

# Philip R Leduc

## List of Publications by Year in descending order

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161  
papers

4,365  
citations

126858

33  
h-index

118793

62  
g-index

164  
all docs

164  
docs citations

164  
times ranked

5893  
citing authors

#	ARTICLE	IF	CITATIONS
1	Subcellular positioning of small molecules. <i>Nature</i> , 2001, 411, 1016-1016.	13.7	496
2	Bio-inspired soft robotics: Material selection, actuation, and design. <i>Extreme Mechanics Letters</i> , 2018, 22, 51-59.	2.0	247
3	Molecular crowding shapes gene expression in synthetic cellular nanosystems. <i>Nature Nanotechnology</i> , 2013, 8, 602-608.	15.6	215
4	Dynamics of individual flexible polymers in a shear flow. <i>Nature</i> , 1999, 399, 564-566.	13.7	202
5	Selective Chemical Treatment of Cellular Microdomains Using Multiple Laminar Streams. <i>Chemistry and Biology</i> , 2003, 10, 123-130.	6.2	192
6	Controlling Mammalian Cell Spreading and Cytoskeletal Arrangement with Conveniently Fabricated Continuous Wavy Features on Poly(dimethylsiloxane). <i>Langmuir</i> , 2002, 18, 3273-3280.	1.6	185
7	Towards an in vivo biologically inspired nanofactory. <i>Nature Nanotechnology</i> , 2007, 2, 3-7.	15.6	172
8	The role of mechanics in biological and bio-inspired systems. <i>Nature Communications</i> , 2015, 6, 7418.	5.8	170
9	Sequential involvement of Cdk1, mTOR and p53 in apoptosis induced by the HIV-1 envelope. <i>EMBO Journal</i> , 2002, 21, 4070-4080.	3.5	146
10	Fabrication of circular microfluidic channels by combining mechanical micromilling and soft lithography. <i>Lab on A Chip</i> , 2011, 11, 1550.	3.1	127
11	Defining the role of syndecan-4 in mechanotransduction using surface-modification approaches. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 22102-22107.	3.3	109
12	Composite polymer systems with control of local substrate elasticity and their effect on cytoskeletal and morphological characteristics of adherent cells. <i>Biomaterials</i> , 2009, 30, 3136-3142.	5.7	93
13	Artificial cells: building bioinspired systems using small-scale biology. <i>Trends in Biotechnology</i> , 2008, 26, 14-20.	4.9	91
14	A biosensing soft robot: Autonomous parsing of chemical signals through integrated organic and inorganic interfaces. <i>Science Robotics</i> , 2019, 4, .	9.9	85
15	Microbial electricity generation via microfluidic flow control. <i>Biotechnology and Bioengineering</i> , 2011, 108, 2061-2069.	1.7	62
16	Understanding Sensory Nerve Mechanotransduction through Localized Elastomeric Matrix Control. <i>PLoS ONE</i> , 2009, 4, e4293.	1.1	61
17	Pressure-driven spatiotemporal control of the laminar flow interface in a microfluidic network. <i>Lab on A Chip</i> , 2007, 7, 647.	3.1	56
18	Probing cell structure by controlling the mechanical environment with cell-substrate interactions. <i>Journal of Biomechanics</i> , 2009, 42, 187-192.	0.9	55

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19	Probing Cellular Dynamics with a Chemical Signal Generator. PLoS ONE, 2009, 4, e4847.	1.1	53
20	Material Gradients in Stretchable Substrates toward Integrated Electronic Functionality. Advanced Materials, 2016, 28, 3584-3591.	11.1	52
21	Probing Cell Structure Responses Through a Shear and Stretching Mechanical Stimulation Technique. Cell Biochemistry and Biophysics, 2010, 56, 115-124.	0.9	50
22	How Do Control-Based Approaches Enter into Biology?. Annual Review of Biomedical Engineering, 2011, 13, 369-396.	5.7	48
23	Probing localized neural mechanotransduction through surface-modified elastomeric matrices and electrophysiology. Nature Protocols, 2010, 5, 714-724.	5.5	44
24	Hierarchical Machine Learning for High-Fidelity 3D Printed Biopolymers. ACS Biomaterials Science and Engineering, 2020, 6, 7021-7031.	2.6	44
25	Using Lessons from Cellular and Molecular Structures for Future Materials. Advanced Materials, 2007, 19, 3761-3770.	11.1	43
26	Modulation of fluidic resistance and capacitance for long-term, high-speed feedback control of a microfluidic interface. Lab on A Chip, 2009, 9, 2603.	3.1	41
27	Mechanical stretch and shear flow induced reorganization and recruitment of fibronectin in fibroblasts. Scientific Reports, 2011, 1, 147.	1.6	40
28	Response of an actin filament network model under cyclic stretching through a coarse grained Monte Carlo approach. Journal of Theoretical Biology, 2011, 274, 109-119.	0.8	39
29	Ablation of cytoskeletal filaments and mitochondria in live cells using a femtosecond laser nanoscissor. Mch Mechanics and Chemistry of Biosystems, 2005, 2, 17-25.	0.3	36
30	Integrated biomimetic carbon nanotube composites for in vivo systems. Nanoscale, 2010, 2, 2855.	2.8	35
31	Detection of Dynamic Spatiotemporal Response to Periodic Chemical Stimulation in a Xenopus Embryonic Tissue. PLoS ONE, 2011, 6, e14624.	1.1	35
32	Localized bimodal response of neurite extensions and structural proteins in dorsal-root ganglion neurons with controlled polydimethylsiloxane substrate stiffness. Journal of Biomechanics, 2011, 44, 856-862.	0.9	35
33	Engineering living systems on chips: from cells to human on chips. Microfluidics and Nanofluidics, 2014, 16, 907-920.	1.0	35
34	Mechanochemical actuators of embryonic epithelial contractility. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14366-14371.	3.3	34
35	Biomimetic scaffolds with three-dimensional undulated microtopographies. Biomaterials, 2017, 128, 109-120.	5.7	33
36	Micropatterning polyvinyl alcohol as a biomimetic material through soft lithography with cell culture. Molecular BioSystems, 2006, 2, 299.	2.9	32

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37	Use of micropatterned adhesive surfaces for control of cell behavior. <i>Methods in Cell Biology</i> , 2002, 69, 385-401.	0.5	31
38	Integrated Lithographic Membranes and Surface Adhesion Chemistry for Three-Dimensional Cellular Stimulation. <i>Langmuir</i> , 2004, 20, 11552-11556.	1.6	31
39	Investigating Circular Dorsal Ruffles through Varying Substrate Stiffness and Mathematical Modeling. <i>Biophysical Journal</i> , 2011, 101, 2122-2130.	0.2	31
40	Apoptosis of Syncytia Induced by the HIV-1 Envelope Glycoprotein Complex: Influence of Cell Shape and Size. <i>Experimental Cell Research</i> , 2000, 261, 119-126.	1.2	25
41	Nanoscale Intracellular Organization and Functional Architecture Mediating Cellular Behavior. <i>Annals of Biomedical Engineering</i> , 2006, 34, 102-113.	1.3	25
42	Mechanical Loading of Stem Cells for Improvement of Transplantation Outcome in a Model of Acute Myocardial Infarction: The Role of Loading History. <i>Tissue Engineering - Part A</i> , 2012, 18, 1101-1108.	1.6	25
43	Localized neurite outgrowth sensing via substrates with alternative rigidities. <i>Soft Matter</i> , 2011, 7, 9871.	1.2	22
44	Controlled surface topography regulates collective 3D migration by epithelial-mesenchymal composite embryonic tissues. <i>Biomaterials</i> , 2015, 58, 1-9.	5.7	21
45	Dissecting the Molecular Basis of the Mechanics of Living Cells. <i>Experimental Mechanics</i> , 2009, 49, 11-23.	1.1	20
46	Sudden motility reversal indicates sensing of magnetic field gradients in <i>Magnetospirillum magneticum</i> AMB-1 strain. <i>ISME Journal</i> , 2015, 9, 1399-1409.	4.4	20
47	Chemically Encapsulated Structural Elements for Probing the Mechanical Responses of Biologically Inspired Systems. <i>Langmuir</i> , 2007, 23, 8129-8134.	1.6	19
48	Thermally tunable polymer microlenses. <i>Applied Physics Letters</i> , 2008, 92, 251904.	1.5	19
49	High-throughput mechanotransduction in <i>Drosophila</i> embryos with mesofluidics. <i>Lab on A Chip</i> , 2019, 19, 1141-1152.	3.1	18
50	Stochastic off-lattice modeling of molecular self-assembly in crowded environments by Green's function reaction dynamics. <i>Physical Review E</i> , 2008, 78, 031911.	0.8	17
51	Decidual Vasculopathy Identification in Whole Slide Images Using Multiresolution Hierarchical Convolutional Neural Networks. <i>American Journal of Pathology</i> , 2020, 190, 2111-2122.	1.9	17
52	Spatiotemporal Response of Living Cell Structures in <i>Dictyostelium discoideum</i> with Semiconductor Quantum Dots. <i>Nano Letters</i> , 2008, 8, 1303-1308.	4.5	16
53	Structure and dynamics of single DNA molecules manipulated by magnetic tweezers and or flow. <i>Methods</i> , 2009, 47, 214-222.	1.9	16
54	Fabricating small-scale, curved, polymeric structures with convex and concave menisci through interfacial free energy equilibrium. <i>Lab on A Chip</i> , 2009, 9, 3306.	3.1	16

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55	Synergistic human-agent methods for deriving effective search strategies: the case of nanoscale design. <i>Research in Engineering Design - Theory, Applications, and Concurrent Engineering</i> , 2015, 26, 145-169.	1.2	16
56	Toward Vasculature in Skeletal Muscle-on-a-Chip through Thermo-Responsive Sacrificial Templates. <i>Micromachines</i> , 2020, 11, 907.	1.4	16
57	Three-dimensional microfiber devices that mimic physiological environments to probe cell mechanics and signaling. <i>Lab on A Chip</i> , 2012, 12, 1775.	3.1	15
58	Cell alignment modulated by surface nano-topography â€“ Roles of cell-matrix and cell-cell interactions. <i>Acta Biomaterialia</i> , 2022, 142, 149-159.	4.1	15
59	Microfluidics for understanding model organisms. <i>Nature Communications</i> , 2022, 13, .	5.8	15
60	Three-Dimensional Chemical Profile Manipulation Using Two-Dimensional Autonomous Microfluidic Control. <i>Journal of the American Chemical Society</i> , 2010, 132, 1339-1347.	6.6	13
61	Emergent Systems Energy Laws for Predicting Myosin Ensemble Processivity. <i>PLoS Computational Biology</i> , 2015, 11, e1004177.	1.5	13
62	Polycarbonate Heat Molding for Soft Lithography. <i>Small</i> , 2020, 16, e2000241.	5.2	13
63	Computational models of molecular self-organization in cellular environments. <i>Cell Biochemistry and Biophysics</i> , 2007, 48, 16-31.	0.9	12
64	Dynamic control of 3D chemical profiles with a single 2D microfluidic platform. <i>Lab on A Chip</i> , 2011, 11, 2182.	3.1	12
65	Biological colloid engineering: Self-assembly of dipolar ferromagnetic chains in a functionalized biogenic ferrofluid. <i>Applied Physics Letters</i> , 2012, 101, 063701.	1.5	12
66	Frontiers of optofluidics in synthetic biology. <i>Lab on A Chip</i> , 2012, 12, 3654.	3.1	12
67	Subfeature patterning of organic and inorganic materials using robotic assembly. <i>Journal of Materials Research</i> , 2007, 22, 1601-1608.	1.2	11
68	Design of Complex Biologically Based Nanoscale Systems Using Multi-Agent Simulations and Structureâ€“Behaviorâ€“Function Representations. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2013, 135, .	1.7	11
69	Disruptive Microfluidics: From Life Sciences to World Health to Energy. <i>Disruptive Science and Technology</i> , 2012, 1, 41-53.	1.0	10
70	Modeling and Control of a Nonlinear Mechanism for High Performance Microfluidic Systems. <i>IEEE Transactions on Control Systems Technology</i> , 2013, 21, 203-211.	3.2	10
71	Beyond Disease, How Biomedical Engineering Can Improve Global Health. <i>Science Translational Medicine</i> , 2014, 6, 266fs48.	5.8	10
72	Structurally Governed Cell Mechanotransduction through Multiscale Modeling. <i>Scientific Reports</i> , 2015, 5, 8622.	1.6	10

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73	2D and 3D Mechanobiology in Human and Nonhuman Systems. ACS Applied Materials & Interfaces, 2016, 8, 21869-21882.	4.0	10
74	The D3 Methodology: Bridging Science and Design for Bio-Based Product Development. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, .	1.7	10
75	Drop casting of stiffness gradients for chip integration into stretchable substrates. Journal of Micromechanics and Microengineering, 2017, 27, 045018.	1.5	10
76	Polymeric microlenses for real-time aqueous and nonaqueous organic imaging. Applied Physics Letters, 2006, 88, 053902.	1.5	9
77	Calcium signaling is gated by a mechanical threshold in three-dimensional environments. Scientific Reports, 2012, 2, 554.	1.6	9
78	Improving human understanding and design of complex multi-level systems with animation and parametric relationship supports. Design Science, 2015, 1, .	1.1	9
79	Evaluating Spatial Constraints in Cellular Assembly Processes Using a Monte Carlo Approach. Cell Biochemistry and Biophysics, 2006, 45, 195-202.	0.9	8
80	Thermally Tunable Polymer Microlenses for Biological Imaging. Journal of Microelectromechanical Systems, 2010, 19, 1444-1449.	1.7	8
81	Controlling Magnetotactic Bacteria through an Integrated Nanofabricated Metallic Island and Optical Microscope Approach. Scientific Reports, 2014, 4, 4104.	1.6	8
82	Force-Controlled Inorganic Crystallization Lithography. Journal of the American Chemical Society, 2006, 128, 12080-12081.	6.6	7
83	Creating Ordered Small-Scale Biologically-Based Rods through Force-Controlled Stamping. Journal of the American Chemical Society, 2007, 129, 9546-9547.	6.6	7
84	Unified regression model of binding equilibria in crowded environments. Scientific Reports, 2011, 1, 97.	1.6	7
85	Efficient probabilistic grammar induction for design. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2018, 32, 177-188.	0.7	7
86	Modeling molecular interactions to understand spatial crowding effects on heterodimer formations. Physical Review E, 2007, 76, 041904.	0.8	6
87	Controlling the mechanics and nanotopography of biocompatible scaffolds through dielectrophoresis with carbon nanotubes. Electrophoresis, 2008, 29, 3123-3127.	1.3	6
88	Creating cellular and molecular patterns via gravitational force with liquid droplets. Applied Physics Letters, 2008, 93, .	1.5	6
89	Dynamics of individual polymers using microfluidic based microcurvilinear flow. Lab on A Chip, 2009, 9, 2339.	3.1	6
90	Cells gain traction in 3D. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11060-11061.	3.3	6

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91	Intact mangrove root electrodes for desalination. RSC Advances, 2019, 9, 4735-4743.	1.7	6
92	Chemotactic Responses of Jurkat Cells in Microfluidic Flow-Free Gradient Chambers. Micromachines, 2020, 11, 384.	1.4	6
93	Toward sustainable desalination using food waste: capacitive desalination with bread-derived electrodes. RSC Advances, 2021, 11, 9628-9637.	1.7	6
94	3D Collagen Vascular Tumor-on-a-Chip Mimetics for Dynamic Combinatorial Drug Screening. Molecular Cancer Therapeutics, 2021, 20, 1210-1219.	1.9	6
95	Structural Phase Coexistence under Reversible Thermal Control. Advanced Materials, 2008, 20, 953-958.	11.1	5
96	Spatiotemporal Control of Apical and Basal Living Subcellular Chemical Environments Through Vertical Phase Separation. Small, 2009, 5, 1984-1989.	5.2	5
97	Cellular force signal integration through vector logic gates. Journal of Biomechanics, 2015, 48, 613-620.	0.9	5
98	Robust mechanobiological behavior emerges in heterogeneous myosin systems. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8147-E8154.	3.3	5
99	Fe-Doped Copolymer-Templated Nitrogen-Rich Carbon as a PGM-Free Fuel Cell Catalyst. ACS Applied Energy Materials, 2021, 4, 9653-9663.	2.5	5
100	Understanding actin organization in cell structure through lattice based Monte Carlo simulations. Mch Mechanics and Chemistry of Biosystems, 2004, 1, 123-31.	0.3	5
101	Freeform 3D Ice Printing (3Dâ€ICE) at the Micro Scale. Advanced Science, 2022, 9, .	5.6	5
102	Optical fabrication of three-dimensional polymeric microstructures. Applied Physics Letters, 2005, 87, 164104.	1.5	4
103	Parameter effects on binding chemistry in crowded media using a two-dimensional stochastic off-lattice model. Physical Review E, 2009, 80, 041918.	0.8	4
104	Modulating material interfaces through biologically-inspired intermediates. Applied Physics Letters, 2011, 99, 233701.	1.5	4
105	The D3 Science-to-Design Methodology: Automated and Cognitive-Based Processes for Discovering, Describing, and Designing Complex Nanomechanical Biosystems. , 2015, , .		4
106	3D bio-etching of a complex composite-like embryonic tissue. Lab on A Chip, 2015, 15, 3293-3299.	3.1	4
107	Controlled geometry fabrication of polydimethylsiloxane nanofibers for biomimetics. Journal of Applied Polymer Science, 2007, 105, 2549-2552.	1.3	3
108	How can we predict cellular mechanosensation?. Physics of Life Reviews, 2017, 22-23, 120-122.	1.5	3

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109	Probing coordinated co-culture cancer related motility through differential micro-compartmentalized elastic substrates. <i>Scientific Reports</i> , 2020, 10, 18519.	1.6	3
110	3D In Vitro Neuron on a Chip for Probing Calcium Mechanostimulation. <i>Advanced Biology</i> , 2020, 4, e2000080.	3.0	3
111	Written in Blood: Applying Shape Grammars to Retinal Vasculatures. <i>Translational Vision Science and Technology</i> , 2020, 9, 36.	1.1	3
112	Three-Dimensional Stochastic Off-Lattice Model of Binding Chemistry in Crowded Environments. <i>PLoS ONE</i> , 2012, 7, e30131.	1.1	3
113	Microdrilling for fabricating micrometer-scale holes in soft matter. <i>Applied Physics A: Materials Science and Processing</i> , 2006, 85, 195-198.	1.1	2
114	Bioinspirations: Cell-Inspired Small-Scale Systems for Enabling Studies in Experimental Biomechanics. <i>Integrative and Comparative Biology</i> , 2011, 51, 133-141.	0.9	2
115	Integrating Synthetic Cells and Flexible Electronics for the Control of Bio-Opto-Fluidic Materials. <i>Biophysical Journal</i> , 2014, 106, 617a-618a.	0.2	2
116	Photochemical three-dimensional fabrication with nanopore membranes for biological applications. , 2008, , .		1
117	Core-shell CdSe/ZnS Quantum dots as a dual mode spatiotemporal microscopy probe for understanding cellular responses. <i>Proceedings of SPIE</i> , 2009, , .	0.8	1
118	Nonlinear modeling and control of a mechanically coupled variable resistance and squeeze pump for pressure regulation in microfluidics. , 2010, , .		1
119	Maskless fabrication of small-scale structures through controlling phase interactions. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 102, 185-188.	1.1	1
120	Automated high-throughput screening of carbon nanotube-based bio-nanocomposites for bone cement applications. <i>Pure and Applied Chemistry</i> , 2011, 83, 2063-2069.	0.9	1
121	Design of Complex Nano-Scale Systems Using Multi-Agent Simulations and Structure-Behavior-Function Representations. , 2012, , .		1
122	Programmed Biologically Inspired Synthetic Templating of Multifunctional Nanoarchitectures for Small-Scale Reactions. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 5405-5410.	1.0	1
123	Topological Control of Cell Sheet Migration by the 3D Microenvironment. <i>Biophysical Journal</i> , 2013, 104, 147a.	0.2	1
124	Modeling Mechanotransduction Signaling through Actin Filament Network Deformation Linked to Biochemical Response. <i>Biophysical Journal</i> , 2013, 104, 317a-318a.	0.2	1
125	Understanding the Mechanical Properties of Microalgae using Atomic Force Microscopy. <i>Biophysical Journal</i> , 2013, 104, 513a.	0.2	1
126	Probing the dynamic responses of individual actin filaments under fluidic mechanical stimulation via microfluidics. <i>Applied Physics Letters</i> , 2013, 102, 193704.	1.5	1



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127	A Design Exploration of Genetically Engineered Myosin Motors. , 2011, , .		1
128	Three-dimensional molecular phase separation and flow patterns with novel multilevel fluidics. MCB Molecular and Cellular Biomechanics, 2006, 3, 69-77.	0.3	1
129	Linking Molecular to Cellular Biomechanics With Nano- and Micro-Technology. , 2003, , 363.		0
130	A platform for building PIC applications for control and instrumentation. , 0, , .		0
131	Thermally Adjustable Microlenses for Biological Imaging. , 2007, , .		0
132	Investigation of Calcium Mechanotransduction by Quasi 3-D Microfiber Mechanical Stimulation of Cells. , 2008, , .		0
133	Nonlinear Modeling for Interface Control in a Three-Lane Microfluidic Channel. , 2010, , .		0
134	Control of Extracellular Matrix Organization through Coupled Mechanical and Chemical Inputs. Biophysical Journal, 2010, 98, 732a.	0.2	0
135	Micropatterning Biomanufactured Single-Domain Nanoparticles using Self-Assembly to form Artificial Magnetosome Chains. Biophysical Journal, 2010, 98, 730a.	0.2	0
136	Probing the Response of Structural Proteins To Mechanical Stimulation in Neuroblasts. Biophysical Journal, 2010, 98, 19a.	0.2	0
137	Simulation Study of Binding Chemistry in Crowded Conditions Using Two- and Three-Dimensional Stochastic Off-Lattice Models. Biophysical Journal, 2010, 98, 58a.	0.2	0
138	Imposing Local Magnetic Fields to Control Magnetotactic Bacteria Through Combining Microfabrication and Magnetism. Biophysical Journal, 2011, 100, 514a.	0.2	0
139	Controlling Embryonic Cell Sheet Migration using Microfluidics. Biophysical Journal, 2012, 102, 417a.	0.2	0
140	Magnetically-Induced Genetic Response of Magnetotactic Bacteria. Biophysical Journal, 2012, 102, 731a.	0.2	0
141	Engineering Magnetic Nanomaterial Production in Magnetotactic Bacteria Through Gene Regulation. , 2012, , .		0
142	Understanding Cellular Energy Harvesting through Piezoelectric Polymers with Cellular Interfaces. Biophysical Journal, 2013, 104, 530a-531a.	0.2	0
143	Analyzing the Early Tissue Mechanical Response to Chemokine Signaling using Microfluidics. Biophysical Journal, 2013, 104, 320a.	0.2	0
144	Controlled Envelopment of Magnetic Particles within Liposomes using a Custom-Built Multi-Layer Magnetic Microfluidic Device. Biophysical Journal, 2013, 104, 546a.	0.2	0

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145	Exploring the Mechanics of Magnetically Driven Motility in Magnetotactic Bacteria through Genetic Regulation. <i>Biophysical Journal</i> , 2013, 104, 640a-641a.	0.2	0
146	Probing Why Nature may Favor Heterogeneous Myosin Systems through Single Molecule and Systems Level Approaches. <i>Biophysical Journal</i> , 2013, 104, 496a.	0.2	0
147	Probing Collective Migration of a Complex Multi-Cellular Embryonic Tissue Through Novel 3D Bioetching. <i>Biophysical Journal</i> , 2014, 106, 172a.	0.2	0
148	Reply to 'Complexity of molecular crowding in cell-free enzymatic reaction networks'. <i>Nature Nanotechnology</i> , 2014, 9, 407-408.	15.6	0
149	Using Atomic Force Microscopy to Probe Microalgal Response. <i>Biophysical Journal</i> , 2014, 106, 390a.	0.2	0
150	Cell Alignment Modulated by Surface Nano-Topography—Roles of Cell-Matrix and Cell-Cell Interactions. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
151	Use of Flexible Materials with a Novel Pressure Driven Equibiaxial Cell Stretching Device for Mechanical Stimulation of Single Mammalian Cells. <i>Materials Research Society Symposia Proceedings</i> , 2003, 773, 561.	0.1	0
152	Stretch-Activated Calcium Signal Propagation Following Mechanical Stimulation of Focal Adhesions. , 2007, , .		0
153	Effects of Local Mechanical Stimulation on Cellular Behavior. , 2007, , .		0
154	Controlled Waveform Chemical Stimulus of Cellular Subdomains for System Identification. , 2008, , .		0
155	Understanding Biological Structures Through Exploring the Mechanical Response of Cell-Like Systems. , 2008, , .		0
156	Stem Cell Transplantation for Cardiac Repair is Improved by Mechanical Preconditioning. <i>FASEB Journal</i> , 2009, 23, 362.9.	0.2	0
157	Effects of Mechanical Strain on Structural and Actin-Binding Proteins in Neuroblasts. , 2009, , .		0
158	Examining Adaptive Extracellular Responses of Living Cells Under Mechanical Stimulation Through Probing Fibronectin Response. , 2009, , .		0
159	Probing Dynamic Responses of the Extracellular Matrix to Coupled Mechanical and Chemical Inputs. , 2010, , .		0
160	Probing Nonlinear Cellular Responses to Integrated Mechanical Signals Through Examining Cell Alignment. , 2010, , .		0
161	Sensing of Local, Highly Concentrated Magnetic Field Gradients in Magnetotactic Bacteria Induces Motility Reversal. , 2012, , .		0