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**Bacterial biofilms: from the natural environment to infectious diseases**

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2259	Off the menu. <i>Nature Reviews Microbiology</i> , <b>2004</b> , 2, 270-270	22.2	1
2258	<i>Bdellovibrio</i> as therapeutic agents: a predatory renaissance?. <i>Nature Reviews Microbiology</i> , <b>2004</b> , 2, 669-75.2	22.2	133
2257	A novel two-component system controls the expression of <i>Pseudomonas aeruginosa</i> fimbrial cup genes. <b>2005</b> , 55, 368-80		226
2256	Evanescent cavity ring-down spectroscopy (e-CRDS) of hemoglobin absorption at the silica-water interface. <b>2004</b> , 2004, 2345-8		
2255	Microbial community dynamics in a larval aquaculture system of the tropical rock lobster, <i>Panulirus ornatus</i> . <b>2004</b> , 242, 31-51		52
2254	The role of biofilms in otolaryngologic infections. <b>2004</b> , 12, 185-90		116
2253	Engineering approaches for the detection and control of orthopaedic biofilm infections. <b>2005</b> , 59-66		84
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2251	Colonization of Abiotic Surfaces. <b>2005</b> , 1,		8
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2249	Economic Impact of Biofilms on Treatment Costs. <b>2005</b> , 21-38	2
2248	Principles of quartz crystal microbalance/heat conduction calorimetry: Measurement of the sorption enthalpy of hydrogen in palladium. <b>2005</b> , 432, 202-211	36
2247	Bacterial crowd control with iron. <b>2005</b> , 12, 721-3	5
2246	AbioticBiotic controls on the origin and development of spicular sinter: in situ growth experiments, Champagne Pool, Waiotapu, New Zealand. <b>2005</b> , 3, 93-114	57
2245	Bacillus subtilis antibiotics: structures, syntheses and specific functions. <b>2005</b> , 56, 845-57	1046
2244	CsrA post-transcriptionally represses pgaABCD, responsible for synthesis of a biofilm polysaccharide adhesin of Escherichia coli. <b>2005</b> , 56, 1648-63	242
2243	Site-based versus subject-based periodontal diagnosis. <b>2005</b> , 39, 145-63	16
2242	Biofilm formation of Pseudomonas putida IsoF: the role of quorum sensing as assessed by proteomics. <b>2005</b> , 28, 87-114	44
2241	High-throughput metal susceptibility testing of microbial biofilms. <b>2005</b> , 5, 53	82
2240	The effect of Virkon S fogging on survival of Salmonella enterica and Staphylococcus aureus on surfaces in a veterinary teaching hospital. <b>2005</b> , 105, 281-9	28
2239	Biofilm formation is prevalent among field isolates of Actinobacillus pleuropneumoniae. <b>2005</b> , 108, 89-94	64
2238	Genotypic and phenotypic characterization of a biofilm-forming Serratia plymuthica isolate from a raw vegetable processing line. <b>2005</b> , 246, 265-72	31
2237	The phosphodiesterase activity of the HmsP EAL domain is required for negative regulation of biofilm formation in Yersinia pestis. <b>2005</b> , 247, 123-30	136
2236	Pseudomonas aeruginosa rhamnolipids disperse Bordetella bronchiseptica biofilms. <b>2005</b> , 250, 237-43	125
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2233	Clonal analysis of Staphylococcus epidermidis isolates carrying or lacking biofilm-mediating genes by multilocus sequence typing. <b>2005</b> , 43, 4751-7	103
2232	Phenotype switching affects biofilm formation by Candida parapsilosis. <b>2005</b> , 151, 1073-1081	87

2231	Effect of pH on an in vitro model of gastric microbiota in enteral nutrition patients. <b>2005</b> , 71, 4777-83	50
2230	The predominant variant of the Brazilian epidemic clonal complex of methicillin-resistant <i>Staphylococcus aureus</i> has an enhanced ability to produce biofilm and to adhere to and invade airway epithelial cells. <b>2005</b> , 192, 801-10	93
2229	Pathogenic viruses in drinking-water biofilms: a public health risk?. <b>2005</b> , 2, 105-117	48
2228	Three stages of a biofilm community developing at the liquid-liquid interface between polychlorinated biphenyls and water. <b>2005</b> , 71, 7301-9	54
2227	Down regulation of virulence factors of <i>Pseudomonas aeruginosa</i> by salicylic acid attenuates its virulence on <i>Arabidopsis thaliana</i> and <i>Caenorhabditis elegans</i> . <b>2005</b> , 73, 5319-28	147
2226	Biofilm formation and phenotypic variation enhance predation-driven persistence of <i>Vibrio cholerae</i> . <b>2005</b> , 102, 16819-24	240
2225	Specific antibody can prevent fungal biofilm formation and this effect correlates with protective efficacy. <b>2005</b> , 73, 6350-62	123
2224	Methods for the treatment and prevention of bacterial biofilms. <b>2005</b> , 15, 955-965	10
2223	<i>Candida albicans</i> biofilm-defective mutants. <b>2005</b> , 4, 1493-502	129
2222	Comparative efficacies of quinupristin-dalfopristin, linezolid, vancomycin, and ciprofloxacin in treatment, using the antibiotic-lock technique, of experimental catheter-related infection due to <i>Staphylococcus aureus</i> . <b>2005</b> , 49, 4042-5	45
2221	Effect of pH and antibiotics on microbial overgrowth in the stomachs and duodena of patients undergoing percutaneous endoscopic gastrostomy feeding. <b>2005</b> , 43, 3059-65	47
2220	Chronic wounds. <b>2005</b> , 32, 209-22	66
2219	Bacterial biofilms and ocular infections. <b>2005</b> , 3, 73-80	37
2218	The <i>Pseudomonas fluorescens</i> SBW25 wrinkly spreader biofilm requires attachment factor, cellulose fibre and LPS interactions to maintain strength and integrity. <b>2005</b> , 151, 2829-2839	111
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2216	Biofilm formation by bacterial associations under various salinities and copper ion stress. <b>2005</b> , 21, 247-55	9
2215	Iron and <i>Pseudomonas aeruginosa</i> biofilm formation. <b>2005</b> , 102, 11076-81	556
2214	Heterogeneous binding of lipoteichoic acid to the surface of titanium dioxide as determined with <sup>31</sup> P solid-state NMR spectroscopy. <b>2005</b> , 127, 856-7	10

2213	Lessons from DNA microarray analysis: the gene expression profile of biofilms. <b>2005</b> , 8, 222-7	117
2212	Mutation analysis of the flp operon in <i>Actinobacillus actinomycetemcomitans</i> . <b>2005</b> , 351, 61-71	38
2211	GroEL1: a dedicated chaperone involved in mycolic acid biosynthesis during biofilm formation in mycobacteria. <b>2005</b> , 123, 861-73	304
2210	Biofilm formation and dispersal and the transmission of human pathogens. <b>2005</b> , 13, 7-10	410
2209	Sociomicrobiology: the connections between quorum sensing and biofilms. <b>2005</b> , 13, 27-33	824
2208	Off the hook--how bacteria survive protozoan grazing. <b>2005</b> , 13, 302-7	431
2207	Modulation of lung epithelial functions by <i>Pseudomonas aeruginosa</i> . <b>2005</b> , 13, 389-97	86
2206	Hospital water point-of-use filtration: a complementary strategy to reduce the risk of nosocomial infection. <b>2005</b> , 33, S1-19	34
2205	Persister cells mediate tolerance to metal oxyanions in <i>Escherichia coli</i> . <b>2005</b> , 151, 3181-3195	97
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2203	Ultrasonically controlled release of ciprofloxacin from self-assembled coatings on poly(2-hydroxyethyl methacrylate) hydrogels for <i>Pseudomonas aeruginosa</i> biofilm prevention. <b>2005</b> , 49, 4272-9	70
2202	Chelator-induced dispersal and killing of <i>Pseudomonas aeruginosa</i> cells in a biofilm. <b>2006</b> , 72, 2064-9	361
2201	Immunomodulatory effects of <i>Pseudomonas aeruginosa</i> quorum sensing small molecule probes on mammalian macrophages. <b>2006</b> , 2, 132-7	29
2200	Antimicrobial titanium/silver PVD coatings on titanium. <b>2006</b> , 5, 22	195
2199	Beneficial biofilm formation by industrial bacteria <i>Bacillus subtilis</i> and related species. <b>2006</b> , 101, 1-8	169
2198	Biomimetic surface modifications based on the cyanobacterial iron chelator anachelin. <b>2006</b> , 128, 1064-5	134
2197	Nosocomial infections by <i>Staphylococcus epidermidis</i> : how a commensal bacterium turns into a pathogen. <b>2006</b> , 28 Suppl 1, S14-20	326
2196	Toxin-antitoxin regulation: bimodal interaction of YefM-YoeB with paired DNA palindromes exerts transcriptional autorepression. <b>2007</b> , 35, 325-39	63

2195	Biofilm formation by <i>Streptococcus pneumoniae</i> : role of choline, extracellular DNA, and capsular polysaccharide in microbial accretion. <b>2006</b> , 188, 7785-95	251
2194	Polymorphism of the signaling molecule c-di-GMP. <b>2006</b> , 128, 7015-24	57
2193	Biofilm development within a larval rearing tank of the tropical rock lobster, <i>Panulirus ornatus</i> . <b>2006</b> , 260, 27-38	46
2192	Regulatory roles of <i>spnT</i> , a novel gene located within transposon TnTIR. <b>2006</b> , 348, 1038-46	4
2191	Evaluation of a bi-layer wound dressing for burn care. II. In vitro and in vivo bactericidal properties. <b>2006</b> , 32, 172-9	35
2190	Citropin 1.1-treated central venous catheters improve the efficacy of hydrophobic antibiotics in the treatment of experimental staphylococcal catheter-related infection. <b>2006</b> , 27, 1210-6	43
2189	Pre-treatment of central venous catheters with the cathelicidin BMAP-28 enhances the efficacy of antistaphylococcal agents in the treatment of experimental catheter-related infection. <b>2006</b> , 27, 2104-10	45
2188	[Two sensors to control bacterial life style: the choice between chronic or acute infection]. <b>2006</b> , 22, 811-4	3
2187	Quorum-sensing-mediated regulation of biofilm growth and virulence of <i>Vibrio cholerae</i> . 101-116	
2186	The effect of surface composition of titanium films on bacterial adhesion. <b>2006</b> , 1, L1-5	19
2185	Biofilm formation in medical device-related infection. <b>2006</b> , 29, 343-59	136
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2183	Microcosm design and evaluation to study stream microbial biofilms. <b>2006</b> , 4, 436-447	23
2182	Biofilm formation and cellulose expression among diverse environmental <i>Pseudomonas</i> isolates. <b>2006</b> , 8, 1997-2011	186
2181	Whole genome analysis of the marine <i>Bacteroidetes</i> ' <i>Gramella forsetii</i> ' reveals adaptations to degradation of polymeric organic matter. <b>2006</b> , 8, 2201-13	273
2180	The detection of environmental autoinducing peptide quorum-sensing genes from an uncultured <i>Clostridium</i> sp. in landfill leachate reactor biomass. <b>2006</b> , 43, 455-60	9
2179	<i>Mycobacterium marinum</i> biofilm formation reveals cording morphology. <b>2006</b> , 257, 43-9	44
2178	Effects of polymicrobial communities on host immunity and response. <b>2006</b> , 265, 141-50	11

2177	Comparison of bacterial plaque samples from titanium implant and tooth surfaces by different methods. <b>2006</b> , 17, 1-7	48
2176	In situ quantitation of the spatial scale of calling distances and population density-independent N-acylhomoserine lactone-mediated communication by rhizobacteria colonized on plant roots. <b>2006</b> , 56, 188-94	142
2175	Metal resistance in Candida biofilms. <b>2006</b> , 55, 479-91	68
2174	Real-time PCR detection of Pseudomonas aeruginosa in clinical and municipal wastewater and genotyping of the ciprofloxacin-resistant isolates. <b>2006</b> , 57, 158-67	73
2173	Lack of in vitro biofilm formation does not attenuate the virulence of Streptococcus gordonii in experimental endocarditis. <b>2006</b> , 48, 419-23	15
2172	Pore formers promoted release of an antifungal drug from functionalized polyurethanes to inhibit Candida colonization. <b>2006</b> , 100, 615-22	27
2171	Rethinking 'secondary' metabolism: physiological roles for phenazine antibiotics. <b>2006</b> , 2, 71-8	398
2170	Biofilms: you do the maths!. <i>Nature Reviews Microbiology</i> , <b>2006</b> , 4, 4-4	22.2 1
2169	Wza the translocon for E. coli capsular polysaccharides defines a new class of membrane protein. <b>2006</b> , 444, 226-9	273
2168	Peptide-PEG amphiphiles as cytophobic coatings for mammalian and bacterial cells. <b>2006</b> , 13, 695-700	36
2167	Iron-oxidising microbial biofilms as possible causes of increased friction coefficient in intermediate and lower guide vane bearing bushings at a hydroelectric powerplant in Brazil. <b>2006</b> , 58, 48-58	
2166	Bacterial-protozoa interactions; an update on the role these phenomena play towards human illness. <b>2006</b> , 8, 578-87	52
2165	Mechanisms of cyclic-di-GMP signaling in bacteria. <b>2006</b> , 40, 385-407	497
2164	The use of microscopy and three-dimensional visualization to evaluate the structure of microbial biofilms cultivated in the Calgary Biofilm Device. <b>2006</b> , 8, 194-215	104
2163	LuxS-mediated signalling in Streptococcus anginosus and its role in biofilm formation. <b>2006</b> , 90, 109-21	32
2162	Bacterial alginates: from biosynthesis to applications. <b>2006</b> , 28, 1701-12	248
2161	Staphylococcus aureus biofilm as a target for single or repeated doses of oxacillin, vancomycin, linezolid and/or lysostaphin. <b>2006</b> , 51, 381-6	34
2160	Biofilm formation by field isolates and reference strains of Haemophilus parasuis. <b>2006</b> , 118, 117-23	52

2159	The adherence of Salmonella Enteritidis PT4 to stainless steel: the importance of the air-liquid interface and nutrient availability. <b>2006</b> , 23, 747-52	70
2158	Bacterial biofilms within the clinical setting: what healthcare professionals should know. <b>2006</b> , 64, 313-25	248
2157	New principles in ecological regulation [Features from the oral cavity. <b>2006</b> , 18, 26-31	4
2156	Keeping their options open: acute versus persistent infections. <b>2006</b> , 188, 1211-7	146
2155	Catheter lock solutions influence staphylococcal biofilm formation on abiotic surfaces. <b>2006</b> , 21, 2247-55	166
2154	Biofilm formation in Campylobacter jejuni. <b>2006</b> , 152, 387-396	185
2153	The cation-responsive protein NhaR of Escherichia coli activates pgaABCD transcription, required for production of the biofilm adhesin poly-beta-1,6-N-acetyl-D-glucosamine. <b>2006</b> , 188, 8022-32	54
2152	Function of Candida albicans adhesin Hwp1 in biofilm formation. <b>2006</b> , 5, 1604-10	270
2151	Characterization of biofilm formation by clinically relevant serotypes of group A streptococci. <b>2006</b> , 72, 2864-75	112
2150	Adaptation of microbial communities in soil contaminated with polychlorinated biphenyls, leading to the transformation of more highly chlorinated congeners in biofilm communities. <b>2006</b> , 3, 37-46	9
2149	RNAIII-inhibiting peptide significantly reduces bacterial load and enhances the effect of antibiotics in the treatment of central venous catheter-associated Staphylococcus aureus infections. <b>2006</b> , 193, 180-6	78
2148	High-resolution three-dimensional imaging of biofilm development using optical coherence tomography. <b>2006</b> , 11, 34001	77
2147	The transcriptional antiterminator RfaH represses biofilm formation in Escherichia coli. <b>2006</b> , 188, 1316-31	76
2146	Enhanced benzaldehyde tolerance in Zymomonas mobilis biofilms and the potential of biofilm applications in fine-chemical production. <b>2006</b> , 72, 1639-44	77
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2143	Direct detection of bacterial biofilms on the middle-ear mucosa of children with chronic otitis media. <b>2006</b> , 296, 202-11	645
2142	Susceptibility of Cryptococcus neoformans biofilms to antifungal agents in vitro. <b>2006</b> , 50, 1021-33	140



2141	Multiparameter assessments to determine the effects of sugars and antimicrobials on a polymicrobial oral biofilm. <b>2006</b> , 72, 6734-42	29
2140	Cryptococcus neoformans cells in biofilms are less susceptible than planktonic cells to antimicrobial molecules produced by the innate immune system. <b>2006</b> , 74, 6118-23	76
2139	Polyamines are essential for the formation of plague biofilm. <b>2006</b> , 188, 2355-63	150
2138	Broad-spectrum biofilm inhibition by a secreted bacterial polysaccharide. <b>2006</b> , 103, 12558-63	190
2137	What food safety professionals should know about bacterial biofilms. <b>2006</b> , 108, 27-37	35
2136	Metagenomics. <b>2006</b> , 189-206	
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2134	Flagella of Pyrococcus furiosus: multifunctional organelles, made for swimming, adhesion to various surfaces, and cell-cell contacts. <b>2006</b> , 188, 6915-23	104
2133	Expression of the primary carbohydrate component of the Bordetella bronchiseptica biofilm matrix is dependent on growth phase but independent of Bvg regulation. <b>2006</b> , 188, 6680-7	21
2132	Role of quorum sensing and antimicrobial component production by Serratia plymuthica in formation of biofilms, including mixed biofilms with Escherichia coli. <b>2006</b> , 72, 7294-300	55
2131	Cryptococcus neoformans biofilm formation depends on surface support and carbon source and reduces fungal cell susceptibility to heat, cold, and UV light. <b>2007</b> , 73, 4592-601	138
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2129	Efficacy of silver-releasing rubber for the prevention of Pseudomonas aeruginosa biofilm formation in water. <b>2007</b> , 23, 405-11	29
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2127	Inhibition of Escherichia coli biofilm formation by self-assembled monolayers of functional alkanethiols on gold. <b>2007</b> , 73, 4300-7	63
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2125	Demonstration of bacterial cells and glycocalyx in biofilms on human tonsils. <b>2007</b> , 133, 115-21	58
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2123	Cooperation and conflict in microbial biofilms. <b>2007</b> , 104, 876-81	374
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2120	RNAIII-inhibiting peptide affects biofilm formation in a rat model of staphylococcal ureteral stent infection. <b>2007</b> , 51, 4518-20	54
2119	Vulnerability of pathogenic biofilms to <i>Micavibrio aeruginosavorus</i> . <b>2007</b> , 73, 605-14	59
2118	Immunostimulatory properties of the emerging pathogen <i>Stenotrophomonas maltophilia</i> . <b>2007</b> , 75, 1698-703	68
2117	Quorum-sensing blockade as a strategy for enhancing host defences against bacterial pathogens. <b>2007</b> , 362, 1213-22	133
2116	Spatial and temporal population dynamics of a naturally occurring two-species microbial community inside the digestive tract of the medicinal leech. <b>2007</b> , 73, 1984-91	46
2115	Metal ions may suppress or enhance cellular differentiation in <i>Candida albicans</i> and <i>Candida tropicalis</i> biofilms. <b>2007</b> , 73, 4940-9	46
2114	Toward automated analysis of biofilm architecture: bias caused by extraneous confocal laser scanning microscopy images. <b>2007</b> , 73, 4922-30	26
2113	Self-organization in high-density bacterial colonies: efficient crowd control. <b>2007</b> , 5, e302	110
2112	Fluorescence-based bacterial overlay method for simultaneous in situ quantification of surface-attached bacteria. <b>2007</b> , 73, 2653-60	27
2111	Role of the <i>rapA</i> gene in controlling antibiotic resistance of <i>Escherichia coli</i> biofilms. <b>2007</b> , 51, 3650-8	78
2110	The Biofilm Primer. <b>2007</b> ,	126
2109	Differential gene expression profiling of <i>Streptococcus mutans</i> cultured under biofilm and planktonic conditions. <b>2007</b> , 153, 1307-1317	106
2108	Pretreatment with the protegrin IB-367 affects Gram-positive biofilm and enhances the therapeutic efficacy of linezolid in animal models of central venous catheter infection. <b>2007</b> , 31, 463-8	22
2107	Urinary Tract Infection. Why Do Some Children Get Complications, While Others Dont?. <b>2007</b> , 3, 35-44	2
2106	Effect of biofilm formation by <i>Pseudoalteromonas spongiae</i> on induction of larval settlement of the polychaete <i>Hydroides elegans</i> . <b>2007</b> , 73, 6284-8	33

2105	Detection and visualization of an exopolysaccharide produced by <i>Xylella fastidiosa</i> in vitro and in planta. <b>2007</b> , 73, 7252-8	40
2104	Phosphorylcholine expression by nontypeable <i>Haemophilus influenzae</i> correlates with maturation of biofilm communities in vitro and in vivo. <b>2007</b> , 189, 8300-7	74
2103	Comparisons of diversity of bacterial communities associated with three sessile marine eukaryotes. <b>2007</b> , 48, 217-229	113
2102	Microbiologic follow-up study in adult bronchiectasis. <b>2007</b> , 101, 1633-8	157
2101	The lipopeptides Pal-Lys-Lys-NH(2) and Pal-Lys-Lys soaking alone and in combination with intraperitoneal vancomycin prevent vascular graft biofilm in a subcutaneous rat pouch model of staphylococcal infection. <b>2007</b> , 28, 1299-303	20
2100	Microbiological aspects of phyllosoma rearing of the ornate rock lobster <i>Panulirus ornatus</i> . <b>2007</b> , 268, 274-287	29
2099	Poly-N-acetylglucosamine mediates biofilm formation and antibiotic resistance in <i>Actinobacillus pleuropneumoniae</i> . <b>2007</b> , 43, 1-9	124
2098	Ultrasonic monitoring of early-stage biofilm growth on polymeric surfaces. <b>2007</b> , 68, 458-67	45
2097	Quantitative analysis of biofilm EPS uronic acid content. <b>2007</b> , 71, 61-5	36
2096	The bacterial response to the chalcogen metalloids Se and Te. <b>2008</b> , 53, 1-72	117
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2094	Biofilm formation by plant-associated bacteria. <b>2007</b> , 61, 401-22	556
2093	Geology, Life and Habitability. <b>2007</b> , 421-437	4
2092	Bactericidal action of daptomycin against stationary-phase and nondividing <i>Staphylococcus aureus</i> cells. <b>2007</b> , 51, 4255-60	208
2091	Isolation and characterization of biofilm formation-defective mutants of <i>Staphylococcus aureus</i> . <b>2007</b> , 75, 1079-88	120
2090	Host susceptibility hypothesis for shell disease in American lobsters. <b>2007</b> , 19, 215-25	42
2089	Role of the ammonium group in the diffusion of quaternary ammonium compounds in <i>Streptococcus mutans</i> biofilms. <b>2007</b> , 60, 1281-7	39
2088	N-phenylacetanoyl-L-homoserine lactones can strongly antagonize or superagonize quorum sensing in <i>Vibrio fischeri</i> . <b>2007</b> , 2, 315-9	103

2087	In vitro activities of different inhibitors of bacterial transcription against <i>Staphylococcus epidermidis</i> biofilm. <b>2007</b> , 51, 3117-21	38
2086	Modulation of bacterial quorum sensing with synthetic ligands: systematic evaluation of N-acylated homoserine lactones in multiple species and new insights into their mechanisms of action. <b>2007</b> , 129, 13613-25	218
2085	<i>Pseudomonas aeruginosa</i> Psl is a galactose- and mannose-rich exopolysaccharide. <b>2007</b> , 189, 8353-6	125
2084	Inhibition of the bacterial heme oxygenases from <i>Pseudomonas aeruginosa</i> and <i>Neisseria meningitidis</i> : novel antimicrobial targets. <b>2007</b> , 50, 3804-13	34
2083	The impact of a low-frequency chlorhexidine rinsing schedule on the subgingival microbiota (the TEETH clinical trial). <b>2007</b> , 78, 1751-8	18
2082	Endotoxins. <b>2007</b> ,	39
2081	[Activity and penetration of linezolid and vancomycin against <i>Staphylococcus epidermidis</i> biofilms]. <b>2007</b> , 25, 425-8	12
2080	Origin of phagotrophic eukaryotes as social cheaters in microbial biofilms. <b>2007</b> , 2, 3	20
2079	Learning the language of bacteria. <b>2007</b> , 2, 715-7	29
2078	Looking for chinks in the armor of bacterial biofilms. <b>2007</b> , 5, e307	154
2077	Mineral surface reactivity and mass transfer in environmental mineralogy. <b>2007</b> , 19, 297-307	10
2076	References. <b>2007</b> , 181-195	
2075	A three-dimensional computer model analysis of three hypothetical biofilm detachment mechanisms. <b>2007</b> , 97, 1573-84	56
2074	High-density targeting of a viral multifunctional nanoplatform to a pathogenic, biofilm-forming bacterium. <b>2007</b> , 14, 387-98	54
2073	Infection control by antibody disruption of bacterial quorum sensing signaling. <b>2007</b> , 14, 1119-27	174
2072	An alternative infrared spectroscopy assay for the quantification of polysaccharides in bacterial samples. <b>2007</b> , 361, 7-14	58
2071	Biofilms in ear, nose, and throat infections: how important are they?. <b>2007</b> , 117, 668-73	85
2070	Microbial landscapes: new paths to biofilm research. <i>Nature Reviews Microbiology</i> , <b>2007</b> , 5, 76-81	22.2 239

2069	Persister cells, dormancy and infectious disease. <i>Nature Reviews Microbiology</i> , <b>2007</b> , 5, 48-56	22.2	1334
2068	Multimetal resistance and tolerance in microbial biofilms. <i>Nature Reviews Microbiology</i> , <b>2007</b> , 5, 928-38	22.2	446
2067	<i>Pseudomonas aeruginosa</i> cupA-encoded fimbriae expression is regulated by a GGDEF and EAL domain-dependent modulation of the intracellular level of cyclic diguanylate. <b>2007</b> , 9, 2475-85		95
2066	<i>Pseudomonas fluorescens</i> ' view of the periodic table. <b>2008</b> , 10, 238-50		55
2065	Characterization of the OxyR regulon of <i>Neisseria gonorrhoeae</i> . <b>2007</b> , 63, 54-68		76
2064	<i>Streptococcus pyogenes</i> pili promote pharyngeal cell adhesion and biofilm formation. <b>2007</b> , 64, 968-83		184
2063	The role of iron in <i>Mycobacterium smegmatis</i> biofilm formation: the exochelin siderophore is essential in limiting iron conditions for biofilm formation but not for planktonic growth. <b>2007</b> , 66, 468-83		113
2062	Effects of a nanoparticulate silica substrate on cell attachment of <i>Candida albicans</i> . <b>2007</b> , 102, 757-65		56
2061	<i>Pleurotaenium trabecula</i> , a desmid of wetland biofilms: the extracellular matrix and adhesion mechanisms1. <b>2007</b> , 43, 1022-1038		27
2060	Increased tolerance of <i>Staphylococcus aureus</i> to vancomycin in viscous media. <b>2007</b> , 51, 277-88		34
2059	A subpopulation of <i>Candida albicans</i> and <i>Candida tropicalis</i> biofilm cells are highly tolerant to chelating agents. <b>2007</b> , 272, 172-81		29
2058	Silver against <i>Pseudomonas aeruginosa</i> biofilms. <b>2007</b> , 115, 921-8		157
2057	The quorum-sensing molecule N-3-oxododecanoyl homoserine lactone (3OC12-HSL) enhances the host defence by activating human polymorphonuclear neutrophils (PMN). <b>2007</b> , 387, 481-7		56
2056	The effect of the chemical, biological, and physical environment on quorum sensing in structured microbial communities. <b>2007</b> , 387, 371-80		129
2055	Microbial interactions in <i>Staphylococcus epidermidis</i> biofilms. <b>2007</b> , 387, 399-408		115
2054	The role of quorum sensing in the pathogenicity of the cunning aggressor <i>Pseudomonas aeruginosa</i> . <b>2007</b> , 387, 409-14		98
2053	Identification of bacterial N-acylhomoserine lactones (AHLs) with a combination of ultra-performance liquid chromatography (UPLC), ultra-high-resolution mass spectrometry, and in-situ biosensors. <b>2007</b> , 387, 455-67		74
2052	Chemical and physical methods for characterisation of biofilms. <b>2007</b> , 158, 1-27		103

2051	A degradation product of the salicylic acid pathway triggers oxidative stress resulting in down-regulation of <i>Bacillus subtilis</i> biofilm formation on <i>Arabidopsis thaliana</i> roots. <b>2007</b> , 226, 283-97	46
2050	Biosorption of cadmium and nickel by functionalized husk of <i>Lathyrus sativus</i> . <b>2008</b> , 62, 173-9	66
2049	From unicellular properties to multicellular behavior: bacteria quorum sensing circuitry and applications. <b>2008</b> , 19, 550-5	123
2048	Microfluidic devices for studying growth and detachment of <i>Staphylococcus epidermidis</i> biofilms. <b>2008</b> , 10, 489-98	71
2047	An archaeal bi-species biofilm formed by <i>Pyrococcus furiosus</i> and <i>Methanopyrus kandleri</i> . <b>2008</b> , 190, 371-7	58
2046	Identifying <i>Escherichia coli</i> genes involved in intrinsic multidrug resistance. <b>2008</b> , 81, 731-41	24
2045	Effect of different incubation atmospheres on the production of biofilm in methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) grown in nutrient-limited medium. <b>2008</b> , 57, 386-90	14
2044	The influence of <i>Lactobacillus acidophilus</i> -derived surfactants on staphylococcal adhesion and biofilm formation. <b>2008</b> , 53, 61-6	114
2043	Bacterial persistence: some new insights into an old phenomenon. <b>2008</b> , 33, 795-805	100
2042	Quantitative contributions of bacteria and of <i>Deinococcus geothermalis</i> to deposits and slimes in paper industry. <b>2008</b> , 35, 1651-7	14
2041	Towards understanding <i>Pseudomonas aeruginosa</i> burn wound infections by profiling gene expression. <b>2008</b> , 30, 777-90	38
2040	Secular trends in pediatric bloodstream infections over a 20-year period at a tertiary care hospital in Germany. <b>2008</b> , 167, 1149-59	11
2039	Observing bacteria through the lens of social evolution. <b>2008</b> , 7, 27	32
2038	Proteome approaches combined with Fourier transform infrared spectroscopy revealed a distinctive biofilm physiology in <i>Bordetella pertussis</i> . <b>2008</b> , 8, 4995-5010	34
2037	Micro-organism-triggered release of silver nanoparticles from biodegradable oxide carriers allows preparation of self-sterilizing polymer surfaces. <b>2008</b> , 4, 824-32	102
2036	Protein-resistant surfaces through mild dopamine surface functionalization. <b>2008</b> , 14, 10579-84	65
2035	Acyclic N-halamine-based biocidal tubing: preparation, characterization, and rechargeable biofilm-controlling functions. <b>2008</b> , 84, 631-42	25
2034	Bacterial transmission from lens storage cases to contact lenses-Effects of lens care solutions and silver impregnation of cases. <b>2008</b> , 87, 237-43	28

2033	Significance of rpoS during maturation of Escherichia coli biofilms. <b>2008</b> , 99, 1462-71	68
2032	Medical biofilms. <b>2008</b> , 100, 1-18	500
2031	Proteomics and mass spectrometric studies reveal planktonic growth of Mycobacterium smegmatis in biofilm cultures in the absence of rpoZ. <b>2008</b> , 861, 196-202	10
2030	Improvement of the anodic bioelectrocatalytic activity of mixed culture biofilms by a simple consecutive electrochemical selection procedure. <b>2008</b> , 24, 1006-1011	179
2029	Identifying the important structural elements of brominated furanones for inhibiting biofilm formation by Escherichia coli. <b>2008</b> , 18, 1006-10	50
2028	Solid-state NMR studies of bacterial lipoteichoic acid adsorption on different surfaces. <b>2008</b> , 34, 154-61	9
2027	Assessing the antibiofouling potential of a fullerene-coated surface. <b>2008</b> , 62, 475-478	24
2026	Staleya guttiformis attachment on poly(tert-butylmethacrylate) polymeric surfaces. <b>2008</b> , 39, 1197-204	31
2025	Multidrug tolerance of biofilms and persister cells. <b>2008</b> , 322, 107-31	508
2024	Impact of oleic acid (cis-9-octadecenoic acid) on bacterial viability and biofilm production in Staphylococcus aureus. <b>2008</b> , 287, 149-55	56
2023	Boesenbergia pandurata (Roxb.) Schltr., Eleutherine americana Merr. and Rhodomyrtus tomentosa (Aiton) Hassk. as antibiofilm producing and antiquorum sensing in Streptococcus pyogenes. <b>2008</b> , 53, 429-36	75
2022	Indole cell signaling occurs primarily at low temperatures in Escherichia coli. <b>2008</b> , 2, 1007-23	94
2021	Physiological heterogeneity in biofilms. <i>Nature Reviews Microbiology</i> , <b>2008</b> , 6, 199-210	22.2 1468
2020	Gram-negative outer membrane vesicles: beyond the cell surface. <b>2008</b> , 6, 214-9	103
2019	The characterization of functions involved in the establishment and maturation of Klebsiella pneumoniae in vitro biofilm reveals dual roles for surface exopolysaccharides. <b>2008</b> , 10, 685-701	77
2018	Roles of type IV pili, flagellum-mediated motility and extracellular DNA in the formation of mature multicellular structures in Pseudomonas aeruginosa biofilms. <b>2008</b> , 10, 2331-43	276
2017	Identification of genes transcribed by Haemophilus parasuis in necrotic porcine lung through the selective capture of transcribed sequences (SCOTS). <b>2008</b> , 10, 3326-36	34
2016	Tolerance to the antimicrobial peptide colistin in Pseudomonas aeruginosa biofilms is linked to metabolically active cells, and depends on the pmr and mexAB-oprM genes. <b>2008</b> , 68, 223-40	349

2015	Autoinducer-2 is produced in saliva-fed flow conditions relevant to natural oral biofilms. <b>2008</b> , 105, 2096-103	40
2014	Influence of environmental conditions on biofilm formation by <i>Hafnia alvei</i> strains. <b>2008</b> , 129, 150-5	41
2013	Antimicrobial resistance and genetic characterization of fluoroquinolone resistance of <i>Pseudomonas aeruginosa</i> isolated from canine infections. <b>2008</b> , 131, 164-72	73
2012	Characterization of ISAp11, an insertion element identified from <i>Actinobacillus pleuropneumoniae</i> field isolate in China. <b>2008</b> , 132, 348-54	8
2011	The coevolution of cooperation and dispersal in social groups and its implications for the emergence of multicellularity. <b>2008</b> , 8, 238	37
2010	Characterization of biofilm matrix, degradation by DNase treatment and evidence of capsule downregulation in <i>Streptococcus pneumoniae</i> clinical isolates. <b>2008</b> , 8, 173	184
2009	DNA-microarrays identification of <i>Streptococcus mutans</i> genes associated with biofilm thickness. <b>2008</b> , 8, 236	19
2008	Effect of biofilm formation on virulence factor secretion via the general secretory pathway in <i>Streptococcus mutans</i> . <b>2008</b> , 53, 1179-85	19
2007	Complementary adhesin function in <i>C. albicans</i> biofilm formation. <b>2008</b> , 18, 1017-24	247
2006	The potential of lipid- and polymer-based drug delivery carriers for eradicating biofilm consortia on device-related nosocomial infections. <b>2008</b> , 128, 2-22	81
2005	The long and short of it - polyphosphate, PPK and bacterial survival. <b>2008</b> , 33, 284-90	143
2004	Biofilms in nephrology. <b>2008</b> , 8, 1159-66	18
2003	Unexpected induction of resistant <i>Pseudomonas aeruginosa</i> biofilm to fluoroquinolones by diltiazem: a new perspective of microbiological drug-drug interaction. <b>2008</b> , 1, 105-12	5
2002	Bacterial Biofilms. <b>2008</b> ,	24
2001	Embryo fossilization is a biological process mediated by microbial biofilms. <b>2008</b> , 105, 19360-5	86
2000	Enhanced biofilm formation and reduced virulence of <i>Actinobacillus pleuropneumoniae</i> luxS mutant. <b>2008</b> , 45, 192-200	40
1999	GM-CSF enhances a CpG-independent pathway of neutrophil activation triggered by bacterial DNA. <b>2008</b> , 46, 37-44	9
1998	BMAP-28 improves the efficacy of vancomycin in rat models of gram-positive cocci ureteral stent infection. <b>2008</b> , 29, 1118-23	26



1997	Comparison of uranium(VI) removal by <i>Shewanella oneidensis</i> MR-1 in flow and batch reactors. <b>2008</b> , 42, 2993-3002	21
1996	Cyclic di-GMP: a second messenger required for long-term survival, but not for biofilm formation, in <i>Mycobacterium smegmatis</i> . <b>2008</b> , 154, 2942-2955	51
1995	Using chemical probes to investigate the sub-inhibitory effects of azithromycin. <b>2008</b> , 6, 4120-4	15
1994	Influence of uranium (VI) on the metabolic activity of stable multispecies biofilms studied by oxygen microsensors and fluorescence microscopy. <b>2008</b> , 72, 5251-5265	28
1993	FLO1 is a variable green beard gene that drives biofilm-like cooperation in budding yeast. <b>2008</b> , 135, 726-37	315
1992	Intravenously administered pharmaceuticals impact biofilm formation and detachment of <i>Staphylococcus lugdunensis</i> and other staphylococci. <b>2008</b> , 60, 9-16	17
1991	[Infection of cerebrospinal fluid shunt systems]. <b>2008</b> , 26, 240-51	8
1990	Biofilm development with an emphasis on <i>Bacillus subtilis</i> . <b>2008</b> , 322, 1-16	99
1989	Quorum sensing and microbial biofilms. <b>2008</b> , 322, 67-84	130
1988	Multiscale modeling of biological pattern formation. <b>2008</b> , 81, 435-60	25
1987	[Biofilm from patients with chronic rhinosinusitis. Morphological SEM studies]. <b>2008</b> , 62, 305-10	5
1986	Influence of quorum sensing and iron on twitching motility and biofilm formation in <i>Pseudomonas aeruginosa</i> . <b>2008</b> , 190, 662-71	144
1985	2-Methoxycyclopentyl analogues of a <i>Pseudomonas aeruginosa</i> quorum sensing modulator. <b>2008</b> , 4, 505-7	15
1984	MEMS and the microbe. <b>2008</b> , 8, 1604-16	44
1983	Coupled electrostatic, hydrodynamic, and mechanical properties of bacterial interfaces in aqueous media. <b>2008</b> , 24, 10988-95	76
1982	Microrheology of bacterial biofilms in vitro: <i>Staphylococcus aureus</i> and <i>Pseudomonas aeruginosa</i> . <b>2008</b> , 24, 13549-55	88
1981	Copper and quaternary ammonium cations exert synergistic bactericidal and antibiofilm activity against <i>Pseudomonas aeruginosa</i> . <b>2008</b> , 52, 2870-81	121
1980	Environmental influences on the partitioning and diffusion of hydrophobic organic contaminants in microbial biofilms. <b>2008</b> , 42, 1990-6	33

1979	Impact of nitrate on the structure and function of bacterial biofilm communities in pipelines used for injection of seawater into oil fields. <b>2008</b> , 74, 2841-51	75
1978	Control of Biofilm Infections by Signal Manipulation. <b>2008</b> ,	9
1977	Microbial biofilms in ophthalmology and infectious disease. <b>2008</b> , 126, 1572-81	81
1976	Brominated furanones inhibit biofilm formation by <i>Salmonella enterica</i> serovar Typhimurium. <b>2008</b> , 74, 6639-48	159
1975	Antagonism between <i>Bacillus cereus</i> and <i>Pseudomonas fluorescens</i> in planktonic systems and in biofilms. <b>2008</b> , 24, 339-49	45
1974	Novel anti-adherence activity of mulberry leaves: inhibition of <i>Streptococcus mutans</i> biofilm by 1-deoxynojirimycin isolated from <i>Morus alba</i> . <b>2008</b> , 62, 751-7	91
1973	Regulation of autolysis-dependent extracellular DNA release by <i>Enterococcus faecalis</i> extracellular proteases influences biofilm development. <b>2008</b> , 190, 5690-8	215
1972	Inverse regulatory coordination of motility and curli-mediated adhesion in <i>Escherichia coli</i> . <b>2008</b> , 22, 2434-46	252
1971	The cyclic AMP-dependent catabolite repression system of <i>Serratia marcescens</i> mediates biofilm formation through regulation of type 1 fimbriae. <b>2008</b> , 74, 3461-70	45
1970	Genetic evidence for an alternative citrate-dependent biofilm formation pathway in <i>Staphylococcus aureus</i> that is dependent on fibronectin binding proteins and the GraRS two-component regulatory system. <b>2008</b> , 76, 2469-77	51
1969	A collective mechanism for phase variation in biofilms. <b>2008</b> , 105, 14597-602	25
1968	Environmental regulation in a network of simulated microbial ecosystems. <b>2008</b> , 105, 10432-7	40
1967	Biofilm formation by saprophytic and pathogenic leptospires. <b>2008</b> , 154, 1309-1317	78
1966	A short-time scale colloidal system reveals early bacterial adhesion dynamics. <b>2008</b> , 6, e167	44
1965	Phosphorylation-independent regulation of the diguanylate cyclase WspR. <b>2008</b> , 6, e67	163
1964	Role of global regulators and nucleotide metabolism in antibiotic tolerance in <i>Escherichia coli</i> . <b>2008</b> , 52, 2718-26	222
1963	A method for determining Stokes flow around particles near a wall or in a thin film bounded by a wall and a gas-liquid interface. <b>2008</b> , 20, 063301	19
1962	Gene expression of <i>Pseudomonas aeruginosa</i> and MRSA within a catheter-associated urinary tract infection biofilm model. <b>2008</b> , 1, 28-37	19

1961	Cross-ocean distribution of Rhodobacterales bacteria as primary surface colonizers in temperate coastal marine waters. <b>2008</b> , 74, 52-60	250
1960	Rapid mineralization of the phenylurea herbicide diuron by <i>Variovorax</i> sp. strain SRS16 in pure culture and within a two-member consortium. <b>2008</b> , 74, 2332-40	111
1959	Identification and ecophysiological characterization of epiphytic protein-hydrolyzing saprospiraceae ("Candidatus Epiflobacter" spp.) in activated sludge. <b>2008</b> , 74, 2229-38	137
1958	The evolution of quorum sensing in bacterial biofilms. <b>2008</b> , 6, e14	276
1957	Biofilm formation of the pathogens of fatal bacterial granuloma after trauma: potential mechanism underlying the failure of traditional antibiotic treatments. <b>2008</b> , 40, 221-8	16
1956	Oral bacteria in biofilms exhibit slow reactivation from nutrient deprivation. <b>2008</b> , 154, 1927-1938	48
1955	Transcriptional profiling of <i>Legionella pneumophila</i> biofilm cells and the influence of iron on biofilm formation. <b>2008</b> , 154, 30-41	83
1954	Evaluation of quantitative analysis of cultures from sonicated retrieved orthopedic implants in diagnosis of orthopedic infection. <b>2008</b> , 46, 488-92	128
1953	Surgical site infection with methicillin-resistant <i>Staphylococcus aureus</i> after primary total hip replacement. <b>2008</b> , 90, 292-8	58
1952	The amino acid valine is secreted in continuous-flow bacterial biofilms. <b>2008</b> , 190, 264-74	47
1951	Population-level virulence factors amongst pathogenic bacteria: relation to infection outcome. <b>2008</b> , 3, 31-42	22
1950	<i>Staphylococcus epidermidis</i> Biofilms: Functional Molecules, Relation to Virulence, and Vaccine Potential. <b>2009</b> , 288, 157-82	25
1949	Expression of <i>Staphylococcus epidermidis</i> SdrG increases following exposure to an in vivo environment. <b>2008</b> , 76, 2950-7	25
1948	Biofilm plaque and hydrodynamic effects on mass transfer, fluoride delivery and caries. <b>2008</b> , 139, 1182-90	42
1947	Chapter 4 Microbial Distribution in Soils. <b>2008</b> , 100, 81-121	130
1946	<i>Pseudomonas aeruginosa</i> : A Model for Biofilm Formation. 215-253	8
1945	Novel combination of atomic force microscopy and epifluorescence microscopy for visualization of leaching bacteria on pyrite. <b>2008</b> , 74, 410-5	63
1944	Hygiene by Design. 75-120	5

1943	<i>Pantoea stewartii</i> subsp. <i>stewartii</i> exhibits surface motility, which is a critical aspect of Stewart's wilt disease development on maize. <b>2008</b> , 21, 1359-70	30
1942	Surface Modification for Bacterial Immobilization by Radiation-Induced Graft Polymerization and Application to Biological Wastewater Treatment. <b>2008</b> , 33, 54-62	
1941	Hospital Tap Water. <b>2008</b> , 16, 349-353	16
1940	Bench and bedside advances in otitis media. <b>2008</b> , 16, 543-7	3
1939	LOSS OF BIOACTIVE PHOSPHORUS AND ENTERIC BACTERIA IN RUNOFF FROM DAIRY MANURE APPLIED TO SOD. <b>2008</b> , 173, 511-521	19
1938	. <b>2008</b> ,	10
1937	. <b>2008</b> ,	11
1936	Evaluation of induced and spontaneous contamination of ocular medications after first opening. <b>2008</b> , 23,	
1935	Animal Models Commonly Used to Study Quorum-Sensing Inhibitors. <b>2008</b> , 109-117	
1934	Introduction. <b>2008</b> , 1-11	1
1933	Marine biofilm bacteria evade eukaryotic predation by targeted chemical defense. <b>2008</b> , 3, e2744	149
1932	Suppression of biofilm related, device-associated infections by staphylococcal quorum sensing inhibitors. <b>2008</b> , 31, 761-70	53
1931	. <b>2008</b> ,	3
1930	Bacterial biofilms with emphasis on coagulase-negative staphylococci. <b>2008</b> , 14, 572-596	7
1929	Implications of bacterial biofilms in chronic rhinosinusitis. <b>2009</b> , 13, 232-5	14
1928	Engineering of bio-hybrid materials by electrospinning polymer-microbe fibers. <b>2009</b> , 106, 14201-6	78
1927	Biofilm Image Segmentation Using Optimal Multi-level Thresholding. <b>2009</b> ,	0
1926	Review: Biofunctionalized Quantum Dots in Biology and Medicine. <b>2009</b> , 2009, 1-17	94

1925	Efficacy of daptomycin in implant-associated infection due to methicillin-resistant <i>Staphylococcus aureus</i> : importance of combination with rifampin. <b>2009</b> , 53, 2719-24	149
1924	<i>Bacillus subtilis</i> spreads by surfing on waves of surfactant. <b>2009</b> , 106, 18109-13	133
1923	Characterization of a novel air-liquid interface biofilm of <i>Pseudomonas fluorescens</i> SBW25. <b>2009</b> , 155, 1397-1406	68
1922	Role of bacterial adhesion in the microbial ecology of biofilms in cooling tower systems. <b>2009</b> , 25, 241-53	26
1921	Coaggregation by the freshwater bacterium <i>Sphingomonas natatoria</i> alters dual-species biofilm formation. <b>2009</b> , 75, 3987-97	34
1920	Chronic surgical site infection due to suture-associated polymicrobial biofilm. <b>2009</b> , 10, 457-61	90
1919	Functional tomographic fluorescence imaging of pH microenvironments in microbial biofilms by use of silica nanoparticle sensors. <b>2009</b> , 75, 7426-35	99
1918	Genetic requirements for <i>Staphylococcus aureus</i> abscess formation and persistence in host tissues. <b>2009</b> , 23, 3393-404	305
1917	Molecular ecology of <i>Listeria monocytogenes</i> : evidence for a reservoir in milking equipment on a dairy farm. <b>2009</b> , 75, 1315-23	67
1916	The chromosomal toxin gene <i>yafQ</i> is a determinant of multidrug tolerance for <i>Escherichia coli</i> growing in a biofilm. <b>2009</b> , 53, 2253-8	148
1915	Nitrite reductase NirS is required for type III secretion system expression and virulence in the human monocyte cell line THP-1 by <i>Pseudomonas aeruginosa</i> . <b>2009</b> , 77, 4446-54	39
1914	Identification of an <i>rsh</i> gene from a <i>Novosphingobium</i> sp. necessary for quorum-sensing signal accumulation. <b>2009</b> , 191, 2551-60	18
1913	Evaluation of the type I signal peptidase as antibacterial target for biofilm-associated infections of <i>Staphylococcus epidermidis</i> . <b>2009</b> , 155, 3719-3729	13
1912	Uncultivated Microorganisms. <b>2009</b> ,	6
1911	Molecular aspects of <i>Moraxella catarrhalis</i> pathogenesis. <b>2009</b> , 73, 389-406, Table of Contents	69
1910	Role of dispersal in shaping communities of ciliates and heterotrophic flagellates within riverine biofilms. <b>2009</b> , 54, 1615-1626	29
1909	Expression of internalin A and biofilm formation among <i>Listeria monocytogenes</i> clinical isolates. <b>2009</b> , 22, 183-93	42
1908	Novel approaches to control biofilm infections. <b>2009</b> , 16, 1512-30	60

1907	Genetic dissection of an exogenously induced biofilm in laboratory and clinical isolates of <i>E. coli</i> . <b>2009</b> , 5, e1000432	32
1906	Role of lung iron in determining the bacterial and host struggle in cystic fibrosis. <b>2009</b> , 297, L795-802	36
1905	Micro-scale surface-patterning influences biofilm formation. <b>2009</b> , 12,	10
1904	Microbiological appraisal of levofloxacin activity against <i>Pseudomonas aeruginosa</i> biofilm in combination with different calcium channel blockers in vitro. <b>2009</b> , 21, 135-43	9
1903	Introduction to biofilms in urology. <b>2009</b> , 3-41	
1902	Eradication of bacteria in suspension and biofilms using methylene blue-loaded dynamic nanoplatforms. <b>2009</b> , 53, 3042-8	49
1901	Detection of circular polarization in light scattered from photosynthetic microbes. <b>2009</b> , 106, 7816-21	89
1900	Three-dimensional macromolecular organization of cryofixed <i>Myxococcus xanthus</i> biofilms as revealed by electron microscopic tomography. <b>2009</b> , 191, 2077-82	67
1899	Conjugative plasmid transfer and adhesion dynamics in an <i>Escherichia coli</i> biofilm. <b>2009</b> , 75, 6783-91	48
1898	Hyphal content determines the compression strength of <i>Candida albicans</i> biofilms. <b>2009</b> , 155, 1997-2003	52
1897	Effects of seawater ozonation on biofilm development in aquaculture tanks. <b>2009</b> , 32, 266-77	46
1896	Microbial biofilms: a concept for industrial catalysis?. <b>2009</b> , 27, 636-43	161
1895	Characterization of structures in biofilms formed by a <i>Pseudomonas fluorescens</i> isolated from soil. <b>2009</b> , 9, 103	59
1894	Outer membrane vesicles of <i>Helicobacter pylori</i> TK1402 are involved in biofilm formation. <b>2009</b> , 9, 197	171
1893	Nitric oxide-mediated dispersal in single- and multi-species biofilms of clinically and industrially relevant microorganisms. <b>2009</b> , 2, 370-8	200
1892	Controlling bacterial biofilms. <b>2009</b> , 10, 2287-94	131
1891	Adsorption mechanism of polypeptides and their location at hydrophobic interfaces. <b>2009</b> , 10, 2795-9	13
1890	Insight into the microbial multicellular lifestyle via flow-cell technology and confocal microscopy. <b>2009</b> , 75, 90-103	92

1889	Proteomic analysis of <i>Staphylococcus aureus</i> biofilms grown in vitro on mechanical heart valve leaflets. <b>2009</b> , 88, 1069-78	13
1888	Localized expression profiles of <i>rpoS</i> in <i>Escherichia coli</i> biofilms. <b>2009</b> , 103, 975-83	22
1887	Diversity of archaeal type IV pilin-like structures. <b>2009</b> , 13, 403-10	78
1886	Prevention of catheter-related bacteremia in children on hemodialysis: time for action. <b>2009</b> , 24, 2087-95	11
1885	Organic compounds inhibiting <i>S. epidermidis</i> adhesion and biofilm formation. <b>2009</b> , 109, 881-8	22
1884	Influences of protein films on antibacterial or bacteria-repellent surface coatings in a model system using silicon wafers. <b>2009</b> , 30, 4921-9	90
1883	Antibiofilm activity of nanosized magnesium fluoride. <b>2009</b> , 30, 5969-78	137
1882	Efficient synthesis and protein conjugation of beta-(1-->6)-D-N-acetylglucosamine oligosaccharides from the polysaccharide intercellular adhesin. <b>2009</b> , 344, 570-5	30
1881	Monitoring ALS1 and ALS3 gene expression during in vitro <i>Candida albicans</i> biofilm formation under continuous flow conditions. <b>2009</b> , 167, 9-17	38
1880	Biofilm formation by <i>Cryptococcus neoformans</i> under distinct environmental conditions. <b>2009</b> , 167, 307-14	26
1879	Iron acquisition by <i>Pseudomonas aeruginosa</i> in the lungs of patients with cystic fibrosis. <b>2009</b> , 22, 53-60	54
1878	Surface modifications based on the cyanobacterial siderophore anachelin: from structure to functional biomaterials design. <b>2009</b> , 22, 595-604	20
1877	The influence of maggot excretions on PAO1 biofilm formation on different biomaterials. <b>2009</b> , 467, 536-45	43
1876	Anti-adhesion activity of two biosurfactants produced by <i>Bacillus</i> spp. prevents biofilm formation of human bacterial pathogens. <b>2009</b> , 83, 541-53	191
1875	Structure and function of <i>Pseudomonas aeruginosa</i> protein PA1324 (21-170). <b>2009</b> , 18, 606-18	11
1874	Expression, purification and preliminary crystallographic analysis of <i>Pseudomonas aeruginosa</i> RocR protein. <b>2009</b> , 65, 1035-8	4
1873	The biofilm life cycle and virulence of <i>Pseudomonas aeruginosa</i> are dependent on a filamentous prophage. <b>2009</b> , 3, 271-82	216
1872	Natural acidophilic biofilm communities reflect distinct organismal and functional organization. <b>2009</b> , 3, 266-70	75

1871	Architectural differentiation reflects bacterial community structure in stream biofilms. <b>2009</b> , 3, 1318-24	39
1870	Adaptive evolution in single species bacterial biofilms. <b>2009</b> , 293, 135-40	38
1869	Cystic fibrosis infections: treatment strategies and prospects. <b>2009</b> , 300, 153-64	58
1868	A global view of antibiotic resistance. <b>2009</b> , 33, 44-65	226
1867	The sociobiology of biofilms. <b>2009</b> , 33, 206-24	423
1866	Generational coexistence and ancestor's inhibition in bacterial populations. <b>2009</b> , 33, 958-67	13
1865	Antibiofilm activity of coral-associated bacteria against different clinical M serotypes of <i>Streptococcus pyogenes</i> . <b>2009</b> , 57, 284-94	123
1864	Point-of-use water filtration reduces healthcare-associated infections in bone marrow transplant recipients. <b>2010</b> , 12, 238-41	17
1863	Versatility of the capsular genes during biofilm formation by <i>Streptococcus pneumoniae</i> . <b>2009</b> , 11, 2542-55	44
1862	O-acetyltransferase gene <i>neuO</i> is segregated according to phylogenetic background and contributes to environmental desiccation resistance in <i>Escherichia coli</i> K1. <b>2009</b> , 11, 3154-65	21
1861	Evolving concepts in biofilm infections. <b>2009</b> , 11, 1034-43	954
1860	The development of peptide-based interfacial biomaterials for generating biological functionality on the surface of bioinert materials. <b>2009</b> , 30, 277-86	61
1859	Micro-structures modulate bacterial cell viability and attachment. <b>2009</b> , 86, 1431-1434	8
1858	Antimicrobial dendrimer active against <i>Escherichia coli</i> biofilms. <b>2009</b> , 19, 5478-81	49
1857	Assessing the antimicrobial activity of zinc oxide thin films using disk diffusion and biofilm reactor. <b>2009</b> , 255, 5806-5811	36
1856	Flexible microfluidic device for mechanical property characterization of soft viscoelastic solids such as bacterial biofilms. <b>2009</b> , 25, 7743-51	97
1855	Coordinated surface activities in <i>Variovorax paradoxus</i> EPS. <b>2009</b> , 9, 124	26
1854	Molecular mechanisms of interactions of plague causative agents with invertebrates. <b>2009</b> , 24, 169-176	5



1853	The impact of biofilm-forming potential and tafi production on transport of environmental Salmonella through unsaturated porous media. <b>2009</b> , 64, 460-464	9
1852	Molecular gradients of bioinertness reveal a mechanistic difference between mammalian cell adhesion and bacterial biofilm formation. <b>2009</b> , 25, 1547-53	32
1851	<i>Pseudomonas aeruginosa</i> extracellular products inhibit staphylococcal growth, and disrupt established biofilms produced by <i>Staphylococcus epidermidis</i> . <b>2009</b> , 155, 2148-2156	101
1850	Adsorption behavior of mercury on functionalized <i>Aspergillus versicolor</i> mycelia: atomic force microscopic study. <b>2009</b> , 25, 360-6	42
1849	Fabrication of microbial biofilm arrays by geometric control of cell adhesion. <b>2009</b> , 25, 4643-54	39
1848	The impact of the stone age diet on gingival conditions in the absence of oral hygiene. <b>2009</b> , 80, 759-68	91
1847	Who's the boss? One-way conversations between bacteria. <b>2009</b> , 17, 155-6	1
1846	Released exopolysaccharide (r-EPS) produced from probiotic bacteria reduce biofilm formation of enterohemorrhagic <i>Escherichia coli</i> O157:H7. <b>2009</b> , 379, 324-9	174
1845	Non starter lactic acid bacteria biofilms: A means to control the growth of <i>Listeria monocytogenes</i> in soft cheese. <b>2009</b> , 20, 1063-1067	13
1844	Can filamentous fungi form biofilms?. <b>2009</b> , 17, 475-80	148
1843	Community as the unit of pathogenicity: an emerging concept as to the microbial pathogenesis of apical periodontitis. <b>2009</b> , 107, 870-8	97
1842	Enhancing the biofiltration of geosmin by seeding sand filter columns with a consortium of geosmin-degrading bacteria. <b>2009</b> , 43, 433-40	58
1841	Biofilm presence in humans with chronic suppurative otitis media. <b>2009</b> , 141, 567-71	43
1840	Ultrastructural examination of failed molar retreatment with secondary apical periodontitis: an examination of endodontic biofilms in an endodontic retreatment failure. <b>2009</b> , 35, 1303-9	79
1839	Mechanisms and regulation of polar surface attachment in <i>Agrobacterium tumefaciens</i> . <b>2009</b> , 12, 708-14	72
1838	Biofilm formation in clinical isolates of group B streptococci from north India. <b>2009</b> , 46, 321-7	31
1837	Pros and cons of using resazurin staining for quantification of viable <i>Staphylococcus aureus</i> biofilms in a screening assay. <b>2009</b> , 78, 104-6	68
1836	Host defence against <i>Staphylococcus aureus</i> biofilms infection: phagocytosis of biofilms by polymorphonuclear neutrophils (PMN). <b>2009</b> , 46, 1805-13	98

1835	Antibiotic Resistance Due to Reduced Uptake. <b>2009</b> , 97-110	5
1834	Chemical modification of reactive multilayered films fabricated from poly(2-alkenyl azlactone)s: design of surfaces that prevent or promote mammalian cell adhesion and bacterial biofilm growth. <b>2009</b> , 10, 1564-74	73
1833	Antimicrobial properties of nanostructured hydrogel webs containing silver. <b>2009</b> , 10, 2686-93	90
1832	Jamming prokaryotic cell-to-cell communications in a model biofilm. <b>2009</b> , 9, 925-34	26
1831	Self-starting micromotors in a bacterial bath. <b>2009</b> , 102, 048104	189
1830	Bacterial interactions in biofilms. <b>2009</b> , 35, 157-68	134
1829	Plasma medicine: an introductory review. <b>2009</b> , 11, 115012	957
1828	Towards quorum-quenching catalytic antibodies. <b>2009</b> , 538-40	32
1827	Heterogeneous films of ionotropic hydrogels fabricated from delivery templates of patterned paper. <b>2009</b> , 1, 1807-12	40
1826	Biofilm formation by group A Streptococcus: a role for the streptococcal regulator of virulence (Srv) and streptococcal cysteine protease (SpeB). <b>2009</b> , 155, 46-52	50
1825	Removal and sterilization of biofilms and planktonic bacteria by microwave-induced argon plasma at atmospheric pressure. <b>2009</b> , 11, 115022	51
1824	Conjugated polyelectrolyte capsules: light-activated antimicrobial micro "Roach Motels". <b>2009</b> , 1, 48-52	98
1823	A membrane basis for bacterial identification and discrimination using laser-induced breakdown spectroscopy. <b>2009</b> , 105, 102034	40
1822	Prolonged control of patterned biofilm formation by bio-inert surface chemistry. <b>2009</b> , 1207-9	27
1821	New and unexpected insights into the modulation of LuxR-type quorum sensing by cyclic dipeptides. <b>2009</b> , 4, 1051-9	89
1820	Antibiofilm activities of 1-alkyl-3-methylimidazolium chloride ionic liquids. <b>2009</b> , 11, 492	214
1819	Engineered bacteriophage targeting gene networks as adjuvants for antibiotic therapy. <b>2009</b> , 106, 4629-34	378
1818	Role of biofilm in <i>Pseudomonas aeruginosa</i> colonization and infection. <b>2009</b> , 30, 925-7	3

1817	Screening for methicillin-resistant <i>Staphylococcus aureus</i> . <b>2009</b> , 30, 927-8	1
1816	Review paper: Host-pathogen interactions in the kidney during chronic leptospirosis. <b>2009</b> , 46, 792-9	65
1815	Clinical and laboratory evidence for <i>Neisseria meningitidis</i> biofilms. <b>2009</b> , 4, 555-63	13
1814	Nontuberculous mycobacteria infections in immunocompromised patients: single institution experience. <b>2009</b> , 31, 556-60	19
1813	Can infectious biofilm be controlled by blocking bacterial communication?. <b>2009</b> , 5, 517-28	18
1812	Quorum-Sensing Inhibitors and Biofilms. <b>2009</b> , 8, 315-326	36
1811	Microwave Preparation of Metal Fluorides and their Biological Application. <b>2009</b> , 71-110	
1810	Phagocytosis of staphylococci biofilms by polymorphonuclear neutrophils: <i>S. aureus</i> and <i>S. epidermidis</i> differ with regard to their susceptibility towards the host defense. <b>2009</b> , 32, 565-73	60
1809	Suicide and fratricide in bacterial biofilms. <b>2009</b> , 32, 537-44	36
1808	Cryoprotection from bacterial teichoic acid. <b>2009</b> ,	2
1807	Phage therapy pharmacology. <b>2010</b> , 11, 28-47	171
1806	Biofilm-Forming Capabilities of Urinary <i>Escherichia Coli</i> Isolates. <b>2010</b> , 24, 589-593	8
1805	The impact of contact angle on the biocompatibility of biomaterials. <b>2010</b> , 87, 387-99	299
1804	Protozoan impact on bacterial biofilm formation. <b>2010</b> , 47, 3-10	5
1803	Detection of bacterial biofilm on cochlear implants removed because of device failure, without evidence of infection. <b>2010</b> , 31, 1320-4	24
1802	Insights into acinetobacter war-wound infections, biofilms, and control. <b>2010</b> , 23, 169-74	56
1801	Preventing Biofilm Formation on Biomedical Surfaces. <b>2010</b> , 183-223	6
1800	Combining Biofilm-Controlling Compounds and Antibiotics as a Promising New Way to Control Biofilm Infections. <b>2010</b> , 3, 1374-1393	54

1799	Association of quantum dot nanoparticles with <i>Pseudomonas aeruginosa</i> biofilm. <b>2010</b> , 39, 1934-41	30
1798	Review of biologically active filters in drinking water applications. <b>2010</b> , 102, 67-77	36
1797	Destruction of bacterial biofilms by polymorphonuclear neutrophils: relative contribution of phagocytosis, DNA release, and degranulation. <b>2010</b> , 33, 608-20	67
1796	Inhibition of <i>Streptococcus pyogenes</i> biofilm formation by coral-associated actinomycetes. <b>2010</b> , 60, 454-60	68
1795	Uranium speciation in biofilms studied by laser fluorescence techniques. <b>2010</b> , 396, 1641-53	11
1794	Ecoenzymatic stoichiometry in relation to productivity for freshwater biofilm and plankton communities. <b>2010</b> , 60, 885-93	36
1793	The quorum-sensing effect of aerobic granules on bacterial adhesion, biofilm formation, and sludge granulation. <b>2010</b> , 88, 789-97	70
1792	Use of flexible endoscopes for NOTES: sterilization or high-level disinfection?. <b>2010</b> , 24, 1581-8	15
1791	Temperature and pH affect the production of bacterial biofilm. <b>2010</b> , 55, 75-8	78
1790	Bacteria competing with the adhesion and biofilm formation by <i>Staphylococcus aureus</i> . <b>2010</b> , 55, 497-501	21
1789	Fungal Biofilms: Relevance in the Setting of Human Disease. <b>2010</b> , 4, 266-275	59
1788	The use of force-volume microscopy to examine bacterial attachment to titanium surfaces. <b>2010</b> , 60, 495-502	3
1787	Computational Challenges in Deciphering Genomic Structures of Bacteria. <b>2010</b> , 25, 53-70	1
1786	Bacterial colonization of bone allografts: establishment and effects of antibiotics. <b>2010</b> , 468, 2113-21	37
1785	Cutaneous fistula from the gastric remnant resulting from a chronic suture-associated biofilm infection. <b>2010</b> , 20, 251-6	18
1784	Contribution of <i>rpoS</i> and <i>bolA</i> genes in biofilm formation in <i>Escherichia coli</i> K-12 MG1655. <b>2010</b> , 342, 207-13	28
1783	Kinetics of conjugative gene transfer on surfaces in granular porous media. <b>2010</b> , 112, 91-102	6
1782	AlgK is a TPR-containing protein and the periplasmic component of a novel exopolysaccharide secretin. <b>2010</b> , 18, 265-73	82

1781	Damage of <i>Streptococcus mutans</i> biofilms by carolacton, a secondary metabolite from the myxobacterium <i>Sorangium cellulosum</i> . <b>2010</b> , 10, 199	62
1780	Genetic adaptation of <i>Streptococcus mutans</i> during biofilm formation on different types of surfaces. <b>2010</b> , 10, 51	40
1779	Structure, function and contribution of polysaccharide intercellular adhesin (PIA) to <i>Staphylococcus epidermidis</i> biofilm formation and pathogenesis of biomaterial-associated infections. <b>2010</b> , 89, 103-11	189
1778	Daptomycin and rifampin alone and in combination prevent vascular graft biofilm formation and emergence of antibiotic resistance in a subcutaneous rat pouch model of staphylococcal infection. <b>2010</b> , 40, 817-22	58
1777	Biofilm formation by <i>Campylobacter jejuni</i> in controlled mixed-microbial populations. <b>2010</b> , 143, 118-24	70
1776	Profile of toll-like receptor-positive cells in septic and aseptic loosening of total hip arthroplasty implants. <b>2010</b> , 94, 84-92	31
1775	The biocompatibility of silver-containing Na <sub>2</sub> O.CaO.2SiO <sub>2</sub> glass prepared by sol-gel method: in vitro studies. <b>2010</b> , 92, 102-10	23
1774	Carolacton [A Macrolide Ketocarboxylic Acid that Reduces Biofilm Formation by the Caries- and Endocarditis-Associated Bacterium <i>Streptococcus mutans</i> . <b>2010</b> , 2010, 1284-1289	47
1773	An electro-optical device from a biofilm structure created by bacterial activity. <b>2010</b> , 22, 4846-50	15
1772	Development and testing of a novel microcantilever technique for measuring the cohesive strength of intact biofilms. <b>2010</b> , 105, 924-34	37
1771	Maximizing the productivity of catalytic biofilms on solid supports in membrane aerated reactors. <b>2010</b> , 106, 516-27	44
1770	MRT letter: Spatial distribution of vancomycin-induced damage in <i>Staphylococcus epidermidis</i> biofilm: an electron microscopic study. <b>2010</b> , 73, 662-4	5
1769	Evolutionary game theory: Theoretical concepts and applications to microbial communities. <b>2010</b> , 389, 4265-4298	167
1768	Motility of bacteria in microfluidic structures. <b>2010</b> , 87, 810-813	22
1767	The use of chitosan to damage <i>Cryptococcus neoformans</i> biofilms. <b>2010</b> , 31, 669-79	94
1766	In vitro and in vivo comparisons of staphylococcal biofilm formation on a cross-linked poly(ethylene glycol)-based polymer coating. <b>2010</b> , 6, 1119-24	47
1765	Progress in electrohydrodynamics of soft microbial particle interphases. <b>2010</b> , 15, 184-195	152
1764	Effects of disordered hemispherical micropatterns on <i>Staphylococcus epidermidis</i> biofilm formation. <b>2010</b> , 75, 601-7	2

1763	Antibiotic susceptibility of coagulase-negative staphylococci isolated from very low birth weight babies: comprehensive comparisons of bacteria at different stages of biofilm formation. <b>2010</b> , 9, 16	44
1762	Denitrification in human dental plaque. <b>2010</b> , 8, 24	52
1761	INTERACTION OF LISTERIA MONOCYTOGENES AND STAPHYLOCOCCUS EPIDERMIDIS IN DUAL SPECIES BIOFILMS. <b>2010</b> , 30, 954-968	15
1760	Drivers of bacterial colonization patterns in stream biofilms. <b>2010</b> , 72, 47-57	33
1759	<i>Brucella melitensis</i> 16M produces a mannan and other extracellular matrix components typical of a biofilm. <b>2010</b> , 59, 364-77	22
1758	Bacterial biofilm on monofilament suture and porcine xenograft after inguinal herniorrhaphy. <b>2010</b> , 59, 405-9	17
1757	Tigecycline inhibition of a mature biofilm in clinical isolates of <i>Staphylococcus aureus</i> : comparison with other drugs. <b>2010</b> , 59, 466-9	23
1756	In vitro effect of branch extracts of <i>Juniperus</i> species from Turkey on <i>Staphylococcus aureus</i> biofilm. <b>2010</b> , 59, 470-6	23
1755	Strategies for culture of 'unculturable' bacteria. <b>2010</b> , 309, 1-7	435
1754	Natural functions of lipopeptides from <i>Bacillus</i> and <i>Pseudomonas</i> : more than surfactants and antibiotics. <b>2010</b> , 34, 1037-62	679
1753	A randomized, controlled clinical trial on the clinical, microbiological, and staining effects of a novel 0.05% chlorhexidine/herbal extract and a 0.1% chlorhexidine mouthrinse adjunct to periodontal surgery. <b>2010</b> , 37, 988-97	24
1752	A bacterial extracellular DNA inhibits settling of motile progeny cells within a biofilm. <b>2010</b> , 77, 815-29	62
1751	Persistence and adaptive mutagenesis in biofilms. <b>2010</b> , 79, 424-434	16
1750	Bacterial polymers: biosynthesis, modifications and applications. <i>Nature Reviews Microbiology</i> , <b>2010</b> , 8, 578-92	22.2 556
1749	Polyamines are required for the expression of key Hms proteins important for <i>Yersinia pestis</i> biofilm formation. <b>2010</b> , 12, 2034-47	50
1748	Assessment of in vitro biofilm formation by <i>Helicobacter pylori</i> . <b>2010</b> , 25 Suppl 1, S90-4	40
1747	Social behaviour in microorganisms. 331-356	13
1746	Clinical implications of power toothbrushing on fluoride delivery: effects on biofilm plaque metabolism and physiology. <b>2010</b> , 2010, 651869	13

1745	Soft-tissue filler complications: the important role of biofilms. <b>2010</b> , 125, 1250-1256	123
1744	Effects of growth conditions on biofilm formation by <i>Actinobacillus pleuropneumoniae</i> . <b>2010</b> , 41, 3	47
1743	dATP/ATP, a multifunctional nucleotide, stimulates bacterial cell lysis, extracellular DNA release and biofilm development. <b>2010</b> , 5, e13355	29
1742	Crenarchaeal biofilm formation under extreme conditions. <b>2010</b> , 5, e14104	91
1741	Biofilm, dental unit water line and its control. <b>2010</b> , 12,	
1740	Biofilm formation in bacterial pathogens of veterinary importance. <b>2010</b> , 11, 97-121	74
1739	Typing of the pilus-protein-encoding FCT region and biofilm formation as novel parameters in epidemiological investigations of <i>Streptococcus pyogenes</i> isolates from various infection sites. <b>2010</b> , 59, 442-452	37
1738	Influence of tigecycline on expression of virulence factors in biofilm-associated cells of methicillin-resistant <i>Staphylococcus aureus</i> . <b>2010</b> , 54, 380-7	48
1737	Extracellular DNA: a major proinflammatory component of <i>Pseudomonas aeruginosa</i> biofilms. <b>2010</b> , 184, 6386-95	83
1736	Reliable detection of dead microbial cells by using fluorescent hydrazides. <b>2010</b> , 76, 1674-8	14
1735	Biofilms: their role in dermal fillers. <b>2010</b> , 3, 20-2	27
1734	Mat fimbriae promote biofilm formation by meningitis-associated <i>Escherichia coli</i> . <b>2010</b> , 156, 2408-2417	21
1733	Anaerobic metabolism occurs in the substratum of gonococcal biofilms and may be sustained in part by nitric oxide. <b>2010</b> , 78, 2320-8	34
1732	Cell immobilization for production of lactic acid biofilms do it naturally. <b>2010</b> , 71, 113-48	25
1731	A Novel Technique for Feeding and Confirming Uptake of Bacteria in Larvae of the Southern House Mosquito, <i>Culex quinquefasciatus</i> (Diptera: Culicidae). <b>2010</b> , 93, 577-583	4
1730	Increase in rhamnolipid synthesis under iron-limiting conditions influences surface motility and biofilm formation in <i>Pseudomonas aeruginosa</i> . <b>2010</b> , 192, 2973-80	112
1729	New device for high-throughput viability screening of flow biofilms. <b>2010</b> , 76, 4136-42	132
1728	<i>Agrobacterium tumefaciens</i> ExoR represses succinoglycan biosynthesis and is required for biofilm formation and motility. <b>2010</b> , 156, 2670-2681	50

1727	Laminar flow around corners triggers the formation of biofilm streamers. <b>2010</b> , 7, 1293-9	132
1726	Enzymatic hydrolysis of trehalose dimycolate releases free mycolic acids during mycobacterial growth in biofilms. <b>2010</b> , 285, 17380-9	95
1725	Polysaccharide capsule and sialic acid-mediated regulation promote biofilm-like intracellular bacterial communities during cystitis. <b>2010</b> , 78, 963-75	96
1724	Emergence of spatial structure in cell groups and the evolution of cooperation. <b>2010</b> , 6, e1000716	237
1723	Microbial indicators in natural biofilms developed in the riverbed. <b>2010</b> , 62, 1149-53	5
1722	Uropathogenic Escherichia coli modulates immune responses and its curli fimbriae interact with the antimicrobial peptide LL-37. <b>2010</b> , 6, e1001010	167
1721	Evaluation of the oral flora in 150 patients suffering from chronic craniofacial pain: a retrospective study. <b>2010</b> , 28, 97-104	2
1720	Biofilms: an extra hurdle for effective antimicrobial therapy. <b>2010</b> , 16, 2279-95	100
1719	Biofilm maturity studies indicate sharp debridement opens a time- dependent therapeutic window. <b>2010</b> , 19, 320-8	280
1718	Antimicrobial Activity and Biocompatibility of PolyurethaneBdine Complexes. <b>2010</b> , 25, 185-206	25
1717	The human oral microbiome. <b>2010</b> , 192, 5002-17	1929
1716	Dual functional polyelectrolyte multilayer coatings for implants: permanent microbicidal base with controlled release of therapeutic agents. <b>2010</b> , 132, 17840-8	86
1715	Label-free in situ SERS imaging of biofilms. <b>2010</b> , 114, 10184-94	75
1714	Mathematical Description of Microbial Biofilms. <b>2010</b> , 52, 221-265	128
1713	Advanced microscopy of microbial cells. <b>2011</b> , 124, 21-54	7
1712	The uronic acids assay: a method for the determination of chemical activity on biofilm EPS. <b>2010</b> , 26, 301-12	2
1711	Mycobacterial biofilms facilitate horizontal DNA transfer between strains of Mycobacterium smegmatis. <b>2010</b> , 192, 5134-42	44
1710	Evaluation of DNA extraction methods from complex phototrophic biofilms. <b>2010</b> , 26, 349-57	18



1709	Microbial biofilm-related polysaccharides in biofouling and corrosion. <b>2010</b> , 781-801	1
1708	Bacterial biofilm: structure, function, and antimicrobial resistance. <b>2010</b> , 22, 2-16	144
1707	Food safety: What can we learn from genomics?. <b>2010</b> , 1, 341-61	9
1706	Sessile <i>Legionella pneumophila</i> is able to grow on surfaces and generate structured monospecies biofilms. <b>2010</b> , 26, 809-19	22
1705	Amine, Melamine, and Amide N-Halamines as Antimicrobial Additives for Polymers. <b>2010</b> , 49, 11206-11213	39
1704	Penetration of antibiotics through <i>Staphylococcus aureus</i> and <i>Staphylococcus epidermidis</i> biofilms. <b>2010</b> , 65, 1955-8	276
1703	Effects of sequential <i>Campylobacter jejuni</i> 81-176 lipooligosaccharide core truncations on biofilm formation, stress survival, and pathogenesis. <b>2010</b> , 192, 2182-92	84
1702	SOS involvement in stress-inducible biofilm formation. <b>2010</b> , 26, 603-11	43
1701	In vitro and in vivo model systems to study microbial biofilm formation. <b>2010</b> , 83, 89-105	295
1700	Success through diversity - how <i>Staphylococcus epidermidis</i> establishes as a nosocomial pathogen. <b>2010</b> , 300, 380-6	102
1699	Adaptation of <i>Staphylococcus aureus</i> to the cystic fibrosis lung. <b>2010</b> , 300, 520-5	76
1698	Biofilms and apical periodontitis: study of prevalence and association with clinical and histopathologic findings. <b>2010</b> , 36, 1277-88	377
1697	Microbiology of dental plaque biofilms and their role in oral health and caries. <b>2010</b> , 54, 441-54	170
1696	Quorum sensing affects biofilm formation through lipopolysaccharide synthesis in <i>Klebsiella pneumoniae</i> . <b>2010</b> , 161, 595-603	53
1695	Response to mixed substrate feeds of the structure and activity of a linuron-degrading triple-species biofilm. <b>2010</b> , 161, 660-6	10
1694	Bacterial activity in plant ( <i>Schoenoplectus validus</i> ) biofilms of constructed wetlands. <b>2010</b> , 44, 5939-48	11
1693	Preventive efficacy and cost-effectiveness of point-of-use water filtration in a subacute care unit. <b>2010</b> , 38, 69-71	9
1692	Biofilm dispersal: mechanisms, clinical implications, and potential therapeutic uses. <b>2010</b> , 89, 205-18	517

1691	Biofilms in endodontic infection. <b>2010</b> , 22, 33-49	34
1690	Prokaryotic Cell Wall Compounds. <b>2010</b> ,	17
1689	Escherichia coli heat-shock proteins IbpA and IbpB affect biofilm formation by influencing the level of extracellular indole. <b>2010</b> , 156, 148-157	38
1688	The role of "inert" surface chemistry in marine biofouling prevention. <b>2010</b> , 12, 4275-86	232
1687	Attachment and detachment of bacteria on surfaces with tunable and switchable wettability. <b>2010</b> , 26, 111-8	68
1686	Prokaryotic and Eukaryotic Heat Shock Proteins in Infectious Disease. <b>2010</b> ,	5
1685	Genes involved in Cronobacter sakazakii biofilm formation. <b>2010</b> , 76, 2251-61	80
1684	Biofilms. <b>2010</b> , 2, a000398	522
1683	Growth inhibition of adherent Pseudomonas aeruginosa by an N-butanoyl-L-homoserine lactone analog. <b>2010</b> , 56, 317-25	16
1682	Nutrients determine the spatial architecture of Paracoccus sp. biofilm. <b>2010</b> , 26, 449-59	33
1681	Marine biofilms on submerged surfaces are a reservoir for Escherichia coli and Vibrio cholerae. <b>2010</b> , 26, 39-46	59
1680	Dynamics in the mixed microbial concourse. <b>2010</b> , 24, 2603-14	138
1679	Disinfection of bacterial biofilms in pilot-scale cooling tower systems. <b>2011</b> , 27, 393-402	24
1678	Antibiofilm activity of nano sized CuO. <b>2011</b> ,	11
1677	Oxygen-generating nanofiber cell scaffolds with antimicrobial properties. <b>2011</b> , 3, 67-73	71
1676	Control of bacterial persister cells by Trp/Arg-containing antimicrobial peptides. <b>2011</b> , 77, 4878-85	73
1675	Paraoxonases as potential antibiofilm agents: their relationship with quorum-sensing signals in Gram-negative bacteria. <b>2011</b> , 55, 1325-31	50
1674	Isolation and characterization of two bacteriophages with strong in vitro antimicrobial activity against Pseudomonas aeruginosa isolated from dogs with ocular infections. <b>2011</b> , 72, 1079-86	7

1673	Microtopographic patterns affect <i>Escherichia coli</i> biofilm formation on poly(dimethylsiloxane) surfaces. <b>2011</b> , 27, 2686-91	92
1672	Reversible binding of metal ions onto bacterial layers revealed by protonation-induced ATR-FTIR difference spectroscopy. <b>2011</b> , 27, 3762-73	40
1671	Rechargeable biofilm-controlling tubing materials for use in dental unit water lines. <b>2011</b> , 3, 2895-903	34
1670	Conjugated-polyelectrolyte-grafted cotton fibers act as "micro flypaper" for the removal and destruction of bacteria. <b>2011</b> , 3, 2932-7	30
1669	Surface acoustic waves increase the susceptibility of <i>Pseudomonas aeruginosa</i> biofilms to antibiotic treatment. <b>2011</b> , 27, 701-10	33
1668	Biofilm inhibition and drug-eluting properties of novel DMAEMA-modified polyethylene and silicone rubber surfaces. <b>2011</b> , 27, 123-35	36
1667	Exoproteome of <i>Staphylococcus aureus</i> reveals putative determinants of nasal carriage. <b>2011</b> , 10, 2064-78	56
1666	Identification of a novel benzimidazole that inhibits bacterial biofilm formation in a broad-spectrum manner. <b>2011</b> , 55, 4369-78	76
1665	Left ventricular assist device driveline infections. <b>2011</b> , 29, 515-27	71
1664	Influences of trans-trans farnesol, a membrane-targeting sesquiterpenoid, on <i>Streptococcus mutans</i> physiology and survival within mixed-species oral biofilms. <b>2011</b> , 3, 98-106	48
1663	Secondary flow as a mechanism for the formation of biofilm streamers. <b>2011</b> , 100, 1392-9	84
1662	The role of alginate in <i>Pseudomonas aeruginosa</i> EPS adherence, viscoelastic properties and cell attachment. <b>2011</b> , 27, 787-98	78
1661	Does <i>Staphylococcus aureus</i> nasal colonization involve biofilm formation?. <b>2011</b> , 6, 489-93	33
1660	Bacterial moonlighting proteins and bacterial virulence. <b>2013</b> , 358, 155-213	91
1659	Understanding bacterial cell-cell communication with computational modeling. <b>2011</b> , 111, 238-50	31
1658	Use of Plant-Associated <i>Bacillus</i> Strains as Biofertilizers and Biocontrol Agents in Agriculture. <b>2011</b> , 41-76	107
1657	Treatment of prosthetic osteoarticular infections. <b>2011</b> , 12, 899-912	31
1656	Larvae of <i>Pocillopora damicornis</i> (Anthozoa) settle and metamorphose in response to surface-biofilm bacteria. <b>2011</b> , 433, 85-96	86

1655	Enzymes for Antifouling Strategies. <b>2011</b> , 25, 2317-2344	36
1654	Peptide signaling in the staphylococci. <b>2011</b> , 111, 117-51	271
1653	Micropatterned surfaces for reducing the risk of catheter-associated urinary tract infection: an in vitro study on the effect of sharklet micropatterned surfaces to inhibit bacterial colonization and migration of uropathogenic <i>Escherichia coli</i> . <b>2011</b> , 25, 1547-52	109
1652	Biofilm Infections. <b>2011</b> ,	24
1651	Impact of nanoscale topography on genomics and proteomics of adherent bacteria. <b>2011</b> , 5, 1865-76	89
1650	From Prospecting to Product Industrial Metagenomics Is Coming of Age. <b>2011</b> , 295-323	0
1649	Fluid dynamics and noise in bacterial cell-cell and cell-surface scattering. <b>2011</b> , 108, 10940-5	486
1648	Nonthermal-plasma-mediated animal cell death. <b>2011</b> , 44, 013001	18
1647	The effects of glutaraldehyde on the control of single and dual biofilms of <i>Bacillus cereus</i> and <i>Pseudomonas fluorescens</i> . <b>2011</b> , 27, 337-46	25
1646	Persister cells in a biofilm treated with a biocide. <b>2011</b> , 27, 403-11	30
1645	The Diatom World. <b>2011</b> ,	30
1644	The Application of Microencapsulation Techniques in the Treatment of Endodontic and Periodontal Diseases. <b>2011</b> , 3, 538-71	27
1643	Control of bacterial biofilm growth on surfaces by nanostructural mechanics and geometry. <b>2011</b> , 22, 494007	113
1642	Multifunctional magnetic nanoparticles for orthopedic and biofilm infections. <b>2011</b> , 8, 21	11
1641	A novel compound from the marine bacterium <i>Bacillus pumilus</i> S6-15 inhibits biofilm formation in gram-positive and gram-negative species. <b>2011</b> , 27, 519-28	77
1640	Evidence and Significance of Biofilms in Chronic Wounds in Horses. <b>2011</b> , 143-173	
1639	Combating bacterial colonization on metals via polymer coatings: relevance to marine and medical applications. <b>2011</b> , 3, 2808-19	89
1638	The Biofilm Returns: Microbial Life at the Interface. <b>2011</b> , 59-85	1

1637	Evolution of fungal pathogens in domestic environments?. <b>2011</b> , 115, 1008-18	83
1636	The Role of Bacterial Biofilms in Infections of Catheters and Shunts. <b>2011</b> , 91-109	4
1635	Complex conductivity response to microbial growth and biofilm formation on phenanthrene spiked medium. <b>2011</b> , 75, 558-564	15
1634	Host defence against <i>Staphylococcus aureus</i> biofilms by polymorphonuclear neutrophils: oxygen radical production but not phagocytosis depends on opsonisation with immunoglobulin G. <b>2011</b> , 216, 351-7	42
1633	Pleiotropic signaling pathways orchestrate yeast development. <b>2011</b> , 14, 676-81	20
1632	Working formulation for the standardization of definitions of infections in patients using ventricular assist devices. <b>2011</b> , 30, 375-84	251
1631	Gentamicin promotes <i>Staphylococcus aureus</i> biofilms on silk suture. <b>2011</b> , 170, 302-8	27
1630	Resazurin metabolism assay for root canal disinfectant evaluation on dual-species biofilms. <b>2011</b> , 37, 31-5	31
1629	Diseases of American lobsters ( <i>Homarus americanus</i> ): a review. <b>2011</b> , 106, 71-8	42
1628	Reservoirs and alternate hosts for pathogens of commercially important crustaceans: a review. <b>2011</b> , 106, 153-64	39
1627	A simple optode based method for imaging O <sub>2</sub> distribution and dynamics in tap water biofilms. <b>2011</b> , 45, 5027-37	27
1626	Effects of silver nanoparticles on wastewater biofilms. <b>2011</b> , 45, 6039-50	187
1625	Can viruses form biofilms?. <b>2011</b> , 19, 257-62	45
1624	Will biofilm disassembly agents make it to market?. <b>2011</b> , 19, 304-6	42
1623	A new method for removing microflora from macroalgal surfaces: an important step for natural product discovery. <b>2011</b> , 54,	18
1622	Maltodextrin-based imaging probes detect bacteria in vivo with high sensitivity and specificity. <b>2011</b> , 10, 602-7	164
1621	Flustramine inspired synthesis and biological evaluation of pyrroloindoline triazole amides as novel inhibitors of bacterial biofilms. <b>2011</b> , 9, 5476-81	48
1620	Bacteriophage therapy: potential uses in the control of antibiotic-resistant pathogens. <b>2011</b> , 9, 775-85	120

1619	Magnetic Particle Induction and Its Importance in Biofilm Research. <b>2011</b> ,	
1618	Environmental Pollution and Chronic Disease Management ÌA Prognostics Approach. <b>2011</b> ,	
1617	The Use of Commercially Available Alpha-Amylase Compounds to Inhibit and Remove Staphylococcus aureus Biofilms. <b>2011</b> , 5, 21-31	82
1616	Biofilm on artificial pacemaker: fiction or reality?. <b>2011</b> , 97, e113-20	30
1615	Anti-Biofilm Drug Susceptibility Testing Methods: Looking for New Strategies against Resistance Mechanism. <b>2011</b> , s3,	13
1614	Diagnosis and management of infected total knee arthroplasty. <b>2011</b> , 5, 86-91	47
1613	Biofilm growth on implants: bacteria prefer plasma coats. <b>2011</b> , 34, 811-7	36
1612	Reducing infections through nanotechnology and nanoparticles. <b>2011</b> , 6, 1463-73	116
1611	Genetic and Functional Diversity of Pseudomonas aeruginosa Lipopolysaccharide. <b>2011</b> , 2, 118	150
1610	Effect of lectins from Diocleinae subtribe against oral Streptococci. <b>2011</b> , 16, 3530-43	20
1609	Anti-biofilm compounds derived from marine sponges. <b>2011</b> , 9, 2010-35	79
1608	Tobacco smoke mediated induction of sinonasal microbial biofilms. <b>2011</b> , 6, e15700	59
1607	Microspectroscopic evidence of cretaceous bone proteins. <b>2011</b> , 6, e19445	40
1606	Voronoi tessellation captures very early clustering of single primary cells as induced by interactions in nascent biofilms. <b>2011</b> , 6, e26368	14
1605	The role of biofilms: are we hitting the right target?. <b>2011</b> , 127 Suppl 1, 28S-35S	104
1604	High-throughput assay for bacterial adhesion on acellular dermal matrices and synthetic surgical materials. <b>2011</b> , 128, 1061-1068	29
1603	Bacterial biofilms and the pathophysiology of chronic rhinosinusitis. <b>2011</b> , 11, 18-23	46
1602	Surgical treatment of osteomyelitis. <b>2011</b> , 127 Suppl 1, 190S-204S	81

1601	Curcumin: a natural antibiofilm agent. <b>2011</b> ,	5
1600	Using Antibiotic Conjugated Magnetic Nanoparticles and a Magnetic Field for the Treatment of Bone Prosthetic Infections. <b>2011</b> , 1316, 1	
1599	Furanones and Thiophenones in Control of Staphylococcus epidermidis Biofilm Infections?. <b>2011</b> ,	2
1598	Biofilms. <b>2011</b> , 547-558	0
1597	The onion model, a simple neutral model for the evolution of diversity in bacterial biofilms. <b>2011</b> , 24, 2496-504	5
1596	Microbial ecology and adaptation in cystic fibrosis airways. <b>2011</b> , 13, 1682-9	51
1595	Properties and applications of calcium hydroxide in endodontics and dental traumatology. <b>2011</b> , 44, 697-730	314
1594	Imaging biofilm in porous media using X-ray computed microtomography. <b>2011</b> , 242, 15-25	54
1593	Cloning and sequencing of biofilm-associated protein (bapA) gene and its occurrence in different serotypes of Salmonella. <b>2011</b> , 52, 138-43	10
1592	Silica-immobilized Methylobacterium sp. NP3 and Acinetobacter sp. PK1 degrade high concentrations of phenol. <b>2011</b> , 52, 448-55	25
1591	Antimicrobial tolerance and the significance of persister cells in recalcitrant chronic wound biofilms. <b>2011</b> , 19, 1-9	107
1590	Development of a novel, highly quantitative in vivo model for the study of biofilm-impaired cutaneous wound healing. <b>2011</b> , 19, 400-10	127
1589	The importance of a multifaceted approach to characterizing the microbial flora of chronic wounds. <b>2011</b> , 19, 532-41	105
1588	CHARACTERISTICS OF BIOFILM FORMATION BY SELECTED FOODBORNE PATHOGENS. <b>2011</b> , 31, 91-97	19
1587	Reduced virulence is an important characteristic of biofilm infection of Streptococcus suis. <b>2011</b> , 316, 36-43	56
1586	Quorum-sensing autoinducer molecules produced by members of a multispecies biofilm promote horizontal gene transfer to Vibrio cholerae. <b>2011</b> , 322, 68-76	81
1585	Lateral genetic transfer and the construction of genetic exchange communities. <b>2011</b> , 35, 707-35	121
1584	Emergence and spread of antibiotic resistance following exposure to antibiotics. <b>2011</b> , 35, 977-91	189

1583	The concurrent evolution of cooperation and the population structures that support it. <b>2011</b> , 65, 1527-43	52
1582	Larval exposure to <i>Francisella tularensis</i> LVS affects fitness of the mosquito <i>Culex quinquefasciatus</i> . <b>2011</b> , 78, 520-30	17
1581	Effects of nutritional and environmental conditions on <i>Salmonella</i> sp. biofilm formation. <b>2011</b> , 76, M12-6	64
1580	Reaction-diffusion model of nutrient uptake in a biofilm: theory and experiment. <b>2011</b> , 289, 90-5	23
1579	Role of biofilm in <i>Staphylococcus aureus</i> and <i>Staphylococcus epidermidis</i> ventricular assist device driveline infections. <b>2011</b> , 141, 1259-64	59
1578	Functional analysis of <i>luxS</i> in <i>Streptococcus suis</i> reveals a key role in biofilm formation and virulence. <b>2011</b> , 152, 151-60	83
1577	Functional artificial free-standing yeast biofilms. <b>2011</b> , 88, 656-63	16
1576	Analysis of outer membrane vesicle protein involved in biofilm formation of <i>Helicobacter pylori</i> . <b>2011</b> , 17, 388-90	56
1575	Effect of sodium fluoride on the virulence factors and composition of <i>Streptococcus mutans</i> biofilms. <b>2011</b> , 56, 643-9	48
1574	Biofilms in drinking water and their role as reservoir for pathogens. <b>2011</b> , 214, 417-23	317
1573	Designing 2-aminoimidazole alkaloids analogs with anti-biofilm activities: structure-activities relationships of polysubstituted triazoles. <b>2011</b> , 21, 6751-5	20
1572	Type VI secretion delivers bacteriolytic effectors to target cells. <b>2011</b> , 475, 343-7	466
1571	The archaeal cell envelope. <i>Nature Reviews Microbiology</i> , <b>2011</b> , 9, 414-26	22.2 341
1570	Benthic Diatoms in Biofilm Culture. <b>2011</b> , 227-243	7
1569	Inhibition of bacterial adhesion on medical devices. <b>2011</b> , 715, 351-67	74
1568	Color measurements as a reliable method for estimating chlorophyll degradation to phaeopigments. <b>2011</b> , 22, 763-71	40
1567	Effects of nisin and acid on the inactivation and recovery of <i>Listeria monocytogenes</i> biofilms treated by high hydrostatic pressure. <b>2011</b> , 20, 1361-1366	8
1566	Influence of microbial processes on the operation of a cold store in a shallow aquifer: impact on well injectivity and filter lifetime. <b>2011</b> , 16, 93-104	24



1565	Pathogenesis of implant-associated infection: the role of the host. <b>2011</b> , 33, 295-306	142
1564	<i>Gluconacetobacter diazotrophicus</i> levansucrase is involved in tolerance to NaCl, sucrose and desiccation, and in biofilm formation. <b>2011</b> , 193, 137-49	35
1563	GGDEF proteins Yeal, YedQ, and YfiN reduce early biofilm formation and swimming motility in <i>Escherichia coli</i> . <b>2011</b> , 90, 651-8	41
1562	"Biofilmology": a multidisciplinary review of the study of microbial biofilms. <b>2011</b> , 90, 1869-81	74
1561	Operational temperature regulates anodic biofilm growth and the development of electrogenic activity. <b>2011</b> , 92, 419-30	29
1560	Evaluation of phenotypic and genotypic detection methods for biofilm-forming methicillin-sensitive and methicillin-resistant <i>Staphylococcus aureus</i> clinical isolates. <b>2011</b> , 61, 825-831	6
1559	Formation and regulation of <i>Yersinia</i> biofilms. <b>2011</b> , 2, 173-9	31
1558	Amphiphilic Copolymer Coatings via Plasma Polymerisation Process: Switching and Anti-Biofouling Characteristics. <b>2011</b> , 8, 373-385	22
1557	Length-Scale Mediated Differential Adhesion of Mammalian Cells and Microbes. <b>2011</b> , 21, 3916-3923	58
1556	Antifouling coatings: recent developments in the design of surfaces that prevent fouling by proteins, bacteria, and marine organisms. <b>2011</b> , 23, 690-718	1916
1555	Ica-expression and gentamicin susceptibility of <i>Staphylococcus epidermidis</i> biofilm on orthopedic implant biomaterials. <b>2011</b> , 96, 365-71	24
1554	Synthesis, characterization, and light-controlled antibiotic application of a composite material derived from polyurethane and silica xerogel with embedded photoactive manganese nitrosyl. <b>2011</b> , 99, 328-37	23
1553	"Click" immobilization on alkylated silicon substrates: model for the study of surface bound antimicrobial peptides. <b>2011</b> , 17, 2656-65	35
1552	Engineering biofilms for biocatalysis. <b>2011</b> , 12, 1391-5	34
1551	Long term performance of an arsenite-oxidizing-chlorate-reducing microbial consortium in an upflow anaerobic sludge bed (UASB) bioreactor. <b>2011</b> , 102, 5010-6	21
1550	Targeting bacterial biofilms: design of a terpenoid-like library as non-toxic anti-biofilm compounds. <b>2011</b> , 21, 1493-7	13
1549	Analysis of the contribution of sedimentation to bacterial mass transport in a parallel plate flow chamber: part II: use of fluorescence imaging. <b>2011</b> , 87, 427-32	25
1548	Surface immobilization of active vancomycin on calcium aluminum oxide. <b>2011</b> , 31, 637-642	13

1547	Investigation of <i>Streptococcus mutans</i> biofilm growth on modified Au(1 1 1)-surfaces using AFM and electrochemistry. <b>2011</b> , 656, 41-49	6
1546	A self-referencing microelectrode for real time measurements of silver flux. <b>2011</b> , 153, 445-452	6
1545	Antimicrobial strategies effective against infectious bacterial biofilms. <b>2011</b> , 18, 2129-45	94
1544	Evolutionary and population dynamics: a coupled approach. <b>2011</b> , 84, 051921	31
1543	Character, Analysis, and Preservation of Biogenicity in Terrestrial Siliceous Stromatolites from Geothermal Settings. <b>2011</b> , 359-381	10
1542	Relation between antibiotic susceptibility and ultrastructure of <i>Staphylococcus aureus</i> biofilms on surgical suture. <b>2011</b> , 12, 297-305	18
1541	Physicochemical regulation of biofilm formation. <b>2011</b> , 36, 347-355	352
1540	Social evolution in multispecies biofilms. <b>2011</b> , 108 Suppl 2, 10839-46	158
1539	Dynamics of swimming bacteria: transition to directional order at high concentration. <b>2011</b> , 83, 061907	92
1538	Strong upstream flow characteristics in the formation of rivulets. <b>2011</b> , 83, 026304	3
1537	Modeling a self-propelled autochemotactic walker. <b>2011</b> , 84, 041924	27
1536	Quorum sensing inhibitors increase the susceptibility of bacterial biofilms to antibiotics in vitro and in vivo. <b>2011</b> , 55, 2655-61	363
1535	Extracellular signal regulation of cell differentiation in biofilms. <b>2011</b> , 36, 374-379	15
1534	Vesicular Lipid Nanoparticles (Liposomes) for the Treatment of Medical Device Infections. <b>2011</b> , 1316, 1	
1533	The role of antimicrobial peptides in preventing multidrug-resistant bacterial infections and biofilm formation. <b>2011</b> , 12, 5971-92	195
1532	ygs is a novel gene that influences biofilm formation and the general stress response of <i>Staphylococcus epidermidis</i> . <b>2011</b> , 79, 1007-15	16
1531	Survey of fungi and yeast in polymicrobial infections in chronic wounds. <b>2011</b> , 20, 40-7	111
1530	Adenoid reservoir for pathogenic biofilm bacteria. <b>2011</b> , 49, 1411-20	104

1529	Zoonotic Infections: The Role of Biofilms. <b>2011</b> , 69-110	2
1528	Effect of the combination of clarithromycin and amikacin on <i>Pseudomonas aeruginosa</i> biofilm in an animal model of ureteral stent infection. <b>2011</b> , 66, 1318-23	23
1527	Biofilm formation by zygomycetes: quantification, structure and matrix composition. <b>2011</b> , 157, 2611-2618	63
1526	Anomalous spatial redistribution of competing bacteria under starvation conditions. <b>2011</b> , 193, 1878-83	16
1525	Study of Antibacterial Efficacy of Hybrid Chitosan-Silver Nanoparticles for Prevention of Specific Biofilm and Water Purification. <b>2011</b> , 2011, 1-11	25
1524	Megacities as sources for pathogenic bacteria in rivers and their fate downstream. <b>2011</b> , 2011,	48
1523	Biology of <i>Streptococcus mutans</i> -derived glucosyltransferases: role in extracellular matrix formation of cariogenic biofilms. <b>2011</b> , 45, 69-86	714
1522	Diagnostic accuracy of nasopharyngeal swabs in detecting biofilm-producing bacteria in chronic adenoiditis: a preliminary study. <b>2011</b> , 144, 784-8	15
1521	Quantifying diffusion in a biofilm of <i>Streptococcus mutans</i> . <b>2011</b> , 55, 1075-81	66
1520	Increased in vitro adherence and on-farm persistence of predominant and persistent <i>Listeria monocytogenes</i> strains in the milking system. <b>2011</b> , 77, 3676-84	27
1519	YuaB functions synergistically with the exopolysaccharide and TasA amyloid fibers to allow biofilm formation by <i>Bacillus subtilis</i> . <b>2011</b> , 193, 4821-31	91
1518	Implant-Associated Infection. <b>2011</b> , 69-90	11
1517	Composite electrospun nanomembranes of fish scale collagen peptides/chito-oligosaccharides: antibacterial properties and potential for wound dressing. <b>2011</b> , 6, 667-76	33
1516	Image segmentation of biofilm structures using optimal multi-level thresholding. <b>2011</b> , 5, 266-86	6
1515	Isolation and bioaugmentation of an estradiol-degrading bacterium and its integration into a mature biofilm. <b>2011</b> , 77, 3734-40	42
1514	Electron flow and biofilms. <b>2011</b> , 36, 380-384	28
1513	A fitness trade-off between local competition and dispersal in <i>Vibrio cholerae</i> biofilms. <b>2011</b> , 108, 14181-5	141
1512	STROMATOLITES: Interaction of Microbes with Sediments. <b>2011</b> ,	7

1511	MrkH, a novel c-di-GMP-dependent transcriptional activator, controls <i>Klebsiella pneumoniae</i> biofilm formation by regulating type 3 fimbriae expression. <b>2011</b> , 7, e1002204	137
1510	Fitness landscape of antibiotic tolerance in <i>Pseudomonas aeruginosa</i> biofilms. <b>2011</b> , 7, e1002298	26
1509	Engineering Interfaces for Infection Immunity. <b>2011</b> , 295-314	1
1508	Demonstration of <i>Bacillus cereus</i> in orthopaedic-implant-related infection with use of a multi-primer polymerase chain reaction-mass spectrometric assay: report of two cases. <b>2011</b> , 93, e85	14
1507	Discriminating multi-species populations in biofilms with peptide nucleic acid fluorescence in situ hybridization (PNA FISH). <b>2011</b> , 6, e14786	105
1506	Crystal structure of the <i>Haemophilus influenzae</i> Hap adhesin reveals an intercellular oligomerization mechanism for bacterial aggregation. <b>2011</b> , 30, 3864-74	58
1505	Microscope-based imaging platform for large-scale analysis of oral biofilms. <b>2012</b> , 78, 8703-11	28
1504	Platelets enhance biofilm formation and resistance of endocarditis-inducing streptococci on the injured heart valve. <b>2012</b> , 205, 1066-75	68
1503	Bacterial cell surface heterogeneity: a pathogen's disguise. <b>2012</b> , 8, e1002821	17
1502	Successful identification of pathogens by polymerase chain reaction (PCR)-based electron spray ionization time-of-flight mass spectrometry (ESI-TOF-MS) in culture-negative periprosthetic joint infection. <b>2012</b> , 94, 2247-54	109
1501	Exposure to solute stress affects genome-wide expression but not the polycyclic aromatic hydrocarbon-degrading activity of <i>Sphingomonas</i> sp. strain LH128 in biofilms. <b>2012</b> , 78, 8311-20	20
1500	How do bacteria know they are on a surface and regulate their response to an adhering state?. <b>2012</b> , 8, e1002440	132
1499	Involvement of T6 pili in biofilm formation by serotype M6 <i>Streptococcus pyogenes</i> . <b>2012</b> , 194, 804-12	32
1498	Small-molecule modulators of <i>Listeria monocytogenes</i> biofilm development. <b>2012</b> , 78, 1454-65	34
1497	Bactericidal activity of the organo-tellurium compound AS101 against <i>Enterobacter cloacae</i> . <b>2012</b> , 67, 2165-72	18
1496	Revised paradigm of aquatic biofilm formation facilitated by microgel transparent exopolymer particles. <b>2012</b> , 109, 9119-24	122
1495	Differential biofilm formation and chemical disinfection resistance of sessile cells of <i>Listeria monocytogenes</i> strains under monospecies and dual-species (with <i>Salmonella enterica</i> ) conditions. <b>2012</b> , 78, 2586-95	119
1494	Function of the pyruvate oxidase-lactate oxidase cascade in interspecies competition between <i>Streptococcus oligofermentans</i> and <i>Streptococcus mutans</i> . <b>2012</b> , 78, 2120-7	39

1493	Adenotonsillar disease. <b>2012</b> , 6, 121-9	22
1492	Islands of non-essential genes, including a DNA translocation operon, in the genome of bacteriophage 030578-36. <b>2012</b> , 2, 25-35	6
1491	Bursting the bubble on bacterial biofilms: a flow cell methodology. <b>2012</b> , 28, 835-42	75
1490	A putative MerR family regulator involved in biofilm formation in <i>Listeria monocytogenes</i> 4b G. <b>2012</b> , 9, 767-72	5
1489	Did mineral surface chemistry and toxicity contribute to evolution of microbial extracellular polymeric substances?. <b>2012</b> , 12, 785-98	20
1488	Liquid-infused structured surfaces with exceptional anti-biofouling performance. <b>2012</b> , 109, 13182-7	623
1487	Evolution of resistance to quorum quenching in digital organisms. <b>2012</b> , 18, 291-310	9
1486	Bactericidal activity of ACH-702 against nondividing and biofilm <i>Staphylococci</i> . <b>2012</b> , 56, 3812-8	14
1485	The response regulator RcsB activates expression of Mat fimbriae in meningitic <i>Escherichia coli</i> . <b>2012</b> , 194, 3475-85	34
1484	The structure- and metal-dependent activity of <i>Escherichia coli</i> PgaB provides insight into the partial de-N-acetylation of poly- $\beta$ ,6-N-acetyl-D-glucosamine. <b>2012</b> , 287, 31126-37	58
1483	The polyketide Pks1 contributes to biofilm formation in <i>Mycobacterium tuberculosis</i> . <b>2012</b> , 194, 715-21	72
1482	Identification of small molecules that antagonize diguanylate cyclase enzymes to inhibit biofilm formation. <b>2012</b> , 56, 5202-11	99
1481	The type II secretion system and its ubiquitous lipoprotein substrate, SslE, are required for biofilm formation and virulence of enteropathogenic <i>Escherichia coli</i> . <b>2012</b> , 80, 2042-52	65
1480	Impact of Biofilms on Quality of Life of Rhinosinusitis Patients after Endoscopic Sinus Surgery. <b>2012</b> , 5, 95-102	
1479	Photodynamic therapy with water-soluble phthalocyanines against bacterial biofilms in teeth root canals. <b>2012</b> ,	4
1478	High levels of genetic recombination during nasopharyngeal carriage and biofilm formation in <i>Streptococcus pneumoniae</i> . <b>2012</b> , 3,	122
1477	A hydration-based biophysical index for the onset of soil microbial coexistence. <b>2012</b> , 2, 881	22
1476	Cellobiose-specific phosphotransferase system of <i>Klebsiella pneumoniae</i> and its importance in biofilm formation and virulence. <b>2012</b> , 80, 2464-72	35

1475	Daptomycin and tigecycline have broader effective dose ranges than vancomycin as prophylaxis against a <i>Staphylococcus aureus</i> surgical implant infection in mice. <b>2012</b> , 56, 2590-7	38
1474	Calcium increases <i>Xylella fastidiosa</i> surface attachment, biofilm formation, and twitching motility. <b>2012</b> , 78, 1321-31	109
1473	Structural characterization of a conserved, calcium-dependent periplasmic protease from <i>Legionella pneumophila</i> . <b>2012</b> , 194, 4415-25	36
1472	Bacterial cell surface deformation under external loading. <b>2012</b> , 3,	29
1471	Resolving biofilm infections: current therapy and drug discovery strategies. <b>2012</b> , 13, 1375-85	18
1470	<i>Bacillus cereus</i> : caractéristiques et pathogénie. <b>2012</b> , 7, 1-10	3
1469	Linezolid limits burden of methicillin-resistant <i>Staphylococcus aureus</i> in biofilm of tracheal tubes. <b>2012</b> , 40, 2385-9	19
1468	Microfluidic approaches to bacterial biofilm formation. <b>2012</b> , 17, 9818-34	95
1467	Molecular analysis of bacterial communities in biofilms of a drinking water clearwell. <b>2012</b> , 27, 443-8	48
1466	Growth dynamics and the evolution of cooperation in microbial populations. <b>2012</b> , 2, 281	64
1465	Allosteric activation of exopolysaccharide synthesis through cyclic di-GMP-stimulated protein-protein interaction. <b>2013</b> , 32, 354-68	106
1464	Acceleration of protease effect on <i>Staphylococcus aureus</i> biofilm dispersal. <b>2012</b> , 335, 31-8	59
1463	Dialysate quality: new standards require a new approach to compliance. <b>2012</b> , 25, 510-5	7
1462	Overcoming drug resistance with alginate oligosaccharides able to potentiate the action of selected antibiotics. <b>2012</b> , 56, 5134-41	108
1461	Nitrate removal from liquid effluents using microalgae immobilized on chitosan nanofiber mats. <b>2012</b> , 14, 2682	94
1460	<i>Quercus cerris</i> extracts limit <i>Staphylococcus aureus</i> biofilm formation. <b>2012</b> , 144, 812-5	21
1459	Biophysical model of prokaryotic diversity in geothermal hot springs. <b>2012</b> , 85, 021911	2
1458	Chelating agents exert distinct effects on biofilm formation in <i>Staphylococcus aureus</i> depending on strain background: role for clumping factor B. <b>2012</b> , 61, 1062-1070	30

1457	Calcium causes multimerization of the large adhesin LapF and modulates biofilm formation by <i>Pseudomonas putida</i> . <b>2012</b> , 194, 6782-9	30
1456	Two-strain, cell-selective protein labeling in mixed bacterial cultures. <b>2012</b> , 134, 8551-6	27
1455	'Life-style' control networks in <i>Escherichia coli</i> : signaling by the second messenger c-di-GMP. <b>2012</b> , 160, 10-6	77
1454	Targeting drug tolerance in mycobacteria: a perspective from mycobacterial biofilms. <b>2012</b> , 10, 1055-66	56
1453	Biomaterial-associated infection: locating the finish line in the race for the surface. <b>2012</b> , 4, 153rv10	455
1452	Synthesis and evaluation of inhibitors of <i>E. coli</i> PgaB, a polysaccharide de-N-acetylase involved in biofilm formation. <b>2012</b> , 10, 7103-7	15
1451	Current and future strategies for the control of mature oral biofilms: Shift from a bacteria-targeting to a matrix-targeting approach. <b>2012</b> , 54, 173-179	3
1450	Antibacterial properties of nanoparticles. <b>2012</b> , 30, 499-511	1665
1449	Effect of polymer degree of conversion on <i>Streptococcus mutans</i> biofilms. <b>2012</b> , 12, 1706-13	18
1448	Preservation and evolution of organic matter during experimental fossilisation of the hyperthermophilic archaea <i>Methanocaldococcus jannaschii</i> . <b>2012</b> , 42, 587-609	14
1447	Surface topographical factors influencing bacterial attachment. <b>2012</b> , 179-182, 142-9	239
1446	In vivo modeling of biofilm-infected wounds: a review. <b>2012</b> , 178, 330-8	80
1445	Remote sensing of chiral signatures on Mars. <b>2012</b> , 72, 111-115	18
1444	Accumulation of MS2, GA, and Q $\phi$ phages on high density polyethylene (HDPE) and drinking water biofilms under flow/non-flow conditions. <b>2012</b> , 46, 6574-84	14
1443	Analysis of the microbial community structure in a membrane bioreactor during initial stages of filtration. <b>2012</b> , 28, 225-38	24
1442	Effectiveness of ciprofloxacin or linezolid in combination with rifampicin against <i>Enterococcus faecalis</i> in biofilms. <b>2012</b> , 67, 433-9	44
1441	It takes walls and knights to defend a castle: Synthesis of surface coatings from antimicrobial and antibiofouling polymers. <b>2012</b> , 22, 19579	61
1440	The influence of ionic strength on the adhesive bond stiffness of oral streptococci possessing different surface appendages as probed using AFM and QCM-D. <b>2012</b> , 8, 9870	20

1439	Preparation and Characterization of N-Halamine-based Antimicrobial Fillers. <b>2012</b> , 51, 5148-5156	44
1438	Biofilm growth on rugose surfaces. <b>2012</b> , 86, 061914	13
1437	Carbon fiber as an excellent support material for wastewater treatment biofilms. <b>2012</b> , 46, 10175-81	57
1436	Analytical challenges of microbial biofilms on medical devices. <b>2012</b> , 84, 3858-66	92
1435	Dual-functional ROMP-based betaines: effect of hydrophilicity and backbone structure on nonfouling properties. <b>2012</b> , 28, 666-75	68
1434	Discovering Biofilms: Inquiry-Based Activities for the Classroom. <b>2012</b> , 74, 305-309	3
1433	Current treatment of nontuberculous mycobacteriosis: an update. <b>2012</b> , 13, 967-86	43
1432	Prophylactic and empiric use of antibiotics in dermatologic surgery: a review of the literature and practical considerations. <b>2012</b> , 38, 1898-921	32
1431	Prevention and treatment of virulent bacterial biofilms with an enzymatic nitric oxide-releasing dressing. <b>2012</b> , 56, 6095-103	38
1430	Exploiting dendrimer multivalency to combat emerging and re-emerging infectious diseases. <b>2012</b> , 9, 342-54	118
1429	Metagenomic analyses of drinking water receiving different disinfection treatments. <b>2012</b> , 78, 6095-102	143
1428	Surfaces resistant to fouling from biological fluids: towards bioactive surfaces for real applications. <b>2012</b> , 12, 1413-22	73
1427	Detection of viable but non-culturable staphylococci in biofilms from central venous catheters negative on standard microbiological assays. <b>2012</b> , 18, E259-61	57
1426	Efficacy of tigecycline and rifampin alone and in combination against <i>Enterococcus faecalis</i> biofilm infection in a rat model of ureteral stent. <b>2012</b> , 176, 1-6	31
1425	Limonin 7-methoxime interferes with <i>Escherichia coli</i> biofilm formation and attachment in type 1 pili and antigen 43 dependent manner. <b>2012</b> , 26, 427-438	8
1424	Recent advances on filamentous fungal biofilms for industrial uses. <b>2012</b> , 167, 1235-53	50
1423	Surface functionalization of <i>Aspergillus versicolor</i> mycelia: in situ fabrication of cadmium sulphide nanoparticles and removal of cadmium ions from aqueous solution. <b>2012</b> , 2, 3000	34
1422	Modeling the role of water in <i>Bacillus subtilis</i> colonies. <b>2012</b> , 85, 041913	2



1421	A proteomic investigation of <i>Fusobacterium nucleatum</i> alkaline-induced biofilms. <b>2012</b> , 12, 189	27
1420	Antimicrobial, antimycobacterial and antibiofilm properties of <i>Couroupita guianensis</i> Aubl. fruit extract. <b>2012</b> , 12, 242	17
1419	Molecular response of <i>Escherichia coli</i> adhering onto nanoscale topography. <b>2012</b> , 7, 575	30
1418	Biomolecule-based antibacterial coating on a stainless steel surface: multilayer film build-up optimization and stability study. <b>2012</b> , 28, 395-404	10
1417	ZnO nanoparticle-coated surfaces inhibit bacterial biofilm formation and increase antibiotic susceptibility. <b>2012</b> , 2, 2314	152
1416	Biofilm Formation by Environmental Bacteria. <b>2012</b> , 341-377	7
1415	Structure and function of the adhesive type IV pilus of <i>Sulfolobus acidocaldarius</i> . <b>2012</b> , 14, 3188-202	57
1414	Noneluting enzymatic antibiofilm coatings. <b>2012</b> , 4, 4708-16	83
1413	Should we stay or should we go: mechanisms and ecological consequences for biofilm dispersal. <i>Nature Reviews Microbiology</i> , <b>2011</b> , 10, 39-50	22.2 550
1412	Analysis of bacterial biofilms using NMR-based metabolomics. <b>2012</b> , 4, 1273-306	73
1411	Diffusive transport without detailed balance in motile bacteria: does microbiology need statistical physics?. <b>2012</b> , 75, 042601	343
1410	Effects of chronic sub-lethal oxidative stress on biofilm formation by <i>Azotobacter vinelandii</i> . <b>2012</b> , 28, 823-33	33
1409	Reactive oxygen species in the signaling and adaptation of multicellular microbial communities. <b>2012</b> , 2012, 976753	93
1408	Silver Nanoparticle Antimicrobials and Related Materials. <b>2012</b> , 3-45	9
1407	Self-assembling zwitterionic carboxybetaine copolymers via aqueous SET-LRP from hemicellulose multi-site initiators. <b>2012</b> , 3, 2920	30
1406	Biofilm Recalcitrance: Theories and Mechanisms. <b>2012</b> , 87-94	
1405	Factors Affecting the Activities of Microbicides. <b>2012</b> , 71-86	1
1404	A phytoanticipin derivative, sodium houttuyfonate, induces in vitro synergistic effects with levofloxacin against biofilm formation by <i>Pseudomonas aeruginosa</i> . <b>2012</b> , 17, 11242-54	23

1403	Revision cochlear implantation in children. <b>2012</b> , 45, 205-19	14
1402	Biofilms on environmental surfaces: evaluation of the disinfection efficacy of a novel steam vapor system. <b>2012</b> , 40, 926-30	25
1401	Real time monitoring of the impedance characteristics of Staphylococcal bacterial biofilm cultures with a modified CDC reactor system. <b>2012</b> , 38, 226-32	39
1400	Mass transfer enhancement in moving biofilm structures. <b>2012</b> , 102, 1483-92	55
1399	Quantitative analysis of amyloid-integrated biofilms formed by uropathogenic Escherichia coli at the air-liquid interface. <b>2012</b> , 103, 464-471	58
1398	Mapping of bacterial biofilm local mechanics by magnetic microparticle actuation. <b>2012</b> , 103, 1400-8	71
1397	Mycobacterium fortuitum prosthetic valve endocarditis: a case for the pathogenetic role of biofilms. <b>2012</b> , 21, 361-4	32
1396	Biofouling in RO system: Mechanisms, monitoring and controlling. <b>2012</b> , 302, 1-23	130
1395	Rapid bacterial detection with an interdigitated array electrode by electrochemical impedance spectroscopy. <b>2012</b> , 82, 126-131	48
1394	Atomic force and super-resolution microscopy support a role for LapA as a cell-surface biofilm adhesin of Pseudomonas fluorescens. <b>2012</b> , 163, 685-91	38
1393	Physics of bacterial near-surface motility using flagella and type IV pili: implications for biofilm formation. <b>2012</b> , 163, 619-29	69
1392	Surface growth of a motile bacterial population resembles growth in a chemostat. <b>2012</b> , 424, 180-91	20
1391	Ecoenzymatic Stoichiometry and Ecological Theory. <b>2012</b> , 43, 313-343	367
1390	Nutrient-dependent structural changes in S. aureus peptidoglycan revealed by solid-state NMR spectroscopy. <b>2012</b> , 51, 8143-53	48
1389	Genome sequencing in clinical microbiology. <b>2012</b> , 30, 1068-71	34
1388	Nitrite and nitrite reductases: from molecular mechanisms to significance in human health and disease. <b>2012</b> , 17, 684-716	45
1387	Engineering ecosystems and synthetic ecologies. <b>2012</b> , 8, 2470-83	82
1386	Antibiofilm activity of $\alpha$ -amylase from Bacillus subtilis S8-18 against biofilm forming human bacterial pathogens. <b>2012</b> , 167, 1778-94	93

1385	Unraveling assembly of stream biofilm communities. <b>2012</b> , 6, 1459-68	182
1384	A microfluidic device for high throughput bacterial biofilm studies. <b>2012</b> , 12, 1157-63	52
1383	Strain variability of the biofilm-forming ability of <i>Salmonella enterica</i> under various environmental conditions. <b>2012</b> , 160, 171-8	79
1382	Transport behavior of selected nanoparticles with different surface coatings in granular porous media coated with <i>Pseudomonas aeruginosa</i> biofilm. <b>2012</b> , 46, 6942-9	76
1381	Molecular dynamics unlocks atomic level self-assembly of the exopolysaccharide matrix of water-treatment granular biofilms. <b>2012</b> , 13, 1965-72	16
1380	Differential proteomic analysis of a polymicrobial biofilm. <b>2012</b> , 11, 4449-64	33
1379	Co-grafting of amino-poly(ethylene glycol) and Magainin I on a TiO <sub>2</sub> surface: tests of antifouling and antibacterial activities. <b>2012</b> , 116, 13839-47	47
1378	Traumatic wound microbiome workshop. <b>2012</b> , 64, 837-50	1
1377	A web of streamers: biofilm formation in a porous microfluidic device. <b>2012</b> , 12, 5133-7	62
1376	Eradication of <i>Pseudomonas aeruginosa</i> biofilms by atmospheric pressure non-thermal plasma. <b>2012</b> , 7, e44289	126
1375	Glycerol monolaurate antibacterial activity in broth and biofilm cultures. <b>2012</b> , 7, e40350	106
1374	Pyocyanin promotes extracellular DNA release in <i>Pseudomonas aeruginosa</i> . <b>2012</b> , 7, e46718	139
1373	Benthic cyanobacterial mats in the high arctic: multi-layer structure and fluorescence responses to osmotic stress. <b>2012</b> , 3, 140	35
1372	Viscosity dictates metabolic activity of <i>Vibrio ruber</i> . <b>2012</b> , 3, 255	4
1371	Alpha-toxin promotes <i>Staphylococcus aureus</i> mucosal biofilm formation. <b>2012</b> , 2, 64	46
1370	Reasons Why We Need Cold Atmospheric Plasmas in Bacteria-Related Diseases in Medicine. <b>2012</b> , 2, 85-96	6
1369	Biofilms of <i>Mycobacterium tuberculosis</i> : New Perspectives of an Old Pathogen. <b>2012</b> ,	
1368	Potential Role of Coagulase-negative <i>Staphylococcus</i> Infection in Preterm Brain Injury. <b>2012</b> , 3, 41-48	6

1367	Biofilms: A Survival and Resistance Mechanism of Microorganisms. <b>2012</b> ,	1
1366	Growth responses of <i>Escherichia coli</i> and <i>Myxococcus xanthus</i> on agar gel substrates with different levels of stiffness. <b>2012</b> , 11, 15477-15483	3
1365	Human sepsis-associated <i>Escherichia coli</i> (SEPEC) is able to adhere to and invade kidney epithelial cells in culture. <b>2012</b> , 45, 417-24	5
1364	Outcome and Prevention of <i>Pseudomonas aeruginosa</i> - <i>Staphylococcus aureus</i> Interactions During Pulmonary Infections in Cystic Fibrosis. <b>2012</b> ,	3
1363	Unraveling the resistance of microbial biofilms: has proteomics been helpful?. <b>2012</b> , 12, 651-65	48
1362	Superparamagnetic iron oxide nanoparticles (SPION) for the treatment of antibiotic-resistant biofilms. <b>2012</b> , 8, 3016-27	89
1361	The <i>E. coli</i> CsgB nucleator of curli assembles to $\beta$ -sheet oligomers that alter the CsgA fibrillization mechanism. <b>2012</b> , 109, 6502-7	49
1360	The microbial cell factory. <b>2012</b> , 10, 1949-57	27
1359	Antimicrobial hydantoin-containing polyesters. <b>2012</b> , 12, 1068-76	16
1358	Ag@AgI, core@shell structure in agarose matrix as hybrid: synthesis, characterization, and antimicrobial activity. <b>2012</b> , 28, 8550-61	39
1357	Immunoprophylaxis and immunotherapy of <i>Staphylococcus epidermidis</i> infections: challenges and prospects. <b>2012</b> , 11, 319-34	29
1356	Therapeutic Window of Ligand-Free Silver Nanoparticles in Agar-Embedded and Colloidal State: In Vitro Bactericidal Effects and Cytotoxicity. <b>2012</b> , 14, B231-B239	20
1355	Antibacterial Surface Coatings from Zinc Oxide Nanoparticles Embedded in Poly(N-isopropylacrylamide) Hydrogel Surface Layers. <b>2012</b> , 22, 2376-2386	184
1354	Biofabricating Multifunctional Soft Matter with Enzymes and Stimuli-Responsive Materials. <b>2012</b> , 22, 3004-3012	50
1353	New biocide with both N-chloramine and quaternary ammonium moieties exerts enhanced bactericidal activity. <b>2012</b> , 1, 609-20	50
1352	Totalsynthese von Carolacton, einem hochwirksamen Inhibitor von Biofilmen. <b>2012</b> , 124, 1087-1091	12
1351	2-Aminobenzimidazole Derivatives Strongly Inhibit and Disperse <i>Pseudomonas aeruginosa</i> Biofilms. <b>2012</b> , 124, 5316-5319	13
1350	2-Aminobenzimidazole derivatives strongly inhibit and disperse <i>Pseudomonas aeruginosa</i> biofilms. <b>2012</b> , 51, 5226-9	99

1349	The effect of surface charge property on <i>Escherichia coli</i> initial adhesion and subsequent biofilm formation. <b>2012</b> , 109, 1745-54	78
1348	Inquiry-based examination of chemical disruption of bacterial biofilms. <b>2012</b> , 40, 191-7	4
1347	The biofilm-specific antibiotic resistance gene <i>ndvB</i> is important for expression of ethanol oxidation genes in <i>Pseudomonas aeruginosa</i> biofilms. <b>2012</b> , 194, 3128-36	73
1346	Diversity and natural functions of antibiotics produced by beneficial and plant pathogenic bacteria. <b>2012</b> , 50, 403-24	357
1345	Biofouling: lessons from nature. <b>2012</b> , 370, 2381-417	321
1344	D-amino acids for the enhancement of a binary biocide cocktail consisting of THPS and EDDS against an SRB biofilm. <b>2012</b> , 28, 1641-6	23
1343	Effects of exopolysaccharide production on liquid vegetative growth, stress survival, and stationary phase recovery in <i>Myxococcus xanthus</i> . <b>2012</b> , 50, 241-8	8
1342	Effect of a novel podophage AB7-IBB2 on <i>Acinetobacter baumannii</i> biofilm. <b>2012</b> , 65, 66-72	18
1341	Preparation of gentamicin-loaded electrospun coating on titanium implants and a study of their properties in vitro. <b>2012</b> , 132, 897-903	35
1340	A review of microbial biofilms of produce: Future challenge to food safety. <b>2012</b> , 21, 299-316	102
1339	The role of endogenous and exogenous enzymes in chronic wounds: a focus on the implications of aberrant levels of both host and bacterial proteases in wound healing. <b>2012</b> , 20, 125-36	103
1338	Genomic content of uncultured <i>Bacteroidetes</i> from contrasting oceanic provinces in the North Atlantic Ocean. <b>2012</b> , 14, 52-66	119
1337	Metagenomic comparison of microbial communities inhabiting confined and unconfined aquifer ecosystems. <b>2012</b> , 14, 240-53	67
1336	Evaluation of microbial biofilm communities from an Alberta oil sands tailings pond. <b>2012</b> , 79, 240-50	68
1335	The metabolically active subpopulation in <i>Pseudomonas aeruginosa</i> biofilms survives exposure to membrane-targeting antimicrobials via distinct molecular mechanisms. <b>2012</b> , 65, 245-56	45
1334	Application of atmospheric pressure nonthermal plasma for the in vitro eradication of bacterial biofilms. <b>2012</b> , 65, 381-4	75
1333	<i>Saccharomyces cerevisiae</i> --a model to uncover molecular mechanisms for yeast biofilm biology. <b>2012</b> , 65, 169-82	48
1332	Multi-species biofilms: living with friendly neighbors. <b>2012</b> , 36, 990-1004	428

1331	Multi-species biofilms: how to avoid unfriendly neighbors. <b>2012</b> , 36, 972-89	192
1330	Hydrothermal synthesis of bacterial cellulose/AgNPs composite: A "green" route for antibacterial application. <b>2012</b> , 87, 2482-2487	120
1329	Designing biological systems: Systems Engineering meets Synthetic Biology. <b>2012</b> , 69, 1-29	66
1328	Inactivation of biofilm cells of foodborne pathogen by aerosolized sanitizers. <b>2012</b> , 154, 130-4	36
1327	Free boundary problem for an initial cell layer in multispecies biofilm formation. <b>2012</b> , 25, 20-26	17
1326	Prevention of vascular graft infections with antibiotic graft impregnation prior to implantation: in vitro comparison between daptomycin, rifampin and nebacetin. <b>2012</b> , 43, 448-56	24
1325	Interactions of alginate-producing and -deficient <i>Pseudomonas aeruginosa</i> with zwitterionic polymers. <b>2012</b> , 33, 3626-31	25
1324	Evaluation of Nd:YAG and Er:YAG irradiation, antibacterial photodynamic therapy and sodium hypochlorite treatment on <i>Enterococcus faecalis</i> biofilms. <b>2012</b> , 45, 482-91	67
1323	Evolutionary dynamics of separate and combined exposure of <i>Pseudomonas fluorescens</i> SBW25 to antibiotics and bacteriophage. <b>2012</b> , 5, 583-92	36
1322	Direct analysis of bacterial viability in endotracheal tube biofilm from a pig model of methicillin-resistant <i>Staphylococcus aureus</i> pneumonia following antimicrobial therapy. <b>2012</b> , 65, 309-17	25
1321	Thiophenones inhibit <i>Staphylococcus epidermidis</i> biofilm formation at nontoxic concentrations. <b>2012</b> , 65, 326-34	16
1320	Towards diagnostic guidelines for biofilm-associated infections. <b>2012</b> , 65, 127-45	226
1319	Can Simpson's paradox explain co-operation in <i>Pseudomonas aeruginosa</i> biofilms?. <b>2012</b> , 65, 226-35	16
1318	Antibacterial efficacy of casein-derived peptides against <i>Enterococcus faecalis</i> . <b>2012</b> , 57, 339-43	2
1317	Arrays of nano-structured surfaces to probe the adhesion and viability of bacteria. <b>2012</b> , 91, 39-43	13
1316	Secondary metabolites produced by fungi derived from a microbial mat encountered in an iron-rich natural spring. <b>2012</b> , 53, 4202-4205	19
1315	Eradication of <i>Propionibacterium acnes</i> biofilms by plant extracts and putative identification of icariin, resveratrol and salidroside as active compounds. <b>2012</b> , 19, 409-12	74
1314	Systematic mutation analysis of two-component signal transduction systems reveals EsrA-EsrB and PhoP-PhoQ as the major virulence regulators in <i>Edwardsiella tarda</i> . <b>2012</b> , 157, 190-9	47

1313	Review article: biofilm formation by <i>Helicobacter pylori</i> as a target for eradication of resistant infection. <b>2012</b> , 36, 222-30	64
1312	BslA(YuaB) forms a hydrophobic layer on the surface of <i>Bacillus subtilis</i> biofilms. <b>2012</b> , 85, 51-66	182
1311	Cyclic di-GMP, an established secondary messenger still speeding up. <b>2012</b> , 14, 1817-29	72
1310	Synthesis of multiple <i>Pseudomonas aeruginosa</i> biofilm matrix exopolysaccharides is post-transcriptionally regulated. <b>2012</b> , 14, 1995-2005	70
1309	Resistance and resilience of microbial communities--temporal and spatial insurance against perturbations. <b>2012</b> , 14, 2283-92	51
1308	Electroaddressing Functionalized Polysaccharides as Model Biofilms for Interrogating Cell Signaling. <b>2012</b> , 22, 519-528	52
1307	Total synthesis of carolacton, a highly potent biofilm inhibitor. <b>2012</b> , 51, 1063-6	46
1306	[Osteomyelitis in adults. Diagnostic principles and therapeutic strategies]. <b>2012</b> , 115, 55-66	6
1305	Association of adenoid hyperplasia and bacterial biofilm formation in children with adenoiditis in Taiwan. <b>2012</b> , 269, 503-11	16
1304	Fluorescent epibiotic microbial community on the carapace of a Bahamian ostracod. <b>2013</b> , 195, 595-604	2
1303	The rise of pathogens: predation as a factor driving the evolution of human pathogens in the environment. <b>2013</b> , 65, 860-8	60
1302	The in vivo biofilm. <b>2013</b> , 21, 466-74	435
1301	Inhibition of bacterial motility and spreading via release of cranberry derived materials from silicone substrates. <b>2013</b> , 110, 275-80	9
1300	Problematic urn-shaped fossils from a Paleoproterozoic (2.2 Ga) paleosol in South Africa. <b>2013</b> , 235, 71-87	30
1299	Bacterial determinants of the social behavior of <i>Bacillus subtilis</i> . <b>2013</b> , 164, 788-98	22
1298	Transparency and damage tolerance of patternable omniphobic lubricated surfaces based on inverse colloidal monolayers. <b>2013</b> , 4, 2167	280
1297	Infection resistance of degradable versus non-degradable biomaterials: an assessment of the potential mechanisms. <b>2013</b> , 34, 8013-7	59
1296	Antagonistic interactions mediated by marine bacteria: the role of small molecules. <b>2013</b> , 39, 879-91	34

1295	Anti-biofilm forming and anti-quorum sensing activity of selected essential oils and their main components on food-related micro-organisms. <b>2013</b> , 115, 933-42	149
1294	Nanotechnology tools for antibacterial materials. <b>2013</b> , 8, 807-21	126
1293	The diabetic foot infections: biofilms and antimicrobial resistance. <b>2013</b> , 7, 101-7	44
1292	rheology of bacterial biofilms. <b>2013</b> , 9, 122-131	71
1291	Biomaterials Associated Infection. <b>2013</b> ,	11
1290	Antifouling glycocalyx-mimetic peptoids. <b>2013</b> , 135, 13015-22	91
1289	Structures and biofilm inhibition activities of brominated furanones for <i>Escherichia coli</i> and <i>Pseudomonas aeruginosa</i> . <b>2013</b> , 4, 1079	19
1288	An ecological perspective of <i>Listeria monocytogenes</i> biofilms in food processing facilities. <b>2013</b> , 53, 801-17	47
1287	Biofilm formation by clinical isolates and the implications in chronic infections. <b>2013</b> , 13, 47	190
1286	<i>Staphylococcus aureus</i> biofilms decrease osteoblast viability, inhibits osteogenic differentiation, and increases bone resorption in vitro. <b>2013</b> , 14, 187	53
1285	Accumulation of inorganic polyphosphate enables stress endurance and catalytic vigour in <i>Pseudomonas putida</i> KT2440. <b>2013</b> , 12, 50	56
1284	Effect of surface compositional heterogeneities and microphase segregation of fluorinated amphiphilic copolymers on antifouling performance. <b>2013</b> , 5, 7808-18	64
1283	Probing the cellular damage in bacteria induced by GaN nanoparticles using confocal laser Raman spectroscopy. <b>2013</b> , 15, 1	15
1282	Self-Assembled Monolayers as Model Biosurfaces. <b>2013</b> , 369-395	1
1281	Bacterial biofilm development as a multicellular adaptation: antibiotic resistance and new therapeutic strategies. <b>2013</b> , 16, 580-9	493
1280	Filamentous fungal biofilm for production of human drug metabolites. <b>2013</b> , 97, 5955-63	23
1279	Improving polyhydroxyalkanoate production by knocking out the genes involved in exopolysaccharide biosynthesis in <i>Haloferax mediterranei</i> . <b>2013</b> , 97, 3027-36	52
1278	A fluid dynamics model of the growth of phototrophic biofilms. <b>2013</b> , 66, 1387-408	19



1277	Biofilm comprising phototrophic, diazotrophic, and hydrocarbon-utilizing bacteria: a promising consortium in the bioremediation of aquatic hydrocarbon pollutants. <b>2013</b> , 20, 3252-62	21
1276	Antimicrobial properties of a nanostructured eggshell from a compost-nesting bird. <b>2014</b> , 217, 1116-21	39
1275	(Z)-4-bromo-5-(bromomethylene)-3-methylfuran-2(5H)-one sensitizes Escherichia coli persister cells to antibiotics. <b>2013</b> , 97, 9145-54	22
1274	Interdigitated microelectrode biosensor for bacterial biofilm growth monitoring by impedance spectroscopy technique in 96-well microtiter plates. <b>2013</b> , 178, 663-670	46
1273	A mucosal model to study microbial biofilm development and anti-biofilm therapeutics. <b>2013</b> , 92, 201-8	23
1272	Shooting at skin Propionibacterium acnes: to be or not to be on target. <b>2013</b> , 133, 2292-4	8
1271	Reduced Adhesion of Staphylococcus aureus to ZnO/PVC Nanocomposites. <b>2013</b> ,	0
1270	Nanopatterned smart polymer surfaces for controlled attachment, killing, and release of bacteria. <b>2013</b> , 5, 9295-304	182
1269	Invasion of E. coli biofilms by antibiotic resistance plasmids. <b>2013</b> , 70, 110-9	42
1268	Tetrazolium reduction allows assessment of biofilm formation by Campylobacter jejuni in a food matrix model. <b>2013</b> , 115, 1212-21	34
1267	Arrested protein synthesis increases persister-like cell formation. <b>2013</b> , 57, 1468-73	219
1266	Reducing Staphylococcus aureus biofilm formation on stainless steel 316L using functionalized self-assembled monolayers. <b>2013</b> , 33, 2059-69	24
1265	Design, synthesis, and evaluation of fimbrolide-nitric oxide donor hybrids as antimicrobial agents. <b>2013</b> , 56, 9517-29	37
1264	The genotypic view of social interactions in microbial communities. <b>2013</b> , 47, 247-73	163
1263	Memory and modularity in cell-fate decision making. <b>2013</b> , 503, 481-486	167
1262	Design of a novel gut bacterial adhesion model for probiotic applications. <b>2013</b> , 41, 116-24	7
1261	Concepts in disinfection of bacterial populations. <b>2013</b> , 245, 111-25	8
1260	Sum of the parts: composition and architecture of the bacterial extracellular matrix. <b>2013</b> , 425, 4286-94	94

1259	Microbial tribology and disruption of dental plaque bacterial biofilms. <b>2013</b> , 306, 276-284	21
1258	Microbial Phenazines. <b>2013</b> ,	11
1257	Effects of extracellular DNA and DNA-binding protein on the development of a <i>Streptococcus intermedius</i> biofilm. <b>2013</b> , 115, 260-70	27
1256	Microbial growth and isothermal microcalorimetry: Growth models and their application to microcalorimetric data. <b>2013</b> , 555, 64-71	94
1255	Live Cell Analysis Under Shear Flow. <b>2013</b> , 357-383	1
1254	Antimycobacterial efficacy of silver nanoparticles as deposited on porous membrane filters. <b>2013</b> , 33, 4575-81	22
1253	Green Hydrogen: Algal Biohydrogen Production. <b>2013</b> , 267-284	1
1252	Method to grow <i>Actinobacillus pleuropneumoniae</i> biofilm on a biotic surface. <b>2013</b> , 9, 213	12
1251	Thermodynamic analysis of marine bacterial attachment to oligo(ethylene glycol)-terminated self-assembled monolayers. <b>2013</b> , 8, 24	4
1250	EGN: a wizard for construction of gene and genome similarity networks. <b>2013</b> , 13, 146	45
1249	The role of ethanol in preventing biofilm formation of <i>Penicillium purpurogenum</i> . <b>2013</b> ,	
1248	Applications of biofilms in bioremediation and biotransformation of persistent organic pollutants, pharmaceuticals/personal care products, and heavy metals. <b>2013</b> , 97, 9909-21	200
1247	Interspecies interaction extends bacterial survival at solid-air interfaces. <b>2013</b> , 29, 1087-96	20
1246	The inhibitory effect of micafungin on biofilm formation by <i>Pseudomonas aeruginosa</i> . <b>2013</b> , 29, 909-15	5
1245	Physicochemical characterization of <i>Acidiphilium</i> sp. biofilms. <b>2013</b> , 14, 1237-44	4
1244	Marine biofilms on artificial surfaces: structure and dynamics. <b>2013</b> , 15, 2879-93	216
1243	Applying insights from biofilm biology to drug development - can a new approach be developed?. <b>2013</b> , 12, 791-808	340
1242	Bacterial flora on Cascades frogs in the Klamath mountains of California. <b>2013</b> , 36, 591-8	15

1241	Oxygen promotes biofilm formation of <i>Shewanella putrefaciens</i> CN32 through a diguanylate cyclase and an adhesin. <b>2013</b> , 3, 1945	60
1240	Physics of rheologically enhanced propulsion: Different strokes in generalized Stokes. <b>2013</b> , 25, 081903	58
1239	Ultra low-power smart medical sensor node for in-body Biomonitoring. <b>2013</b> ,	2
1238	Community patterns of the small riverine benthos within and between two contrasting glacier catchments. <b>2013</b> , 3, 2832-44	11
1237	Cave Microbiomes: A Novel Resource for Drug Discovery. <b>2013</b> ,	5
1236	Optimal dosing regimen of nitric oxide donor compounds for the reduction of <i>Pseudomonas aeruginosa</i> biofilm and isolates from wastewater membranes. <b>2013</b> , 29, 203-12	49
1235	Antimicrobial resistance, presence of integrons and biofilm formation of <i>Salmonella Pullorum</i> isolates from Eastern China (1962-2010). <b>2013</b> , 42, 290-4	27
1234	Inhibition of planktonic and sessile <i>Salmonella enterica</i> cells by combinations of enterocin AS-48, polymyxin B and biocides. <b>2013</b> , 30, 214-221	11
1233	Influence of season and plant species on the abundance and diversity of sulfate reducing bacteria and ammonia oxidizing bacteria in constructed wetland microcosms. <b>2013</b> , 65, 111-27	53
1232	Variation in adhesion and germ tube formation of oral <i>Candida</i> using Egyptian propolis. <b>2013</b> , 59, 197-203	7
1231	Etiology, diagnosis and management of chronic rhinosinusitis. <b>2013</b> , 11, 25-35	7
1230	Towards a processual microbial ontology. <b>2013</b> , 28, 379-404	41
1229	A flexible approach to 1,4-di-substituted 2-aminoimidazoles that inhibit and disperse biofilms and potentiate the effects of $\beta$ -lactams against multi-drug resistant bacteria. <b>2013</b> , 62, 59-70	48
1228	The polymicrobial nature of biofilm infection. <b>2013</b> , 19, 107-12	180
1227	Antibiotic-resistant bacteria: a challenge for the food industry. <b>2013</b> , 53, 11-48	217
1226	Antimicrobial Medical Devices in Preclinical Development and Clinical Use. <b>2013</b> , 307-354	11
1225	Nanoparticle deposition onto biofilms. <b>2013</b> , 41, 53-67	16
1224	Sticking together: building a biofilm the <i>Bacillus subtilis</i> way. <i>Nature Reviews Microbiology</i> , <b>2013</b> , 11, 157-68	22.2 606

1223	Biocidal effect of copper and zinc oxide nanoparticles on human oral microbiome and biofilm formation. <b>2013</b> , 97, 67-70	46
1222	Biomaterials immobilized with chitosan for rechargeable antimicrobial drug delivery. <b>2013</b> , 101, 447-55	27
1221	Antibacterial activity of two chitosan solutions and their effect on rice bacterial leaf blight and leaf streak. <b>2013</b> , 69, 312-20	69
1220	Genetic analysis of <i>Agrobacterium tumefaciens</i> unipolar polysaccharide production reveals complex integrated control of the motile-to-sessile switch. <b>2013</b> , 89, 929-48	80
1219	Evidence of extensive diversity in bacterial adherence mechanisms that exploit unanticipated stainless steel surface structural complexity for biofilm formation. <b>2013</b> , 9, 6236-44	5
1218	F18ab <i>Escherichia coli</i> flagella expression is regulated by acyl-homoserine lactone and contributes to bacterial virulence. <b>2013</b> , 165, 378-83	14
1217	Quorum sensing inhibitor FS3-coated vascular graft enhances daptomycin efficacy in a rat model of staphylococcal infection. <b>2013</b> , 40, 77-81	35
1216	Chip-calorimetric monitoring of biofilm eradication with antibiotics provides mechanistic information. <b>2013</b> , 303, 158-65	24
1215	Effects of local delivery of D-amino acids from biofilm-dispersive scaffolds on infection in contaminated rat segmental defects. <b>2013</b> , 34, 7533-43	56
1214	The structure of the deacetylase domain of <i>Escherichia coli</i> PgaB, an enzyme required for biofilm formation: a circularly permuted member of the carbohydrate esterase 4 family. <b>2013</b> , 69, 44-51	12
1213	Doped TiO <sub>2</sub> anodic layers of enhanced antibacterial properties. <b>2013</b> , 105, 106-12	48
1212	Bioinspired surfaces with dynamic topography for active control of biofouling. <b>2013</b> , 25, 1430-4	120
1211	Effect of the source of biofilm bacteria, level of biofilm maturation, and type of disinfecting agent on the susceptibility of biofilm bacteria to antibacterial agents. <b>2013</b> , 39, 473-7	97
1210	Clinical relevance of the ESKAPE pathogens. <b>2013</b> , 11, 297-308	748
1209	The genetic architecture of biofilm formation in a clinical isolate of <i>Saccharomyces cerevisiae</i> . <b>2013</b> , 193, 587-600	25
1208	The limits for life under multiple extremes. <b>2013</b> , 21, 204-12	155
1207	Development of quinoline-based disruptors of biofilm formation against <i>Vibrio cholerae</i> . <b>2013</b> , 15, 1234-7	27
1206	SLIME THROUGH TIME: THE FOSSIL RECORD OF PROKARYOTE EVOLUTION. <b>2013</b> , 28, 1-5	18

1205	Conservative management of infected pacemaker and implantable defibrillator sites with a closed antimicrobial irrigation system. <b>2013</b> , 15, 541-5	17
1204	Staphylococcus epidermidis in Biomaterial-Associated Infections. <b>2013</b> , 25-56	25
1203	Regulation of flagellar motility during biofilm formation. <b>2013</b> , 37, 849-71	284
1202	Effect of silver content on the antibacterial and bioactive properties of silver-substituted hydroxyapatite. <b>2013</b> , 101, 2456-64	71
1201	Biological individuality: the case of biofilms. <b>2013</b> , 28, 331-349	40
1200	Molar mass, entanglement, and associations of the biofilm polysaccharide of Staphylococcus epidermidis. <b>2013</b> , 14, 1474-81	22
1199	Zinc as an agent for the prevention of biofilm formation by pathogenic bacteria. <b>2013</b> , 115, 30-40	44
1198	Electrical methods of controlling bacterial adhesion and biofilm on device surfaces. <b>2013</b> , 10, 85-103	33
1197	Phenotypic Resistance to Antibiotics. <b>2013</b> , 2, 237-55	78
1196	Synthesis of (R)-norbgugaine and its potential as quorum sensing inhibitor against Pseudomonas aeruginosa. <b>2013</b> , 23, 2353-6	29
1195	Functional Amyloids in Bacteria. <b>2013</b> , 411-438	9
1194	Self-suppression of biofilm formation in the cyanobacterium Synechococcus elongatus. <b>2013</b> , 15, 1786-94	45
1193	Single-walled carbon nanotube coated antibacterial paper: preparation and mechanistic study. <b>2013</b> , 1, 2639-2646	62
1192	Biofilm Formation in the Rhizosphere: Multispecies Interactions and Implications for Plant Growth. <b>2013</b> , 701-712	13
1191	Enhanced antibacterial and anti-quorum sensing activities of triclosan by complexation with modified $\beta$ -cyclodextrins. <b>2013</b> , 29, 1731-6	10
1190	Role of environmental and antibiotic stress on Staphylococcus epidermidis biofilm microstructure. <b>2013</b> , 29, 7017-24	24
1189	Hypolithic and soil microbial community assembly along an aridity gradient in the Namib Desert. <b>2013</b> , 17, 329-37	77
1188	Conjugated Polyelectrolyte-Based Biocide Applications. <b>2013</b> , 263-294	1

1187	Preface. Between Pathogenicity and Commensalism. <b>2013</b> , 358, v-vii	4
1186	Burn Infections. <b>2013</b> , 353-374	1
1185	Transport and retention of selected engineered nanoparticles by porous media in the presence of a biofilm. <b>2013</b> , 47, 2246-53	78
1184	Current knowledge and perspectives on biofilm formation: the case of <i>Listeria monocytogenes</i> . <b>2013</b> , 97, 957-68	97
1183	Surface cell density effects on <i>Escherichia coli</i> gene expression during cell attachment. <b>2013</b> , 47, 6223-30	6
1182	A Functional DNase I Coating to Prevent Adhesion of Bacteria and the Formation of Biofilm. <b>2013</b> , 23, 2843-2849	125
1181	Real-time microbial adaptive diversification in soil. <b>2013</b> , 16, 650-5	51
1180	On the mechanics of bacterial biofilms on non-dissolvable surgical sutures: a laser scanning confocal microscopy-based finite element study. <b>2013</b> , 9, 6641-52	20
1179	Formation and retention of staphylococcal biofilms on DLC and its hybrids compared to metals used as biomaterials. <b>2013</b> , 101, 290-7	35
1178	Biofilm-inactivating activity of silver nanoparticles: A comparison with silver ions. <b>2013</b> , 19, 614-619	63
1177	Porous surface structure fabricated by breath figures that suppresses <i>Pseudomonas aeruginosa</i> biofilm formation. <b>2013</b> , 5, 11900-5	68
1176	Bacterial attachment and viscoelasticity: physicochemical and motility effects analyzed using quartz crystal microbalance with dissipation (QCM-D). <b>2013</b> , 47, 398-404	75
1175	Deposition and characterization of a dual-layer silicon- and silver-containing hydroxyapatite coating via a drop-on-demand technique. <b>2013</b> , 3, 11162	14
1174	Discovery and biological characterization of the auromomycin chromophore as an inhibitor of biofilm formation in <i>Vibrio cholerae</i> . <b>2013</b> , 14, 2209-15	15
1173	Qualitative and quantitative agar invasion test based on bacterial colony/biofilm. <b>2013</b> , 94, 267-73	1
1172	Secreted proteases control autolysin-mediated biofilm growth of <i>Staphylococcus aureus</i> . <b>2013</b> , 288, 29440-52	64
1171	Efficient ammonium removal from aquatic environments by <i>Acinetobacter calcoaceticus</i> STB1 immobilized on an electrospun cellulose acetate nanofibrous web. <b>2013</b> , 15, 2566	37
1170	Molecular analysis of the <i>Acinetobacter baumannii</i> biofilm-associated protein. <b>2013</b> , 79, 6535-43	49

1169	The roles of extracellular DNA in the structural integrity of extracellular polymeric substance and bacterial biofilm development. <b>2013</b> , 5, 778-86	151
1168	The dynamic nature of bacterial surfaces: implications for metal-membrane interaction. <b>2013</b> , 39, 196-217	26
1167	Shear-induced detachment of biofilms from hollow fiber silicone membranes. <b>2013</b> , 110, 525-34	19
1166	Activity, distribution and function of indole-3-acetic acid biosynthetic pathways in bacteria. <b>2013</b> , 39, 395-415	105
1165	Biofilm attachment reduction on bioinspired, dynamic, micro-wrinkling surfaces. <b>2013</b> , 15, 095018	58
1164	Critical interplay between density-dependent predation and evolution of the selfish herd. <b>2013</b> ,	7
1163	Fluorescent stereo microscopy for 3D surface profilometry and deformation mapping. <b>2013</b> , 21, 11808-18	55
1162	Archaeal diversity in biofilm technologies applied to treat urban and industrial wastewater: recent advances and future prospects. <b>2013</b> , 14, 18572-98	29
1161	The interaction of CuS and Halothiobacillus HT1 biofilm in microscale using synchrotron radiation-based techniques. <b>2013</b> , 14, 11113-24	6
1160	Lysogenic conversion and phage resistance development in phage exposed Escherichia coli biofilms. <b>2013</b> , 5, 150-61	17
1159	Chronic Wounds, Biofilms and Use of Medicinal Larvae. <b>2013</b> , 2013, 1-7	15
1158	The EPS matrix as an adaptive bastion for biofilms: introduction to special issue. <b>2013</b> , 14, 23297-300	9
1157	Concurrent quantification of cellular and extracellular components of biofilms. <b>2013</b> , e50639	13
1156	Biofilms in the oral environment. <b>2013</b> , 169-186	2
1155	What Is New in the Understanding of Non Healing Wounds Epidemiology, Pathophysiology, and Therapies. <b>2013</b> , 2013, 1-8	17
1154	Autofluorescence as a tool for structural analysis of biofilms formed by nonpigmented rapidly growing mycobacteria. <b>2013</b> , 79, 1065-7	13
1153	Potential use of Atlantic cod trypsin in biomedicine. <b>2013</b> , 2013, 749078	10
1152	Bacterial filamentation accelerates colonization of adhesive spots embedded in biopassive surfaces. <b>2013</b> , 15, 125016	19

1151	Frequency of biofilm formation in toothbrushes and wash basin junks. <b>2013</b> , 6, 55	1
1150	(+)-Dehydroabietic acid, an abietane-type diterpene, inhibits <i>Staphylococcus aureus</i> biofilms in vitro. <b>2013</b> , 14, 12054-72	41
1149	Initial Bacterial Adhesion on Different Yttria-Stabilized Tetragonal Zirconia Implant Surfaces. <b>2013</b> , 6, 5659-5674	14
1148	Molecular characterization of host-specific biofilm formation in a vertebrate gut symbiont. <b>2013</b> , 9, e1004057	94
1147	LuxR homologue SmcR is essential for <i>Vibrio vulnificus</i> pathogenesis and biofilm detachment, and its expression is induced by host cells. <b>2013</b> , 81, 3721-30	48
1146	Fructose-Enhanced Efficacy of Magnetic Nanoparticles against Antibiotic Resistant Biofilms. <b>2013</b> , 1498, 133-138	
1145	Microbial management for bacterial pathogen control in invertebrate aquaculture hatcheries. <b>2013</b> , 246-285	9
1144	In-situ quantification of the interfacial rheological response of bacterial biofilms to environmental stimuli. <b>2013</b> , 8, e78524	64
1143	Sn doping induced enhancement in the activity of ZnO nanostructures against antibiotic resistant <i>S. aureus</i> bacteria. <b>2013</b> , 8, 3679-87	58
1142	Marine enzymes with applications for biosynthesis of fine chemicals. <b>2013</b> , 89-106	3
1141	Tangled bank of experimentally evolved <i>Burkholderia</i> biofilms reflects selection during chronic infections. <b>2013</b> , 110, E250-9	132
1140	Biofilm matrix and its regulation in <i>Pseudomonas aeruginosa</i> . <b>2013</b> , 14, 20983-1005	185
1139	A nitric oxide-responsive quorum sensing circuit in <i>Vibrio harveyi</i> regulates flagella production and biofilm formation. <b>2013</b> , 14, 16473-84	41
1138	Iron induces bimodal population development by <i>Escherichia coli</i> . <b>2013</b> , 110, 2629-34	84
1137	AmrZ modulates <i>Pseudomonas aeruginosa</i> biofilm architecture by directly repressing transcription of the <i>psl</i> operon. <b>2013</b> , 195, 1637-44	54
1136	Biofilm formation by <i>Psychrobacter arcticus</i> and the role of a large adhesin in attachment to surfaces. <b>2013</b> , 79, 3967-73	14
1135	Microanatomy at cellular resolution and spatial order of physiological differentiation in a bacterial biofilm. <b>2013</b> , 4, e00103-13	227
1134	Antimicrobial peptide GL13K is effective in reducing biofilms of <i>Pseudomonas aeruginosa</i> . <b>2013</b> , 57, 4903-10	74



1133	Candida albicans forms a specialized "sexual" as well as "pathogenic" biofilm. <b>2013</b> , 12, 1120-31	36
1132	Cellulose as an architectural element in spatially structured Escherichia coli biofilms. <b>2013</b> , 195, 5540-54	209
1131	Methicillin-resistant Staphylococcus aureus antibiotic resistance and virulence. <b>2013</b> ,	6
1130	Phosphoproteomic analysis reveals the effects of PilF phosphorylation on type IV pilus and biofilm formation in Thermus thermophilus HB27. <b>2013</b> , 12, 2701-13	18
1129	Phenazines and Bacterial Biofilms. <b>2013</b> , 71-87	1
1128	Nano-BaSO <sub>4</sub> : A Novel Bacteriostatic Polymer Additive. <b>2013</b> ,	2
1127	In situ analysis of oxygen consumption and diffusive transport in high-temperature acidic iron-oxide microbial mats. <b>2013</b> , 15, 2360-70	20
1126	Surface-mediated release of a small-molecule modulator of bacterial biofilm formation: a non-bactericidal approach to inhibiting biofilm formation in Pseudomonas aeruginosa. <b>2013</b> , 2, 993-1000	19
1125	Antimicrobial effect of an ultrasonic levitation washer disinfectant with silver electrolysis and ozone oxidation on methicillin-resistant Staphylococcus aureus. <b>2013</b> , 40, 1020-6	5
1124	Life under flow: A novel microfluidic device for the assessment of anti-biofilm technologies. <b>2013</b> , 7, 64118	21
1123	Biofilms, Biomaterials, and Device-Related Infections. <b>2013</b> , 77-101	4
1122	Transport and Fate of Microbial Pathogens in Agricultural Settings. <b>2013</b> , 43, 775-893	155
1121	A combination of glycerol and manganese promotes biofilm formation in Bacillus subtilis via histidine kinase KinD signaling. <b>2013</b> , 195, 2747-54	112
1120	Targeted synthesis of porous aromatic frameworks and their composites for versatile, facile, efficacious, and durable antibacterial polymer coatings. <b>2013</b> , 25, 6619-24	64
1119	Biofilms, Biomaterials, and Device-Related Infections. <b>2013</b> , 565-583	6
1118	The specific degree-of-polymerization of A-type proanthocyanidin oligomers impacts Streptococcus mutans glucan-mediated adhesion and transcriptome responses within biofilms. <b>2013</b> , 29, 629-40	33
1117	Life in an arsenic-containing gold mine: genome and physiology of the autotrophic arsenite-oxidizing bacterium rhizobium sp. NT-26. <b>2013</b> , 5, 934-53	55
1116	In vitro interaction between alginate lyase and amphotericin B against Aspergillus fumigatus biofilm determined by different methods. <b>2013</b> , 57, 1275-82	43

1115	AhrC and Eep are biofilm infection-associated virulence factors in <i>Enterococcus faecalis</i> . <b>2013</b> , 81, 1696-708	44
1114	Importance of Motile and Biofilm Lifestyles of Rhizobia for the Establishment of Symbiosis with Legumes. <b>2013</b> , 47-69	
1113	Suppression of type III effector secretion by polymers. <b>2013</b> , 3, 130133	2
1112	Effect of spaceflight on <i>Pseudomonas aeruginosa</i> final cell density is modulated by nutrient and oxygen availability. <b>2013</b> , 13, 241	39
1111	Biofilm associated microorganisms on removable oral orthodontic appliances in children in the mixed dentition. <b>2013</b> , 37, 335-9	11
1110	The role of bacterial biofilms in device-associated infection. <b>2013</b> , 132, 1319-1328	162
1109	Biofilm-forming activity of bacteria isolated from toilet bowl biofilms and the bactericidal activity of disinfectants against the isolates. <b>2013</b> , 18, 129-35	9
1108	Introduction to biofilms and to biofilm research. <b>2013</b> , 1-66	
1107	Nano-BaSO <sub>4</sub> : a novel antimicrobial additive to pellethane. <b>2013</b> , 8, 1197-205	16
1106	Role of Bacterial Biofilms in Catheter-Associated Urinary Tract Infections (CAUTI) and Strategies for Their Control. <b>2013</b> ,	8
1105	Biofilms. <b>2013</b> , 335-337	
1104	Resistant virulent <i>Candida</i> species colonizing preterm neonates and in vitro promising prospect of chlorhexidine gluconate. <b>2013</b> , 7, 3421-3428	
1103	Molecular characterization of $\alpha$ -amylase from <i>Staphylococcus aureus</i> . <b>2013</b> , 9, 281-5	7
1102	Pyocyanin facilitates extracellular DNA binding to <i>Pseudomonas aeruginosa</i> influencing cell surface properties and aggregation. <b>2013</b> , 8, e58299	70
1101	Inhibition of SypG-induced biofilms and host colonization by the negative regulator SypE in <i>Vibrio fischeri</i> . <b>2013</b> , 8, e60076	16
1100	Identification of commensal <i>Escherichia coli</i> genes involved in biofilm resistance to pathogen colonization. <b>2013</b> , 8, e61628	25
1099	Spaceflight promotes biofilm formation by <i>Pseudomonas aeruginosa</i> . <b>2013</b> , 8, e62437	100
1098	Antibiofilm activity of <i>Actinobacillus pleuropneumoniae</i> serotype 5 capsular polysaccharide. <b>2013</b> , 8, e63844	26

1097	Resource availability and competition shape the evolution of survival and growth ability in a bacterial community. <b>2013</b> , 8, e76471	25
1096	Co-culture with <i>Listeria monocytogenes</i> within a dual-species biofilm community strongly increases resistance of <i>Pseudomonas putida</i> to benzalkonium chloride. <b>2013</b> , 8, e77276	87
1095	Rapid kill-novel endodontic sealer and <i>Enterococcus faecalis</i> . <b>2013</b> , 8, e78586	20
1094	Environmental reservoirs and mechanisms of persistence of <i>Vibrio cholerae</i> . <b>2013</b> , 4, 375	147
1093	The biology of <i>Neisseria adhesins</i> . <b>2013</b> , 2, 1054-109	30
1092	Comparison of biofilm and attachment mechanisms of a phytopathological and clinical isolate of <i>Klebsiella pneumoniae</i> Subsp. <i>pneumoniae</i> . <b>2013</b> , 2013, 925375	7
1091	Reduced adhesion of <i>Staphylococcus aureus</i> to ZnO/PVC nanocomposites. <b>2013</b> , 8, 1177-84	19
1090	. <b>2013</b> ,	13
1089	Putative biofilm-forming organisms in the human vasculature: expanded and review of the literature. <b>2014</b> , 1, 24-37	2
1088	Non-replicating <i>Mycobacterium tuberculosis</i> elicits a reduced infectivity profile with corresponding modifications to the cell wall and extracellular matrix. <b>2014</b> , 9, e87329	45
1087	Spore formation and toxin production in <i>Clostridium difficile</i> biofilms. <b>2014</b> , 9, e87757	68
1086	Mechanistic models of biofilm growth in porous media. <b>2014</b> , 119, 1418-1431	8
1085	Role of alkyl hydroperoxide reductase (AhpC) in the biofilm formation of <i>Campylobacter jejuni</i> . <b>2014</b> , 9, e87312	57
1084	The multiple roles of hypothetical gene BPSS1356 in <i>Burkholderia pseudomallei</i> . <b>2014</b> , 9, e99218	3
1083	<i>Pseudomonas aeruginosa</i> promotes <i>Escherichia coli</i> biofilm formation in nutrient-limited medium. <b>2014</b> , 9, e107186	38
1082	Photodynamic antimicrobial polymers for infection control. <b>2014</b> , 9, e108500	23
1081	Exopolysaccharide biosynthesis enables mature biofilm formation on abiotic surfaces by <i>Herbaspirillum seropedicae</i> . <b>2014</b> , 9, e110392	42
1080	Coincidental loss of bacterial virulence in multi-enemy microbial communities. <b>2014</b> , 9, e111871	5

1079	Efficacy of combined vancomycin and fosfomycin against methicillin-resistant <i>Staphylococcus aureus</i> in biofilms in vivo. <b>2014</b> , 9, e113133	22
1078	N-acyl homoserine lactone-mediated quorum sensing with special reference to use of quorum quenching bacteria in membrane biofouling control. <b>2014</b> , 2014, 162584	57
1077	Synthesis and characterization of silver and gold nanoparticles using aqueous extract of seaweed, <i>Turbinaria conoides</i> , and their antimicrofouling activity. <b>2014</b> , 2014, 938272	132
1076	In Vitro Antibiofilm Efficacies of Different Antibiotic Combinations with Zinc Sulfate against <i>Pseudomonas aeruginosa</i> Recovered from Hospitalized Patients with Urinary Tract Infection. <b>2014</b> , 3, 64-84	18
1075	Quorum quenching mediated approaches for control of membrane biofouling. <b>2014</b> , 10, 550-65	111
1074	Topical antimicrobials for burn infections - an update. <b>2013</b> , 8, 161-97	54
1073	Biofilm in aquaculture production. <b>2014</b> , 8, 1434-1443	20
1072	Is peracetic acid suitable for the cleaning step of reprocessing flexible endoscopes?. <b>2014</b> , 6, 390-406	17
1071	Culture-dependent characterization of microbes in biofilms from selected microhabitats in Rivers State, Nigeria. <b>2014</b> , 8, 1922-1930	1
1070	Plant lectins as alternative tools against bacterial biofilms. <b>2014</b> , 8, 2555-2564	4
1069	Fighting <i>Pseudomonas aeruginosa</i> infection in patients with cystic fibrosis: orphan drug designation for a novel PcrV antibody. <b>2014</b> , 2, 201-204	
1068	Investigation of biofilm formation on a charged intravenous catheter relative to that on a similar but uncharged catheter. <b>2014</b> , 7, 219-24	4
1067	<i>Pseudomonas aeruginosa</i> . <b>2014</b> , 355-366	4
1066	. <b>2014</b> ,	8
1065	Morphology of bacterial flora in root canals associated with apical abscesses. <b>2014</b> , 127, 3254-3258	1
1064	Bacterial fight-and-flight responses enhance virulence in a polymicrobial infection. <b>2014</b> , 111, 7819-24	117
1063	A new mathematical model for effectiveness factors in biofilm under toxic conditions. <b>2014</b> , 53, 917-928	4
1062	Spatial and seasonal variation in diversity and structure of microbial biofilms on marine plastics in Northern European waters. <b>2014</b> , 90, 478-92	236

1061	Bacteria slingshot more on soft surfaces. <b>2014</b> , 5, 5541	20
1060	Strain-specific parallel evolution drives short-term diversification during <i>Pseudomonas aeruginosa</i> biofilm formation. <b>2014</b> , 111, E1419-27	61
1059	Biofilms in Root Canal Infections. <b>2014</b> , 29-56	
1058	Impact of external flow on the dynamics of swimming microorganisms near surfaces. <b>2014</b> , 26, 115101	26
1057	Antibiotic activity against naive and induced <i>Streptococcus pneumoniae</i> biofilms in an in vitro pharmacodynamic model. <b>2014</b> , 58, 1348-58	16
1056	<i>Withania somnifera</i> attenuates acid production, acid tolerance and extra-cellular polysaccharide formation of <i>Streptococcus mutans</i> biofilms. <b>2014</b> , 42, 157-71	9
1055	In the social amoeba <i>Dictyostelium discoideum</i> , density, not farming status, determines predatory success on unpalatable <i>Escherichia coli</i> . <b>2014</b> , 14, 328	11
1054	Biofilm formation by virulent and non-virulent strains of <i>Haemophilus parasuis</i> . <b>2014</b> , 45, 104	19
1053	Fluid mechanical responses to nutrient depletion in fungi and biofilms). <b>2014</b> , 26, 101306	5
1052	Biofilm Processes and Control in Water and Wastewater Treatment. <b>2014</b> , 90-107	15
1051	In this issue of Gut Microbes. <b>2014</b> , 5, 83-5	
1050	A novel approach utilizing biofilm time-kill curves to assess the bactericidal activity of ceftaroline combinations against biofilm-producing methicillin-resistant <i>Staphylococcus aureus</i> . <b>2014</b> , 58, 2989-92	29
1049	Minimization of extracellular space as a driving force in prokaryote association and the origin of eukaryotes. <b>2014</b> , 9, 24	2
1048	Importance of positioning for microbial evolution. <b>2014</b> , 111, E1639-47	100
1047	Conventional and molecular diagnostic strategies for prosthetic joint infections. <b>2014</b> , 14, 83-96	17
1046	Self-decontaminating properties of fluorinated copolymers integrated with ciprofloxacin for synergistically inhibiting the growth of <i>Escherichia coli</i> . <b>2014</b> , 25, 1920-45	4
1045	Bacterial biofilms on implanted suture material are a cause of surgical site infection. <b>2014</b> , 15, 592-600	24
1044	Mini-review: Microbial coaggregation: ubiquity and implications for biofilm development. <b>2014</b> , 30, 1235-51	62

1043	Current and Emergent Control Strategies for Medical Biofilms. <b>2014</b> , 117-159	7
1042	Small RNAs in the control of RpoS, CsgD, and biofilm architecture of <i>Escherichia coli</i> . <b>2014</b> , 11, 494-507	96
1041	Inhibition of bacterial quorum sensing and biofilm formation by extracts of neotropical rainforest plants. <b>2014</b> , 80, 343-50	24
1040	External pH is a cue for the behavioral switch that determines surface motility and biofilm formation of <i>Alicyclobacillus acidoterrestris</i> . <b>2014</b> , 77, 1418-23	17
1039	The <i>Pseudomonas aeruginosa</i> type III translocon is required for biofilm formation at the epithelial barrier. <b>2014</b> , 10, e1004479	30
1038	Emergence of microbial networks as response to hostile environments. <b>2014</b> , 5, 407	6
1037	Biofilm growth mode promotes maximum carrying capacity and community stability during product inhibition syntrophy. <b>2014</b> , 5, 693	24
1036	ChIP-Seq and RNA-Seq reveal an AmrZ-mediated mechanism for cyclic di-GMP synthesis and biofilm development by <i>Pseudomonas aeruginosa</i> . <b>2014</b> , 10, e1003984	103
1035	Two-dimensionality of yeast colony expansion accompanied by pattern formation. <b>2014</b> , 10, e1003979	24
1034	The Relationship between Biofilm and Physical-Chemical Properties of Implant Abutment Materials for Successful Dental Implants. <b>2014</b> , 7, 3651-3662	22
1033	Biocompatible Coating. <b>2014</b> , 425-447	3
1032	Physics of biofilms: the initial stages of biofilm formation and dynamics. <b>2014</b> , 16, 045005	12
1031	Single particle tracking reveals spatial and dynamic organization of the biofilm matrix. <b>2014</b> , 16, 085014	33
1030	Inter-species interconnections in acid mine drainage microbial communities. <b>2014</b> , 5, 367	39
1029	Dynamic interactions of neutrophils and biofilms. <b>2014</b> , 6, 26102	56
1028	Far from being well understood: multiple protein phosphorylation events control cell differentiation in <i>Bacillus subtilis</i> at different levels. <b>2014</b> , 5, 704	4
1027	Fungi are not involved in biofilm formation on rock wall in subterranean arsenic mine in Poland. <b>2014</b> , 99, 255-269	5
1026	The diguanylate cyclase SadC is a central player in Gac/Rsm-mediated biofilm formation in <i>Pseudomonas aeruginosa</i> . <b>2014</b> , 196, 4081-8	69

1025 Analyse der Biofilmbildung auf kieferorthopädischen Apparaturen. **2014**, 123, 192-199

1024 Microbial communities in UK aquifers: current understanding and future research needs. **2014**, 47, 145-157 13

1023 Biofilms formed by gram-negative bacteria undergo increased lipid palmitoylation, enhancing in vivo survival. **2014**, 5, 50

1022 Dynamic remodeling of microbial biofilms by functionally distinct exopolysaccharides. **2014**, 5, e01536-14 106

1021 Specific maltose derivatives modulate the swarming motility of nonswarming mutant and inhibit bacterial adhesion and biofilm formation by *Pseudomonas aeruginosa*. **2014**, 15, 1514-23 15

1020 Microbial biofilm formation: a need to act. **2014**, 276, 98-110 105

1019 Siderophore-promoted dissolution of smectite by fluorescent *Pseudomonas*. **2014**, 6, 459-67 29

1018 Role of PBPD1 in stimulation of *Listeria monocytogenes* biofilm formation by subminimal inhibitory  $\beta$ -lactam concentrations. **2014**, 58, 6508-17 10

1017 Nanoindentation of *Pseudomonas aeruginosa* bacterial biofilm using atomic force microscopy. **2014**, 1, 045411 19

1016 The effect of sodium hypochlorite on *Enterococcus faecalis* when grown on dentine as a single- and multi-species biofilm. **2014**, 40, 101-10 13

1015 Fungal biofilms, drug resistance, and recurrent infection. **2014**, 4, 146

1014 Sound waves effectively assist tobramycin in elimination of *Pseudomonas aeruginosa* biofilms in vitro. **2014**, 15, 1644-54 9

1013 Rapid identification of bacterial biofilms and biofilm wound models using a multichannel nanosensor. **2014**, 8, 12014-9 58

1012 Biofilm formation of a bacterial consortium on linuron at micropollutant concentrations in continuous flow chambers and the impact of dissolved organic matter. **2014**, 88, 184-94 18

1011 *Streptococcus bovis* infection and colorectal neoplasia: a meta-analysis. **2014**, 16, 672-80 47

1010 Biofouling ecology as a means to better understand membrane biofouling. **2014**, 98, 8047-72 46

1009 Biofilm: basic principles, pathophysiology, and implications for clinicians. **2014**, 15, 1-7 56

1008 Biophysical controls on cluster dynamics and architectural differentiation of microbial biofilms in contrasting flow environments. **2014**, 16, 802-12 24

1007	Environmental bacteria produce abundant and diverse antibiofilm compounds. <b>2014</b> , 117, 1663-73	5
1006	Ultra low-power smart medical sensor node based on a central venous catheter for in-body biomonitoring. <b>2014</b> , 35, 362-369	
1005	The role of continuous microbial debulking in the hospital environment and its effect on reducing hospital-acquired infections (HAI). <b>2014</b> , 232-253	
1004	Mixed-species biofilm compromises wound healing by disrupting epidermal barrier function. <b>2014</b> , 233, 331-343	117
1003	Drug susceptibility of matrix-encapsulated <i>Candida albicans</i> nano-biofilms. <b>2014</b> , 111, 418-24	10
1002	Corticosteroids directly reduce <i>Staphylococcus aureus</i> biofilm growth: an in vitro study. <b>2014</b> , 124, 602-7	20
1001	Soft robotic concepts in catheter design: an on-demand fouling-release urinary catheter. <b>2014</b> , 3, 1588-96	43
1000	Formation and dimerization of the phosphodiesterase active site of the <i>Pseudomonas aeruginosa</i> MorA, a bi-functional c-di-GMP regulator. <b>2014</b> , 588, 4631-6	32
999	Biofilm-Mediated Bioremediation of Polycyclic Aromatic Hydrocarbons. <b>2014</b> , 203-232	37
998	Biofilm formation by <i>Fusarium oxysporum</i> f. sp. <i>cucumerinum</i> and susceptibility to environmental stress. <b>2014</b> , 350, 138-45	31
997	Microbiota organization is a distinct feature of proximal colorectal cancers. <b>2014</b> , 111, 18321-6	405
996	The evolutionary origin of form and function. <b>2014</b> , 592, 2261-5	10
995	Proteome profile of a pandemic <i>Vibrio parahaemolyticus</i> SC192 strain in the planktonic and biofilm condition. <b>2014</b> , 30, 729-39	16
994	Analysis of the mechanical stability and surface detachment of mature <i>Streptococcus mutans</i> biofilms by applying a range of external shear forces. <b>2014</b> , 30, 1079-91	48
993	Persistence and Biofilm Assessment of <i>Campylobacter</i> <i>Juveni</i> in Poultry Abattoir. <b>2014</b> , 32, 54-61	5
992	High activity of Fosfomycin and Rifampin against methicillin-resistant <i>Staphylococcus aureus</i> biofilm in vitro and in an experimental foreign-body infection model. <b>2014</b> , 58, 2547-53	81
991	Allogene Augmentate in der klinischen Anwendung. <b>2014</b> , 8, 35-43	1
990	Bacterial Adherence to Biomaterials Used in Surgical Procedures. <b>2014</b> , 41-57	10



989	Antibiotic treatment of <i>Pseudomonas aeruginosa</i> biofilms stimulates expression of the magnesium transporter gene <i>mgtE</i> . <b>2014</b> , 160, 165-178	14
988	Fluorescence-based quasicontinuous and in situ monitoring of biofilm formation dynamics in natural marine environments. <b>2014</b> , 80, 3721-8	18
987	When and how should we treat biofilms in chronic sinusitis?. <b>2014</b> , 22, 16-21	21
986	Inactivation of specific <i>Pseudomonas aeruginosa</i> biofilm factors does not alter virulence in infected cholesteatomas. <b>2014</b> , 35, 1585-91	3
985	Degradation of methicillin-resistant <i>Staphylococcus aureus</i> biofilms using a chimeric lysin. <b>2014</b> , 30, 667-74	13
984	Curli synthesis and biofilm formation in enteric bacteria are controlled by a dynamic small RNA module made up of a pseudoknot assisted by an RNA chaperone. <b>2014</b> , 42, 4682-96	46
983	Influence of calcium in extracellular DNA mediated bacterial aggregation and biofilm formation. <b>2014</b> , 9, e91935	102
982	Structural basis for the De-N-acetylation of Poly- $\beta$ -1,6-N-acetyl-D-glucosamine in Gram-positive bacteria. <b>2014</b> , 289, 35907-17	20
981	Imaging bacteria and biofilms on hardware and periprosthetic tissue in orthopedic infections. <b>2014</b> , 1147, 105-26	18
980	Intra- and inter-species interactions in microbial communities. <b>2014</b> , 5, 629	14
979	Inhibition of microbial adhesion to plastic surface and human buccal epithelial cells by <i>Rhodomyrtus tomentosa</i> leaf extract. <b>2014</b> , 59, 1256-65	15
978	The visualization of biofilms in chronic diabetic foot wounds using routine diagnostic microscopy methods. <b>2014</b> , 2014, 153586	37
977	A mechanistic explanation linking adaptive mutation, niche change, and fitness advantage for the wrinkly spreader. <b>2014</b> , 2014, 675432	17
976	Unexpected Multidrug Resistance of Methicillin-Resistant <i>Staphylococcus aureus</i> in Urine Samples: A Single-Center Study. <b>2014</b> , 55, 349-53	3
975	Biofilms and biocorrosion. <b>2014</b> , 33-56	11
974	Genetic basis for <i>Saccharomyces cerevisiae</i> biofilm in liquid medium. <b>2014</b> , 4, 1671-80	22
973	Detection and quantification of bacterial biofilms combining high-frequency acoustic microscopy and targeted lipid microparticles. <b>2014</b> , 12, 24	20
972	Gram-negative bacteria can also form pellicles. <b>2014</b> , 6, 534-44	46

971	The action of selected isothiocyanates on bacterial biofilm prevention and control. <b>2014</b> , 86, 25-33	44
970	Biofilm-dependent airway infections: a role for ambroxol?. <b>2014</b> , 28, 98-108	17
969	Antimicrobial oligo(p-phenylene-ethynylene) film deposited by resonant infrared matrix-assisted pulsed laser evaporation. <b>2014</b> , 116, 786-92	25
968	Human dental biofilm: Screening, characterization, in vitro biofilm formation and antifungal resistance of <i>Candida</i> spp.. <b>2014</b> , 5, 55-70	7
967	Biodegradation of naphthenic acids in oils sands process waters in an immobilized soil/sediment bioreactor. <b>2014</b> , 109, 164-72	46
966	Studying bacterial hydrophobicity and biofilm formation at liquid-liquid interfaces through interfacial rheology and pendant drop tensiometry. <b>2014</b> , 117, 174-84	47
965	Surface conditioning of stainless steel coupons with skim milk, buttermilk, and butter serum solutions and its effect on bacterial adherence. <b>2014</b> , 42, 94-100	11
964	Human pathogenic viruses are retained in and released by <i>Candida albicans</i> biofilm in vitro. <b>2014</b> , 179, 153-60	17
963	Nickel and cadmium ions inhibit quorum sensing and biofilm formation without affecting viability in <i>Burkholderia multivorans</i> . <b>2014</b> , 91, 82-87	31
962	Synthesis and characterization of fluoro-modified polypropylene films for inhibition of biofilm formation. <b>2014</b> , 115, 8-14	10
961	Synthesis and biological evaluation of pyrrole-2-carboxamide derivatives: oroidin analogues. <b>2014</b> , 23, 1387-1396	8
960	The quantity and quality of dissolved organic matter as supplementary carbon source impacts the pesticide-degrading activity of a triple-species bacterial biofilm. <b>2014</b> , 98, 931-43	10
959	Inhibitory effect of -ethyl-3-amino-5-oxo-4-phenyl-2,5-dihydro-1-pyrazole-1-carbothioamide on spp. planktonic or biofilm-forming cells. <b>2014</b> , 23, 1057-1066	8
958	Molecular techniques revealed highly diverse microbial communities in natural marine biofilms on polystyrene dishes for invertebrate larval settlement. <b>2014</b> , 68, 81-93	18
957	High-throughput screening of multispecies biofilm formation and quantitative PCR-based assessment of individual species proportions, useful for exploring interspecific bacterial interactions. <b>2014</b> , 68, 146-54	63
956	Mixed-species biofilms cultured from an oil sand tailings pond can biomineralize metals. <b>2014</b> , 68, 70-80	18
955	The natural alternative: protozoa as cellular models for <i>Legionella</i> infection. <b>2014</b> , 16, 15-26	86
954	Delivery of antibiotics with polymeric particles. <b>2014</b> , 78, 63-76	182

953	Molecular mechanisms of antimicrobial tolerance and resistance in bacterial and fungal biofilms. <b>2014</b> , 22, 326-33	295
952	Genes without prominence: a reappraisal of the foundations of biology. <b>2014</b> , 11, 20131017	26
951	Biofilms. <b>2014</b> , 143-163	4
950	Healthcare-Associated Infections and Biofilms. <b>2014</b> , 165-184	1
949	Collaborative microbial Fe-redox cycling by pelagic floc bacteria across wide ranging oxygenated aquatic systems. <b>2014</b> , 366, 90-102	23
948	The effects of silver, silicon-containing apatite towards bacteria and cell responses. <b>2014</b> , 9, 015010	17
947	Interactions in multispecies biofilms: do they actually matter?. <b>2014</b> , 22, 84-91	305
946	An Introduction to the Biology of Biofilm Recalcitrance. <b>2014</b> , 245-256	1
945	The bacteriological composition of biomass recovered by flushing an operational drinking water distribution system. <b>2014</b> , 54, 100-14	70
944	Influence of Mg doping level on morphology, optical, electrical properties and antibacterial activity of ZnO nanostructures. <b>2014</b> , 40, 7487-7493	45
943	Crowning: a novel Escherichia coli colonizing behaviour generating a self-organized corona. <b>2014</b> , 7, 108	7
942	Biocompatible Ag nanoparticle-embedded poly(2-hydroxyethyl methacrylate) derivative films with bacterial adhesion-resistant and antibacterial properties. <b>2014</b> , 22, 337-343	8
941	Therapeutic ultrasound as a treatment modality for chronic rhinosinusitis. <b>2014</b> , 16, 398	8
940	Beyond Mucosal Infection: a Role for C. albicans-Streptococcal Interactions in the Pathogenesis of Dental Caries. <b>2014</b> , 1, 86-93	4
939	Erwinia persicina, a possible new necrosis and wilt threat to forage or grain legumes production. <b>2014</b> , 139, 349-358	16
938	Identification of genes required for soil survival in Burkholderia thailandensis by transposon-directed insertion site sequencing. <b>2014</b> , 68, 693-701	3
937	Antibiofilm properties of chemically synthesized silver nanoparticles found against Pseudomonas aeruginosa. <b>2014</b> , 12, 2	105
936	Effects of single- and multi-strain probiotics on biofilm formation and in vitro adhesion to bladder cells by urinary tract pathogens. <b>2014</b> , 27, 71-6	38

- 935 Atmospheric pressure plasmas: infection control and bacterial responses. **2014**, 43, 508-17 161
- 934 Smart central venous port for early detection of bacterial biofilm related infections. **2014**, 16, 365-74 25
- 933 Superhydrophobic and superhydrophilic nanocomposite coatings for preventing *Escherichia coli* K-12 adhesion on food contact surface. **2014**, 131, 135-141 43
- 932 Titania nanoparticles prevent development of *Pseudomonas fluorescens* biofilms on polystyrene surfaces. **2014**, 127, 1-3 12
- 931 Morphological and proteomic analysis of early stage air-liquid interface biofilm formation in *Mycobacterium smegmatis*. **2014**, 160, 1346-1356 9
- 930 Biofilm formation and persistence on abiotic surfaces in the context of food and medical environments. **2014**, 196, 453-72 147
- 929 Mechanisms of infective endocarditis: pathogen-host interaction and risk states. **2014**, 11, 35-50 113
- 928 Effect of long-term exposure to endodontic disinfecting solutions on young and old *Enterococcus faecalis* biofilms in dentin canals. **2014**, 40, 509-14 62
- 927 Sociobiology of the budding yeast. **2014**, 39, 225-36 12
- 926 Solutions to the public goods dilemma in bacterial biofilms. **2014**, 24, 50-55 229
- 925 Solid-State NMR for Bacterial Biofilms. **2014**, 112, 887-894 31
- 924 Butyric acid released during milk lipolysis triggers biofilm formation of *Bacillus* species. **2014**, 181, 19-27 38
- 923 Biopolymers Synthesis and Application. **2014**, 415-443 4
- 922 Disruption of putrescine biosynthesis in *Shewanella oneidensis* enhances biofilm cohesiveness and performance in Cr(VI) immobilization. **2014**, 80, 1498-506 74
- 921 Biofilm Formation in Food Processing Environments is Still Poorly Understood and Controlled. **2014**, 6, 29-42 108
- 920 Characterization and application of a flow system for in vitro multispecies oral biofilm formation. **2014**, 49, 323-32 44
- 919 Harnessing large deformation and instabilities of soft dielectrics: Theory, experiment, and application. **2014**, 1, 021304 127
- 918 Involvement of toxin-antitoxin modules in *Burkholderia cenocepacia* biofilm persistence. **2014**, 71, 326-35 46

917	Dual antifungal properties of cationic antimicrobial peptides polybia-MPI: membrane integrity disruption and inhibition of biofilm formation. <b>2014</b> , 56, 22-9	43
916	Endotracheal tube biofilm and ventilator-associated pneumonia with mechanical ventilation. <b>2014</b> , 77, 305-12	20
915	Biofilm formation in <i>Haemophilus parasuis</i> : relationship with antibiotic resistance, serotype and genetic typing. <b>2014</b> , 97, 171-5	18
914	Rapid evolution of culture-impaired bacteria during adaptation to biofilm growth. <b>2014</b> , 6, 293-300	43
913	Ion exchange membrane textile bioreactor as a new alternative for drinking water denitrification. <b>2014</b> , 98, 5227-39	
912	Recent progress in biointerfaces with controlled bacterial adhesion by using chemical and physical methods. <b>2014</b> , 9, 2004-16	36
911	The metabolic cost of flagellar motion in <i>Pseudomonas putida</i> KT2440. <b>2014</b> , 16, 291-303	97
910	Detection of bacterial biofilms in different types of chronic otitis media. <b>2014</b> , 271, 2877-83	38
909	Biotransformation of Waste Biomass into High Value Biochemicals. <b>2014</b> ,	29
908	Alkylidene-lactones and isobutylpyrrol-2(5H)-ones analogues to rubrolides as inhibitors of biofilm formation by gram-positive and gram-negative bacteria. <b>2014</b> , 24, 1052-6	39
907	Nanoscale cell wall deformation impacts long-range bacterial adhesion forces on surfaces. <b>2014</b> , 80, 637-43	56
906	Ferromagnetic nanoparticles with peroxidase-like activity enhance the cleavage of biological macromolecules for biofilm elimination. <b>2014</b> , 6, 2588-93	167
905	Dental materials with antibiofilm properties. <b>2014</b> , 30, e1-16	113
904	Identification of small molecules inhibiting diguanylate cyclases to control bacterial biofilm development. <b>2014</b> , 30, 17-28	79
903	Antibacterial effects of the tellurium compound OTD on <i>E. coli</i> isolates. <b>2014</b> , 196, 51-61	3
902	Biofilm formation and susceptibility to gentamicin and colistin of extremely drug-resistant KPC-producing <i>Klebsiella pneumoniae</i> . <b>2014</b> , 69, 1027-34	54
901	Biosecurity and Control of Infectious Disease Outbreaks. <b>2014</b> , 530-543.e3	
900	Fungal infections associated with long-term mechanical circulatory support-diagnosis and management. <b>2014</b> , 29, 95-100	12

899	Quaternized chitosans bind onto preexisting biofilms and eradicate pre-attached microorganisms. <b>2014</b> , 2, 8518-8527	26
898	Bacterial adherence and biofilm formation on medical implants: a review. <b>2014</b> , 228, 1083-99	257
897	Normally Oriented Adhesion versus Friction Forces in Bacterial Adhesion to Polymer-Brush Functionalized Surfaces Under Fluid Flow. <b>2014</b> , 24, 4435-4441	20
896	New approaches to the treatment of biofilm-related infections. <b>2014</b> , 69 Suppl 1, S47-52	54
895	Segmented flow is controlling growth of catalytic biofilms in continuous multiphase microreactors. <b>2014</b> , 111, 1831-40	35
894	Development of a Novel Zinc Oxide/Polyvinyl Chloride Nanocomposite Material for Medical Implant Applications. <b>2014</b> , 1626, 1	
893	Development and calibration of a microfluidic biofilm growth cell with flow-templating and multi-modal characterization. <b>2014</b> , 2014, 1557-62	
892	New aspects in the biology of <i>Photobacterium damsela</i> subsp. <i>piscicida</i> : pili, motility and adherence to solid surfaces. <b>2014</b> , 174, 247-54	10
891	Benefits of neutral electrolyzed oxidizing water as a drinking water additive for broiler chickens. <b>2014</b> , 93, 2320-6	6
890	Bioremediation of hydrocarbons contaminating sewage effluent using man-made biofilms: effects of some variables. <b>2014</b> , 174, 1736-51	18
889	Inhibitory effect of skatole (3-methylindole) on enterohemorrhagic <i>Escherichia coli</i> O157:H7 ATCC 43894 biofilm formation mediated by elevated endogenous oxidative stress. <b>2014</b> , 58, 454-61	12
888	When functionalization of PLA surfaces meets Thiol-Yne photochemistry: case study with antibacterial polyaspartamide derivatives. <b>2014</b> , 15, 4351-62	28
887	A GFP promoter fusion library for the study of <i>Salmonella</i> biofilm formation and the mode of action of biofilm inhibitors. <b>2014</b> , 30, 605-25	21
886	Photodynamic inactivation of bacterial and yeast biofilms with a cationic porphyrin. <b>2014</b> , 90, 1387-96	78
885	Biofilm removal and antimicrobial activity of two different air-polishing powders: an in vitro study. <b>2014</b> , 85, e363-9	21
884	<i>Staphylococcus epidermidis</i> originating from titanium implants infects surrounding tissue and immune cells. <b>2014</b> , 10, 5202-5212	59
883	Nanopatterned antimicrobial enzymatic surfaces combining biocidal and fouling release properties. <b>2014</b> , 6, 4750-7	84
882	Cell growth and protein expression of <i>Shewanella oneidensis</i> in biofilms and hydrogel-entrapped cultures. <b>2014</b> , 10, 1035-42	32

881	Robust bio-inspired antibacterial surfaces based on the covalent binding of peptides on functional atmospheric plasma thin films. <b>2014</b> , 2, 5168-5177	35
880	Cationic oligo-p-phenylene ethynylenes form complexes with surfactants for long-term light-activated biocidal applications. <b>2014</b> , 13, 247-53	12
879	The BCESM genomic region contains a regulator involved in quorum sensing and persistence in <i>Burkholderia cenocepacia</i> J2315. <b>2014</b> , 9, 845-60	8
878	Biofilms of <i>Clostridium</i> species. <b>2014</b> , 30, 193-8	34
877	Iron triggers $\Phi$ prophage induction and release of extracellular DNA in <i>Shewanella oneidensis</i> MR-1 biofilms. <b>2014</b> , 80, 5304-16	44
876	<i>Pseudomonas aeruginosa</i> biofilm growth inhibition on medical plastic materials by immobilized esterases and acylase. <b>2014</b> , 15, 1911-9	13
875	D-amino acids enhance the activity of antimicrobials against biofilms of clinical wound isolates of <i>Staphylococcus aureus</i> and <i>Pseudomonas aeruginosa</i> . <b>2014</b> , 58, 4353-61	72
874	Attachment from flow of <i>Escherichia coli</i> bacteria onto silanized glass substrates. <b>2014</b> , 30, 11147-55	22
873	Uncovering the mechanism of trapping and cell orientation during <i>Neisseria gonorrhoeae</i> twitching motility. <b>2014</b> , 107, 1523-31	30
872	Surface roughness mediated adhesion forces between borosilicate glass and gram-positive bacteria. <b>2014</b> , 30, 9466-76	69
871	Games of life and death: antibiotic resistance and production through the lens of evolutionary game theory. <b>2014</b> , 21, 35-44	29
870	Inhibitory effects of green tea polyphenol epigallocatechin gallate (EGCG) on exopolysaccharide production by <i>Streptococcus mutans</i> under microfluidic conditions. <b>2014</b> , 8, 179-186	5
869	S-aryl-L-cysteine sulfoxides and related organosulphur compounds alter oral biofilm development and AI-2-based cell-cell communication. <b>2014</b> , 117, 1472-86	8
868	Artificial <i>Klebsiella pneumoniae</i> biofilm model mimicking in vivo system: altered morphological characteristics and antibiotic resistance. <b>2014</b> , 67, 305-9	13
867	Optimized polymeric film-based nitric oxide delivery inhibits bacterial growth in a mouse burn wound model. <b>2014</b> , 10, 4136-42	62
866	Ionic liquids as a class of materials for transdermal delivery and pathogen neutralization. <b>2014</b> , 111, 13313-8	184
865	Fabrication of biomimetically patterned surfaces and their application to probing plant-bacteria interactions. <b>2014</b> , 6, 12467-78	32
864	Differentially instructive extracellular protein micro-nets. <b>2014</b> , 136, 7889-98	30

863	A status review on the medicinal properties of essential oils. <b>2014</b> , 62, 250-264	621
862	Characteristics of <i>Streptomyces griseus</i> biofilms in continuous flow tubular reactors. <b>2014</b> , 352, 157-64	12
861	Interaction between atypical microorganisms and <i>E. coli</i> in catheter-associated urinary tract biofilms. <b>2014</b> , 30, 893-902	22
860	The roles of epithelial cell contact, respiratory bacterial interactions and phosphorylcholine in promoting biofilm formation by <i>Streptococcus pneumoniae</i> and nontypeable <i>Haemophilus influenzae</i> . <b>2014</b> , 16, 640-7	7
859	Does <i>Campylobacter jejuni</i> form biofilms in food-related environments?. <b>2014</b> , 80, 5154-60	59
858	Quorum sensing-mediated regulation of staphylococcal virulence and antibiotic resistance. <b>2014</b> , 9, 669-81	53
857	Biofilm-eradicating properties of quaternary ammonium amphiphiles: simple mimics of antimicrobial peptides. <b>2014</b> , 15, 2211-5	102
856	Density of founder cells affects spatial pattern formation and cooperation in <i>Bacillus subtilis</i> biofilms. <b>2014</b> , 8, 2069-79	149
855	Stiffness of cross-linked poly(dimethylsiloxane) affects bacterial adhesion and antibiotic susceptibility of attached cells. <b>2014</b> , 30, 10354-62	90
854	Modeling of biofilm systems: a review. <b>2014</b> , 146, 53-76	37
853	The importance of microscopic characterization of membrane biofilms in an unconfined environment. <b>2014</b> , 348, 8-15	24
852	Competition-dispersal tradeoff ecologically differentiates recently speciated marine bacterioplankton populations. <b>2014</b> , 111, 5622-7	117
851	The effects of pH on wound healing, biofilms, and antimicrobial efficacy. <b>2014</b> , 22, 174-86	187
850	Role of force-sensitive amyloid-like interactions in fungal catch bonding and biofilms. <b>2014</b> , 13, 1136-42	19
849	Implementing tissue engineering and regenerative medicine solutions in medical implants. <b>2014</b> , 109, 3-18	9
848	Enhanced uranium immobilization and reduction by <i>Geobacter sulfurreducens</i> biofilms. <b>2014</b> , 80, 6638-46	56
847	Cheese rind communities provide tractable systems for in situ and in vitro studies of microbial diversity. <b>2014</b> , 158, 422-433	328
846	Draining the moat: disrupting bacterial biofilms with natural products. <b>2014</b> , 70, 6373-6383	26



845	Evolution of staying together in the context of diffusible public goods. <b>2014</b> , 360, 1-12	10
844	DNase I and proteinase K impair <i>Listeria monocytogenes</i> biofilm formation and induce dispersal of pre-existing biofilms. <b>2014</b> , 187, 26-32	88
843	Effect of solid boundaries on swimming dynamics of microorganisms in a viscoelastic fluid. <b>2014</b> , 53, 911-926	50
842	Identification and characterization of microbial biofilm communities associated with corroded oil pipeline surfaces. <b>2014</b> , 30, 823-35	67
841	The phosphotransferase system gene <i>ptsI</i> in the endophytic bacterium <i>Bacillus cereus</i> is required for biofilm formation, colonization, and biocontrol against wheat sharp eyespot. <b>2014</b> , 354, 142-52	34
840	Massive diversification in aging colonies of <i>Escherichia coli</i> . <b>2014</b> , 196, 3059-73	32
839	Revealing a world of biofilms--the pioneering research of Bill Costerton. <i>Nature Reviews Microbiology</i> , <b>2014</b> , 12, 781-7	22.2 30
838	The impact of natural transformation on adaptation in spatially structured bacterial populations. <b>2014</b> , 14, 141	6
837	Human plasma enhances the expression of Staphylococcal microbial surface components recognizing adhesive matrix molecules promoting biofilm formation and increases antimicrobial tolerance In Vitro. <b>2014</b> , 7, 457	39
836	Antiadhesive activity of poly-hydroxy butyrate biopolymer from a marine <i>Brevibacterium casei</i> MSI04 against shrimp pathogenic vibrios. <b>2014</b> , 13, 114	40
835	Cooperation and bacterial pathogenicity: an approach to social evolution. <b>2014</b> , 87,	
834	N-terminally modified linear and branched spermine backbone dipeptidomimetics against planktonic and sessile methicillin-resistant <i>Staphylococcus aureus</i> . <b>2014</b> , 58, 5435-47	13
833	Deposition of nanoparticles onto polysaccharide-coated surfaces: implications for nanoparticleBiofilm interactions. <b>2014</b> , 1, 117-122	26
832	Microbial engineering of floc Fe and trace element geochemistry in a circumneutral, remote lake. <b>2014</b> , 48, 6578-87	9
831	Bacterial interactions with proteins and cells relevant to the development of life-threatening endocarditis studied by use of a quartz-crystal microbalance. <b>2014</b> , 406, 3395-406	12
830	Unraveling microbial biofilms of importance for food microbiology. <b>2014</b> , 68, 35-46	54
829	Mechanically robust, flame-retardant and anti-bacterial nanocomposite films comprised of cellulose nanofibrils and magnesium hydroxide nanoplatelets in a regenerated cellulose matrix. <b>2014</b> , 21, 1859-1872	38
828	Structure-function analysis of <i>Staphylococcus aureus</i> amidase reveals the determinants of peptidoglycan recognition and cleavage. <b>2014</b> , 289, 11083-11094	23

827	The involvement of rhamnolipids in microbial cell adhesion and biofilm development - an approach for control?. <b>2014</b> , 58, 447-53	80
826	Biomimetic PEG-catecholates for stabile antifouling coatings on metal surfaces: applications on TiO <sub>2</sub> and stainless steel. <b>2014</b> , 117, 185-92	32
825	Label-free interdigitated microelectrode based biosensors for bacterial biofilm growth monitoring using Petri dishes. <b>2014</b> , 100, 77-83	38
824	Image-based 384-well high-throughput screening method for the discovery of skylamycins A to C as biofilm inhibitors and inducers of biofilm detachment in <i>Pseudomonas aeruginosa</i> . <b>2014</b> , 58, 1092-9	42
823	Minimum information about a biofilm experiment (MIABiE): standards for reporting experiments and data on sessile microbial communities living at interfaces. <b>2014</b> , 70, 250-6	31
822	8th International Conference on Practical Applications of Computational Biology & Bioinformatics (PACBB 2014). <b>2014</b> ,	1
821	A broad-spectrum antibiofilm peptide enhances antibiotic action against bacterial biofilms. <b>2014</b> , 58, 5363-71	198
820	Microbes in Beach Sands: Integrating Environment, Ecology and Public Health. <b>2014</b> , 13, 329-368	98
819	Changes in gene expression of <i>Actinobacillus pleuropneumoniae</i> in response to anaerobic stress reveal induction of central metabolism and biofilm formation. <b>2014</b> , 52, 473-81	16
818	In vitro synergism of fosfomycin and clarithromycin antimicrobials against methicillin-resistant <i>Staphylococcus pseudintermedius</i> . <b>2014</b> , 14, 129	6
817	Using liquid crystals to reveal how mechanical anisotropy changes interfacial behaviors of motile bacteria. <b>2014</b> , 107, 255-65	50
816	Distribution of organohalide-respiring bacteria between solid and aqueous phases. <b>2014</b> , 48, 10878-87	14
815	Development and Control of Bacterial Biofilms on Dairy Processing Membranes. <b>2014</b> , 13, 18-33	53
814	Impacts of engineered nanomaterials on microbial community structure and function in natural and engineered ecosystems. <b>2014</b> , 98, 8457-68	30
813	Hyperhalophilic archaeal biofilms: growth kinetics, structure, and antagonistic interaction in continuous culture. <b>2014</b> , 30, 237-45	7
812	Phosphorylated DegU manipulates cell fate differentiation in the <i>Bacillus subtilis</i> biofilm. <b>2014</b> , 196, 16-27	40
811	Hydrocarbonoclastic biofilms based on sewage microorganisms and their application in hydrocarbon removal in liquid wastes. <b>2014</b> , 60, 477-86	9
810	Chemical functionalization of bone implants with nanoparticle-stabilized chitosan and methotrexate for inhibiting both osteoclastoma formation and bacterial infection. <b>2014</b> , 2, 5952-5961	23

809	Studying the influence of surface topography on bacterial adhesion using spatially organized microtopographic surface patterns. <b>2014</b> , 30, 4633-41	129
808	RIR-MAPLE deposition of multifunctional films combining biocidal and fouling release properties. <b>2014</b> , 2, 4371-4378	44
807	Comparison of real time impedance monitoring of bacterial biofilm cultures in different experimental setups mimicking real field environments. <b>2014</b> , 195, 667-676	22
806	Inactivation of <i>Propionibacterium acnes</i> and its biofilm by non-thermal plasma. <b>2014</b> , 14, S142-S148	24
805	Soft tissue integration versus early biofilm formation on different dental implant materials. <b>2014</b> , 30, 716-27	122
804	[Biofilms in otolaryngology]. <b>2014</b> , 65, 47-52	5
803	Growth phenotype screening of <i>Schizosaccharomyces pombe</i> using a Lensless microscope. <b>2014</b> , 54, 345-50	3
802	Direct measurement and characterization of active photosynthesis zones inside wastewater remediating and biofuel producing microalgal biofilms. <b>2014</b> , 156, 206-15	40
801	A multifunctional streptococcal collagen-mimetic protein coating prevents bacterial adhesion and promotes osteoid formation on titanium. <b>2014</b> , 10, 3354-62	35
800	Biofilms in Otolaryngology. <b>2014</b> , 65, 47-52	
799	Streptococci biofilm decontamination on teeth by low-temperature air plasma of dc corona discharges. <b>2014</b> , 47, 224014	35
798	Biofilm formation enhances fomite survival of <i>Streptococcus pneumoniae</i> and <i>Streptococcus pyogenes</i> . <b>2014</b> , 82, 1141-6	47
797	Multi-scale strategy to eradicate <i>Pseudomonas aeruginosa</i> on surfaces using solid lipid nanoparticles loaded with free fatty acids. <b>2014</b> , 6, 825-32	23
796	Microbial biofilms and wound healing: an ecological hypothesis. <b>2014</b> , 29, 168-173	7
795	Tolérance des biofilms aux antibiotiques : comprendre pour mieux traiter. <b>2014</b> , 16, 112-121	2
794	Aminoglycoside inhibition of <i>Staphylococcus aureus</i> biofilm formation is nutrient dependent. <b>2014</b> , 63, 861-869	18
793	Inhibition of <i>Enterococcus faecalis</i> biofilm formation by highly active lactones and lactams analogues of rubrolides. <b>2014</b> , 82, 127-38	41
792	Inhibition of biofilm formation by conformationally constrained indole-based analogues of the marine alkaloid oroidin. <b>2014</b> , 24, 2530-4	22

791	Attachment and biofilm formation by foodborne bacteria in meat processing environments: causes, implications, role of bacterial interactions and control by alternative novel methods. <b>2014</b> , 97, 298-309	212
790	Chemical shift assignments and secondary structure prediction of the master biofilm regulator, SinR, from <i>Bacillus subtilis</i> . <b>2014</b> , 8, 155-8	5
789	Bacterial Strategies for Survival in the Host. <b>2014</b> , 425-440	1
788	More than Just a Quorum: Integration of Stress and Other Environmental Cues in Acyl-Homoserine Lactone Signaling. <b>2014</b> , 349-363	3
787	Remote magnetic actuation of micrometric probes for in situ 3D mapping of bacterial biofilm physical properties. <b>2014</b> ,	1
786	Nano and Microscale Topographies for the Prevention of Bacterial Surface Fouling. <b>2014</b> , 4, 37-59	97
785	Surface-associated microbes continue to surprise us in their sophisticated strategies for assembling biofilm communities. <b>2014</b> , 6, 26	22
784	Biofilms. <b>2014</b> , 365-373	1
783	Effects of warming and nutrient enrichment on how grazing pressure affects leaf litter-colonizing bacteria. <b>2014</b> , 43, 851-8	8
782	The BiofilmMode of Life. <b>2014</b> , 277-291	
781	Structure and Properties of Mucins. <b>2014</b> , 133-158	
780	Rhamnolipids: Characteristics, Production, Applications, and Analysis. <b>2014</b> , 65-120	3
779	Antimicrobial activity of water resistant surface coating from catechol conjugated polyquaternary amine on versatile substrates. <b>2014</b> , 131, n/a-n/a	1
778	Undulatory swimming in non-Newtonian fluids. <b>2015</b> , 784,	34
777	Candida Biofilms: Development, Architecture, and Resistance. <b>2015</b> , 3,	77
776	Bacterial community analysis of drinking water biofilms in southern Sweden. <b>2015</b> , 30, 99-107	39
775	Low and atmospheric plasma polymerisation of nanocoatings for bio-applications. <b>2015</b> , 3, 63-83	29
774	Current Knowledge and Perspectives on Biofilm Formation and Remediation. <b>2015</b> , 1-28	1

- 773 Fungal Biofilms: Formation, Resistance and Pathogenicity. **2015**, 291-314
- 772 Molecular tweeting. **2015**, 3
- 771 Formation and dissolution of bacterial colonies. **2015**, 92, 032704 10
- 770 Artificial biofilms establish the role of matrix interactions in staphylococcal biofilm assembly and disassembly. **2015**, 5, 13081 42
- 769 Successful treatment of biofilm infections using shock waves combined with antibiotic therapy. **2015**, 5, 17440 47
- 768 Genome-scale modelling of microbial metabolism with temporal and spatial resolution. **2015**, 43, 1164-71 20
- 767 Protocols for Harvesting a Microbial Community Directly as a Biofilm for the Remediation of Oil Sands Process Water. **2015**, 131-152 2
- 766 Using Knock-Out Mutants to Investigate the Adhesion of to Abiotic Surfaces. **2021**, 22, 0
- 765 Phototherapy and optical waveguides for the treatment of infection. **2021**, 179, 114036 7
- 764 Arginine Induced Biofilm Detachment Using a Novel Rotating-Disc Rheometry Method. **2021**, 11, 784388 0
- 763 Effect of Clove Essential Oil (*Syzygium aromaticum*) on Some Virulence Factors of *Staphylococcus aureus*. **2020**, 14, 13-19
- 762 Characterization of harbouring in patients with haematological malignancy and hospital environments at a medical centre in Japan. **2020**, 69, 999-1004 0
- 761 Biofilm Growth: Perspectives on Two-Phase Mixture Flow and Fingerings Formation. **2006**, 273-290
- 760 Drivers of bacterial colonization patterns in stream biofilms. **2010**,
- 759 Nanotechnology and Diabetic Foot Ulcer: Future Prospects. **2021**, 331-357 0
- 758 Lifestyle-specific S-nitrosylation of protein cysteine thiols regulates *Escherichia coli* biofilm formation and resistance to oxidative stress.
- 757 A bacterial inflammation sensor regulates c-di-GMP signaling, adhesion, and biofilm formation.
- 756 Eucalyptol inhibits biofilm formation of and its mediated virulence factors. **2020**, 69, 1308-1318 4

- 755 Cell population migration cycle and response to environmental pH in *Bacillus subtilis*.
- 754 Rational tuning of a membrane-perforating antimicrobial peptide to selectively target membranes of different lipid composition. 1
- 753 Viscophobic turning dictates microalgae transport in viscosity gradients.
- 752 Stopping the Unstoppable: Unconventional Methods to Prevent the Biofilm Growth. **2020**, 17, 515-522 0
- 751 Çiğdem Ortamda hayata tutunma: Bakteriyel biyofilmler. 1
- 750 Antimicrobial Fillers for Dental Restorative Materials. **2021**, 359-392 0
- 749 Frequency of and virulence genes in drug resistant clinical isolates of and their role in biofilm formation. **2017**, 20, 849-855 8
- 748 Biofilm formation by *Haemophilus influenzae* isolated from adeno-tonsil tissue samples, and its role in recurrent adenotonsillitis. **2007**, 27, 134-8 24
- 747 The use of superparamagnetic nanoparticles for prosthetic biofilm prevention. **2009**, 4, 145-52 63
- 746 Why diabetic wounds do not heal. **2012**, 39, 860-1
- 745 Effect of subinhibitory concentrations of fluoroquinolones on biofilm production by clinical isolates of *Streptococcus pyogenes*. **2013**, 137, 963-71 9
- 744 [Bacterial biofilms: their importance in animal health and public health]. **2014**, 78, 110-6 7
- 743 Detection of cell surface hydrophobicity, biofilm and fimbriae genes in salmonella isolated from tunisian clinical and poultry meat. **2014**, 43, 423-31 13
- 742 The management of biofilm formation after hyaluronic acid gel filler injections: a review. **2013**, 86, 192-5 10
- 741 *Pseudomonas Aeruginosa* Lectins As Targets for Novel Antibacterials. **2015**, 7, 29-41 15
- 740 The inhibitory effect of a *Lactobacillus acidophilus* derived biosurfactant on biofilm producer *Serratia marcescens*. **2015**, 18, 1001-7 23
- 739 Activity of Linezolid in Combination with Photodynamic Inactivation Against Biofilms. **2017**, 9, 44-48 4
- 738 and Infection in Synthetic Hair Implants. **2017**, 9, 82-86 3

737	Antimicrobial Effect of Copper Oxide Nanoparticles on Some Oral Bacteria and Candida Species. <b>2017</b> , 4, 347-352	14
736	Estimation of biofilm, proteinase & phospholipase production of the species isolated from the oropharyngeal samples in HIV-infected patients. <b>2017</b> , 145, 635-640	1
735	Role of antigen-43 on biofilm formation and horizontal antibiotic resistance gene transfer in non-O157 Shiga toxin producing strains. <b>2017</b> , 9, 89-96	3
734	[Effects of Yili dark bee propolis on oral cariogenic biofilm in vitro]. <b>2015</b> , 33, 343-6	
733	Characterization of the first highly predatory from Iran and its potential lytic activity against principal pathogenic. <b>2020</b> , 23, 1275-1285	1
732	Biofilm Production Potential of Serovars Isolated from Chickens in North West Province, South Africa. <b>2020</b> , 69, 427-439	
731	Growing emergence of drug-resistant and attenuation of its virulence using quorum sensing inhibitors: A critical review. <b>2021</b> , 24, 699-719	1
730	Antibiotics- and Heavy Metals-Based Titanium Alloy Surface Modifications for Local Prosthetic Joint Infections. <b>2021</b> , 10,	0
729	Crystal Structure of VpsR Revealed Novel Dimeric Architecture and c-di-GMP Binding Site: Mechanistic Implications in Oligomerization, ATPase Activity and DNA Binding. <b>2021</b> , 434, 167354	3
728	Recent advances in orthopedic polyetheretherketone biomaterials: Material fabrication and biofunction establishment. <b>2022</b> , 3, 20-36	4
727	Biofilm-mediated bioremediation of polycyclic aromatic hydrocarbons: current status and future perspectives. <b>2022</b> , 547-570	0
726	Nonlinear inclusion theory with application to the growth and morphogenesis of a confined body. <b>2022</b> , 159, 104709	2
725	Design principles for bacteria-responsive antimicrobial nanomaterials. <b>2022</b> , 23, 100606	2
724	Antibiotics- and Heavy Metals-Based Titanium Alloy Surface Modifications for Local Prosthetic Joint Infections. <b>2021</b> , 10, 1270	1
723	Type IV Pili of Streptococcus sanguinis Contribute to Pathogenesis in Experimental Infective Endocarditis. <b>2021</b> , e0175221	1
722	Rhizobacteria Impact Colonization of Listeria monocytogenes on Arabidopsis thaliana Roots. <b>2021</b> , 87, e0141121	0
721	A Thin-Film Lubrication Model for Biofilm Expansion Under Strong Adhesion.	
720	Preventing Biofilms on Indwelling Catheters by Surface-Bound Enzymes.. <b>2021</b> , 4, 8248-8258	0

719	Direct Visualization of Chemical Cues and Cellular Phenotypes throughout <i>Bacillus subtilis</i> Biofilms. <b>2021</b> , e0103821	1
718	Emergent bacterial community properties induce enhanced drought tolerance in <i>Arabidopsis</i> . <b>2021</b> , 7, 82	4
717	Colistin Induces Resistance through Biofilm Formation, via Increased Expression, in Avian Pathogenic. <b>2021</b> , 10,	1
716	Biospeckle Analysis and Biofilm Electrostatic Tests, Two Useful Methods in Microbiology. <b>2021</b> , 1, 557-572	
715	A review on microplastic pollution in the mangrove wetlands and microbial strategies for its remediation. <b>2021</b> , 29, 4865	1
714	Mechanical forces drive a reorientation cascade leading to biofilm self-patterning. <b>2021</b> , 12, 6632	7
713	Multifunctional Antibiotic-Host Defense Peptide Conjugate Kills Bacteria, Eradicates Biofilms, and Modulates the Innate Immune Response. <b>2021</b> , 64, 16854-16863	2
712	CONTEMPLATION OF SYMBIOTIC MICROBIAL BIOFILMS IN WASTEWATER TREATMENT. 24-31	
711	Gut biofilms: <i>Bacteroides</i> as model symbionts to study biofilm formation by intestinal anaerobes. <b>2021</b> ,	2
710	Physical and Methodological Perspectives on the Optical Properties of Biological Samples: A Review. <b>2021</b> , 8, 540	
709	Chronic Tonsillopharyngitis. <b>2022</b> , 525-531	
708	Two-Step Approach Using Degradable Magnesium to Inhibit Surface Biofilm and Subsequently Kill Planktonic Bacteria. <b>2021</b> , 9,	
707	Three faces of biofilms: a microbial lifestyle, a nascent multicellular organism, and an incubator for diversity. <b>2021</b> , 7, 80	19
706	Scale invariance of cell size fluctuations in starving bacteria. <b>2021</b> , 4,	1
705	The Role of the Surface on Bacteria-Implant Interactions. <b>2022</b> , 31-39	
704	Oriented immobilization of Pep19-2.5 on antifouling brushes suppresses the development of <i>Staphylococcus aureus</i> biofilms. <b>2021</b> , 163, 106609	0
703	Infection microenvironment-related antibacterial nanotherapeutic strategies. <b>2021</b> , 280, 121249	13
702	Nanoantibiotics Based in Mesoporous Silica Nanoparticles: New Formulations for Bacterial Infection Treatment.. <b>2021</b> , 13,	3



701	Paradox of complex diversity: Challenges in the diagnosis and management of bacterial keratitis. <b>2021</b> , 101028	2
700	Etiology and Pathogenesis of Knee Replacement Infections. <b>2022</b> , 9-27	
699	A semi high-throughput method for real-time monitoring of curli producing biofilms on air-solid interfaces. <b>2021</b> , 3, 100060	0
698	Control of Foodborne by Shikonin, a Natural Extract.. <b>2021</b> , 10,	3
697	Tailoring Time-varying Alkaline Microenvironment on Titanium for Sequential Anti-infection and Osseointegration. <b>2021</b> , 431, 133940	4
696	Plasma for biomedical decontamination: from plasma-engineered to plasma-active antimicrobial surfaces. <b>2022</b> , 36, 100764	4
695	Comparative characteristics of metabolites from various cyanobacteria biofilms. <b>2021</b> , 16-23	
694	Phase-Sensitive Characterization of Dynamics in Biofilms in Response to Chemical Cues. <b>2021</b> ,	
693	Preparation of medical hydrophilic and antibacterial silicone rubber surface modification.. <b>2021</b> , 11, 39950-39957	
692	Contributions of Extracellular Vesicles to Fungal Biofilm Pathogenesis.. <b>2021</b> , 432, 67-79	0
691	Microbial Growth. <b>2021</b> ,	
690	A Novel Strategy for Creating an Antibacterial Surface Using a Highly Efficient Electrospray-Based Method for Silica Deposition.. <b>2022</b> , 23,	0
689	Transcriptomic analysis of F113 reveals the antagonistic roles of AmrZ and FleQ during rhizosphere adaption.. <b>2022</b> , 8,	0
688	Why do microbes make minerals?. <b>2022</b> , 354, 1-39	2
687	Mycobacterial MMAR_2193 catalyzes O-methylation of diverse polyketide cores.. <b>2022</b> , 17, e0262241	
686	Crystal Violet Staining Alone Is Not Adequate to Assess Synergism or Antagonism in Multi-Species Biofilms of Bacteria Associated With Bacterial Vaginosis.. <b>2021</b> , 11, 795797	4
685	Substrate-independent adsorption of nanoparticles as anti-biofilm coatings. <b>2021</b> ,	0
684	Potent eradication of mixed-species biofilms using photodynamic inactivation coupled with slightly alkaline electrolyzed water. <b>2022</b> , 155, 112958	1

- 683 Exogenous N-hexanoyl-L-homoserine lactone assists in upflow anaerobic sludge blanket recovery from acetate accumulation via aceticlastic methanogens enrichment.. **2021**, 126600 0
- 682 Hijacking host components for bacterial biofilm formation: An advanced mechanism.. **2021**, 103, 108471 2
- 681 *Bacillus subtilis* rhizobacteria ameliorate heat stress in the common bean. **2022**, 21, 100472 2
- 680 Self-healing effect of damaged coatings via biomineralization by *Shewanella putrefaciens*. **2022**, 196, 110067 2
- 679 Of biofilms and beehives: An analogy-based instructional tool to introduce biofilms in school and undergraduate curriculum.. **2022**, 4, 100066 0
- 678 Dual Antibiotic and Diffusible Signal Factor Combination Nanoliposomes for Combating Biofilm. **2021**, 11, 684-692 0
- 677 Biofilm Production Potential of *Salmonella* Serovars Isolated from Chickens in North West Province, South Africa. **2020**, 69, 427-439 2
- 676 Dynamic interspecies interactions and robustness in a four-species model biofilm.. **2021**, 10, e1254 0
- 675 A Supervised Machine-Learning Prediction of Textile Antimicrobial Capacity Coated with Nanomaterials. **2021**, 11, 1532 3
- 674 A novel phage indirectly regulates diatom growth by infecting diatom-associated biofilm-forming bacterium.. **2022**, AEM0213821 0
- 673 Full Issue PDF.. **2022**, 35, 1-96
- 672 Application of Semi-Mechanistic Pharmacokinetic and Pharmacodynamic Model in Antimicrobial Resistance.. **2022**, 14, 1
- 671 In vitro Antifungal Activity of a Novel Antimicrobial Peptide AMP-17 Against Planktonic Cells and Biofilms of .. **2022**, 15, 233-248 0
- 670 Phase Variation of LPS and Capsule Is Responsible for Stochastic Biofilm Formation in .. **2021**, 11, 808550 0
- 669 Modular Synthetic Routes to Fluorine-Containing Halogenated Phenazine and Acridine Agents That Induce Rapid Iron Starvation in Methicillin-Resistant Biofilms.. **2022**, 1
- 668 Tylosin Inhibits Biofilm Formation by Interacting With the O-acetylserine (thiol)-lyase B CysM.. **2021**, 8, 829899 0
- 667 Experimental Designs to Study the Aggregation and Colonization of Biofilms by Video Microscopy With Statistical Confidence.. **2021**, 12, 785182 0
- 666 Antimicrobial Biocomposites Fiber-Welded with Lignocellulose Containing Silver Nanoparticles. 2100872 1

665	Nonconformity of biofilm formation in vivo and in vitro based on <i>Staphylococcus aureus</i> accessory gene regulator status.. <b>2022</b> , 12, 1251	2
664	Downregulation of the farnesoid X receptor promotes colorectal tumorigenesis by facilitating enterotoxigenic <i>Bacteroides fragilis</i> colonization.. <b>2022</b> , 177, 106101	1
663	-A Known Opponent against Host Defense Mechanisms and Vaccine Development-Do We Still Have a Chance to Win?. <b>2022</b> , 23,	2
662	Proteomic and Transcriptomic Analyses Indicate Reduced Biofilm-Forming Abilities in Cefiderocol-Resistant .. <b>2021</b> , 12, 778190	2
661	Research and implementations of biofiltration for sustainable water treatment. <b>2022</b> , 217-234	
660	Biofilm and Chronic Typhoid Carriers with Special Reference to Bacteriophage Therapy. <b>2022</b> , 11, 36-41	
659	Chapter 3. Branched Metallic Nanocrystals: Synthesis, Properties, and Photothermal Applications. <b>2022</b> , 81-134	
658	Horizontally acquired cellulases assist the expansion of dietary range in <i>Pristionchus</i> nematodes.. <b>2022</b> ,	0
657	Validated In Silico Model for Biofilm Formation in .. <b>2022</b> ,	0
656	Thin-film lubrication model for biofilm expansion under strong adhesion.. <b>2022</b> , 105, 014408	0
655	Complicated Wounds. <b>2022</b> , 27-38	
654	Size-selective characterization of porous media via tortuous network analysis. <b>2022</b> , 66, 219-233	0
653	Analysis of Antibiofilm Activities of Bioactive Compounds from Honeyweed ( <i>Leonurus sibiricus</i> ) Against <i>P. aeruginosa</i> : an In Vitro and In Silico Approach.. <b>2022</b> , 1	1
652	Antibacterial and antibiofilm activity of bacterially reduced graphene oxide against some MDR bacterial pathogens isolated from urinary tract infections. <b>2022</b> ,	0
651	Antimicrobial Peptides and Macromolecules for Combating Microbial Infections: From Agents to Interfaces.. <b>2022</b> ,	6
650	Multiscale X-ray study of biofilms reveals interlinked structural hierarchy and elemental heterogeneity.. <b>2022</b> , 119,	1
649	Optimization and Antibacterial Response of N-Halamine Coatings Based on Polydopamine. <b>2022</b> , 6, 9	1
648	Peroxidase-Mimetic Copper-doped Carbon-Dots for Oxidative Stress-Mediated Broad-Spectrum and Efficient Antibacterial Activity.. <b>2022</b> ,	0

- 647 Multiplexed Identification of Bacterial Biofilm Infections Based on Machine-Learning-Aided Lanthanide Encoding.. **2022**, 5
- 646 Repurposing the Veterinary Antibiotic Apramycin for Antibacterial and Antibiofilm Activity Against From Cystic Fibrosis Patients.. **2021**, 12, 801152
- 645 Are Bacterial Persisters Dormant Cells Only?. **2021**, 12, 708580 0
- 644 Modular 3D-Printed Peg Biofilm Device for Flexible Setup of Surface-Related Biofilm Studies.. **2021**, 11, 802303 0
- 643 Therapeutic Effects of Inhaled Nitric Oxide Therapy in COVID-19 Patients.. **2022**, 10, 7
- 642 Diversified antibacterial modification and latest applications of polysaccharide-based hydrogels for wound healthcare. **2022**, 26, 101396 4
- 641 Surface modification of titanium implants by pH-Responsive coating designed for Self-Adaptive antibacterial and promoted osseointegration. **2022**, 435, 134802 1
- 640 Biofilm-overproducing *Bacillus subtilis* B12 $\Delta$ wcc decreases Cd uptake in Chinese cabbage through increasing Cd-immobilizing related gene abundance and root surface colonization. **2022**, 120, 84-93 0
- 639 Manganese oxide nanomaterials for bacterial infection detection and therapy.. **2022**, 4
- 638 Biofilm disruption and bactericidal activity of aqueous ozone coupled with ultrasonic dental scaling. **2022**, 1, 100003 1
- 637 Riboflavin as a promising antimicrobial agent? A multi-perspective review.. **2022**, 3, 100111 1
- 636 Data-driven modeling of heterogeneous viscoelastic biofilms.. **2022**, 0
- 635 The Response Regulator FlmD Regulates Biofilm Formation in through the Transcriptional Activator SoxR.. **2022**, 10,
- 634 The biogeography of infection revisited.. *Nature Reviews Microbiology*, **2022**, 22.2 1
- 633 Surface modification of carbon dots with tetraalkylammonium moieties for fine tuning their antibacterial activity.. **2022**, 112697 0
- 632 Complex Analysis of Vanillin and Syringic Acid as Natural Antimicrobial Agents against Biofilms.. **2022**, 23, 1
- 631 Founder cell configuration drives competitive outcome within colony biofilms.. **2022**, 1
- 630 Dopamine Assisted Self-Cleaning, Antifouling, and Antibacterial Coating Dynamic Covalent Interactions.. **2022**, 2

- 629 Regulation of ECP fimbriae-related genes by the transcriptional regulator RcsAB in *Klebsiella pneumoniae* NTUH-K2044.. **2022**, 0
- 628 The stress response mechanisms of biofilm formation under sub-lethal photocatalysis. **2022**, 121200 2
- 627 Biophysical properties at patch scale shape the metabolism of biofilm landscapes.. **2022**, 8, 5 1
- 626 Solid-State NMR Investigations of Extracellular Matrixes and Cell Walls of Algae, Bacteria, Fungi, and Plants. **2021**, 7
- 625 Algal Nanotechnology for Wastewater Treatment. **2021**, 365-382
- 624 Identification of novel candidates for inhibition of LasR, a quorum-sensing receptor of multidrug resistant *Pseudomonas aeruginosa*, through a specialized multi-level in silico approach. 0
- 623 Characterising the mechanics of cell-cell adhesion in plants. **2022**, 3, 0
- 622 Plasmonic photoreactors-coated plastic tubing as combined-active-and-passive antimicrobial flow sterilizer.. **2022**,
- 621 Identification of a *Candida albicans* Biofilm Inhibitor. **2022**, 12, 23-29
- 620 Design and Development of Antibacterial Metal Implants. **2022**, 163-175 0
- 619 Detection and Molecular Characterization of *Salmonella* Species on U.S. Goat Operations.
- 618 Mechanisms of stress adaptation by bacterial communities. **2022**, 247-258 0
- 617 Current Trends and Future Prospective of Anti-biofilm Compounds from Marine Macroalgae: An Overview. **2022**, 519-538
- 616 Antibacterial Surface Modification to Prevent Biofilm Formation on Polymeric Biomaterials. **2022**, 425-455
- 615 Photo-switchable supramolecular comb-like polymer brush based on host-guest recognition for use as antimicrobial smart surface.. **2022**, 1
- 614 Anti-Adhesion and Antibiofilm Activity of Miller Extract Targeting Cell Adhesion Proteins of Food-Borne Bacteria as a Potential Mechanism: Combined In Vitro-In Silico Approach.. **2022**, 11, 4
- 613 Effect of Bacteriocin (ALC102) of *Enterococcus faecium* GRD AA on Biofilm Forming *Listeria monocytogenes* MTCC 657. **2022**, 16, 481-493
- 612 R-based method for quantitative analysis of biofilm thickness by using Confocal Laser Scanning Microscopy. 0

611	Recent Strategies to Combat Biofilms Using Antimicrobial Agents and Therapeutic Approaches.. <b>2022</b> , 11,	2
610	Type IV Pilus Shapes a 'Bubble-Burst' Pattern Opposing Spatial Intermixing of Two Interacting Bacterial Populations.. <b>2022</b> , e0194421	0
609	Therapeutic efficacy of antimalarial drugs targeting DosRS signaling in .. <b>2022</b> , 14, eabj3860	0
608	Complete genome sequence of biocontrol strain <i>Paenibacillus peoriae</i> HJ-2 and further analysis of its biocontrol mechanism.. <b>2022</b> , 23, 161	0
607	A microfluidic platform for characterizing the structure and rheology of biofilm streamers.	1
606	How Good are Bacteriophages as an Alternative Therapy to Mitigate Biofilms of Nosocomial Infections.. <b>2022</b> , 15, 503-532	0
605	Cadaverine Is a Switch in the Lysine Degradation Pathway in Biofilm Identified by Untargeted Metabolomics.. <b>2022</b> , 12, 833269	0
604	Inactivation of Polymicrobial Biofilms of Foodborne Pathogens Using Epsilon Poly-L-Lysin Conjugated Chitosan Nanoparticles.. <b>2022</b> , 11,	3
603	Exploring the role of microbial biofilm for industrial effluents treatment.. <b>2022</b> , 13, 6420-6440	1
602	Strategies to improve the potency of oxazolidinones towards bacterial biofilms.. <b>2022</b> ,	0
601	Antimicrobial peptide-inspired antibacterial polymeric materials for biosafety. <b>2022</b> ,	1
600	Plasma bioscience for medicine, agriculture and hygiene applications.. <b>2022</b> , 1-35	4
599	A critical analysis of research methods and experimental models to study irrigants and irrigation systems.. <b>2022</b> ,	0
598	Synergistic antimicrobial activity of TZP4 with conventional antibiotics against antibiotic-resistant <i>Pseudomonas aeruginosa</i> .	
597	Review of Label-Free Monitoring of Bacteria: From Challenging Practical Applications to Basic Research Perspectives.. <b>2022</b> , 12,	0
596	Movement with meaning: integrating information into meta-ecology.	2
595	Antibacterial activities of polyphenols against foodborne pathogens and their application as antibacterial agents.	3
594	Microbial exopolymeric substances and biosurfactants as Bioavailability enhancersFor polycyclic aromatic hydrocarbons biodegradation. 1	0

593	Leveraging bacterial survival mechanism for targeting and photodynamic inactivation of bacterial biofilms with red natural AIEgen. <b>2022</b> , 3, 100803	2
592	Are late hernia mesh complications linked to Staphylococci biofilms?. <b>2022</b> , 1	1
591	Mechanical Resilience of Biofilms toward Environmental Perturbations Mediated by Extracellular Matrix. 2110699	1
590	Incorporating Boron into Niobic Acid Nanosheets Enables Generation of Multiple Reactive Oxygen Species for Superior Antibacterial Action.. <b>2022</b> , e2107333	0
589	Type two secretion systems secretins are necessary for exopolymeric slime secretion in cyanobacteria and myxobacteria.	
588	Bioactive compounds: a goldmine for defining new strategies against pathogenic bacterial biofilms?. <b>2022</b> , 1-33	
587	Drug-dependent growth curve reshaping reveals mechanisms of antifungal resistance in <i>Saccharomyces cerevisiae</i> .. <b>2022</b> , 5, 292	
586	Biofilm Formation by Pathogenic Bacteria: Applying a Model to Appraise Potential Targets for Therapeutic Intervention.. <b>2022</b> , 11,	2
585	Biofilm through the Looking Glass: A Microbial Food Safety Perspective.. <b>2022</b> , 11,	5
584	Mesoporous Silk-Bioactive Glass Nanocomposites as Drug Eluting Multifunctional Conformal Coatings for Improving Osseointegration and Bactericidal Properties of Metal Implants.. <b>2022</b> ,	1
583	Hurdle technology using encapsulated enzymes and essential oils to fight bacterial biofilms.. <b>2022</b> , 106, 2311	1
582	Transport of complex and active fluids in porous media. <b>2022</b> , 66, 375-397	2
581	The Products of Probiotic Bacteria Effectively Treat Persistent Biofilms.. <b>2022</b> , 14,	0
580	Leaky Gum: The Revisited Origin of Systemic Diseases.. <b>2022</b> , 11,	0
579	Effects of Er, Cr: YSGG Laser on Shear Bond Strength of the Orthodontic Brackets for 5 and 10 Seconds: An In Vitro Study.. <b>2022</b> , 2022, 9126699	0
578	Mechanisms of interactions between bacteria and bacteriophage mediate by quorum sensing systems.. <b>2022</b> , 106, 2299	4
577	The structural role of bacterial eDNA in the formation of biofilm streamers.. <b>2022</b> , 119, e2113723119	4
576	Toxicity elimination of phenanthrene to wheat mediated by enhanced <i>Pseudomonas</i> sp. JM2-gfp biofilm degradation. 1	

575	Flow-based method for biofilm microbiota enrichment and exploration of metagenomes.. <b>2022</b> , 12, 36	
574	Effect of pH and Salinity on the Ability of Serotypes to Form Biofilm.. <b>2022</b> , 13, 821679	1
573	In Vitro Antimicrobial Potential of CAPE and Caffeamide Derivatives against Oral Microbes.. <b>2022</b> , 23,	0
572	Staphylococcus aureus utilizes environmental RNA as a building material in specific polysaccharide-dependent biofilms.. <b>2022</b> , 8, 17	0
571	Microbiologically Influenced Corrosion of Copper and Its Alloys in Anaerobic Aqueous Environments: A Review.. <b>2022</b> , 13, 806688	1
570	Flagellar Motility During E. Coli Biofilm Formation Provides a Competitive Disadvantage Which Recedes in the Presence of Co-Colonizers.	
569	Using Hydraulic Transients for Biofilm Detachment in Water Distribution Systems: Approximated Model. <b>2022</b> , 148,	1
568	Small Prokaryotic DNA-Binding Proteins Protect Genome Integrity throughout the Life Cycle.. <b>2022</b> , 23,	0
567	Key role of quorum-sensing mutations in the development of Staphylococcus aureus clinical device-associated infection.. <b>2022</b> , 12, e801	1
566	Present status and future directions - irrigants and irrigation methods.. <b>2022</b> ,	6
565	Identification, Characterization, and Efficacy Evaluation of Bacillus velezensis for Shot-Hole Disease Biocontrol in Flowering Cherry.. <b>2022</b> , 38, 115-130	2
564	Evidence for a widespread third system for bacterial polysaccharide export across the outer membrane comprising a composite OPX/E-barrel translocon.	0
563	Biofilm-Related Drug Resistance and New Developments in Its Anti-Biofilm Agents.. <b>2022</b> , 15, 1561-1571	3
562	Activity-induced interactions and cooperation of artificial microswimmers in one-dimensional environments.. <b>2022</b> , 13, 1772	1
561	Huddling together to survive: Population density as a survival strategy of non-spore forming bacteria under nutrient starvation and desiccation at solid-air interfaces.. <b>2022</b> , 258, 126997	0
560	Response of amino acid metabolism to decreased temperatures in anammox consortia: Strong, Efficient and flexible.. <b>2022</b> , 127099	1
559	Microbial biofilms: Recent advances and progress in environmental bioremediation.. <b>2022</b> , 153843	6
558	Intelligent sterilizable self-cleaning membranes triggered by sustainable counterion-induced bacteria killing/releasing procedure. <b>2022</b> , 440, 135798	0



- 557 A review of risk-based decision-making models for microbiologically influenced corrosion (MIC) in offshore pipelines. **2022**, 223, 108474 3
- 556 Bacterial biofilms as platforms engineered for diverse applications.. **2022**, 107932 2
- 555 Correlation of structural extracellular polymeric substances in the mesh biofilms with solids retention time and biofilm hydraulic resistance in dynamic membrane bioreactors.. **2022**, 832, 155000
- 554 Performance of halotolerant bacteria associated with Sahara-inhabiting halophytes *Atriplex halimus* L. and *Lygeum spartum* L. ameliorate tomato plant growth and tolerance to saline stress: from selective isolation to genomic analysis of potential determinants.. **2021**, 38, 16 0
- 553 *Burkholderia cepacia* Complex, an Emerging Nosocomial Pathogen at Health Care Facilities in Sebha, Libya. **2021**, 9, 178-184
- 552 A diguanylate cyclase regulates biofilm formation in sp. NJ-530 from Antarctica.. **2022**, 12, 27
- 551 Role of Multispecies Biofilms with a Dominance of *Bacillus subtilis* in the Rhizosphere. **2021**, 48, S47-S64 0
- 550 In-vitro Anti-Tuberculosis, Anti-Efflux Pumps and Anti-Biofilm Effects of *Crinum Asiaticum* Bulbs. **2021**, 14, 1905-1915 1
- 549 Probiotics as Therapeutic Tools against Pathogenic Biofilms: Have We Found the Perfect Weapon?. **2021**, 12, 916-937 2
- 548 Activity of Moxifloxacin Against Biofilms Formed by Clinical Isolates of Differing by Their Resistant or Persister Character to Fluoroquinolones.. **2021**, 12, 785573 0
- 547 In situ control of rootBacteria interactions using optical trapping in transparent soil.
- 546 Effect of Plasmonic Gold Nanoprisms on Biofilm Formation and Heat Shock Proteins Expression in Human Pathogenic Bacteria.. **2021**, 14, 2
- 545 Social evolution of shared biofilm matrix components. 0
- 544 The role of surface adhesion on the macroscopic wrinkling of biofilms.
- 543 Plasmonic Au@Ag@mSiO Nanorattles for In Situ Imaging of Bacterial Metabolism by Surface-Enhanced Raman Scattering Spectroscopy.. **2021**, 13, 61587-61597 2
- 542 The maltose transporter subunit IICB of the phosphotransferase system: An important factor for biofilm formation of *Cronobacter*.. **2021**, 109517 0
- 541 Chemotactic movement and zeta potential dominate attachment and biocathode development. **2021**, 1-35
- 540 Utilizing domain-based features to improve classification accuracy of biomedical text having bacterial associations. **2021**,

- 539 Single-Walled Carbon Nanotube Probes for the Characterization of Biofilm-Degrading Enzymes Demonstrated against Extracellular Matrices.. **2021**, 1
- 538 Spreading rates of bacterial colonies depend on substrate stiffness and permeability. **2022**, 1, 2
- 537 Updates in the Use of Antibiotics, Biofilms.. **2022**, 52, e1-e19
- 536 Visible Occlusal Plaque Index Predicting Caries Lesion Activity.. **2022**, 220345221084664
- 535 Architecture of the biofilm-associated archaic CupE pilus from *Pseudomonas aeruginosa*.
- 534 Biofilm and Gene Expression Characteristics of the Carbapenem-Resistant Enterobacterales, IMP, and NDM-1 Associated with Common Bacterial Infections.. **2022**, 19, 0
- 533 Systems view of *Bacillus subtilis* pellicle development.. **2022**, 8, 25 3
- 532 Polyethyleneimine Functionalized Mesoporous Magnetic Nanoparticles with Enhanced Antibacterial and Antibiofilm Activity in an Alternating Magnetic Field.. **2022**, 1
- 531 The Evolution of Microbial Facilitation: Sociogenesis, Symbiogenesis, and Transition in Individuality. **2022**, 10,
- 530 Low-concentration iron promotes *Klebsiella pneumoniae* biofilm formation by suppressing succinic acid.. **2022**, 22, 95 0
- 529 Bacterial Biofilm and the Medical Impact.
- 528 Nutrient Sensing and Biofilm Modulation: The Example of L-arginine in .. **2022**, 23, 3
- 527 A 3D-Printed Customizable Platform for Multiplex Dynamic Biofilm Studies. 2200138 0
- 526 Antibiofilm Potential of Alpha-Amylase from a Marine Bacterium, .. **2022**, 2022, 7480382
- 525 Correlation Between the Amount of Extracellular Polymeric Substances and the Survival Rate to Freeze-Drying of Probiotics.. **2022**, 79, 165 0
- 524 Overview of multi-species biofilms in different ecosystems: Wastewater treatment, soil and oral cavity.. **2022**, 350, 67-74 0
- 523 Performance of a packed-bed anode bio-electrochemical reactor for power generation and for removal of gaseous acetone.. **2022**, 314, 115062 0
- 522 Image\_1.JPEG. **2018**,

521 Table\_1.DOCX. **2018,**

520 Data\_Sheet\_1.docx. **2018,**

519 Data\_Sheet\_1.docx. **2018,**

518 Table\_1.xlsx. **2018,**

517 Table\_2.xlsx. **2018,**

516 Data\_Sheet\_1.docx. **2018,**

515 Data\_Sheet\_1.PDF. **2018,**

514 Table\_1.docx. **2019,**

513 Data\_Sheet\_1.PDF. **2019,**

512 DataSheet\_1.zip. **2020,**

511 Data\_Sheet\_2.PDF. **2019,**

510 Data\_Sheet\_1.pdf. **2020,**

509 Data\_Sheet\_1.XLS. **2019,**

508 Data\_Sheet\_2.XLS. **2019,**

507 Image\_1.TIF. **2019,**

506 Image\_2.TIF. **2019,**

505 Image\_3.TIF. **2019,**

504 Image\_4.TIF. **2019,**

503 Image\_5.TIF. **2019**,

502 Image\_6.TIFF. **2019**,

501 Image\_7.TIF. **2019**,

500 Table\_1.docx. **2019**,

499 Data\_Sheet\_1.PDF. **2019**,

498 Image\_1.PDF. **2020**,

497 Image\_2.PDF. **2020**,

496 Table\_1.PDF. **2020**,

495 Table\_2.PDF. **2020**,

494 Data\_Sheet\_1.docx. **2019**,

493 Data\_Sheet\_1.PDF. **2018**,

492 Image\_1.TIF. **2018**,

491 Table\_1.DOCX. **2018**,

490 Table\_2.DOCX. **2018**,

489 Table\_3.XLSX. **2018**,

488 Table\_4.XLSX. **2018**,

487 Table\_5.XLSX. **2018**,

486 Data\_Sheet\_1.pdf. **2020**,

485 Data\_Sheet\_2.xlsx. **2020**,

484 Data\_Sheet\_3.xlsx. **2020**,

483 Data\_Sheet\_4.zip. **2020**,

482 Data\_Sheet\_1.docx. **2020**,

481 Presentation\_1.pdf. **2018**,

480 Image\_1.TIF. **2018**,

479 Image\_2.TIF. **2018**,

478 Table\_1.DOCX. **2018**,

477 Data\_Sheet\_1.PDF. **2018**,

476 Data\_Sheet\_1.docx. **2020**,

475 Presentation\_1.PDF. **2018**,

474 Data\_Sheet\_1.pdf. **2019**,

473 Image\_1.PNG. **2018**,

472 Image\_2.JPEG. **2018**,

471 Table\_1.XLSX. **2018**,

470 Table\_2.XLSX. **2018**,

469 Table\_3.XLSX. **2018**,

468 Image\_1.TIF. **2018**,

467 Table\_4.xlsx. **2018,**

466 Table\_5.xlsx. **2018,**

465 Image\_2.TIF. **2018,**

464 Table\_6.xlsx. **2018,**

463 Image\_3.TIF. **2018,**

462 Image\_4.TIF. **2018,**

461 Table\_1.DOCX. **2018,**

460 Table\_2.DOCX. **2018,**

459 Table\_3.docx. **2018,**

458 Table\_4.DOCX. **2018,**

457 Table\_5.DOCX. **2018,**

456 Data\_Sheet\_1.docx. **2020,**

455 Data\_Sheet\_2.docx. **2020,**

454 Table\_1.XLSX. **2020,**

453 Data\_Sheet\_1.docx. **2020,**

452 Data\_Sheet\_1.pdf. **2019,**

451 Table\_1.DOCX. **2019,**

450 Image\_1.TIF. **2020,**

449 Image\_2.TIF. **2020**,

448 Table\_1.docx. **2020**,

447 Table\_2.docx. **2020**,

446 Image\_1.JPEG. **2020**,

445 Image\_2.JPEG. **2020**,

444 Table\_1.doc. **2020**,

443 Table\_1.docx. **2020**,

442 Data\_Sheet\_1.pdf. **2020**,

441 Data\_Sheet\_1.docx. **2020**,

440 Image\_1.TIF. **2020**,

439 Table1\_v1.DOCX. **2020**,

438 Bioresponsive nano-antibacterials for HS-sensitized hyperthermia and immunomodulation against refractory implant-related infections.. **2022**, 8, eabn1701 6

437 Pseudomonas aeruginosa Initiates a Rapid and Specific Transcriptional Response during Surface Attachment.. **2022**, e0008622 1

436 Potential of Metal Oxide Nanoparticles and Nanocomposites as Antibiofilm Agents: Leverages and Limitations. **2022**, 163-209 0

435 Biofilm Formation of Food-Borne Pathogens. **2022**, 461-497

434 A mathematical model of discrete attachment to a cellulolytic biofilm using random DEs. **2022**, 19, 6582-6619 1

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

432 Microbial behavior, responses toward salinity stress, mechanism of microbe-mediated remediation for sustainable crop production. **2022**, 103-127

431 A quorum-based fluorescent probe for imaging pathogenic bacteria.

430 In Situ Analytical Tools to Resolve Stress Response Mechanisms of Foodborne Pathogens. **2022**, 575-607

429 Immunology and Microbes. **2022**, 9-19

428 A microfluidic platform for characterizing the structure and rheology of biofilm streamers.. **2022**, 1

427 Realistic-Shape Bacterial Biofilm Simulator for Deep Learning-Based 3D Single-Cell Segmentation. **2022**, 0

426 Role of Animal Models to Advance Research of Bacterial Osteomyelitis.. **2022**, 9, 879630 0

425 Mechanism Involved in Biofilm Formation of Enterococcus faecalis.

424 The Transcription Regulator Affects Biofilm Formation and Environmental Stress Resistance in Avian Pathogenic .. **2022**, 12, 0

423 Approaches to Enhance Therapeutic Activity of Drugs against Bacterial Biofilms.

422 The Structure-Function Relationship of Pseudomonas aeruginosa in Infections and its Influence on the Microenvironment.. **2022**, 0

421 Ultrasound-Activated Nanodroplet Disruption of the Biofilm in Dental Root Canal.. **2022**,

420 Giving Drugs a Second Chance: Antibacterial and Antibiofilm Effects of Ciclopirox and Ribavirin against Cystic Fibrosis Strains.. **2022**, 23, 1

419 Synergistic efficacy of meropenem, ciprofloxacin and colistin antibiotics against planktonic and biofilm forms of Myroides odoratimimus bacterial isolates.. **2022**, 0

418 Nanosensors. **2022**, 133-159

417 Evaluation of photosensitizer-containing superhydrophobic surfaces for the antibacterial treatment of periodontal biofilms. **2022**, 112458 0

416 Could Bacillus biofilms enhance the effectivity of biocontrol strategies in the phyllosphere?. **2022**, 0

415 Review on Stenotrophomonas maltophilia: an emerging multidrug-resistant opportunistic pathogen.. **2022**, 0

414 Isolation and Characterization of Lytic Bacteriophages Specific for Campylobacter jejuni and Campylobacter coli. **2022**, 2, 59-72



- 413 *Piscirickettsia salmonis* forms a biofilm on nylon surface using a CDC Biofilm Reactor.. **2022**, 0
- 412 Effects of aqueous carrier media and brick media as filter materials on performance of biofilm reactor. **2022**, 0
- 411 *Klebsiella pneumoniae* Biofilms and Their Role in Disease Pathogenesis. **2022**, 12, 2
- 410 Dual species dry surface biofilms; *Bacillus* species impact on *Staphylococcus aureus* survival and surface disinfection.. **2022**, 0
- 409 Microbial Resistance to Antibiotics and Effective Antibiotherapy. **2022**, 10, 1121 0
- 408 A soft gripper with contamination resistance and large friction coefficient. **2022**, 128, 1
- 407 Betting blind: coping with uncertainty through redundancy. **2022**, 200, 1
- 406 Microplastics in drinking water: a macro issue. 1
- 405 Supermagnetic halloysite nanotubes surface-tuned with aminosilane for protease immobilization and applied for eradication of bacterial biofilm. **2022**, 593, 153469 0
- 404 Glycosylation increases the anti-QS as well as anti-biofilm and anti-adhesion ability of the cyclo (L-Trp-L-Ser) against *Pseudomonas aeruginosa*. **2022**, 114457
- 403 A genome-wide scan of wastewater *E. coli* for genes under positive selection: focusing on mechanisms of antibiotic resistance.. **2022**, 12, 8037 1
- 402 Shining light in blind alleys: deciphering bacterial attachment in silicon microstructures. 1
- 401 A Self-Cleaning Surface Based on UV-Activatable, AgCl Micropumps for Bacterial Killing and Removal.
- 400 Recent Updates on Microbial Biofilms in Periodontitis: An Analysis of In Vitro Biofilm Models. **2022**, 159-174 3
- 399 Bioaerosol and Its Impact on Human Health. **2022**, 167-193 1
- 398 Archaeal bundling pili of *Pyrobaculum calidifontis* reveal similarities between archaeal and bacterial biofilms. 0
- 397 Second-generation transfer mediates efficient propagation of ICEBs1 in biofilms.
- 396 Distinct types of multicellular aggregates in *Pseudomonas aeruginosa* liquid cultures.

- 395 Role of Hfq in glucose utilization, biofilm formation and quorum sensing system in *Bacillus subtilis*.
- 394 Natural Products as Antibiofilm Agents. 1
- 393 In situ real-time investigation of *Staphylococcus aureus* on hemisphere-patterned polyurethane films. **2022**, 216, 112577
- 392 Antifouling Strategies and Environmental Issues in Industrial Cooling Water Systems in Marine Environment. **2022**, 93-120
- 391 *E. coli* biofilm formation and its susceptibility towards T4 bacteriophages studied in a continuously operating mixing tubular bioreactor system. 1
- 390 Evidence on the Use of Mouthwash for the Control of Supragingival Biofilm and Its Potential Adverse Effects. **2022**, 11, 727 2
- 389 Biofilms in Remediation. **2022**, 150-163
- 388 Current Perspectives for Engineering Antimicrobial Nanostructured Materials. **2022**, 100399 0
- 387 Prevalence and risk factors of *Pseudomonas aeruginosa* colonization.
- 386 The Antibiofilm Role of Biotics Family in Vaginal Fungal Infections. **2022**, 13, 1
- 385 Clinical *Escherichia coli*: From Biofilm Formation to New Antibiofilm Strategies. **2022**, 10, 1103 3
- 384 Bacterial capsular polysaccharides with antibiofilm activity share common biophysical and electrokinetic properties.
- 383 Osteogenic and antibacterial ability of micro-nano structures coated with ZnO on Ti-6Al-4V implant fabricated by two-step laser processing. **2022**, 1
- 382 Economic significance of biofilms: a multidisciplinary and cross-sectoral challenge. **2022**, 8, 10
- 381 Nitrate respiration occurs throughout the depth of mucoid and non-mucoid *Pseudomonas aeruginosa* submerged agar colony biofilms including the oxic zone. **2022**, 12,
- 380 The Role of Abdominal Drain Cultures in Managing Abdominal Infections. **2022**, 11, 697 0
- 379 Probing the growth and mechanical properties of *Bacillus subtilis* biofilms through genetic mutation strategies. **2022**, 0
- 378 Biofilm formation, antimicrobial assay, and toxin-genotypes of *Clostridium perfringens* type C isolates cultured from a neonatal Yangtze finless porpoise. **2022**, 204,

- 377 Selection on plastic adherence leads to hyper-multicellular strains and incidental virulence in the budding yeast.
- 376 Inhibitory effect of a new bacteriocin RSQ04 purified from *Lactococcus lactis* on *Listeria monocytogenes* and its application on model food systems. **2022**, 113626 ○
- 375 Novel Quorum Quenching YtnP Lactonase From *Bacillus paralicheniformis* Reduces *Pseudomonas aeruginosa* Virulence and Increases Antibiotic Efficacy in vivo. **2022**, 13, 2
- 374 A biophysical threshold for biofilm formation. 11, 3
- 373 Self-locomotive, antimicrobial microrobot (SLAM) swarm for enhanced biofilm elimination. **2022**, 121610 ○
- 372 Synthetic microbiology applications powered by light. **2022**, 68, 102158 ○
- 371 Potentiality of Probiotics in Inactivation of Tetrodotoxin. **2022**, 1-12
- 370 Minimally invasive approach in appendectomy and cholecystectomy reduces risk for early but not late-onset *Clostridioides difficile* infection. **2022**, 1, 15
- 369 Crack patterns of drying dense bacterial suspensions. ○
- 368 Nanostructuring of biomaterials and reducing implant related infections via incorporation of silver and copper as antimicrobial elements: an overview. 1-13
- 367 Microfluidic Study of Bacterial Attachment on and Detachment from Zinc Oxide Nanopillars.
- 366 Repurposing the Sphingosine-1-Phosphate Receptor Modulator Etrasimod as an Antibacterial Agent Against Gram-Positive Bacteria. 13, ○
- 365 Mini Review Therapeutic Strategies Targeting for Biofilm and Bone Infections. 13, ○
- 364 Plastisphere community assemblage of aquatic environment: plastic-microbe interaction, role in degradation and characterization technologies. **2022**, 17, ○
- 363 Characterization of the Lytic Phage Flora With a Broad Host Range Against Multidrug-Resistant *Escherichia coli* and Evaluation of Its Efficacy Against *E. coli* Biofilm Formation. 9, ○
- 362 Archaeal bundling pili of *Pyrobaculum calidifontis* reveal similarities between archaeal and bacterial biofilms. **2022**, 119, ○
- 361 Biophysical aspects underlying the swarm to biofilm transition. **2022**, 8, ○
- 360 Multimodal Handheld Probe for Characterizing Otitis Media Integrating Raman Spectroscopy and Optical Coherence Tomography. 3, ○

- 359 Incidence of Early and Late-Onset *Clostridioides difficile* Infection following Appendectomy Compared to Other Common Abdominal Surgical Procedures. **2022**, 2022, 1-6
- 358 Chimeric Ligands of Pili and Lectin A Inhibit Tolerance, Persistence, and Virulence Factors of *Pseudomonas aeruginosa* over a Wide Range of Phenotypes.
- 357 Microrheology of *Pseudomonas aeruginosa* biofilms grown in wound beds. **2022**, 8, 0
- 356 The role of surface adhesion on the macroscopic wrinkling of biofilms. 11, 0
- 355 Characterization of *Candida albicans* and *Staphylococcus aureus* polymicrobial biofilm on different surfaces. **2022**, 0
- 354 Metabolic interactions control the spread of plasmid-encoded functional novelty during microbial range expansion. 0
- 353 Arginine inhibits *Saccharomyces cerevisiae* biofilm formation by inducing endocytosis of the arginine transporter Can1. 0
- 352 Polydopamine, harness of the antibacterial potentials-A review. **2022**, 15, 100329 2
- 351 Clonality and Persistence of Multiresistant Methicillin-Resistant Coagulase-Negative Staphylococci Isolated from the Staff of a University Veterinary Hospital. **2022**, 11, 811 0
- 350 The Depletion Mechanism Actuates Bacterial Aggregation by Exopolysaccharides and Determines Species Distribution & Composition in Bacterial Aggregates. 12, 1
- 349 Novel liposome-like assemblies composed of phospholipid-porphyrin conjugates with photothermal and photodynamic activities against bacterial biofilms. **2022**, 623, 121915 0
- 348 Biofilm characteristics and transcriptomic profiling of *Acinetobacter johnsonii* defines signatures for planktonic and biofilm cells. **2022**, 213, 113714 0
- 347 Fungal Hyphae Regulate Bacterial Diversity and Plasmid-Mediated Functional Novelty During Range Expansion.
- 346 Multi-species biofilms: Friends or foe to the human?. **2022**, 327-359
- 345 High-throughput method development for in-situ quantification of aquatic phototrophic biofilms. **2022**, 38, 521-535 1
- 344 Matrix-producing cells formed Van Gogh bundles facilitate *Bacillus subtilis* biofilm self-healing.
- 343 Social evolution of shared biofilm matrix components. **2022**, 119, 2
- 342 It's a Long Way to the Tap: Microbiome and DNA-Based Omics at the Core of Drinking Water Quality. **2022**, 19, 7940 0

- 341 Benthic Biofilms in Glacier-Fed Streams from Scandinavia to the Himalayas Host Distinct Bacterial Communities Compared with the Streamwater. **2022**, 88, 1
- 340 A mechanistic understanding of biofilm morphogenesis: Coexistence of mobile and sessile aggregates and phase-separated patterns.
- 339 Activity of singly and doubly modified derivatives of C20-epi-salinomycin against *Staphylococcus* strains. **2022**, 75, 445-453
- 338 Biofilm Detection by a Fiber-Tip Ball Resonator Optical Fiber Sensor. **2022**, 12, 481 0
- 337 Photodynamic therapy and combinatory treatments for the control of biofilm-associated infections. 0
- 336 Functional Bacterial Amyloids: Understanding Fibrillation, Regulating Biofilm Fibril Formation and Organizing Surface Assemblies. **2022**, 27, 4080 2
- 335 Antifouling Surface Coatings from Self-Assembled Zwitterionic Aramid Amphiphile Nanoribbons. 2200311
- 334 Secondary Ammonium-Based Hyperbranched Poly(amidoamine) with Excellent Membrane-Active Property for Multidrug-Resistant Bacterial Infection. **2022**, 5, 3384-3395
- 333 Biofilm control on metallic materials in medical fields from the viewpoint of materials science □ from the fundamental aspects to evaluation. 1-25 0
- 332 Antibiofilm Activities of Cinnamaldehyde Analogs against Uropathogenic *Escherichia coli* and *Staphylococcus aureus*. **2022**, 23, 7225 2
- 331 Biofilm Development in Gram-Positive and Gram-Negative Bacteria.
- 330 Potentiating hypoxic microenvironment for antibiotic activation by photodynamic therapy to combat bacterial biofilm infections. **2022**, 13, 5
- 329 The Antibacterial Activity Mode of Action of Plantaricin YKX against *Staphylococcus aureus*. **2022**, 27, 4280
- 328 Bacteriophage and Bacterial Susceptibility, Resistance, and Tolerance to Antibiotics. **2022**, 14, 1425 2
- 327 The choline-binding proteins PspA, PspC and LytA of *Streptococcus pneumoniae* and their role on host cellular adhesion and damage. 0
- 326 Clinical usefulness of quantifying microbial load from diabetic foot ulcers: A multicenter cohort study. **2022**, 189, 109975
- 325 Raman Microscopic Analysis of Dry-Surface Biofilms on Clinically Relevant Materials. **2022**, 10, 1369 2
- 324 Antibacterial Sutures Coated with Smooth Chitosan Layer by Gradient Deposition.

- 323 Flagellar Motility During *E. coli* Biofilm Formation Provides a Competitive Disadvantage Which Recedes in the Presence of Co-Colonizers. 12,
- 322 Biofilm Syntrophic Consortia of Microbial Cells: Boon or Bane?.
- 321 Enhancement of *Acinetobacter baumannii* biofilm growth by cephem antibiotics via enrichment of protein and extracellular DNA in the biofilm matrices. 0
- 320 Current Advances in the Concept of Quorum Sensing-Based Prevention of Spoilage of Fish Products by *Pseudomonads*. 2022, 12, 6719
- 319 Programming the lifestyles of engineered bacteria for cancer therapy. 0
- 318 A T3SS Regulator Mutant HY9901  $\beta$ raC of *Vibrio alginolyticus* Decreased the Expression of HopPmaJ and Provided Protection to *Danio rerio* as a Live-Attenuated Vaccine. 9, 0
- 317 A previously uncharacterized gene, PA2146, contributes to biofilm formation and drug tolerance across the  $\gamma$ -Proteobacteria. 2022, 8, 1
- 316 Facile construction of fluorescent C70-COOH nanoparticles with advanced antibacterial and anti-biofilm photodynamic activity. 2022, 234, 112507
- 315 Strategies and perspectives of developing anti-biofilm materials for improved food safety. 2022, 159, 111543 1
- 314 Antibacterial and antibiofilm activity of peptide PvGBP2 against pathogenic bacteria that contaminate *Auricularia auricular* culture bags. 2022, 11, 1607-1613 1
- 313 Metallic Nanoparticles as promising tools to eradicate *H. pylori*: A comprehensive review on recent advancements. 2022, 6, 100129
- 312 Dental plaque-inspired versatile nanosystem for caries prevention and tooth restoration. 2023, 20, 418-433 1
- 311 Lineage dynamics in growing biofilms: Spatial patterns of standing vs. de novo diversity. 13,
- 310 Ecoresorbable and bioresorbable microelectromechanical systems. 2
- 309 To biofilm or not to biofilm. 11,
- 308 In Situ Surface-Directed Assembly of 2D Metal Nanoplatelets for Drug-Free Treatment of Antibiotic-Resistant Bacteria. 2102567
- 307 Special Issue: Biofilm Composition and Applications. 2022, 12, 1026
- 306 Spatiotemporal Metabolic Network Models Reveal Complex Autotroph-Heterotroph Biofilm Interactions Governed by Photon Incidences. 2022, 55, 112-118 0

- 305 Antibiotic induced biofilm formations in *Pseudomonas aeruginosa* strains KPW.1-S1 and HRW.1-S3 are associated with increased production of eDNA and exoproteins, increased ROS generation, and increased cell surface hydrophobicity.
- 304 Activity of Essential Oils Against Multidrug-Resistant *Salmonella enteritidis*. **2022**, 79, 1
- 303 Cuprous Oxide Nanoparticles Decorated Fabric Materials with Anti-biofilm Properties. 1
- 302 Biofilm neutrophils interactions under hypoxia: A mathematical modeling study. **2022**, 108893
- 301 Microbial-mat colonization of modern gravel deposits in a siliciclastic coastal setting. **2022**, 92, 739-750
- 300 Comparison of amphotericin B lipid complex, deoxycholate amphotericin B, fluconazole, and anidulafungin activity against *Candida albicans* biofilm isolated from breakthrough candidemia. **2022**,
- 299 Molecular Epidemiology of Plasmid-Mediated Types 1 and 3 Fimbriae Associated with Biofilm Formation in Multidrug Resistant *Escherichia coli* from Diseased Food Animals in Guangdong, China. 0
- 298 Extracytoplasmic sigma factor AlgU contributes to fitness of *Pseudomonas aeruginosa* PGPR2 during corn root colonization.
- 297 *Alcanivorax borkumensis* Biofilms Enhance Oil Degradation By Interfacial Tubulation.
- 296 Microbial Biofilms at Meat-Processing Plant as Possible Places of Bacteria Survival. **2022**, 10, 1583 0
- 295 Farm Biosecurity Measures and Interventions with an Impact on Bacterial Biofilms. **2022**, 12, 1251 1
- 294 Biofilms in hoses utilized to divert colostrum and milk on dairy farms: A report exploring their potential role in herd health, milk quality, and public health. 9,
- 293 Dispersal of pathogen-associated multispecies biofilm by novel probiotic *Bacillus subtilis* in a contact-dependent manner. 1
- 292 The biofilm life cycle: expanding the conceptual model of biofilm formation. 24
- 291 What is the best technic to dislodge *Staphylococcus epidermidis* biofilm on medical implants?. **2022**, 22, 0
- 290 Integrating metagenomic binning with flux balance analysis to unravel syntrophies in anaerobic CO<sub>2</sub> methanation. **2022**, 10, 0
- 289 Ocular surface microbiota: Ophthalmic infectious disease and probiotics. 13, 1
- 288 Biofilm aggregates and the host airway-microbial interface. 12,

- 287 Enzymatic Dispersion of Biofilms: An Emerging Biocatalytic Avenue to Combat Biofilm-Mediated Microbial Infections. **2022**, 102352 2
- 286 What is the fate of the biofilm matrix?. 0
- 285 *Streptococcus mutans* PrsA mediates AtIA secretion contributing to extracellular DNA release and biofilm formation in the pathogenesis of infective endocarditis. **2022**, 13, 1379-1392
- 284 Active bulging promotes biofilm formation in a bacterial swarm.
- 283 Evidence for a Widespread Third System for Bacterial Polysaccharide Export across the Outer Membrane Comprising a Composite OPX/EBarrel Translocon. 0
- 282 Hemithioindigo-Based Visible Light-Activated Molecular Machines Kill Bacteria by Oxidative Damage. 2203242 1
- 281 Vertical growth dynamics of biofilms. 0
- 280 Dual-functional antibacterial hybrid film with antifouling and NIR-activated bactericidal properties. **2022**, 244, 110143 0
- 279 Activatable iodinated BODIPYs for selective imaging and photodynamic disruption of amyloid structures in pathogenic bacterial biofilms. **2022**, 371, 132475 0
- 278 Design and synthesis of novel benzimidazole derivatives as potential *Pseudomonas aeruginosa* anti-biofilm agents inhibiting LasR: Evidence from comprehensive molecular dynamics simulation and in vitro investigation. **2022**, 241, 114629 0
- 277 Out of control: The need for standardised solvent approaches and data reporting in antibiofilm assays incorporating dimethyl-sulfoxide (DMSO). **2022**, 4, 100081
- 276 Adsorption of *Candida albicans* on Ti-6Al-4V surface and its corrosion effects in artificial saliva. **2022**, 148, 108248 0
- 275 Simvastatin-hydroxyapatite coatings prevent biofilm formation and improve bone formation in implant-associated infections. **2023**, 21, 44-56 0
- 274 Mikrobekontaminasjon av vann fra dentaluniter i Norge. **2005**, 115, 0
- 273 *Pseudomonas putida* mediates bacterial killing, biofilm invasion and biocontrol with a type IVB secretion system. 0
- 272 A review on biofilms and the currently available antibiofilm approaches: Matrix-destabilizing hydrolases and anti-bacterial peptides as promising candidates for the food industries. **2022**, 219, 1163-1179 0
- 271 Comparative transcriptomic analysis of *Stenotrophomonas* sp. MNB17 revealed mechanisms of manganese tolerance at different concentrations and the role of histidine biosynthesis in manganese removal. **2022**, 244, 114056 0
- 270 Ultrasonic preparation of Tween-essential oil (*Zanthoxylum schinifolium* Sieb. et Zucc) oil/water nanoemulsion: Improved stability and alleviation of *Staphylococcus epidermidis* biofilm. **2022**, 188, 115654 0



- 269 Investigation of morphological and biochemical changes of zinc oxide nanoparticles induced toxicity against multi drug resistance bacteria. **2022**, 74, 127069 ○
- 268 Metabolic labeling and bioluminescent imaging of nascent peptidoglycan. **2022**, 372, 132580 ○
- 267 Biofungicidal Properties of Rhizobacteria for Plant Growth Promotion and Plant Disease Resistance. **2022**, 103-133 ○
- 266 Introduction: Biofilms 101. **2022**, 3-15 ○
- 265 Controlling Collision-Induced Aggregations in a Swarm of Micro Bristle Robots. **2022**, 1-15 ○
- 264 Influence of cationic groups on the antibacterial behavior of cationic nano-sized hyperbranched polymers to enhance bacteria-infected wound healing. **2022**, 14, 12789-12803 ○
- 263 Nitric Oxide-Mediated Dispersal as an Adjunctive Strategy for the Control of Biofilm-Associated Infection. **2022**, 501-519 ○
- 262 A Novel Quorum-Sensing Inhibition Strategy Based on Controlling the Transmembrane Transport and Extracellular Accumulation of Quorum Sensing Signals. ○
- 261 Feed-Based Biofilm Vaccine for the Evaluation of Immune Response and Disease Resistance of Striped Catfish, *Pangasianodon Hypophthalmus* (Sauvage 1878) Against *Aeromonas Hydrophila* Infection. ○
- 260 Polypharmacology in Drug Design and DiscoveryBasis for Rational Design of Multitarget Drugs. **2022**, 397-533 ○
- 259 Effective pH-regulated release of covalently conjugated antibiotics from antibacterial hydrogels. **2022**, 13, 5234-5242 ○
- 258 A Dynamically Degradable Surface: Can We Fool Bacteria to Delay Biofouling in Urinary Stents?. **2022**, 187-195 ○
- 257 Polymer-induced biofilms for enhanced biocatalysis. **2022**, 9, 2592-2602 ○
- 256 A combination therapy strategy for treating antibiotic resistant biofilm infection using a guanidinium derivative and nanoparticulate Ag(0) derived hybrid gel conjugate. **2022**, 13, 10103-10118 4
- 255 Hybrid suture coating for dual-staged control over antibacterial actions to match well wound healing progression. 1
- 254 Preventing Biofilm Formation and Encrustation on Urinary Implants: (Bio)molecular and Physical Research Approaches. **2022**, 437-447 ○
- 253 Slightly acidic hypochlorous water effective against dual-species biofilm of *Listeria monocytogenes* and *Escherichia coli* strains isolated from Pangasius fish-processing plants. **2022**, ○
- 252 Rapid synthesis of drug-encapsulated films by evaporation-induced self-assembly for highly-controlled drug release from biomaterial surfaces. **2022**, 10, 6453-6463 ○

251	Characterization of microbial community assembly on new wooden vats for use in cheese production. <b>2023</b> , 109, 104154	0
250	Beyond superconductivity towards novel biomedical, energy, ecology, and heritage applications of MgB <sub>2</sub> . <b>2022</b> , 15, 646-657	0
249	Social complexity as a driving force of gut microbiota exchange among conspecific hosts in non-human primates. 16,	0
248	Exploring the Function of Quorum Sensing Regulated Biofilms in Biological Wastewater Treatment: A Review. <b>2022</b> , 23, 9751	1
247	A common vesicle proteome drives fungal biofilm development. <b>2022</b> , 119,	0
246	Biofilm formation is not an independent risk factor for mortality in patients with <i>Acinetobacter baumannii</i> bacteremia. 12,	1
245	A designed cyclic analogue of gomesin has potent activity against <i>Staphylococcus aureus</i> biofilms.	1
244	Communication Breakdown: Into the Molecular Mechanism of Biofilm Inhibition by CeO <sub>2</sub> Nanocrystal Enzyme Mimics and How It Can Be Exploited.	0
243	A review of effective strides in amelioration of the biocompatibility of PEO coatings on Mg alloys. <b>2022</b> ,	1
242	Sucrose-mediated formation and adhesion strength of <i>Streptococcus mutans</i> biofilms on titanium.	0
241	Synthesis of the cyanobacterial halometabolite Chlorosphaerolactylate B and demonstration of its antimicrobial effect in vitro and in vivo. 13,	0
240	A Microfluidic Approach for Quantitative Study of Spatial Heterogeneity in Bacterial Biofilms. 2200047	1
239	Quorum Sensing and Quorum Quenching with a Focus on Cariogenic and Periodontopathic Oral Biofilms. <b>2022</b> , 10, 1783	1
238	Redox-Mediated Inactivation of the Transcriptional Repressor RcrR is Responsible for Uropathogenic <i>Escherichia coli</i> Increased Resistance to Reactive Chlorine Species.	0
237	Role of RNAIII in Resistance to Antibiotics and Antimicrobial Agents in <i>Staphylococcus epidermidis</i> Biofilms. <b>2022</b> , 23, 11094	0
236	Promising Application of D-Amino Acids toward Clinical Therapy. <b>2022</b> , 23, 10794	1
235	Single-channel characterization of the chitooligosaccharide transporter chitoporin (SmChiP) from the opportunistic pathogen <i>Serratia marcescens</i> . <b>2022</b> , 102487	0
234	Breaching Bacterial Biofilm Barriers: Efficient Combinatorial Theranostics for Multidrug-Resistant Bacterial Biofilms with a Novel Penetration-Enhanced AIEgen Probe. <b>2022</b> , 14, 41671-41683	1

233	Predicting partner fitness based on spatial structuring in a light-driven microbial community.	0
232	Anti-biofilm effects of sinomenine against <i>Staphylococcus aureus</i> .	0
231	Second-Generation Transfer Mediates Efficient Propagation of ICE Bs1 in Biofilms.	1
230	Detection and molecular characterization of <i>Salmonella</i> species on U.S. goat operations. <b>2022</b> , 105766	0
229	Riboflavin- and chlorophyllin-based antimicrobial photoinactivation of <i>Brevundimonas</i> sp. ESA1 biofilms. 12,	0
228	Stimulation of the Biofilm of a marine bacterium, <i>Pseudoalteromonas agarivorans</i> - by Fucoidan extracted from macroalgae.	0
227	Hysteresis in viscoelastic flow instability of confined cylinders. <b>2022</b> , 7,	0
226	Combinatorial control of biofilm development by quorum-sensing and nutrient-sensing regulators in <i>Pseudomonas aeruginosa</i> .	0
225	Viscoelastic instability in an asymmetric geometry.	0
224	The Role of ptsH in Stress Adaptation and Virulence in <i>Cronobacter sakazakii</i> BAA-894. <b>2022</b> , 11, 2680	0
223	Two-component system GacS/GacA, a global response regulator of bacterial physiological behaviors. <b>2022</b> , 100051	0
222	Biofilm formation and its impact on environmental survival and antibiotic resistance of <i>Mycoplasma anserisalpinitidis</i> strains. <b>2022</b> , 70, 184-191	0
221	Silicon Nanostructures and Nanocomposites for Antibacterial and Theranostic Applications. <b>2022</b> , 113912	0
220	Finding the best combination of autochthonous microorganisms with the most effective biosorption ability for heavy metals removal from wastewater. 13,	1
219	Injectable, Self-Healing and Multiple Responsive Histamine modified Hyaluronic Acid Hydrogels with Potentialities in Drug Delivery, Antibacterial and Tissue Engineering. 2200674	1
218	Transcriptional Profiling of <i>Pseudomonas aeruginosa</i> Infections. <b>2022</b> , 303-323	0
217	Inhibition and eradication of bacterial biofilm using polymeric materials.	0
216	Precisely modulated 2D PdCu alloy nanodendrites as highly active peroxidase mimics for the elimination of biofilms.	0

- 215 Analysis of the effects of disinfectants and plasma treatment on biofilm growth by a thermal flow sensor for real time measurements. **2022**, 0
- 214 *Acinetobacter baumannii* Biofilm Formation: Association with Antimicrobial Resistance and Prolonged Survival under Desiccation. **2022**, 79, 0
- 213 Shared biophysical mechanisms determine early biofilm architecture development across different bacterial species. **2022**, 20, e3001846 0
- 212 Macroporous Silicone Chips for Decoding Microbial Dark Matter in Environmental Microbiomes. 0
- 211 dnaE2 expression promotes genetic diversity and bacterial persistence in mycobacterial biofilms. 0
- 210 Recent Advances in Superhydrophobic and Antibacterial Coatings for Biomedical Materials. **2022**, 12, 1469 1
- 209 How It All Begins: Bacterial Factors Mediating the Colonization of Invertebrate Hosts by Beneficial Symbionts. 0
- 208 *Streptomyces rochei* MS-37 as a Novel Marine Actinobacterium for Green Biosynthesis of Silver Nanoparticles and Their Biomedical Applications. **2022**, 27, 7296 2
- 207 Current therapeutic interventions combating biofilm-related infections in orthopaedics. **2022**, 11, 700-714 0
- 206 Responses of *Salmonella* biofilms to oxidising biocides: evidence of spatial clustering. 0
- 205 Preventing Antibiotic-Resistant Infections: Additively Manufactured Porous Ti6Al4V Biofunctionalized with Ag and Fe Nanoparticles. **2022**, 23, 13239 0
- 204 Urinary Catheters Coated with a Novel Biofilm Preventative Agent Inhibit Biofilm Development by Diverse Bacterial Uropathogens. **2022**, 11, 1514 0
- 203 Hydrophobicity of Cholic Acid-Derived Amphiphiles Dictates the Antimicrobial Specificity. 0
- 202 Antibiofilm Effect of Cinnamaldehyde-Chitosan Nanoparticles against the Biofilm of *Staphylococcus aureus*. **2022**, 11, 1403 4
- 201 Green synthesis of silver nanoparticles from *Mahonia fortunei* extracts and characterization of its inhibitory effect on Chinese cabbage soft rot pathogen. 13, 2
- 200 Comparison of cell viability assessment and visualization of *Aspergillus niger* biofilm with two fluorescent probe staining methods. **2022**, 100090 0
- 199 Agent-Based Modeling of Microbial Communities. 0
- 198 Impact of sodium nitroprusside concentration added to batch cultures of *Escherichia coli* biofilms on the c-di-GMP levels, morphologies and adhesion of biofilm-dispersed cells. 1-18 0

- 197 Eugenol and geraniol impede Csu-pilus assembly and evades multidrug-resistant *Acinetobacter baumannii* biofilms: In-vitro and in-silico evidence. **2022**, 0
- 196 A one-dimensional three-state run-and-tumble model with a Bell cycle **2022**, 45, 0
- 195 Single-cell/nanoparticle trajectories reveal two-tier L<sub>xy</sub>-like interactions across bacterial swarms. **2022**0047 0
- 194 In situ control of rootBacteria interactions using optical trapping in transparent soil. 0
- 193 Evaluation of feed utilization, immune response and disease resistance in striped catfish, *Pangasianodon hypophthalmus* (Sauvage 1878) fed with a novel *Aeromonas hydrophila* biofilm vaccine. **2022**, 3, 100070 0
- 192 Prevalence of biofilm forming *Salmonella* in different seafood contact surfaces of fishing boats, fish landing centres, fish markets and seafood processing plants. **2022**, 185, 114285 0
- 191 Antibiotic susceptibility and biofilm-forming ability of *Veillonella* strains. **2022**, 78, 102667 0
- 190 Effect of antibiotics and sanitizers on *Salmonella* biofilms associated with seafood contact surfaces. **2023**, 266, 127213 0
- 189 Tetracycline accumulation in biofilms enhances the selection pressure on *Escherichia coli* for expression of antibiotic resistance. **2023**, 857, 159441 0
- 188 Antibiofilm properties of biosurfactants: A tool against the food pathogens. **2023**, 91-110 0
- 187 Highly durable photocatalytic titanium suboxidePolymer nanocomposite films with visible light-triggered antibiofilm activity. **2023**, 454, 139971 0
- 186 Specific detection of antibiotic-resistant bacteria using CRISPR/Cas9 induced isothermal exponential amplification reaction (IEXPAR). **2023**, 253, 124045 0
- 185 Enzymology of Microbial Biofilms. **2022**, 117-140 0
- 184 Hermetic and Bioresorbable Packaging Materials for MEMS Implantable Pressure Sensors: A Review. **2022**, 1-1 0
- 183 Effects of Acylase Treatment Episodes on Multispecies Biofilm Development. **2022**, 0
- 182 MOFs and MOF-Derived Materials for Antibacterial Application. **2022**, 13, 215 1
- 181 Concentration-Dependent Global Quantitative Proteome Response of *Staphylococcus epidermidis* RP62A Biofilms to Subinhibitory Tigecycline. **2022**, 11, 3488 0
- 180 Extracellular Vesicles Contribute to Mixed-Fungal Species Competition during Biofilm Initiation. 0

- 179 Recent advances in prevention, detection and treatment in prosthetic joint infections of bioactive materials. 10, 1
- 178 The Effect of the Gallbladder Environment during Chronic Infection on Salmonella Persister Cell Formation. **2022**, 10, 2276 0
- 177 A Strong Inhibitory Effect of Microbe-Induced Mineralization on Corrosion on Steel Surfaces. 0
- 176 Antibiofilm effect and mechanism of protocatechuic aldehyde against *Vibrio parahaemolyticus*. 13, 1
- 175 Antibacterial Activity of Thymoquinone Against *Shigella flexneri* and Its Effect on Biofilm Formation. **2022**, 19, 767-778 0
- 174 Early Biofilm Accumulation in Freshwater Environments on Different Types of Plastic. **2022**, 83-105 0
- 173 Targeting Vancomycin-Resistant Enterococci (VRE) Infections and Van Operon-Mediated Drug Resistance Using Dimeric Cholic AcidPeptide Conjugates. 0
- 172 Different Patterns of Virulence Genes in *Streptococcus mutans* and *Streptococcus sobrinus* Originating from Estonian ToddlersMothers Cohort. **2022**, 13, 928-936 0
- 171 Active percolation in pusher-type microswimmers. 0
- 170 Protein corona mediated liposomal drug delivery for bacterial infection management. **2022**, 0
- 169 Quorum sensing in biofilms: a key mechanism to target in ecotoxicological studies. 1-19 0
- 168 Biofilms and Benign Colonic Diseases. **2022**, 23, 14259 1
- 167 Efficient Inhibition of Bacterial Biofilm Through Interference of ProteinProtein Interaction of Master Regulator Proteins: a Proof of Concept Study with SinR- SinI Complex of *Bacillus subtilis*. 0
- 166 Effect of laser thermochemical treatment of Ti $\beta$ Al $\beta$ V alloy on *Candida albicans* biofilm growth. **2023**, 294, 127055 0
- 165 Biocide loaded shear-thinning hydrogel with anti-biofilm efficacy cures topical infection. 0
- 164 Synthesized bioactive lignin nanoparticles/polycaprolactone nanofibers: A novel nanobiocomposite for bone tissue engineering. **2023**, 144, 213203 1
- 163 Drug delivery approaches for enhanced antibiofilm therapy. **2023**, 353, 350-365 0
- 162 Evidence of a possible multicellular life cycle in *Escherichia coli*. **2023**, 26, 105795 2

- 161 Light-regulated adsorption and desorption of *Chlamydomonas* cells at surfaces. o
- 160 Biofilms and their impact on the food industry. **2023**, 30, 103523 o
- 159 Hurdle technology based on the use of microencapsulated pepsin, trypsin and carvacrol to eradicate *Pseudomonas aeruginosa* and *Enterococcus faecalis* biofilms. **2022**, 38, 903-915 o
- 158 A Review of *Pseudomonas aeruginosa* Metallophores: Pyoverdine, Pyochelin and Pseudopaline. **2022**, 11, 1711 2
- 157 The impact of positive and negative information on SIR-like epidemics in delayed multiplex networks. **2022**, 32, 113141 o
- 156 Flagellar Phenotypes Impact on Bacterial Transport and Deposition Behavior in Porous Media: Case of *Salmonella enterica* Serovar Typhimurium. **2022**, 23, 14460 o
- 155 Biofilm formation of *Pseudomonas aeruginosa* in spaceflight is minimized on Lubricant Impregnated Surfaces. o
- 154 Comparative metabolite profiling of four polyphenol rich *Morus* leaves extracts in relation to their antibiofilm activity against *Enterococcus faecalis*. **2022**, 12, o
- 153 The spin of dioxygen as the main factor in pulmonology and respiratory care. **2022**, 8, 028-033 o
- 152 Global trends of *Helicobacter pylori* biofilm research in the past two decades: A bibliometric study (Preprint). o
- 151 Characterization of Mixed-Species Biofilms Formed by Four Gut Microbiota. **2022**, 10, 2332 o
- 150 Airborne transmission of biological agents within the indoor built environment: a multidisciplinary review. o
- 149 Anti-Biofilm Activity of a Hyaluronan-like Exopolysaccharide from the Marine *Vibrio* MO245 against Pathogenic Bacteria. **2022**, 20, 728 1
- 148 Foamed glass ceramicsAn upcycled scaffold for microbial biofilm development. o
- 147 The Sia System and c-di-GMP Play a Crucial Role in Controlling Cell-Association of Psl in Planktonic *P. aeruginosa*. **2022**, 204, o
- 146 A Review of Biofilm Formation of *Staphylococcus aureus* and Its Regulation Mechanism. **2023**, 12, 12 2
- 145 Nanomaterials for Delivering Antibiotics in the Therapy of Pneumonia. **2022**, 23, 15738 o
- 144 Psychogenetic, Genetic and Epigenetic Mechanisms in *Candida auris*: Role in Drug Resistance. **2022**, 1

- 143 Strategies to Mitigate and Treat Orthopaedic Device-Associated Infections. **2022**, 11, 1822 o
- 142 Species and condition dependent mutational spectrum in experimentally evolved biofilms of *Bacilli*. o
- 141 De novo engineering of a bacterial lifestyle program. o
- 140 Innovative Biofilms Mediated as Empiricist of Bioremediation for Sustainable Development. **2023**, 125-139 o
- 139 Antimicrobial Efficiency of Chitosan and Its Methylated Derivative against *Lentilactobacillus parabuchneri* Biofilms. **2022**, 27, 8647 2
- 138 Why vary what's working? Phase variation and biofilm formation in *Francisella tularensis*. 13, o
- 137 Fungal hyphae regulate bacterial diversity and plasmid-mediated functional novelty during range expansion. **2022**, 32, 5285-5294.e4 o
- 136 How changing environments alter the microbial composition and ecological response in marine biofilms: a mini review. **2023**, 10, 95-106 o
- 135 The effect of recognition on competition among clones in spatially structured microbial communities. o
- 134 Mechanisms driving spatial distribution of residents in colony biofilms: an interdisciplinary perspective. **2022**, 12, o
- 133 GC-MS Analysis and Microbiological Evaluation of Caraway Essential Oil as a Virulence Attenuating Agent against *Pseudomonas aeruginosa*. **2022**, 27, 8532 2
- 132 Biofilm Lifestyle in Recurrent Urinary Tract Infections. **2023**, 13, 148 2
- 131 Pepsin and Trypsin Treatment Combined with Carvacrol: An Efficient Strategy to Fight *Pseudomonas aeruginosa* and *Enterococcus faecalis* Biofilms. **2023**, 11, 143 1
- 130 The *Pseudomonas aeruginosa* RpoH ( $\sigma^{24}$ ) Regulon and Its Role in Essential Cellular Functions, Starvation Survival, and Antibiotic Tolerance. **2023**, 24, 1513 o
- 129 Growth in a biofilm promotes conjugation of *bla*NDM-1-bearing plasmid between *Klebsiella pneumoniae* strains. o
- 128 Temperature-specific adaptations and genetic requirements in a biofilm formed by *Pseudomonas aeruginosa*. 13, o
- 127 Development of nanoclay-based nanocomposite surfaces with antibacterial properties for potential biomedical applications. **2023**, o
- 126 Development of Nanoparticle Adaptation Phenomena in *Acinetobacter baumannii*: Physiological Change and Defense Response. o



- 125 A mechanistic understanding of microcolony morphogenesis: coexistence of mobile and sessile aggregates. O
- 124 Is There Any Benefit to the Use of Antibiotics with Indwelling Catheters after Urologic Surgery in Adults. **2023**, 12, 156 O
- 123 Therapeutic Strategies against Biofilm Infections. **2023**, 13, 172 1
- 122 OpaR exerts a dynamic control over c-di-GMP homeostasis and *cpsA* expression in *V. parahaemolyticus* through its regulation of ScrC and the trigger phosphodiesterase TpdA. O
- 121 Biofilm inhibition based on controlling the transmembrane transport and extracellular accumulation of quorum sensing signals. **2023**, 221, 115218 O
- 120 Amphiphilically engineered sodium deoxycholate based nanocomposite hydrogels with strong bactericidal and water absorption characteristics. **2023**, 34, 105353 O
- 119 Enzymatic bionanocatalysts for combating peri-implant biofilm infections by specific heat-amplified chemodynamic therapy and innate immunomodulation. **2023**, 67, 100917 1
- 118 Prevalence and Virulence of Commensal *Pseudomonas Aeruginosa* Isolates from Healthy Individuals in Southern Vietnam (2018–2020). **2023**, 11, 54 O
- 117 A critical review on nanomaterial based therapeutics for diabetic wound healing. 1-35 O
- 116 Perspective Chapter: Hydroxyapatite - Surface Functionalization to Prevent Bacterial Colonization. O
- 115 Biofilm Formation and its Association with Gram Negative Sepsis Pathogenicity. **2022**, 15, 2099-2106 O
- 114 Interdisciplinary Overview of Lipopeptide and Protein-Containing Biosurfactants. **2023**, 14, 76 1
- 113 Dioxygen and reactive oxygen species paramagnetic properties are important factors in dermatology. **2022**, 8, 016-023 O
- 112 Biofilm formation: A well-played game in bacterial pathogenesis. **2023**, 605-625 O
- 111 Industrial applications and implications of biofilms. **2023**, 713-738 O
- 110 Working principles of various smart coatings on microbes/virus growth. **2023**, 239-261 O
- 109 Comparison of amphotericin B lipid complex, deoxycholate amphotericin B, fluconazole, and anidulafungin activity against *Candida albicans* biofilm isolated from breakthrough candidemia. **2023**, O
- 108 Instantaneous Clearing of Biofilm (iCBiofilm): an optical approach to revisit bacterial and fungal biofilm imaging. **2023**, 6, O

- 107 Mechanical Characterization and Single-Cell Imaging of Bacterial Biofilms. o
- 106 Biopolymer Honeycomb Microstructures: A Review. **2023**, 16, 772 o
- 105 Nanotechnology as a Promising Approach to Combat Multidrug Resistant Bacteria: A Comprehensive Review and Future Perspectives. **2023**, 11, 413 1
- 104 Epifluorescence Microscopy with Image Analysis as a Promising Method for Multispecies Biofilm Quantification. **2023**, o
- 103 Aspects of biofilms on medical devices. **2023**, 91-105 o
- 102 Ultrasound-responsive catalytic microbubbles enhance biofilm elimination and immune activation to treat chronic lung infections. **2023**, 9, o
- 101 Microbial biofilm approaches in phytopathogen management. **2023**, 77-96 o
- 100 Presence of pharmaceuticals and bacterial resistance genes in river epilithic biofilms exposed to intense agricultural and urban pressure. **2023**, 195, o
- 99 Pathogenic biofilms in environment and industrial setups and impact on human health. **2023**, 587-604 o
- 98 The NET response to biofilm infections. **2023**, 575-589 o
- 97 From understanding bacterial interactions to developing bactericidal surfaces. **2023**, 41-57 o
- 96 The Two-Component System CpxRA Affects Antibiotic Susceptibility and Biofilm Formation in Avian Pathogenic *Escherichia coli*. **2023**, 13, 383 o
- 95 Natural biofilms: Structure, development, and habitats. **2023**, 187-206 o
- 94 Fundamentals of biofilm formation in soil: From functionalized self-assembled monolayers to rewilding. o
- 93 Building blocks of biofilms: An engaging and hands-on microbiology outreach activity for school children and the general public. **2023**, 5, o
- 92 *Mycobacterium* biofilms. **2023**, 5, 100107 o
- 91 Biofilm formation by *E. coli* and *S. aureus* on cellphone cover: sensitivity to commercially available sanitizers. **2023**, 70, 181-186 o
- 90 Factors and Mechanisms Influencing Conjugation In Vivo in the Gastrointestinal Tract Environment: A Review. **2023**, 24, 5919 o

89	Preceding Host History of Conjugative Resistance Plasmids Affects Intra- and Interspecific Transfer Potential from Biofilm.	o
88	Tree pathogens <i>Armillaria solidipes</i> influence the biocontrol activity of <i>Bacillus velezensis</i> BY6. <b>2023</b> , 179, 105176	o
87	Pomegranate Extract Affects Gut Biofilm Forming Bacteria and Promotes Intestinal Mucosal Healing Regulating the Crosstalk between Epithelial Cells and Intestinal Fibroblasts. <b>2023</b> , 15, 1771	o
86	<i>Staphylococcus aureus</i> biofilm secreted factors cause mucosal damage, mast cell infiltration and goblet cell hyperplasia in a rat rhinosinusitis model.	o
85	Sampling the rainbow.	o
84	Nanotheranostics to target antibiotic-resistant bacteria: Strategies and applications. <b>2023</b> , 11, 100138	1
83	Quinoxaline-based membrane-targeting therapeutic material: Implications in rejuvenating antibiotic and curb MRSA invasion in an in vitro bone cell infection model. <b>2023</b> , 148, 213359	o
82	Sulfide inhibition on polyphosphate accumulating organisms and glycogen accumulating organisms: Cumulative inhibitory effect and recoverability. <b>2023</b> , 451, 131157	o
81	Unique stratification of biofilm density in heterotrophic membrane-aerated biofilms: An experimental and modeling study. <b>2023</b> , 327, 138501	o
80	Degradation mechanisms of 2-chlorophenol by <i>Acinetobacter</i> sp.: Exploring cellular membrane structure, intra- and extracellular components, and transcriptomic analysis. <b>2023</b> , 11, 109865	o
79	Combinatorial enzyme therapy: A promising neoteric approach for bacterial biofilm disruption. <b>2023</b> , 129, 56-66	o
78	Using electrochemical impedance spectroscopy to study biofilm growth in a 3D-printed flow cell system. <b>2023</b> , 14, 100326	o
77	Approaching prosthesis infection environment: Development of an innovative in vitro <i>Staphylococcus aureus</i> biofilm model. <b>2023</b> , 5, 100120	o
76	Architecture of the biofilm-associated archaic Chaperone-Usher pilus CupE from <i>Pseudomonas aeruginosa</i> . <b>2023</b> , 19, e1011177	o
75	<i>Bacillus subtilis</i> -based biofilms. <b>2022</b> , 93-104	o
74	Collagen hydrogel with multiple antimicrobial mechanisms as anti-bacterial wound dressing. <b>2023</b> , 232, 123413	2
73	Intelligent design and medical applications of antimicrobial hydrogels. <b>2023</b> , 53, 100696	o
72	Physical contacts between sparse biofilms promote plasmid transfer and generate functional novelty.	o

- 71 Bacterial inactivation on sputtered TiOMoN and TiOMoN-Ag thin films under solar simulated light. **2023**, 460, 141590 ○
- 70 A dual-functional PEEK implant coating for anti-bacterial and accelerated osseointegration. **2023**, 224, 113196 ○
- 69 The use of a lactic acid gel in the treatment and prevention of bacterial vaginosis and urinary tract infections as a challenge to antibacterial therapy. A literature review. **2023**, 71, 63-70 ○
- 68 Microbial Dynamics in Mixed-Culture Biofilms of Salmonella Typhimurium and Escherichia coli O157:H7 and Bacteria Surviving Sanitation of Conveyor Belts of Meat Processing Plants. **2023**, 11, 421 ○
- 67 Industrial backgrounds and microbes growth. **2023**, 141-217 ○
- 66 Differences in In Vitro Bacterial Adherence between Ti6Al4V and CoCrMo Alloys. **2023**, 16, 1505 ○
- 65 Treatment Strategies to Combat Multidrug Resistance (MDR) in Bacteria. **2023**, 79-100 ○
- 64 Programming the lifestyles of engineered bacteria for cancer therapy. **2023**, 10, ○
- 63 New Insights into Vibrio cholerae Biofilms from Molecular Biophysics to Microbial Ecology. **2023**, 17-39 ○
- 62 Effects of co-selection of antibiotic-resistance and metal-resistance genes on antibiotic-resistance potency of environmental bacteria and related ecological risk factors. **2023**, 98, 104081 ○
- 61 Diagnosis and treatment of chronic osteomyelitis based on nanomaterials. 14, 42-54 ○
- 60 Microbial colonization and degradation of marine microplastics in the plastisphere: A review. 14, ○
- 59 Antibiofilm activity and NMR-based metabolomic characterization of cell-free supernatant of Limosilactobacillus reuteri DSM 17938. 14, ○
- 58 Effect of One Sulfate-Reducing Bacterium SRB-Z Isolated from Pearl River on the Corrosion Behavior of Q235 Carbon Steel. **2023**, 13, 478 ○
- 57 In Vivo Effect of a NisinBiogel on the Antimicrobial and Virulence Signatures of Canine Oral Enterococci. **2023**, 12, 468 ○
- 56 Rationally Designed Ionic Covalent Organic Networks (iCONs) with Efficient Antimicrobial Activities. **2023**, 12, 376-381 ○
- 55 Recent advances in biofilm formation and their role in environmental protection. **2023**, 263-279 ○
- 54 The Colorectal Cancer Microbiota Alter Their Transcriptome To Adapt to the Acidity, Reactive Oxygen Species, and Metabolite Availability of Gut Microenvironments. **2023**, 8, 1

- 53 In Vitro Models of Bacterial Biofilms: Innovative Tools to Improve Understanding and Treatment of Infections. **2023**, 13, 904 o
- 52 Zinc-Based Nanoparticles Reduce Bacterial Biofilm Formation. **2023**, 11, o
- 51 Antibacterial and Antibiofilm Efficacy of Thyme (*Thymus vulgaris* L.) Essential Oil against Foodborne Illness Pathogens, *Salmonella enterica* subsp. *enterica* Serovar Typhimurium and *Bacillus cereus*. **2023**, 12, 485 o
- 50 Nanoparticle Coatings on Glass Surfaces to Prevent *Pseudomonas fluorescens* AR 11 Biofilm Formation. **2023**, 11, 621 o
- 49 High Glucose Inhibits the Expression of EtcABC Which Resulted in Negative Regulation of Type III Fimbriae in *Klebsiella pneumoniae* Isolates. **2023**, 125-135 o
- 48 Effectiveness of conservative instrumentation in root canal disinfection. o
- 47 Clinical Antibiotic-Resistance Plasmids Have Small Effects on Biofilm Formation and Population Growth in *Escherichia coli* in vitro. o
- 46 Synthesis and anti-fouling properties of zwitterionic poly(l-glutamic acid). o
- 45 Piezoelectric Nanozyme for Dual-Driven Catalytic Eradication of Bacterial Biofilms. o
- 44 Biofilm Formation and Control of Foodborne Pathogenic Bacteria. **2023**, 28, 2432 o
- 43 Exopolysaccharides from vaginal lactobacilli modulate microbial biofilms. **2023**, 22, o
- 42 *Escherichia coli* Nissle 1917 inhibits biofilm formation and mitigates virulence in *Pseudomonas aeruginosa*. 14, o
- 41 Antibacterial Effect of Oral Care Gel-Containing Hinokitiol and 4-isopropyl-3-methylphenol Against Intraoral Pathogenic Microorganisms. o
- 40 Effects of direction reversals on patterns of active filaments. **2023**, 5, o
- 39 Fluorescence-guided and molecularly-guided debridement: identifying devitalized and infected tissue in orthopaedic trauma. **2023**, o
- 38 Evaluation of Biofilm Cultivation Models for Efficacy Testing of Disinfectants against *Salmonella* Typhimurium Biofilms. **2023**, 11, 761 o
- 37 Biofilm inhibiting phytometabolites. **2023**, 161-174 o
- 36 The role of single and mixed biofilms in *Clostridioides difficile* infection and strategies for prevention and inhibition. 1-15 o

- 35 BODIPY-Functionalized Natural Polymer Coatings for Multimodal Therapy of Drug-Resistant Bacterial Infection. 2300328 ○
- 34 Bacterial c-di-GMP plays a key role in the evolution of host-association. ○
- 33 Bacteria-Induced Colloidal Encapsulation for Probiotic Oral Delivery. **2023**, 17, 6886-6898 ○
- 32 Eradication of multiple-species biofilms from food industrial and domestic surfaces using essential oils. 108201322311655 ○
- 31 Advances in bioleaching of waste lithium batteries under metal ion stress. **2023**, 10, ○
- 30 Diminishing the Pathogenesis of the Food-Borne Pathogen *Serratia marcescens* by Low Doses of Sodium Citrate. **2023**, 12, 504 ○
- 29 Synthesis, characterization, and antibacterial activities of a heteroscorpionate derivative platinum complex against methicillin-resistant *Staphylococcus aureus*. 13, ○
- 28 Environmental contamination across multiple hospital departments with multidrug-resistant bacteria pose an elevated risk of healthcare-associated infections in Kenyan hospitals. **2023**, 12, ○
- 27 Spatial structure, chemotaxis and quorum sensing shape biomass accumulation in complex systems. ○
- 26 Insulated Interlaced Surface Electrodes for Bacterial Inactivation and Detachment. **2023**, 127, 3164-3174 ○
- 25 Hydrogel-Based Strategies for the Management of Osteomyelitis. **2023**, 9, 1843-1861 ○
- 24 Prevention of Infectious Diseases in Hospital Environments. **2021**, 171-186 ○
- 23 Investigation of the Photoinduced Antimicrobial Properties of N-Doped TiO<sub>2</sub> Nanoparticles under Visible-Light Irradiation on *Salmonella Typhimurium* Biofilm. **2023**, 13, 4498 ○
- 22 Role of Resident Microbial Communities in Biofilm-Related Implant Infections: Recent Insights and Implications. **2023**, 24, 258-264 ○
- 21 Isoamphiphathic antibacterial molecules regulating activity and toxicity through positional isomerism. ○
- 20 Design of non-cytotoxic 6,7-dihydroxycoumarin-5-carboxylates with antibiofilm activity against *Staphylococcus aureus* and *Candida albicans*. ○
- 19 Synthetic Hair Fiber Implantation: Fishing Lines on the Head. **2023**, 557-576 ○
- 18 Water treatment by cavitation: Understanding it at a single bubble - bacterial cell level. **2023**, 236, 119956 ○

- 17 Stay or Go: Sulfolobales Biofilm Dispersal Is Dependent on a Bifunctional VapB Antitoxin. ○
- 16 Role of Microbial Interactions across Food-Related Bacteria on Biofilm Population and Biofilm Decontamination by a TiO<sub>2</sub>-Nanoparticle-Based Surfactant. **2023**, 12, 573 ○
- 15 Wound Dressing Modifications for Accelerated Healing of Infected Wounds. **2023**, 24, 7193 ○
- 14 Crosstalk between microbial biofilms in the gastrointestinal tract and chronic mucosa diseases. 14, ○
- 13 *Vibrio cholerae* biofilms use modular adhesins with glycan-targeting and nonspecific surface binding domains for colonization. **2023**, 14, ○
- 12 Chemotaxis of two chiral squirmers. **2023**, 35, 043611 ○
- 11 Biofilm Production by Critical Antibiotic-Resistant Pathogens from an Equine Wound. **2023**, 13, 1342 ○
- 10 *Streptococcus salivarius* as an Important Factor in Dental Biofilm Homeostasis: Influence on *Streptococcus mutans* and *Aggregatibacter actinomycetemcomitans* in Mixed Biofilm. **2023**, 24, 7249 ○
- 9 HKUST-1 loaded few-layer Ti<sub>3</sub>C<sub>2</sub>Tx for synergistic chemo-photothermal effects to enhance antibacterial activity. ○
- 8 Adaption of *Pseudomonas* 'ogarae F113 to the Rhizosphere EnvironmentThe AmrZ-FleQ Hub. **2023**, 11, 1037 ○
- 7 Two-Component System Response Regulator ompR Regulates Mussel Settlement through Exopolysaccharides. **2023**, 24, 7474 ○
- 6 Synthesis and evaluation of novel 3, 4-dihydropyrimidin-2(1H)- thione based pongamol conjugates as antibacterial agents. ○
- 5 Electrical stimulation for therapeutic approach. ○
- 4 In Vitro Antibacterial Activity of Silver Nanoparticles Conjugated with Amikacin and Combined with Hyperthermia against Drug-Resistant and Biofilm-Producing Strains. ○
- 3 Medical device associated-biofilm eradication strategies. **2023**, 595-616 ○
- 2 TargIDe: a machine-learning workflow for target identification of molecules with antibiofilm activity against *Pseudomonas aeruginosa*. ○
- 1 Cell selectivity and antibiofilm and anti-inflammatory activities and antibacterial mechanism of symmetric-end antimicrobial peptide centered on D-Pro-Pro. **2023**, 666, 21-28 ○