

# Sean P Palecek

## List of Publications by Year in descending order

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160  
papers

15,132  
citations

30070

54  
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19749

117  
g-index

176  
all docs

176  
docs citations

176  
times ranked

17273  
citing authors

#	ARTICLE	IF	CITATIONS
1	Robust cardiomyocyte differentiation from human pluripotent stem cells via temporal modulation of canonical Wnt signaling. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1848-57.	7.1	1,376
2	Directed cardiomyocyte differentiation from human pluripotent stem cells by modulating Wnt/ $\beta$ -catenin signaling under fully defined conditions. Nature Protocols, 2013, 8, 162-175.	12.0	1,353
3	Integrin-ligand binding properties govern cell migration speed through cell-substratum adhesiveness. Nature, 1997, 385, 537-540.	27.8	1,292
4	Functional Cardiomyocytes Derived From Human Induced Pluripotent Stem Cells. Circulation Research, 2009, 104, e30-41.	4.5	1,202
5	Derivation of blood-brain barrier endothelial cells from human pluripotent stem cells. Nature Biotechnology, 2012, 30, 783-791.	17.5	623
6	Extracellular Matrix Promotes Highly Efficient Cardiac Differentiation of Human Pluripotent Stem Cells. Circulation Research, 2012, 111, 1125-1136.	4.5	416
7	A retinoic acid-enhanced, multicellular human blood-brain barrier model derived from stem cell sources. Scientific Reports, 2014, 4, 4160.	3.3	390
8	Hypoxia-enhanced Blood-Brain Barrier Chip recapitulates human barrier function and shuttling of drugs and antibodies. Nature Communications, 2019, 10, 2621.	12.8	371
9	Regulation of Cell Migration by the Calcium-dependent Protease Calpain. Journal of Biological Chemistry, 1997, 272, 32719-32722.	3.4	338
10	Efficient Differentiation of Human Pluripotent Stem Cells to Endothelial Progenitors via Small-Molecule Activation of WNT Signaling. Stem Cell Reports, 2014, 3, 804-816.	4.8	271
11	3-D microwell culture of human embryonic stem cells. Biomaterials, 2006, 27, 6032-6042.	11.4	216
12	An isogenic blood-brain barrier model comprising brain endothelial cells, astrocytes, and neurons derived from human induced pluripotent stem cells. Journal of Neurochemistry, 2017, 140, 874-888.	3.9	201
13	The microwell control of embryoid body size in order to regulate cardiac differentiation of human embryonic stem cells. Biomaterials, 2010, 31, 1885-1893.	11.4	184
14	Modeling Psychomotor Retardation using iPSCs from MCT8-Deficient Patients Indicates a Prominent Role for the Blood-Brain Barrier. Cell Stem Cell, 2017, 20, 831-843.e5.	11.1	181
15	Directed differentiation of human pluripotent stem cells to blood-brain barrier endothelial cells. Science Advances, 2017, 3, e1701679.	10.3	177
16	EAP1, a Candida albicans Gene Involved in Binding Human Epithelial Cells. Eukaryotic Cell, 2003, 2, 1266-1273.	3.4	168
17	Scalable culture and cryopreservation of human embryonic stem cells on microcarriers. Biotechnology Progress, 2009, 25, 20-31.	2.6	157
18	Substratum-induced differentiation of human pluripotent stem cells reveals the coactivator YAP is a potent regulator of neuronal specification. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13805-13810.	7.1	153

#	ARTICLE	IF	CITATIONS
19	Retinoic Acid and Bone Morphogenetic Protein Signaling Synergize to Efficiently Direct Epithelial Differentiation of Human Embryonic Stem Cells. <i>Stem Cells</i> , 2008, 26, 372-380.	3.2	150
20	Antifungal Activity from 14-Helical $\beta$ -Peptides. <i>Journal of the American Chemical Society</i> , 2006, 128, 12630-12631.	13.7	145
21	Inhibition of human embryonic stem cell differentiation by mechanical strain. <i>Journal of Cellular Physiology</i> , 2006, 206, 126-137.	4.1	143
22	Human pluripotent stem cell-derived brain pericyte-like cells induce blood-brain barrier properties. <i>Science Advances</i> , 2019, 5, eaau7375.	10.3	135
23	Slippery Liquid-Infused Porous Surfaces that Prevent Microbial Surface Fouling and Kill Non-Adherent Pathogens in Surrounding Media: A Controlled Release Approach. <i>Advanced Functional Materials</i> , 2016, 26, 3599-3611.	14.9	132
24	Chemically defined, albumin-free human cardiomyocyte generation. <i>Nature Methods</i> , 2015, 12, 595-596.	19.0	129
25	Cryopreservation of adherent human embryonic stem cells. <i>Biotechnology and Bioengineering</i> , 2004, 88, 299-312.	3.3	124
26	Eap1p, an Adhesin That Mediates <i>Candida albicans</i> Biofilm Formation In Vitro and In Vivo. <i>Eukaryotic Cell</i> , 2007, 6, 931-939.	3.4	124
27	Differentiation and characterization of human pluripotent stem cell-derived brain microvascular endothelial cells. <i>Methods</i> , 2016, 101, 93-102.	3.8	123
28	Engineering the Stem Cell Microenvironment. <i>Biotechnology Progress</i> , 2007, 23, 18-23.	2.6	114
29	Structure-Activity Relationships among Antifungal Nylon-3 Polymers: Identification of Materials Active against Drug-Resistant Strains of <i>Candida albicans</i> . <i>Journal of the American Chemical Society</i> , 2014, 136, 4333-4342.	13.7	113
30	TGF $\beta$ /Activin/Nodal Pathway in Inhibition of Human Embryonic Stem Cell Differentiation by Mechanical Strain. <i>Biophysical Journal</i> , 2008, 94, 4123-4133.	0.5	110
31	Short Alkylated Peptoid Mimics of Antimicrobial Lipopeptides. <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 417-420.	3.2	108
32	Exploring the effects of cell seeding density on the differentiation of human pluripotent stem cells to brain microvascular endothelial cells. <i>Fluids and Barriers of the CNS</i> , 2015, 12, 13.	5.0	106
33	Modeling the blood-brain barrier using stem cell sources. <i>Fluids and Barriers of the CNS</i> , 2013, 10, 2.	5.0	105
34	Development of Macroporous Poly(ethylene glycol) Hydrogel Arrays within Microfluidic Channels. <i>Biomacromolecules</i> , 2010, 11, 3316-3324.	5.4	100
35	Intermolecular electrostatic interactions and their effect on flux and protein deposition during protein filtration. <i>Biotechnology Progress</i> , 1994, 10, 207-213.	2.6	94
36	A human three-dimensional neural-perivascular $\alpha$ -assembloid <sup>TM</sup> promotes astrocytic development and enables modeling of SARS-CoV-2 neuropathology. <i>Nature Medicine</i> , 2021, 27, 1600-1606.	30.7	94

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37	Transcriptomic comparison of human and mouse brain microvessels. <i>Scientific Reports</i> , 2020, 10, 12358.	3.3	89
38	Modeling the blood-brain barrier: Beyond the endothelial cells. <i>Current Opinion in Biomedical Engineering</i> , 2018, 5, 6-12.	3.4	88
39	Genetic Analysis Reveals That <i>FLO11</i> Upregulation and Cell Polarization Independently Regulate Invasive Growth in <i>Saccharomyces cerevisiae</i> . <i>Genetics</i> , 2000, 156, 1005-1023.	2.9	88
40	Long-term self-renewing human epicardial cells generated from pluripotent stem cells under defined xeno-free conditions. <i>Nature Biomedical Engineering</i> , 2017, 1, .	22.5	86
41	The response of human embryonic stem cell-derived endothelial cells to shear stress. <i>Biotechnology and Bioengineering</i> , 2008, 100, 830-837.	3.3	83
42	Distinct domains of the <i>Candida albicans</i> adhesin Eap1p mediate cell-cell and cell-substrate interactions. <i>Microbiology (United Kingdom)</i> , 2008, 154, 1193-1203.	1.8	82
43	Effect of Sequence and Structural Properties on 14-Helical $\beta$ -Peptide Activity against <i>Candida albicans</i> Planktonic Cells and Biofilms. <i>ACS Chemical Biology</i> , 2009, 4, 567-579.	3.4	76
44	Commentary on human pluripotent stem cell-based blood-brain barrier models. <i>Fluids and Barriers of the CNS</i> , 2020, 17, 64.	5.0	75
45	Innovation in the culture and derivation of pluripotent human stem cells. <i>Current Opinion in Biotechnology</i> , 2008, 19, 527-533.	6.6	72
46	Polyelectrolyte Multilayers Fabricated from Antifungal $\beta$ -Peptides: Design of Surfaces that Exhibit Antifungal Activity Against <i>Candida albicans</i> . <i>Biomacromolecules</i> , 2010, 11, 2321-2328.	5.4	72
47	Chemically-defined albumin-free differentiation of human pluripotent stem cells to endothelial progenitor cells. <i>Stem Cell Research</i> , 2015, 15, 122-129.	0.7	71
48	An isogenic neurovascular unit model comprised of human induced pluripotent stem cell-derived brain microvascular endothelial cells, pericytes, astrocytes, and neurons. <i>Fluids and Barriers of the CNS</i> , 2019, 16, 25.	5.0	69
49	Modulation of Wnt/ $\beta$ -catenin signaling in human embryonic stem cells using a 3-D microwell array. <i>Biomaterials</i> , 2012, 33, 2041-2049.	11.4	68
50	Organotypic microfluidic breast cancer model reveals starvation-induced spatial-temporal metabolic adaptations. <i>EBioMedicine</i> , 2018, 37, 144-157.	6.1	68
51	Temporal impact of substrate mechanics on differentiation of human embryonic stem cells to cardiomyocytes. <i>Acta Biomaterialia</i> , 2014, 10, 604-612.	8.3	62
52	Engineering the human pluripotent stem cell microenvironment to direct cell fate. <i>Biotechnology Advances</i> , 2013, 31, 1002-1019.	11.7	61
53	Hydraulic permeability of protein deposits formed during microfiltration: effect of solution pH and ionic strength. <i>Journal of Membrane Science</i> , 1994, 95, 71-81.	8.2	60
54	Concise Review: Tissue-Specific Microvascular Endothelial Cells Derived From Human Pluripotent Stem Cells. <i>Stem Cells</i> , 2014, 32, 3037-3045.	3.2	60

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55	Inhibition of Focal Adhesion Kinase Signaling by Integrin $\alpha 6 \beta 1$ Supports Human Pluripotent Stem Cell Self-Renewal. <i>Stem Cells</i> , 2016, 34, 1753-1764.	3.2	60
56	$\alpha 5$ Laminin Synthesized by Human Pluripotent Stem Cells Promotes Self-Renewal. <i>Stem Cell Reports</i> , 2015, 5, 195-206.	4.8	59
57	Insulin Inhibits Cardiac Mesoderm, Not Mesendoderm, Formation During Cardiac Differentiation of Human Pluripotent Stem Cells and Modulation of Canonical Wnt Signaling Can Rescue This Inhibition. <i>Stem Cells</i> , 2013, 31, 447-457.	3.2	57
58	Bioengineering Solutions for Manufacturing Challenges in CAR T Cells. <i>Biotechnology Journal</i> , 2018, 13, 1700095.	3.5	56
59	Effect of pH, Counter Ion, and Phosphate Concentration on the Glass Transition Temperature of Freeze-Dried Sugar-Phosphate Mixtures. <i>Pharmaceutical Research</i> , 2004, 21, 1615-1621.	3.5	53
60	Hydrophobicity and Helicity Regulate the Antifungal Activity of 14-Helical $\alpha 2$ -Peptides. <i>ACS Chemical Biology</i> , 2014, 9, 1613-1621.	3.4	53
61	Blockade to pathological remodeling of infarcted heart tissue using a porcupine antagonist. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 1649-1654.	7.1	53
62	Kinetic Model for Integrin-mediated Adhesion Release During Cell Migration. <i>Annals of Biomedical Engineering</i> , 1999, 27, 219-235.	2.5	52
63	Development of scalable culture systems for human embryonic stem cells. <i>Biochemical Engineering Journal</i> , 2010, 48, 378-384.	3.6	52
64	Human pluripotent stem cell culture density modulates YAP signaling. <i>Biotechnology Journal</i> , 2016, 11, 662-675.	3.5	51
65	Generation and Differentiation of Human Embryonic Stem Cell-Derived Keratinocyte Precursors. <i>Tissue Engineering</i> , 2006, 12, 665-679.	4.6	50
66	Protein Analytical Assays for Diagnosing, Monitoring, and Choosing Treatment for Cancer Patients. <i>Journal of Healthcare Engineering</i> , 2012, 3, 503-534.	1.9	48
67	Polymer multilayers loaded with antifungal $\alpha 2$ -peptides kill planktonic <i>Candida albicans</i> and reduce formation of fungal biofilms on the surfaces of flexible catheter tubes. <i>Journal of Controlled Release</i> , 2014, 191, 54-62.	9.9	48
68	Regionally specified human pluripotent stem cell-derived astrocytes exhibit different molecular signatures and functional properties. <i>Development (Cambridge)</i> , 2019, 146, .	2.5	48
69	Advancing human induced pluripotent stem cell-derived blood-brain barrier models for studying immune cell interactions. <i>FASEB Journal</i> , 2020, 34, 16693-16715.	0.5	47
70	Depression of <i>Saccharomyces cerevisiae</i> invasive growth on non-glucose carbon sources requires the Snf1 kinase. <i>Molecular Microbiology</i> , 2002, 45, 453-469.	2.5	46
71	Fabrication and Selective Functionalization of Amine-Reactive Polymer Multilayers on Topographically Patterned Microwell Cell Culture Arrays. <i>Biomacromolecules</i> , 2011, 12, 1998-2007.	5.4	46
72	Modeling Group B <i>Streptococcus</i> and Blood-Brain Barrier Interaction by Using Induced Pluripotent Stem Cell-Derived Brain Endothelial Cells. <i>MSphere</i> , 2017, 2, .	2.9	46

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73	Preventing <i>S. aureus</i> biofilm formation on titanium surfaces by the release of antimicrobial $\beta$ -peptides from polyelectrolyte multilayers. <i>Acta Biomaterialia</i> , 2019, 93, 50-62.	8.3	45
74	Effect of ionic environment on BSA filtration and the properties of BSA deposits. <i>Desalination</i> , 1993, 90, 147-159.	8.2	44
75	Human pluripotent stem cell-derived epicardial progenitors can differentiate to endocardial-like endothelial cells. <i>Bioengineering and Translational Medicine</i> , 2017, 2, 191-201.	7.1	43
76	Hyaluronan impairs the barrier integrity of brain microvascular endothelial cells through a CD44-dependent pathway. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2019, 39, 1759-1775.	4.3	43
77	Coculture of Endothelial Cells with Human Pluripotent Stem Cell-Derived Cardiac Progenitors Reveals a Differentiation Stage-Specific Enhancement of Cardiomyocyte Maturation. <i>Biotechnology Journal</i> , 2019, 14, e1800725.	3.5	41
78	Optically Responsive and Mechanically Tunable Colloid-Liquid Crystal Gels that Support Growth of Fibroblasts. <i>Advanced Materials</i> , 2008, 20, 4804-4809.	21.0	40
79	Directed differentiation and long-term maintenance of epicardial cells derived from human pluripotent stem cells under fully defined conditions. <i>Nature Protocols</i> , 2017, 12, 1890-1900.	12.0	40
80	Activation of $RAR^1$ , $RAR^3$ , or $RXR^1$ Increases Barrier Tightness in Human Induced Pluripotent Stem Cell-Derived Brain Endothelial Cells. <i>Biotechnology Journal</i> , 2018, 13, 1700093.	3.5	39
81	Enzyme Encapsulation in Permeabilized <i>Saccharomyces cerevisiae</i> Cells. <i>Biotechnology Progress</i> , 2008, 20, 449-456.	2.6	38
82	Human Embryonic Stem Cell-Derived Keratinocytes Exhibit an Epidermal Transcription Program and Undergo Epithelial Morphogenesis in Engineered Tissue Constructs. <i>Tissue Engineering - Part A</i> , 2010, 16, 213-223.	3.1	37
83	Local and systemic metabolic alterations in brain, plasma, and liver of rats in response to aging and ischemic stroke, as detected by nuclear magnetic resonance (NMR) spectroscopy. <i>Neurochemistry International</i> , 2019, 127, 113-124.	3.8	37
84	Intrinsic blood-brain barrier dysfunction contributes to multiple sclerosis pathogenesis. <i>Brain</i> , 2022, 145, 4334-4348.	7.6	37
85	Protein-Acrylamide Copolymer Hydrogels for Array-Based Detection of Tyrosine Kinase Activity from Cell Lysates. <i>Biomacromolecules</i> , 2005, 6, 2765-2775.	5.4	36
86	Analysis of Cancer-Targeting Alkylphosphocholine Analogue Permeability Characteristics Using a Human Induced Pluripotent Stem Cell Blood-Brain Barrier Model. <i>Molecular Pharmaceutics</i> , 2016, 13, 3341-3349.	4.6	36
87	Engineering Scalable Manufacturing of High-Quality Stem Cell-Derived Cardiomyocytes for Cardiac Tissue Repair. <i>Frontiers in Medicine</i> , 2018, 5, 110.	2.6	34
88	<i>Saccharomyces cerevisiae</i> JEN1 Promoter Activity Is Inversely Related to Concentration of Repressing Sugar. <i>Applied and Environmental Microbiology</i> , 2004, 70, 8-17.	3.1	32
89	Effect of sugar-phosphate mixtures on the stability of DPPC membranes in dehydrated systems. <i>Cryobiology</i> , 2004, 48, 81-89.	0.7	32
90	Metabolomics Identifies Metabolic Markers of Maturation in Human Pluripotent Stem Cell-Derived Cardiomyocytes. <i>Theranostics</i> , 2017, 7, 2078-2091.	10.0	31

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91	Wnt signaling mediates acquisition of bloodâ€“brain barrier properties in naÃ“ve endothelium derived from human pluripotent stem cells. <i>ELife</i> , 2021, 10, .	6.0	31
92	A Small Molecule Inhibitor of Src Family Kinases Promotes Simple Epithelial Differentiation of Human Pluripotent Stem Cells. <i>PLoS ONE</i> , 2013, 8, e60016.	2.5	30
93	Antifungal Activity of 14-Helical $\beta$ -Peptides against Planktonic Cells and Biofilms of <i>Candida</i> Species. <i>Pharmaceuticals</i> , 2015, 8, 483-503.	3.8	29
94	Intraluminal Release of an Antifungal $\beta$ -Peptide Enhances the Antifungal and Anti-Biofilm Activities of Multilayer-Coated Catheters in a Rat Model of Venous Catheter Infection. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 112-121.	5.2	29
95	Antifungal activity of a $\beta$ -peptide in synthetic urine media: Toward materials-based approaches to reducing catheter-associated urinary tract fungal infections. <i>Acta Biomaterialia</i> , 2016, 43, 240-250.	8.3	28
96	A comprehensive analysis of gene expression changes in a high replicate and open-source dataset of differentiating hiPSC-derived cardiomyocytes. <i>Scientific Reports</i> , 2021, 11, 15845.	3.3	28
97	Use of proteinâ€“acrylamide copolymer hydrogels for measuring protein concentration and activity. <i>Analytical Biochemistry</i> , 2004, 329, 180-189.	2.4	27
98	Electroporation of Human Embryonic Stem Cells: Small and Macromolecule Loading and DNA Transfection. <i>Biotechnology Progress</i> , 2006, 22, 825-834.	2.6	27
99	Identification of <i>Candida albicans</i> Genes that Induce <i>Saccharomyces cerevisiae</i> Cell Adhesion and Morphogenesis. <i>Biotechnology Progress</i> , 2005, 21, 1601-1609.	2.6	26
100	Human Embryonic Stem Cell-Derived Epithelial Cells in a Novel <i>In Vitro</i> Model of Vocal Mucosa. <i>Tissue Engineering - Part A</i> , 2013, 19, 2233-2241.	3.1	25
101	The Poly (ADP-Ribose) Polymerase Inhibitor Veliparib and Radiation Cause Significant Cell Line Dependent Metabolic Changes in Breast Cancer Cells. <i>Scientific Reports</i> , 2016, 6, 36061.	3.3	25
102	Directed Differentiation of Human Pluripotent Stem Cells to Podocytes under Defined Conditions. <i>Scientific Reports</i> , 2019, 9, 2765.	3.3	25
103	Quantification of kinase activity in cell lysates via photopatterned macroporous poly(ethylene glycol) hydrogel arrays in microfluidic channels. <i>Biomedical Microdevices</i> , 2012, 14, 247-257.	2.8	24
104	Cryopreservation of Brain Endothelial Cells Derived from Human Induced Pluripotent Stem Cells Is Enhanced by Rho-Associated Coiled Coil-Containing Kinase Inhibition. <i>Tissue Engineering - Part C: Methods</i> , 2016, 22, 1085-1094.	2.1	24
105	14-Helical $\beta$ -Peptides Elicit Toxicity against <i>C. albicans</i> by Forming Pores in the Cell Membrane and Subsequently Disrupting Intracellular Organelles. <i>Cell Chemical Biology</i> , 2019, 26, 289-299.e4.	5.2	22
106	Photocleavable peptide hydrogel arrays for MALDI-TOF analysis of kinase activity. <i>Analyst</i> , The, 2006, 131, 1097.	3.5	21
107	Efficient Generation of Functional Epithelial and Epidermal Cells from Human Pluripotent Stem Cells Under Defined Conditions. <i>Tissue Engineering - Part C: Methods</i> , 2013, 19, 949-960.	2.1	21
108	Directed Endothelial Progenitor Differentiation from Human Pluripotent Stem Cells Via Wnt Activation Under Defined Conditions. <i>Methods in Molecular Biology</i> , 2016, 1481, 183-196.	0.9	21

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109	<i>Sucrose non-fermenting related kinase</i> enzyme is essential for cardiac metabolism. <i>Biology Open</i> , 2015, 4, 48-61.	1.2	20
110	Metabolic responses induced by DNA damage and poly (ADP-ribose) polymerase (PARP) inhibition in MCF-7 cells. <i>Metabolomics</i> , 2015, 11, 1779-1791.	3.0	20
111	Platelet cryopreservation using a trehalose and phosphate formulation. <i>Biotechnology and Bioengineering</i> , 2005, 92, 79-90.	3.3	19
112	Quantifying the sensitivities of EGF receptor (EGFR) tyrosine kinase inhibitors in drug resistant non-small cell lung cancer (NSCLC) cells using hydrogel-based peptide array. <i>Biosensors and Bioelectronics</i> , 2010, 26, 424-431.	10.1	18
113	Matrix Revolutions: A Trinity of Defined Substrates for Long-Term Expansion of Human ESCs. <i>Cell Stem Cell</i> , 2010, 7, 7-8.	11.1	18
114	Advances in microfluidic platforms for analyzing and regulating human pluripotent stem cells. <i>Current Opinion in Genetics and Development</i> , 2015, 34, 54-60.	3.3	18
115	Incorporation of $\beta$ -Amino Acids Enhances the Antifungal Activity and Selectivity of the Helical Antimicrobial Peptide Aurein 1.2. <i>ACS Chemical Biology</i> , 2017, 12, 2975-2980.	3.4	18
116	Deletion of MAG1 and MRE11 enhances the sensitivity of the <i>Saccharomyces cerevisiae</i> HUG1P-GFP promoter-reporter construct to genotoxicity. <i>Biosensors and Bioelectronics</i> , 2008, 24, 736-741.	10.1	17
117	Comparative evaluation of isogenic mesodermal and ectomesodermal chondrocytes from human iPSCs for cartilage regeneration. <i>Science Advances</i> , 2021, 7, .	10.3	17
118	Atovaquone: An Inhibitor of Oxidative Phosphorylation as Studied in Gynecologic Cancers. <i>Cancers</i> , 2022, 14, 2297.	3.7	17
119	Microwell Regulation of Pluripotent Stem Cell Self-Renewal and Differentiation. <i>BioNanoScience</i> , 2012, 2, 266-276.	3.5	16
120	Effects of 3D microwell culture on growth kinetics and metabolism of human embryonic stem cells. <i>Biotechnology and Applied Biochemistry</i> , 2012, 59, 88-96.	3.1	15
121	Integrative analysis of the human brain mural cell transcriptome. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021, 41, 3052-3068.	4.3	15
122	Hydrogel-based protein array for quantifying epidermal growth factor receptor activity in cell lysates. <i>Analytical Biochemistry</i> , 2009, 393, 205-214.	2.4	14
123	Engineered Perineural Vascular Plexus for Modeling Developmental Toxicity. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000825.	7.6	14
124	Differentiation of human pluripotent stem cells to brain microvascular endothelial cell-like cells suitable to study immune cell interactions. <i>STAR Protocols</i> , 2021, 2, 100563.	1.2	14
125	Effects of $3\mu\text{m}$ microwell culture on initial fate specification in human embryonic stem cells. <i>AIChE Journal</i> , 2014, 60, 1225-1235.	3.6	13
126	Influence of substrate composition on human embryonic stem cell differentiation and extracellular matrix production in embryoid bodies. <i>Biotechnology Progress</i> , 2015, 31, 212-219.	2.6	13

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127	Sucrose Nonfermenting-Related Kinase Enzyme-Mediated Rho-Associated Kinase Signaling is Responsible for Cardiac Function. <i>Circulation: Cardiovascular Genetics</i> , 2016, 9, 474-486.	5.1	13
128	Epidermal growth factor mediated healing in stem cell-derived vocal fold mucosa. <i>Journal of Surgical Research</i> , 2015, 197, 32-38.	1.6	12
129	Hydrophobicity of Antifungal $\beta$ -Peptides Is Associated with Their Cytotoxic Effect on In Vitro Human Colon Caco-2 and Liver HepG2 Cells. <i>PLoS ONE</i> , 2016, 11, e0149271.	2.5	12
130	Sonic Hedgehog Signaling in Cranial Neural Crest Cells Regulates Microvascular Morphogenesis in Facial Development. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 590539.	3.7	11
131	Disruption of LRG1 inhibits mother-daughter separation in <i>Saccharomyces cerevisiae</i> . <i>Yeast</i> , 2005, 22, 1117-1132.	1.7	10
132	Metabolomics revealed the influence of breast cancer on lymphatic endothelial cell metabolism, metabolic crosstalk, and lymphangiogenic signaling in co-culture. <i>Scientific Reports</i> , 2020, 10, 21244.	3.3	10
133	Multiomics Method Enabled by Sequential Metabolomics and Proteomics for Human Pluripotent Stem-Cell-Derived Cardiomyocytes. <i>Journal of Proteome Research</i> , 2021, 20, 4646-4654.	3.7	10
134	Slippery Antifouling Polymer Coatings Fabricated Entirely from Biodegradable and Biocompatible Components. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 17940-17949.	8.0	10
135	Improving efficiency of human pluripotent stem cell differentiation platforms using an integrated experimental and computational approach. <i>Biotechnology and Bioengineering</i> , 2013, 110, 3024-3037.	3.3	9
136	Advances in applications of metabolomics in pluripotent stem cell research. <i>Current Opinion in Chemical Engineering</i> , 2017, 15, 36-43.	7.8	8
137	Macroporous hydrogel micropillars for quantifying Met kinase activity in cancer cell lysates. <i>Analyst</i> , 2012, 137, 4052.	3.5	7
138	A Global Assessment of Stem Cell Engineering. <i>Tissue Engineering - Part A</i> , 2014, 20, 2575-2589.	3.1	7
139	Small-Molecule Morphogenesis Modulators Enhance the Ability of 14-Helical $\beta$ -Peptides To Prevent <i>Candida albicans</i> Biofilm Formation. <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	3.2	7
140	Adaptable pulsatile flow generated from stem cell-derived cardiomyocytes using quantitative imaging-based signal transduction. <i>Lab on A Chip</i> , 2020, 20, 3744-3756.	6.0	7
141	Metabolic alterations caused by the mutation and overexpression of the <i>Tmem135</i> gene. <i>Experimental Biology and Medicine</i> , 2020, 245, 1571-1583.	2.4	7
142	Human pluripotent stem cell-derived cardiac stromal cells and their applications in regenerative medicine. <i>Stem Cell Research</i> , 2020, 45, 101831.	0.7	6
143	Developmental lineage of human pluripotent stem cell-derived cardiac fibroblasts affects their functional phenotype. <i>FASEB Journal</i> , 2021, 35, e21799.	0.5	6
144	Cardiac differentiation of human pluripotent stem cells using defined extracellular matrix proteins reveals essential role of fibronectin. <i>ELife</i> , 0, 11, .	6.0	6

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145	Differentiation of Brain Pericyte-Like Cells from Human Pluripotent Stem Cell-Derived Neural Crest. <i>Current Protocols</i> , 2021, 1, e21.	2.9	5
146	Editorial: Stem cell engineering – discovery, diagnostics and therapies. <i>Biotechnology Journal</i> , 2013, 8, 390-391.	3.5	4
147	Direct coculture of human pluripotent stem cell-derived cardiac progenitor cells with epicardial cells induces cardiomyocyte proliferation and reduces sarcomere organization. <i>Journal of Molecular and Cellular Cardiology</i> , 2022, 162, 144-157.	1.9	4
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