

Nathan D Gallant

List of Publications by Year in descending order

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39
papers

2,069
citations

361413

20
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315739

38
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41
all docs

41
docs citations

41
times ranked

3404
citing authors

#	ARTICLE	IF	CITATIONS
1	Laser machined micropatterns as corrosion protection of both hydrophobic and hydrophilic magnesium. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 125, 104920.	3.1	8
2	A combinatorial approach to protect sensory tissue against cisplatin-induced ototoxicity. <i>Hearing Research</i> , 2022, 415, 108430.	2.0	7
3	Collagen production and niche engineering: A novel strategy for cancer cells to survive acidosis in DCIS and evolve. <i>Evolutionary Applications</i> , 2020, 13, 2689-2703.	3.1	11
4	Adhesion and Particle Removal from Surface-Tethered Poly(<i>N</i> -Isopropylacrylamide) Coatings Using Hydrodynamic Shear Forces. <i>Langmuir</i> , 2019, 35, 15751-15758.	3.5	3
5	Responsive coatings from naturally occurring pectin polysaccharides. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 176, 387-393.	5.0	13
6	Cell sheet engineering for integrating functional tissue in vivo: Successes and challenges. <i>MRS Bulletin</i> , 2017, 42, 350-355.	3.5	5
7	Microcontact printing of tissue precursors via geometrically patterned shape-changing hydrogel stamps preserves cell viability and organization. <i>Bioprinting</i> , 2017, 8, 22-29.	5.8	4
8	Effect of nordihydroguaiaretic acid cross-linking on fibrillar collagen: in vitro evaluation of fibroblast adhesion strength and migration. <i>AIMS Bioengineering</i> , 2017, 4, 300-317.	1.1	6
9	Protein-surface interactions on stimuli-responsive polymeric biomaterials. <i>Biomedical Materials (Bristol)</i> , 2016, 11, 022002.	3.3	38
10	Mechanical characterization of crosslinking effect in polydimethylsiloxane using nanoindentation. <i>Polymer Testing</i> , 2016, 56, 329-336.	4.8	17
11	Surface chemistry gradients on silicone elastomers for high-throughput modulation of cell adhesive interfaces. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 2066-2076.	4.0	8
12	Comparison of the macroscale and microscale tests for measuring elastic properties of polydimethylsiloxane. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	2.6	27
13	Thermoresponsive PNIPAM Coatings on Nanostructured Gratings for Cell Alignment and Release. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 11857-11862.	8.0	25
14	Combining Nonadhesive Materials into Microstructured Composite Surfaces Induces Cell Adhesion and Spreading. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 1163-1173.	5.2	6
15	A Cell ELISA for the quantification of MUC1 mucin (CD227) expressed by cancer cells of epithelial and neuroectodermal origin. <i>Cellular Immunology</i> , 2015, 298, 96-103.	3.0	22
16	Shape-changing hydrogel surfaces trigger rapid release of patterned tissue modules. <i>Acta Biomaterialia</i> , 2015, 11, 96-103.	8.3	18
17	Nanoindentation study of polydimethylsiloxane elastic modulus using Berkovich and flat punch tips. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	2.6	39
18	Crosslinking effect on polydimethylsiloxane elastic modulus measured by custom-built compression instrument. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	2.6	328

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19	Microtubules Mechanically Regulate Cell Adhesion Strengthening Via Cell Shape. Cellular and Molecular Bioengineering, 2014, 7, 136-144.	2.1	4
20	Surface Modification on Acoustic Wave Biosensors for Enhanced Specificity. Sensors, 2012, 12, 12317-12328.	3.8	20
21	A Urinary Bcl-2 Surface Acoustic Wave Biosensor for Early Ovarian Cancer Detection. Sensors, 2012, 12, 7423-7437.	3.8	30
22	Sheathless Size-Based Acoustic Particle Separation. Sensors, 2012, 12, 905-922.	3.8	88
23	Regulation of Adhesion Strength by Focal Adhesion Position and Cell Shape. , 2012, , .		0
24	Regulation of Cell Adhesion Strength by Peripheral Focal Adhesion Distribution. Biophysical Journal, 2011, 101, 2903-2911.	0.5	60
25	Synergistic enhancement of human bone marrow stromal cell proliferation and osteogenic differentiation on BMP-2-derived and RGD peptide concentration gradients. Acta Biomaterialia, 2011, 7, 2091-2100.	8.3	110
26	A Resistless Process for the Production of Patterned, Vertically Aligned ZnO Nanowires.. Materials Research Society Symposia Proceedings, 2011, 1302, 8201.	0.1	1
27	The modulation of dendritic cell integrin binding and activation by RGD-peptide density gradient substrates. Biomaterials, 2010, 31, 7444-7454.	11.4	62
28	Contractility modulates cell adhesion strengthening through focal adhesion kinase and assembly of vinculin-containing focal adhesions. Journal of Cellular Physiology, 2010, 223, 746-756.	4.1	88
29	The use of immobilized osteogenic growth peptide on gradient substrates synthesized via click chemistry to enhance MC3T3-E1 osteoblast proliferation. Biomaterials, 2010, 31, 1604-1611.	11.4	77
30	Time-dependent effects of pre-aging polymer films in cell culture medium on cell adhesion and spreading. Journal of Materials Science: Materials in Medicine, 2008, 19, 1759-1766.	3.6	11
31	Micro- and Nano-Patterned Substrates to Manipulate Cell Adhesion. Journal of Nanoscience and Nanotechnology, 2007, 7, 803-807.	0.9	21
32	Universal Gradient Substrates for "Click" Biofunctionalization. Advanced Materials, 2007, 19, 965-969.	21.0	124
33	Length-Dependent Uptake of DNA-Wrapped Single-Walled Carbon Nanotubes. Advanced Materials, 2007, 19, 939-945.	21.0	142
34	Model of integrin-mediated cell adhesion strengthening. Journal of Biomechanics, 2007, 40, 1301-1309.	2.1	53
35	Quantitative Analyses of Cell Adhesion Strength. Methods in Molecular Biology, 2007, 370, 83-95.	0.9	19
36	Cellular response to phase-separated blends of tyrosine-derived polycarbonates. Journal of Biomedical Materials Research - Part A, 2006, 76A, 491-502.	4.0	19

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37	Cell Adhesion Strengthening: Contributions of Adhesive Area, Integrin Binding, and Focal Adhesion Assembly. <i>Molecular Biology of the Cell</i> , 2005, 16, 4329-4340.	2.1	373
38	Stick and Grip: Measurement Systems and Quantitative Analyses of Integrin-Mediated Cell Adhesion Strength. <i>Cell Biochemistry and Biophysics</i> , 2003, 39, 61-74.	1.8	86
39	Micropatterned Surfaces to Engineer Focal Adhesions for Analysis of Cell Adhesion Strengthening. <i>Langmuir</i> , 2002, 18, 5579-5584.	3.5	93