# Donald E Ingber

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4463884/publications.pdf

Version: 2024-02-01

| 253 | 71,752 | 701 | 767 |
|---|---|---|---|
| papers | citations | 121 h-index | 249 g-index |

| 291 | 291 | 291 | 51156 |
|---|---|---|---|
| all docs | docs citations | times ranked | 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. | 22.5 | 31 |
| 2 | Establishment of a Modular Anaerobic Human Intestine Chip. Methods in Molecular Biology, 2022, 2373, 69-85. | 0.9 | 5 |
| 3 | Modeling pulmonary cystic fibrosis in a human lung airway-on-a-chip. Journal of Cystic Fibrosis, 2022, 21, 606-615. | 0.7 | 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. | 7.6 | 29 |
| 5 | Establishment of physiologically relevant oxygen gradients in microfluidic organ chips. Lab on A Chip, 2022, 22, 1584-1593. | 6.0 | 18 |
| 6 | Human organs-on-chips for disease modelling, drug development and personalized medicine. Nature Reviews Genetics, 2022, 23, 467-491. | 16.3 | 361 |
| 7 | Ectopic Lymphoid Follicle Formation and Human Seasonal Influenza Vaccination Responses Recapitulated in an Organâ€onâ€aâ€Chip. Advanced Science, 2022, 9, e2103241. | 11.2 | 32 |
| 8 | Mechanical control of innate immune responses against viral infection revealed in a human lung alveolus chip. Nature Communications, 2022, 13, 1928. | 12.8 | 53 |
| 9 | Enhancers of Host Immune Tolerance to Bacterial Infection Discovered Using Linked Computational and Experimental Approaches. Advanced Science, 2022, 9, . | 11.2 | 3 |
| 10 | Biofabrication of Multiplexed Electrochemical Immunosensors for Simultaneous Detection of Clinical Biomarkers in Complex Fluids. Advanced Healthcare Materials, 2022, 11, . | 7.6 | 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. | 22.5 | 20 |
| 12 | What Can an Organ-on-a-Chip Teach Us About Human Lung Pathophysiology?. Physiology, 2022, 37, 242-252. | 3.1 | 14 |
| 13 | Simulating drug concentrations in PDMS microfluidic organ chips. Lab on A Chip, 2021, 21, 3509-3519. | 6.0 | 50 |
| 14 | Anomalous COVID-19 tests hinder researchers. Science, 2021, 371, 244-245. | 12.6 | 11 |
| 15 | Graphene Enabled Lowâ€Noise Surface Chemistry for Multiplexed Sepsis Biomarker Detection in Whole Blood. Advanced Functional Materials, 2021, 31, 2010638. | 14.9 | 54 |
| 16 | Enabling out-of-body experiences for living organs. Journal of Experimental Medicine, 2021, 218, . | 8.5 | 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. | 3.9 | 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, . | 7.1 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | COVID-19 tissue atlases reveal SARS-CoV-2 pathology and cellular targets. Nature, 2021, 595, 107-113. | 27.8 | 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. | 22.5 | 228 |
| 21 | Mechanosensation Mediates Longâ€Range Spatial Decisionâ€Making in an Aneural Organism. Advanced Materials, 2021, 33, e2008161. | 21.0 | 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. | 4.1 | 13 |
| 23 | Laboratory-Generated DNA Can Cause Anomalous Pathogen Diagnostic Test Results. Microbiology Spectrum, 2021, 9, e0031321. | 3.0 | 10 |
| 24 | Clinically Relevant Influenza Virus Evolution Reconstituted in a Human Lung Airway-on-a-Chip. Microbiology Spectrum, 2021, 9, e0025721. | 3.0 | 31 |
| 25 | Enabling Multiplexed Electrochemical Detection of Biomarkers with High Sensitivity in Complex Biological Samples. Accounts of Chemical Research, 2021, 54, 3529-3539. | 15.6 | 37 |
| 26 | Bioinspired design and optimization for thin film wearable and building cooling systems. Bioinspiration and Biomimetics, 2021, , . | 2.9 | 2 |
| 27 | Enteric Coronavirus Infection and Treatment Modeled With an Immunocompetent Human Intestine-On-A-Chip. Frontiers in Pharmacology, 2021, 12, 718484. | 3.5 | 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. | 1.4 | 0 |
| 29 | Biomimetic smoking robot for in vitro inhalation exposure compatible with microfluidic organ chips. Nature Protocols, 2020, 15, 183-206. | 12.0 | 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. | 4.5 | 140 |
| 31 | Molecular mapping of transmembrane mechanotransduction through the Î²1 integrin-CD98hc-TRPV4 axis. Journal of Cell Science, 2020, 133, . | 2.0 | 21 |
| 32 | Origami microfluidics for radiant cooling with small temperature differences in buildings. Applied Energy, 2020, 277, 115610. | 10.1 | 20 |
| 33 | Human Organs-on-Chips for Virology. Trends in Microbiology, 2020, 28, 934-946. | 7.7 | 81 |
| 34 | Treatment of psoriasis with NFKBIZ siRNA using topical ionic liquid formulations. Science Advances, 2020, 6, eabb6049. | 10.3 | 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. | 11.2 | 159 |

| # | Article | IF | Citations |
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| 37 | Emerging preclinical evidence does not support broad use of hydroxychloroquine in COVID-19 patients. Nature Communications, 2020, 11, 4253. | 12.8 | 43 |
| 38 | On-chip recapitulation of clinical bone marrow toxicities and patient-specific pathophysiology. Nature Biomedical Engineering, 2020, 4, 394-406. | 22.5 | 170 |
| 39 | Quantitative prediction of human pharmacokinetic responses to drugs via fluidically coupled vascularized organ chips. Nature Biomedical Engineering, 2020, 4, 421-436. | 22.5 | 280 |
| 40 | YAP Regulates Hematopoietic Stem Cell Formation in Response to the Biomechanical Forces of Blood Flow. Developmental Cell, 2020, 52, 446-460.e5. | 7.0 | 65 |
| 41 | Robotic fluidic coupling and interrogation of multiple vascularized organ chips. Nature Biomedical Engineering, 2020, 4, 407-420. | 22.5 | 256 |
| 42 | Biology-inspired microphysiological systems to advance medicines for patient benefit and animal welfare. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 365-394. | 1.5 | 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. | 0.5 | 0 |
| 44 | Reproducing human and cross-species drug toxicities using a Liver-Chip. Science Translational Medicine, 2019, 11, . | 12.4 | 287 |
| 45 | Controllable Fabrication of Inhomogeneous Microcapsules for Triggered Release by Osmotic Pressure. Small, 2019, 15, e1903087. | 10.0 | 23 |
| 46 | Tumor-Derived Extracellular Vesicles Breach the Intact Bloodâ€“Brain Barrier via Transcytosis. ACS Nano, 2019, 13, 13853-13865. | 14.6 | 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. | 6.0 | 106 |
| 48 | Cellular nanoscale stiffness patterns governed by intracellular forces. Nature Materials, 2019, 18, 1071-1077. | 27.5 | 60 |
| 49 | Hypoxia-enhanced Blood-Brain Barrier Chip recapitulates human barrier function and shuttling of drugs and antibodies. Nature Communications, 2019, 10, 2621. | 12.8 | 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. | 4.1 | 127 |
| 51 | A complex human gut microbiome cultured in an anaerobic intestine-on-a-chip. Nature Biomedical Engineering, 2019, 3, 520-531. | 22.5 | 487 |
| 52 | Seeing Your Way to New Insights in Biology. Journal of Molecular Biology, 2019, 431, 2485-2486. | 4.2 | 0 |
| 53 | Species-specific enhancement of enterohemorrhagic E. coli pathogenesis mediated by microbiome metabolites. Microbiome, 2019, 7, 43. | 11.1 | 102 |
| 54 | Platelet decoys inhibit thrombosis and prevent metastatic tumor formation in preclinical models. Science Translational Medicine, 2019, 11, . | 12.4 | 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. | 31.5 | 266 |
| 56 | AAV-mediated gene therapy targeting TRPV4 mechanotransduction for inhibition of pulmonary vascular leakage. APL Bioengineering, 2019, 3, 046103. | 6.2 | 20 |
| 57 | Rapid Coating Process Generates Omniphobic Dentures in Minutes to Reduce C. albicans Biofouling. ACS Biomaterials Science and Engineering, 2019, 5, 420-424. | 5.2 | 10 |
| 58 | Modelling cancer in microfluidic human organs-on-chips. Nature Reviews Cancer, 2019, 19, 65-81. | 28.4 | 582 |
| 59 | Broad-spectrum capture of clinical pathogens using engineered Fc-mannose-binding lectin enhanced by antibiotic treatment. F1000Research, 2019, 8, 108. | 1.6 | 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. | 4.1 | 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. | 4.7 | 91 |
| 62 | Rapid Prototyping of Thermoplastic Microfluidic Devices. Methods in Molecular Biology, 2018, 1771, 161-170. | 0.9 | 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. | 6.3 | 138 |
| 64 | Development of a primary human Small Intestine-on-a-Chip using biopsy-derived organoids. Scientific Reports, 2018, 8, 2871. | 3.3 | 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. | 7.1 | 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. | 9.4 | 133 |
| 67 | Microfluidic Organ-on-a-Chip Models of Human Intestine. Cellular and Molecular Gastroenterology and Hepatology, 2018, 5, 659-668. | 4.5 | 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. | 4.7 | 238 |
| 69 | From mechanobiology to developmentally inspired engineering. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170323. | 4.0 | 32 |
| 70 | Scalable Fabrication of Stretchable, Dual Channel, Microfluidic Organ Chips. Journal of Visualized Experiments, 2018, , . | 0.3 | 24 |
| 71 | Developmentally inspired human â€˜organs on chipsâ€™. Development (Cambridge), 2018, 145, . | 2.5 | 77 |
| 72 | Modulation of the Cellular Uptake of DNA Origami through Control over Mass and Shape. Nano Letters, 2018, 18, 3557-3564. | 9.1 | 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. | 12.0 | 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. | 17.5 | 310 |
| 75 | Mature induced-pluripotent-stem-cell-derived human podocytes reconstitute kidney glomerular-capillary-wall function on a chip. Nature Biomedical Engineering, 2017, 1, . | 22.5 | 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. | 0.8 | 5 |
| 77 | SEBS elastomers for fabrication of microfluidic devices with reduced drug absorption by injection molding and extrusion. Microfluidics and Nanofluidics, 2017, 21, 1. | 2.2 | 65 |
| 78 | Human Lung Small Airway-on-a-Chip Protocol. Methods in Molecular Biology, 2017, 1612, 345-365. | 0.9 | 58 |
| 79 | Ultrasound-sensitive nanoparticle aggregates for targeted drug delivery. Biomaterials, 2017, 139, 187-194. | 11.4 | 58 |
| 80 | Organs-on-Chips with combined multi-electrode array and transepithelial electrical resistance measurement capabilities. Lab on A Chip, 2017, 17, 2294-2302. | 6.0 | 188 |
| 81 | Cycling through the menstrual cycle â€" an out-of-body experience. Nature Reviews Endocrinology, 2017, 13, 380-382. | 9.6 | 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. | 6.0 | 300 |
| 83 | Human Organ Chip Models Recapitulate Orthotopic Lung Cancer Growth, Therapeutic Responses, and Tumor Dormancy InÂVitro. Cell Reports, 2017, 21, 508-516. | 6.4 | 324 |
| 84 | A Biologically Inspired, Functionally Graded End Effector for Soft Robotics Applications. Soft Robotics, 2017, 4, 317-323. | 8.0 | 41 |
| 85 | Art Advancing Science: Filmmaking Leads to Molecular Insights at the Nanoscale. ACS Nano, 2017, 11, 12156-12166. | 14.6 | 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. | 0.7 | 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. | 7.1 | 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. | 3.1 | 17 |
| 90 | Theory and associated phenomenology for intrinsic mortality arising from natural selection. PLoS ONE, 2017, 12, e0173677. | 2.5 | 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. | 2.5 | 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. | 2.5 | 335 |
| 93 | Application of a Halbach magnetic array for long-range cell and particle separations in biological samples. Applied Physics Letters, 2016, 108, . | 3.3 | 16 |
| 94 | Assessment of whole blood thrombosis in a microfluidic device lined by fixed human endothelium. Biomedical Microdevices, 2016, 18, 73. | 2.8 | 101 |
| 95 | Commendation for Exposing Key Advantage of Organ Chip Approach. Cell Systems, 2016, 3, 411. | 6.2 | 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. | 6.2 | 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, , . | 0.3 | 43 |
| 98 | A Broad-Spectrum Infection Diagnostic that Detects Pathogen-Associated Molecular Patterns (PAMPs) in Whole Blood. EBioMedicine, 2016, 9, 217-227. | 6.1 | 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. | 7.1 | 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. | 2.1 | 53 |
| 101 | Reverse Engineering Human Pathophysiology with Organs-on-Chips. Cell, 2016, 164, 1105-1109. | 28.9 | 170 |
| 102 | Small airway-on-a-chip enables analysis of human lung inflammation and drug responses in vitro. Nature Methods, 2016, 13, 151-157. | 19.0 | 620 |
| 103 | A shear gradient-activated microfluidic device for automated monitoring of whole blood haemostasis and platelet function. Nature Communications, 2016, 7, 10176. | 12.8 | 134 |
| 104 | Activation of mechanosensitive ion channel TRPV4 normalizes tumor vasculature and improves cancer therapy. Oncogene, 2016, 35, 314-322. | 5.9 | 127 |
| 105 | A Chemical APC Mimetic Protects Endothelium from Thromboinflammatory Injury. Blood, 2016, 128, 3835-3835. | 1.4 | 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. | 2.5 | 30 |
| 107 | Abstract WP437: Shear-activated Nanoparticle Aggregate Lysis Combined With Temporary Stent-bypass to Treat Emergent Large Vessel Occlusions (ELVO). Stroke, 2016, 47, . | 2.0 | 0 |
| 108 | Mesenchymal condensationâ€dependent accumulation of collagen VI stabilizes organâ€specific cell fates during embryonic tooth formation. Developmental Dynamics, 2015, 244, 713-723. | 1.8 | 19 |

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| 109 | Optimization of Pathogen Capture in Flowing Fluids with Magnetic Nanoparticles. Small, 2015, 11, 5657-5666. | 10.0 | 38 |
| 110 | Stability of Surface-Immobilized Lubricant Interfaces under Flow. Chemistry of Materials, 2015, 27, 1792-1800. | 6.7 | 181 |
| 111 | Engineered In Vitro Disease Models. Annual Review of Pathology: Mechanisms of Disease, 2015, 10, 195-262. | 22.4 | 442 |
| 112 | Measuring direct current trans-epithelial electrical resistance in organ-on-a-chip microsystems. Lab on A Chip, 2015, 15, 745-752. | 6.0 | 155 |
| 113 | Improved treatment of systemic blood infections using antibiotics with extracorporeal opsonin hemoadsorption. Biomaterials, 2015, 67, 382-392. | 11.4 | 65 |
| 114 | Control of cancer formation by intrinsic genetic noise and microenvironmental cues. Nature Reviews Cancer, 2015, 15, 499-509. | 28.4 | 65 |
| 115 | Programed Death is Favored by Natural Selection in Spatial Systems. Physical Review Letters, 2015, 114, 238103. | 7.8 | 30 |
| 116 | Biomechanical forces promote blood development through prostaglandin E2 and the cAMPâ€“PKA signaling axis. Journal of Experimental Medicine, 2015, 212, 665-680. | 8.5 | 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. | 1.1 | 13 |
| 118 | Targeted Drug Delivery to Flow-Obstructed Blood Vessels Using Mechanically Activated Nanotherapeutics. JAMA Neurology, 2015, 72, 119. | 9.0 | 43 |
| 119 | Shear-Activated Nanoparticle Aggregates Combined With Temporary Endovascular Bypass to Treat Large Vessel Occlusion. Stroke, 2015, 46, 3507-3513. | 2.0 | 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. | 21.0 | 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. | 2.0 | 35 |
| 124 | Manufacturing of Largeâ€Scale Functional Objects Using Biodegradable Chitosan Bioplastic. Macromolecular Materials and Engineering, 2014, 299, 932-938. | 3.6 | 102 |
| 125 | Bone marrowâ€“onâ€“aâ€“chip replicates hematopoietic niche physiology in vitro. Nature Methods, 2014, 11, 663-669. | 19.0 | 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. | 13.7 | 199 |

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|---|---|---|---|
| 127 | Tensegrity, cellular biophysics, and the mechanics of living systems. Reports on Progress in Physics, 2014, 77, 046603. | 20.1 | 339 |
| 128 | Quantifying cell-generated mechanical forces within living embryonic tissues. Nature Methods, 2014, 11, 183-189. | 19.0 | 336 |
| 129 | Silencing HoxA1 by Intraductal Injection of siRNA Lipidoid Nanoparticles Prevents Mammary Tumor Progression in Mice. Science Translational Medicine, 2014, 6, 217ra2. | 12.4 | 66 |
| 130 | A bioinspired omniphobic surface coating on medical devices prevents thrombosis and biofouling. Nature Biotechnology, 2014, 32, 1134-1140. | 17.5 | 575 |
| 131 | A microdevice for rapid optical detection of magnetically captured rare blood pathogens. Lab on A Chip, 2014, 14, 182-188. | 6.0 | 55 |
| 132 | Microfluidic organs-on-chips. Nature Biotechnology, 2014, 32, 760-772. | 17.5 | 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. | 7.1 | 64 |
| 134 | An extracorporeal blood-cleansing device for sepsis therapy. Nature Medicine, 2014, 20, 1211-1216. | 30.7 | 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. | 7.1 | 214 |
| 136 | A combinatorial cell-laden gel microarray for inducing osteogenic differentiation of human mesenchymal stem cells. Scientific Reports, 2014, 4, 3896. | 3.3 | 123 |
| 137 | An artificial vasculature for adaptive thermal control of windows. Solar Energy Materials and Solar Cells, 2013, 117, 429-436. | 6.2 | 29 |
| 138 | Bioinspired Chitinous Material Solutions for Environmental Sustainability and Medicine. Advanced Functional Materials, 2013, 23, 4454-4466. | 14.9 | 50 |
| 139 | Breast cancer normalization induced by embryonic mesenchyme is mediated by extracellular matrix biglycan. Integrative Biology (United Kingdom), 2013, 5, 1045-1056. | 1.3 | 33 |
| 140 | Shearâ€Responsive Platelet Mimetics for Targeted Drug Delivery. Israel Journal of Chemistry, 2013, 53, 610-615. | 2.3 | 5 |
| 141 | Platform for High-Throughput Testing of the Effect of Soluble Compounds on 3D Cell Cultures. Analytical Chemistry, 2013, 85, 8085-8094. | 6.5 | 115 |
| 142 | Clear castable polyurethane elastomer for fabrication of microfluidic devices. Lab on A Chip, 2013, 13, 3956. | 6.0 | 101 |
| 143 | Mechanobiology and Developmental Control. Annual Review of Cell and Developmental Biology, 2013, 29, 27-61. | 9.4 | 367 |
| 144 | Microfabrication of human organs-on-chips. Nature Protocols, 2013, 8, 2135-2157. | 12.0 | 558 |

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| 145 | SLLISWD Sequence in the 10FNIII Domain Initiates Fibronectin Fibrillogenesis. Journal of Biological Chemistry, 2013, 288, 21329-21340. | 3.4 | 24 |
| 146 | Gut-on-a-Chip microenvironment induces human intestinal cells to undergo villus differentiation. Integrative Biology (United Kingdom), 2013, 5, 1130. | 1.3 | 560 |
| 147 | Control of lung vascular permeability and endotoxin-induced pulmonary oedema by changes in extracellular matrix mechanics. Nature Communications, 2013, 4, 1759. | 12.8 | 119 |
| 148 | Human kidney proximal tubule-on-a-chip for drug transport and nephrotoxicity assessment. Integrative Biology (United Kingdom), 2013, 5, 1119-1129. | 1.3 | 649 |
| 149 | Intraductal Injection for Localized Drug Delivery to the Mouse Mammary Gland. Journal of Visualized Experiments, 2013, , . | 0.3 | 27 |
| 150 | How Changes in Extracellular Matrix Mechanics and Gene Expression Variability Might Combine to Drive Cancer Progression. PLoS ONE, 2013, 8, e76122. | 2.5 | 32 |
| 151 | Paxillin controls directional cell motility in response to physical cues. Cell Adhesion and Migration, 2012, 6, 502-508. | 2.7 | 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. | 12.4 | 804 |
| 153 | A mini-microscope for in situ monitoring of cells. Lab on A Chip, 2012, 12, 3976. | 6.0 | 60 |
| 154 | Inhibition of Mammary Tumor Growth Using Lysyl Oxidase-Targeting Nanoparticles to Modify Extracellular Matrix. Nano Letters, 2012, 12, 3213-3217. | 9.1 | 97 |
| 155 | A combined micromagnetic-microfluidic device for rapid capture and culture of rare circulating tumor cells. Lab on A Chip, 2012, 12, 2175. | 6.0 | 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. | 6.0 | 1,304 |
| 157 | Mechanosensitive mechanisms in transcriptional regulation. Journal of Cell Science, 2012, 125, 3061-73. | 2.0 | 332 |
| 158 | Microengineered physiological biomimicry: Organs-on-Chips. Lab on A Chip, 2012, 12, 2156. | 6.0 | 584 |
| 159 | Shear-Activated Nanotherapeutics for Drug Targeting to Obstructed Blood Vessels. Science, 2012, 337, 738-742. | 12.6 | 428 |
| 160 | Unexpected Strength and Toughness in Chitosanâ€Fibroin Laminates Inspired by Insect Cuticle. Advanced Materials, 2012, 24, 480-484. | 21.0 | 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. | 21.0 | 0 |
| 162 | Mechanochemical Control of Mesenchymal Condensation and Embryonic Tooth Organ Formation. Developmental Cell, 2011, 21, 758-769. | 7.0 | 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. | 2.5 | 40 |
| 164 | From 3D cell culture to organs-on-chips. Trends in Cell Biology, 2011, 21, 745-754. | 7.9 | 1,514 |
| 165 | From Cellular Mechanotransduction to Biologically Inspired Engineering. Annals of Biomedical Engineering, 2010, 38, 1148-1161. | 2.5 | 85 |
| 166 | Self-assembly of three-dimensional prestressed tensegrity structures from DNA. Nature Nanotechnology, 2010, 5, 520-524. | 31.5 | 354 |
| 167 | Mechanical control of tissue and organ development. Development (Cambridge), 2010, 137, 1407-1420. | 2.5 | 732 |
| 168 | Reconstituting Organ-Level Lung Functions on a Chip. Science, 2010, 328, 1662-1668. | 12.6 | 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. | 1.3 | 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. | 7.1 | 373 |
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