

Chwee Teck Lim

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502
papers

34,866
citations

92
h-index

172
g-index

535
ext. papers

39,700
ext. citations

7.3
avg, IF

7.58
L-index

#	Paper	IF	Citations
502	Fe ₂ O ₃ Nanoflakes as an Anode Material for Li-Ion Batteries. <i>Advanced Functional Materials</i> , 2007 , 17, 2792-2799	15.6	941
501	Electrospinning of gelatin fibers and gelatin/PCL composite fibrous scaffolds. <i>Journal of Biomedical Materials Research Part B</i> , 2005 , 72, 156-65		805
500	Origin of enhanced stem cell growth and differentiation on graphene and graphene oxide. <i>ACS Nano</i> , 2011 , 5, 7334-41	16.7	802
499	Evaluation of electrospun PCL/gelatin nanofibrous scaffold for wound healing and layered dermal reconstitution. <i>Acta Biomaterialia</i> , 2007 , 3, 321-30	10.8	678
498	AFM indentation study of breast cancer cells. <i>Biochemical and Biophysical Research Communications</i> , 2008 , 374, 609-13	3.4	631
497	Connections between single-cell biomechanics and human disease states: gastrointestinal cancer and malaria. <i>Acta Biomaterialia</i> , 2005 , 1, 15-30	10.8	619
496	Electrospun biomimetic nanocomposite nanofibers of hydroxyapatite/chitosan for bone tissue engineering. <i>Biomaterials</i> , 2008 , 29, 4314-22	15.6	572
495	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	5	567
494	Electrospinning and mechanical characterization of gelatin nanofibers. <i>Polymer</i> , 2004 , 45, 5361-5368	3.9	558
493	Fabrication of NiO Nanowall Electrodes for High Performance Lithium Ion Battery. <i>Chemistry of Materials</i> , 2008 , 20, 3360-3367	9.6	553
492	Isolation and retrieval of circulating tumor cells using centrifugal forces. <i>Scientific Reports</i> , 2013 , 3, 12594.9		523
491	Recent development of polymer nanofibers for biomedical and biotechnological applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2005 , 16, 933-46	4.5	501
490	Crosslinking of the electrospun gelatin nanofibers. <i>Polymer</i> , 2006 , 47, 2911-2917	3.9	496
489	Mechanical models for living cells--a review. <i>Journal of Biomechanics</i> , 2006 , 39, 195-216	2.9	495
488	Coaxial electrospinning of (fluorescein isothiocyanate-conjugated bovine serum albumin)-encapsulated poly(epsilon-caprolactone) nanofibers for sustained release. <i>Biomacromolecules</i> , 2006 , 7, 1049-57	6.9	429
487	Microfluidics for cell separation. <i>Medical and Biological Engineering and Computing</i> , 2010 , 48, 999-1014	3.1	428
486	Characterization of the surface biocompatibility of the electrospun PCL-collagen nanofibers using fibroblasts. <i>Biomacromolecules</i> , 2005 , 6, 2583-9	6.9	412

485	Nanofiber technology: current status and emerging developments. <i>Progress in Polymer Science</i> , 2017 , 70, 1-17	29.6	398
484	Tissue scaffolds for skin wound healing and dermal reconstruction. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2010 , 2, 510-25	9.2	397
483	Slanted spiral microfluidics for the ultra-fast, label-free isolation of circulating tumor cells. <i>Lab on A Chip</i> , 2014 , 14, 128-37	7.2	385
482	Graphene Polymer Nanofiber Membrane for Ultrafast Photonics. <i>Advanced Functional Materials</i> , 2010 , 20, 782-791	15.6	382
481	Haem-activated promiscuous targeting of artemisinin in Plasmodium falciparum. <i>Nature Communications</i> , 2015 , 6, 10111	17.4	353
480	Biomechanics approaches to studying human diseases. <i>Trends in Biotechnology</i> , 2007 , 25, 111-8	15.1	351
479	Ultra-fast, label-free isolation of circulating tumor cells from blood using spiral microfluidics. <i>Nature Protocols</i> , 2016 , 11, 134-48	18.8	338
478	Preparation of CoreShell Structured PCL-r-Gelatin Bi-Component Nanofibers by Coaxial Electrospinning. <i>Chemistry of Materials</i> , 2004 , 16, 3406-3409	9.6	331
477	Spectrin-level modeling of the cytoskeleton and optical tweezers stretching of the erythrocyte. <i>Biophysical Journal</i> , 2005 , 88, 3707-19	2.9	327
476	Topological defects in epithelia govern cell death and extrusion. <i>Nature</i> , 2017 , 544, 212-216	50.4	316
475	Large-scale synthesis and field emission properties of vertically oriented CuO nanowire films. <i>Nanotechnology</i> , 2005 , 16, 88-92	3.4	314
474	Microdevice for the isolation and enumeration of cancer cells from blood. <i>Biomedical Microdevices</i> , 2009 , 11, 883-92	3.7	307
473	Emerging modes of collective cell migration induced by geometrical constraints. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 12974-9	11.5	302
472	Shape and Biomechanical Characteristics of Human Red Blood Cells in Health and Disease. <i>MRS Bulletin</i> , 2010 , 35, 382-388	3.2	302
471	Emerging flexible and wearable physical sensing platforms for healthcare and biomedical applications. <i>Microsystems and Nanoengineering</i> , 2016 , 2, 16043	7.7	280
470	Fluorinated graphene for promoting neuro-induction of stem cells. <i>Advanced Materials</i> , 2012 , 24, 4285-90	9.4	280
469	Pinched flow coupled shear-modulated inertial microfluidics for high-throughput rare blood cell separation. <i>Lab on A Chip</i> , 2011 , 11, 1870-8	7.2	280
468	Force-dependent conformational switch of E-catenin controls vinculin binding. <i>Nature Communications</i> , 2014 , 5, 4525	17.4	272

467	Tensile testing of a single ultrafine polymeric fiber. <i>Biomaterials</i> , 2005 , 26, 1453-6	15.6	267
466	Co3O4 Nanostructures with Different Morphologies and their Field-Emission Properties. <i>Advanced Functional Materials</i> , 2007 , 17, 1932-1939	15.6	260
465	Deformability based cell margination--a simple microfluidic design for malaria-infected erythrocyte separation. <i>Lab on A Chip</i> , 2010 , 10, 2605-13	7.2	244
464	Controlled Growth and Field-Emission Properties of Cobalt Oxide Nanowalls. <i>Advanced Materials</i> , 2005 , 17, 1595-1599	24	235
463	Deformability study of breast cancer cells using microfluidics. <i>Biomedical Microdevices</i> , 2009 , 11, 557-64	3.7	231
462	Exosomes in Cancer Nanomedicine and Immunotherapy: Prospects and Challenges. <i>Trends in Biotechnology</i> , 2017 , 35, 665-676	15.1	224
461	Bead-based microfluidic immunoassays: the next generation. <i>Biosensors and Bioelectronics</i> , 2007 , 22, 1197-204	11.8	220
460	Mechanical characterization of nanofibers [A review]. <i>Composites Science and Technology</i> , 2006 , 66, 1102-8	8.1	219
459	Directing Assembly and Disassembly of 2D MoS Nanosheets with DNA for Drug Delivery. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 15286-15296	9.5	199
458	Finite-element modeling of the ballistic impact of fabric armor. <i>International Journal of Impact Engineering</i> , 2003 , 28, 13-31	4	192
457	Effects of crystalline morphology on the tensile properties of electrospun polymer nanofibers. <i>Applied Physics Letters</i> , 2008 , 92, 141908	3.4	189
456	Guidance of collective cell migration by substrate geometry. <i>Integrative Biology (United Kingdom)</i> , 2013 , 5, 1026-35	3.7	187
455	When stem cells meet graphene: Opportunities and challenges in regenerative medicine. <i>Biomaterials</i> , 2018 , 155, 236-250	15.6	181
454	Physical properties of a single polymeric nanofiber. <i>Applied Physics Letters</i> , 2004 , 84, 1603-1605	3.4	170
453	Versatile label free biochip for the detection of circulating tumor cells from peripheral blood in cancer patients. <i>Biosensors and Bioelectronics</i> , 2010 , 26, 1701-5	11.8	164
452	Effect of plasmodial RESA protein on deformability of human red blood cells harboring Plasmodium falciparum. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 9213-7	11.5	161
451	Fabrication of porous electrospun nanofibres. <i>Nanotechnology</i> , 2006 , 17, 901-908	3.4	161
450	Fabrication of large pores in electrospun nanofibrous scaffolds for cellular infiltration: a review. <i>Tissue Engineering - Part B: Reviews</i> , 2012 , 18, 77-87	7.9	159

449	Mechanical properties of single electrospun drug-encapsulated nanofibres. <i>Nanotechnology</i> , 2006 , 17, 3880-3891	3.4	158
448	Adaptive rheology and ordering of cell cytoskeleton govern matrix rigidity sensing. <i>Nature Communications</i> , 2015 , 6, 7525	17.4	156
447	Low-Dimensional Transition Metal Dichalcogenide Nanostructures Based Sensors. <i>Advanced Functional Materials</i> , 2016 , 26, 7034-7056	15.6	156
446	Tumor dissemination: an EMT affair. <i>Cancer Cell</i> , 2013 , 23, 272-3	24.3	154
445	Perforation of high-strength fabric by projectiles of different geometry. <i>International Journal of Impact Engineering</i> , 2003 , 28, 207-222	4	151
444	An ultra-high-throughput spiral microfluidic biochip for the enrichment of circulating tumor cells. <i>Analyst, The</i> , 2014 , 139, 3245-55	5	146
443	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	3.7	139
442	High-throughput cell cycle synchronization using inertial forces in spiral microchannels. <i>Lab on A Chip</i> , 2011 , 11, 1359-67	7.2	137
441	Large deformation of living cells using laser traps. <i>Acta Materialia</i> , 2004 , 52, 1837-1845	8.4	136
440	Flexible and Stretchable Strain Sensing Actuator for Wearable Soft Robotic Applications. <i>Advanced Materials Technologies</i> , 2016 , 1, 1600018	6.8	133
439	Epithelial bridges maintain tissue integrity during collective cell migration. <i>Nature Materials</i> , 2014 , 13, 87-96	27	132
438	Impact life prediction modeling of TFBGA packages under board level drop test. <i>Microelectronics Reliability</i> , 2004 , 44, 1131-1142	1.2	127
437	YAP Regulates Actin Dynamics through ARHGAP29 and Promotes Metastasis. <i>Cell Reports</i> , 2017 , 19, 1495-1502	10.6	125
436	Agrin as a Mechanotransduction Signal Regulating YAP through the Hippo Pathway. <i>Cell Reports</i> , 2017 , 18, 2464-2479	10.6	123
435	Isoporous micro/nanoengineered membranes. <i>ACS Nano</i> , 2013 , 7, 1882-904	16.7	123
434	Microfluidic Devices for Blood Fractionation. <i>Micromachines</i> , 2011 , 2, 319-343	3.3	123
433	Plasmodium vivax: restricted tropism and rapid remodeling of CD71-positive reticulocytes. <i>Blood</i> , 2015 , 125, 1314-24	2.2	120
432	Biomimetic and bioactive nanofibrous scaffolds from electrospun composite nanofibers. <i>International Journal of Nanomedicine</i> , 2007 , 2, 623-38	7.3	120

431	Dynamic mechanical properties of fabric armour. <i>International Journal of Impact Engineering</i> , 2001 , 25, 1-15	4	119
430	A visco-hyperelastic approach to modelling the constitutive behaviour of rubber. <i>International Journal of Impact Engineering</i> , 2000 , 24, 545-560	4	119
429	A bioelectronic platform using a graphene-lipid bilayer interface. <i>ACS Nano</i> , 2010 , 4, 7387-94	16.7	118
428	Flexible Hybrid Sensors for Health Monitoring: Materials and Mechanisms to Render Wearability. <i>Advanced Materials</i> , 2020 , 32, e1902133	24	114
427	Chitosan nanofibers from an easily electrospinnable UHMWPEO-doped chitosan solution system. <i>Biomacromolecules</i> , 2008 , 9, 136-41	6.9	113
426	Microfluidic modelling of the tumor microenvironment for anti-cancer drug development. <i>Lab on A Chip</i> , 2019 , 19, 369-386	7.2	112
425	Biophysical responses upon the interaction of nanomaterials with cellular interfaces. <i>Accounts of Chemical Research</i> , 2013 , 46, 782-91	24.3	111
424	Experimental techniques for single cell and single molecule biomechanics. <i>Materials Science and Engineering C</i> , 2006 , 26, 1278-1288	8.3	111
423	Investigations on the Structural Damage in Human Erythrocytes Exposed to Silver, Gold, and Platinum Nanoparticles. <i>Advanced Functional Materials</i> , 2010 , 20, 1233-1242	15.6	109
422	Defect engineered bioactive transition metals dichalcogenides quantum dots. <i>Nature Communications</i> , 2019 , 10, 41	17.4	107
421	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	11.5	105
420	Short-term expansion of breast circulating cancer cells predicts response to anti-cancer therapy. <i>Oncotarget</i> , 2015 , 6, 15578-93	3.3	103
419	Enhanced biomineralization in osteoblasts on a novel electrospun biocomposite nanofibrous substrate of hydroxyapatite/collagen/chitosan. <i>Tissue Engineering - Part A</i> , 2010 , 16, 1949-60	3.9	100
418	Tensile test of a single nanofiber using an atomic force microscope tip. <i>Applied Physics Letters</i> , 2005 , 86, 073115	3.4	100
417	DEAD-box helicase DP103 defines metastatic potential of human breast cancers. <i>Journal of Clinical Investigation</i> , 2014 , 124, 3807-24	15.9	98
416	Encapsulation of self-assembled FePt magnetic nanoparticles in PCL nanofibers by coaxial electrospinning. <i>Chemical Physics Letters</i> , 2005 , 415, 317-322	2.5	97
415	Cell-assembled graphene biocomposite for enhanced chondrogenic differentiation. <i>Small</i> , 2015 , 11, 963-9	94	
414	Microfluidic enrichment for the single cell analysis of circulating tumor cells. <i>Scientific Reports</i> , 2016 , 6, 22076	4.9	93

413	Highly wrinkled cross-linked graphene oxide membranes for biological and charge-storage applications. <i>Small</i> , 2012 , 8, 423-31	11	93
412	Flow sensing of single cell by graphene transistor in a microfluidic channel. <i>Nano Letters</i> , 2011 , 11, 5240-5	61.5	93
411	Influence of irrigation regimens on the adherence of <i>Enterococcus faecalis</i> to root canal dentin. <i>Journal of Endodontics</i> , 2008 , 34, 850-4	4.7	92
410	Perforation of high-strength double-ply fabric system by varying shaped projectiles. <i>International Journal of Impact Engineering</i> , 2002 , 27, 577-591	4	91
409	Collective cell migration: a mechanistic perspective. <i>Physiology</i> , 2013 , 28, 370-9	9.8	90
408	Particle-based simulations of red blood cells-A review. <i>Journal of Biomechanics</i> , 2016 , 49, 2255-2266	2.9	89
407	Effects of annealing on the structural and mechanical properties of electrospun polymeric nanofibres. <i>Nanotechnology</i> , 2006 , 17, 2649-54	3.4	87
406	Micellization phenomena of biodegradable amphiphilic triblock copolymers consisting of poly(beta-hydroxyalkanoic acid) and poly(ethylene oxide). <i>Langmuir</i> , 2005 , 21, 8681-5	4	86
405	Malaria detection using inertial microfluidics. <i>Lab on A Chip</i> , 2015 , 15, 1101-9	7.2	85
404	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, 1507-16	6	85
403	Substrate-friendly synthesis of metal oxide nanostructures using a hotplate. <i>Small</i> , 2006 , 2, 80-4	11	84
402	Controlled biomineralization of electrospun poly(L-lactide) fibers to enhance their mechanical properties. <i>Acta Biomaterialia</i> , 2013 , 9, 5698-707	10.8	82
401	Crystallinity and surface effects on Young's modulus of CuO nanowires. <i>Applied Physics Letters</i> , 2007 , 90, 163112	3.4	81
400	Atomic force microscopy study of the antimicrobial action of Sushi peptides on Gram negative bacteria. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007 , 1768, 411-8	3.8	81
399	Host cell deformability is linked to transmission in the human malaria parasite <i>Plasmodium falciparum</i> . <i>Cellular Microbiology</i> , 2012 , 14, 983-93	3.9	80
398	Plastic deformation modes in rigid polyurethane foam under static loading. <i>International Journal of Solids and Structures</i> , 2001 , 38, 9267-9279	3.1	80
397	Mechanics of epithelial closure over non-adherent environments. <i>Nature Communications</i> , 2015 , 6, 6111	17.4	79
396	Expansion of patient-derived circulating tumor cells from liquid biopsies using a CTC microfluidic culture device. <i>Nature Protocols</i> , 2018 , 13, 34-58	18.8	79

395	Liquid biopsy and therapeutic response: Circulating tumor cell cultures for evaluation of anticancer treatment. <i>Science Advances</i> , 2016 , 2, e1600274	14.3	78
394	Nanoindentation study of nanofibers. <i>Applied Physics Letters</i> , 2005 , 87, 123106	3.4	78
393	Efficient field emission from α -Fe ₂ O ₃ nanoflakes on an atomic force microscope tip. <i>Applied Physics Letters</i> , 2005 , 87, 023103	3.4	78
392	Significant biochemical, biophysical and metabolic diversity in circulating human cord blood reticulocytes. <i>PLoS ONE</i> , 2013 , 8, e76062	3.7	77
391	Measurement of Poisson's ratio of dental composite restorative materials. <i>Biomaterials</i> , 2004 , 25, 2455-60.6	6.6	76
390	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		76
389	TRPV4 Regulates Breast Cancer Cell Extravasation, Stiffness and Actin Cortex. <i>Scientific Reports</i> , 2016 , 6, 27903	4.9	75
388	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	3.7	75
387	Nb ₂ O ₅ Nanowires as Efficient Electron Field Emitters. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 10008-10012	10.12	75
386	Study on structural and mechanical properties of porous PLA nanofibers electrospun by channel-based electrospinning system. <i>Polymer</i> , 2015 , 56, 572-580	3.9	74
385	Triple-State Liquid-Based Microfluidic Tactile Sensor with High Flexibility, Durability, and Sensitivity. <i>ACS Sensors</i> , 2016 , 1, 543-551	9.2	74
384	Mechanobiology of Tumor Growth. <i>Chemical Reviews</i> , 2018 , 118, 6499-6515	68.1	74
383	Cancer diagnosis: from tumor to liquid biopsy and beyond. <i>Lab on A Chip</i> , 2018 , 19, 11-34	7.2	74
382	Jetting microfluidics with size-sorting capability for single-cell protease detection. <i>Biosensors and Bioelectronics</i> , 2015 , 66, 19-23	11.8	73
381	Modulus grading versus geometrical grading of composite adherends in single-lap bonded joints. <i>Composite Structures</i> , 2003 , 62, 113-121	5.3	71
380	All-Optical Chirality-Sensitive Sorting via Reversible Lateral Forces in Interference Fields. <i>ACS Nano</i> , 2017 , 11, 4292-4300	16.7	69
379	Wearable tactile sensor based on flexible microfluidics. <i>Lab on A Chip</i> , 2016 , 16, 3244-50	7.2	68
378	Highly Flexible Graphene Oxide Nanosuspension Liquid-Based Microfluidic Tactile Sensor. <i>Small</i> , 2016 , 12, 1593-604	11	67

377	A microfluidics approach towards high-throughput pathogen removal from blood using margination. <i>Biomicrofluidics</i> , 2012 , 6, 24115-2411513	3.2	66
376	Modeling of hemodynamics arising from malaria infection. <i>Journal of Biomechanics</i> , 2010 , 43, 1386-93	2.9	66
375	Effects of CF4 plasma on the field emission properties of aligned multi-wall carbon nanotube films. <i>Carbon</i> , 2005 , 43, 395-400	10.4	66
374	Material approaches to active tissue mechanics. <i>Nature Reviews Materials</i> , 2019 , 4, 23-44	73.3	66
373	Biosensing with the singular phase of an ultrathin metal-dielectric nanophotonic cavity. <i>Nature Communications</i> , 2018 , 9, 369	17.4	65
372	Mesenchymal stem cells reduce intervertebral disc fibrosis and facilitate repair. <i>Stem Cells</i> , 2014 , 32, 2164-77	5.8	65
371	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, C607-20	5.4	65
370	Biophysics of malarial parasite exit from infected erythrocytes. <i>PLoS ONE</i> , 2011 , 6, e20869	3.7	65
369	Epithelial Cell Packing Induces Distinct Modes of Cell Extrusions. <i>Current Biology</i> , 2016 , 26, 2942-2950	6.3	64
368	Thickness sensing of hMSCs on collagen gel directs stem cell fate. <i>Biochemical and Biophysical Research Communications</i> , 2010 , 401, 287-92	3.4	64
367	Effect of hydrogen peroxide on intertubular dentine. <i>Journal of Dentistry</i> , 2005 , 33, 363-9	4.8	64
366	Flexural strength of dental composite restoratives: comparison of biaxial and three-point bending test. <i>Journal of Biomedical Materials Research Part B</i> , 2004 , 71, 278-83		64
365	Photon momentum transfer in inhomogeneous dielectric mixtures and induced tractor beams. <i>Light: Science and Applications</i> , 2015 , 4, e278-e278	16.7	63
364	High-performance graphene-titania platform for detection of phosphopeptides in cancer cells. <i>Analytical Chemistry</i> , 2012 , 84, 6693-700	7.8	63
363	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	2.9	63
362	Emergence of microfluidic wearable technologies. <i>Lab on A Chip</i> , 2016 , 16, 4082-4090	7.2	62
361	Enhanced field emission from O2 and CF4 plasma-treated CuO nanowires. <i>Chemical Physics Letters</i> , 2006 , 419, 458-463	2.5	62
360	Microfluidic cell trap array for controlled positioning of single cells on adhesive micropatterns. <i>Lab on A Chip</i> , 2013 , 13, 714-21	7.2	61

359	Emergent patterns of collective cell migration under tubular confinement. <i>Nature Communications</i> , 2017 , 8, 1517	17.4	61
358	Nanoindentation study of human premolars subjected to bleaching agent. <i>Journal of Biomechanics</i> , 2005 , 38, 2204-11	2.9	61
357	Synthesis, optical properties, and chemical/biological sensing applications of one-dimensional inorganic semiconductor nanowires. <i>Progress in Materials Science</i> , 2013 , 58, 705-748	42.2	60
356	Biocompatibility and Nanotoxicity of Layered Two-Dimensional Nanomaterials. <i>ChemNanoMat</i> , 2017 , 3, 5-16	3.5	59
355	An extracellular matrix-related prognostic and predictive indicator for early-stage non-small cell lung cancer. <i>Nature Communications</i> , 2017 , 8, 1734	17.4	59
354	Biophysical properties of human breast cancer cells measured using silicon MEMS resonators and atomic force microscopy. <i>Lab on A Chip</i> , 2015 , 15, 839-47	7.2	59
353	Potassium channel dysfunction in human neuronal models of Angelman syndrome. <i>Science</i> , 2019 , 366, 1486-1492	33.3	58
352	Highly Stretchable, Weavable, and Washable Piezoresistive Microfiber Sensors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 12773-12780	9.5	57
351	Size selective assembly of colloidal particles on a template by directed self-assembly technique. <i>Langmuir</i> , 2006 , 22, 8248-52	4	57
350	Mussel inspired protein-mediated surface modification to electrospun fibers and their potential biomedical applications. <i>Journal of Biomedical Materials Research - Part A</i> , 2012 , 100, 929-38	5.4	56
349	Cell adhesion properties on photochemically functionalized diamond. <i>Langmuir</i> , 2007 , 23, 5615-21	4	56
348	Ultrathin and Wearable Microtubular Epidermal Sensor for Real-Time Physiological Pulse Monitoring. <i>Advanced Materials Technologies</i> , 2017 , 2, 1700016	6.8	55
347	Structure-mechanical property of individual cobalt oxide nanowires. <i>Nano Letters</i> , 2008 , 8, 3226-32	11.5	55
346	Modeling the size-dependent elastic properties of polymeric nanofibers. <i>Nanotechnology</i> , 2008 , 19, 4557-66	5.4	55
345	The role of organic intertile layer in abalone nacre. <i>Materials Science and Engineering C</i> , 2009 , 29, 2398-2410	4.1	54
344	The malaria parasite progressively dismantles the host erythrocyte cytoskeleton for efficient egress. <i>Molecular and Cellular Proteomics</i> , 2011 , 10, M111.010678	7.6	54
343	Finite Element Simulation of the Micropipette Aspiration of a Living Cell Undergoing Large Viscoelastic Deformation. <i>Mechanics of Advanced Materials and Structures</i> , 2005 , 12, 501-512	1.8	54
342	Modeling cell entry into a micro-channel. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011 , 10, 755-66.8	6.8	53

341	Power-law rheology analysis of cells undergoing micropipette aspiration. <i>Biomechanics and Modeling in Mechanobiology</i> , 2010 , 9, 563-72	3.8	53
340	Novel approach to tensile testing of micro- and nanoscale fibers. <i>Review of Scientific Instruments</i> , 2004 , 75, 2581-2585	1.7	53
339	Concordance of anaplastic lymphoma kinase (ALK) gene rearrangements between circulating tumor cells and tumor in non-small cell lung cancer. <i>Oncotarget</i> , 2016 , 7, 23251-62	3.3	53
338	Force-dependent binding of vinculin to E-catenin regulates cell-cell contact stability and collective cell behavior. <i>Molecular Biology of the Cell</i> , 2018 , 29, 380-388	3.5	52
337	Advances in microfluidics in combating infectious diseases. <i>Biotechnology Advances</i> , 2016 , 34, 404-421	17.8	52
336	Mechanical properties of electrospun collagen-chitosan complex single fibers and membrane. <i>Materials Science and Engineering C</i> , 2009 , 29, 2428-2435	8.3	52
335	Collagen-based fibrous scaffold for spatial organization of encapsulated and seeded human mesenchymal stem cells. <i>Biomaterials</i> , 2009 , 30, 1133-42	15.6	52
334	Molecular interactions of graphene oxide with human blood plasma proteins. <i>Nanoscale</i> , 2016 , 8, 9425-41.7	4.7	52
333	Highly Sensitive and Selective Aptamer-Based Fluorescence Detection of a Malarial Biomarker Using Single-Layer MoS ₂ Nanosheets. <i>ACS Sensors</i> , 2016 , 1, 1315-1321	9.2	52
332	Cell contractility arising from topography and shear flow determines human mesenchymal stem cell fate. <i>Scientific Reports</i> , 2016 , 6, 20415	4.9	51
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330	Live single cell mass spectrometry reveals cancer-specific metabolic profiles of circulating tumor cells. <i>Cancer Science</i> , 2019 , 110, 697-706	6.9	51
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