

Patrick Vermette

List of Publications by Year in descending order

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78
papers

2,708
citations

186265

28
h-index

182427

51
g-index

78
all docs

78
docs citations

78
times ranked

3655
citing authors

#	ARTICLE	IF	CITATIONS
1	Overview of approval procedures for bioadhesives in the United States of America and Canada. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 950-966.	3.4	3
2	Characterization of three-dimensional rat central nervous system culture maturation, with applications to monitor cholinergic integrity. Biotechnology Progress, 2020, 36, e2976.	2.6	0
3	The role of elastin-derived peptides in human physiology and diseases. Matrix Biology, 2019, 84, 81-96.	3.6	58
4	Method for isolation of pancreatic blood vessels, their culture and coculture with islets of langerhans. Biotechnology Progress, 2019, 35, e2745.	2.6	3
5	Decellularized pancreas as a native extracellular matrix scaffold for pancreatic islet seeding and culture. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1230-1237.	2.7	55
6	Insulin secretion kinetics from single islets reveals distinct subpopulations. Biotechnology Progress, 2018, 34, 1059-1068.	2.6	5
7	A factorial design to identify process parameters affecting whole mechanically disrupted rat pancreata in a perfusion bioreactor. Biotechnology Progress, 2018, 34, 432-444.	2.6	1
8	Multiple-Condition Analysis in a Retrievable Subcutaneous Animal Model for Drug Screening on Full Pancreatic Tissue Digest. Assay and Drug Development Technologies, 2018, 16, 462-471.	1.2	0
9	Tissue and organ decellularization in regenerative medicine. Biotechnology Progress, 2018, 34, 1494-1505.	2.6	59
10	Real-time label-free detection and kinetic analysis of Etanercept-Protein A interactions using quartz crystal microbalance. Colloids and Surfaces B: Biointerfaces, 2017, 149, 312-321.	5.0	9
11	An <i>in situ</i> glucose-stimulated insulin secretion assay under perfusion bioreactor conditions. Biotechnology Progress, 2017, 33, 454-462.	2.6	7
12	Quartz crystal microbalance as an assay to detect anti-drug antibodies for the immunogenicity assessment of therapeutic biologics. Analytical and Bioanalytical Chemistry, 2017, 409, 7153-7167.	3.7	2
13	Biomimetic Surfaces Supporting Dissociated Pancreatic Islet Cultures. Colloids and Surfaces B: Biointerfaces, 2017, 159, 166-173.	5.0	6
14	Intracellular insulin quantification by cell-ELISA. Experimental Cell Research, 2016, 347, 14-23.	2.6	10
15	INS-1 cell glucose-stimulated insulin secretion is reduced by the downregulation of the 67 kDa laminin receptor. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 1376-1385.	2.7	6
16	Culturing Free-Floating and Fibrin-Embedded Islets with Endothelial Cells: Effects on Insulin Secretion and Apoptosis. Cellular and Molecular Bioengineering, 2014, 7, 243-253.	2.1	4
17	In situ positron emission tomography monitoring of endothelial cells embedded in perfused fibrin gels. Process Biochemistry, 2013, 48, 1645-1650.	3.7	0
18	A 3D cell culture system: Separation distance between INS-1 cell and endothelial cell monolayers co-cultured in fibrin influences INS-1 cells insulin secretion. Biotechnology and Bioengineering, 2013, 110, 619-627.	3.3	16

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19	Young porcine endocrine pancreatic islets cultured in fibrin show improved resistance toward hydrogen peroxide. <i>Islets</i> , 2013, 5, 207-215.	1.8	24
20	Laminin Receptor 37/67LR Regulates Adhesion and Proliferation of Normal Human Intestinal Epithelial Cells. <i>PLoS ONE</i> , 2013, 8, e74337.	2.5	20
21	Solution composition impacts fibronectin immobilization on carboxymethyl-dextran surfaces and INS-1 insulin secretion. <i>Colloids and Surfaces B: Biointerfaces</i> , 2012, 95, 266-273.	5.0	6
22	Bioreactor controlled by PI algorithm and operated with a perfusion chamber to support endothelial cell survival and proliferation. <i>Biotechnology and Bioengineering</i> , 2012, 109, 1305-1313.	3.3	5
23	A model for cellulase production from <i>Trichoderma reesei</i> in an airlift reactor. <i>Biotechnology and Bioengineering</i> , 2012, 109, 2025-2038.	3.3	18
24	Culturing INS-1 cells on CDPGYIGSR-, RGD- and fibronectin surfaces improves insulin secretion and cell proliferation. <i>Acta Biomaterialia</i> , 2012, 8, 619-626.	8.3	30
25	In vitro morphogenesis of PANC-1 cells into islet-like aggregates using RGD-covered dextran derivative surfaces. <i>Colloids and Surfaces B: Biointerfaces</i> , 2012, 89, 117-125.	5.0	22
26	Diffusion of rhodamine B and bovine serum albumin in fibrin gels seeded with primary endothelial cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2012, 93, 202-207.	5.0	17
27	Bridging the Gap Between Physicochemistry and Interpretation Prevalent in Cell-Surface Interactions. <i>Chemical Reviews</i> , 2011, 111, 2900-2936.	47.7	76
28	Endothelial cell responses towards low-fouling surfaces bearing RGD in a three-dimensional environment. <i>Experimental Cell Research</i> , 2011, 317, 1994-2006.	2.6	12
29	PEGylated liposomes encapsulating human hemoglobin enhance oxygen transfer and cell proliferation while decreasing cell hypoxia in fibrin. <i>Biochemical Engineering Journal</i> , 2011, 55, 162-168.	3.6	13
30	Flow dynamics within a bioreactor for tissue engineering by residence time distribution analysis combined with fluorescence and magnetic resonance imaging to investigate forced permeability and apparent diffusion coefficient in a perfusion cell culture chamber. <i>Biotechnology and Bioengineering</i> , 2011, 108, 2488-2498.	3.3	7
31	Production and characterization of polyhydroxyalkanoates by recombinant <i>Methylobacterium extorquens</i> : Combining desirable thermal properties with functionality. <i>Biochemical Engineering Journal</i> , 2011, 54, 26-33.	3.6	27
32	Polymer fibers as contact guidance to orient microvascularization in a 3D environment. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 92A, 1587-1597.	4.0	14
33	Production of functionalized polyhydroxyalkanoates by genetically modified <i>Methylobacterium extorquens</i> strains. <i>Microbial Cell Factories</i> , 2010, 9, 70.	4.0	27
34	Effect of mechanical agitation on the production of cellulases by <i>Trichoderma reesei</i> RUT-C30 in a draft-tube airlift bioreactor. <i>Biochemical Engineering Journal</i> , 2010, 49, 379-387.	3.6	73
35	The effects of co-culture with fibroblasts and angiogenic growth factors on microvascular maturation and multi-cellular lumen formation in HUVEC-oriented polymer fibre constructs. <i>Biomaterials</i> , 2010, 31, 5091-5099.	11.4	35
36	Enhancing oxygen solubility using hemoglobin- and perfluorocarbon-based carriers. <i>Frontiers in Bioscience - Landmark</i> , 2009, Volume, 665.	3.0	20

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37	Reconstruction of thin fluorophore-filled capillaries in thick scattering medium using fluorescence diffuse optical tomography within the diffusion approximation. , 2009, , .		0
38	Enhanced smooth muscle cell adhesion and proliferation on proteinâ€modified polycaprolactoneâ€based copolymers. Journal of Biomedical Materials Research - Part A, 2009, 88A, 520-530.	4.0	23
39	Smooth muscle cell adhesion in surfaceâ€modified threeâ€dimensional copolymer scaffolds prepared from coâ€continuous blends. Journal of Biomedical Materials Research - Part A, 2009, 91A, 305-315.	4.0	8
40	Design and validation of a pulsatile perfusion bioreactor for 3D high cell density cultures. Biotechnology and Bioengineering, 2009, 104, 1215-1223.	3.3	30
41	Biofouling of dextran-derivative layers investigated by quartz crystal microbalance. Colloids and Surfaces B: Biointerfaces, 2009, 71, 293-299.	5.0	29
42	Effect of culture medium composition on Trichoderma reeseiâ€™s morphology and cellulase production. Bioresource Technology, 2009, 100, 5979-5987.	9.6	119
43	Liposome Characterization by Quartz Crystal Microbalance Measurements and Atomic Force Microscopy. Methods in Enzymology, 2009, 465, 43-73.	1.0	12
44	Cell adhesion resistance mechanisms using arrays of dextranâ€derivative layers. Journal of Biomedical Materials Research - Part A, 2008, 85A, 1052-1063.	4.0	21
45	Culture-based strategies to enhance cellulase enzyme production from Trichoderma reesei RUT-C30 in bioreactor culture conditions. Biochemical Engineering Journal, 2008, 40, 399-407.	3.6	179
46	Enhanced enzyme production from mixed cultures of Trichoderma reesei RUT-C30 and Aspergillus niger LMA grown as fed batch in a stirred tank bioreactor. Biochemical Engineering Journal, 2008, 42, 41-46.	3.6	156
47	Physico-chemical properties and cytotoxicity assessment of PEG-modified liposomes containing human hemoglobin. Colloids and Surfaces B: Biointerfaces, 2008, 65, 239-246.	5.0	51
48	Oxidized-LDL induce morphological changes and increase stiffness of endothelial cells. Experimental Cell Research, 2008, 314, 3007-3016.	2.6	52
49	Young's Moduli of Surface-Bound Liposomes by Atomic Force Microscopy Force Measurements. Langmuir, 2008, 24, 2009-2014.	3.5	41
50	Three-dimensional spatial localization of thin fluorophore-filled capillaries in thick scattering media. , 2008, , .		1
51	Biocompatibility and Light Transmission of Liposomal Lenses. Optometry and Vision Science, 2007, 84, 954-961.	1.2	18
52	Imaging growth of thick engineered tissues with fluorescence diffuse optical tomography. , 2007, , .		0
53	Fluorescence diffuse optical tomography measurements for tissue engineering. , 2007, , .		0
54	Bioactive Polymer Fibers to Direct Endothelial Cell Growth in a Three-Dimensional Environment. Biomacromolecules, 2007, 8, 864-873.	5.4	34

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55	Bioactive Microarrays Immobilized on Low-Fouling Surfaces to Study Specific Endothelial Cell Adhesion. <i>Biomacromolecules</i> , 2007, 8, 3668-3673.	5.4	46
56	Development of Dextran-Derivative Arrays To Identify Physicochemical Properties Involved in Biofouling from Serum. <i>Langmuir</i> , 2007, 23, 3290-3297.	3.5	34
57	Fabrication and characterization of contact lenses bearing surface-immobilized layers of intact liposomes. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 82A, 41-51.	4.0	77
58	Characterization, degradation, and mechanical strength of poly(D,L-lactide-co- μ -caprolactone)-poly(ethylene glycol)-poly(D,L-lactide-co- μ -caprolactone). <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 83A, 503-511.	4.0	36
59	Method of imaging low density lipoproteins by atomic force microscopy. <i>Microscopy Research and Technique</i> , 2007, 70, 904-907.	2.2	8
60	Antibacterial Activity of Contact Lenses Bearing Surface-Immobilized Layers of Intact Liposomes Loaded With Levofloxacin. <i>Journal of Pharmaceutical Sciences</i> , 2007, 96, 2350-2363.	3.3	80
61	Perfluorocarbon Emulsions Cytotoxic Effects on Human Fibroblasts and Effect of Aging on Particle Size Distribution. <i>Artificial Organs</i> , 2007, 31, 649-653.	1.9	8
62	Liposome Layers Characterized by Quartz Crystal Microbalance Measurements and Multirelease Delivery. <i>Langmuir</i> , 2007, 23, 7679-7686.	3.5	22
63	Study of the effect of process parameters for n-heptylamine plasma polymerization on final layer properties. <i>Thin Solid Films</i> , 2007, 515, 6844-6852.	1.8	49
64	Low-Fouling Amine-Terminated Poly(ethylene glycol) Thin Layers and Effect of Immobilization Conditions on Their Mechanical and Physicochemical Properties. <i>Macromolecules</i> , 2006, 39, 8083-8091.	4.8	23
65	Bioreactors for tissue mass culture: Design, characterization, and recent advances. <i>Biomaterials</i> , 2005, 26, 7481-7503.	11.4	338
66	Characterization of Surface-Immobilized Layers of Intact Liposomes. <i>Biomacromolecules</i> , 2004, 5, 1496-1502.	5.4	46
67	Drug Delivery Systems Using Immobilized Intact Liposomes: A Comparative and Critical Review. <i>Current Drug Delivery</i> , 2004, 1, 299-312.	1.6	28
68	Immobilization and surface characterization of NeutrAvidin biotin-binding protein on different hydrogel interlayers. <i>Journal of Colloid and Interface Science</i> , 2003, 259, 13-26.	9.4	93
69	Interactions of phospholipid- and poly(ethylene glycol)-modified surfaces with biological systems: relation to physico-chemical properties and mechanisms. <i>Colloids and Surfaces B: Biointerfaces</i> , 2003, 28, 153-198.	5.0	209
70	Toward an integrated biotechnological engineering education program: a Canadian perspective. <i>Nature Biotechnology</i> , 2003, 21, 1525-1527.	17.5	1
71	Control over PEGylated-Liposome Aggregation by NeutrAvidin \sim Biotin Interactions Investigated by Photon Correlation Spectroscopy. <i>Langmuir</i> , 2002, 18, 505-511.	3.5	33
72	Immobilization and Characterization of Poly(acrylic acid) Graft Layers. <i>Langmuir</i> , 2002, 18, 10137-10145.	3.5	27

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73	Immobilized liposome layers for drug delivery applications: inhibition of angiogenesis. Journal of Controlled Release, 2002, 80, 179-195.	9.9	52
74	Commercial polyurethanes: The potential influence of auxiliary chemicals on the biodegradation process. Journal of Biomaterials Science, Polymer Edition, 1999, 10, 729-749.	3.5	8
75	Lipid uptake across the wall of an expanded polytetrafluoroethylene vascular graft. , 1999, 48, 660-668.		7
76	Lipid uptake across the wall of an expanded polytetrafluoroethylene vascular graft. Journal of Biomedical Materials Research Part B, 1999, 48, 660-668.	3.1	1
77	A Continuous and Pulsatile Flow Circulation System for Evaluation of Cardiovascular Devices. Artificial Organs, 1998, 22, 746-752.	1.9	12
78	Composition, host responses and clinical applications of bioadhesives. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 0, , .	3.4	6