Tiago G Fernandes

List of Publications by Citations

53 papers	1,247 citations	19 h-index	35 g-index
61 ext. papers	1,460 ext. citations	4.9 avg, IF	4.53 L-index

#	Paper	IF	Citations
53	High-throughput cellular microarray platforms: applications in drug discovery, toxicology and stem cell research. *Trends in Biotechnology*, **2009**, 27, 342-9	15.1	218
52	Stem cell cultivation in bioreactors. *Biotechnology Advances*, **2011**, 29, 815-29	17.8	158
51	Mouse embryonic stem cell expansion in a microcarrier-based stirred culture system. *Journal of Biotechnology*, **2007**, 132, 227-36	3.7	127
50	Three-dimensional cell culture microarray for high-throughput studies of stem cell fate. *Biotechnology and Bioengineering*, **2010**, 106, 106-18	4.9	86
49	On-chip, cell-based microarray immunofluorescence assay for high-throughput analysis of target proteins. *Analytical Chemistry*, **2008**, 80, 6633-9	7.8	66
48	Transcriptomic analysis of 3D Cardiac Differentiation of Human Induced Pluripotent Stem Cells Reveals Faster Cardiomyocyte Maturation Compared to 2D Culture. *Scientific Reports*, **2019**, 9, 9229	4.9	46
47	Defined Essential 8™ Medium and Vitronectin Efficiently Support Scalable Xeno-Free Expansion of Human Induced Pluripotent Stem Cells in Stirred Microcarrier Culture Systems. *PLoS ONE*, **2016**, 11, e0151264	3.7	43
46	Different stages of pluripotency determine distinct patterns of proliferation, metabolism, and lineage commitment of embryonic stem cells under hypoxia. *Stem Cell Research*, **2010**, 5, 76-89	1.6	39
45	Towards Multi-Organoid Systems for Drug Screening Applications. *Bioengineering*, **2018**, 5,	5.3	34
44	Microcarrier-based platforms for in vitro expansion and differentiation of human pluripotent stem cells in bioreactor culture systems. *Journal of Biotechnology*, **2016**, 234, 71-82	3.7	33
43	Spatial and temporal control of cell aggregation efficiently directs human pluripotent stem cells towards neural commitment. *Biotechnology Journal*, **2015**, 10, 1612-24	5.6	28
42	Stem cell bioprocessing for regenerative medicine. *Journal of Chemical Technology and Biotechnology*, **2014**, 89, 34-47	3.5	26
41	Neural commitment of human pluripotent stem cells under defined conditions recapitulates neural development and generates patient-specific neural cells. *Biotechnology Journal*, **2015**, 10, 1578-88	5.6	23
40	Kinetic and metabolic analysis of mouse embryonic stem cell expansion under serum-free conditions. *Biotechnology Letters*, **2010**, 32, 171-9	3	23
39	Biophysical study of human induced Pluripotent Stem Cell-Derived cardiomyocyte structural maturation during long-term culture. *Biochemical and Biophysical Research Communications*, **2018**, 499, 611-617	3.4	22
38	Long-term expansion of human induced pluripotent stem cells in a microcarrier-based dynamic system. *Journal of Chemical Technology and Biotechnology*, **2017**, 92, 492-503	3.5	21
37	Scalable culture of human induced pluripotent cells on microcarriers under xeno-free conditions using single-use vertical-wheel™ bioreactors. *Journal of Chemical Technology and Biotechnology*, **2018**, 93, 3597-3606	3.5	20

36	Scalable expansion of human-induced pluripotent stem cells in xeno-free microcarriers. *Methods in Molecular Biology*, **2015**, 1283, 23-9	1.4	20
35	Clinical-scale purification of pluripotent stem cell derivatives for cell-based therapies. *Biotechnology Journal*, **2015**, 10, 1103-14	5.6	19
34	New insights into the mechanisms of embryonic stem cell self-renewal under hypoxia: a multifactorial analysis approach. *PLoS ONE*, **2012**, 7, e38963	3.7	19
33	Maturation of Human Pluripotent Stem Cell-Derived Cerebellar Neurons in the Absence of Co-culture. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 70	5.8	18
32	Integrated platform for production and purification of human pluripotent stem cell-derived neural precursors. *Stem Cell Reviews and Reports*, **2014**, 10, 151-61	6.4	16
31	Design Principles for Pluripotent Stem Cell-Derived Organoid Engineering. *Stem Cells International*, **2019**, 2019, 4508470	5	15
30	Production of Human Pluripotent Stem Cell-Derived Hepatic Cell Lineages and Liver Organoids: Current Status and Potential Applications. *Bioengineering*, **2020**, 7,	5.3	15
29	Modeling Rett Syndrome With Human Patient-Specific Forebrain Organoids. *Frontiers in Cell and Developmental Biology*, **2020**, 8, 610427	5.7	15
28	Scaling up a chemically-defined aggregate-based suspension culture system for neural commitment of human pluripotent stem cells. *Biotechnology Journal*, **2016**, 11, 1628-1638	5.6	14
27	Scalable Generation of Mature Cerebellar Organoids from Human Pluripotent Stem Cells and Characterization by Immunostaining. *Journal of Visualized Experiments*, **2020**,	1.6	13
26	Angelman syndrome: a journey through the brain. *FEBS Journal*, **2020**, 287, 2154-2175	5.7	12
25	A scale out approach towards neural induction of human induced pluripotent stem cells for neurodevelopmental toxicity studies. *Toxicology Letters*, **2018**, 294, 51-60	4.4	12
24	Extracellular Vesicles in CNS Developmental Disorders. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	10
23	Transcriptome profiling of human pluripotent stem cell-derived cerebellar organoids reveals faster commitment under dynamic conditions. *Biotechnology and Bioengineering*, **2021**, 118, 2781-2803	4.9	6
22	Modeling Rett Syndrome with Human Pluripotent Stem Cells: Mechanistic Outcomes and Future Clinical Perspectives. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
21	Multifactorial Modeling Reveals a Dominant Role of Wnt Signaling in Lineage Commitment of Human Pluripotent Stem Cells. *Bioengineering*, **2019**, 6,	5.3	3
20	Natural Multimerization Rules the Performance of Affinity-Based Physical Hydrogels for Stem Cell Encapsulation and Differentiation. *Biomacromolecules*, **2020**, 21, 3081-3091	6.9	3
19	Three-Dimensional Cell-Based Microarrays: Printing Pluripotent Stem Cells into 3D Microenvironments. *Methods in Molecular Biology*, **2018**, 1771, 69-81	1.4	3

18	Purification of human induced pluripotent stem cell-derived neural precursors using magnetic activated cell sorting. *Methods in Molecular Biology*, **2015**, 1283, 137-45	1.4	3
17	Bioreactors for stem cell culture **2013**, 69-114		3
16	Affinity-Triggered Assemblies Based on a Designed Peptide-Peptide Affinity Pair. *Biotechnology Journal*, **2019**, 14, e1800559	5.6	2
15	Engineering Organoids for Modeling of Phenylketonuria.. *Frontiers in Molecular Neuroscience*, **2021**, 14, 787242	6.1	2
14	Enrichment and Separation Technologies for Stem Cell-Based Therapies **2016**, 199-213		1
13	Stem cell separation **2013**, 115-141		1
12	Microscale technologies for stem cell culture **2013**, 143-175		1
11	Advanced microtechnologies for high-throughput screening **2020**, 149-175		0
10	Human Pluripotent Stem Cells: Applications and Challenges for Regenerative Medicine and Disease Modeling. *Advances in Biochemical Engineering/Biotechnology*, **2020**, 171, 189-224	1.7	0
9	A Dynamic 3D Aggregate-Based System for the Successful Expansion and Neural Induction of Human Pluripotent Stem Cells.. *Frontiers in Cellular Neuroscience*, **2022**, 16, 838217	6.1	0
8	3D Microwell Platform for Cardiomyocyte Differentiation of Human Pluripotent Stem Cells. *Methods in Molecular Biology*, **2020**, 1	1.4	
7	Stem-Cell Microscale Platforms for Toxicology Screening **2018**, 285-308		
6	Characteristics of stem cells **2013**, 1-32		
5	Engineering at the microscale: A step towards single-cell analysis of human pluripotent stem cells. *Biotechnology Journal*, **2015**, 10, 1511-2	5.6	
4	Stem cell culture: mimicking the stem cell niche in vitro **2013**, 33-68		
3	Stem cells and regenerative medicine **2013**, 177-206		
2	Pluripotent stem cell biology and engineering **2020**, 1-31		
1	Conclusions and closing remarks **2020**, 259-261		