James D Bryers

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8775804/publications.pdf

Version: 2024-02-01

61	4,423	147566	149479
papers	citations	31 h-index	56 g-index

61	61	61	6936
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Inhibition of bacterial adhesion and biofilm formation on zwitterionic surfaces. Biomaterials, 2007, 28, 4192-4199.	5.7	640
2	Medical biofilms. Biotechnology and Bioengineering, 2008, 100, 1-18.	1.7	623
3	Zwitterionic carboxybetaine polymer surfaces and their resistance to long-term biofilm formation. Biomaterials, 2009, 30, 5234-5240.	5.7	465
4	Engineering biomaterials to integrate and heal: The biocompatibility paradigm shifts. Biotechnology and Bioengineering, 2012, 109, 1898-1911.	1.7	217
5	Chitosan-based nanofibrous membranes for antibacterial filter applications. Carbohydrate Polymers, 2013, 92, 254-259.	5.1	159
6	Processes governing primary biofilm formation. Biotechnology and Bioengineering, 1982, 24, 2451-2476.	1.7	128
7	Effects of carbon and oxygen limitations and calcium concentrations on biofilm removal processes. Biotechnology and Bioengineering, 1991, 37, 17-25.	1.7	126
8	Plasma Deposition and Surface Characterization of Oligoglyme, Dioxane, and Crown Ether Nonfouling Films. Langmuir, 2005, 21, 870-881.	1.6	114
9	Protein and bacterial fouling characteristics of peptide and antibody decorated surfaces of PEG-poly(acrylic acid) co-polymers. Biomaterials, 2004, 25, 2247-2263.	5.7	113
10	Multifunctional triblock copolymers for intracellular messenger RNA delivery. Biomaterials, 2012, 33, 6868-6876.	5.7	111
11	Diblock copolymers with tunable pH transitions for gene delivery. Biomaterials, 2012, 33, 2301-2309.	5.7	104
12	Biologically Active Surfaces: Processes Governing the Formation and Persistence of Biofilms. Biotechnology Progress, 1987, 3, 57-68.	1.3	103
13	Local macromolecule diffusion coefficients in structurally non-uniform bacterial biofilms using fluorescence recovery after photobleaching (FRAP). , 1998, 60, 462-473.		91
14	Integrated Bi‚Layered Scaffold for Osteochondral Tissue Engineering. Advanced Healthcare Materials, 2013, 2, 872-883.	3.9	83
15	Antibacterial effects of silver-doped hydroxyapatite thin films sputter deposited on titanium. Materials Science and Engineering C, 2012, 32, 2135-2144.	3.8	80
16	Sustained release of antibiotic from poly(2-hydroxyethyl methacrylate) to prevent blinding infections after cataract surgery. Biomaterials, 2009, 30, 5675-5681.	5.7	69
17	Multispectral Optical Tweezers for Biochemical Fingerprinting of CD9-Positive Exosome Subpopulations. Analytical Chemistry, 2017, 89, 5357-5363.	3.2	69
18	Biofilms and the technological implications of microbial cell adhesion. Colloids and Surfaces B: Biointerfaces, 1994, 2, 9-23.	2.5	68

#	Article	IF	Citations
19	Biodegradation of poly(anhydride-esters) into non-steroidal anti-inflammatory drugs and their effect on Pseudomonas aeruginosa biofilms in vitro and on the foreign-body response in vivo. Biomaterials, 2006, 27, 5039-5048.	5.7	67
20	Design of infection-resistant antibiotic-releasing polymers: I. Fabrication and formulation. Journal of Controlled Release, 1999, 62, 289-299.	4.8	59
21	Toluene degradation kinetics for planktonic and biofilm-grown cells ofPseudomonas putida 54G. , 1997, 53, 535-546.		58
22	Antimicrobial effects of nanofiber poly(caprolactone) tissue scaffolds releasing rifampicin. Journal of Materials Science: Materials in Medicine, 2012, 23, 1411-1420.	1.7	57
23	Non-invasive determination of conjugative transfer of plasmids bearing antibiotic-resistance genes in biofilm-bound bacteria: effects of substrate loading and antibiotic selection. Applied Microbiology and Biotechnology, 2013, 97, 317-328.	1.7	46
24	Development of a poly(ether urethane) system for the controlled release of two novel anti-biofilm agents based on gallium or zinc and its efficacy to prevent bacterial biofilm formation. Journal of Controlled Release, 2013, 172, 1035-1044.	4.8	45
25	Biofilm formation and chemostat dynamics: Pure and mixed culture considerations. Biotechnology and Bioengineering, 1984, 26, 948-958.	1.7	44
26	Plasmid retention and gene expression in suspended and biofilm cultures of recombinantEscherichia coli DH5?(pMJR1750). Biotechnology and Bioengineering, 1993, 41, 211-220.	1.7	44
27	Protein Engineering Reveals Mechanisms of Functional Amyloid Formation in Pseudomonas aeruginosa Biofilms. Journal of Molecular Biology, 2018, 430, 3751-3763.	2.0	44
28	Injectable Biodegradable Chitosanâ€Alginate 3D Porous Gel Scaffold for mRNA Vaccine Delivery. Macromolecular Bioscience, 2019, 19, e1800242.	2.1	44
29	Effects of medium carbon-to-nitrogen ratio on biofilm formation and plasmid stability. Biotechnology and Bioengineering, 1994, 44, 329-336.	1.7	42
30	Surface modification of a perfluorinated ionomer using a glow discharge deposition method to control protein adsorption. Biomaterials, 2008, 29, 1356-1366.	5.7	40
31	Scaffold-mediated delivery for non-viral mRNA vaccines. Gene Therapy, 2018, 25, 556-567.	2.3	39
32	Giant Extracellular Matrix Binding Protein Expression in Staphylococcus epidermidis is Regulated by Biofilm Formation and Osmotic Pressure. Current Microbiology, 2013, 66, 627-633.	1.0	34
33	Designed Î±-sheet peptides suppress amyloid formation in Staphylococcus aureus biofilms. Npj Biofilms and Microbiomes, 2017, 3, 16.	2.9	34
34	Bacterial biofilms. Current Opinion in Biotechnology, 1993, 4, 197-204.	3.3	33
35	Precisionâ€porous templated scaffolds of varying pore size drive dendritic cell activation. Biotechnology and Bioengineering, 2018, 115, 1086-1095.	1.7	27
36	Poly(ethylene glycol)-polyacrylate copolymers modified to control adherent monocyte-macrophage physiology: Interactions with attachingStaphylococcus epidermidis orPseudomonas aeruginosa bacteria. Journal of Biomedical Materials Research Part B, 2004, 69A, 79-90.	3.0	26

#	Article	IF	Citations
37	Chemical and Physical Variability in Structural Isomers of an <scp>l</scp>/<scp>d</scp> Î±-Sheet Peptide Designed To Inhibit Amyloidogenesis. Biochemistry, 2018, 57, 507-510.	1.2	24
38	Deposition of bacterial cells onto glass and biofilm surfaces. Biofouling, 1992, 6, 81-86.	0.8	22
39	Interruption of Electrical Conductivity of Titanium Dental Implants Suggests a Path Towards Elimination Of Corrosion. PLoS ONE, 2015, 10, e0140393.	1.1	21
40	Adhesion of Staphylococcus epidermidis to biomaterials is inhibited by fibronectin and albumin. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1990-1997.	2.1	17
41	Non-invasive method to quantify local bacterial concentrations in a mixed culture biofilm. Journal of Industrial Microbiology and Biotechnology, 2010, 37, 1081-1089.	1.4	16
42	Biomaterials Approaches to Combating Oral Biofilms and Dental Disease. BMC Oral Health, 2006, 6, S15.	0.8	15
43	Nonâ€invasive in situ monitoring and quantification of TOL plasmid segregational loss within Pseudomonas putida biofilms. Biotechnology and Bioengineering, 2013, 110, 2949-2958.	1.7	15
44	A Single B-Repeat of Staphylococcus epidermidis Accumulation-Associated Protein Induces Protective Immune Responses in an Experimental Biomaterial-Associated Infection Mouse Model. Vaccine Journal, 2014, 21, 1206-1214.	3.2	14
45	Use of flow cell reactors to quantify biofilm formation kinetics. Biotechnology Letters, 1992, 6, 193-198.	0.5	13
46	Biomimetic strategies based on viruses and bacteria for the development of immune evasive biomaterials. Biomaterials, 2009, 30, 1989-2005.	5.7	13
47	Multivalent artificial opsonin for the recognition and phagocytosis of Gram-positive bacteria by human phagocytes. Biomaterials, 2011, 32, 4042-4051.	5.7	13
48	Uniform 40â€Âµmâ€pore diameter precision templated scaffolds promote a proâ€healing host response by extracellular vesicle immune communication. Journal of Tissue Engineering and Regenerative Medicine, 2021, 15, 24-36.	1.3	13
49	[9] Biofilm-induced gene expression and gene transfer. Methods in Enzymology, 2001, 336, 84-IN1.	0.4	12
50	Activity and stability of a recombinant plasmid-borne TCE degradative pathway in suspended cultures. Biotechnology and Bioengineering, 1998, 57, 287-296.	1.7	10
51	Effect of macrophage classical (M1) activation on implantâ€adherent macrophage interactions with Staphylococcus epidermidis: A murine in vitro model system. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2045-2053.	2.1	10
52	[17] Two-photon excitation microscopy for analyses of biofilm processes. Methods in Enzymology, 2001, 337, 259-269.	0.4	9
53	Precision-Porous PolyHEMA-Based Scaffold as an Antibiotic-Releasing Insert for a Scleral Bandage. ACS Biomaterials Science and Engineering, 2015, 1, 593-600.	2.6	8
54	Activity and stability of a recombinant plasmid-borne TCE degradative pathway in biofilm cultures. , 1998, 59, 318-327.		7

#	Article	IF	Citations
55	A dynamic model for receptorâ€mediated specific adhesion of bacteria under uniform shear flow. Biofouling, 1997, 11, 227-252.	0.8	6
56	Resuscitation of Starved Ultramicrobacteria to Improve in Situ Bioremediation^a. Annals of the New York Academy of Sciences, 1994, 745, 61-76.	1.8	6
57	Artificial opsonin enhances bacterial phagocytosis, oxidative burst and chemokine production by human neutrophils. Pathogens and Disease, 2017, 75, .	0.8	5
58	Monocytes contribute to a proâ€healing response in 40ÂÎ¼m diameter uniformâ€pore, precisionâ€templated scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2022, 16, 297-310.	1.3	5
59	Evaluation of the effectiveness factor for a multiple species biofilm. Biofouling, 1993, 6, 363-380.	0.8	2
60	Toluene degradation kinetics for planktonic and biofilm-grown cells of Pseudomonas putida 54G. , 1997, 53, 535.		1
61	Anti-antimicrobial Approaches to Device-Based Infections. , 2017, , 143-169.		0