Megan C Frost

List of Publications by Year
in descending order

43 papers	2,228 citations	304743 22 h-index	289244 40 g-index
43 all docs	43 docs citations	43 times ranked	2880 citing authors

#	Article	IF	Citations
1	Control of Orthodontic Tooth Movement by Nitric Oxide Releasing Nanoparticles in Sprague-Dawley Rats. Frontiers in Materials, 2022, 9, .	2.4	2
2	Dual Switch Mechanism of Erythropoietin as an Antiapoptotic and Pro-Angiogenic Determinant in the Retina. ACS Omega, 2020, 5, 21113-21126.	3.5	16
3	S-Nitroso-N-Acetyl-D-Penicillamine Modified Hyperbranched Polyamidoamine for High-Capacity Nitric Oxide Storage and Release. Bioengineering, 2020, 7, 9.	3.5	7
4	Biomimetic recyclable microgels for on-demand generation of hydrogen peroxide and antipathogenic application. Acta Biomaterialia, 2019, 83, 109-118.	8.3	58
5	Magnetoelastic galfenol as a stent material for wirelessly controlled degradation rates. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 232-241.	3.4	2
6	Investigative Study on Nitric Oxide Production in Human Dermal Fibroblast Cells under Normal and High Glucose Conditions. Medical Sciences (Basel, Switzerland), 2018, 6, 99.	2.9	6
7	Synthesis and Characterization of Controlled Nitric Oxide Release from S-Nitroso-N-Acetyl-d-Penicillamine Covalently Linked to Polyvinyl Chloride (SNAP-PVC). Bioengineering, 2018, 5, 72.	3.5	15
8	Improving the Performance of Implantable Sensors with Nitric Oxide Release. , 2017, , 191-219.		2
9	Transition-Metal-Mediated Release of Nitric Oxide (NO) from S-Nitroso-N-acetyl-<scp>d</scp>-penicillamine (SNAP): Potential Applications for Endogenous Release of NO at the Surface of Stents Via Corrosion Products. ACS Applied Materials & Interfaces, 2016, 8, 10128-10135.	8.0	61
10	Direct measurement of actual levels of nitric oxide (NO) in cell culture conditions using soluble NO donors. Redox Biology, 2016, 9, 1-14.	9.0	34
11	CellNO trap: Novel device for quantitative, real-time, direct measurement of nitric oxide from cultured RAW 267.4 macrophages. Redox Biology, 2016, 8, 383-397.	9.0	12
12	Synthesis and Characterization of the Novel Nitric Oxide (NO) Donating Compound, S-nitroso-N-acetyl-D-penicillamine Derivatized Cyclam (SNAP-Cyclam). ACS Applied Materials & Interfaces, 2016, 8, 5898-5905.	8.0	21
13	Real-Time Monitoring of Critical Care Analytes in the Bloodstream with Chemical Sensors: Progress and Challenges. Annual Review of Analytical Chemistry, 2015, 8, 171-192.	5.4	52
14	Fabrication and Short-Term in Vivo Performance of a Natural Elastic Laminaâ€“Polymeric Hybrid Vascular Graft. ACS Applied Materials & Interfaces, 2015, 7, 16202-16212.	8.0	26
15	Increasing Mechanical Strength of Gelatin Hydrogels by Divalent Metal Ion Removal. Scientific Reports, 2014, 4, 4706.	3.3	340
16	Fabrication and Characterization of a Nitric Oxide-Releasing Nanofibrous Gelatin Matrix. Biomacromolecules, 2013, 14, 2521-2530.	5.4	37
17	Novel device for continuous spatial control and temporal delivery of nitric oxide for in vitro cell culture. Redox Biology, 2013, 1, 332-339.	9.0	10
18	Highly Water-Soluble BODIPY-Based Fluorescent Probe for Sensitive and Selective Detection of Nitric Oxide in Living Cells. ACS Applied Materials & Interfaces, 2013, 5, 4107-4112.	8.0	73

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19	S-Nitroso-N-acetylpenicillamine (SNAP) Derivatization of Peptide Primary Amines to Create Inducible Nitric Oxide Donor Biomaterials. ACS Applied Materials & Interfaces, 2013, 5, 8430-8439.	8.0	17
20	Inducible nitric oxide releasing poly-(ethylene glycol)-fibrinogen adhesive hydrogels for tissue regeneration. Materials Research Society Symposia Proceedings, 2013, 1569, 39-44.	0.1	4
21	Effects of local nitric oxide release on human mesenchymal stem cell attachment and proliferation on gelatin hydrogel surface. Surface Innovations, 2013, 1, 224-232.	2.3	13
22	In Vivo Sensors for Continuous Monitoring of Blood Gases, Glucose, and Lactate: Biocompatibility Challenges and Potential Solutions. RSC Detection Science, 2013, , 129-155.	0.0	4
23	Wireless platform for controlled nitric oxide releasing optical fibers for mediating biological response to implanted devices. Nitric Oxide - Biology and Chemistry, 2012, 27, 228-234.	2.7	8
24	Nitric oxide leads to cytoskeletal reorganization in the retinal pigment epithelium under oxidative stress. Advances in Bioscience and Biotechnology (Print), 2012, 03, 1167-1178.	0.7	23
25	S-Nitroso-N-acetyl-D-penicillamine covalently linked to polydimethylsiloxane (SNAPâ€“PDMS) for use as a controlled photoinitiated nitric oxide release polymer. Science and Technology of Advanced Materials, 2011, 12, 055007.	6.1	36
26	Covalent Linking of pH-Sensitive Dye to Fumed Silica. Journal of Medical Devices, Transactions of the ASME, 2010, 4, .	0.7	0
27	Toward the Development of Novel Nitric Oxide Donating Polymeric Materials to Improve the Biocompatibility of Implanted Devices. Journal of Medical Devices, Transactions of the ASME, 2010, 4, .	0.7	0
28	Fabrication and characterization of an inorganic gold and silica nanoparticle mediated drug delivery system for nitric oxide. Nanotechnology, 2010, 21, 305102.	2.6	48
29	Effect of varying nitric oxide release to prevent platelet consumption and preserve platelet function in an in vivo model of extracorporeal circulation. Perfusion (United Kingdom), 2007, 22, 193-200.	1.0	66
30	In Vivo Chemical Sensors: Tackling Biocompatibility. Analytical Chemistry, 2006, 78, 7370-7377.	6.5	139
31	Polymers incorporating nitric oxide releasing/generating substances for improved biocompatibility of blood-contacting medical devices. Biomaterials, 2005, 26, 1685-1693.	11.4	315
32	Synthesis, characterization, and controlled nitric oxide release fromS-nitrosothiol-derivatized fumed silica polymer filler particles. Journal of Biomedical Materials Research - Part A, 2005, 72A, 409-419.	4.0	85
33	Fabrication and In Vivo Evaluation of Nitric Oxide-Releasing Electrochemical Oxygen-Sensing Catheters. Methods in Enzymology, 2004, 381, 704-715.	1.0	9
34	Nitric Oxide-Releasing Hydrophobic Polymers: Preparation, Characterization, and Potential Biomedical Applications. Free Radical Biology and Medicine, 2004, 37, 926-936.	2.9	100
35	Controlled Photoinitiated Release of Nitric Oxide from Polymer Films ContainingS-Nitroso-N-acetyl-dl-penicillamine Derivatized Fumed Silica Filler. Journal of the American Chemical Society, 2004, 126, 1348-1349.	13.7	115
36	Preparation and characterization of implantable sensors with nitric oxide release coatings. Microchemical Journal, 2003, 74, 277-288.	4.5	51

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37	In Vivo Biocompatibility and Analytical Performance of Intravascular Amperometric Oxygen Sensors Prepared with Improved Nitric Oxide-Releasing Silicone Rubber Coating. Analytical Chemistry, 2002, 74, 5942-5947.	6.5	93
38	Synthesis and Characterization of Polymethacrylate-Based Nitric Oxide Donors. Journal of the American Chemical Society, 2002, 124, 12182-12191.	13.7	90
39	Nitric Oxide-Releasing Fluorescence-Based Oxygen Sensing Polymeric Films. Analytical Chemistry, 2002, 74, 5937-5941.	6.5	34
40	Implantable chemical sensors for real-time clinical monitoring: progress and challenges. Current Opinion in Chemical Biology, 2002, 6, 633-641.	6.1	136
41	Separation using planar chromatography with electroosmotic flow. Journal of Chromatography A, 2000, 903, 211-217.	3.7	49
42	Study of enzyme-catalyzed reactions in organic solvents using multiple linear regression. Journal of Molecular Catalysis B: Enzymatic, 1999, 7, 273-282.	1.8	14
43	Empirical equation for the accurate prediction of retention in planar chromatography. Journal of Chromatography A, 1997, 788, 207-211.	3.7	5