

# Raymond H W Lam

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

59  
papers

1,774  
citations

21  
h-index

41  
g-index

78  
ext. papers

2,136  
ext. citations

6.5  
avg, IF

4.82  
L-index

#	Paper	IF	Citations
59	Adhesion Strengthening Mechanism of Carbon Nanotube-Embedded Epoxy Composites: A Fracture-Based Approach.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	3
58	High-throughput deterministic pairing and coculturing of single cells in a microwell array using combined hydrodynamic and recirculation flow captures. <i>Biomicrofluidics</i> , <b>2021</b> , 15, 054103	3.2	1
57	An glioblastoma microenvironment model dissects the immunological mechanisms of resistance to PD-1 checkpoint blockade immunotherapy. <i>Small Methods</i> , <b>2021</b> , 5, 2100197	12.8	3
56	Acoustically Driven Manipulation of Microparticles and Cells on a Detachable Surface Micromachined Silicon Chip. <i>IEEE Sensors Journal</i> , <b>2021</b> , 1-1	4	2
55	Spreading and Migration of Nasopharyngeal Normal and Cancer Cells on Microgratings.. <i>ACS Applied Bio Materials</i> , <b>2021</b> , 4, 3224-3231	4.1	1
54	Label-free biosensor of phagocytosis for diagnosing bacterial infections. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 191, 113412	11.8	5
53	Low-cost laser-cut patterned chips for acoustic concentration of micro- to nanoparticles and cells by operating over a wide frequency range. <i>Analyst, The</i> , <b>2021</b> , 146, 3280-3288	5	3
52	Gravitational sedimentation-based approach for ultra-simple and flexible cell patterning coculture on microfluidic device. <i>Biofabrication</i> , <b>2020</b> , 12, 035005	10.5	7
51	Reduction in cement content of normal strength concrete with used engine oil (UEO) as chemical admixture. <i>Construction and Building Materials</i> , <b>2020</b> , 261, 119967	6.7	6
50	Mechanics designs-performance relationships in epidermal triboelectric nanogenerators. <i>Nano Energy</i> , <b>2020</b> , 76, 105017	17.1	18
49	Antibody-coated microstructures for selective isolation of immune cells in blood. <i>Lab on A Chip</i> , <b>2020</b> , 20, 1072-1082	7.2	5
48	Microfluidic Viscometer Using a Suspending Micromembrane for Measurement of Biosamples. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	6
47	Nondestructive quantification of single-cell nuclear and cytoplasmic mechanical properties based on large whole-cell deformation. <i>Lab on A Chip</i> , <b>2020</b> , 20, 4175-4185	7.2	4
46	Early Committed Clockwise Cell Chirality Upregulates Adipogenic Differentiation of Mesenchymal Stem Cells. <i>Advanced Biology</i> , <b>2020</b> , 4, e2000161	3.5	1
45	A two-chip acoustofluidic particle manipulation platform with a detachable and reusable surface acoustic wave device. <i>Analyst, The</i> , <b>2020</b> , 145, 7752-7758	5	7
44	Elasticity-Modulated Microbeads for Classification of Floating Normal and Cancer Cells Using Confining Microchannels. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 3889-3898	5.5	6
43	Biofluidic Random Laser Cytometer for Biophysical Phenotyping of Cell Suspensions. <i>ACS Sensors</i> , <b>2019</b> , 4, 832-840	9.2	11

42	Biophysical Phenotyping and Modulation of ALDH+ Inflammatory Breast Cancer Stem-Like Cells. <i>Small</i> , <b>2019</b> , 15, e1802891	11	12
41	Characterization of Cytoskeletal Pore Size Using Quantum Dots. <i>IEEE Nanotechnology Magazine</i> , <b>2018</b> , 17, 398-401	2.6	
40	Hacking macrophage-associated immunosuppression for regulating glioblastoma angiogenesis. <i>Biomaterials</i> , <b>2018</b> , 161, 164-178	15.6	90
39	A fluorescent microbead-based microfluidic immunoassay chip for immune cell cytokine secretion quantification. <i>Lab on A Chip</i> , <b>2018</b> , 18, 522-531	7.2	30
38	Revealing elasticity of largely deformed cells flowing along confining microchannels.. <i>RSC Advances</i> , <b>2018</b> , 8, 1030-1038	3.7	18
37	Protein-Substrate Adhesion in Microcontact Printing Regulates Cell Behavior. <i>Langmuir</i> , <b>2018</b> , 34, 1750-1759	17.59	16
36	A simplified sheathless cell separation approach using combined gravitational-sedimentation-based prefocusing and dielectrophoretic separation. <i>Lab on A Chip</i> , <b>2018</b> , 18, 1521-1532	7.2	29
35	Microfluidic implementation of functional cytometric microbeads for improved multiplexed cytokine quantification. <i>Biomicrofluidics</i> , <b>2018</b> , 12, 044112	3.2	2
34	Preferred cell alignment along concave microgrooves. <i>RSC Advances</i> , <b>2017</b> , 7, 6788-6794	3.7	12
33	A microfluidic device for isolation and characterization of transendothelial migrating cancer cells. <i>Biomicrofluidics</i> , <b>2017</b> , 11, 014105	3.2	25
32	Effect of triethanolamine on cement hydration toward initial setting time. <i>Construction and Building Materials</i> , <b>2017</b> , 141, 94-103	6.7	62
31	Chemical Technologies for Modern Concrete Production. <i>Procedia Engineering</i> , <b>2017</b> , 172, 1270-1277		11
30	Characterization of viscoelastic properties of normal and cancerous human breast cells using a confining microchannel. <i>Microfluidics and Nanofluidics</i> , <b>2017</b> , 21, 1	2.8	13
29	Microfluidic biosensing of viscoelastic properties of normal and cancerous human breast cells <b>2017</b> ,		1
28	Molecular dynamics simulations on adhesion of epoxy-silica interface in salt environment. <i>Composites Part B: Engineering</i> , <b>2017</b> , 131, 165-172	10	55
27	Investigation of Drug Cocktail Effects on Cancer Cell-Spheroids Using a Microfluidic Drug-Screening Assay. <i>Micromachines</i> , <b>2017</b> , 8, 167	3.3	12
26	Influence of micro-scale substrate curvature on subcellular behaviors of vascular cells <b>2016</b> ,		2
25	Multiparametric Biomechanical and Biochemical Phenotypic Profiling of Single Cancer Cells Using an Elasticity Microcytometer. <i>Small</i> , <b>2016</b> , 12, 2300-11	11	31

24	Deterministic sequential isolation of floating cancer cells under continuous flow. <i>Lab on A Chip</i> , <b>2016</b> , 16, 2813-9	7.2	17
23	High-throughput dental biofilm growth analysis for multiparametric microenvironmental biochemical conditions using microfluidics. <i>Lab on A Chip</i> , <b>2016</b> , 16, 1652-62	7.2	20
22	Effects of 4-methylbenzylidene camphor (4-MBC) on neuronal and muscular development in zebrafish ( <i>Danio rerio</i> ) embryos. <i>Environmental Science and Pollution Research</i> , <b>2016</b> , 23, 8275-85	5.1	31
21	Nanowire Magnetoscope Reveals a Cellular Torque with Left-Right Bias. <i>ACS Nano</i> , <b>2016</b> , 10, 7409-17	16.7	22
20	Substrate Stiffness Regulates the Development of Left-Right Asymmetry in Cell Orientation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 17976-86	9.5	11
19	Piezoelectricity of Portland cement hydrates cured under the influence of electric field <b>2016</b> ,		4
18	Microengineered Conductive Elastomeric Electrodes for Long-Term Electrophysiological Measurements with Consistent Impedance under Stretch. <i>Sensors</i> , <b>2015</b> , 15, 26906-20	3.8	15
17	Mixing in an enclosed microfluidic chamber through moving boundary motions. <i>Microfluidics and Nanofluidics</i> , <b>2015</b> , 19, 711-720	2.8	8
16	Microfluidic long-term differential oxygenation for bacterial growth characteristics analyses. <i>RSC Advances</i> , <b>2014</b> , 4, 16662-16673	3.7	8
15	Automated long-term monitoring of parallel microfluidic operations applying a machine vision-assisted positioning method. <i>Scientific World Journal, The</i> , <b>2014</b> , 2014, 608184	2.2	3
14	Dynamics of Microvalve Operations in Integrated Microfluidics. <i>Micromachines</i> , <b>2014</b> , 5, 50-65	3.3	27
13	Mathematical analysis of oxygen transfer through polydimethylsiloxane membrane between double layers of cell culture channel and gas chamber in microfluidic oxygenator. <i>Microfluidics and Nanofluidics</i> , <b>2013</b> , 15, 285-296	2.8	35
12	Nanoroughened surfaces for efficient capture of circulating tumor cells without using capture antibodies. <i>ACS Nano</i> , <b>2013</b> , 7, 566-75	16.7	194
11	Surface-micromachined microfiltration membranes for efficient isolation and functional immunophenotyping of subpopulations of immune cells. <i>Advanced Healthcare Materials</i> , <b>2013</b> , 2, 965-975	10.1	38
10	Atomistic Prediction of Nanomaterials: Introduction to Molecular Dynamics Simulation and a Case Study of Graphene Wettability.. <i>IEEE Nanotechnology Magazine</i> , <b>2012</b> , 6, 8-13	1.7	3
9	Photolithographic surface micromachining of polydimethylsiloxane (PDMS). <i>Lab on A Chip</i> , <b>2012</b> , 12, 391-5	7.2	107
8	Elastomeric microposts integrated into microfluidics for flow-mediated endothelial mechanotransduction analysis. <i>Lab on A Chip</i> , <b>2012</b> , 12, 1865-73	7.2	70
7	Live-cell subcellular measurement of cell stiffness using a microengineered stretchable micropost array membrane. <i>Integrative Biology (United Kingdom)</i> , <b>2012</b> , 4, 1289-98	3.7	46

6	A silicone-based stretchable micropost array membrane for monitoring live-cell subcellular cytoskeletal response. <i>Lab on A Chip</i> , <b>2012</b> , 12, 731-40	7.2	80
5	Nanotopography influences adhesion, spreading, and self-renewal of human embryonic stem cells. <i>ACS Nano</i> , <b>2012</b> , 6, 4094-103	16.7	287
4	Mechanics regulates fate decisions of human embryonic stem cells. <i>PLoS ONE</i> , <b>2012</b> , 7, e37178	3.7	92
3	A Digitally Controllable Polymer-Based Microfluidic Mixing Module Array. <i>Micromachines</i> , <b>2012</b> , 3, 279-294	3.5	11
2	Culturing aerobic and anaerobic bacteria and mammalian cells with a microfluidic differential oxygenator. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 5918-24	7.8	94
1	Building a better cell trap: Applying Lagrangian modeling to the design of microfluidic devices for cell biology. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 044701	2.5	39