

# Catherine Le Visage

## List of Publications by Year in descending order

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Version: 2024-02-01

82  
papers

3,667  
citations

109137

35  
h-index

143772

57  
g-index

84  
all docs

84  
docs citations

84  
times ranked

5276  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design and characterization of an in vivo injectable hydrogel with effervescently generated porosity for regenerative medicine applications. <i>Acta Biomaterialia</i> , 2022, 140, 324-337.	4.1	25
2	Microgels based on Infernan, a glycosaminoglycan-mimetic bacterial exopolysaccharide, as BMP-2 delivery systems. <i>Carbohydrate Polymers</i> , 2022, 284, 119191.	5.1	7
3	Comparison of MRI T1, T2, and T2* mapping with histology for assessment of intervertebral disc degeneration in an ovine model. <i>Scientific Reports</i> , 2022, 12, 5398.	1.6	6
4	Lipid nanocapsules for intracellular delivery of microRNA: A first step towards intervertebral disc degeneration therapy. <i>International Journal of Pharmaceutics</i> , 2022, 624, 121941.	2.6	10
5	Collateral effects of targeting the nucleus pulposus via a transpedicular or transannular surgical route: a combined X-ray, MRI, and histological long-term descriptive study in sheep. <i>European Spine Journal</i> , 2021, 30, 585-595.	1.0	4
6	Arthrose: des traitements à venir aux traitements d'avenir. <i>Revue Du Rhumatisme Monographies</i> , 2021, 88, 165-171.	0.0	0
7	Correlation between magnetic resonance, X-ray imaging alterations and histological changes in an ovine model of age-related disc degeneration. , 2021, 42, 166-178.		4
8	Osteoarthritis: From upcoming treatments to treatments yet to come. <i>Joint Bone Spine</i> , 2021, 88, 105206.	0.8	18
9	Degenerative lumbar disc disease: in vivo data support the rationale for the selection of appropriate animal models. , 2020, 39, 17-48.		14
10	Characterization of biomaterials intended for use in the nucleus pulposus of degenerated intervertebral discs. <i>Acta Biomaterialia</i> , 2020, 114, 1-15.	4.1	35
11	Controlled release of biological factors for endogenous progenitor cell migration and intervertebral disc extracellular matrix remodelling. <i>Biomaterials</i> , 2020, 253, 120107.	5.7	31
12	Quantifying Oxygen Levels in 3D Bioprinted Cell-Laden Thick Constructs with Perfusable Microchannel Networks. <i>Polymers</i> , 2020, 12, 1260.	2.0	11
13	Lessons learned from intervertebral disc pathophysiology to guide rational design of sequential delivery systems for therapeutic biological factors. <i>Advanced Drug Delivery Reviews</i> , 2019, 149-150, 49-71.	6.6	71
14	Microcarriers Based on Glycosaminoglycan-Like Marine Exopolysaccharide for TGF- $\beta$ 1 Long-Term Protection. <i>Marine Drugs</i> , 2019, 17, 65.	2.2	20
15	In vitro and in vivo evaluation of an electrospun-aligned microfibrillar implant for Annulus fibrosus repair. <i>Biomaterials</i> , 2019, 205, 81-93.	5.7	66
16	Intervertebral disc regeneration: From cell therapy to the development of novel bioinspired endogenous repair strategies. <i>Advanced Drug Delivery Reviews</i> , 2019, 146, 306-324.	6.6	132
17	Assessing glucose and oxygen diffusion in hydrogels for the rational design of 3D stem cell scaffolds in regenerative medicine. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, 1238-1246.	1.3	74
18	Innovative strategies for intervertebral disc regenerative medicine: From cell therapies to multiscale delivery systems. <i>Biotechnology Advances</i> , 2018, 36, 281-294.	6.0	95

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19	Laponite nanoparticle-associated silylated hydroxypropylmethyl cellulose as an injectable reinforced interpenetrating network hydrogel for cartilage tissue engineering. <i>Acta Biomaterialia</i> , 2018, 65, 112-122.	4.1	113
20	Application of Microfluidics to Encapsulate and Support Viable Human Mesenchymal Stem Cells in a Polysaccharide Hydrogel. <i>International Journal of Molecular Sciences</i> , 2018, 19, 1952.	1.8	11
21	In situ photochemical crosslinking of hydrogel membrane for Guided Tissue Regeneration. <i>Dental Materials</i> , 2018, 34, 1769-1782.	1.6	32
22	Animal Models and Imaging of Intervertebral Disc Degeneration. , 2018, , 19-66.		0
23	Calcium-phosphate ceramics and polysaccharide-based hydrogel scaffolds combined with mesenchymal stem cell differently support bone repair in rats. <i>Journal of Materials Science: Materials in Medicine</i> , 2017, 28, 35.	1.7	39
24	Silica nanofibers as a new drug delivery system: a study of the protein-silica interactions. <i>Journal of Materials Chemistry B</i> , 2017, 5, 2908-2920.	2.9	25
25	Pro-angiogenic effect of RANTES-loaded polysaccharide-based microparticles for a mouse ischemia therapy. <i>Scientific Reports</i> , 2017, 7, 13294.	1.6	13
26	Toward the development of biomimetic injectable and macroporous biohydrogels for regenerative medicine. <i>Advances in Colloid and Interface Science</i> , 2017, 247, 589-609.	7.0	72
27	Pullulan microbeads/Si-HPMC hydrogel injectable system for the sustained delivery of GDF-5 and TGF- $\beta$ 1: new insight into intervertebral disc regenerative medicine. <i>Drug Delivery</i> , 2017, 24, 999-1010.	2.5	32
28	Polysaccharide Hydrogels Support the Long-Term Viability of Encapsulated Human Mesenchymal Stem Cells and Their Ability to Secrete Immunomodulatory Factors. <i>Stem Cells International</i> , 2017, 2017, 1-11.	1.2	21
29	Biomaterial-assisted cell therapy in osteoarthritis: From mesenchymal stem cells to cell encapsulation. <i>Best Practice and Research in Clinical Rheumatology</i> , 2017, 31, 730-745.	1.4	34
30	Submillimeter Diameter Poly(Vinyl Alcohol) Vascular Graft Patency in Rabbit Model. <i>Frontiers in Bioengineering and Biotechnology</i> , 2016, 4, 44.	2.0	31
31	Biological challenges for regeneration of the degenerated disc using cellular therapies. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2016, 87, 39-46.	1.2	20
32	Successful chondrogenesis within scaffolds, using magnetic stem cell confinement and bioreactor maturation. <i>Acta Biomaterialia</i> , 2016, 37, 101-110.	4.1	34
33	Planar and tubular patterning of micro and nano-topographies on poly(vinyl alcohol) hydrogel for improved endothelial cell responses. <i>Biomaterials</i> , 2016, 84, 184-195.	5.7	77
34	Composite Scaffold of Poly(Vinyl Alcohol) and Interfacial Polyelectrolyte Complexation Fibers for Controlled Biomolecule Delivery. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 3.	2.0	27
35	Evaluation of Functionalized Polysaccharide Microparticles Dosimetry for SPECT Imaging Based on Biodistribution Data of Rats. <i>Molecular Imaging and Biology</i> , 2015, 17, 504-511.	1.3	6
36	Polysaccharide nanofibers with variable compliance for directing cell fate. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 959-968.	2.1	15

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37	Fucoidan in a 3D scaffold interacts with vascular endothelial growth factor and promotes neovascularization in mice. <i>Drug Delivery and Translational Research</i> , 2015, 5, 187-197.	3.0	58
38	Three-Dimensional Environment Sustains Hematopoietic Stem Cell Differentiation into Platelet-Producing Megakaryocytes. <i>PLoS ONE</i> , 2015, 10, e0136652.	1.1	29
39	Abdominal Aortic Aneurysms Targeted by Functionalized Polysaccharide Microparticles: a new Tool for SPECT Imaging. <i>Theranostics</i> , 2014, 4, 592-603.	4.6	32
40	Fucoidan Promotes Early Step of Cardiac Differentiation from Human Embryonic Stem Cells and Long-Term Maintenance of Beating Areas. <i>Tissue Engineering - Part A</i> , 2014, 20, 1285-1294.	1.6	26
41	Polysaccharide electrospun fibers with sulfated poly(fucose) promote endothelial cell migration and VEGF-mediated angiogenesis. <i>Biomaterials Science</i> , 2014, 2, 843-852.	2.6	35
42	Composite pullulan-dextran polysaccharide scaffold with interfacial polyelectrolyte complexation fibers: A platform with enhanced cell interaction and spatial distribution. <i>Acta Biomaterialia</i> , 2014, 10, 4410-4418.	4.1	38
43	Mitochondrial Routing of Glucose and Sucrose Polymers after Pinocytotic Uptake: Avenues for Drug Delivery. <i>Biomacromolecules</i> , 2014, 15, 2119-2127.	2.6	3
44	Leukocyte mimetic polysaccharide microparticles tracked in vivo on activated endothelium and in abdominal aortic aneurysm. <i>Acta Biomaterialia</i> , 2014, 10, 3535-3545.	4.1	30
45	Pullulan/dextran/nHA Macroporous Composite Beads for Bone Repair in a Femoral Condyle Defect in Rats. <i>PLoS ONE</i> , 2014, 9, e110251.	1.1	32
46	High-Resolution Cellular MRI: Gadolinium and Iron Oxide Nanoparticles for in-Depth Dual-Cell Imaging of Engineered Tissue Constructs. <i>ACS Nano</i> , 2013, 7, 7500-7512.	7.3	88
47	Use of Magnetic Forces to Promote Stem Cell Aggregation During Differentiation, and Cartilage Tissue Modeling. <i>Advanced Materials</i> , 2013, 25, 2611-2616.	11.1	84
48	Cell interactions between human progenitor-derived endothelial cells and human mesenchymal stem cells in a three-dimensional macroporous polysaccharide-based scaffold promote osteogenesis. <i>Acta Biomaterialia</i> , 2013, 9, 8200-8213.	4.1	67
49	A nano-hydroxyapatite Pullulan/dextran polysaccharide composite macroporous material for bone tissue engineering. <i>Biomaterials</i> , 2013, 34, 2947-2959.	5.7	197
50	Evaluation of hemocompatibility and endothelialization of hybrid poly(vinyl alcohol) (PVA)/gelatin polymer films. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2013, 101, 1549-1559.	1.6	46
51	Plasma functionalization of poly(vinyl alcohol) hydrogel for cell adhesion enhancement. <i>Biomatter</i> , 2013, 3, .	2.6	45
52	Design of Biomimetic Vascular Grafts with Magnetic Endothelial Patterning. <i>Cell Transplantation</i> , 2013, 22, 2105-2118.	1.2	28
53	Mesenchymal Stem Cell Delivery into Rat Infarcted Myocardium Using a Porous Polysaccharide-Based Scaffold: A Quantitative Comparison With Endocardial Injection. <i>Tissue Engineering - Part A</i> , 2012, 18, 35-44.	1.6	51
54	Porous Polysaccharide-Based Scaffolds for Human Endothelial Progenitor Cells. <i>Macromolecular Bioscience</i> , 2012, 12, 901-910.	2.1	42

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55	Biomimicking Polysaccharide Nanofibers Promote Vascular Phenotypes: A Potential Application for Vascular Tissue Engineering. <i>Macromolecular Bioscience</i> , 2012, 12, 395-401.	2.1	21
56	Long-Term Stabilization of Polysaccharide Electrospun Fibres by In Situ Cross-Linking. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2011, 22, 1459-1472.	1.9	21
57	Doxorubicin Release Triggered by Alginate Embedded Magnetic Nanoheaters: A Combined Therapy. <i>Advanced Materials</i> , 2011, 23, 787-790.	11.1	169
58	Magnetic resonance imaging tracking of human adipose derived stromal cells within three-dimensional scaffolds for bone tissue engineering. , 2011, 21, 341-354.		81
59	Magnetic micro-manipulations to probe the local physical properties of porous scaffolds and to confine stem cells. <i>Biomaterials</i> , 2010, 31, 1586-1595.	5.7	51
60	Fabrication of porous polysaccharide-based scaffolds using a combined freeze-drying/cross-linking process. <i>Acta Biomaterialia</i> , 2010, 6, 3640-3648.	4.1	157
61	High-Resolution 1.5-Tesla Magnetic Resonance Imaging for Tissue-Engineered Constructs: A Noninvasive Tool to Assess Three-Dimensional Scaffold Architecture and Cell Seeding. <i>Tissue Engineering - Part C: Methods</i> , 2010, 16, 185-200.	1.1	38
62	A Novel Cross-Linked Poly(vinyl alcohol) (PVA) for Vascular Grafts. <i>Advanced Functional Materials</i> , 2008, 18, 2855-2861.	7.8	162
63	Pullulan-based hydrogel for smooth muscle cell culture. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 82A, 336-342.	2.1	75
64	Human endothelial progenitor cell attachment to polysaccharide-based hydrogels: A pre-requisite for vascular tissue engineering. <i>Journal of Materials Science: Materials in Medicine</i> , 2007, 18, 339-345.	1.7	65
65	Tracheal Tissue Engineering. , 2007, , 33-1-33-19.		0
66	Small Intestinal Submucosa as a Potential Bioscaffold for Intervertebral Disc Regeneration. <i>Spine</i> , 2006, 31, 2423-2430.	1.0	41
67	Interaction of Human Mesenchymal Stem Cells With Disc Cells. <i>Spine</i> , 2006, 31, 2036-2042.	1.0	87
68	Proliferation and differentiation of human mesenchymal stem cell encapsulated in polyelectrolyte complexation fibrous scaffold. <i>Biomaterials</i> , 2006, 27, 6111-6122.	5.7	70
69	The evaluation of a small-diameter polysaccharide-based arterial graft in rats. <i>Biomaterials</i> , 2006, 27, 5546-5553.	5.7	74
70	Low Molecular Weight Fucoidan Increases VEGF165-induced Endothelial Cell Migration by Enhancing VEGF165 Binding to VEGFR-2 and NRP1. <i>Journal of Biological Chemistry</i> , 2006, 281, 37844-37852.	1.6	107
71	MR imaging of biodegradable polymeric microparticles: A potential method of monitoring local drug delivery. <i>Magnetic Resonance in Medicine</i> , 2005, 53, 614-620.	1.9	43
72	Coculture of Mesenchymal Stem Cells and Respiratory Epithelial Cells to Engineer a Human Composite Respiratory Mucosa. <i>Tissue Engineering</i> , 2004, 10, 1426-1435.	4.9	65

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73	Bioadhesive characterization of poly(methylidene malonate 2.12) microparticle on model extracellular matrix. <i>Biomaterials</i> , 2004, 25, 4327-4332.	5.7	11
74	Encapsulation of biologics in self-assembled fibers as biostructural units for tissue engineering. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 71A, 586-595.	3.0	50
75	Efficacy of Paclitaxel Released From Bio-Adhesive Polymer Microspheres on Model Superficial Bladder Cancer. <i>Journal of Urology</i> , 2004, 171, 1324-1329.	0.2	54
76	Coculture of Mesenchymal Stem Cells and Respiratory Epithelial Cells to Engineer a Human Composite Respiratory Mucosa. <i>Tissue Engineering</i> , 2004, 10, 1426-1435.	4.9	1
77	In Vivo US Monitoring of Catheter-based Vascular Delivery of Gene Microspheres in Pigs: Feasibility. <i>Radiology</i> , 2003, 228, 555-559.	3.6	15
78	Novel microparticulate system made of poly(methylidene malonate 2.1.2). <i>Biomaterials</i> , 2001, 22, 2229-2238.	5.7	21
79	In vitro and in vivo Evaluation of Poly(Methylidene Malonate 2.1.2) Microparticles Behavior for Oral Administration. <i>Journal of Drug Targeting</i> , 2001, 9, 141-153.	2.1	13
80	The influence of the helicity of soluble peptides on their adsorption kinetics. <i>Colloids and Surfaces B: Biointerfaces</i> , 1997, 9, 233-238.	2.5	1
81	Novel method for imaging biodegradable polymeric microparticles using MRI: application toward monitoring drug delivery. , 0, , .		0
82	Microsphere as a contrast agent/gene vector in ultrasound imaging-based vascular gene delivery. , 0, , .		0