

# Sean P Palecek

## List of Publications by Year in descending order

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160  
papers

15,132  
citations

29994

54  
h-index

19690

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. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E1848-57.	3.3	1,376
2	Directed cardiomyocyte differentiation from human pluripotent stem cells by modulating Wnt/ $\beta$ -catenin signaling under fully defined conditions. <i>Nature Protocols</i> , 2013, 8, 162-175.	5.5	1,353
3	Integrin-ligand binding properties govern cell migration speed through cell-substratum adhesiveness. <i>Nature</i> , 1997, 385, 537-540.	13.7	1,292
4	Functional Cardiomyocytes Derived From Human Induced Pluripotent Stem Cells. <i>Circulation Research</i> , 2009, 104, e30-41.	2.0	1,202
5	Derivation of blood-brain barrier endothelial cells from human pluripotent stem cells. <i>Nature Biotechnology</i> , 2012, 30, 783-791.	9.4	623
6	Extracellular Matrix Promotes Highly Efficient Cardiac Differentiation of Human Pluripotent Stem Cells. <i>Circulation Research</i> , 2012, 111, 1125-1136.	2.0	416
7	A retinoic acid-enhanced, multicellular human blood-brain barrier model derived from stem cell sources. <i>Scientific Reports</i> , 2014, 4, 4160.	1.6	390
8	Hypoxia-enhanced Blood-Brain Barrier Chip recapitulates human barrier function and shuttling of drugs and antibodies. <i>Nature Communications</i> , 2019, 10, 2621.	5.8	371
9	Regulation of Cell Migration by the Calcium-dependent Protease Calpain. <i>Journal of Biological Chemistry</i> , 1997, 272, 32719-32722.	1.6	338
10	Efficient Differentiation of Human Pluripotent Stem Cells to Endothelial Progenitors via Small-Molecule Activation of WNT Signaling. <i>Stem Cell Reports</i> , 2014, 3, 804-816.	2.3	271
11	3-D microwell culture of human embryonic stem cells. <i>Biomaterials</i> , 2006, 27, 6032-6042.	5.7	216
12	An isogenic blood-brain barrier model comprising brain endothelial cells, astrocytes, and neurons derived from human induced pluripotent stem cells. <i>Journal of Neurochemistry</i> , 2017, 140, 874-888.	2.1	201
13	The microwell control of embryoid body size in order to regulate cardiac differentiation of human embryonic stem cells. <i>Biomaterials</i> , 2010, 31, 1885-1893.	5.7	184
14	Modeling Psychomotor Retardation using iPSCs from MCT8-Deficient Patients Indicates a Prominent Role for the Blood-Brain Barrier. <i>Cell Stem Cell</i> , 2017, 20, 831-843.e5.	5.2	181
15	Directed differentiation of human pluripotent stem cells to blood-brain barrier endothelial cells. <i>Science Advances</i> , 2017, 3, e1701679.	4.7	177
16	EAP1, a <i>Candida albicans</i> Gene Involved in Binding Human Epithelial Cells. <i>Eukaryotic Cell</i> , 2003, 2, 1266-1273.	3.4	168
17	Scalable culture and cryopreservation of human embryonic stem cells on microcarriers. <i>Biotechnology Progress</i> , 2009, 25, 20-31.	1.3	157
18	Substratum-induced differentiation of human pluripotent stem cells reveals the coactivator YAP is a potent regulator of neuronal specification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 13805-13810.	3.3	153

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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.	1.4	150
20	Antifungal Activity from 14-Helical $\beta$ -Peptides. <i>Journal of the American Chemical Society</i> , 2006, 128, 12630-12631.	6.6	145
21	Inhibition of human embryonic stem cell differentiation by mechanical strain. <i>Journal of Cellular Physiology</i> , 2006, 206, 126-137.	2.0	143
22	Human pluripotent stem cell-derived brain pericyte-like cells induce blood-brain barrier properties. <i>Science Advances</i> , 2019, 5, eaau7375.	4.7	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.	7.8	132
24	Chemically defined, albumin-free human cardiomyocyte generation. <i>Nature Methods</i> , 2015, 12, 595-596.	9.0	129
25	Cryopreservation of adherent human embryonic stem cells. <i>Biotechnology and Bioengineering</i> , 2004, 88, 299-312.	1.7	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.	1.9	123
28	Engineering the Stem Cell Microenvironment. <i>Biotechnology Progress</i> , 2007, 23, 18-23.	1.3	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.	6.6	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.	0.2	110
31	Short Alkylated Peptoid Mimics of Antimicrobial Lipopeptides. <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 417-420.	1.4	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.	2.4	106
33	Modeling the blood-brain barrier using stem cell sources. <i>Fluids and Barriers of the CNS</i> , 2013, 10, 2.	2.4	105
34	Development of Macroporous Poly(ethylene glycol) Hydrogel Arrays within Microfluidic Channels. <i>Biomacromolecules</i> , 2010, 11, 3316-3324.	2.6	100
35	Intermolecular electrostatic interactions and their effect on flux and protein deposition during protein filtration. <i>Biotechnology Progress</i> , 1994, 10, 207-213.	1.3	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.	15.2	94

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37	Transcriptomic comparison of human and mouse brain microvessels. <i>Scientific Reports</i> , 2020, 10, 12358.	1.6	89
38	Modeling the blood-brain barrier: Beyond the endothelial cells. <i>Current Opinion in Biomedical Engineering</i> , 2018, 5, 6-12.	1.8	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.	1.2	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, .	11.6	86
41	The response of human embryonic stem cell-derived endothelial cells to shear stress. <i>Biotechnology and Bioengineering</i> , 2008, 100, 830-837.	1.7	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.	0.7	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.	1.6	76
44	Commentary on human pluripotent stem cell-based blood-brain barrier models. <i>Fluids and Barriers of the CNS</i> , 2020, 17, 64.	2.4	75
45	Innovation in the culture and derivation of pluripotent human stem cells. <i>Current Opinion in Biotechnology</i> , 2008, 19, 527-533.	3.3	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.	2.6	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.	0.3	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.	2.4	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.	5.7	68
50	Organotypic microfluidic breast cancer model reveals starvation-induced spatial-temporal metabolic adaptations. <i>EBioMedicine</i> , 2018, 37, 144-157.	2.7	68
51	Temporal impact of substrate mechanics on differentiation of human embryonic stem cells to cardiomyocytes. <i>Acta Biomaterialia</i> , 2014, 10, 604-612.	4.1	62
52	Engineering the human pluripotent stem cell microenvironment to direct cell fate. <i>Biotechnology Advances</i> , 2013, 31, 1002-1019.	6.0	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.	4.1	60
54	Concise Review: Tissue-Specific Microvascular Endothelial Cells Derived From Human Pluripotent Stem Cells. <i>Stem Cells</i> , 2014, 32, 3037-3045.	1.4	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.	1.4	60
56	$\alpha 5$ Laminin Synthesized by Human Pluripotent Stem Cells Promotes Self-Renewal. <i>Stem Cell Reports</i> , 2015, 5, 195-206.	2.3	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.	1.4	57
58	Bioengineering Solutions for Manufacturing Challenges in CAR T Cells. <i>Biotechnology Journal</i> , 2018, 13, 1700095.	1.8	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.	1.7	53
60	Hydrophobicity and Helicity Regulate the Antifungal Activity of 14-Helical $\alpha 2$ -Peptides. <i>ACS Chemical Biology</i> , 2014, 9, 1613-1621.	1.6	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.	3.3	53
62	Kinetic Model for Integrin-mediated Adhesion Release During Cell Migration. <i>Annals of Biomedical Engineering</i> , 1999, 27, 219-235.	1.3	52
63	Development of scalable culture systems for human embryonic stem cells. <i>Biochemical Engineering Journal</i> , 2010, 48, 378-384.	1.8	52
64	Human pluripotent stem cell culture density modulates YAP signaling. <i>Biotechnology Journal</i> , 2016, 11, 662-675.	1.8	51
65	Generation and Differentiation of Human Embryonic Stem Cell-Derived Keratinocyte Precursors. <i>Tissue Engineering</i> , 2006, 12, 665-679.	4.9	50
66	Protein Analytical Assays for Diagnosing, Monitoring, and Choosing Treatment for Cancer Patients. <i>Journal of Healthcare Engineering</i> , 2012, 3, 503-534.	1.1	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.	4.8	48
68	Regionally specified human pluripotent stem cell-derived astrocytes exhibit different molecular signatures and functional properties. <i>Development (Cambridge)</i> , 2019, 146, .	1.2	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.	0.2	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.	1.2	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.	2.6	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, .	1.3	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.	4.1	45
74	Effect of ionic environment on BSA filtration and the properties of BSA deposits. <i>Desalination</i> , 1993, 90, 147-159.	4.0	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.	3.9	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.	2.4	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.	1.8	41
78	Optically Responsive and Mechanically Tunable Colloid-Liquid Crystal Gels that Support Growth of Fibroblasts. <i>Advanced Materials</i> , 2008, 20, 4804-4809.	11.1	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.	5.5	40
80	Activation of $RAR\alpha$ , $RAR\beta$ , or $RXR\alpha$ Increases Barrier Tightness in Human Induced Pluripotent Stem Cell-Derived Brain Endothelial Cells. <i>Biotechnology Journal</i> , 2018, 13, 1700093.	1.8	39
81	Enzyme Encapsulation in Permeabilized <i>Saccharomyces cerevisiae</i> Cells. <i>Biotechnology Progress</i> , 2008, 20, 449-456.	1.3	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.	1.6	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.	1.9	37
84	Intrinsic blood-brain barrier dysfunction contributes to multiple sclerosis pathogenesis. <i>Brain</i> , 2022, 145, 4334-4348.	3.7	37
85	Protein-Acrylamide Copolymer Hydrogels for Array-Based Detection of Tyrosine Kinase Activity from Cell Lysates. <i>Biomacromolecules</i> , 2005, 6, 2765-2775.	2.6	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.	2.3	36
87	Engineering Scalable Manufacturing of High-Quality Stem Cell-Derived Cardiomyocytes for Cardiac Tissue Repair. <i>Frontiers in Medicine</i> , 2018, 5, 110.	1.2	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.	1.4	32
89	Effect of sugar-phosphate mixtures on the stability of DPPC membranes in dehydrated systems. <i>Cryobiology</i> , 2004, 48, 81-89.	0.3	32
90	Metabolomics Identifies Metabolic Markers of Maturation in Human Pluripotent Stem Cell-Derived Cardiomyocytes. <i>Theranostics</i> , 2017, 7, 2078-2091.	4.6	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, .	2.8	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.	1.1	30
93	Antifungal Activity of 14-Helical Î²-Peptides against Planktonic Cells and Biofilms of <i>Candida</i> Species. <i>Pharmaceuticals</i> , 2015, 8, 483-503.	1.7	29
94	Intraluminal Release of an Antifungal Î²-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.	2.6	29
95	Antifungal activity of a Î²-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.	4.1	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.	1.6	28
97	Use of proteinâ€‘acrylamide copolymer hydrogels for measuring protein concentration and activity. <i>Analytical Biochemistry</i> , 2004, 329, 180-189.	1.1	27
98	Electroporation of Human Embryonic Stem Cells: Small and Macromolecule Loading and DNA Transfection. <i>Biotechnology Progress</i> , 2006, 22, 825-834.	1.3	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.	1.3	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.	1.6	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.	1.6	25
102	Directed Differentiation of Human Pluripotent Stem Cells to Podocytes under Defined Conditions. <i>Scientific Reports</i> , 2019, 9, 2765.	1.6	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.	1.4	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.	1.1	24
105	14-Helical Î²-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.	2.5	22
106	Photocleavable peptide hydrogel arrays for MALDI-TOF analysis of kinase activity. <i>Analyst</i> , The, 2006, 131, 1097.	1.7	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.	1.1	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.	0.4	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.	0.6	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.	1.4	20
111	Platelet cryopreservation using a trehalose and phosphate formulation. <i>Biotechnology and Bioengineering</i> , 2005, 92, 79-90.	1.7	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.	5.3	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.	5.2	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.	1.5	18
115	Incorporation of $\beta^2$ -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.	1.6	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.	5.3	17
117	Comparative evaluation of isogenic mesodermal and ectomesodermal chondrocytes from human iPSCs for cartilage regeneration. <i>Science Advances</i> , 2021, 7, .	4.7	17
118	Atovaquone: An Inhibitor of Oxidative Phosphorylation as Studied in Gynecologic Cancers. <i>Cancers</i> , 2022, 14, 2297.	1.7	17
119	Microwell Regulation of Pluripotent Stem Cell Self-Renewal and Differentiation. <i>BioNanoScience</i> , 2012, 2, 266-276.	1.5	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.	1.4	15
121	Integrative analysis of the human brain mural cell transcriptome. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021, 41, 3052-3068.	2.4	15
122	Hydrogel-based protein array for quantifying epidermal growth factor receptor activity in cell lysates. <i>Analytical Biochemistry</i> , 2009, 393, 205-214.	1.1	14
123	Engineered Perineural Vascular Plexus for Modeling Developmental Toxicity. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000825.	3.9	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.	0.5	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.	1.8	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.	1.3	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.	0.8	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.	1.1	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.	1.8	11
131	Disruption of LRG1 inhibits mother-daughter separation in <i>Saccharomyces cerevisiae</i> . <i>Yeast</i> , 2005, 22, 1117-1132.	0.8	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.	1.6	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.	1.8	10
134	Slippery Antifouling Polymer Coatings Fabricated Entirely from Biodegradable and Biocompatible Components. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 17940-17949.	4.0	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.	1.7	9
136	Advances in applications of metabolomics in pluripotent stem cell research. <i>Current Opinion in Chemical Engineering</i> , 2017, 15, 36-43.	3.8	8
137	Macroporous hydrogel micropillars for quantifying Met kinase activity in cancer cell lysates. <i>Analyst</i> , 2012, 137, 4052.	1.7	7
138	A Global Assessment of Stem Cell Engineering. <i>Tissue Engineering - Part A</i> , 2014, 20, 2575-2589.	1.6	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, .	1.4	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.	3.1	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.	1.1	7
142	Human pluripotent stem cell-derived cardiac stromal cells and their applications in regenerative medicine. <i>Stem Cell Research</i> , 2020, 45, 101831.	0.3	6
143	Developmental lineage of human pluripotent stem cell-derived cardiac fibroblasts affects their functional phenotype. <i>FASEB Journal</i> , 2021, 35, e21799.	0.2	6
144	Cardiac differentiation of human pluripotent stem cells using defined extracellular matrix proteins reveals essential role of fibronectin. <i>ELife</i> , 0, 11, .	2.8	6

#	ARTICLE	IF	CITATIONS
145	Differentiation of Brain Pericyte-Like Cells from Human Pluripotent Stem Cell-Derived Neural Crest. <i>Current Protocols</i> , 2021, 1, e21.	1.3	5
146	Editorial: Stem cell engineering – discovery, diagnostics and therapies. <i>Biotechnology Journal</i> , 2013, 8, 390-391.	1.8	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.	0.9	4
148	Ciliogenesis mechanisms mediated by PAK2-ARL13B signaling in brain endothelial cells is responsible for vascular stability. <i>Biochemical Pharmacology</i> , 2022, 202, 115143.	2.0	4
149	Multiplexed tyrosine kinase activity detection in cancer cells using a hydrogel immobilized substrate. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 5489-5499.	1.9	3
150	Cilia proteins are biomarkers of altered flow in the vasculature. <i>JCI Insight</i> , 2022, 7, .	2.3	3
151	Advances in Manufacturing Cardiomyocytes from Human Pluripotent Stem Cells. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2022, 13, 255-278.	3.3	3
152	Integrating in-Vitro disease models of the neurovascular unit into discovery and development of neurotherapeutics. <i>Current Opinion in Biomedical Engineering</i> , 2021, 20, 100341.	1.8	2
153	Activity Assay of Epidermal Growth Factor Receptor Tyrosine Kinase Inhibitors in Triple-Negative Breast Cancer Cells Using Peptide-Conjugated Magnetic Beads. <i>Assay and Drug Development Technologies</i> , 2013, 11, 44-51.	0.6	1
154	Editorial: Stem Cell Engineering. <i>Biotechnology Journal</i> , 2015, 10, 1509-1510.	1.8	1
155	Inductive factors for generation of pluripotent stem cell-derived cardiomyocytes. , 2020, , 177-242.		1
156	Rational, Unbiased Selection of Reference Genes for Pluripotent Stem Cell-Derived Cardiomyocytes. <i>Tissue Engineering - Part C: Methods</i> , 2021, 27, 322-336.	1.1	1
157	Spatial Stem Cell Fate Engineering via Facile Morphogen Localization. <i>Advanced Healthcare Materials</i> , 2021, 10, 2100995.	3.9	1
158	Regenerative Medicine Manufacturing. <i>Biotechnology Journal</i> , 2018, 13, .	1.8	0
159	Software to improve transfer and reproducibility of cell culture methods. <i>BioTechniques</i> , 2018, 65, 289-292.	0.8	0
160	Directed differentiation of human pluripotent stem cells to epicardial-derived fibroblasts. <i>STAR Protocols</i> , 2022, 3, 101275.	0.5	0