haluk Beyenal

List of Publications by Year
in descending order

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186	10,907	29994	35952
papers	citations	54 h-index	97 g-index

204	204	204	10337
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Extracellular electron transfer mechanisms between microorganisms and minerals. Nature Reviews Microbiology, 2016, 14, 651-662.	13.6	1,224
2	Quorum Sensing: A New Biofouling Control Paradigm in a Membrane Bioreactor for Advanced Wastewater Treatment. Environmental Science & Technology, 2009, 43, 380-385.	4.6	406
3	Compromised Host Defense on Pseudomonas aeruginosa Biofilms: Characterization of Neutrophil and Biofilm Interactions. Journal of Immunology, 2003, 171, 4329-4339.	0.4	339
4	Wireless Sensors Powered by Microbial Fuel Cells. Environmental Science & Technology, 2005, 39, 5037-5042.	4.6	290
5	Microbial Fuel Cell using Anaerobic Respiration as an Anodic Reaction and Biomineralized Manganese as a Cathodic Reactant. Environmental Science & Technology, 2005, 39, 4666-4671.	4.6	288
6	Spatial Patterns of DNA Replication, Protein Synthesis, and Oxygen Concentration within Bacterial Biofilms Reveal Diverse Physiological States. Journal of Bacteriology, 2007, 189, 4223-4233.	1.0	278
7	Batteryless, Wireless Sensor Powered by a Sediment Microbial Fuel Cell. Environmental Science & Technology, 2008, 42, 8591-8596.	4.6	274
8	Extracellular polymeric substances from Shewanella sp. HRCRâ€1 biofilms: characterization by infrared spectroscopy and proteomics. Environmental Microbiology, 2011, 13, 1018-1031.	1.8	247
9	Scaling up Microbial Fuel Cells. Environmental Science & Technology, 2008, 42, 7643-7648.	4.6	217
10	Power management system for a 2.5W remote sensor powered by a sediment microbial fuel cell. Journal of Power Sources, 2011, 196, 1171-1177.	4.0	205
11	Quantifying biofilm structure using image analysis. Journal of Microbiological Methods, 2000, 39, 109-119.	0.7	199
12	Three-dimensional biofilm structure quantification. Journal of Microbiological Methods, 2004, 59, 395-413.	0.7	190
13	Electrochemically active biofilms: facts and fiction. A review. Biofouling, 2012, 28, 789-812.	0.8	183
14	A transâ€outer membrane porinâ€cytochrome protein complex for extracellular electron transfer by <scp>G</scp>eobacter sulfurreducensâ€¦<scp>PCA</scp>. Environmental Microbiology Reports, 2014, 6, 776-785.	1.0	178
15	Alternative power sources for remote sensors: A review. Journal of Power Sources, 2014, 245, 129-143.	4.0	175
16	Measurement of local effective diffusivity in heterogeneous biofilms. Water Science and Technology, 1998, 38, 171-178.	1.2	171
17	Mechanical, In vitro Antimicrobial, and Biological Properties of Plasma-Sprayed Silver-Doped Hydroxyapatite Coating. ACS Applied Materials & Interfaces, 2012, 4, 1341-1349.	4.0	167
18	Procedure for Determining Maximum Sustainable Power Generated by Microbial Fuel Cells. Environmental Science & Technology, 2006, 40, 1062-1068.	4.6	162

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19	Contribution of Extracellular Polymeric Substances from Shewanella sp. HRCR-1 Biofilms to U(VI) Immobilization. Environmental Science & Technology, 2011, 45, 5483-5490.	4.6	149
20	Internal and External Mass Transfer in Biofilms Grown at Various Flow Velocities. Biotechnology Progress, 2002, 18, 55-61.	1.3	141
21	Fatty Acids as Antibiofilm and Antivirulence Agents. Trends in Microbiology, 2020, 28, 753-768.	3.5	132
22	Quantification of Electron Transfer Rates to a Solid Phase Electron Acceptor through the Stages of Biofilm Formation from Single Cells to Multicellular Communities. Environmental Science & Technology, 2010, 44, 2721-2727.	4.6	122
23	Quantifying Biofilm Structure: Facts and Fiction. Biofouling, 2004, 20, 1-23.	0.8	112
24	pH, redox potential and local biofilm potential microenvironments within Geobacter sulfurreducens biofilms and their roles in electron transfer. Biotechnology and Bioengineering, 2012, 109, 2651-2662.	1.7	112
25	Sediment microbial fuel cell powering a submersible ultrasonic receiver: New approach to remote monitoring. Journal of Power Sources, 2013, 233, 79-85.	4.0	110
26	Scale-up of sediment microbial fuel cells. Journal of Power Sources, 2014, 272, 311-319.	4.0	110
27	Uranium Immobilization by Sulfate-Reducing Biofilms. Environmental Science & Technology, 2004, 38, 2067-2074.	4.6	105
28	Syntrophic anaerobic photosynthesis via direct interspecies electron transfer. Nature Communications, 2017, 8, 13924.	5.8	102
29	Increased Transfer of a Multidrug Resistance Plasmid in Escherichia coli Biofilms at the Air-Liquid Interface. Applied and Environmental Microbiology, 2011, 77, 5079-5088.	1.4	101
30	Microsensor and transcriptomic signatures of oxygen depletion in biofilms associated with chronic wounds. Wound Repair and Regeneration, 2016, 24, 373-383.	1.5	96
31	Reproducibility of biofilm processes and the meaning of steady state in biofilm reactors. Water Science and Technology, 2004, 49, 359-364.	1.2	95
32	Diffusion in biofilms respiring on electrodes. Energy and Environmental Science, 2013, 6, 595-607.	15.6	95
33	Fundamentals of Biofilm Research. , 0, , .		95
34	Combined effect of substrate concentration and flow velocity on effective diffusivity in biofilms. Water Research, 2000, 34, 528-538.	5.3	93
35	Intermittent Energy Harvesting Improves the Performance of Microbial Fuel Cells. Environmental Science & Technology, 2009, 43, 4600-4605.	4.6	87
36	Evaluating the performance of microbial fuel cells powering electronic devices. Journal of Power Sources, 2010, 195, 90-96.	4.0	87

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37	Electrochemical biofilm control: a review. Biofouling, 2015, 31, 745-758.	0.8	87
38	Multi-substrate growth kinetics of Pseudomonas putida for phenol removal. Applied Microbiology and Biotechnology, 1997, 47, 610-614.	1.7	85
39	Evaluation of biofilm image thresholding methods. Water Research, 2001, 35, 1149-1158.	5.3	84
40	Characterization of Mono- and Mixed-Culture Campylobacter jejuni Biofilms. Applied and Environmental Microbiology, 2012, 78, 1033-1038.	1.4	81
41	In situ effective diffusion coefficient profiles in live biofilms using pulsedâ€field gradient nuclear magnetic resonance. Biotechnology and Bioengineering, 2010, 106, 928-937.	1.7	76
42	The epsomitic phototrophic microbial mat of Hot Lake, Washington: community structural responses to seasonal cycling. Frontiers in Microbiology, 2013, 4, 323.	1.5	75
43	Evaluation of long-term performance of sediment microbial fuel cells and the role of natural resources. Applied Energy, 2017, 192, 490-497.	5.1	75
44	Antimicrobial particulate silver coatings on stainless steel implants for fracture management. Materials Science and Engineering C, 2012, 32, 1112-1120.	3.8	74
45	Metabolic spatial variability in electrode-respiring Geobacter sulfurreducens biofilms. Energy and Environmental Science, 2013, 6, 1827.	15.6	73
46	Modeling biofilms with dual extracellular electron transfer mechanisms. Physical Chemistry Chemical Physics, 2013, 15, 19262.	1.3	70
47	The double substrate growth kinetics of Pseudomonas aeruginosa. Enzyme and Microbial Technology, 2003, 32, 92-98.	1.6	69
48	The mechanism of neutral red-mediated microbial electrosynthesis in Escherichia coli: menaquinone reduction. Bioresource Technology, 2015, 192, 689-695.	4.8	69
49	Electrochemical scaffold generates localized, low concentration of hydrogen peroxide that inhibits bacterial pathogens and biofilms. Scientific Reports, 2015, 5, 14908.	1.6	68
50	Fundamentals of Biofilm Research. , 0, , .		66
51	Cross-Linked Protein Nanofilter with Antibacterial Properties for Multifunctional Air Filtration. ACS Applied Materials & Interfaces, 2017, 9, 22846-22855.	4.0	65
52	Redox and pH Microenvironments within Shewanella oneidensis MR-1 Biofilms Reveal an Electron Transfer Mechanism. Environmental Science & Technology, 2011, 45, 6654-6660.	4.6	61
53	Mass transfer studies of Geobacter sulfurreducens biofilms on rotating disk electrodes. Biotechnology and Bioengineering, 2014, 111, 285-294.	1.7	61
54	Differential Protection from Tobramycin by Extracellular Polymeric Substances from Acinetobacter baumannii and Staphylococcus aureus Biofilms. Antimicrobial Agents and Chemotherapy, 2014, 58, 4755-4761.	1.4	60

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55	Electrochemical biofilm control: mechanism of action. Biofouling, 2012, 28, 769-778.	0.8	58
56	Neutral red-mediated microbial electrosynthesis by Escherichia coli, Klebsiella pneumoniae, and Zymomonas mobilis. Bioresource Technology, 2015, 195, 57-65.	4.8	58
57	Uranium removal by sulfate reducing biofilms in the presence of carbonates. Water Science and Technology, 2005, 52, 49-55.	1.2	55
58	Oxygen reduction kinetics on graphite cathodes in sediment microbial fuel cells. Physical Chemistry Chemical Physics, 2011, 13, 21573.	1.3	53
59	Staphylococcus aureus Induces Hypoxia and Cellular Damage in Porcine Dermal Explants. Infection and Immunity, 2015, 83, 2531-2541.	1.0	52
60	Eradication of Pseudomonas aeruginosa biofilms and persister cells using an electrochemical scaffold and enhanced antibiotic susceptibility. Npj Biofilms and Microbiomes, 2016, 2, 2.	2.9	51
61	Microbiosensor for the detection of acetate in electrode-respiring biofilms. Biosensors and Bioelectronics, 2016, 81, 517-523.	5.3	48
62	Growing reproducible biofilms with respect to structure and viable cell counts. Journal of Microbiological Methods, 2001, 47, 1-10.	0.7	47
63	Microscale Gradients of Oxygen, Hydrogen Peroxide, and pH in Freshwater Cathodic Biofilms. ChemSusChem, 2013, 6, 1252-1261.	3.6	46
64	Biofilm shows spatially stratified metabolic responses to contaminant exposure. Environmental Microbiology, 2012, 14, 2901-2910.	1.8	44
65	Inâ€ŝitu oxygen profiling and lignin modification in guts of woodâ€ŕeeding termites. Insect Science, 2010, 17, 277-290.	1.5	43
66	Hypochlorous-Acid-Generating Electrochemical Scaffold for Treatment of Wound Biofilms. Scientific Reports, 2019, 9, 2683.	1.6	43
67	Biological synthesis of nanoparticles in biofilms. Enzyme and Microbial Technology, 2016, 95, 4-12.	1.6	41
68	An improved Severinghaus-type carbon dioxide microelectrode for use in biofilms. Sensors and Actuators B: Chemical, 2004, 97, 202-210.	4.0	40
69	Modeling mass transport and microbial activity in stratified biofilms. Chemical Engineering Science, 2005, 60, 4337-4348.	1.9	39
70	Uranium Immobilization by Sulfate-Reducing Biofilms Grown on Hematite, Dolomite, And Calcite. Environmental Science & Technology, 2007, 41, 8349-8354.	4.6	35
71	Biomass production in Chlorella vulgaris biofilm cultivated under mixotrophic growth conditions. Algal Research, 2017, 26, 153-160.	2.4	35
72	Dynamics of lead immobilization in sulfate reducing biofilms. Water Research, 2004, 38, 2726-2736.	5.3	34

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73	Self-powered wastewater treatment for the enhanced operation of a facultative lagoon. Journal of Power Sources, 2014, 269, 284-292.	4.0	31
74	Localized electron transfer rates and microelectrode-based enrichment of microbial communities within a phototrophic microbial mat. Frontiers in Microbiology, 2014, 5, 11.	1.5	31
75	Biofilm matrix and artificial mediator for efficient electron transport in CO2 microbial electrosynthesis. Chemical Engineering Journal, 2022, 427, 131885.	6.6	31
76	Immobilization of urease and estimation of effective diffusion coefficients of urea in HEMA and VP copolymer matrices. Polymer International, 1994, 35, 321-327.	1.6	30
77	Mechanisms of Microbially Influenced Corrosion. Springer Series on Biofilms, 2009, , 35-64.	0.0	30
78	Photosynthetic activity assessment in mixotrophically cultured Chlorella vulgaris biofilms at various developmental stages. Algal Research, 2019, 38, 101408.	2.4	30
79	Host-free biofilm culture of â€œCandidatus Liberibacter asiaticus,â€•the bacterium associated with Huanglongbing. Biofilm, 2019, 1, 100005.	1.5	29
80	An electrochemical technique to measure local flow velocity in biofilms. Water Research, 1998, 32, 3631-3636.	5.3	28
81	Mass-transport dynamics, activity, and structure of sulfate-reducing biofilms. AICHE Journal, 2001, 47, 1689-1697.	1.8	28
82	Microscale geochemical gradients in Hanford 300 Area sediment biofilms and influence of uranium. Water Research, 2012, 46, 227-234.	5.3	28
83	A voltammetric flavin microelectrode for use in biofilms. Sensors and Actuators B: Chemical, 2012, 161, 929-937.	4.0	28
84	The effects of biofilm thickness on biofilm density and substrate consumption rate in a differential fluidizied bed biofilm reactor (DFBBR). Journal of Biotechnology, 1995, 41, 39-47.	1.9	27
85	Biofilms: their structure, activity, and effect on membrane filtration. Water Science and Technology, 2005, 51, 181-192.	1.2	27
86	Fe(III) Reduction and U(VI) Immobilization by Paenibacillus sp. Strain 300A, Isolated from Hanford 300A Subsurface Sediments. Applied and Environmental Microbiology, 2012, 78, 8001-8009.	1.4	26
87	A Self-Sustainable Power Management System for Reliable Power Scaling Up of Sediment Microbial Fuel Cells. IEEE Transactions on Power Electronics, 2015, 30, 4626-4632.	5.4	26
88	Trade-offs between microbiome diversity and productivity in a stratified microbial mat. ISME Journal, 2017, 11, 405-414.	4.4	26
89	Microscale gradients and their role in electron-transfer mechanisms in biofilms. Biochemical Society Transactions, 2012, 40, 1315-1318.	1.6	24
90	New rotating disk hematite film electrode for riboflavin detection. Journal of Electroanalytical Chemistry, 2017, 798, 42-50.	1.9	24

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91	Prediction of average biofilm density and performance of a spherical bioparticle under substrate inhibition. , 1997, 56, 319-329.		23
92	Biofilm monitoring: a perfect solution in search of a problem. Water Science and Technology, 2003, 47, 9-18.	1.2	23
93	Biofilm image reconstruction for assessing structural parameters. Biotechnology and Bioengineering, 2011, 108, 1383-1394.	1.7	23
94	Immobilization of U(VI) from oxic groundwater by Hanford 300 Area sediments and effects of Columbia River water. Water Research, 2012, 46, 3989-3998.	5.3	23
95	Organismal and spatial partitioning of energy and macronutrient transformations within a hypersaline mat. FEMS Microbiology Ecology, 2017, 93, .	1.3	23
96	Simultaneous evaluation of effective diffusion coefficients of the substrates in a biofilm with a novel experimental method. Canadian Journal of Chemical Engineering, 1996, 74, 526-533.	0.9	22
97	An optical microsensor to measure fluorescent light intensity in biofilms. Journal of Microbiological Methods, 2004, 58, 367-374.	0.7	21
98	Exosomes as Powerful Engines in Cancer: Isolation, Characterization and Detection Techniques. Biosensors, 2021, 11, 518.	2.3	21
99	Multiple Cathodic Reaction Mechanisms in Seawater Cathodic Biofilms Operating in Sediment Microbial Fuel Cells. ChemSusChem, 2014, 7, 2898-2906.	3.6	20
100	The Influence of Energy Harvesting Strategies on Performance and Microbial Community for Sediment Microbial Fuel Cells. Journal of the Electrochemical Society, 2017, 164, H3109-H3114.	1.3	20
101	The effect of detachment on biofilm structure and activity: the oscillating pattern of biofilm accumulation. Water Science and Technology, 2007, 55, 429-436.	1.2	19
102	Investigation of Electron Transfer by Geobacter sulfurreducens Biofilms by using an Electrochemical Quartz Crystal Microbalance. ChemElectroChem, 2014, 1, 2007-2016.	1.7	19
103	Production of gold nanoparticles by electrode-respiring Geobacter sulfurreducens biofilms. Enzyme and Microbial Technology, 2016, 95, 69-75.	1.6	19
104	The calculation of simultaneous effective diffusion coefficients of the substrates in a fluidized bed biofilm reactor. Water Science and Technology, 1994, 29, 463-470.	1.2	19
105	The effects of biofilm characteristics on the external mass transfer coefficient in a differential fluidized bed biofilm reactor. Biochemical Engineering Journal, 1998, 1, 53-61.	1.8	18
106	Prediction of substrate consumption rate, average biofilm density and active thickness for a thin spherical biofilm at pseudo-steady state. Biochemical Engineering Journal, 1998, 2, 207-216.	1.8	18
107	Resistance of biofilms containing alginateâ€producing bacteria to disintegration by an alginate degrading enzyme (Algl). Biofouling, 2001, 17, 203-210.	0.8	18
108	Quantifying selected growth parameters of Leptothrix discophora SP-6 in biofilms from oxygen concentration profiles. Chemical Engineering Science, 2003, 58, 4557-4566.	1.9	18

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109	Hypochlorous acid-generating electrochemical scaffold eliminates Candida albicans biofilms. Journal of Applied Microbiology, 2020, 129, 776-786.	1.4	18
110	Large-scale switchable potentiostatically controlled/microbial fuel cell bioelectrochemical wastewater treatment system. Bioelectrochemistry, 2021, 138, 107724.	2.4	18
111	Hydrogen peroxideâ€producing electrochemical bandage controlled by a wearable potentiostat for treatment of wound infections. Biotechnology and Bioengineering, 2021, 118, 2815-2821.	1.7	18
112	A hydrogen peroxide microelectrode to use in bioelectrochemical systems. Sensors and Actuators B: Chemical, 2016, 226, 429-435.	4.0	17
113	Effect of electrode spacing on electron transfer and conductivity of Geobacter sulfurreducens biofilms. Bioelectrochemistry, 2020, 131, 107395.	2.4	17
114	Biomass-derived nanocarbon materials for biological applications: challenges and prospects. Journal of Materials Chemistry B, 2020, 8, 9668-9678.	2.9	16
115	Fiber-optic microsensors to measure backscattered light intensity in biofilms. Applied Optics, 2000, 39, 3408.	2.1	15
116	Vancomycin and maltodextrin affect structure and activity of Staphylococcus aureus biofilms. Biotechnology and Bioengineering, 2015, 112, 2562-2570.	1.7	15
117	Hyperosmotic Agents and Antibiotics Affect Dissolved Oxygen and pH Concentration Gradients in Staphylococcus aureus Biofilms. Applied and Environmental Microbiology, 2017, 83, .	1.4	15
118	Hydrogenâ€Peroxideâ€Generating Electrochemical Scaffold Eradicates Methicillinâ€Resistant Staphylococcus aureus Biofilms. Global Challenges, 2019, 3, 1800101.	1.8	15
119	In Vitro Antibacterial Activity of Hydrogen Peroxide and Hypochlorous Acid, Including That Generated by Electrochemical Scaffolds. Antimicrobial Agents and Chemotherapy, 2021, 65, .	1.4	15
120	Rapid differentiation of antibiotic-susceptible and -resistant bacteria through mediated extracellular electron transfer. Biosensors and Bioelectronics, 2022, 197, 113754.	5.3	15
121	Modeling Milk Clotting Activity in the Continuous Production of Microbial Rennet from Mucor miehei. Journal of Food Science, 1999, 64, 525-529.	1.5	14
122	A biofilm microreactor system for simultaneous electrochemical and nuclear magnetic resonance techniques. Water Science and Technology, 2014, 69, 966-973.	1.2	14
123	Colonization of Epidermal Tissue by Staphylococcus aureus Produces Localized Hypoxia and Stimulates Secretion of Antioxidant and Caspase-14 Proteins. Infection and Immunity, 2015, 83, 3026-3034.	1.0	14
124	Osmotic Compounds Enhance Antibiotic Efficacy against Acinetobacter baumannii Biofilm Communities. Applied and Environmental Microbiology, 2017, 83, .	1.4	14
125	Impact of intermittent polarization on electrode-respiring Geobacter sulfurreducens biofilms. Journal of Power Sources, 2018, 406, 96-101.	4.0	14
126	Microsensors and Microscale Gradients in Biofilms. Advances in Biochemical Engineering/Biotechnology, 2013, 146, 235-256.	0.6	13

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127	Local Current Variation by Depth inGeobacter SulfurreducensBiofilms. Journal of the Electrochemical Society, 2014, 161, H3070-H3075.	1.3	13
128	Use of a small overpotential approximation to analyze Geobacter sulfurreducens biofilm impedance. Journal of Power Sources, 2017, 356, 549-555.	4.0	13
129	Physiochemical changes mediated by â€œCandidatus Liberibacter asiaticusâ€•in Asian citrus psyllids. Scientific Reports, 2019, 9, 16375.	1.6	13
130	Maltodextrin enhances biofilm elimination by electrochemical scaffold. Scientific Reports, 2016, 6, 36003.	1.6	12
131	Design and Finite Element Model of a Microfluidic Platform with Removable Electrodes for Electrochemical Analysis. Journal of the Electrochemical Society, 2019, 166, B125-B132.	1.3	12
132	An Integrated HOCl-Producing E-Scaffold Is Active against Monomicrobial and Polymicrobial Biofilms. Antimicrobial Agents and Chemotherapy, 2021, 65, .	1.4	12
133	A combined growth model of Zoogloea ramigera including multisubstrate, pH, and agitation effects. Enzyme and Microbial Technology, 1997, 21, 74-78.	1.6	11
134	Production of microbial rennin from Mucor miehei in a continuously fed fermenter. Enzyme and Microbial Technology, 1998, 23, 469-474.	1.6	11
135	Regulation of electron transfer processes affects phototrophic mat structure and activity. Frontiers in Microbiology, 2015, 6, 909.	1.5	11
136	Excess surface area in bioelectrochemical systems causes ion transport limitations. Biotechnology and Bioengineering, 2015, 112, 858-866.	1.7	11
137	Structural and metabolic responses of Staphylococcus aureus biofilms to hyperosmotic and antibiotic stress. Biotechnology and Bioengineering, 2018, 115, 1594-1603.	1.7	11
138	In situ enrichment of microbial communities on polarized electrodes deployed in alkaline hot springs. Journal of Power Sources, 2019, 414, 547-556.	4.0	11
139	Reproducibility of biofilm processes and the meaning of steady state in biofilm reactors. Water Science and Technology, 2004, 49, 359-64.	1.2	11
140	Mechanisms of Microbially Influenced Corrosion. Springer Series on Biofilms, 2008, , 35.	0.0	10
141	Engineering rheology of electrolytes using agar for improving the performance of bioelectrochemical systems. Bioresource Technology, 2018, 263, 242-249.	4.8	10
142	Hydrogen-peroxide generating electrochemical bandage is active in vitro against mono- and dual-species biofilms. Biofilm, 2021, 3, 100055.	1.5	10
143	Entrapment of Urease in glycol-containing polymeric matrices and estimation of effective diffusion coefficient of urea. Polymer, 1995, 36, 4091-4096.	1.8	9
144	Autonomous Device for Evaluating the Field Performance of Microbial Fuel Cells in Remote Areas. Journal of the Electrochemical Society, 2017, 164, H3030-H3036.	1.3	9

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145	A Fumarate Microbiosensor for Use in Biofilms. Journal of the Electrochemical Society, 2017, 164, H3058-H3064.	1.3	9
146	Modeling Substrate Utilization, Metabolite Production, and Uranium Immobilization in Shewanella oneidensis Biofilms. Frontiers in Environmental Science, 2017, 5, .	1.5	9
147	[23] Limiting-current-type microelectrodes for quantifying mass transport dynamics in biofilmst. Methods in Enzymology, 2001, 337, 339-359.	0.4	8
148	Hydrogen Peroxide-Generating Electrochemical Scaffold Activity against Trispecies Biofilms. Antimicrobial Agents and Chemotherapy, 2020, 64, .	1.4	8
149	The effect of additional salinity on performance of a phosphate buffer saline buffered three-electrode bioelectrochemical system inoculated with wastewater. Bioresource Technology, 2021, 320, 124291.	4.8	8
150	Predicting average biofilm density of a fully active spherical bioparticle. Journal of Biotechnology, 1996, 52, 39-49.	1.9	7
151	Effectiveness factor for a hollow-fiber biofilm reactor at maximum substrate consumption. The Chemical Engineering Journal and the Biochemical Engineering Journal, 1996, 62, 149-154.	0.1	7
152	EQCM and Surface pH Studies on Lanthanum Accumulation on Electrodes in Aqueous Solution. Journal of the Electrochemical Society, 2016, 163, H866-H870.	1.3	7
153	Electrochemical Preconcentration Mechanism of Trivalent Lanthanum. Journal of the Electrochemical Society, 2018, 165, D654-D661.	1.3	7
154	Growth of â€˜Candidatus Liberibacter asiaticusâ€™ in a host-free microbial culture is associated with microbial community composition. Enzyme and Microbial Technology, 2020, 142, 109691.	1.6	7
155	Controlled replication of â€˜ Candidatus Liberibacter asiaticus â€˜ DNA in citrus leaf discs. Microbial Biotechnology, 2020, 13, 747-759.	2.0	7
156	Flow Injection Electrochemical Quartz Crystal Microbalance with ICP-OES Detection: Recovery of Silver by Electrodeposition with Redox Replacement in a Flow Cell. Journal of the Electrochemical Society, 2021, 168, 056518.	1.3	7
157	Reconstruction of biofilm images: combining local and global structural parameters. Biofouling, 2014, 30, 1141-1154.	0.8	6
158	The infection of its insect vector by bacterial plant pathogen "Candidatus Liberibacter solanacearum" is associated with altered vector physiology. Enzyme and Microbial Technology, 2019, 129, 109358.	1.6	6
159	Responses of Acinetobacter baumannii Bound and Loose Extracellular Polymeric Substances to Hyperosmotic Agents Combined with or without Tobramycin: An Atomic Force Microscopy Study. Langmuir, 2019, 35, 9071-9083.	1.6	6
160	Overestimation of biofilm conductance determined by using the split electrode as the microbial respiration. Journal of Power Sources, 2020, 453, 227906.	4.0	6
161	Microbial fuel cells: Current trends and emerging applications. Bioresource Technology, 2021, 324, 124687.	4.8	6
162	Control of carbon monoxide dehydrogenase orientation by site-specific immobilization enables direct electrical contact between enzyme cofactor and solid surface. Communications Biology, 2022, 5, 390.	2.0	6

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163	Immobilization of Uranium in Groundwater Using Biofilms. , 2010, , 1-37.		5
164	Characterization of Bacteriaâ€“Biomaterial Interactions, from a Single Cell to Biofilms. , 2013, , 207-253.		5
165	In Vitro Antibiofilm Activity of Hydrogen Peroxide-Generating Electrochemical Bandage against Yeast Biofilms. Antimicrobial Agents and Chemotherapy, 2022, 66, AAC0179221.	1.4	5
166	A mathematical model for hollow fiber biofilm reactors. The Chemical Engineering Journal and the Biochemical Engineering Journal, 1994, 56, B53-B59.	0.1	4
167	Electron donor availability controls scale up of anodic biofilms. Bioelectrochemistry, 2020, 132, 107403.	2.4	4
168	Sequential Hypertonic-Hypotonic Treatment Enhances Efficacy of Antibiotic against Acinetobacter baumannii Biofilm Communities. Antibiotics, 2020, 9, 832.	1.5	4
169	Biofilm addition improves sand strength over a wide range of saturations. Biofilm, 2021, 3, 100050.	1.5	4
170	Hypochlorous Acid-Generating Electrochemical Catheter Prototype for Prevention of Intraluminal Infection. Microbiology Spectrum, 2021, 9, e0055721.	1.2	4
171	The effect ofD-glucose on milk clotting activity ofMucor miehei in a chemostat with biomass retention. Journal of Chemical Technology and Biotechnology, 1999, 74, 527-532.	1.6	3
172	Preconcentration mechanism of trivalent lanthanum on eQCM electrodes in the presence of Î±-hydroxy isobutyric acid. Journal of Electroanalytical Chemistry, 2020, 857, 113731.	1.9	3
173	Threeâ€dimensional biofilm image reconstruction for assessing structural parameters. Biotechnology and Bioengineering, 2020, 117, 2460-2468.	1.7	3
174	Kinetics and scale up of oxygen reducing cathodic biofilms. Biofilm, 2021, 3, 100053.	1.5	3
175	Electrochemically Active Biofilms as an Indicator of Soil Health. Journal of the Electrochemical Society, 2021, 168, 087511.	1.3	2
176	Characterizing temporal development of biofilm porosity using artificial neural networks. Water Science and Technology, 2008, 57, 1867-1872.	1.2	1
177	Design and performance considerations for benthic microbial fuel cells. , 2014, , .		1
178	Electrochemical precipitation of neptunium with a micro electrochemical quartz crystal microbalance. Journal of Radioanalytical and Nuclear Chemistry, 2020, 324, 1021-1030.	0.7	1
179	Electrochemical detection of flavin mononucleotide using mineral-filmed microelectrodes. Journal of Electroanalytical Chemistry, 2021, 892, 115307.	1.9	1
180	Enhanced bioelectrochemical nitrogen removal in flow through electrodes. Sustainable Energy Technologies and Assessments, 2021, 47, 101507.	1.7	1

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181	Biofilms: their structure, activity, and effect on membrane filtration. Water Science and Technology, 2005, 51, 181-92.	1.2	1
182	Fiber-optic microsensors to measure backscattered light intensity in biofilms. , 2000, , .		0
183	Methods for imaging and quantifying the structure of biofilms in food processing and other environments. , 2009, , 99-130.		0
184	Integration of Electrochemical Methods with Magnetic Resonance and Electron Microscopies for the Study of Geobacter sulfurreducens Biofilms. Microscopy and Microanalysis, 2012, 18, 14-15.	0.2	0
185	Interactions between hyaluronic acid and CoCrMo alloy surface in simulated synovial fluids. Biosurface and Biotribology, 2021, 7, 239.	0.6	0
186	Monitoring Electron Transfer Rates of Electrode-Respiring Cells. , 2020, , 76-84.		0