Cornelia Neidlinger-Wilke

List of Publications by Year
in descending order

40 papers	2,658 citations	218677 26 h-index	345221 36 g-index
41 all docs	41 docs citations	41 times ranked	2594 citing authors

#	Article	IF	Citations
1	Fundamentals of mechanobiology. , 2022, , 71-95.		0
2	Biomechanics of the spine. , 2022, , 35-46.		0
3	Terminal complement complex formation is associated with intervertebral disc degeneration. European Spine Journal, 2021, 30, 217-226.	2.2	11
4	Interleukin-1Î² and cathepsin D modulate formation of the terminal complement complex in cultured human disc tissue. European Spine Journal, 2021, 30, 2247-2256.	2.2	9
5	Can UVA-light-activated riboflavin-induced collagen crosslinking be transferred from ophthalmology to spine surgery? A feasibility study on bovine intervertebral disc. PLoS ONE, 2021, 16, e0252672.	2.5	3
6	Interleukin-1Î² More Than Mechanical Loading Induces a Degenerative Phenotype in Human Annulus Fibrosus Cells, Partially Impaired by Anti-Proteolytic Activity of Mesenchymal Stem Cell Secretome. Frontiers in Bioengineering and Biotechnology, 2021, 9, 802789.	4.1	4
7	Infrared attenuated total reflection spectroscopic surface analysis of bovineâ€tail intervertebral discs after UV â€lightâ€activated riboflavinâ€induced collagen crossâ€linking. Journal of Biophotonics, 2020, 13, e202000110.	2.3	2
8	GEORG SCHMORL PRIZE OF THE GERMAN SPINE SOCIETY (DWG) 2018: combined inflammatory and mechanical stress weakens the annulus fibrosus: evidences from a loaded bovine AF organ culture. European Spine Journal, 2019, 28, 922-933.	2.2	14
9	Reduced Terminal Complement Complex Formation in Mice Manifests in Low Bone Mass and Impaired Fracture Healing. American Journal of Pathology, 2019, 189, 147-161.	3.8	9
10	Immunomodulation of Human Mesenchymal Stem/Stromal Cells in Intervertebral Disc Degeneration. Spine, 2018, 43, E673-E682.	2.0	49
11	Role of the Complement System in the Response to Orthopedic Biomaterials. International Journal of Molecular Sciences, 2018, 19, 3367.	4.1	38
12	Anti-inflammatory Chitosan/Poly-Î³-glutamic acid nanoparticles control inflammation while remodeling extracellular matrix in degenerated intervertebral disc. Acta Biomaterialia, 2016, 42, 168-179.	8.3	68
13	A Degenerative/Proinflammatory Intervertebral Disc Organ Culture: An <i>Ex Vivo</i> Model for Anti-inflammatory Drug and Cell Therapy. Tissue Engineering - Part C: Methods, 2016, 22, 8-19.	2.1	35
14	Molecular Interactions Between Human Cartilaginous Endplates and Nucleus Pulposus Cells. Spine, 2014, 39, 1355-1364.	2.0	22
15	Inverse numerical prediction of the transport properties of vertebral endplates in low back pain patients. Biomedizinische Technik, 2014, 59, 385-97.	0.8	2
16	Mechanical loading of the intervertebral disc: from the macroscopic to the cellular level. European Spine Journal, 2014, 23, 333-343.	2.2	130
17	Cell sources for nucleus pulposus regeneration. European Spine Journal, 2014, 23, 364-374.	2.2	48
18	Evaluation of platelet-rich plasma and hydrostatic pressure regarding cell differentiation in nucleus pulposus tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2013, 7, 244-252.	2.7	21

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19	Effect of intervertebral disc degeneration on disc cell viability: a numerical investigation. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 328-337.	1.6	31
20	Interactions of environmental conditions and mechanical loads have influence on matrix turnover by nucleus pulposus cells. Journal of Orthopaedic Research, 2012, 30, 112-121.	2.3	76
21	The effect of degenerative morphological changes of the intervertebral disc on the lumbar spine biomechanics: a poroelastic finite element investigation. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 729-739.	1.6	37
22	The mechanical response of the lumbar spine to different combinations of disc degenerative changes investigated using randomized poroelastic finite element models. European Spine Journal, 2011, 20, 563-571.	2.2	60
23	Influence of low glucose supply on the regulation of gene expression by nucleus pulposus cells and their responsiveness to mechanical loading. Journal of Neurosurgery: Spine, 2010, 13, 535-542.	1.7	31
24	The Biology of Intervertebral Disc Degeneration. , 2010, , 3-10.		2
25	Mechanical Stimulation Alters Pleiotrophin and Aggrecan Expression by Human Intervertebral Disc Cells and Influences Their Capacity to Stimulate Endothelial Cell Migration. Spine, 2009, 34, 663-669.	2.0	27
26	DIFFERENT OSMOLARITIES ALTER RESPONSIVITY OF ANNULUS CELLS TO INTERMITTENT MECHANICAL STRAIN. Journal of Biomechanics, 2008, 41, S348.	2.1	0
27	Behavior of Mesenchymal Stem Cells in the Chemical Microenvironment of the Intervertebral Disc. Spine, 2008, 33, 1843-1849.	2.0	145
28	Influence of extracellular osmolarity and mechanical stimulation on gene expression of intervertebral disc cells. Journal of Orthopaedic Research, 2007, 25, 1513-1522.	2.3	132
29	Validity and interobserver agreement of a new radiographic grading system for intervertebral disc degeneration: Part I. Lumbar spine. European Spine Journal, 2006, 15, 720-730.	2.2	135
30	Validity and interobserver agreement of a new radiographic grading system for intervertebral disc degeneration: Part II. Cervical spine. European Spine Journal, 2006, 15, 732-741.	2.2	85
31	Regulation of gene expression in intervertebral disc cells by low and high hydrostatic pressure. European Spine Journal, 2006, 15, 372-378.	2.2	100
32	Is a collagen scaffold for a tissue engineered nucleus replacement capable of restoring disc height and stability in an animal model?. European Spine Journal, 2006, 15, 433-438.	2.2	95
33	A three-dimensional collagen matrix as a suitable culture system for the comparison of cyclic strain and hydrostatic pressure effects on intervertebral disc cells. Journal of Neurosurgery: Spine, 2005, 2, 457-465.	1.7	73
34	Mitogens are increased in the systemic circulation during bone callus healing. Journal of Orthopaedic Research, 2003, 21, 320-325.	2.3	39
35	Proliferation of human-derived osteoblast-like cells depends on the cycle number and frequency of uniaxial strain. Journal of Biomechanics, 2002, 35, 873-880.	2.1	152
36	Cell orientation induced by extracellular signals. Cell Biochemistry and Biophysics, 1999, 30, 167-192.	1.8	31

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37	Effects of Mechanical Factors on the Fracture Healing Process. Clinical Orthopaedics and Related Research, 1998, 355S, S132-S147.	1.5	552
38	Ilizarov callus distraction produces systemic bone cell mitogens. Journal of Orthopaedic Research, 1995, 13, 629-638.	2.3	51
39	Human osteoblasts from younger normal and osteoporotic donors show differences in proliferation and TGFÎ²-release in response to cyclic strain. Journal of Biomechanics, 1995, 28, 1411-1418.	2.1	110
40	Cyclic stretching of human osteoblasts affects proliferation and metabolism: A new experimental method and its application. Journal of Orthopaedic Research, 1994, 12, 70-78.	2.3	229