Donald E Ingber

List of Publications by Year
in descending order

253 papers	71,752 citations	831 121 h-index	884 249 g-index
291 all docs	291 docs citations	291 times ranked	57388 citing authors

#	Article	IF	Citations
1	Biomaterial vaccines capturing pathogen-associated molecular patterns protect against bacterial infections and septic shock. Nature Biomedical Engineering, 2022, 6, 8-18.	11.6	31
2	Establishment of a Modular Anaerobic Human Intestine Chip. Methods in Molecular Biology, 2022, 2373, 69-85.	0.4	5
3	Modeling pulmonary cystic fibrosis in a human lung airway-on-a-chip. Journal of Cystic Fibrosis, 2022, 21, 606-615.	0.3	52
4	Ultrarapid Method for Coating Electrochemical Sensors with Antifouling Conductive Nanomaterials Enables Highly Sensitive Multiplexed Detection in Whole Blood. Advanced Healthcare Materials, 2022, 11, e2102244.	3.9	29
5	Establishment of physiologically relevant oxygen gradients in microfluidic organ chips. Lab on A Chip, 2022, 22, 1584-1593.	3.1	18
6	Human organs-on-chips for disease modelling, drug development and personalized medicine. Nature Reviews Genetics, 2022, 23, 467-491.	7.7	361
7	Ectopic Lymphoid Follicle Formation and Human Seasonal Influenza Vaccination Responses Recapitulated in an Organâ€onâ€aâ€Chip. Advanced Science, 2022, 9, e2103241.	5.6	32
8	Mechanical control of innate immune responses against viral infection revealed in a human lung alveolus chip. Nature Communications, 2022, 13, 1928.	5.8	53
9	Enhancers of Host Immune Tolerance to Bacterial Infection Discovered Using Linked Computational and Experimental Approaches. Advanced Science, 2022, 9, .	5.6	3
10	Biofabrication of Multiplexed Electrochemical Immunosensors for Simultaneous Detection of Clinical Biomarkers in Complex Fluids. Advanced Healthcare Materials, 2022, 11, .	3.9	14
11	Nutritional deficiency in an intestine-on-a-chip recapitulates injury hallmarks associated with environmental enteric dysfunction. Nature Biomedical Engineering, 2022, 6, 1236-1247.	11.6	20
12	What Can an Organ-on-a-Chip Teach Us About Human Lung Pathophysiology?. Physiology, 2022, 37, 242-252.	1.6	14
13	Simulating drug concentrations in PDMS microfluidic organ chips. Lab on A Chip, 2021, 21, 3509-3519.	3.1	50
14	Anomalous COVID-19 tests hinder researchers. Science, 2021, 371, 244-245.	6.0	11
15	Graphene Enabled Lowâ€Noise Surface Chemistry for Multiplexed Sepsis Biomarker Detection in Whole Blood. Advanced Functional Materials, 2021, 31, 2010638.	7.8	54
16	Enabling out-of-body experiences for living organs. Journal of Experimental Medicine, 2021, 218, .	4.2	4
17	Harnessing Colon Chip Technology to Identify Commensal Bacteria That Promote Host Tolerance to Infection. Frontiers in Cellular and Infection Microbiology, 2021, 11, 638014.	1.8	28
18	Transferrin receptor targeting by de novo sheet extension. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	17

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19	COVID-19 tissue atlases reveal SARS-CoV-2 pathology and cellular targets. Nature, 2021, 595, 107-113.	13.7	537
20	A human-airway-on-a-chip for the rapid identification of candidate antiviral therapeutics and prophylactics. Nature Biomedical Engineering, 2021, 5, 815-829.	11.6	228
21	Mechanosensation Mediates Longâ€Range Spatial Decisionâ€Making in an Aneural Organism. Advanced Materials, 2021, 33, e2008161.	11.1	11
22	Evidence generation and reproducibility in cell and gene therapy research: A call to action. Molecular Therapy - Methods and Clinical Development, 2021, 22, 11-14.	1.8	13
23	Laboratory-Generated DNA Can Cause Anomalous Pathogen Diagnostic Test Results. Microbiology Spectrum, 2021, 9, e0031321.	1.2	10
24	Clinically Relevant Influenza Virus Evolution Reconstituted in a Human Lung Airway-on-a-Chip. Microbiology Spectrum, 2021, 9, e0025721.	1.2	31
25	Enabling Multiplexed Electrochemical Detection of Biomarkers with High Sensitivity in Complex Biological Samples. Accounts of Chemical Research, 2021, 54, 3529-3539.	7.6	37
26	Bioinspired design and optimization for thin film wearable and building cooling systems. Bioinspiration and Biomimetics, 2021, , .	1.5	2
27	Enteric Coronavirus Infection and Treatment Modeled With an Immunocompetent Human Intestine-On-A-Chip. Frontiers in Pharmacology, 2021, 12, 718484.	1.6	52
28	Changes in ABC Transporter Expression during Hematopoiesis Cause Lineage-Biased Cytopenias in Patients Treated with Aurora Kinase Inhibitors. Blood, 2021, 138, 4292-4292.	0.6	0
29	Biomimetic smoking robot for in vitro inhalation exposure compatible with microfluidic organ chips. Nature Protocols, 2020, 15, 183-206.	5.5	30
30	Human Colon-on-a-Chip Enables Continuous InÂVitro Analysis of Colon Mucus Layer Accumulation and Physiology. Cellular and Molecular Gastroenterology and Hepatology, 2020, 9, 507-526.	2.3	140
31	Molecular mapping of transmembrane mechanotransduction through the Î²1 integrin-CD98hc-TRPV4 axis. Journal of Cell Science, 2020, 133, .	1.2	21
32	Origami microfluidics for radiant cooling with small temperature differences in buildings. Applied Energy, 2020, 277, 115610.	5.1	20
33	Human Organs-on-Chips for Virology. Trends in Microbiology, 2020, 28, 934-946.	3.5	81
34	Treatment of psoriasis with NFKBIZ siRNA using topical ionic liquid formulations. Science Advances, 2020, 6, eabb6049.	4.7	52
35	Proteomic and Metabolomic Characterization of Human Neurovascular Unit Cells in Response to Methamphetamine. Advanced Biology, 2020, 4, 1900230.	3.0	12
36	Is it Time for Reviewer 3 to Request Human Organ Chip Experiments Instead of Animal Validation Studies?. Advanced Science, 2020, 7, 2002030.	5.6	159

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37	Emerging preclinical evidence does not support broad use of hydroxychloroquine in COVID-19 patients. Nature Communications, 2020, 11, 4253.	5.8	43
38	On-chip recapitulation of clinical bone marrow toxicities and patient-specific pathophysiology. Nature Biomedical Engineering, 2020, 4, 394-406.	11.6	170
39	Quantitative prediction of human pharmacokinetic responses to drugs via fluidically coupled vascularized organ chips. Nature Biomedical Engineering, 2020, 4, 421-436.	11.6	280
40	YAP Regulates Hematopoietic Stem Cell Formation in Response to the Biomechanical Forces of Blood Flow. Developmental Cell, 2020, 52, 446-460.e5.	3.1	65
41	Robotic fluidic coupling and interrogation of multiple vascularized organ chips. Nature Biomedical Engineering, 2020, 4, 407-420.	11.6	256
42	Biology-inspired microphysiological systems to advance medicines for patient benefit and animal welfare. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 365-394.	0.9	123
43	Increased phosphorylation of ACTN4 leads to podocyte vulnerability and proteinuric kidney disease and is stimulated by high glucose and TGFâ€b. FASEB Journal, 2020, 34, 1-1.	0.2	0
44	Reproducing human and cross-species drug toxicities using a Liver-Chip. Science Translational Medicine, 2019, 11, .	5.8	287
45	Controllable Fabrication of Inhomogeneous Microcapsules for Triggered Release by Osmotic Pressure. Small, 2019, 15, e1903087.	5.2	23
46	Tumor-Derived Extracellular Vesicles Breach the Intact Bloodâ€“Brain Barrier via Transcytosis. ACS Nano, 2019, 13, 13853-13865.	7.3	326
47	Non-invasive sensing of transepithelial barrier function and tissue differentiation in organs-on-chips using impedance spectroscopy. Lab on A Chip, 2019, 19, 452-463.	3.1	106
48	Cellular nanoscale stiffness patterns governed by intracellular forces. Nature Materials, 2019, 18, 1071-1077.	13.3	60
49	Hypoxia-enhanced Blood-Brain Barrier Chip recapitulates human barrier function and shuttling of drugs and antibodies. Nature Communications, 2019, 10, 2621.	5.8	371
50	Human Intestinal Morphogenesis Controlled by Transepithelial Morphogen Gradient and Flow-Dependent Physical Cues in a Microengineered Gut-on-a-Chip. IScience, 2019, 15, 391-406.	1.9	127
51	A complex human gut microbiome cultured in an anaerobic intestine-on-a-chip. Nature Biomedical Engineering, 2019, 3, 520-531.	11.6	487
52	Seeing Your Way to New Insights in Biology. Journal of Molecular Biology, 2019, 431, 2485-2486.	2.0	0
53	Species-specific enhancement of enterohemorrhagic E. coli pathogenesis mediated by microbiome metabolites. Microbiome, 2019, 7, 43.	4.9	102
54	Platelet decoys inhibit thrombosis and prevent metastatic tumor formation in preclinical models. Science Translational Medicine, 2019, 11, .	5.8	55

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55	An antifouling coating that enables affinity-based electrochemical biosensing in complex biological fluids. Nature Nanotechnology, 2019, 14, 1143-1149.	15.6	266
56	AAV-mediated gene therapy targeting TRPV4 mechanotransduction for inhibition of pulmonary vascular leakage. APL Bioengineering, 2019, 3, 046103.	3.3	20
57	Rapid Coating Process Generates Omniphobic Dentures in Minutes to Reduce C. albicans Biofouling. ACS Biomaterials Science and Engineering, 2019, 5, 420-424.	2.6	10
58	Modelling cancer in microfluidic human organs-on-chips. Nature Reviews Cancer, 2019, 19, 65-81.	12.8	582
59	Broad-spectrum capture of clinical pathogens using engineered Fc-mannose-binding lectin enhanced by antibiotic treatment. F1000Research, 2019, 8, 108.	0.8	23
60	Multi-scale modeling reveals use of hierarchical tensegrity principles at the molecular, multi-molecular, and cellular levels. Extreme Mechanics Letters, 2018, 20, 21-28.	2.0	15
61	Organâ€onâ€Chip Recapitulates Thrombosis Induced by an antiâ€CD154 Monoclonal Antibody: Translational Potential of Advanced Microengineered Systems. Clinical Pharmacology and Therapeutics, 2018, 104, 1240-1248.	2.3	91
62	Rapid Prototyping of Thermoplastic Microfluidic Devices. Methods in Molecular Biology, 2018, 1771, 161-170.	0.4	9
63	Modeling radiation injury-induced cell death and countermeasure drug responses in a human Gut-on-a-Chip. Cell Death and Disease, 2018, 9, 223.	2.7	138
64	Development of a primary human Small Intestine-on-a-Chip using biopsy-derived organoids. Scientific Reports, 2018, 8, 2871.	1.6	523
65	PAR1 agonists stimulate APC-like endothelial cytoprotection and confer resistance to thromboinflammatory injury. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E982-E991.	3.3	55
66	Physiologically Based Pharmacokinetic and Pharmacodynamic Analysis Enabled by Microfluidically Linked Organs-on-Chips. Annual Review of Pharmacology and Toxicology, 2018, 58, 37-64.	4.2	133
67	Microfluidic Organ-on-a-Chip Models of Human Intestine. Cellular and Molecular Gastroenterology and Hepatology, 2018, 5, 659-668.	2.3	423
68	Primary Human Lung Alveolusâ€onâ€aâ€chip Model of Intravascular Thrombosis for Assessment of Therapeutics. Clinical Pharmacology and Therapeutics, 2018, 103, 332-340.	2.3	238
69	From mechanobiology to developmentally inspired engineering. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170323.	1.8	32
70	Scalable Fabrication of Stretchable, Dual Channel, Microfluidic Organ Chips. Journal of Visualized Experiments, 2018, , .	0.2	24
71	Developmentally inspired human â€˜organs on chipsâ€™. Development (Cambridge), 2018, 145, .	1.2	77
72	Modulation of the Cellular Uptake of DNA Origami through Control over Mass and Shape. Nano Letters, 2018, 18, 3557-3564.	4.5	183

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73	Directed differentiation of human induced pluripotent stem cells into mature kidney podocytes and establishment of a Glomerulus Chip. Nature Protocols, 2018, 13, 1662-1685.	5.5	125
74	A linked organ-on-chip model of the human neurovascular unit reveals the metabolic coupling of endothelial and neuronal cells. Nature Biotechnology, 2018, 36, 865-874.	9.4	310
75	Mature induced-pluripotent-stem-cell-derived human podocytes reconstitute kidney glomerular-capillary-wall function on a chip. Nature Biomedical Engineering, 2017, 1, .	11.6	376
76	New anticoagulant coatings and hemostasis assessment tools to avoid complications with pediatric left ventricular assist devices. Journal of Thoracic and Cardiovascular Surgery, 2017, 154, 1364-1366.	0.4	5
77	SEBS elastomers for fabrication of microfluidic devices with reduced drug absorption by injection molding and extrusion. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	65
78	Human Lung Small Airway-on-a-Chip Protocol. Methods in Molecular Biology, 2017, 1612, 345-365.	0.4	58
79	Ultrasound-sensitive nanoparticle aggregates for targeted drug delivery. Biomaterials, 2017, 139, 187-194.	5.7	58
80	Organs-on-Chips with combined multi-electrode array and transepithelial electrical resistance measurement capabilities. Lab on A Chip, 2017, 17, 2294-2302.	3.1	188
81	Cycling through the menstrual cycle â€" an out-of-body experience. Nature Reviews Endocrinology, 2017, 13, 380-382.	4.3	1
82	Organs-on-chips with integrated electrodes for trans-epithelial electrical resistance (TEER) measurements of human epithelial barrier function. Lab on A Chip, 2017, 17, 2264-2271.	3.1	300
83	Human Organ Chip Models Recapitulate Orthotopic Lung Cancer Growth, Therapeutic Responses, and Tumor Dormancy InÂVitro. Cell Reports, 2017, 21, 508-516.	2.9	324
84	A Biologically Inspired, Functionally Graded End Effector for Soft Robotics Applications. Soft Robotics, 2017, 4, 317-323.	4.6	41
85	Art Advancing Science: Filmmaking Leads to Molecular Insights at the Nanoscale. ACS Nano, 2017, 11, 12156-12166.	7.3	8
86	Mechanical induction of dentin-like differentiation by adult mouse bone marrow stromal cells using compressive scaffolds. Stem Cell Research, 2017, 24, 55-60.	0.3	15
87	The Wyss institute: A new model for medical technology innovation and translation across the academicâ€industrial interface. Bioengineering and Translational Medicine, 2017, 2, 247-257.	3.9	15
88	An Engineered Human Fcâ€Mannoseâ€Bindingâ€Lectin Captures Circulating Tumor Cells. Advanced Biology, 2017, 1, 1700094.	3.0	9
89	Direct Bonding of Chitosan Biomaterials to Tissues Using Transglutaminase for Surgical Repair or Device Implantation. Tissue Engineering - Part A, 2017, 23, 135-142.	1.6	17
90	Theory and associated phenomenology for intrinsic mortality arising from natural selection. PLoS ONE, 2017, 12, e0173677.	1.1	8

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91	Human Gut-On-A-Chip Supports Polarized Infection of Coxsackie B1 Virus In Vitro. PLoS ONE, 2017, 12, e0169412.	1.1	148
92	Distinct Contributions of Astrocytes and Pericytes to Neuroinflammation Identified in a 3D Human Blood-Brain Barrier on a Chip. PLoS ONE, 2016, 11, e0150360.	1.1	335
93	Application of a Halbach magnetic array for long-range cell and particle separations in biological samples. Applied Physics Letters, 2016, 108, .	1.5	16
94	Assessment of whole blood thrombosis in a microfluidic device lined by fixed human endothelium. Biomedical Microdevices, 2016, 18, 73.	1.4	101
95	Commendation for Exposing Key Advantage of Organ Chip Approach. Cell Systems, 2016, 3, 411.	2.9	9
96	Matched-Comparative Modeling of Normal and Diseased Human Airway Responses Using a Microengineered Breathing Lung Chip. Cell Systems, 2016, 3, 456-466.e4.	2.9	227
97	Co-culture of Living Microbiome with Microengineered Human Intestinal Villi in a Gut-on-a-Chip Microfluidic Device. Journal of Visualized Experiments, 2016, , .	0.2	43
98	A Broad-Spectrum Infection Diagnostic that Detects Pathogen-Associated Molecular Patterns (PAMPs) in Whole Blood. EBioMedicine, 2016, 9, 217-227.	2.7	40
99	Contributions of microbiome and mechanical deformation to intestinal bacterial overgrowth and inflammation in a human gut-on-a-chip. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7-15.	3.3	652
100	Modeling Hematopoiesis and Responses to Radiation Countermeasures in a Bone Marrow-on-a-Chip. Tissue Engineering - Part C: Methods, 2016, 22, 509-515.	1.1	53
101	Reverse Engineering Human Pathophysiology with Organs-on-Chips. Cell, 2016, 164, 1105-1109.	13.5	170
102	Small airway-on-a-chip enables analysis of human lung inflammation and drug responses in vitro. Nature Methods, 2016, 13, 151-157.	9.0	620
103	A shear gradient-activated microfluidic device for automated monitoring of whole blood haemostasis and platelet function. Nature Communications, 2016, 7, 10176.	5.8	134
104	Activation of mechanosensitive ion channel TRPV4 normalizes tumor vasculature and improves cancer therapy. Oncogene, 2016, 35, 314-322.	2.6	127
105	A Chemical APC Mimetic Protects Endothelium from Thromboinflammatory Injury. Blood, 2016, 128, 3835-3835.	0.6	3
106	Rapid Isolation of Staphylococcus aureus Pathogens from Infected Clinical Samples Using Magnetic Beads Coated with Fc-Mannose Binding Lectin. PLoS ONE, 2016, 11, e0156287.	1.1	30
107	Abstract WP437: Shear-activated Nanoparticle Aggregate Lysis Combined With Temporary Stent-bypass to Treat Emergent Large Vessel Occlusions (ELVO). Stroke, 2016, 47, .	1.0	0
108	Mesenchymal condensationâ€dependent accumulation of collagen VI stabilizes organâ€specific cell fates during embryonic tooth formation. Developmental Dynamics, 2015, 244, 713-723.	0.8	19

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109	Optimization of Pathogen Capture in Flowing Fluids with Magnetic Nanoparticles. Small, 2015, 11, 5657-5666.	5.2	38
110	Stability of Surface-Immobilized Lubricant Interfaces under Flow. Chemistry of Materials, 2015, 27, 1792-1800.	3.2	181
111	Engineered In Vitro Disease Models. Annual Review of Pathology: Mechanisms of Disease, 2015, 10, 195-262.	9.6	442
112	Measuring direct current trans-epithelial electrical resistance in organ-on-a-chip microsystems. Lab on A Chip, 2015, 15, 745-752.	3.1	155
113	Improved treatment of systemic blood infections using antibiotics with extracorporeal opsonin hemoadsorption. Biomaterials, 2015, 67, 382-392.	5.7	65
114	Control of cancer formation by intrinsic genetic noise and microenvironmental cues. Nature Reviews Cancer, 2015, 15, 499-509.	12.8	65
115	Programed Death is Favored by Natural Selection in Spatial Systems. Physical Review Letters, 2015, 114, 238103.	2.9	30
116	Biomechanical forces promote blood development through prostaglandin E2 and the cAMPâ€“PKA signaling axis. Journal of Experimental Medicine, 2015, 212, 665-680.	4.2	74
117	Generation of biocompatible droplets for in vivo and in vitro measurement of cell-generated mechanical stresses. Methods in Cell Biology, 2015, 125, 373-390.	0.5	13
118	Targeted Drug Delivery to Flow-Obstructed Blood Vessels Using Mechanically Activated Nanotherapeutics. JAMA Neurology, 2015, 72, 119.	4.5	43
119	Shear-Activated Nanoparticle Aggregates Combined With Temporary Endovascular Bypass to Treat Large Vessel Occlusion. Stroke, 2015, 46, 3507-3513.	1.0	39
120	Developmentally Inspired Regenerative Organ Engineering. , 2015, , 17-24.		1
121	Developmentallyâ€Inspired Shrinkâ€Wrap Polymers for Mechanical Induction of Tissue Differentiation. Advanced Materials, 2014, 26, 3253-3257.	11.1	25
122	Mechanobiology, Tissue Development and Organ Engineering. , 2014, , 309-322.		3
123	Paxillin controls endothelial cell migration and tumor angiogenesis by altering neuropilin 2 expression. Journal of Cell Science, 2014, 127, 1672-1683.	1.2	35
124	Manufacturing of Largeâ€Scale Functional Objects Using Biodegradable Chitosan Bioplastic. Macromolecular Materials and Engineering, 2014, 299, 932-938.	1.7	102
125	Bone marrowâ€“onâ€“aâ€“chip replicates hematopoietic niche physiology in vitro. Nature Methods, 2014, 11, 663-669.	9.0	369
126	Nanoparticle targeting of anti-cancer drugs that alter intracellular signaling or influence the tumor microenvironment. Advanced Drug Delivery Reviews, 2014, 79-80, 107-118.	6.6	199

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127	Tensegrity, cellular biophysics, and the mechanics of living systems. Reports on Progress in Physics, 2014, 77, 046603.	8.1	339
128	Quantifying cell-generated mechanical forces within living embryonic tissues. Nature Methods, 2014, 11, 183-189.	9.0	336
129	Silencing HoxA1 by Intraductal Injection of siRNA Lipidoid Nanoparticles Prevents Mammary Tumor Progression in Mice. Science Translational Medicine, 2014, 6, 217ra2.	5.8	66
130	A bioinspired omniphobic surface coating on medical devices prevents thrombosis and biofouling. Nature Biotechnology, 2014, 32, 1134-1140.	9.4	575
131	A microdevice for rapid optical detection of magnetically captured rare blood pathogens. Lab on A Chip, 2014, 14, 182-188.	3.1	55
132	Microfluidic organs-on-chips. Nature Biotechnology, 2014, 32, 760-772.	9.4	2,468
133	Stationary nanoliter droplet array with a substrate of choice for single adherent/nonadherent cell incubation and analysis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11293-11298.	3.3	64
134	An extracorporeal blood-cleansing device for sepsis therapy. Nature Medicine, 2014, 20, 1211-1216.	15.2	254
135	Mechanotransduction of fluid stresses governs 3D cell migration. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2447-2452.	3.3	214
136	A combinatorial cell-laden gel microarray for inducing osteogenic differentiation of human mesenchymal stem cells. Scientific Reports, 2014, 4, 3896.	1.6	123
137	An artificial vasculature for adaptive thermal control of windows. Solar Energy Materials and Solar Cells, 2013, 117, 429-436.	3.0	29
138	Bioinspired Chitinous Material Solutions for Environmental Sustainability and Medicine. Advanced Functional Materials, 2013, 23, 4454-4466.	7.8	50
139	Breast cancer normalization induced by embryonic mesenchyme is mediated by extracellular matrix biglycan. Integrative Biology (United Kingdom), 2013, 5, 1045-1056.	0.6	33
140	Shearâ€Responsive Platelet Mimetics for Targeted Drug Delivery. Israel Journal of Chemistry, 2013, 53, 610-615.	1.0	5
141	Platform for High-Throughput Testing of the Effect of Soluble Compounds on 3D Cell Cultures. Analytical Chemistry, 2013, 85, 8085-8094.	3.2	115
142	Clear castable polyurethane elastomer for fabrication of microfluidic devices. Lab on A Chip, 2013, 13, 3956.	3.1	101
143	Mechanobiology and Developmental Control. Annual Review of Cell and Developmental Biology, 2013, 29, 27-61.	4.0	367
144	Microfabrication of human organs-on-chips. Nature Protocols, 2013, 8, 2135-2157.	5.5	558

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145	SLLISWD Sequence in the 10FNIII Domain Initiates Fibronectin Fibrillogenesis. Journal of Biological Chemistry, 2013, 288, 21329-21340.	1.6	24
146	Gut-on-a-Chip microenvironment induces human intestinal cells to undergo villus differentiation. Integrative Biology (United Kingdom), 2013, 5, 1130.	0.6	560
147	Control of lung vascular permeability and endotoxin-induced pulmonary oedema by changes in extracellular matrix mechanics. Nature Communications, 2013, 4, 1759.	5.8	119
148	Human kidney proximal tubule-on-a-chip for drug transport and nephrotoxicity assessment. Integrative Biology (United Kingdom), 2013, 5, 1119-1129.	0.6	649
149	Intraductal Injection for Localized Drug Delivery to the Mouse Mammary Gland. Journal of Visualized Experiments, 2013, , .	0.2	27
150	How Changes in Extracellular Matrix Mechanics and Gene Expression Variability Might Combine to Drive Cancer Progression. PLoS ONE, 2013, 8, e76122.	1.1	32
151	Paxillin controls directional cell motility in response to physical cues. Cell Adhesion and Migration, 2012, 6, 502-508.	1.1	17
152	A Human Disease Model of Drug Toxicityâ€“Induced Pulmonary Edema in a Lung-on-a-Chip Microdevice. Science Translational Medicine, 2012, 4, 159ra147.	5.8	804
153	A mini-microscope for in situ monitoring of cells. Lab on A Chip, 2012, 12, 3976.	3.1	60
154	Inhibition of Mammary Tumor Growth Using Lysyl Oxidase-Targeting Nanoparticles to Modify Extracellular Matrix. Nano Letters, 2012, 12, 3213-3217.	4.5	97
155	A combined micromagnetic-microfluidic device for rapid capture and culture of rare circulating tumor cells. Lab on A Chip, 2012, 12, 2175.	3.1	261
156	Human gut-on-a-chip inhabited by microbial flora that experiences intestinal peristalsis-like motions and flow. Lab on A Chip, 2012, 12, 2165.	3.1	1,304
157	Mechanosensitive mechanisms in transcriptional regulation. Journal of Cell Science, 2012, 125, 3061-73.	1.2	332
158	Microengineered physiological biomimicry: Organs-on-Chips. Lab on A Chip, 2012, 12, 2156.	3.1	584
159	Shear-Activated Nanotherapeutics for Drug Targeting to Obstructed Blood Vessels. Science, 2012, 337, 738-742.	6.0	428
160	Unexpected Strength and Toughness in Chitosanâ€Fibroin Laminates Inspired by Insect Cuticle. Advanced Materials, 2012, 24, 480-484.	11.1	97
161	Chitosan-Fibroin Laminates: Unexpected Strength and Toughness in Chitosan-Fibroin Laminates Inspired by Insect Cuticle (Adv. Mater. 4/2012). Advanced Materials, 2012, 24, 446-446.	11.1	0
162	Mechanochemical Control of Mesenchymal Condensation and Embryonic Tooth Organ Formation. Developmental Cell, 2011, 21, 758-769.	3.1	175

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163	Paxillin Mediates Sensing of Physical Cues and Regulates Directional Cell Motility by Controlling Lamellipodia Positioning. PLoS ONE, 2011, 6, e28303.	1.1	40
164	From 3D cell culture to organs-on-chips. Trends in Cell Biology, 2011, 21, 745-754.	3.6	1,514
165	From Cellular Mechanotransduction to Biologically Inspired Engineering. Annals of Biomedical Engineering, 2010, 38, 1148-1161.	1.3	85
166	Self-assembly of three-dimensional prestressed tensegrity structures from DNA. Nature Nanotechnology, 2010, 5, 520-524.	15.6	354
167	Mechanical control of tissue and organ development. Development (Cambridge), 2010, 137, 1407-1420.	1.2	732
168	Reconstituting Organ-Level Lung Functions on a Chip. Science, 2010, 328, 1662-1668.	6.0	3,186
169	Ultra-rapid activation of TRPV4 ion channels by mechanical forces applied to cell surface Î²1 integrins. Integrative Biology (United Kingdom), 2010, 2, 435.	0.6	222
170	Paper-supported 3D cell culture for tissue-based bioassays. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18457-18462.	3.3	373
171	TRPV4 Channels Mediate Cyclic Strainâ€“Induced Endothelial Cell Reorientation Through Integrin-to-Integrin Signaling. Circulation Research, 2009, 104, 1123-1130.	2.0	310
172	Cytoskeletal control of growth and cell fate switching. Current Opinion in Cell Biology, 2009, 21, 864-870.	2.6	189
173	Mechanical control of cAMP signaling through integrins is mediated by the heterotrimeric GÎ±s protein. Journal of Cellular Biochemistry, 2009, 106, 529-538.	1.2	49
174	A mechanosensitive transcriptional mechanism that controls angiogenesis. Nature, 2009, 457, 1103-1108.	13.7	487
175	Mechanotransduction at a distance: mechanically coupling the extracellular matrix with the nucleus. Nature Reviews Molecular Cell Biology, 2009, 10, 75-82.	16.1	1,538
176	Micromagneticâ€“microfluidic blood cleansing device. Lab on A Chip, 2009, 9, 1171.	3.1	178
177	Tensegrity-guided self assembly: from molecules to living cells. Soft Matter, 2009, 5, 1137-1145.	1.2	62
178	A multi-modular tensegrity model of an actin stress fiber. Journal of Biomechanics, 2008, 41, 2379-2387.	0.9	84
179	Nanomagnetic actuation of receptor-mediated signal transduction. Nature Nanotechnology, 2008, 3, 36-40.	15.6	285
180	Can cancer be reversed by engineering the tumor microenvironment?. Seminars in Cancer Biology, 2008, 18, 356-364.	4.3	259

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181	Directional control of cell motility through focal adhesion positioning and spatial control of Rac activation. FASEB Journal, 2008, 22, 1649-1659.	0.2	140
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