

Caroline D Hoemann

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8976723/caroline-d-hoemann-publications-by-citations.pdf>

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

81
papers

4,176
citations

34
h-index

63
g-index

84
ext. papers

4,490
ext. citations

4.1
avg, IF

5.22
L-index

#	Paper	IF	Citations
81	Tissue engineering of cartilage using an injectable and adhesive chitosan-based cell-delivery vehicle. <i>Osteoarthritis and Cartilage</i> , 2005 , 13, 318-29	6.2	289
80	In vitro osteogenesis assays: influence of the primary cell source on alkaline phosphatase activity and mineralization. <i>Pathologie Et Biologie</i> , 2009 , 57, 318-23		219
79	Chitosan-glycerol phosphate/blood implants improve hyaline cartilage repair in ovine microfracture defects. <i>Journal of Bone and Joint Surgery - Series A</i> , 2005 , 87, 2671-2686	5.6	206
78	The potential of chitosan-based gels containing intervertebral disc cells for nucleus pulposus supplementation. <i>Biomaterials</i> , 2006 , 27, 388-96	15.6	204
77	Chitosan-glycerol phosphate/blood implants elicit hyaline cartilage repair integrated with porous subchondral bone in microdrilled rabbit defects. <i>Osteoarthritis and Cartilage</i> , 2007 , 15, 78-89	6.2	193
76	Drilling and microfracture lead to different bone structure and necrosis during bone-marrow stimulation for cartilage repair. <i>Journal of Orthopaedic Research</i> , 2009 , 27, 1432-8	3.8	182
75	Chitosan-glycerol phosphate/blood implants increase cell recruitment, transient vascularization and subchondral bone remodeling in drilled cartilage defects. <i>Osteoarthritis and Cartilage</i> , 2007 , 15, 316-27	6.2	147
74	Meniscus structure in human, sheep, and rabbit for animal models of meniscus repair. <i>Journal of Orthopaedic Research</i> , 2009 , 27, 1197-203	3.8	140
73	A multivalent assay to detect glycosaminoglycan, protein, collagen, RNA, and DNA content in milligram samples of cartilage or hydrogel-based repair cartilage. <i>Analytical Biochemistry</i> , 2002 , 300, 1-10	3.1	134
72	Depth of subchondral perforation influences the outcome of bone marrow stimulation cartilage repair. <i>Journal of Orthopaedic Research</i> , 2011 , 29, 1178-84	3.8	112
71	International Cartilage Repair Society (ICRS) Recommended Guidelines for Histological Endpoints for Cartilage Repair Studies in Animal Models and Clinical Trials. <i>Cartilage</i> , 2011 , 2, 153-72	3	106
70	The chondrocyte cytoskeleton in mature articular cartilage: structure and distribution of actin, tubulin, and vimentin filaments. <i>Journal of Histochemistry and Cytochemistry</i> , 2000 , 48, 1307-20	3.4	97
69	The cartilage-bone interface. <i>Journal of Knee Surgery</i> , 2012 , 25, 85-97	2.4	95
68	Aged bovine chondrocytes display a diminished capacity to produce a collagen-rich, mechanically functional cartilage extracellular matrix. <i>Journal of Orthopaedic Research</i> , 2005 , 23, 1354-62	3.8	94
67	Characterization of subchondral bone repair for marrow-stimulated chondral defects and its relationship to articular cartilage resurfacing. <i>American Journal of Sports Medicine</i> , 2011 , 39, 1731-40	6.8	93
66	Preclinical Studies for Cartilage Repair: Recommendations from the International Cartilage Repair Society. <i>Cartilage</i> , 2011 , 2, 137-52	3	91
65	Cytocompatible gel formation of chitosan-glycerol phosphate solutions supplemented with hydroxyl ethyl cellulose is due to the presence of glyoxal. <i>Journal of Biomedical Materials Research - Part A</i> , 2007 , 83, 521-9	5.4	86

64	Fibronectin, vitronectin, and collagen I induce chemotaxis and haptotaxis of human and rabbit mesenchymal stem cells in a standardized transmembrane assay. <i>Stem Cells and Development</i> , 2007 , 16, 489-502	4.4	79
63	Two distinct Notch1 mutant alleles are involved in the induction of T-cell leukemia in c-myc transgenic mice. <i>Molecular and Cellular Biology</i> , 2000 , 20, 3831-42	4.8	77
62	Scaffold-guided subchondral bone repair: implication of neutrophils and alternatively activated arginase-1+ macrophages. <i>American Journal of Sports Medicine</i> , 2010 , 38, 1845-56	6.8	69
61	CHITOSAN-GLYCEROL PHOSPHATE/BLOOD IMPLANTS IMPROVE HYALINE CARTILAGE REPAIR IN OVINE MICROFRACTURE DEFECTS. <i>Journal of Bone and Joint Surgery - Series A</i> , 2005 , 87, 2671-2686	5.6	67
60	Endoglin differentially regulates TGF- β -induced Smad2/3 and Smad1/5 signalling and its expression correlates with extracellular matrix production and cellular differentiation state in human chondrocytes. <i>Osteoarthritis and Cartilage</i> , 2010 , 18, 1518-27	6.2	65
59	Structural characteristics of the collagen network in human normal, degraded and repair articular cartilages observed in polarized light and scanning electron microscopies. <i>Osteoarthritis and Cartilage</i> , 2011 , 19, 1458-68	6.2	64
58	Precise derivatization of structurally distinct chitosans with rhodamine B isothiocyanate. <i>Carbohydrate Polymers</i> , 2008 , 72, 616-624	10.3	60
57	Mature full-thickness articular cartilage explants attached to bone are physiologically stable over long-term culture in serum-free media. <i>Connective Tissue Research</i> , 1999 , 40, 259-72	3.3	57
56	Molecular and biochemical assays of cartilage components. <i>Methods in Molecular Medicine</i> , 2004 , 101, 127-56		55
55	Effect of chitosan particles and dexamethasone on human bone marrow stromal cell osteogenesis and angiogenic factor secretion. <i>Bone</i> , 2009 , 45, 617-26	4.7	51
54	Bone-repair properties of biodegradable hydroxyapatite nano-rod superstructures. <i>Nanoscale</i> , 2015 , 7, 18751-62	7.7	46
53	BST-CarGel: In Situ ChondroInduction for Cartilage Repair. <i>Operative Techniques in Orthopaedics</i> , 2006 , 16, 271-278	0.3	46
52	Osteochondral Biopsy Analysis Demonstrates That BST-CarGel Treatment Improves Structural and Cellular Characteristics of Cartilage Repair Tissue Compared With Microfracture. <i>Cartilage</i> , 2016 , 7, 16-28	3	40
51	Lysosomal rupture induced by structurally distinct chitosans either promotes a type 1 IFN response or activates the inflammasome in macrophages. <i>Biomaterials</i> , 2017 , 129, 127-138	15.6	39
50	Temporal and spatial modulation of chondrogenic foci in subchondral microdrill holes by chitosan-glycerol phosphate/blood implants. <i>Osteoarthritis and Cartilage</i> , 2011 , 19, 136-44	6.2	39
49	Neutrophils exhibit distinct phenotypes toward chitosans with different degrees of deacetylation: implications for cartilage repair. <i>Arthritis Research and Therapy</i> , 2009 , 11, R74	5.7	36
48	Solidification mechanisms of chitosan-glycerol phosphate/blood implant for articular cartilage repair. <i>Osteoarthritis and Cartilage</i> , 2009 , 17, 953-60	6.2	34
47	Subchondral chitosan/blood implant-guided bone plate resorption and woven bone repair is coupled to hyaline cartilage regeneration from microdrill holes in aged rabbit knees. <i>Osteoarthritis and Cartilage</i> , 2014 , 22, 323-33	6.2	32

46	Acute Osteoclast Activity following Subchondral Drilling Is Promoted by Chitosan and Associated with Improved Cartilage Repair Tissue Integration. <i>Cartilage</i> , 2011 , 2, 173-85	3	32
45	Microdrilled cartilage defects treated with thrombin-solidified chitosan/blood implant regenerate a more hyaline, stable, and structurally integrated osteochondral unit compared to drilled controls. <i>Tissue Engineering - Part A</i> , 2012 , 18, 508-19	3.9	32
44	Ultrastructure of hybrid chitosan-glycerol phosphate blood clots by environmental scanning electron microscopy. <i>Microscopy Research and Technique</i> , 2008 , 71, 236-47	2.8	31
43	At-line quantification of bioactive antibody in bioreactor by surface plasmon resonance using epitope detection. <i>Analytical Biochemistry</i> , 2008 , 378, 158-65	3.1	30
42	Non-destructive electromechanical assessment (Arthro-BST) of human articular cartilage correlates with histological scores and biomechanical properties. <i>Osteoarthritis and Cartilage</i> , 2014 , 22, 1926-35	6.2	28
41	Poly(E-caprolactone) scaffolds of highly controlled porosity and interconnectivity derived from co-continuous polymer blends: model bead and cell infiltration behavior. <i>Journal of Materials Science: Materials in Medicine</i> , 2014 , 25, 2083-93	4.5	28
40	Biodegradable chitosan microparticles induce delayed STAT-1 activation and lead to distinct cytokine responses in differentially polarized human macrophages in vitro. <i>Acta Biomaterialia</i> , 2015 , 12, 183-194	10.8	26
39	Subchondral pre-solidified chitosan/blood implants elicit reproducible early osteochondral wound-repair responses including neutrophil and stromal cell chemotaxis, bone resorption and repair, enhanced repair tissue integration and delayed matrix deposition. <i>BMC Musculoskeletal Disorders</i> , 2013 , 14, 27	2.8	26
38	Optimization of Histoprocessing Methods to Detect Glycosaminoglycan, Collagen Type II, and Collagen Type I in Decalcified Rabbit Osteochondral Sections. <i>Journal of Histotechnology</i> , 2005 , 28, 165-173	1.3	26
37	Electromechanical probe and automated indentation maps are sensitive techniques in assessing early degenerated human articular cartilage. <i>Journal of Orthopaedic Research</i> , 2017 , 35, 858-867	3.8	25
36	Pore size and LbL chitosan coating influence mesenchymal stem cell in vitro fibrosis and biomineralization in 3D porous poly(epsilon-caprolactone) scaffolds. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 2449-59	5.4	25
35	Chondroinduction Is the Main Cartilage Repair Response to Microfracture and Microfracture With BST-CarGel: Results as Shown by ICRS-II Histological Scoring and a Novel Zonal Collagen Type Scoring Method of Human Clinical Biopsy Specimens. <i>American Journal of Sports Medicine</i> , 2015 , 43, 2469-80	6.8	21
34	Stereological analysis of subchondral angiogenesis induced by chitosan and coagulation factors in microdrilled articular cartilage defects. <i>Osteoarthritis and Cartilage</i> , 2013 , 21, 849-59	6.2	20
33	Bone marrow stimulation induces greater chondrogenesis in trochlear vs condylar cartilage defects in skeletally mature rabbits. <i>Osteoarthritis and Cartilage</i> , 2013 , 21, 999-1007	6.2	20
32	Chitosan rate of uptake in HEK293 cells is influenced by soluble versus microparticle state and enhanced by serum-induced cell metabolism and lactate-based media acidification. <i>Molecules</i> , 2013 , 18, 1015-35	4.8	20
31	At-line monitoring of bioreactor protein production by Surface Plasmon Resonance. <i>Biotechnology and Bioengineering</i> , 2008 , 100, 184-8	4.9	20
30	Hydrogels as a platform for stem cell delivery to the heart. <i>Congestive Heart Failure</i> , 2010 , 16, 132-5		19
29	Injectable chitosan-platelet-rich plasma implants to promote tissue regeneration: in vitro properties, in vivo residence, degradation, cell recruitment and vascularization. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018 , 12, 217-228	4.4	17

28	Fusion peptide P15-CSP shows antibiofilm activity and pro-osteogenic activity when deposited as a coating on hydrophilic but not hydrophobic surfaces. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 3736-46	5.4	17
27	Stress relaxation of swine growth plate in semi-confined compression: depth dependent tissue deformational behavior versus extracellular matrix composition and collagen fiber organization. <i>Biomechanics and Modeling in Mechanobiology</i> , 2013 , 12, 67-78	3.8	16
26	Characterization of initial microfracture defects in human condyles. <i>Journal of Knee Surgery</i> , 2013 , 26, 347-55	2.4	16
25	Chitosan surface modification of fully interconnected 3D porous poly(ϵ -caprolactone) by the LbL approach. <i>Polymer</i> , 2015 , 64, 112-121	3.9	15
24	Biodegradable chitosan particles induce chemokine release and negligible arginase-1 activity compared to IL-4 in murine bone marrow-derived macrophages. <i>Biochemical and Biophysical Research Communications</i> , 2011 , 405, 538-44	3.4	15
23	Standardized three-dimensional volumes of interest with adapted surfaces for more precise subchondral bone analyses by micro-computed tomography. <i>Tissue Engineering - Part C: Methods</i> , 2011 , 17, 475-84	2.9	15
22	Bone-Induced Chondroinduction in Sheep Jamshidi Biopsy Defects with and without Treatment by Subchondral Chitosan-Blood Implant: 1-Day, 3-Week, and 3-Month Repair. <i>Cartilage</i> , 2013 , 4, 131-43	3	13
21	Severe Acute Respiratory Syndrome-Associated Coronavirus 2 Infection and Organ Dysfunction in the ICU: Opportunities for Translational Research 2021 , 3, e0374		12
20	Mesenchymal stem cell detachment with trace trypsin is superior to EDTA for <i>in vitro</i> chemotaxis and adhesion assays. <i>Biochemical and Biophysical Research Communications</i> , 2017 , 484, 656-661	3.4	11
19	Soluble recombinant neprilysin induces aggrecanase-mediated cleavage of aggrecan in cartilage explant cultures. <i>Archives of Biochemistry and Biophysics</i> , 2001 , 396, 178-86	4.1	11
18	Young adult chondrocytes proliferate rapidly and produce a cartilaginous tissue at the gel-media interface in agarose cultures. <i>Connective Tissue Research</i> , 2010 , 51, 216-23	3.3	10
17	C3, C5, and factor B bind to chitosan without complement activation. <i>Journal of Biomedical Materials Research - Part A</i> , 2010 , 93, 1429-41	5.4	10
16	Alternative splicing of the <i>Drosophila melanogaster</i> rotundRacGAP gene. <i>Gene</i> , 1996 , 168, 135-41	3.8	9
15	Cartilage Repair With Chitosan-Glycerol Phosphate-Stabilized Blood Clots 2007 , 85-104		8
14	Bone marrow stimulation of the medial femoral condyle produces inferior cartilage and bone repair compared to the trochlea in a rabbit surgical model. <i>Journal of Orthopaedic Research</i> , 2013 , 31, 1757-64	3.8	7
13	Thromboelastography (TEG) Cups and Pins with Different PECVD Coatings: Effect on the Coagulation Cascade in Platelet-poor Blood Plasma. <i>Plasma Processes and Polymers</i> , 2013 , 10, 817-828	3.4	7
12	Effect of a Rapidly Degrading Presolidified 10 kDa Chitosan/Blood Implant and Subchondral Marrow Stimulation Surgical Approach on Cartilage Resurfacing in a Sheep Model. <i>Cartilage</i> , 2017 , 8, 417-431	3	6
11	Synthetic anionic surfaces can replace microparticles in stimulating burst coagulation of blood plasma. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019 , 175, 596-605	6	6

10	Bone Marrow Progenitor Cells Isolated from Young Rabbit Trochlea Are More Numerous and Exhibit Greater Clonogenic, Chondrogenic, and Osteogenic Potential than Cells Isolated from Condyles. <i>Cartilage</i> , 2018 , 9, 378-390	3	6
9	Effect of chitosan and coagulation factors on the wound repair phenotype of bioengineered blood clots. <i>International Journal of Biological Macromolecules</i> , 2017 , 104, 1916-1924	7.9	5
8	Cationic osteogenic peptide P15-CSP coatings promote 3-D osteogenesis in poly(epsilon-caprolactone) scaffolds of distinct pore size. <i>Journal of Biomedical Materials Research - Part A</i> , 2017 , 105, 2171-2181	5.4	5
7	Injectable freeze-dried chitosan-platelet-rich-plasma implants improve marrow-stimulated cartilage repair in a chronic-defect rabbit model. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2019 , 13, 599-611	4.4	5
6	Quality of Cartilage Repair from Marrow Stimulation Correlates with Cell Number, Clonogenic, Chondrogenic, and Matrix Production Potential of Underlying Bone Marrow Stromal Cells in a Rabbit Model. <i>Cartilage</i> , 2021 , 12, 237-250	3	5
5	Guided bone marrow stimulation for articular cartilage repair through a freeze-dried chitosan microparticle approach. <i>Materialia</i> , 2020 , 9, 100609	3.2	4
4	Multiple platelet-rich plasma preparations can solubilize freeze-dried chitosan formulations to form injectable implants for orthopedic indications. <i>Bio-Medical Materials and Engineering</i> , 2019 , 30, 349 ¹ -364 ²		
3	Chitosan coatings with distinct innate immune bioactivities differentially stimulate angiogenesis, osteogenesis and chondrogenesis in poly-caprolactone scaffolds with controlled interconnecting pore size.. <i>Bioactive Materials</i> , 2022 , 10, 430-442	16.7	1
2	Aged bovine chondrocytes display a diminished capacity to produce a collagen-rich, mechanically functional cartilage extracellular matrix. <i>Journal of Orthopaedic Research</i> , 2005 , 23, 1354-1362	3.8	0
1	Immunological Responses in Orthopedics and Transplantation 2019 , 359-373		