Donald E Ingber

List of Publications by Year
in descending order

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248 papers	78,085 citations	690 121 h-index	665 254 g-index
310 all docs	310 docs citations	310 times ranked	55179 citing authors

#	Article	IF	Citations
1	Human organ chips for regenerative pharmacology. Pharmacology Research and Perspectives, 2024, 12, .	2.3	11
2	Mechanical forces amplify TCR mechanotransduction in T cell activation and function. Applied Physics Reviews, 2024, 11, .	10.7	2
3	Mechanical forces amplify TCR mechanotransduction in T cell activation and function. Applied Physics Reviews, 2024, 11, .	10.7	15
4	Micrometer-thick and porous nanocomposite coating for electrochemical sensors with exceptional antifouling and electroconducting properties. Nature Communications, 2024, 15, .	14.2	48
5	Identification of pharmacological inducers of a reversible hypometabolic state for whole organ preservation. ELife, 2024, 13, .	1.6	3
6	Redox-Modified Nanostructured Electrochemical Surfaces for Continuous Glucose Monitoring in Complex Biological Fluids. Nanomaterials, 2024, 14, 796.	4.2	4
7	Mucus production, host-microbiome interactions, hormone sensitivity, and innate immune responses modeled in human cervix chips. Nature Communications, 2024, 15, .	14.2	24
8	Signal amplification by cyclic extension enables high-sensitivity single-cell mass cytometry. Nature Biotechnology, 2024, 43, 811-821.	25.8	11
9	Author response: Identification of pharmacological inducers of a reversible hypometabolic state for whole organ preservation. , 2024, , .		0
10	Donepezil Nanoemulsion Induces a Torpor-like State with Reduced Toxicity in Nonhibernating Xenopus laevis Tadpoles. ACS Nano, 2024, 18, 23991-24003.	15.4	4
11	Intestinal organ chips for disease modelling and personalized medicine. Nature Reviews Gastroenterology and Hepatology, 2024, 21, 751-773.	40.1	31
12	From tensegrity to human organs-on-chips: implications for mechanobiology and mechanotherapeutics. Biochemical Journal, 2023, 480, 243-257.	4.0	21
13	Epithelial-Stromal Interactions in Barrettâ€™s Esophagus Modeled in Human Organ Chips. Gastro Hep Advances, 2023, 2, 676-680.	1.0	11
14	Target-agnostic drug prediction integrated with medical record analysis uncovers differential associations of statins with increased survival in COVID-19 patients. PLoS Computational Biology, 2023, 19, e1011050.	3.3	9
15	A human lung alveolus-on-a-chip model of acute radiation-induced lung injury. Nature Communications, 2023, 14, .	14.2	101
16	Bioinspired designÂand optimization for thin film wearable and building cooling systems. Bioinspiration and Biomimetics, 2022, 17, 015003.	3.0	4
17	Modeling pulmonary cystic fibrosis in a human lung airway-on-a-chip. Journal of Cystic Fibrosis, 2022, 21, 606-615.	0.7	110
18	Ultrarapid Method for Coating Electrochemical Sensors with Antifouling Conductive Nanomaterials Enables Highly Sensitive Multiplexed Detection in Whole Blood. Advanced Healthcare Materials, 2022, 11, .	8.7	46

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19	Establishment of physiologically relevant oxygen gradients in microfluidic organ chips. Lab on A Chip, 2022, 22, 1584-1593.	5.6	58
20	Human organs-on-chips for disease modelling, drug development and personalized medicine. Nature Reviews Genetics, 2022, 23, 467-491.	34.2	1,108
21	Ectopic Lymphoid Follicle Formation and Human Seasonal Influenza Vaccination Responses Recapitulated in an Organâ€onâ€aâ€Chip. Advanced Science, 2022, 9, .	12.7	78
22	Mechanical control of innate immune responses against viral infection revealed in a human lung alveolus chip. Nature Communications, 2022, 13, .	14.2	131
23	Enhancers of Host Immune Tolerance to Bacterial Infection Discovered Using Linked Computational and Experimental Approaches. Advanced Science, 2022, 9, .	12.7	11
24	Biofabrication of Multiplexed Electrochemical Immunosensors for Simultaneous Detection of Clinical Biomarkers in Complex Fluids. Advanced Healthcare Materials, 2022, 11, .	8.7	27
25	Nutritional deficiency in an intestine-on-a-chip recapitulates injury hallmarks associated with environmental enteric dysfunction. Nature Biomedical Engineering, 2022, 6, 1236-1247.	24.8	57
26	What Can an Organ-on-a-Chip Teach Us About Human Lung Pathophysiology?. Physiology, 2022, 37, 242-252.	0.9	32
27	Self-assembling short immunostimulatory duplex RNAs with broad-spectrum antiviral activity. Molecular Therapy - Nucleic Acids, 2022, 29, 923-940.	5.1	14
28	PIKfyve-specific inhibitors restrict replication of multiple coronaviruses in vitro but not in a murine model of COVID-19. Communications Biology, 2022, 5, .	4.6	16
29	A lab-on-a-chip for the concurrent electrochemical detection of SARS-CoV-2 RNA and anti-SARS-CoV-2 antibodies in saliva and plasma. Nature Biomedical Engineering, 2022, 6, 968-978.	24.8	238
30	Differential ABC transporter expression during hematopoiesis contributes to neutrophil-biased toxicity of Aurora kinase inhibitors. Nature Communications, 2022, 13, .	14.2	4
31	FcMBL magnetic bead-based MALDI-TOF MS rapidly identifies paediatric blood stream infections from positive blood cultures. PLoS ONE, 2022, 17, e0276777.	2.5	7
32	Performance assessment and economic analysis of a human Liver-Chip for predictive toxicology. Communications Medicine, 2022, 2, .	5.7	201
33	Simulating drug concentrations in PDMS microfluidic organ chips. Lab on A Chip, 2021, 21, 3509-3519.	5.6	95
34	Anomalous COVID-19 tests hinder researchers. Science, 2021, 371, 244-245.	19.5	12
35	Graphene Enabled Lowâ€Noise Surface Chemistry for Multiplexed Sepsis Biomarker Detection in Whole Blood. Advanced Functional Materials, 2021, 31, .	16.9	82
36	Enabling out-of-body experiences for living organs. Journal of Experimental Medicine, 2021, 218, .	8.1	6

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37	Harnessing Colon Chip Technology to Identify Commensal Bacteria That Promote Host Tolerance to Infection. Frontiers in Cellular and Infection Microbiology, 2021, 11, .	4.2	39
38	Transferrin receptor targeting by de novo sheet extension. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.5	38
39	COVID-19 tissue atlases reveal SARS-CoV-2 pathology and cellular targets. Nature, 2021, 595, 107-113.	34.3	763
40	A human-airway-on-a-chip for the rapid identification of candidate antiviral therapeutics and prophylactics. Nature Biomedical Engineering, 2021, 5, 815-829.	24.8	380
41	Biomaterial vaccines capturing pathogen-associated molecular patterns protect against bacterial infections and septic shock. Nature Biomedical Engineering, 2021, 6, 8-18.	24.8	61
42	Mechanosensation Mediates Longâ€Range Spatial Decisionâ€Making in an Aneural Organism. Advanced Materials, 2021, 33, .	24.4	21
43	Evidence generation and reproducibility in cell and gene therapy research: A call to action. Molecular Therapy - Methods and Clinical Development, 2021, 22, 11-14.	4.0	26
44	Laboratory-Generated DNA Can Cause Anomalous Pathogen Diagnostic Test Results. Microbiology Spectrum, 2021, 9, .	3.6	16
45	Clinically Relevant Influenza Virus Evolution Reconstituted in a Human Lung Airway-on-a-Chip. Microbiology Spectrum, 2021, 9, .	3.6	48
46	Enabling Multiplexed Electrochemical Detection of Biomarkers with High Sensitivity in Complex Biological Samples. Accounts of Chemical Research, 2021, 54, 3529-3539.	17.7	109
47	Enteric Coronavirus Infection and Treatment Modeled With an Immunocompetent Human Intestine-On-A-Chip. Frontiers in Pharmacology, 2021, 12, .	4.0	75
48	Cell Motility in Microfabricated Models of the Tissue Microenvironment. , 2021, , 151-152.		0
49	Changes in ABC Transporter Expression during Hematopoiesis Cause Lineage-Biased Cytopenias in Patients Treated with Aurora Kinase Inhibitors. Blood, 2021, 138, 4292-4292.	1.0	0
50	Biomimetic smoking robot for in vitro inhalation exposure compatible with microfluidic organ chips. Nature Protocols, 2020, 15, 183-206.	24.7	46
51	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.	5.5	205
52	Molecular mapping of transmembrane mechanotransduction through the Î²1 integrinâ€"CD98hcâ€"TRPV4 axis. Journal of Cell Science, 2020, 133, .	3.2	31
53	Origami microfluidics for radiant cooling with small temperature differences in buildings. Applied Energy, 2020, 277, 115610.	11.3	33
54	Human Organs-on-Chips for Virology. Trends in Microbiology, 2020, 28, 934-946.	8.5	111

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55	Treatment of psoriasis with NFKBIZ siRNA using topical ionic liquid formulations. Science Advances, 2020, 6, .	11.5	99
56	Proteomic and Metabolomic Characterization of Human Neurovascular Unit Cells in Response to Methamphetamine. Advanced Biology, 2020, 4, .	3.4	15
57	Is it Time for Reviewer 3 to Request Human Organ Chip Experiments Instead of Animal Validation Studies?. Advanced Science, 2020, 7, .	12.7	232
58	Emerging preclinical evidence does not support broad use of hydroxychloroquine in COVID-19 patients. Nature Communications, 2020, 11, .	14.2	48
59	On-chip recapitulation of clinical bone marrow toxicities and patient-specific pathophysiology. Nature Biomedical Engineering, 2020, 4, 394-406.	24.8	253
60	Quantitative prediction of human pharmacokinetic responses to drugs via fluidically coupled vascularized organ chips. Nature Biomedical Engineering, 2020, 4, 421-436.	24.8	416
61	YAP Regulates Hematopoietic Stem Cell Formation in Response to the Biomechanical Forces of Blood Flow. Developmental Cell, 2020, 52, 446-460.e5.	6.8	98
62	Robotic fluidic coupling and interrogation of multiple vascularized organ chips. Nature Biomedical Engineering, 2020, 4, 407-420.	24.8	365
63	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.	0.7	0
64	Reproducing human and cross-species drug toxicities using a Liver-Chip. Science Translational Medicine, 2019, 11, .	13.7	419
65	Controllable Fabrication of Inhomogeneous Microcapsules for Triggered Release by Osmotic Pressure. Small, 2019, 15, .	11.5	34
66	Tumor-Derived Extracellular Vesicles Breach the Intact Bloodâ€“Brain Barrier via Transcytosis. ACS Nano, 2019, 13, 13853-13865.	15.4	496
67	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.	5.6	146
68	Cellular nanoscale stiffness patterns governed by intracellular forces. Nature Materials, 2019, 18, 1071-1077.	34.0	80
69	Hypoxia-enhanced Blood-Brain Barrier Chip recapitulates human barrier function and shuttling of drugs and antibodies. Nature Communications, 2019, 10, .	14.2	497
70	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.	3.8	162
71	A complex human gut microbiome cultured in an anaerobic intestine-on-a-chip. Nature Biomedical Engineering, 2019, 3, 520-531.	24.8	719
72	Seeing Your Way to New Insights in Biology. Journal of Molecular Biology, 2019, 431, 2485-2486.	4.3	0

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73	Species-specific enhancement of enterohemorrhagic E. coli pathogenesis mediated by microbiome metabolites. Microbiome, 2019, 7, .	11.4	125
74	Platelet decoys inhibit thrombosis and prevent metastatic tumor formation in preclinical models. Science Translational Medicine, 2019, 11, .	13.7	71
75	An antifouling coating that enables affinity-based electrochemical biosensing in complex biological fluids. Nature Nanotechnology, 2019, 14, 1143-1149.	33.4	403
76	AAV-mediated gene therapy targeting TRPV4 mechanotransduction for inhibition of pulmonary vascular leakage. APL Bioengineering, 2019, 3, .	4.0	25
77	Rapid Coating Process Generates Omniphobic Dentures in Minutes to Reduce C. albicans Biofouling. ACS Biomaterials Science and Engineering, 2019, 5, 420-424.	5.5	12
78	Modelling cancer in microfluidic human organs-on-chips. Nature Reviews Cancer, 2019, 19, 65-81.	41.2	798
79	Broad-spectrum capture of clinical pathogens using engineered Fc-mannose-binding lectin enhanced by antibiotic treatment. F1000Research, 2019, 8, 108.	0.6	35
80	Multi-scale modeling reveals use of hierarchical tensegrity principles at the molecular, multi-molecular, and cellular levels. Extreme Mechanics Letters, 2018, 20, 21-28.	4.2	24
81	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.	5.2	120
82	Modeling radiation injury-induced cell death and countermeasure drug responses in a human Gut-on-a-Chip. Cell Death and Disease, 2018, 9, .	8.5	192
83	Development of a primary human Small Intestine-on-a-Chip using biopsy-derived organoids. Scientific Reports, 2018, 8, .	3.7	671
84	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, .	7.5	64
85	Physiologically Based Pharmacokinetic and Pharmacodynamic Analysis Enabled by Microfluidically Linked Organs-on-Chips. Annual Review of Pharmacology and Toxicology, 2018, 58, 37-64.	12.4	164
86	Microfluidic Organ-on-a-Chip Models of Human Intestine. Cellular and Molecular Gastroenterology and Hepatology, 2018, 5, 659-668.	5.5	516
87	From mechanobiology to developmentally inspired engineering. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170323.	3.9	40
88	Scalable Fabrication of Stretchable, Dual Channel, Microfluidic Organ Chips. Journal of Visualized Experiments, 2018, , .	0.3	27
89	Modulation of the Cellular Uptake of DNA Origami through Control over Mass and Shape. Nano Letters, 2018, 18, 3557-3564.	8.8	241
90	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.	25.8	383

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91	Mature induced-pluripotent-stem-cell-derived human podocytes reconstitute kidney glomerular-capillary-wall function on a chip. Nature Biomedical Engineering, 2017, 1, .	24.8	475
92	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.	2.6	7
93	SEBS elastomers for fabrication of microfluidic devices with reduced drug absorption by injection molding and extrusion. Microfluidics and Nanofluidics, 2017, 21, .	2.3	88
94	Ultrasound-sensitive nanoparticle aggregates for targeted drug delivery. Biomaterials, 2017, 139, 187-194.	12.3	78
95	Organs-on-Chips with combined multi-electrode array and transepithelial electrical resistance measurement capabilities. Lab on A Chip, 2017, 17, 2294-2302.	5.6	231
96	Cycling through the menstrual cycle â€" an out-of-body experience. Nature Reviews Endocrinology, 2017, 13, 380-382.	25.2	1
97	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.	5.6	401
98	Human Organ Chip Models Recapitulate Orthotopic Lung Cancer Growth, Therapeutic Responses, and Tumor Dormancy InÂVitro. Cell Reports, 2017, 21, 508-516.	6.2	404
99	A Biologically Inspired, Functionally Graded End Effector for Soft Robotics Applications. Soft Robotics, 2017, 4, 317-323.	7.9	51
100	Art Advancing Science: Filmmaking Leads to Molecular Insights at the Nanoscale. ACS Nano, 2017, 11, 12156-12166.	15.4	9
101	Mechanical induction of dentin-like differentiation by adult mouse bone marrow stromal cells using compressive scaffolds. Stem Cell Research, 2017, 24, 55-60.	0.6	15
102	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.	6.0	18
103	An Engineered Human Fcâ€Mannoseâ€Bindingâ€Lectin Captures Circulating Tumor Cells. Advanced Biology, 2017, 1, .	3.4	11
104	Direct Bonding of Chitosan Biomaterials to Tissues Using Transglutaminase for Surgical Repair or Device Implantation. Tissue Engineering - Part A, 2017, 23, 135-142.	2.8	20
105	Theory and associated phenomenology for intrinsic mortality arising from natural selection. PLoS ONE, 2017, 12, e0173677.	2.5	9
106	Human Gut-On-A-Chip Supports Polarized Infection of Coxsackie B1 Virus In Vitro. PLoS ONE, 2017, 12, e0169412.	2.5	180
107	Distinct Contributions of Astrocytes and Pericytes to Neuroinflammation Identified in a 3D Human Blood-Brain Barrier on a Chip. PLoS ONE, 2016, 11, e0150360.	2.5	404
108	Application of a Halbach magnetic array for long-range cell and particle separations in biological samples. Applied Physics Letters, 2016, 108, .	3.2	22

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109	Assessment of whole blood thrombosis in a microfluidic device lined by fixed human endothelium. Biomedical Microdevices, 2016, 18, .	2.8	129
110	Commendation for Exposing Key Advantage of Organ Chip Approach. Cell Systems, 2016, 3, 411.	5.4	11
111	Matched-Comparative Modeling of Normal and Diseased Human Airway Responses Using a Microengineered Breathing Lung Chip. Cell Systems, 2016, 3, 456-466.e4.	5.4	285
112	Co-culture of Living Microbiome with Microengineered Human Intestinal Villi in a Gut-on-a-Chip Microfluidic Device. Journal of Visualized Experiments, 2016, , .	0.3	48
113	A Broad-Spectrum Infection Diagnostic that Detects Pathogen-Associated Molecular Patterns (PAMPs) in Whole Blood. EBioMedicine, 2016, 9, 217-227.	9.0	45
114	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, .	7.5	750
115	Modeling Hematopoiesis and Responses to Radiation Countermeasures in a Bone Marrow-on-a-Chip. Tissue Engineering - Part C: Methods, 2016, 22, 509-515.	2.6	66
116	Reverse Engineering Human Pathophysiology with Organs-on-Chips. Cell, 2016, 164, 1105-1109.	28.6	203
117	A shear gradient-activated microfluidic device for automated monitoring of whole blood haemostasis and platelet function. Nature Communications, 2016, 7, .	14.2	165
118	A Chemical APC Mimetic Protects Endothelium from Thromboinflammatory Injury. Blood, 2016, 128, 3835-3835.	1.0	3
119	Mesenchymal condensationâ€dependent accumulation of collagen VI stabilizes organâ€specific cell fates during embryonic tooth formation. Developmental Dynamics, 2015, 244, 713-723.	1.7	28
120	Optimization of Pathogen Capture in Flowing Fluids with Magnetic Nanoparticles. Small, 2015, 11, 5657-5666.	11.5	40
121	Stability of Surface-Immobilized Lubricant Interfaces under Flow. Chemistry of Materials, 2015, 27, 1792-1800.	6.9	215
122	Engineered In Vitro Disease Models. Annual Review of Pathology: Mechanisms of Disease, 2015, 10, 195-262.	31.9	502
123	Measuring direct current trans-epithelial electrical resistance in organ-on-a-chip microsystems. Lab on A Chip, 2015, 15, 745-752.	5.6	191
124	Improved treatment of systemic blood infections using antibiotics with extracorporeal opsonin hemoadsorption. Biomaterials, 2015, 67, 382-392.	12.3	77
125	Control of cancer formation by intrinsic genetic noise and microenvironmental cues. Nature Reviews Cancer, 2015, 15, 499-509.	41.2	69
126	Programed Death is Favored by Natural Selection in Spatial Systems. Physical Review Letters, 2015, 114, .	7.8	35

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127	Biomechanical forces promote blood development through prostaglandin E2 and the cAMPâ€“PKA signaling axis. Journal of Experimental Medicine, 2015, 212, 665-680.	8.1	91
128	Generation of biocompatible droplets for in vivo and in vitro measurement of cell-generated mechanical stresses. Methods in Cell Biology, 2015, , 373-390.	0.0	16
129	Targeted Drug Delivery to Flow-Obstructed Blood Vessels Using Mechanically Activated Nanotherapeutics. JAMA Neurology, 2015, 72, 119.	13.0	51
130	Shear-Activated Nanoparticle Aggregates Combined With Temporary Endovascular Bypass to Treat Large Vessel Occlusion. Stroke, 2015, 46, 3507-3513.	5.1	49
131	Developmentally Inspired Regenerative Organ Engineering. , 2015, , 17-24.		1
132	Small airway-on-a-chip enables analysis of human lung inflammation and drug responses in vitro. Nature Methods, 2015, 13, 151-157.	24.0	777
133	Developmentallyâ€Inspired Shrinkâ€Wrap Polymers for Mechanical Induction of Tissue Differentiation. Advanced Materials, 2014, 26, 3253-3257.	24.4	31
134	Mechanobiology, Tissue Development and Organ Engineering. , 2014, , 309-322.		3
135	Paxillin controls endothelial cell migration and tumor angiogenesis by altering neuropilin 2 expression. Journal of Cell Science, 2014, 127, 1672-1683.	3.2	41
136	Manufacturing of Largeâ€Scale Functional Objects Using Biodegradable Chitosan Bioplastic. Macromolecular Materials and Engineering, 2014, 299, 932-938.	4.2	112
137	Bone marrowâ€“onâ€“aâ€“chip replicates hematopoietic niche physiology in vitro. Nature Methods, 2014, 11, 663-669.	24.0	429
138	Nanoparticle targeting of anti-cancer drugs that alter intracellular signaling or influence the tumor microenvironment. Advanced Drug Delivery Reviews, 2014, 79-80, 107-118.	16.0	213
139	Tensegrity, cellular biophysics, and the mechanics of living systems. Reports on Progress in Physics, 2014, 77, 046603.	20.0	419
140	Silencing HoxA1 by Intraductal Injection of siRNA Lipidoid Nanoparticles Prevents Mammary Tumor Progression in Mice. Science Translational Medicine, 2014, 6, .	13.7	71
141	A bioinspired omniphobic surface coating on medical devices prevents thrombosis and biofouling. Nature Biotechnology, 2014, 32, 1134-1140.	25.8	697
142	A microdevice for rapid optical detection of magnetically captured rare blood pathogens. Lab on A Chip, 2014, 14, 182-188.	5.6	61
143	Microfluidic organs-on-chips. Nature Biotechnology, 2014, 32, 760-772.	25.8	2,941
144	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.	7.5	64

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145	An extracorporeal blood-cleansing device for sepsis therapy. Nature Medicine, 2014, 20, 1211-1216.	36.5	306
146	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.	7.5	253
147	A combinatorial cell-laden gel microarray for inducing osteogenic differentiation of human mesenchymal stem cells. Scientific Reports, 2014, 4, .	3.7	129
148	Developing microphysiological systems for use as regulatory tools â€“ challenges and opportunities. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 364-367.	1.7	25
149	An artificial vasculature for adaptive thermal control of windows. Solar Energy Materials and Solar Cells, 2013, 117, 429-436.	6.2	33
150	Bioinspired Chitinous Material Solutions for Environmental Sustainability and Medicine. Advanced Functional Materials, 2013, 23, 4454-4466.	16.9	62
151	Breast cancer normalization induced by embryonic mesenchyme is mediated by extracellular matrix biglycan. Integrative Biology (United Kingdom), 2013, 5, 1045-1056.	1.4	37
152	Shearâ€Responsive Platelet Mimetics for Targeted Drug Delivery. Israel Journal of Chemistry, 2013, 53, 610-615.	2.1	9
153	Platform for High-Throughput Testing of the Effect of Soluble Compounds on 3D Cell Cultures. Analytical Chemistry, 2013, 85, 8085-8094.	6.7	120
154	Clear castable polyurethane elastomer for fabrication of microfluidic devices. Lab on A Chip, 2013, 13, 3956.	5.6	120
155	Mechanobiology and Developmental Control. Annual Review of Cell and Developmental Biology, 2013, 29, 27-61.	10.1	410
156	Microfabrication of human organs-on-chips. Nature Protocols, 2013, 8, 2135-2157.	24.7	655
157	SLLISWD Sequence in the 10FNIII Domain Initiates Fibronectin Fibrillogenesis. Journal of Biological Chemistry, 2013, 288, 21329-21340.	2.3	24
158	Gut-on-a-Chip microenvironment induces human intestinal cells to undergo villus differentiation. Integrative Biology (United Kingdom), 2013, 5, 1130.	1.4	665
159	Control of lung vascular permeability and endotoxin-induced pulmonary oedema by changes in extracellular matrix mechanics. Nature Communications, 2013, 4, .	14.2	136
160	Human kidney proximal tubule-on-a-chip for drug transport and nephrotoxicity assessment. Integrative Biology (United Kingdom), 2013, 5, 1119-1129.	1.4	756
161	Intraductal Injection for Localized Drug Delivery to the Mouse Mammary Gland. Journal of Visualized Experiments, 2013, , .	0.3	31
162	Quantifying cell-generated mechanical forces within living embryonic tissues. Nature Methods, 2013, 11, 183-189.	24.0	426

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163	How Changes in Extracellular Matrix Mechanics and Gene Expression Variability Might Combine to Drive Cancer Progression. PLoS ONE, 2013, 8, e76122.	2.5	34
164	Paxillin controls directional cell motility in response to physical cues. Cell Adhesion and Migration, 2012, 6, 502-508.	1.7	21
165	A Human Disease Model of Drug Toxicityâ€"Induced Pulmonary Edema in a Lung-on-a-Chip Microdevice. Science Translational Medicine, 2012, 4, .	13.7	908
166	A mini-microscope for in situ monitoring of cells. Lab on A Chip, 2012, 12, 3976.	5.6	62
167	Inhibition of Mammary Tumor Growth Using Lysyl Oxidase-Targeting Nanoparticles to Modify Extracellular Matrix. Nano Letters, 2012, 12, 3213-3217.	8.8	113
168	A combined micromagnetic-microfluidic device for rapid capture and culture of rare circulating tumor cells. Lab on A Chip, 2012, 12, 2175.	5.6	268
169	Human gut-on-a-chip inhabited by microbial flora that experiences intestinal peristalsis-like motions and flow. Lab on A Chip, 2012, 12, 2165.	5.6	1,563
170	Mechanosensitive mechanisms in transcriptional regulation. Journal of Cell Science, 2012, , .	3.2	346
171	Microengineered physiological biomimicry: Organs-on-Chips. Lab on A Chip, 2012, 12, 2156.	5.6	636
172	Unexpected Strength and Toughness in Chitosanâ€Fibroin Laminates Inspired by Insect Cuticle. Advanced Materials, 2012, 24, 480-484.	24.4	112
173	Mechanochemical Control of Mesenchymal Condensation and Embryonic Tooth Organ Formation. Developmental Cell, 2011, 21, 758-769.	6.8	210
174	Paxillin Mediates Sensing of Physical Cues and Regulates Directional Cell Motility by Controlling Lamellipodia Positioning. PLoS ONE, 2011, 6, e28303.	2.5	44
175	From 3D cell culture to organs-on-chips. Trends in Cell Biology, 2011, 21, 745-754.	12.1	1,718
176	From Cellular Mechanotransduction to Biologically Inspired Engineering. Annals of Biomedical Engineering, 2010, 38, 1148-1161.	4.2	89
177	Self-assembly of three-dimensional prestressed tensegrity structures from DNA. Nature Nanotechnology, 2010, 5, 520-524.	33.4	378
178	Mechanical control of tissue and organ development. Development (Cambridge), 2010, 137, 1407-1420.	3.0	808
179	Reconstituting Organ-Level Lung Functions on a Chip. Science, 2010, 328, 1662-1668.	19.5	3,805
180	Ultra-rapid activation of TRPV4 ion channels by mechanical forces applied to cell surface Î²1 integrins. Integrative Biology (United Kingdom), 2010, 2, 435.	1.4	267

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181	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.	7.5	406
182	TRPV4 Channels Mediate Cyclic Strainâ€"Induced Endothelial Cell Reorientation Through Integrin-to-Integrin Signaling. Circulation Research, 2009, 104, 1123-1130.	11.3	352
183	Cytoskeletal control of growth and cell fate switching. Current Opinion in Cell Biology, 2009, 21, 864-870.	4.2	201
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