Karin Wuertz

List of Publications by Year
in descending order

82 papers	3,840 citations	117625 34 h-index	149698 56 g-index
87 all docs	87 docs citations	87 times ranked	3919 citing authors

#	Article	IF	Citations
1	pH-Responsive Electrospun Nanofibers and Their Applications. Polymer Reviews, 2022, 62, 351-399.	10.9	44
2	Acrylonitrile and Pullulan Based Nanofiber Mats as Easily Accessible Scaffolds for 3D Skin Cell Models Containing Primary Cells. Cells, 2022, 11, 445.	4.1	2
3	Resveratrol Microencapsulation into Electrosprayed Polymeric Carriers for the Treatment of Chronic, Non-Healing Wounds. Pharmaceutics, 2022, 14, 853.	4.5	3
4	Uncovering the secretome of mesenchymal stromal cells exposed to healthy, traumatic, and degenerative intervertebral discs: a proteomic analysis. Stem Cell Research and Therapy, 2021, 12, 11.	5.5	38
5	Multiscale Regulation of the Intervertebral Disc: Achievements in Experimental, In Silico, and Regenerative Research. International Journal of Molecular Sciences, 2021, 22, 703.	4.1	27
6	Engineering Advanced In Vitro Models of Systemic Sclerosis for Drug Discovery and Development. Advanced Biology, 2021, 5, e2000168.	2.5	8
7	Effect of BMI on the clinical outcome following microsurgical decompression in over-the-top technique: bi-centric study with an analysis of 744 patients. European Spine Journal, 2021, 30, 936-945.	2.2	1
8	<scp>TRPV4</scp> mediates cell damage induced by hyperphysiological compression and regulates <scp>COX2</scp>/<scp>PGE2</scp> in intervertebral discs. JOR Spine, 2021, 4, e1149.	3.2	8
9	Extracellular Vesicles: Potential Mediators of Psychosocial Stress Contribution to Osteoporosis?. International Journal of Molecular Sciences, 2021, 22, 5846.	4.1	6
10	pH-Responsive Chitosan/Alginate Polyelectrolyte Complexes on Electrospun PLGA Nanofibers for Controlled Drug Release. Nanomaterials, 2021, 11, 1850.	4.1	28
11	Sulfated Hydrogels in Intervertebral Disc and Cartilage Research. Cells, 2021, 10, 3568.	4.1	3
12	Expression and activity of hyaluronidases HYAL-1, HYAL-2 and HYAL-3 in the human intervertebral disc. European Spine Journal, 2020, 29, 605-615.	2.2	11
13	Magnetic fields modulate metabolism and gut microbiome in correlation with <i>Pgcâ€1Î±</i> expression: Followâ€up to an in vitro magnetic mitohormetic study. FASEB Journal, 2020, 34, 11143-11167.	0.5	20
14	Electrospinning and <scp>3D</scp> bioprinting for intervertebral disc tissue engineering. JOR Spine, 2020, 3, e1117.	3.2	23
15	TRPV4 Inhibition and CRISPR-Cas9 Knockout Reduce Inflammation Induced by Hyperphysiological Stretching in Human Annulus Fibrosus Cells. Cells, 2020, 9, 1736.	4.1	20
16	Effects of Early Life Stress on Bone Homeostasis in Mice and Humans. International Journal of Molecular Sciences, 2020, 21, 6634.	4.1	8
17	Cell-Laden Agarose-Collagen Composite Hydrogels for Mechanotransduction Studies. Frontiers in Bioengineering and Biotechnology, 2020, 8, 346.	4.1	41
18	The Role of Cutibacterium acnes in Intervertebral Disc Inflammation. Biomedicines, 2020, 8, 186.	3.2	18

#	Article	IF	Citations
19	Hypo-Osmotic Loading Induces Expression of IL-6 in Nucleus Pulposus Cells of the Intervertebral Disc Independent of TRPV4 and TRPM7. Frontiers in Pharmacology, 2020, 11, 952.	3.5	8
20	Therapeutic Potential of Extracellular Vesicles in Degenerative Diseases of the Intervertebral Disc. Frontiers in Bioengineering and Biotechnology, 2020, 8, 311.	4.1	34
21	MicroRNAs in Intervertebral Disc Degeneration, Apoptosis, Inflammation, and Mechanobiology. International Journal of Molecular Sciences, 2020, 21, 3601.	4.1	137
22	Fibronectin Fragments and Inflammation During Canine Intervertebral Disc Disease. Frontiers in Veterinary Science, 2020, 7, 547644.	2.2	8
23	Alterations in Bone Homeostasis and Microstructure Related to Depression and Allostatic Load. Psychotherapy and Psychosomatics, 2019, 88, 383-385.	8.8	5
24	Electrospray-Based Microencapsulation of Epigallocatechin 3-Gallate for Local Delivery into the Intervertebral Disc. Pharmaceutics, 2019, 11, 435.	4.5	13
25	Controversies in regenerative medicine: Should intervertebral disc degeneration be treated with mesenchymal stem cells?. JOR Spine, 2019, 2, e1043.	3.2	74
26	Decellularized matrix as a building block in bioprinting and electrospinning. Current Opinion in Biomedical Engineering, 2019, 10, 116-122.	3.4	21
27	Mechanical and Biological Characterization of 3D Printed Lattices. 3D Printing and Additive Manufacturing, 2019, 6, 73-81.	2.9	33
28	Clinical and Radiological Outcome of a New Total Cervical Disc Replacement Design. Spine, 2019, 44, E202-E210.	2.0	8
29	Hypotonicity differentially affects inflammatory marker production by nucleus pulposus tissue in simulated disc degeneration versus herniation. Journal of Orthopaedic Research, 2019, 37, 1110-1116.	2.3	4
30	Expression and Activity of TRPA1 and TRPV1 in the Intervertebral Disc: Association with Inflammation and Matrix Remodeling. International Journal of Molecular Sciences, 2019, 20, 1767.	4.1	27
31	Clinical and Radiographic Outcome of Patients With Cervical Spondylotic Myelopathy Undergoing Total Disc Replacement. Spine, 2019, 44, 1403-1411.	2.0	11
32	Implant Design and the Anchoring Mechanism Influence the Incidence of Heterotopic Ossification in Cervical Total Disc Replacement at 2-year Follow-up. Spine, 2019, 44, 1471-1480.	2.0	8
33	Sexual and urinary function following anterior lumbar surgery in females. Neurourology and Urodynamics, 2019, 38, 632-636.	1.5	4
34	The potential of CRISPR/Cas9 genome editing for the study and treatment of intervertebral disc pathologies. JOR Spine, 2018, 1, e1003.	3.2	26
35	Osmosensing, osmosignalling and inflammation: how intervertebral disc cells respond to altered osmolarity. , 2018, 36, 231-250.		30
36	Advances in the Biofabrication of 3D Skin in vitro: Healthy and Pathological Models. Frontiers in Bioengineering and Biotechnology, 2018, 6, 154.	4.1	121

#	Article	IF	Citations
37	TRPC6 in simulated microgravity of intervertebral disc cells. European Spine Journal, 2018, 27, 2621-2630.	2.2	12
38	Inflammaging in the intervertebral disc. Clinical and Translational Neuroscience, 2018, 2, 2514183X1876114.	0.9	9
39	The Pathobiology of the Meniscus: A Comparison Between the Human and Dog. Frontiers in Veterinary Science, 2018, 5, 73.	2.2	9
40	p38 MAPK Facilitates Crosstalk Between Endoplasmic Reticulum Stress and IL-6 Release in the Intervertebral Disc. Frontiers in Immunology, 2018, 9, 1706.	4.8	37
41	Inflammaging in cervical and lumbar degenerated intervertebral discs: analysis of proinflammatory cytokine and TRP channel expression. European Spine Journal, 2018, 27, 564-577.	2.2	46
42	Antimicrobial activity of Lactobacillus salivarius and Lactobacillus fermentum against Staphylococcus aureus. Pathogens and Disease, 2017, 75, .	2.0	76
43	Hyaluronan supplementation as a mechanical regulator of cartilage tissue development under joint-kinematic-mimicking loading. Journal of the Royal Society Interface, 2017, 14, 20170255.	3.4	14
44	Stress and Alterations in Bones: An Interdisciplinary Perspective. Frontiers in Endocrinology, 2017, 8, 96.	3.5	38
45	Inflammatory Processes Associated with Canine Intervertebral Disc Herniation. Frontiers in Immunology, 2017, 8, 1681.	4.8	35
46	The role of transient receptor potential channels in joint diseases. , 2017, 34, 180-201.		30
47	The Natural Polyphenol Epigallocatechin Gallate Protects Intervertebral Disc Cells from Oxidative Stress. Oxidative Medicine and Cellular Longevity, 2016, 2016, 1-17.	4.0	49
48	An Inflammatory Nucleus Pulposus Tissue Culture Model to Test Molecular Regenerative Therapies: Validation with Epigallocatechin 3-Gallate. International Journal of Molecular Sciences, 2016, 17, 1640.	4.1	23
49	Stability of (â^')-epigallocatechin gallate and its activity in liquid formulations and delivery systems. Journal of Nutritional Biochemistry, 2016, 37, 1-12.	4.2	140
50	Chondrogenic Priming at Reduced Cell Density Enhances Cartilage Adhesion of Equine Allogeneic MSCs - a Loading Sensitive Phenomenon in an Organ Culture Study with 180 Explants. Cellular Physiology and Biochemistry, 2015, 37, 651-665.	1.6	17
51	Transient receptor potential vanilloid 2â€mediated shearâ€stress responses in C2C12 myoblasts are regulated by serum and extracellular matrix. FASEB Journal, 2015, 29, 4726-4737.	0.5	28
52	Regenerative Therapies for Equine Degenerative Joint Disease: A Preliminary Study. PLoS ONE, 2014, 9, e85917.	2.5	94
53	Activation of intervertebral disc cells by co-culture with notochordal cells, conditioned medium and hypoxia. BMC Musculoskeletal Disorders, 2014, 15, 422.	1.9	46
54	Expression and regulation of toll-like receptors (TLRs) in human intervertebral disc cells. European Spine Journal, 2014, 23, 1878-1891.	2.2	73

#	Article	IF	Citations
55	Allogenic Mesenchymal Stem Cells as a Treatment for Equine Degenerative Joint Disease: A Pilot Study. Current Stem Cell Research and Therapy, 2014, 9, 497-503.	1.3	53
56	Epigallocatechin 3-gallate suppresses interleukin-1Î²-induced inflammatory responses in intervertebral disc cells in vitro and reduces radiculopathic pain in rats. , 2014, 28, 372-386.		55
57	Inflammatory Mediators in Intervertebral Disk Degeneration and Discogenic Pain. Global Spine Journal, 2013, 3, 175-184.	2.3	164
58	Hyaluronic acid fragments enhance the inflammatory and catabolic response in human intervertebral disc cells through modulation of toll-like receptor 2 signalling pathways. Arthritis Research and Therapy, 2013, 15, R94.	3.5	81
59	Detrimental Role for Human High Temperature Requirement Serine Protease A1 (HTRA1) in the Pathogenesis of Intervertebral Disc (IVD) Degeneration. Journal of Biological Chemistry, 2012, 287, 21335-21345.	3.4	57
60	Curcuma DMSO extracts and curcumin exhibit an anti-inflammatory and anti-catabolic effect on human intervertebral disc cells, possibly by influencing TLR2 expression and JNK activity. Journal of Inflammation, 2012, 9, 29.	3.4	53
61	Age-related changes in human cervical, thoracal and lumbar intervertebral disc exhibit a strong intra-individual correlation. European Spine Journal, 2012, 21, 810-818.	2.2	56
62	Triptolide exhibits anti-inflammatory, anti-catabolic as well as anabolic effects and suppresses TLR expression and MAPK activity in IL-1Î² treated human intervertebral disc cells. European Spine Journal, 2012, 21, 850-859.	2.2	43
63	Inflammatory and catabolic signalling in intervertebral discs: The roles of NF-ï«B and MAP Kinases. , 2012, 23, 102-120.		181
64	Histological analysis of surgical lumbar intervertebral disc tissue provides evidence for an association between disc degeneration and increased body mass index. BMC Research Notes, 2011, 4, 497.	1.4	62
65	Bupivacaineâ€"the deadly friend of intervertebral disc cells?. Spine Journal, 2011, 11, 46-53.	1.3	35
66	Region-Dependent Aggrecan Degradation Patterns in the Rat Intervertebral Disc Are Affected by Mechanical Loading In Vivo. Spine, 2011, 36, 203-209.	2.0	33
67	Biological Response of the Intervertebral Disc to Repetitive Short-Term Cyclic Torsion. Spine, 2011, 36, 2021-2030.	2.0	50
68	The Red Wine Polyphenol Resveratrol Shows Promising Potential for the Treatment of Nucleus Pulposusâ€"Mediated Pain In Vitro and In Vivo. Spine, 2011, 36, E1373-E1384.	2.0	81
69	Age-Related Variation in Cell Density of Human Lumbar Intervertebral Disc. Spine, 2011, 36, 153-159.	2.0	117
70	Human MMP28 expression is unresponsive to inflammatory stimuli and does not correlate to the grade of intervertebral disc degeneration. Journal of Negative Results in BioMedicine, 2011, 10, 9.	1.4	10
71	Development of a Novel Automated Cell Isolation, Expansion, and Characterization Platform. Journal of the Association for Laboratory Automation, 2011, 16, 204-213.	2.8	11
72	Immunohistochemical identification of notochordal markers in cells in the aging human lumbar intervertebral disc. European Spine Journal, 2010, 19, 1761-1770.	2.2	101

#	Article	IF	Citations
73	In vivo remodeling of intervertebral discs in response to shortâ€•and longâ€‡term dynamic compression. Journal of Orthopaedic Research, 2009, 27, 1235-1242.	2.3	138
74	Matrix metalloproteinase expression levels suggest distinct enzyme roles during lumbar disc herniation and degeneration. European Spine Journal, 2009, 18, 1573-1586.	2.2	158
75	MSC response to pH levels found in degenerating intervertebral discs. Biochemical and Biophysical Research Communications, 2009, 379, 824-829.	2.1	98
76	Peroxynitrite Induces Gene Expression in Intervertebral Disc Cells. Spine, 2009, 34, 1127-1133.	2.0	46
77	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
78	Behavior of Mesenchymal Stem Cells in the Chemical Microenvironment of the Intervertebral Disc. Spine, 2008, 33, 1843-1849.	2.0	145
79	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
80	Regulation of gene expression in intervertebral disc cells by low and high hydrostatic pressure. European Spine Journal, 2006, 15, 372-378.	2.2	100
81	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
82	Immuno-Modulatory Effects of Intervertebral Disc Cells. Frontiers in Cell and Developmental Biology, 0, 10, .	3.7	20