pseudomonas aeruginosa Biofilms. Scientific Reports, 2019, 9, 2008.	1.6	30
133	Experimental and conceptual studies on mass transport in biofilms. Water Science and Technology, 1995, 31, 153-162.	1.2	30
134	The future of biofilm research â€“ Report on the â€˜2019 Biofilm Bashâ€™. Biofilm, 2020, 2, 100012.	1.5	29
135	Polymer Designs to Control Biofilm Growth on Medical Devices. Reviews in Environmental Science and Biotechnology, 2003, 2, 307-319.	3.9	28
136	Effects of loading concentration, blood and synovial fluid on antibiotic release and anti-biofilm activity of bone cement beads. Journal of Controlled Release, 2017, 248, 24-32.	4.8	28
137	Microbial tribology and disruption of dental plaque bacterial biofilms. Wear, 2013, 306, 276-284.	1.5	27
138	Low Concentrations of Nitric Oxide Modulate Streptococcus pneumoniae Biofilm Metabolism and Antibiotic Tolerance. Antimicrobial Agents and Chemotherapy, 2016, 60, 2456-2466.	1.4	27
139	Advances in Biofilm Mechanics. Springer Series on Biofilms, 2011, , 111-139.	0.0	26
140	In Vitro Efficacy of Antibiotics Released from Calcium Sulfate Bone Void Filler Beads. Materials, 2018, 11, 2265.	1.3	26
141	Streptococcus mutans yidC1 and yidC2 Impact Cell Envelope Biogenesis, the Biofilm Matrix, and Biofilm Biophysical Properties. Journal of Bacteriology, 2019, 201, .	1.0	26
142	Biofilm formation byica-positive andica-negative strains ofStaphylococcus epidermidis in vitro. Biofouling, 2009, 25, 367-375.	0.8	25
143	Cold water cleaning of brain proteins, biofilm and bone â€“ harnessing an ultrasonically activated stream. Physical Chemistry Chemical Physics, 2015, 17, 20574-20579.	1.3	25
144	Kinetics and morphology of polymicrobial biofilm formation on polypropylene mesh. FEMS Immunology and Medical Microbiology, 2012, 65, 283-290.	2.7	24

#	Article	IF	Citations
145	Targeting intracellular Staphylococcus aureus to lower recurrence of orthopaedic infection. Journal of Orthopaedic Research, 2018, 36, 1086-1092.	1.2	24
146	Imaging Bacteria and Biofilms on Hardware and Periprosthetic Tissue in Orthopedic Infections. Methods in Molecular Biology, 2014, 1147, 105-126.	0.4	23
147	Antibiotic loaded calcium sulfate bead and pulse lavage eradicates biofilms on metal implant materials in vitro. Journal of Orthopaedic Research, 2018, 36, 2349-2354.	1.2	23
148	Biofilms in nephrology. Expert Opinion on Biological Therapy, 2008, 8, 1159-1166.	1.4	22
149	SLIME THROUGH TIME: THE FOSSIL RECORD OF PROKARYOTE EVOLUTION. Palaios, 2013, 28, 1-5.	0.6	22
150	On the mechanics of bacterial biofilms on non-dissolvable surgical sutures: A laser scanning confocal microscopy-based finite element study. Acta Biomaterialia, 2013, 9, 6641-6652.	4.1	22
151	Elution of antibiotics from poly(methyl methacrylate) bone cement after extended implantation does not necessarily clear the infection despite susceptibility of the clinical isolates. Pathogens and Disease, 2016, 74, ftv103.	0.8	22
152	Fluidâ€driven interfacial instabilities and turbulence in bacterial biofilms. Environmental Microbiology, 2017, 19, 4417-4431.	1.8	22
153	The influence of fluid shear and AlCl3 on the material properties of Pseudomonas aeruginosa PAO1 and Desulfovibrio sp. EX265 biofilms. Water Science and Technology, 2001, 43, 113-20.	1.2	22
154	Flow induced vibrations, drag force, and pressure drop in conduits covered with biofilm. Water Science and Technology, 1995, 32, 19.	1.2	21
155	An experimental and computational study of the hydrodynamics of high-velocity water microdrops for interproximal tooth cleaning. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 46, 148-157.	1.5	21
156	16S rRNA analysis provides evidence of biofilms on all components of three infected periprosthetic knees including permanent braided suture. Pathogens and Disease, 2016, 74, ftw083.	0.8	21
157	Cephalosporin-NO-donor prodrug PYRRO-C3D shows Î²-lactam - mediated activity against Streptococcus pneumoniae biofilms. Nitric Oxide - Biology and Chemistry, 2017, 65, 43-49.	1.2	21
158	Biofilm prevention of gram-negative bacterial pathogens involved in periprosthetic infection by antibiotic-loaded calcium sulfate beads in vitro. Biomedical Materials (Bristol), 2017, 12, 015002.	1.7	21
159	Modelling production of extracellular polymeric substances in a pseudomonas aeruginosa chemostat culture. Water Science and Technology, 2001, 43, 129-134.	1.2	19
160	Cutaneous Fistula from the Gastric Remnant Resulting from a Chronic Suture-associated Biofilm Infection. Obesity Surgery, 2010, 20, 251-256.	1.1	19
161	Prevention of Propionibacterium acnes biofilm formation in prosthetic infections in vitro. Journal of Shoulder and Elbow Surgery, 2017, 26, 553-563.	1.2	19
162	Chemical effects of biofilm colonization on 304 stainless steel. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 1755-1760.	0.9	18

#	Article	IF	Citations
163	Bacterial biofilm on monofilament suture and porcine xenograft after inguinal herniorrhaphy. FEMS Immunology and Medical Microbiology, 2010, 59, 405-409.	2.7	18
164	Demonstration of Bacillus cereus in Orthopaedic-Implant-Related Infection with Use of a Multi-Primer Polymerase Chain Reaction-Mass Spectrometric Assay. Journal of Bone and Joint Surgery - Series A, 2011, 93, e85.	1.4	18
165	Mechanical effects, antimicrobial efficacy and cytotoxicity of usnic acid as a biofilm prophylaxis in PMMA. Journal of Materials Science: Materials in Medicine, 2011, 22, 2773-2780.	1.7	17
166	A scanning electron microscope characterisation of biofilm on failed craniofacial osteosynthesis miniplates. Journal of Cranio-Maxillo-Facial Surgery, 2014, 42, e372-e378.	0.7	17
167	High-Velocity Microsprays Enhance Antimicrobial Activity in Streptococcus mutans Biofilms. Journal of Dental Research, 2016, 95, 1494-1500.	2.5	17
168	Biofilms: Flow disrupts communication. Nature Microbiology, 2016, 1, 15012.	5.9	16
169	Staphylococcus aureus Aggregates on Orthopedic Materials under Varying Levels of Shear Stress. Applied and Environmental Microbiology, 2020, 86, .	1.4	16
170	Biofilm formation in periprosthetic joint infections. Annals of Joint, 2021, 6, 43-43.	1.0	16
171	Mycobacterium abscessus biofilms have viscoelastic properties which may contribute to their recalcitrance in chronic pulmonary infections. Scientific Reports, 2021, 11, 5020.	1.6	16
172	Development of a laboratory model to assess the removal of biofilm from interproximal spaces by powered tooth brushing. American Journal of Dentistry, 2002, 15 Spec No, 12B-17B.	0.1	16
173	Mathematical modeling of dispersal phenomenon in biofilms. Mathematical Biosciences, 2019, 307, 70-87.	0.9	15
174	Clinical Implications of Power Toothbrushing on Fluoride Delivery: Effects on Biofilm Plaque Metabolism and Physiology. International Journal of Dentistry, 2010, 2010, 1-7.	0.5	14
175	Bacterial Deoxyribonucleic Acid Is Often Present in Failed Revision Anterior Cruciate Ligament Reconstructions. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2018, 34, 3046-3052.	1.3	14
176	Bacterial DNA is associated with tunnel widening in failed ACL reconstructions. Knee Surgery, Sports Traumatology, Arthroscopy, 2019, 27, 3490-3497.	2.3	14
177	Novel Aminoglycoside-Tolerant Phoenix Colony Variants of Pseudomonas aeruginosa. Antimicrobial Agents and Chemotherapy, 2020, 64, .	1.4	14
178	Influence of the Sonicare toothbrush on the structure and thickness of laboratory grown Streptococcus mutans biofilms. American Journal of Dentistry, 2003, 16, 79-83.	0.1	14
179	Microbial Biofilms. , 2013, , 343-372.		13
180	Biofilms, Biomaterials, and Device-Related Infections. , 2013, , 77-101.		13

#	Article	IF	Citations
181	Predictive Computer Models for Biofilm Detachment Properties in Pseudomonas aeruginosa. MBio, 2016, 7, .	1.8	13
182	Complete Killing of Agar Lawn Biofilms by Systematic Spacing of Antibiotic-Loaded Calcium Sulfate Beads. Materials, 2019, 12, 4052.	1.3	12
183	Use of an oxygen planar optode to assess the effect of high velocity microsprays on oxygen penetration in a human dental biofilms in-vitro. BMC Oral Health, 2020, 20, 230.	0.8	12
184	Ultrastructure imaging of Pseudomonas aeruginosa lawn biofilms and eradication of the tobramycin-resistant variants under in vitro electroceutical treatment. Scientific Reports, 2020, 10, 9879.	1.6	12
185	Evaluation of Peptide-Based Probes toward In Vivo Diagnostic Imaging of Bacterial Biofilm-Associated Infections. ACS Infectious Diseases, 2020, 6, 2086-2098.	1.8	12
186	Bacterial biofilms and periprosthetic infections. Journal of Bone and Joint Surgery - Series A, 2013, 95, 2223-9.	1.4	12
187	A marine biofilm flow cell for in situ screening marine fouling control coatings using optical coherence tomography. Ocean Engineering, 2018, 170, 321-328.	1.9	11
188	Reduction in Pseudomonas aeruginosa and Staphylococcus aureus biofilms from implant materials in a diffusion dominated environment. Journal of Orthopaedic Research, 2018, 36, 3081-3085.	1.2	11
189	Synovial Fluid-Induced Aggregation Occurs across Staphylococcus aureus Clinical Isolates and is Mechanistically Independent of Attached Biofilm Formation. Microbiology Spectrum, 2021, 9, e0026721.	1.2	11
190	The long-term release of antibiotics from monolithic nonporous polymer implants for use as tympanostomy tubes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 354, 331-337.	2.3	10
191	D-methionine interferes with non-typeable Haemophilus influenzae peptidoglycan synthesis during growth and biofilm formation. Microbiology (United Kingdom), 2017, 163, 1093-1104.	0.7	10
192	Antibiotic loaded Î²-tricalcium phosphate/calcium sulfate for antimicrobial potency, prevention and killing efficacy of Pseudomonas aeruginosa and Staphylococcus aureus biofilms. Scientific Reports, 2021, 11, 1446.	1.6	9
193	Cadaverine Is a Switch in the Lysine Degradation Pathway in Pseudomonas aeruginosa Biofilm Identified by Untargeted Metabolomics. Frontiers in Cellular and Infection Microbiology, 2022, 12, 833269.	1.8	9
194	Establishment of Experimental Biofilms Using the Modified Robbins Device and Flow Cells. , 1999, , 307-320.		8
195	Death and Transfiguration in Static Staphylococcus epidermidis Cultures. PLoS ONE, 2014, 9, e100002.	1.1	8
196	Miniaturized rotating disc rheometer test for rapid screening of drag reducing marine coatings. Surface Topography: Metrology and Properties, 2015, 3, 034004.	0.9	8
197	Mapping bacterial biofilms on recovered orthopaedic implants by a novel agar candle dip method. Apmis, 2019, 127, 123-130.	0.9	8
198	Computational and Experimental Investigation of Biofilm Disruption Dynamics Induced by High-Velocity Gas Jet Impingement. MBio, 2020, 11, .	1.8	8

#	Article	IF	Citations
199	Rapid Aggregation of Staphylococcus aureus in Synovial Fluid Is Influenced by Synovial Fluid Concentration, Viscosity, and Fluid Dynamics, with Evidence of Polymer Bridging. MBio, 2022, 13, e0023622.	1.8	8
200	Analysis of Bacterial Spatial Patterns at the Initial Stage of Biofilm Formation. Biometrical Journal, 1995, 37, 393-408.	0.6	7
201	Biofilms, Biomaterials, and Device-Related Infections. , 2013, , 565-583.		7
202	Printed Electroceutical Dressings for the Inhibition of Biofilms and Treatment of Chronic Wounds. Journal of Microelectromechanical Systems, 2020, 29, 918-923.	1.7	7
203	Biofilms, Biomaterials, and Device-Related Infections. , 2020, , 823-840.		7
204	Bacterial toxins in musculoskeletal infections. Journal of Orthopaedic Research, 2021, 39, 240-250.	1.2	7
205	Development of X-ray micro-focus computed tomography to image and quantify biofilms in central venous catheter models in vitro. Microbiology (United Kingdom), 2016, 162, 1629-1640.	0.7	7
206	Coupled CFDâ€ĐEM modeling to predict how EPS affects bacterial biofilm deformation, recovery and detachment under flow conditions. Biotechnology and Bioengineering, 2022, 119, 2551-2563.	1.7	7
207	Multiple displacement amplification as an adjunct to PCR-based detection of Staphylococcus aureus in synovial fluid. BMC Research Notes, 2010, 3, 259.	0.6	6
208	An in vitro biofilm model system to facilitate study of microbial communities of the human oral cavity. Letters in Applied Microbiology, 2022, 74, 302-310.	1.0	6
209	Environmental and genetic factors influencing biofilm structure. , 2000, , 53-64.		5
210	The Role of Bacterial Biofilms in Infections of Catheters and Shunts. , 2011, , 91-109.		5
211	Nitric oxide-mediated dispersal and enhanced antibiotic sensitivity in pseudomonas aeruginosa biofilms from the cystic fibrosis lung. Archives of Disease in Childhood, 2011, 96, A45-A45.	1.0	5
212	A novel technique using potassium permanganate and reflectance confocal microscopy to image biofilm extracellular polymeric matrix reveals non eDNA networks inPseudomonas aeruginosabiofilms. Pathogens and Disease, 2015, 74, ftv104.	0.8	5
213	Synovial Fluid Mediated Aggregation of Clinical Strains of Four Enterobacterial Species. Advances in Experimental Medicine and Biology, 2020, 1323, 81-90.	0.8	5
214	Individual differences in echocardiography: Visual object recognition ability predicts cue utilization. Applied Cognitive Psychology, 2020, 34, 1369-1378.	0.9	5
215	Elution Kinetics from Antibiotic-Loaded Calcium Sulfate Beads, Antibiotic-Loaded Polymethacrylate Spacers, and a Powdered Antibiotic Bolus for Surgical Site Infections in a Novel In Vitro Draining Knee Model. Antibiotics, 2021, 10, 270.	1.5	5
216	<i>Pseudomonas aeruginosa</i> biofilm killing beyond the spacer by antibiotic-loaded calcium sulfate beads: an in vitro study. Journal of Bone and Joint Infection, 2021, 6, 119-129.	0.6	5

#	Article	IF	Citations
217	Free-Floating Aggregate and Single-Cell-Initiated Biofilms of Staphylococcus aureus. Antibiotics, 2021, 10, 889.	1.5	5
218	The Functional Resistance of Bacterial Biofilms. , 2009, , 121-131.		5
219	Mapping Bacterial Biofilm on Features of Orthopedic Implants In Vitro. Microorganisms, 2022, 10, 586.	1.6	5
220	Influence of Staphylococcus epidermidis biofilm on the mechanical strength of soft tissue allograft. Journal of Orthopaedic Research, 2023, 41, 466-472.	1.2	5
221	Antimicrobials and biofilms. Journal of Industrial Microbiology and Biotechnology, 2002, 29, 325-325.	1.4	4
222	Computational Investigation of Ripple Dynamics in Biofilms in Flowing Systems. Biophysical Journal, 2018, 115, 1393-1400.	0.2	4
223	Evaluation of bacterial presence on lead X-ray aprons utilised in the operating room via IBIS and standard culture methods. Journal of Infection Prevention, 2019, 20, 191-196.	0.5	4
224	Culture-Negative Infections in Orthopedic Surgery. Springer Series on Biofilms, 2012, , 17-27.	0.0	4
225	The influence of fluid shear on the structure and material properties of sulphate-reducing bacterial biofilms. Journal of Industrial Microbiology and Biotechnology, 2002, 29, 347-353.	1.4	4
226	Arginine Induced Streptococcus gordonii Biofilm Detachment Using a Novel Rotating-Disc Rheometry Method. Frontiers in Cellular and Infection Microbiology, 2021, 11, 784388.	1.8	4
227	A commercial <scp> SnF ₂ </scp> toothpaste formulation reduces simulated human plaque biofilm in a dynamic typodont model. Journal of Applied Microbiology, 0, , .	1.4	4
228	Evidence for a biofilm-based treatment strategy in the management of chronic hidradenitis suppurativa. British Journal of Dermatology, 2017, 176, 855-856.	1.4	3
229	Laser tongue debridement for oral malodorâ€"A novel approach to halitosis. American Journal of Otolaryngology - Head and Neck Medicine and Surgery, 2021, 42, 102458.	0.6	3
230	A rapid benchtop method to assess biofilm on marine fouling control coatings. Biofouling, 2021, 37, 452-464.	0.8	3
231	Structural deformation of bacterial biofilms caused by short-term fluctuations in fluid shear: An in situ investigation of biofilm rheology. Biotechnology and Bioengineering, 1999, 65, 83.	1.7	3
232	Clinical significance of seeding dispersal in biofilms: a response. Microbiology (United Kingdom), 2005, 151, 3453-3453.	0.7	3
233	Australian sonographer competencyâ€"A new framework. Sonography, 2022, 9, 108-115.	0.4	3
234	Microbial detachment from biofilms. , 2000, , 107-128.		2

#	Article	IF	Citations
235	Cardiac amyloidosis: the value of myocardial strain echocardiography in diagnosis and treatment. Sonography, 2015, 2, 32-38.	0.4	2
236	A marine biofilm flow cell for in situ determination of drag and biofilm structure. Ocean Engineering, 2019, 178, 59-65.	1.9	2
237	Host blood proteins as bridging ligand in bacterial aggregation as well as anchor point for adhesion in the molecular pathogenesis of Staphylococcus aureus infections. Micron, 2021, 150, 103137.	1.1	2
238	Structural deformation of bacterial biofilms caused by short-term fluctuations in fluid shear: An in situ investigation of biofilm rheology. , 1999, 65, 83.		2
239	Host Reactions to Biomaterials and Their Evaluation. , 1996, , 293-X.		2
240	What can an echocardiographer see in briefly presented stimuli? Perceptual expertise in dynamic search. Cognitive Research: Principles and Implications, 2020, 5, 30.	1.1	2
241	Towards a New Paradigm in the Diagnosis and Treatment of Orthopedic Infections. Springer Series on Biofilms, 2012, , 129-139.	0.0	2
242	Antibacterial Action: Antibacterial Action of Nanoparticles by Lethal Stretching of Bacterial Cell Membranes (Adv. Mater. 52/2020). Advanced Materials, 2020, 32, .	11.1	2
243	Infection in Arthroplasty: The Basic Science of Bacterial Biofilms in Its Pathogenesis, Diagnosis, Treatment, and Prevention. Instructional Course Lectures, 2020, 69, 229-242.	0.2	2
244	Nitrate respiration occurs throughout the depth of mucoid and non-mucoid Pseudomonas aeruginosa submerged agar colony biofilms including the oxic zone. Scientific Reports, 2022, 12, .	1.6	2
245	Biofilms. Nurse Practitioner, 2009, 34, 35-39.	0.2	1
246	CORR InsightsÂ®: Biofilm Antimicrobial Susceptibility Increases With Antimicrobial Exposure Time. Clinical Orthopaedics and Related Research, 2016, 474, 1665-1667.	0.7	1
247	Prevention and Killing Efficacy of Carbapenem Resistant Enterobacteriaceae (CRE) and Vancomycin Resistant Enterococci (VRE) Biofilms by Antibiotic-Loaded Calcium Sulfate Beads. Materials, 2020, 13, 3258.	1.3	1
248	Structural deformation of bacterial biofilms caused by short-term fluctuations in fluid shear: An in situ investigation of biofilm rheology. , 1999, 65, 83.		1
249	Laser disruption and killing of mrsa biofilms. Laryngoscope, 2009, 119, S42.	1.1	0
250	Assessment of marine biofilm attachment and growth for antifouling surfaces under static and controlled hydrodynamic conditions. Materials Research Society Symposia Proceedings, 2011, 1356, 60601.	0.1	0
251	Bacterial Deoxyribonucleic Acid (DNA) is Often Present in Ruptured Graft Tissue at Time of Revision Anterior Cruciate Ligament (ACL) Reconstruction. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2017, 33, e8.	1.3	0
252	CORR InsightsÂ®: Is Implant Coating With Tyrosol- and Antibiotic-loaded Hydrogel Effective in Reducing Cutibacterium (Propionibacterium) acnes Biofilm Formation? A Preliminary In Vitro Study. Clinical Orthopaedics and Related Research, 2019, 477, 1747-1749.	0.7	0

#	Article	IF	Citations
253	Static versus dynamic medical images: The role of cue utilization in diagnostic performance. Applied Cognitive Psychology, 2021, 35, 1284-1296.	0.9	0
254	Exploration of the Pharmacodynamics for Pseudomonas aeruginosa Biofilm Eradication by Tobramycin. Antimicrobial Agents and Chemotherapy, 2022, 66, AAC0137121.	1.4	0
255	Individual differences in echocardiography: Cue utilisation relates to visual object recognition ability.. Journal of Vision, 2020, 20, 139.	0.1	0
256	Antimicrobials and biofilms. Journal of Industrial Microbiology and Biotechnology, 2002, 29, 325-325.	1.4	0
257	Title is missing!. , 2020, 15, e0231791.		0
258	Title is missing!. , 2020, 15, e0231791.		0
259	Title is missing!. , 2020, 15, e0231791.		0
260	Title is missing!. , 2020, 15, e0231791.		0