

Christopher A Fraker

List of Publications by Year in descending order

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42
papers

1,853
citations

257450

24
h-index

330143

37
g-index

43
all docs

43
docs citations

43
times ranked

2286
citing authors

#	ARTICLE	IF	CITATIONS
1	Preventing hypoxia-induced cell death in beta cells and islets via hydrolytically activated, oxygen-generating biomaterials. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4245-4250.	7.1	335
2	Device design and materials optimization of conformal coating for islets of Langerhans. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10514-10519.	7.1	167
3	Improved human islet isolation outcome from marginal donors following addition of oxygenated perfluorocarbon to the cold-storage solution. Transplantation, 2003, 75, 1524-1527.	1.0	142
4	Macroporous Three-Dimensional PDMS Scaffolds for Extrahepatic Islet Transplantation. Cell Transplantation, 2013, 22, 1123-1135.	2.5	112
5	Shipment of Human Islets for Transplantation. American Journal of Transplantation, 2007, 7, 1010-1020.	4.7	106
6	Rapamycin Impairs In Vivo Proliferation of Islet Beta-Cells. Transplantation, 2007, 84, 1576-1583.	1.0	97
7	Improved Human Islet Isolation Using Nicotinamide. American Journal of Transplantation, 2006, 6, 2060-2068.	4.7	69
8	Heme oxygenase-1 fused to a TAT peptide transduces and protects pancreatic β -cells. Biochemical and Biophysical Research Communications, 2003, 305, 876-881.	2.1	66
9	Quantitative Assessment of Islet Cell Products: Estimating the Accuracy of the Existing Protocol and Accounting for Islet Size Distribution. Cell Transplantation, 2009, 18, 1223-1235.	2.5	61
10	Enhanced Oxygenation Promotes β -Cell Differentiation In Vitro. Stem Cells, 2007, 25, 3155-3164.	3.2	60
11	Synthesis of macroporous poly(dimethylsiloxane) scaffolds for tissue engineering applications. Journal of Biomaterials Science, Polymer Edition, 2013, 24, 1041-1056.	3.5	58
12	USE OF OXYGENATED PERFLUOROCARBON TOWARD MAKING EVERY PANCREAS COUNT. Transplantation, 2002, 74, 1811-1812.	1.0	48
13	Optimization of perfluoro nano-scale emulsions: The importance of particle size for enhanced oxygen transfer in biomedical applications. Colloids and Surfaces B: Biointerfaces, 2012, 98, 26-35.	5.0	47
14	Influence of In Vitro and In Vivo Oxygen Modulation on β Cell Differentiation From Human Embryonic Stem Cells. Stem Cells Translational Medicine, 2014, 3, 277-289.	3.3	38
15	Complementary Methods for the Determination of Dissolved Oxygen Content in Perfluorocarbon Emulsions and Other Solutions. Journal of Physical Chemistry B, 2011, 115, 10547-10552.	2.6	35
16	Long-term culture of human pancreatic slices as a model to study real-time islet regeneration. Nature Communications, 2020, 11, 3265.	12.8	34
17	Oxygen: a master regulator of pancreatic development?. Biology of the Cell, 2009, 101, 431-440.	2.0	33
18	A Double Fail-Safe Approach to Prevent Tumorigenesis and Select Pancreatic β Cells from Human Embryonic Stem Cells. Stem Cell Reports, 2019, 12, 611-623.	4.8	32

#	ARTICLE	IF	CITATIONS
19	Effects of Low Glucose Concentrations on Oxygen Consumption Rates of Intervertebral Disc Cells. <i>Spine</i> , 2007, 32, 2063-2069.	2.0	27
20	A Physiological Pattern of Oxygenation Using Perfluorocarbon-Based Culture Devices Maximizes Pancreatic Islet Viability and Enhances β -Cell Function. <i>Cell Transplantation</i> , 2013, 22, 1723-1733.	2.5	27
21	Manganese oxide particles as cytoprotective, oxygen generating agents. <i>Acta Biomaterialia</i> , 2017, 59, 327-337.	8.3	27
22	The Folate Cycle As a Cause of Natural Killer Cell Dysfunction and Viral Etiology in Type 1 Diabetes. <i>Frontiers in Endocrinology</i> , 2017, 8, 315.	3.5	27
23	Neonatal porcine pancreatic cell clusters as a potential source for transplantation in humans: Characterization of proliferation, apoptosis, xenoantigen expression and gene delivery with recombinant AAV. <i>Xenotransplantation</i> , 2002, 9, 14-24.	2.8	26
24	The Expanding Role of Natural Killer Cells in Type 1 Diabetes and Immunotherapy. <i>Current Diabetes Reports</i> , 2016, 16, 109.	4.2	26
25	Rapamycin Impairs β -Cell Proliferation In Vivo. <i>Transplantation Proceedings</i> , 2008, 40, 436-437.	0.6	25
26	Perfluorinated alginate for cellular encapsulation. <i>Journal of Biomedical Materials Research - Part A</i> , 2012, 100A, 1963-1971.	4.0	25
27	Covalent stabilization of alginate hydrogel beads via Staudinger ligation: Assessment of poly(ethylene) Tj ETQq1 1 0.784314 1.55 BT /Ov	4.0	25
28	The Importance of Proper Oxygenation in 3D Culture. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 634403.	4.1	20
29	Corneal elasticity after oxygen enriched high intensity corneal cross linking assessed using atomic force microscopy. <i>Experimental Eye Research</i> , 2016, 153, 51-55.	2.6	18
30	TAT-Mediated Transduction of MafA Protein In Utero Results in Enhanced Pancreatic Insulin Expression and Changes in Islet Morphology. <i>PLoS ONE</i> , 2011, 6, e22364.	2.5	14
31	Natural Killer Cells as Key Mediators in Type I Diabetes Immunopathology. <i>Frontiers in Immunology</i> , 2021, 12, 722979.	4.8	12
32	Stable perfluorocarbon emulsions for the delivery of halogenated ether anesthetics. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 172, 797-805.	5.0	5
33	Modeling and in vitro and in vivo characterization of β -cell tissue engineered pancreatic substitute. <i>Journal of Combinatorial Optimization</i> , 2009, 17, 54-73.	1.3	4
34	Optical sensor arrays designed for guided manufacture of perfluorocarbon nanoemulsions with a non-synthetic stabilizer. <i>Acta Biomaterialia</i> , 2021, 136, 558-569.	8.3	3
35	Determining chemical exchange rate constants in nanoemulsions using nuclear magnetic resonance. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 19244-19254.	2.8	2
36	Rapid quantification of isoflurane in anesthetic nanoemulsions using Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy (ATR-FTIR). <i>Vibrational Spectroscopy</i> , 2020, 109, 103095.	2.2	1

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37	Reverse-dialysis can be misleading for drug release studies in emulsions as demonstrated by NMR dilution experiments. International Journal of Pharmaceutics, 2021, 608, 121093.	5.2	1
38	A Novel Cell Culture Platform for In-Vitro Enhancement of Oxygen Delivery Leads to Improved Physiological Function of Isolated Islets of Langerhans. IFMBE Proceedings, 2009, , 163-164.	0.3	1
39	Modeling and in vitro and in vivo characterization of a tissue engineered pancreatic substitute. AIP Conference Proceedings, 2007, , .	0.4	0
40	Optimization of Perfluorocarbon Emulsions for Cellular Encapsulation. IFMBE Proceedings, 2009, , 165-166.	0.3	0
41	Design and Development of a Highly Macroporous Silicone Scaffold as a Bioartificial Pancreas for Type 1 Diabetes. IFMBE Proceedings, 2009, , 233-234.	0.3	0
42	2139-P: Real-Time Monitoring and High-Resolution Analysis of Human Pancreatic Ductal Plasticity. Diabetes, 2019, 68, .	0.6	0