

# Mehmet Toner

## List of Publications by Year in descending order

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207  
papers

34,730  
citations

7096

78  
h-index

3487

182  
g-index

210  
all docs

210  
docs citations

210  
times ranked

30479  
citing authors

#	ARTICLE	IF	CITATIONS
1	Isolation of rare circulating tumour cells in cancer patients by microchip technology. <i>Nature</i> , 2007, 450, 1235-1239.	27.8	3,272
2	Circulating Breast Tumor Cells Exhibit Dynamic Changes in Epithelial and Mesenchymal Composition. <i>Science</i> , 2013, 339, 580-584.	12.6	2,137
3	Circulating Tumor Cell Clusters Are Oligoclonal Precursors of Breast Cancer Metastasis. <i>Cell</i> , 2014, 158, 1110-1122.	28.9	1,960
4	Detection of Mutations in <i>EGFR</i> in Circulating Lung-Cancer Cells. <i>New England Journal of Medicine</i> , 2008, 359, 366-377.	27.0	1,602
5	Isolation of circulating tumor cells using a microvortex-generating herringbone-chip. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 18392-18397.	7.1	1,454
6	Continuous inertial focusing, ordering, and separation of particles in microchannels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 18892-18897.	7.1	1,408
7	Circulating tumor cells: approaches to isolation and characterization. <i>Journal of Cell Biology</i> , 2011, 192, 373-382.	5.2	971
8	Inertial Focusing for Tumor Antigen-Dependent and -Independent Sorting of Rare Circulating Tumor Cells. <i>Science Translational Medicine</i> , 2013, 5, 179ra47.	12.4	910
9	Ex vivo culture of circulating breast tumor cells for individualized testing of drug susceptibility. <i>Science</i> , 2014, 345, 216-220.	12.6	808
10	Microfluidic, marker-free isolation of circulating tumor cells from blood samples. <i>Nature Protocols</i> , 2014, 9, 694-710.	12.0	634
11	A microfluidic device for label-free, physical capture of circulating tumor cell clusters. <i>Nature Methods</i> , 2015, 12, 685-691.	19.0	628
12	RNA-Seq of single prostate CTCs implicates noncanonical Wnt signaling in antiandrogen resistance. <i>Science</i> , 2015, 349, 1351-1356.	12.6	614
13	Blood-on-a-Chip. <i>Annual Review of Biomedical Engineering</i> , 2005, 7, 77-103.	12.3	579
14	Microengineering of Cellular Interactions. <i>Annual Review of Biomedical Engineering</i> , 2000, 2, 227-256.	12.3	565
15	Controlling cell interactions by micropatterning in co-cultures: Hepatocytes and 3T3 fibroblasts. <i>Journal of Biomedical Materials Research Part B</i> , 1997, 34, 189-199.	3.1	496
16	Intracellular trehalose improves the survival of cryopreserved mammalian cells. <i>Nature Biotechnology</i> , 2000, 18, 163-167.	17.5	475
17	Isolation and Characterization of Circulating Tumor Cells from Patients with Localized and Metastatic Prostate Cancer. <i>Science Translational Medicine</i> , 2010, 2, 25ra23.	12.4	474
18	Single-Cell RNA Sequencing Identifies Extracellular Matrix Gene Expression by Pancreatic Circulating Tumor Cells. <i>Cell Reports</i> , 2014, 8, 1905-1918.	6.4	449

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19	Controlled encapsulation of single-cells into monodisperse picolitre drops. <i>Lab on A Chip</i> , 2008, 8, 1262.	6.0	444
20	Particle Segregation and Dynamics in Confined Flows. <i>Physical Review Letters</i> , 2009, 102, 094503.	7.8	431
21	Inertial Focusing in Microfluidics. <i>Annual Review of Biomedical Engineering</i> , 2014, 16, 371-396.	12.3	419
22	Effect of extracellular matrix topology on cell structure, function, and physiological responsiveness: hepatocytes cultured in a sandwich configuration. <i>FASEB Journal</i> , 1996, 10, 1471-1484.	0.5	387
23	The promise of organ and tissue preservation to transform medicine. <i>Nature Biotechnology</i> , 2017, 35, 530-542.	17.5	371
24	Clusters of circulating tumor cells traverse capillary-sized vessels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 4947-4952.	7.1	364
25	LEA Proteins During Water Stress: Not Just for Plants Anymore. <i>Annual Review of Physiology</i> , 2011, 73, 115-134.	13.1	359
26	Malaria-Infected Erythrocyte-Derived Microvesicles Mediate Cellular Communication within the Parasite Population and with the Host Immune System. <i>Cell Host and Microbe</i> , 2013, 13, 521-534.	11.0	356
27	Equilibrium Separation and Filtration of Particles Using Differential Inertial Focusing. <i>Analytical Chemistry</i> , 2008, 80, 2204-2211.	6.5	354
28	Advancing the speed, sensitivity and accuracy of biomolecular detection using multi-length-scale engineering. <i>Nature Nanotechnology</i> , 2014, 9, 969-980.	31.5	349
29	HER2 expression identifies dynamic functional states within circulating breast cancer cells. <i>Nature</i> , 2016, 537, 102-106.	27.8	335
30	Detection of T790M, the Acquired Resistance <i>EGFR</i> Mutation, by Tumor Biopsy versus Noninvasive Blood-Based Analyses. <i>Clinical Cancer Research</i> , 2016, 22, 1103-1110.	7.0	326
31	A Microfabrication-Based Dynamic Array Cytometer. <i>Analytical Chemistry</i> , 2002, 74, 3984-3990.	6.5	314
32	A microfluidic device for practical label-free CD4+ T cell counting of HIV-infected subjects. <i>Lab on A Chip</i> , 2007, 7, 170-178.	6.0	312
33	Effects of oxygenation and flow on the viability and function of rat hepatocytes cocultured in a microchannel flat-plate bioreactor. <i>Biotechnology and Bioengineering</i> , 2001, 73, 379-389.	3.3	304
34	Androgen Receptor Signaling in Circulating Tumor Cells as a Marker of Hormonally Responsive Prostate Cancer. <i>Cancer Discovery</i> , 2012, 2, 995-1003.	9.4	257
35	Cellular Micropatterns on Biocompatible Materials. <i>Biotechnology Progress</i> , 1998, 14, 388-392.	2.6	251
36	Engineered nanointerfaces for microfluidic isolation and molecular profiling of tumor-specific extracellular vesicles. <i>Nature Communications</i> , 2018, 9, 175.	12.8	248

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37	Surface Engineering with Poly(ethylene glycol) Photolithography to Create High-Density Cell Arrays on Glass. <i>Langmuir</i> , 2003, 19, 9855-9862.	3.5	244
38	En Route to Metastasis: Circulating Tumor Cell Clusters and Epithelial-to-Mesenchymal Transition. <i>Trends in Cancer</i> , 2015, 1, 44-52.	7.4	218
39	Deregulation of ribosomal protein expression and translation promotes breast cancer metastasis. <i>Science</i> , 2020, 367, 1468-1473.	12.6	214
40	Brain Tumor Cells in Circulation Are Enriched for Mesenchymal Gene Expression. <i>Cancer Discovery</i> , 2014, 4, 1299-1309.	9.4	207
41	Literature Review: Supplemented Phase Diagram of the Trehaloseâ€“Water Binary Mixture. <i>Cryobiology</i> , 2000, 40, 277-282.	0.7	203
42	Particle Focusing in Staged Inertial Microfluidic Devices for Flow Cytometry. <i>Analytical Chemistry</i> , 2010, 82, 3862-3867.	6.5	202
43	A high-throughput microfluidic real-time gene expression living cell array. <i>Lab on A Chip</i> , 2007, 7, 77-85.	6.0	200
44	Beneficial effect of microinjected trehalose on the cryosurvival of human oocytes. <i>Fertility and Sterility</i> , 2002, 77, 152-158.	1.0	196
45	Inertial focusing dynamics in spiral microchannels. <i>Physics of Fluids</i> , 2012, 24, 32001.	4.0	183
46	Inertio-elastic focusing of bioparticles in microchannels at high throughput. <i>Nature Communications</i> , 2014, 5, 4120.	12.8	173
47	Collective and individual migration following the epithelialâ€“mesenchymal transition. <i>Nature Materials</i> , 2014, 13, 1063-1071.	27.5	169
48	Clinical microfluidics for neutrophil genomics and proteomics. <i>Nature Medicine</i> , 2010, 16, 1042-1047.	30.7	168
49	Particle Focusing in Curved Microfluidic Channels. <i>Scientific Reports</i> , 2013, 3, .	3.3	161
50	Development of a microfabricated cytometry platform for characterization and sorting of individual leukocytes. <i>Lab on A Chip</i> , 2005, 5, 30.	6.0	158
51	Microfluidic Isolation of Circulating Tumor Cell Clusters by Size and Asymmetry. <i>Scientific Reports</i> , 2017, 7, 2433.	3.3	158
52	Genomic and Functional Fidelity of Small Cell Lung Cancer Patient-Derived Xenografts. <i>Cancer Discovery</i> , 2018, 8, 600-615.	9.4	157
53	Supercooling enables long-term transplantation survival following 4 days of liver preservation. <i>Nature Medicine</i> , 2014, 20, 790-793.	30.7	153
54	Differential inertial focusing of particles in curved low-aspect-ratio microchannels. <i>New Journal of Physics</i> , 2009, 11, 075025.	2.9	152

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55	Tunable Nanostructured Coating for the Capture and Selective Release of Viable Circulating Tumor Cells. <i>Advanced Materials</i> , 2015, 27, 1593-1599.	21.0	144
56	Effect of Flow and Surface Conditions on Human Lymphocyte Isolation Using Microfluidic Chambers. <i>Langmuir</i> , 2004, 20, 11649-11655.	3.5	140
57	Cell detection and counting through cell lysate impedance spectroscopy in microfluidic devices. <i>Lab on A Chip</i> , 2007, 7, 746-755.	6.0	136
58	Monolithic Chip for High-throughput Blood Cell Depletion to Sort Rare Circulating Tumor Cells. <i>Scientific Reports</i> , 2017, 7, 10936.	3.3	134
59	An RNA-based signature enables high specificity detection of circulating tumor cells in hepatocellular carcinoma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 1123-1128.	7.1	133
60	Molecular signatures of circulating melanoma cells for monitoring early response to immune checkpoint therapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2467-2472.	7.1	131
61	Microvortex for focusing, guiding and sorting of particles. <i>Lab on A Chip</i> , 2008, 8, 2128.	6.0	117
62	The Lipogenic Regulator SREBP2 Induces Transferrin in Circulating Melanoma Cells and Suppresses Ferroptosis. <i>Cancer Discovery</i> , 2021, 11, 678-695.	9.4	114
63	Continuous Flow Microfluidic Device for Rapid Erythrocyte Lysis. <i>Analytical Chemistry</i> , 2004, 76, 6247-6253.	6.5	112
64	An RNA-Based Digital Circulating Tumor Cell Signature Is Predictive of Drug Response and Early Dissemination in Prostate Cancer. <i>Cancer Discovery</i> , 2018, 8, 288-303.	9.4	107
65	Designing a Hepatocellular Microenvironment with Protein Microarraying and Poly(ethylene glycol) Photolithography. <i>Langmuir</i> , 2004, 20, 2999-3005.	3.5	104
66	Nanotechnology: emerging tools for biology and medicine. <i>Genes and Development</i> , 2013, 27, 2397-2408.	5.9	104
67	Deformability of Tumor Cells versus Blood Cells. <i>Scientific Reports</i> , 2015, 5, 18542.	3.3	104
68	Enhancing the performance of a point-of-care CD4+ T-cell counting microchip through monocyte depletion for HIV/AIDS diagnostics. <i>Lab on A Chip</i> , 2009, 9, 1357.	6.0	102
69	Microfluidic isolation of platelet-covered circulating tumor cells. <i>Lab on A Chip</i> , 2017, 17, 3498-3503.	6.0	102
70	Ultrahigh-throughput magnetic sorting of large blood volumes for epitope-agnostic isolation of circulating tumor cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 16839-16847.	7.1	101
71	Single-Cell Chemical Lysis in Picoliter-Scale Closed Volumes Using a Microfabricated Device. <i>Analytical Chemistry</i> , 2004, 76, 6137-6143.	6.5	100
72	A Device to Measure the Oxygen Uptake Rate of Attached Cells: Importance in Bioartificial Organ Design. <i>Cell Transplantation</i> , 1994, 3, 515-527.	2.5	96

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73	Expression of $\beta$ -globin by cancer cells promotes cell survival during blood-borne dissemination. Nature Communications, 2017, 8, 14344.	12.8	96
74	Stress-Induced Changes in Bone Marrow Stromal Cell Populations Revealed through Single-Cell Protein Expression Mapping. Cell Stem Cell, 2019, 25, 570-583.e7.	11.1	96
75	Late embryogenesis abundant proteins protect human hepatoma cells during acute desiccation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20859-20864.	7.1	92
76	Isolation and Molecular Characterization of Circulating Melanoma Cells. Cell Reports, 2014, 7, 645-653.	6.4	91
77	Oxygen is a factor determining in vitro tissue assembly: Effects on attachment and spreading of hepatocytes. Biotechnology and Bioengineering, 1994, 43, 654-660.	3.3	90
78	A Digital RNA Signature of Circulating Tumor Cells Predicting Early Therapeutic Response in Localized and Metastatic Breast Cancer. Cancer Discovery, 2018, 8, 1286-1299.	9.4	85
79	A stable long-term hepatocyte culture system for studies of physiologic processes: cytokine stimulation of the acute phase response in rat and human hepatocytes. Biotechnology Progress, 1992, 8, 219-225.	2.6	82
80	A Microchip Approach for Practical Label-Free CD4+ T-Cell Counting of HIV-Infected Subjects in Resource-Poor Settings. Journal of Acquired Immune Deficiency Syndromes (1999), 2007, 45, 257-261.	2.1	81
81	Microfabrication of an analog of the basal lamina: biocompatible membranes with complex topographies. FASEB Journal, 2000, 14, 593-602.	0.5	79
82	Enrichment using antibody-coated microfluidic chambers in shear flow: Model mixtures of human lymphocytes. Biotechnology and Bioengineering, 2005, 91, 816-826.	3.3	78
83	Cell handling using microstructured membranes. Lab on A Chip, 2006, 6, 345.	6.0	78
84	Continuous Flow Microfluidic Bioparticle Concentrator. Scientific Reports, 2015, 5, 11300.	3.3	76
85	Biodegradable nano-films for capture and non-invasive release of circulating tumor cells. Biomaterials, 2015, 65, 93-102.	11.4	70
86	Analysis of Oxygen Transport to Hepatocytes in a Flat-Plate Microchannel Bioreactor. Annals of Biomedical Engineering, 2001, 29, 947-955.	2.5	69
87	AR Expression in Breast Cancer CTCs Associates with Bone Metastases. Molecular Cancer Research, 2018, 16, 720-727.	3.4	68
88	Successful Cryopreservation of Mouse Oocytes by Using Low Concentrations of Trehalose and Dimethylsulfoxide. Biology of Reproduction, 2009, 80, 70-78.	2.7	66
89	Trehalose uptake through P2X7 purinergic channels provides dehydration protection. Cryobiology, 2006, 52, 114-127.	0.7	65
90	Transport phenomena during freezing of isolated hepatocytes. AIChE Journal, 1992, 38, 1512-1522.	3.6	63

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91	Cell-cell interactions are essential for maintenance of hepatocyte function in collagen gel but not on matrigel. <i>Biotechnology and Bioengineering</i> , 1997, 56, 706-711.	3.3	61
92	Long-Term Functional Recovery of Hepatocytes after Cryopreservation in a Three-Dimensional Culture Configuration. <i>Cell Transplantation</i> , 1992, 1, 281-292.	2.5	59
93	Oscillatory inertial focusing in infinite microchannels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 7682-7687.	7.1	58
94	Bioengineered Implantable Scaffolds as a Tool to Study Stromal-Derived Factors in Metastatic Cancer Models. <i>Cancer Research</i> , 2014, 74, 7229-7238.	0.9	56
95	HIF1A signaling selectively supports proliferation of breast cancer in the brain. <i>Nature Communications</i> , 2020, 11, 6311.	12.8	55
96	Exploring Dynamics and Structure of Biomolecules, Cryoprotectants, and Water Using Molecular Dynamics Simulations: Implications for Biostabilization and Biopreservation. <i>Annual Review of Biomedical Engineering</i> , 2019, 21, 1-31.	12.3	54
97	Whole blood stabilization for the microfluidic isolation and molecular characterization of circulating tumor cells. <i>Nature Communications</i> , 2017, 8, 1733.	12.8	53
98	Antibody-targeted Photolysis of Bacteria In Vivo. <i>Nature Biotechnology</i> , 1994, 12, 703-706.	17.5	52
99	Stabilization of Active Recombinant Retroviruses in an Amorphous Dry State with Trehalose. <i>Biotechnology Progress</i> , 1998, 14, 615-620.	2.6	51
100	Engineered Trehalose Permeable to Mammalian Cells. <i>PLoS ONE</i> , 2015, 10, e0130323.	2.5	51
101	Molecular Dynamics at the Interface between Ice and Poly(vinyl alcohol) and Ice Recrystallization Inhibition. <i>Langmuir</i> , 2018, 34, 5116-5123.	3.5	50
102	Microfluidic concentration and separation of circulating tumor cell clusters from large blood volumes. <i>Lab on A Chip</i> , 2020, 20, 558-567.	6.0	50
103	Resolving cancerâ€‘stroma interfacial signalling and interventions with micropatterned tumourâ€‘stromal assays. <i>Nature Communications</i> , 2014, 5, 5662.	12.8	45
104	A fulminant hepatic failure model in the rat: involvement of interleukin-1beta and tumor necrosis factor-alpha. <i>Digestive Diseases and Sciences</i> , 2001, 46, 1700-1708.	2.3	44
105	Isothermal Desiccation and Vitrification Kinetics of Trehaloseâˆ’Dextran Solutions. <i>Langmuir</i> , 2004, 20, 5521-5529.	3.5	43
106	Visualization of microscale particle focusing in diluted and whole blood using particle trajectory analysis. <i>Lab on A Chip</i> , 2012, 12, 2199.	6.0	42
107	A computational study of circulating large tumor cells traversing microvessels. <i>Computers in Biology and Medicine</i> , 2015, 63, 187-195.	7.0	40
108	Single-Cell Analysis of Circulating Tumor Cells as a Window into Tumor Heterogeneity. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 2016, 81, 269-274.	1.1	40

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109	Panning of multiple subsets of leukocytes on antibody-decorated poly(ethylene) glycol-coated glass slides. <i>Journal of Immunological Methods</i> , 2006, 313, 96-109.	1.4	39
110	Optimization of hepatocyte attachment to microcarriers: Importance of oxygen. <i>Biotechnology and Bioengineering</i> , 1993, 42, 579-588.	3.3	38
111	The Role of Physical Stabilization in Whole Blood Preservation. <i>Scientific Reports</i> , 2016, 6, 21023.	3.3	38
112	In Vitro Characterization of Porcine Hepatocyte Function. <i>Cell Transplantation</i> , 2000, 9, 1-10.	2.5	36
113	In Vitro and In Vivo Evaluation of Albumin Synthesis Rate of Porcine Hepatocytes in a Flat-Plate Bioreactor. <i>Artificial Organs</i> , 2001, 25, 571-578.	1.9	34
114	COX-2 mediates tumor-stromal prolactin signaling to initiate tumorigenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 5223-5232.	7.1	34
115	A Spin-Drying Technique for Lyopreservation of Mammalian Cells. <i>Annals of Biomedical Engineering</i> , 2011, 39, 1582-1591.	2.5	32
116	Antibody-Functionalized Fluid-Permeable Surfaces for Rolling Cell Capture at High Flow Rates. <i>Biophysical Journal</i> , 2012, 102, 721-730.	0.5	32
117	Flexible Octopus-Shaped Hydrogel Particles for Specific Cell Capture. <i>Small</i> , 2016, 12, 2001-2008.	10.0	32
118	Non-equilibrium Inertial Separation Array for High-throughput, Large-volume Blood Fractionation. <i>Scientific Reports</i> , 2017, 7, 9915.	3.3	32
119	Clusters of circulating tumor cells: A biophysical and technological perspective. <i>Current Opinion in Biomedical Engineering</i> , 2017, 3, 13-19.	3.4	32
120	Invention, innovation, entrepreneurship in academic medical centers. <i>Surgery</i> , 2008, 143, 168-171.	1.9	30
121	High throughput single cell bioinformatics. <i>Biotechnology Progress</i> , 2009, 25, 1772-1779.	2.6	30
122	Integration of Bulk Nanoporous Elements in Microfluidic Devices With Application to Biomedical Diagnostics. <i>Journal of Microelectromechanical Systems</i> , 2011, 20, 1428-1438.	2.5	30
123	Cryopreservation of human spermatozoa with minimal non-permeable cryoprotectant. <i>Cryobiology</i> , 2016, 73, 162-167.	0.7	29
124	Detection and Analysis of Circulating Epithelial Cells in Liquid Biopsies From Patients With Liver Disease. <i>Gastroenterology</i> , 2018, 155, 2016-2018.e11.	1.3	29
125	Rapid Isolation and Concentration of Pathogenic Fungi Using Inertial Focusing on a Chip-Based Platform. <i>Frontiers in Cellular and Infection Microbiology</i> , 2019, 9, 27.	3.9	29
126	Immunofunctional photodegradable poly(ethylene glycol) hydrogel surfaces for the capture and release of rare cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 174, 483-492.	5.0	28



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127	Bacterial Ice Nucleation in Monodisperse D <sub>2</sub> O and H <sub>2</sub> O-in-Oil Emulsions. <i>Langmuir</i> , 2016, 32, 9229-9236.	3.5	27
128	Controlled ice nucleation using freeze-dried <i>Pseudomonas syringae</i> encapsulated in alginate beads. <i>Cryobiology</i> , 2017, 75, 1-6.	0.7	27
129	Microfluidic Leukocyte Isolation for Gene Expression Analysis in Critically Ill Hospitalized Patients. <i>Clinical Chemistry</i> , 2008, 54, 891-900.	3.2	26
130	Thermally Induced Introduction of Trehalose into Primary Rat Hepatocytes. <i>Cell Preservation Technology</i> , 2006, 4, 178-187.	0.6	25
131	Blood-based monitoring identifies acquired and targetable driver HER2 mutations in endocrine-resistant metastatic breast cancer. <i>Npj Precision Oncology</i> , 2019, 3, 18.	5.4	25
132	Liquid biopsy: a perspective for probing blood for cancer. <i>Lab on A Chip</i> , 2019, 19, 548-549.	6.0	25
133	Bulk Droplet Vitrification: An Approach to Improve Large-Scale Hepatocyte Cryopreservation Outcome. <i>Langmuir</i> , 2019, 35, 7354-7363.	3.5	25
134	Dynamic particle ordering in oscillatory inertial microfluidics. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	2.2	24
135	Desiccation kinetics of biopreservation solutions in microchannels. <i>Journal of Applied Physics</i> , 2006, 99, 064703.	2.5	22
136	Preservative solution that stabilizes erythrocyte morphology and leukocyte viability under ambient conditions. <i>Scientific Reports</i> , 2017, 7, 5658.	3.3	21
137	Improved Detection of Circulating Epithelial Cells in Patients with Intraductal Papillary Mucinous Neoplasms. <i>Oncologist</i> , 2018, 23, 121-127.	3.7	21
138	Live Pups from Evaporatively Dried Mouse Sperm Stored at Ambient Temperature for up to 2 Years. <i>PLoS ONE</i> , 2014, 9, e99809.	2.5	20
139	Isolation of circulating tumor cells. <i>IScience</i> , 2022, 25, 104696.	4.1	20
140	Prevention of Hemolysis in Rapidly Frozen Erythrocytes by Using a Laser Pulse. <i>Annals of the New York Academy of Sciences</i> , 1998, 858, 245-252.	3.8	19
141	Cryopreservation of infectious <i>Cryptosporidium parvum</i> oocysts. <i>Nature Communications</i> , 2018, 9, 2883.	12.8	19
142	Dynamic Profiling of Antitumor Activity of CAR T Cells Using Micropatterned Tumor Arrays. <i>Advanced Science</i> , 2019, 6, 1901829.	11.2	19
143	A Raman Microspectroscopy Study of Water and Trehalose in Spin-Dried Cells. <i>Biophysical Journal</i> , 2014, 107, 2253-2262.	0.5	18
144	Effect of Ice Nucleation and Cryoprotectants during High Subzero-Preservation in Endothelialized Microchannels. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 3006-3015.	5.2	18

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145	Partial freezing of rat livers extends preservation time by 5-fold. <i>Nature Communications</i> , 2022, 13, .	12.8	18
146	Further optimization of mouse spermatozoa evaporative drying techniques. <i>Cryobiology</i> , 2009, 59, 113-115.	0.7	17
147	Deformability-based cell selection with downstream immunofluorescence analysis. <i>Integrative Biology (United Kingdom)</i> , 2016, 8, 654-664.	1.3	17
148	Megakaryocytes contain extranuclear histones and may be a source of platelet-associated histones during sepsis. <i>Scientific Reports</i> , 2020, 10, 4621.	3.3	17
149	Layer-by-layer functionalized nanotube arrays: A versatile microfluidic platform for biodetection. <i>Microsystems and Nanoengineering</i> , 2015, 1, .	7.0	16
150	"Universal" vitrification of cells by ultra-fast cooling. <i>Technology</i> , 2015, 03, 64-71.	1.4	16
151	NR4A1 regulates expression of immediate early genes, suppressing replication stress in cancer. <i>Molecular Cell</i> , 2021, 81, 4041-4058.e15.	9.7	16
152	Analysis of Desiccation and Vitrification Characteristics of Carbohydrate Films by Shear-Wave Resonators. <i>Langmuir</i> , 2005, 21, 2847-2854.	3.5	15
153	Microflow and Crack Formation Patterns in Drying Sessile Droplets of Liposomes Suspended in Trehalose Solutions. <i>Langmuir</i> , 2008, 24, 7688-7697.	3.5	15
154	Genome-wide transcriptome analysis of 150 cell samples. <i>Integrative Biology (United Kingdom)</i> , 2009, 1, 99-107.	1.3	15
155	Storage and Translational Issues in Reparative Medicine. <i>Annals of the New York Academy of Sciences</i> , 2002, 961, 258-262.	3.8	14
156	In-flow measurement of cell-cell adhesion using oscillatory inertial microfluidics. <i>Lab on A Chip</i> , 2020, 20, 1612-1620.	6.0	13
157	Interaction between heat shock and interleukin 6 stimulation in the acute-phase response of human hepatoma (HepG2) cells. <i>Hepatology</i> , 1998, 28, 994-1004.	7.3	12
158	Cryopreservation of Spin-Dried Mammalian Cells. <i>PLoS ONE</i> , 2011, 6, e24916.	2.5	12
159	Identification of Somatic Acquired <i>BRCA1/2</i> Mutations by cfDNA Analysis in Patients with Metastatic Breast Cancer. <i>Clinical Cancer Research</i> , 2020, 26, 4852-4862.	7.0	12
160	On a Chip. <i>IEEE Pulse</i> , 2011, 2, 19-27.	0.3	11
161	Integration of Architectural and Cytologic Driven Image Algorithms for Prostate Adenocarcinoma Identification. <i>Analytical Cellular Pathology</i> , 2012, 35, 251-265.	1.4	11
162	Discontinuous Nanoporous Membranes Reduce Non-specific Fouling for Immunoaffinity Cell Capture. <i>Small</i> , 2013, 9, 4207-4214.	10.0	11

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163	Role of synthetic antifreeze agents in catalyzing ice nucleation. <i>Cryobiology</i> , 2018, 84, 91-94.	0.7	11
164	Cell-cell interactions are essential for maintenance of hepatocyte function in collagen gel but not on matrigel. <i>Biotechnology and Bioengineering</i> , 1997, 56, 706-711.	3.3	9
165	Ultra-fast vitrification of patient-derived circulating tumor cell lines. <i>PLoS ONE</i> , 2018, 13, e0192734.	2.5	9
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