

# Emmanuel C Opara

## List of Publications by Year in descending order

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Version: 2024-02-01

55  
papers

1,540  
citations

331538

21  
h-index

315616

38  
g-index

55  
all docs

55  
docs citations

55  
times ranked

1886  
citing authors

#	ARTICLE	IF	CITATIONS
1	Porcine pancreas extracellular matrix as a platform for endocrine pancreas bioengineering. <i>Biomaterials</i> , 2013, 34, 5488-5495.	5.7	145
2	Characteristics of Poly-l-Ornithine-coated alginate microcapsules. <i>Biomaterials</i> , 2005, 26, 6846-6852.	5.7	143
3	The Bioartificial Pancreas: Progress and Challenges. <i>Diabetes Technology and Therapeutics</i> , 2005, 7, 968-985.	2.4	103
4	Design of a Bioartificial Pancreas. <i>Journal of Investigative Medicine</i> , 2010, 58, 831-837.	0.7	94
5	Synthesis of multilayered alginate microcapsules for the sustained release of fibroblast growth factor-1. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 95A, 632-640.	2.1	73
6	Evolution of Islet Transplantation for the Last 30 Years. <i>Pancreas</i> , 2016, 45, 8-20.	0.5	70
7	Role of Oxidative Stress in the Etiology of Type 2 Diabetes and the Effect of Antioxidant Supplementation on Glycemic Control. <i>Journal of Investigative Medicine</i> , 2004, 52, 19.2-23.	0.7	60
8	Long-Term Function of Islets Encapsulated in a Redesigned Alginate Microcapsule Construct in Omentum Pouches of Immune-Competent Diabetic Rats. <i>Pancreas</i> , 2014, 43, 605-613.	0.5	56
9	Applications of particulate oxygen-generating substances (POGS) in the bioartificial pancreas. <i>Biomaterials Science</i> , 2017, 5, 2437-2447.	2.6	52
10	Chemical Modification of Alginate for Controlled Oral Drug Delivery. <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 10481-10488.	2.4	52
11	Novel 3D Co-Culture Model for Epithelial-Stromal Cells Interaction in Prostate Cancer. <i>PLoS ONE</i> , 2013, 8, e75187.	1.1	52
12	A three-dimensional microfluidic approach to scaling up microencapsulation of cells. <i>Biomedical Microdevices</i> , 2012, 14, 461-469.	1.4	49
13	Design of a bioartificial pancreas(+). <i>Journal of Investigative Medicine</i> , 2010, 58, 831-7.	0.7	48
14	Engineered multilayer ovarian tissue that secretes sex steroids and peptide hormones in response to gonadotropins. <i>Biomaterials</i> , 2013, 34, 2412-2420.	5.7	43
15	Immunoisolation techniques for islet cell transplantation. <i>Expert Opinion on Biological Therapy</i> , 2002, 2, 503-511.	1.4	37
16	In vivo transplantation of 3D encapsulated ovarian constructs in rats corrects abnormalities of ovarian failure. <i>Nature Communications</i> , 2017, 8, 1858.	5.8	35
17	Effect of alginate composition and gelling cation on micro-bead swelling. <i>Journal of Microencapsulation</i> , 2006, 23, 29-37.	1.2	34
18	Alginate-based strategies for therapeutic vascularization. <i>Therapeutic Delivery</i> , 2013, 4, 327-341.	1.2	33

#	ARTICLE	IF	CITATIONS
19	Microencapsulation of Pancreatic Islets for Use in a Bioartificial Pancreas. <i>Methods in Molecular Biology</i> , 2013, 1001, 261-266.	0.4	31
20	Microencapsulation of porcine thyroid cell organoids within a polymer microcapsule construct. <i>Experimental Biology and Medicine</i> , 2017, 242, 286-296.	1.1	28
21	Effect of alginate matrix engineered to mimic the pancreatic microenvironment on encapsulated islet function. <i>Biotechnology and Bioengineering</i> , 2021, 118, 1177-1185.	1.7	24
22	Scientific principles of regenerative medicine and their application in the female reproductive system. <i>Maturitas</i> , 2014, 77, 12-19.	1.0	22
23	Encapsulation of Mesenchymal Stem Cells in 3D Ovarian Cell Constructs Promotes Stable and Long-Term Hormone Secretion with Improved Physiological Outcomes in a Syngeneic Rat Model. <i>Annals of Biomedical Engineering</i> , 2020, 48, 1058-1070.	1.3	22
24	Islet cell transplantation for the treatment of diabetes mellitus. <i>Expert Opinion on Biological Therapy</i> , 2001, 1, 109-119.	1.4	21
25	Durability of sodium sulfate-treated polylysine-alginate microcapsules. <i>Journal of Biomedical Materials Research Part B</i> , 2001, 54, 396-399.	3.0	20
26	Effects of Allogeneic Bone Marrow Derived Mesenchymal Stromal Cell Therapy on Voiding Function in a Rat Model of Parkinson Disease. <i>Journal of Urology</i> , 2014, 191, 850-859.	0.2	20
27	Winner of the student award in the undergraduate category, 10th World Biomaterials Congress, May 17-22, 2016, Montreal QC, Canada: Evaluation of the tissue response to alginate encapsulated islets in an omentum pouch model. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 1581-1590.	2.1	17
28	Design of an Adhesive Film-Based Microfluidic Device for Alginate Hydrogel-Based Cell Encapsulation. <i>Annals of Biomedical Engineering</i> , 2020, 48, 1103-1111.	1.3	16
29	Comprehensive characterization of the human pancreatic proteome for bioengineering applications. <i>Biomaterials</i> , 2021, 270, 120613.	5.7	13
30	Methods for Incorporating Oxygen-Generating Biomaterials into Cell Culture and Microcapsule Systems. <i>Methods in Molecular Biology</i> , 2017, 1479, 135-141.	0.4	11
31	Glutathione-Mediated Preservation and Enhancement of Isolated Perfused Islet Function. <i>Journal of Surgical Research</i> , 1995, 59, 694-698.	0.8	10
32	Development of a Novel Oral Delivery Vehicle for Probiotics. <i>Current Pharmaceutical Design</i> , 2020, 26, 3134-3140.	0.9	10
33	Islet cell encapsulation – Application in diabetes treatment. <i>Experimental Biology and Medicine</i> , 2021, 246, 2570-2578.	1.1	10
34	The therapeutic potential of islet cell transplant in the treatment of diabetes. <i>Expert Opinion on Investigational Drugs</i> , 1998, 7, 785-795.	1.9	8
35	Combinations of Activin A or Nicotinamide with the Pancreatic Transcription Factor PDX1 Support Differentiation of Human Amnion Epithelial Cells Toward a Pancreatic Lineage. <i>Cellular Reprogramming</i> , 2017, 19, 255-262.	0.5	8
36	Polymeric Materials for Perm-Selective Coating of Alginate Microbeads. <i>Methods in Molecular Biology</i> , 2017, 1479, 95-109.	0.4	8

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37	The combined effect of PDX1, epidermal growth factor and poly-L-ornithine on human amnion epithelial cells™ differentiation. BMC Developmental Biology, 2016, 16, 8.	2.1	7
38	Applications of Cell Microencapsulation. Methods in Molecular Biology, 2017, 1479, 23-39.	0.4	7
39	Microfluidic Approach to Cell Microencapsulation. Methods in Molecular Biology, 2017, 1479, 71-76.	0.4	7
40	Detergent-Free Decellularization of the Human Pancreas for Soluble Extracellular Matrix (ECM) Production. Journal of Visualized Experiments, 2020, , .	0.2	7
41	Perspectives and Challenges on the Potential Use of Exosomes in Bioartificial Pancreas Engineering. Annals of Biomedical Engineering, 2022, 50, 1177-1186.	1.3	7
42	Retrieval of Microencapsulated Islet Grafts for Post-transplant Evaluation. Methods in Molecular Biology, 2017, 1479, 157-171.	0.4	6
43	Compartmentalization of Two Cell Types in Multilayered Alginate Microcapsules. Methods in Molecular Biology, 2017, 1479, 225-235.	0.4	3
44	Selective Osmotic Shock for Islet Isolation in the Cadaveric Canine Pancreas. Cell Transplantation, 2018, 27, 542-550.	1.2	3
45	<i>In Vitro</i> Proliferation of Porcine Pancreatic Islet Cells for $\beta$ -Cell Therapy Applications. Journal of Diabetes Research, 2016, 2016, 1-8.	1.0	2
46	Selective Osmotic Shock (SOS)-Based Islet Isolation for Microencapsulation. Methods in Molecular Biology, 2017, 1479, 191-198.	0.4	2
47	Determination of the Mechanical Strength of Microcapsules. Methods in Molecular Biology, 2017, 1479, 111-118.	0.4	2
48	Encapsulation Strategies for Pancreatic Islet Transplantation without Immune Suppression. Current Stem Cell Reports, 2021, 7, 49-71.	0.7	2
49	Microencapsulation: The Emerging Role of Microfluidics. Micro and Nanosystems, 2013, 5, 194-208.	0.3	2
50	Effect of Alginate Microbead Encapsulation of Placental Mesenchymal Stem Cells on Their Immunomodulatory Function. Annals of Biomedical Engineering, 2022, 50, 291-302.	1.3	2
51	A Method of Porcine Pancreatic Islet Isolation for Microencapsulation. Methods in Molecular Biology, 2017, 1479, 175-189.	0.4	1
52	Bioengineering and Enabling Technologies: ABME Special Issue Editorial. Annals of Biomedical Engineering, 2020, 48, 1445-1450.	1.3	1
53	Controlled Delivery of Slit3 Proteins from Alginate Microbeads Inhibits <i>In Vitro</i> Angiogenesis. Journal of Surgical Research, 2021, 264, 90-98.	0.8	1
54	Cell-Based and Pharmacologic Hormone Therapy Maintain Diastolic Function After Ovariectomy in Hypertensive Rats. Innovation in Aging, 2020, 4, 131-131.	0.0	0

#	ARTICLE	IF	CITATIONS
55	Cell-based hormone therapy prevents diastolic dysfunction after estrogen loss in the Spontaneously Hypertensive Rat (SHR). FASEB Journal, 2020, 34, 1-1.	0.2	0