

# Chwee Teck Lim

## List of Publications by Year in descending order

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513  
papers

44,020  
citations

2093

100  
h-index

2940

189  
g-index

535  
all docs

535  
docs citations

535  
times ranked

49199  
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene Nanoflakes as an Anode Material for Li-Ion Batteries. <i>Advanced Functional Materials</i> , 2007, 17, 2792-2799.	7.8	1,024
2	Origin of Enhanced Stem Cell Growth and Differentiation on Graphene and Graphene Oxide. <i>ACS Nano</i> , 2011, 5, 7334-7341.	7.3	953
3	Electrospinning of gelatin fibers and gelatin/PCL composite fibrous scaffolds. <i>Journal of Biomedical Materials Research Part B</i> , 2005, 72B, 156-165.	3.0	924
4	Evaluation of electrospun PCL/gelatin nanofibrous scaffold for wound healing and layered dermal reconstitution. <i>Acta Biomaterialia</i> , 2007, 3, 321-330.	4.1	784
5	AFM indentation study of breast cancer cells. <i>Biochemical and Biophysical Research Communications</i> , 2008, 374, 609-613.	1.0	770
6	Connections between single-cell biomechanics and human disease states: gastrointestinal cancer and malaria. <i>Acta Biomaterialia</i> , 2005, 1, 15-30.	4.1	748
7	Mechanics of the human red blood cell deformed by optical tweezers. <i>Journal of the Mechanics and Physics of Solids</i> , 2003, 51, 2259-2280.	2.3	696
8	Electrospun biomimetic nanocomposite nanofibers of hydroxyapatite/chitosan for bone tissue engineering. <i>Biomaterials</i> , 2008, 29, 4314-4322.	5.7	637
9	Electrospinning and mechanical characterization of gelatin nanofibers. <i>Polymer</i> , 2004, 45, 5361-5368.	1.8	629
10	Isolation and retrieval of circulating tumor cells using centrifugal forces. <i>Scientific Reports</i> , 2013, 3, 1259.	1.6	618
11	Mechanical models for living cells—a review. <i>Journal of Biomechanics</i> , 2006, 39, 195-216.	0.9	605
12	Fabrication of NiO Nanowall Electrodes for High Performance Lithium Ion Battery. <i>Chemistry of Materials</i> , 2008, 20, 3360-3367.	3.2	605
13	Nanofiber technology: current status and emerging developments. <i>Progress in Polymer Science</i> , 2017, 70, 1-17.	11.8	587
14	Crosslinking of the electrospun gelatin nanofibers. <i>Polymer</i> , 2006, 47, 2911-2917.	1.8	571
15	Recent development of polymer nanofibers for biomedical and biotechnological applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2005, 16, 933-946.	1.7	561
16	Microfluidics for cell separation. <i>Medical and Biological Engineering and Computing</i> , 2010, 48, 999-1014.	1.6	531
17	Tissue scaffolds for skin wound healing and dermal reconstruction. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2010, 2, 510-525.	3.3	512
18	Topological defects in epithelia govern cell death and extrusion. <i>Nature</i> , 2017, 544, 212-216.	13.7	511

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19	Haem-activated promiscuous targeting of artemisinin in Plasmodium falciparum. Nature Communications, 2015, 6, 10111.	5.8	486
20	Slanted spiral microfluidics for the ultra-fast, label-free isolation of circulating tumor cells. Lab on A Chip, 2014, 14, 128-137.	3.1	485
21	Coaxial Electrospinning of (Fluorescein Isothiocyanate-Conjugated Bovine Serum) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 667 2006, 7, 1049-1057.	2.6	459
22	Characterization of the Surface Biocompatibility of the Electrospun PCL-Collagen Nanofibers Using Fibroblasts. Biomacromolecules, 2005, 6, 2583-2589.	2.6	455
23	Ultra-fast, label-free isolation of circulating tumor cells from blood using spiral microfluidics. Nature Protocols, 2016, 11, 134-148.	5.5	439
24	Graphene-Polymer Nanofiber Membrane for Ultrafast Photonics. Advanced Functional Materials, 2010, 20, 782-791.	7.8	434
25	Biomechanics approaches to studying human diseases. Trends in Biotechnology, 2007, 25, 111-118.	4.9	430
26	Shape and Biomechanical Characteristics of Human Red Blood Cells in Health and Disease. MRS Bulletin, 2010, 35, 382-388.	1.7	424
27	Emerging modes of collective cell migration induced by geometrical constraints. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12974-12979.	3.3	389
28	Emerging flexible and wearable physical sensing platforms for healthcare and biomedical applications. Microsystems and Nanoengineering, 2016, 2, 16043.	3.4	385
29	Spectrin-Level Modeling of the Cytoskeleton and Optical Tweezers Stretching of the Erythrocyte. Biophysical Journal, 2005, 88, 3707-3719.	0.2	376
30	Force-dependent conformational switch of $\beta$ -catenin controls vinculin binding. Nature Communications, 2014, 5, 4525.	5.8	375
31	Preparation of Core-Shell Structured PCL-r-Gelatin Bi-Component Nanofibers by Coaxial Electrospinning. Chemistry of Materials, 2004, 16, 3406-3409.	3.2	359
32	Large-scale synthesis and field emission properties of vertically oriented CuO nanowire films. Nanotechnology, 2005, 16, 88-92.	1.3	348
33	Microdevice for the isolation and enumeration of cancer cells from blood. Biomedical Microdevices, 2009, 11, 883-892.	1.4	346
34	Pinched flow coupled shear-modulated inertial microfluidics for high-throughput rare blood cell separation. Lab on A Chip, 2011, 11, 1870.	3.1	320
35	Fluorinated Graphene for Promoting Neuro-Induction of Stem Cells. Advanced Materials, 2012, 24, 4285-4290.	11.1	315
36	Exosomes in Cancer Nanomedicine and Immunotherapy: Prospects and Challenges. Trends in Biotechnology, 2017, 35, 665-676.	4.9	313

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37	Tensile testing of a single ultrafine polymeric fiber. <i>Biomaterials</i> , 2005, 26, 1453-1456.	5.7	310
38	Co <sub>3</sub> O <sub>4</sub> Nanostructures with Different Morphologies and their Field-Emission Properties. <i>Advanced Functional Materials</i> , 2007, 17, 1932-1939.	7.8	297
39	Deformability study of breast cancer cells using microfluidics. <i>Biomedical Microdevices</i> , 2009, 11, 557-564.	1.4	273
40	Deformability based cell margination—A simple microfluidic design for malaria-infected erythrocyte separation. <i>Lab on A Chip</i> , 2010, 10, 2605.	3.1	269
41	Controlled Growth and Field-Emission Properties of Cobalt Oxide Nanowalls. <i>Advanced Materials</i> , 2005, 17, 1595-1599.	11.1	255
42	Mechanical characterization of nanofibers — A review. <i>Composites Science and Technology</i> , 2006, 66, 1102-1111.	3.8	252
43	Bead-based microfluidic immunoassays: The next generation. <i>Biosensors and Bioelectronics</i> , 2007, 22, 1197-1204.	5.3	251
44	Guidance of collective cell migration by substrate geometry. <i>Integrative Biology (United Kingdom)</i> , 2013, 5, 1026.	0.6	241
45	Adaptive rheology and ordering of cell cytoskeleton govern matrix rigidity sensing. <i>Nature Communications</i> , 2015, 6, 7525.	5.8	233
46	Directing Assembly and Disassembly of 2D MoS <sub>2</sub> Nanosheets with DNA for Drug Delivery. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 15286-15296.	4.0	232
47	When stem cells meet graphene: Opportunities and challenges in regenerative medicine. <i>Biomaterials</i> , 2018, 155, 236-250.	5.7	232
48	Flexible Hybrid Sensors for Health Monitoring: Materials and Mechanisms to Render Wearability. <i>Advanced Materials</i> , 2020, 32, e1902133.	11.1	232
49	Effects of crystalline morphology on the tensile properties of electrospun polymer nanofibers. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	230
50	Finite-element modeling of the ballistic impact of fabric armor. <i>International Journal of Impact Engineering</i> , 2003, 28, 13-31.	2.4	222
51	Low-Dimensional Transition Metal Dichalcogenide Nanostructures Based Sensors. <i>Advanced Functional Materials</i> , 2016, 26, 7034-7056.	7.8	208
52	Versatile label free biochip for the detection of circulating tumor cells from peripheral blood in cancer patients. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1701-1705.	5.3	191
53	Fabrication of Large Pores in Electrospun Nanofibrous Scaffolds for Cellular Infiltration: A Review. <i>Tissue Engineering - Part B: Reviews</i> , 2012, 18, 77-87.	2.5	190
54	Physical properties of a single polymeric nanofiber. <i>Applied Physics Letters</i> , 2004, 84, 1603-1605.	1.5	189

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55	Flexible and Stretchable Strain Sensing Actuator for Wearable Soft Robotic Applications. <i>Advanced Materials Technologies</i> , 2016, 1, 1600018.	3.0	188
56	YAP Regulates Actin Dynamics through ARHGAP29 and Promotes Metastasis. <i>Cell Reports</i> , 2017, 19, 1495-1502.	2.9	188
57	Effect of plasmodial RESA protein on deformability of human red blood cells harboring <i>Plasmodium falciparum</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 9213-9217.	3.3	184
58	Tumor Dissemination: An EMT Affair. <i>Cancer Cell</i> , 2013, 23, 272-273.	7.7	184
59	Microfluidic modelling of the tumor microenvironment for anti-cancer drug development. <i>Lab on A Chip</i> , 2019, 19, 369-386.	3.1	182
60	Mechanical properties of single electrospun drug-encapsulated nanofibres. <i>Nanotechnology</i> , 2006, 17, 3880-3891.	1.3	179
61	Perforation of high-strength fabric by projectiles of different geometry. <i>International Journal of Impact Engineering</i> , 2003, 28, 207-222.	2.4	177
62	Fabrication of porous electrospun nanofibres. <i>Nanotechnology</i> , 2006, 17, 901-908.	1.3	177
63	Agrin as a Mechanotransduction Signal Regulating YAP through the Hippo Pathway. <i>Cell Reports</i> , 2017, 18, 2464-2479.	2.9	175
64	Impact life prediction modeling of TFBGA packages under board level drop test. <i>Microelectronics Reliability</i> , 2004, 44, 1131-1142.	0.9	174
65	An ultra-high-throughput spiral microfluidic biochip for the enrichment of circulating tumor cells. <i>Analyst</i> , 2014, 139, 3245-3255.	1.7	173
66	Flexible Wearable Sensors for Cardiovascular Health Monitoring. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100116.	3.9	170
67	Defect engineered bioactive transition metals dichalcogenides quantum dots. <i>Nature Communications</i> , 2019, 10, 41.	5.8	168
68	Clinical Validation of an Ultra High-Throughput Spiral Microfluidics for the Detection and Enrichment of Viable Circulating Tumor Cells. <i>PLoS ONE</i> , 2014, 9, e99409.	1.1	165
69	Epithelial bridges maintain tissue integrity during collective cell migration. <i>Nature Materials</i> , 2014, 13, 87-96.	13.3	162
70	Large deformation of living cells using laser traps. <i>Acta Materialia</i> , 2004, 52, 1837-1845.	3.8	159
71	<i>Plasmodium vivax</i> : restricted tropism and rapid remodeling of CD71-positive reticulocytes. <i>Blood</i> , 2015, 125, 1314-1324.	0.6	157
72	High-throughput cell cycle synchronization using inertial forces in spiral microchannels. <i>Lab on A Chip</i> , 2011, 11, 1359.	3.1	150

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73	A visco-hyperelastic approach to modelling the constitutive behaviour of rubber. <i>International Journal of Impact Engineering</i> , 2000, 24, 545-560.	2.4	149
74	Dynamic mechanical properties of fabric armour. <i>International Journal of Impact Engineering</i> , 2001, 25, 1-15.	2.4	145
75	Multivariate biophysical markers predictive of mesenchymal stromal cell multipotency. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E4409-18.	3.3	143
76	Microfluidic Devices for Blood Fractionation. <i>Micromachines</i> , 2011, 2, 319-343.	1.4	141
77	Isoporous Micro/Nanoengineered Membranes. <i>ACS Nano</i> , 2013, 7, 1882-1904.	7.3	140
78	Short-term expansion of breast circulating cancer cells predicts response to anti-cancer therapy. <i>Oncotarget</i> , 2015, 6, 15578-15593.	0.8	134
79	A Bioelectronic Platform Using a Graphene-Lipid Bilayer Interface. <i>ACS Nano</i> , 2010, 4, 7387-7394.	7.3	132
80	Biomimetic and bioactive nanofibrous scaffolds from electrospun composite nanofibers. <i>International Journal of Nanomedicine</i> , 2007, 2, 623-38.	3.3	129
81	Expansion of patient-derived circulating tumor cells from liquid biopsies using a CTC microfluidic culture device. <i>Nature Protocols</i> , 2018, 13, 34-58.	5.5	128
82	Experimental techniques for single cell and single molecule biomechanics. <i>Materials Science and Engineering C</i> , 2006, 26, 1278-1288.	3.8	127
83	Biophysical Responses upon the Interaction of Nanomaterials with Cellular Interfaces. <i>Accounts of Chemical Research</i> , 2013, 46, 782-791.	7.6	125
84	Cancer Diagnosis: From Tumor to Liquid Biopsy and Beyond. <i>Lab on A Chip</i> , 2018, 19, 11-34.	3.1	123
85	Chitosan Nanofibers from an Easily Electrospinnable UHMWPEO-Doped Chitosan Solution System. <i>Biomacromolecules</i> , 2008, 9, 136-141.	2.6	122
86	Investigations on the Structural Damage in Human Erythrocytes Exposed to Silver, Gold, and Platinum Nanoparticles. <i>Advanced Functional Materials</i> , 2010, 20, 1233-1242.	7.8	122
87	Cell response to substrate rigidity is regulated by active and passive cytoskeletal stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 12817-12825.	3.3	122
88	Liquid biopsy and therapeutic response: Circulating tumor cell cultures for evaluation of anticancer treatment. <i>Science Advances</i> , 2016, 2, e1600274.	4.7	120
89	CD80 and CD86 Differentially Regulate Mechanical Interactions of T-Cells with Antigen-Presenting Dendritic Cells and B-Cells. <i>PLoS ONE</i> , 2012, 7, e45185.	1.1	118
90	DEAD-box helicase DP103 defines metastatic potential of human breast cancers. <i>Journal of Clinical Investigation</i> , 2014, 124, 3807-3824.	3.9	118

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91	Mechanobiology of Tumor Growth. <i>Chemical Reviews</i> , 2018, 118, 6499-6515.	23.0	118
92	Potassium channel dysfunction in human neuronal models of Angelman syndrome. <i>Science</i> , 2019, 366, 1486-1492.	6.0	118
93	Particle-based simulations of red blood cells – A review. <i>Journal of Biomechanics</i> , 2016, 49, 2255-2266.	0.9	117
94	Collective Cell Migration: A Mechanistic Perspective. <i>Physiology</i> , 2013, 28, 370-379.	1.6	114
95	Significant Biochemical, Biophysical and Metabolic Diversity in Circulating Human Cord Blood Reticulocytes. <i>PLoS ONE</i> , 2013, 8, e76062.	1.1	114
96	Mechanics of epithelial closure over non-adherent environments. <i>Nature Communications</i> , 2015, 6, 6111.	5.8	113
97	Enhanced Biomineralization in Osteoblasts on a Novel Electrospun Biocomposite Nanofibrous Substrate of Hydroxyapatite/Collagen/Chitosan. <i>Tissue Engineering - Part A</i> , 2010, 16, 1949-1960.	1.6	112
98	Cell-Assembled Graphene Biocomposite for Enhanced Chondrogenic Differentiation. <i>Small</i> , 2015, 11, 963-969.	5.2	109
99	Microfluidic enrichment for the single cell analysis of circulating tumor cells. <i>Scientific Reports</i> , 2016, 6, 22076.	1.6	109
100	The role of single-cell mechanical behaviour and polarity in driving collective cell migration. <i>Nature Physics</i> , 2020, 16, 802-809.	6.5	109
101	Malaria detection using inertial microfluidics. <i>Lab on A Chip</i> , 2015, 15, 1101-1109.	3.1	108
102	Tensile test of a single nanofiber using an atomic force microscope tip. <i>Applied Physics Letters</i> , 2005, 86, 073115.	1.5	106
103	Flow Sensing of Single Cell by Graphene Transistor in a Microfluidic Channel. <i>Nano Letters</i> , 2011, 11, 5240-5246.	4.5	106
104	A flexible multiplexed immunosensor for point-of-care in situ wound monitoring. <i>Science Advances</i> , 2021, 7, .	4.7	106
105	Perforation of high-strength double-ply fabric system by varying shaped projectiles. <i>International Journal of Impact Engineering</i> , 2002, 27, 577-591.	2.4	105
106	Effects of annealing on the structural and mechanical properties of electrospun polymeric nanofibres. <i>Nanotechnology</i> , 2006, 17, 2649-2654.	1.3	104
107	Substrate topography determines the fate of chondrogenesis from human mesenchymal stem cells resulting in specific cartilage phenotype formation. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014, 10, 1507-1516.	1.7	104
108	Highly Wrinkled Cross-Linked Graphene Oxide Membranes for Biological and Charge Storage Applications. <i>Small</i> , 2012, 8, 423-431.	5.2	103

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109	Biosensing with the singular phase of an ultrathin metal-dielectric nanophotonic cavity. <i>Nature Communications</i> , 2018, 9, 369.	5.8	103
110	Material approaches to active tissue mechanics. <i>Nature Reviews Materials</i> , 2019, 4, 23-44.	23.3	103
111	Encapsulation of self-assembled FePt magnetic nanoparticles in PCL nanofibers by coaxial electrospinning. <i>Chemical Physics Letters</i> , 2005, 415, 317-322.	1.2	102
112	Host cell deformability is linked to transmission in the human malaria parasite <i>Plasmodium falciparum</i> . <i>Cellular Microbiology</i> , 2012, 14, 983-993.	1.1	102
113	Emergent patterns of collective cell migration under tubular confinement. <i>Nature Communications</i> , 2017, 8, 1517.	5.8	101
114	Influence of Irrigation Regimens on the Adherence of <i>Enterococcus faecalis</i> to Root Canal Dentin. <i>Journal of Endodontics</i> , 2008, 34, 850-854.	1.4	99
115	Wearable tactile sensor based on flexible microfluidics. <i>Lab on A Chip</i> , 2016, 16, 3244-3250.	3.1	99
116	All-Optical Chirality-Sensitive Sorting <i>via</i> Reversible Lateral Forces in Interference Fields. <i>ACS Nano</i> , 2017, 11, 4292-4300.	7.3	99
117	Force-dependent binding of vinculin to $\beta$ -catenin regulates cell-cell contact stability and collective cell behavior. <i>Molecular Biology of the Cell</i> , 2018, 29, 380-388.	0.9	99
118	Plastic deformation modes in rigid polyurethane foam under static loading. <i>International Journal of Solids and Structures</i> , 2001, 38, 9267-9279.	1.3	98
119	Epithelial Cell Packing Induces Distinct Modes of Cell Extrusions. <i>Current Biology</i> , 2016, 26, 2942-2950.	1.8	98
120	TRPV4 Regulates Breast Cancer Cell Extravasation, Stiffness and Actin Cortex. <i>Scientific Reports</i> , 2016, 6, 27903.	1.6	98
121	Triple-State Liquid-Based Microfluidic Tactile Sensor with High Flexibility, Durability, and Sensitivity. <i>ACS Sensors</i> , 2016, 1, 543-551.	4.0	97
122	Flexural strength of dental composite restoratives: Comparison of biaxial and three-point bending test. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 71B, 278-283.	3.0	95
123	An extracellular matrix-related prognostic and predictive indicator for early-stage non-small cell lung cancer. <i>Nature Communications</i> , 2017, 8, 1734.	5.8	95
124	Measurement of Poisson's ratio of dental composite restorative materials. <i>Biomaterials</i> , 2004, 25, 2455-2460.	5.7	93
125	Micellization Phenomena of Biodegradable Amphiphilic Triblock Copolymers Consisting of Poly( $\beta$ -hydroxyalkanoic acid) and Poly(ethylene oxide). <i>Langmuir</i> , 2005, 21, 8681-8685.	1.6	93
126	Substrate-Friendly Synthesis of Metal Oxide Nanostructures Using a Hotplate. <i>Small</i> , 2006, 2, 80-84.	5.2	93

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127	Atomic force microscopy study of the antimicrobial action of Sushi peptides on Gram negative bacteria. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007, 1768, 411-418.	1.4	93
128	Crystallinity and surface effects on Young's modulus of CuO nanowires. <i>Applied Physics Letters</i> , 2007, 90, 163112.	1.5	92
129	Controlled biomineralization of electrospun poly( $\epsilon$ -caprolactone) fibers to enhance their mechanical properties. <i>Acta Biomaterialia</i> , 2013, 9, 5698-5707.	4.1	91
130	Study on structural and mechanical properties of porous PLA nanofibers electrospun by channel-based electrospinning system. <i>Polymer</i> , 2015, 56, 572-580.	1.8	91
131	Live single cell mass spectrometry reveals cancer-specific metabolic profiles of circulating tumor cells. <i>Cancer Science</i> , 2019, 110, 697-706.	1.7	90
132	Emergence of microfluidic wearable technologies. <i>Lab on A Chip</i> , 2016, 16, 4082-4090.	3.1	89
133	Modulus grading versus geometrical grading of composite adherends in single-lap bonded joints. <i>Composite Structures</i> , 2003, 62, 113-121.	3.1	88
134	Nanoindentation study of nanofibers. <i>Applied Physics Letters</i> , 2005, 87, 123106.	1.5	88
135	Nb <sub>2</sub> O <sub>5</sub> Nanowires as Efficient Electron Field Emitters. <i>Journal of Physical Chemistry C</i> , 2008, 112, 10008-10012.	1.5	84
136	Mesenchymal Stem Cells Reduce Intervertebral Disc Fibrosis and Facilitate Repair. <i>Stem Cells</i> , 2014, 32, 2164-2177.	1.4	84
137	Biophysics of Malarial Parasite Exit from Infected Erythrocytes. <i>PLoS ONE</i> , 2011, 6, e20869.	1.1	84
138	Efficient field emission from $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> nanoflakes on an atomic force microscope tip. <i>Applied Physics Letters</i> , 2005, 87, 023103.	1.5	82
139	Effect of hydrogen peroxide on intertubular dentine. <i>Journal of Dentistry</i> , 2005, 33, 363-369.	1.7	82
140	Celebrating Soft Matter's 10th Anniversary: Cell division: a source of active stress in cellular monolayers. <i>Soft Matter</i> , 2015, 11, 7328-7336.	1.2	82
141	Board level drop test and simulation of TFPGA packages for telecommunication applications. , 0, , .		81
142	Jetting microfluidics with size-sorting capability for single-cell protease detection. <i>Biosensors and Bioelectronics</i> , 2015, 66, 19-23.	5.3	81
143	A visco-hyperelastic constitutive model to characterize both tensile and compressive behavior of rubber. <i>Journal of Applied Polymer Science</i> , 2004, 92, 523-531.	1.3	79
144	A microfluidics approach towards high-throughput pathogen removal from blood using margination. <i>Biomicrofluidics</i> , 2012, 6, 24115-2411513.	1.2	79

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145	Advances in microfluidics in combating infectious diseases. <i>Biotechnology Advances</i> , 2016, 34, 404-421.	6.0	79
146	Photon momentum transfer in inhomogeneous dielectric mixtures and induced tractor beams. <i>Light: Science and Applications</i> , 2015, 4, e278-e278.	7.7	78
147	Nonlinear elastic and viscoelastic deformation of the human red blood cell with optical tweezers. <i>Mechanics and Chemistry of Biosystems</i> , 2004, 1, 169-80.	0.3	78
148	Force-dependent vinculin binding to talin in live cells: a crucial step in anchoring the actin cytoskeleton to focal adhesions. <i>American Journal of Physiology - Cell Physiology</i> , 2014, 306, C607-C620.	2.1	77
149	Highly Flexible Graphene Oxide Nanosuspension Liquid-Based Microfluidic Tactile Sensor. <i>Small</i> , 2016, 12, 1593-1604.	5.2	77
150	Thermal-Disrupting Interface Mitigates Intercellular Cohesion Loss for Accurate Topical Antibacterial Therapy. <i>Advanced Materials</i> , 2020, 32, e1907030.	11.1	75
151	Advanced experimental and simulation techniques for analysis of dynamic responses during drop impact. , 0, , .		74
152	Modeling of hemodynamics arising from malaria infection. <i>Journal of Biomechanics</i> , 2010, 43, 1386-1393.	0.9	74
153	Thickness sensing of hMSCs on collagen gel directs stem cell fate. <i>Biochemical and Biophysical Research Communications</i> , 2010, 401, 287-292.	1.0	74
154	Phase-Change-Material-Based Low-Loss Visible-Frequency Hyperbolic Metamaterials for Ultrasensitive Label-Free Biosensing. <i>Advanced Optical Materials</i> , 2019, 7, 1900081.	3.6	74
155	Highly Stretchable, Weavable, and Washable Piezoresistive Microfiber Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 12773-12780.	4.0	73
156	Liquid biopsy: one cell at a time. <i>Npj Precision Oncology</i> , 2019, 3, 23.	2.3	72
157	Effects of CF4 plasma on the field emission properties of aligned multi-wall carbon nanotube films. <i>Carbon</i> , 2005, 43, 395-400.	5.4	71
158	Synthesis, optical properties, and chemical-biological sensing applications of one-dimensional inorganic semiconductor nanowires. <i>Progress in Materials Science</i> , 2013, 58, 705-748.	16.0	71
159	Microfluidic cell trap array for controlled positioning of single cells on adhesive micropatterns. <i>Lab on A Chip</i> , 2013, 13, 714.	3.1	71
160	Advanced Numerical and Experimental Techniques for Analysis of Dynamic Responses and Solder Joint Reliability During Drop Impact. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2006, 29, 449-456.	1.4	70
161	Biocompatibility and Nanotoxicity of Layered Two-Dimensional Nanomaterials. <i>ChemNanoMat</i> , 2017, 3, 5-16.	1.5	69
162	Nanoindentation study of human premolars subjected to bleaching agent. <i>Journal of Biomechanics</i> , 2005, 38, 2204-2211.	0.9	68

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163	Biophysical properties of human breast cancer cells measured using silicon MEMS resonators and atomic force microscopy. <i>Lab on A Chip</i> , 2015, 15, 839-847.	3.1	68
164	Ultrathin and Wearable Microtubular Epidermal Sensor for Real-Time Physiological Pulse Monitoring. <i>Advanced Materials Technologies</i> , 2017, 2, 1700016.	3.0	68
165	A wireless and battery-free wound infection sensor based on DNA hydrogel. <i>Science Advances</i> , 2021, 7, eabj1617.	4.7	68
166	Molecular interactions of graphene oxide with human blood plasma proteins. <i>Nanoscale</i> , 2016, 8, 9425-9441.	2.8	67
167	Modal analysis and dynamic responses of board level drop test. , 0, , .		66
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