

# Beth A Winkelstein

## List of Publications by Year in descending order

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160  
papers

4,827  
citations

81743

39  
h-index

133063

59  
g-index

162  
all docs

162  
docs citations

162  
times ranked

3315  
citing authors

#	ARTICLE	IF	CITATIONS
1	Painful temporomandibular joint overloading induces structural remodeling in the pericellular matrix of that joint's chondrocytes. <i>Journal of Orthopaedic Research</i> , 2022, 40, 348-358.	1.2	5
2	Learning Environments and Evidence-Based Practices in Bioengineering and Biomedical Engineering. <i>Biomedical Engineering Education</i> , 2022, 2, 1-16.	0.6	6
3	MMPs Regulate Neuronal Substance P After a Painful Equibiaxial Stretch in a Co-Culture Collagen Gel Model Simulating Injury of an Innervated Ligament. <i>Frontiers in Mechanical Engineering</i> , 2022, 8, .	0.8	0
4	Inhibiting the $\beta 1$ integrin subunit increases the strain threshold for neuronal dysfunction under tensile loading in collagen gels mimicking innervated ligaments. <i>Biomechanics and Modeling in Mechanobiology</i> , 2022, 21, 885-898.	1.4	1
5	Biomechanical Model of Low Back Pain. , 2022, , 457-460.		0
6	Increased substance P and synaptic remodeling occur in the trigeminal sensory system with sustained osteoarthritic temporomandibular joint sensitivity. <i>Pain Reports</i> , 2021, 6, e911.	1.4	5
7	MMPs in tissues retrieved during surgery from patients with TMJ disorders relate to pain more than to radiological damage score. <i>Journal of Orthopaedic Research</i> , 2021, , .	1.2	3
8	Local tissue heterogeneity may modulate neuronal responses via altered axon strain fields: insights about innervated joint capsules from a computational model. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021, 20, 2269-2285.	1.4	6
9	Early changes in brain network topology and activation of affective pathways predict persistent pain in the rat. <i>Pain</i> , 2021, 162, 45-55.	2.0	14
10	Inhibiting spinal secretory phospholipase A <sub>2</sub> after painful nerve root injury attenuates established pain and spinal neuronal hyperexcitability by altering spinal glutamatergic signaling. <i>Molecular Pain</i> , 2021, 17, 174480692110662.	1.0	8
11	Burst & High-Frequency Spinal Cord Stimulation Differentially Effect Spinal Neuronal Activity After Radiculopathy. <i>Annals of Biomedical Engineering</i> , 2020, 48, 112-120.	1.3	10
12	Intra-articular etanercept attenuates pain and hypoxia from TMJ loading in the rat. <i>Journal of Orthopaedic Research</i> , 2020, 38, 1316-1326.	1.2	14
13	Immediate inhibition of spinal secretory phospholipase A <sub>2</sub> prevents the pain and elevated spinal neuronal hyperexcitability and neuroimmune regulatory genes that develop with nerve root compression. <i>NeuroReport</i> , 2020, 31, 1084-1089.	0.6	7
14	Intra-articular collagenase in the spinal facet joint induces pain, DRG neuron dysregulation and increased MMP-1 absent evidence of joint destruction. <i>Scientific Reports</i> , 2020, 10, 21965.	1.6	7
15	Synthetic Secoisolariciresinol Diglucoside Attenuates Established Pain, Oxidative Stress and Neuroinflammation in a Rodent Model of Painful Radiculopathy. <i>Antioxidants</i> , 2020, 9, 1209.	2.2	7
16	Phospholipase A <sub>2</sub> Inhibitor-Loaded Phospholipid Micelles Abolish Neuropathic Pain. <i>ACS Nano</i> , 2020, 14, 8103-8115.	7.3	16
17	Changes in Neuronal Activity in the Anterior Cingulate Cortex and Primary Somatosensory Cortex With Nonlinear Burst and Tonic Spinal Cord Stimulation. <i>Neuromodulation</i> , 2020, 23, 594-604.	0.4	9
18	Pain After Whole-Body Vibration Exposure Is Frequency Dependent and Independent of the Resonant Frequency: Lessons From an In Vivo Rat Model. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	0.6	4

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19	Dietary polyphenols as a safe and novel intervention for modulating pain associated with intervertebral disc degeneration in an in-vivo rat model. <i>PLoS ONE</i> , 2019, 14, e0223435.	1.1	13
20	ANNUAL SPECIAL ISSUE "Biomechanical Engineering" 2018 Year in Review. <i>Journal of Biomechanical Engineering</i> , 2019, 141, .	0.6	0
21	Image-based multi-scale mechanical analysis of strain amplification in neurons embedded in collagen gel. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2019, 22, 113-129.	0.9	8
22	Physiologic facet capsule stretch can induce pain & upregulate matrix metalloproteinase-3 in the dorsal root ganglia when preceded by a physiological mechanical or nonpainful chemical exposure. <i>Clinical Biomechanics</i> , 2019, 64, 122-130.	0.5	4
23	Concentration-Dependent Effects of Fibroblast-Like Synoviocytes on Collagen Gel Multiscale Biomechanics and Neuronal Signaling: Implications for Modeling Human Ligamentous Tissues. <i>Journal of Biomechanical Engineering</i> , 2019, 141, .	0.6	8
24	Collagen organization regulates stretch-initiated pain-related neuronal signals in vitro: Implications for structure-function relationships in innervated ligaments. <i>Journal of Orthopaedic Research</i> , 2018, 36, 770-777.	1.2	11
25	Inter-subject FDG PET Brain Networks Exhibit Multi-scale Community Structure with Different Normalization Techniques. <i>Annals of Biomedical Engineering</i> , 2018, 46, 1001-1012.	1.3	10
26	Perspectives on Sharing Models and Related Resources in Computational Biomechanics Research. <i>Journal of Biomechanical Engineering</i> , 2018, 140, .	0.6	16
27	Multiscale mechanics of the cervical facet capsular ligament, with particular emphasis on anomalous fiber realignment prior to tissue failure. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018, 17, 133-145.	1.4	15
28	The equivalence of multi-axis spine systems: Recommended stiffness limits using a standardized testing protocol. <i>Journal of Biomechanics</i> , 2018, 70, 59-66.	0.9	6
29	Grading facial expression is a sensitive means to detect grimace differences in orofacial pain in a rat model. <i>Scientific Reports</i> , 2018, 8, 13894.	1.6	37
30	Pre-treatment with Meloxicam Prevents the Spinal Inflammation and Oxidative Stress in DRG Neurons that Accompany Painful Cervical Radiculopathy. <i>Neuroscience</i> , 2018, 388, 393-404.	1.1	26
31	Repeated High Rate Facet Capsular Stretch at Strains That are Below the Pain Threshold Induces Pain and Spinal Inflammation With Decreased Ligament Strength in the Rat. <i>Journal of Biomechanical Engineering</i> , 2018, 140, .	0.6	5
32	Inhibiting tumor necrosis factor- $\alpha$ at time of induced intervertebral disc injury limits long-term pain and degeneration in a rat model. <i>JOR Spine</i> , 2018, 1, e1014.	1.5	50
33	The role of spinal thrombin through protease-activated receptor 1 in hyperalgesia after neural injury. <i>Journal of Neurosurgery: Spine</i> , 2017, 26, 532-541.	0.9	5
34	The Interface of Mechanics and Nociception in Joint Pathophysiology: Insights From the Facet and Temporomandibular Joints. <i>Journal of Biomechanical Engineering</i> , 2017, 139, .	0.6	20
35	Techniques for Multiscale Neuronal Regulation via Therapeutic Materials and Drug Design. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 2744-2760.	2.6	5
36	Collagen Organization in Facet Capsular Ligaments Varies With Spinal Region and With Ligament Deformation. <i>Journal of Biomechanical Engineering</i> , 2017, 139, .	0.6	27

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37	The Physiological Basis of Cervical Facet-Mediated Persistent Pain: Basic Science and Clinical Challenges. <i>Journal of Orthopaedic and Sports Physical Therapy</i> , 2017, 47, 450-461.	1.7	16
38	Painful Cervical Facet Joint Injury Is Accompanied by Changes in the Number of Excitatory and Inhibitory Synapses in the Superficial Dorsal Horn That Differentially Relate to Local Tissue Injury Severity. <i>Spine</i> , 2017, 42, E695-E701.	1.0	8
39	Tissue loading and microstructure regulate the deformation of embedded nerve fibres: predictions from single-scale and multiscale simulations. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20170326.	1.5	24
40	A Nociceptive Role for Integrin Signaling in Pain After Mechanical Injury to the Spinal Facet Capsular Ligament. <i>Annals of Biomedical Engineering</i> , 2017, 45, 2813-2825.	1.3	17
41	Superoxide Dismutase-Loaded Porous Polymersomes as Highly Efficient Antioxidants for Treating Neuropathic Pain. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700500.	3.9	41
42	Ablation of IB4 non-peptidergic afferents in the rat facet joint prevents injury-induced pain and thalamic hyperexcitability via supraspinal glutamate transporters. <i>Neuroscience Letters</i> , 2017, 655, 82-89.	1.0	6
43	Nerve Root Compression Increases Spinal Astrocytic Vimentin in Parallel With Sustained Pain and Endothelial Vimentin in Association With Spinal Vascular Reestablishment. <i>Spine</i> , 2017, 42, 1434-1439.	1.0	6
44	ANNUAL SPECIAL ISSUE "Biomechanical Engineering: Year in Review". <i>Journal of Biomechanical Engineering</i> , 2017, 139, .	0.6	0
45	Use of the Rat Grimace Scale to Evaluate Neuropathic Pain in a Model of Cervical Radiculopathy. <i>Comparative Medicine</i> , 2017, 67, 34-42.	0.4	22
46	Developmental Changes in Pain and Spinal Immune Gene Expression after Radicular Trauma in the Rat. <i>Frontiers in Neurology</i> , 2016, 7, 223.	1.1	6
47	Whole-body vibration induces pain and lumbar spinal inflammation responses in the rat that vary with the vibration profile. <i>Journal of Orthopaedic Research</i> , 2016, 34, 1439-1446.	1.2	20
48	Upper Cervical Spine Loading Simulating a Dynamic Low-Speed Collision Significantly Increases the Risk of Pain Compared to Quasi-Static Loading With Equivalent Neck Kinematics. <i>Journal of Biomechanical Engineering</i> , 2016, 138, .	0.6	3
49	Tissue Strain Reorganizes Collagen With a Switchlike Response That Regulates Neuronal Extracellular Signal-Regulated Kinase Phosphorylation In Vitro: Implications for Ligamentous Injury and Mechanotransduction. <i>Journal of Biomechanical Engineering</i> , 2016, 138, 021013.	0.6	25
50	Spinal Astrocytic Thrombospondin-4 Induced by Excitatory Neuronal Signaling Mediates Pain After Facet Capsule Injury. <i>Annals of Biomedical Engineering</i> , 2016, 44, 3215-3224.	1.3	8
51	Development of a Rat Model of Mechanically Induced Tunable Pain and Associated Temporomandibular Joint Responses. <i>Journal of Oral and Maxillofacial Surgery</i> , 2016, 74, 54.e1-54.e10.	0.5	24
52	Stretch-induced network reconfiguration of collagen fibres in the human facet capsular ligament. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20150883.	1.5	13
53	Annular puncture with tumor necrosis factor-alpha injection enhances painful behavior with disc degeneration in vivo. <i>Spine Journal</i> , 2016, 16, 420-431.	0.6	64
54	Salmon-derived thrombin inhibits development of chronic pain through an endothelial barrier protective mechanism dependent on APC. <i>Biomaterials</i> , 2016, 80, 96-105.	5.7	20

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55	Relevant Anatomic and Morphological Measurements of the Rat Spine. <i>Spine</i> , 2015, 40, E1084-E1092.	1.0	32
56	Pain Biomechanics. , 2015, , 549-580.		2
57	Whole-body Vibration at Thoracic Resonance Induces Sustained Pain and Widespread Cervical Neuroinflammation in the Rat. <i>Clinical Orthopaedics and Related Research</i> , 2015, 473, 2936-2947.	0.7	17
58	Assessment of functional and behavioral changes sensitive to painful disc degeneration. <i>Journal of Orthopaedic Research</i> , 2015, 33, 755-764.	1.2	56
59	Burst and Tonic Spinal Cord Stimulation Differentially Activate GABAergic Mechanisms to Attenuate Pain in a Rat Model of Cervical Radiculopathy. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 1604-1613.	2.5	75
60	Stimulation Parameters Define the Effectiveness of Burst Spinal Cord Stimulation in a Rat Model of Neuropathic Pain. <i>Neuromodulation</i> , 2015, 18, 1-8.	0.4	56
61	Intra-articular nerve growth factor regulates development, but not maintenance, of injury-induced facet joint pain & spinal neuronal hypersensitivity. <i>Osteoarthritis and Cartilage</i> , 2015, 23, 1999-2008.	0.6	24
62	Pain from intra-articular NGF or joint injury in the rat requires contributions from peptidergic joint afferents. <i>Neuroscience Letters</i> , 2015, 604, 193-198.	1.0	24
63	Thrombospondin-4 and excitatory synaptogenesis promote spinal sensitization after painful mechanical joint injury. <i>Experimental Neurology</i> , 2015, 264, 111-120.	2.0	37
64	Advanced Multi-Axis Spine Testing: Clinical Relevance and Research Recommendations. <i>International Journal of Spine Surgery</i> , 2015, 9, 34.	0.7	9
65	Riluzole effects on behavioral sensitivity and the development of axonal damage and spinal modifications that occur after painful nerve root compression. <i>Journal of Neurosurgery: Spine</i> , 2014, 20, 751-762.	0.9	25
66	Characterization of the Frequency and Muscle Responses of the Lumbar and Thoracic Spines of Seated Volunteers During Sinusoidal Whole Body Vibration. <i>Journal of Biomechanical Engineering</i> , 2014, 136, 101002.	0.6	28
67	Intervertebral Disc Herniation: Pathophysiology and Emerging Therapies. , 2014, , 305-326.		8
68	Kinematic Magnetic Resonance Imaging to Define the Cervical Facet Joint Space for the Spine in Neutral and Torsion. <i>Spine</i> , 2014, 39, 664-672.	1.0	6
69	Increased Interleukin-1 $\beta$ and Prostaglandin E2 Expression in the Spinal Cord at 1 Day After Painful Facet Joint Injury. <i>Spine</i> , 2014, 39, 207-212.	1.0	28
70	Sustained Neuronal Hyperexcitability Is Evident in the Thalamus After a Transient Cervical Radicular Injury. <i>Spine</i> , 2014, 39, E870-E877.	1.0	9
71	Upregulation of BDNF and NGF in Cervical Intervertebral Discs Exposed to Painful Whole-Body Vibration. <i>Spine</i> , 2014, 39, 1542-1548.	1.0	32
72	Upregulation of GLT $\alpha$ 1 by treatment with ceftriaxone alleviates radicular pain by reducing spinal astrocyte activation and neuronal hyperexcitability. <i>Journal of Neuroscience Research</i> , 2014, 92, 116-129.	1.3	44

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73	Early afferent activity from the facet joint after painful trauma to its capsule potentiates neuronal excitability and glutamate signaling in the spinal cord. <i>Pain</i> , 2014, 155, 1878-1887.	2.0	23
74	Ablating Spinal NK1-Bearing Neurons Eliminates the Development of Pain and Reduces Spinal Neuronal Hyperexcitability and Inflammation From Mechanical Joint Injury in the Rat. <i>Journal of Pain</i> , 2014, 15, 378-386.	0.7	32
75	Whole body vibration induces forepaw and hind paw behavioral sensitivity in the rat. <i>Journal of Orthopaedic Research</i> , 2013, 31, 1739-1744.	1.2	13
76	Brain-derived neurotrophic factor is upregulated in the cervical dorsal root ganglia and spinal cord and contributes to the maintenance of pain from facet joint injury in the rat. <i>Journal of Neuroscience Research</i> , 2013, 91, 1312-1321.	1.3	32
77	Gabapentin Alleviates Facet-Mediated Pain in the Rat Through Reduced Neuronal Hyperexcitability and Astrocytic Activation in the Spinal Cord. <i>Journal of Pain</i> , 2013, 14, 1564-1572.	0.7	12
78	Three-dimensional kinematic stress magnetic resonance image analysis shows promise for detecting altered anatomical relationships of tissues in the cervical spine associated with painful radiculopathy. <i>Medical Hypotheses</i> , 2013, 81, 738-744.	0.8	2
79	Spinal neuronal plasticity is evident within 1 day after a painful cervical facet joint injury. <i>Neuroscience Letters</i> , 2013, 542, 102-106.	1.0	27
80	Ketorolac Reduces Spinal Astrocytic Activation and PAR1 Expression Associated with Attenuation of Pain after Facet Joint Injury. <i>Journal of Neurotrauma</i> , 2013, 30, 818-825.	1.7	29
81	ProDisc Cervical Arthroplasty Does Not Alter Facet Joint Contact Pressure During Lateral Bending or Axial Torsion. <i>Spine</i> , 2013, 38, E84-E93.	1.0	19
82	An Anatomical and Immunohistochemical Characterization of Afferents Innervating the C6-C7 Facet Joint After Painful Joint Loading in the Rat. <i>Spine</i> , 2013, 38, E325-E331.	1.0	20
83	The Prostaglandin E2 Receptor, EP2, Is Upregulated in the Dorsal Root Ganglion After Painful Cervical Facet Joint Injury in the Rat. <i>Spine</i> , 2013, 38, 217-222.	1.0	17
84	Salmon and Human Thrombin Differentially Regulate Radicular Pain, Glial-Induced Inflammation and Spinal Neuronal Excitability through Protease-Activated Receptor-1. <i>PLoS ONE</i> , 2013, 8, e80006.	1.1	12
85	Biomechanical Model of Low Back Pain. , 2013, , 1-5.		0
86	The roles of mechanical compression and chemical irritation in regulating spinal neuronal signaling in painful cervical nerve root injury. <i>Stapp Car Crash Journal</i> , 2013, 57, 219-42.	1.1	8
87	The failure response of the human cervical facet capsular ligament during facet joint retraction. <i>Journal of Biomechanics</i> , 2012, 45, 2325-2329.	0.9	11
88	Facet joint contact pressure is not significantly affected by ProDisc cervical disc arthroplasty in sagittal bending: a single-level cadaveric study. <i>Spine Journal</i> , 2012, 12, 949-959.	0.6	20
89	Whiplash-like facet joint loading initiates glutamatergic responses in the DRG and spinal cord associated with behavioral hypersensitivity. <i>Brain Research</i> , 2012, 1461, 51-63.	1.1	43
90	Imaging Approaches to Quantify Tissue Structure and Function from the Microscale to the Macroscale. , 2012, , 485-512.		0

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91	Preconditioning is Correlated With Altered Collagen Fiber Alignment in Ligament. <i>Journal of Biomechanical Engineering</i> , 2011, 133, 064506.	0.6	51
92	Activating transcription factor 4, a mediator of the integrated stress response, is increased in the dorsal root ganglia following painful facet joint distraction. <i>Neuroscience</i> , 2011, 193, 377-386.	1.1	28
93	Superparamagnetic Iron Oxide-Enhanced Magnetic Resonance Imaging of Neuroinflammation in a Rat Model of Radicular Pain. <i>Molecular Imaging</i> , 2011, 10, 7290.2010.00042.	0.7	17
94	The Role of Tissue Damage in Whiplash-Associated Disorders. <i>Spine</i> , 2011, 36, S309-S315.	1.0	101
95	How Can Animal Models Inform on the Transition to Chronic Symptoms in Whiplash?. <i>Spine</i> , 2011, 36, S218-S225.	1.0	27
96	Pressure Measurement in the Cervical Spinal Facet Joint. <i>Spine</i> , 2011, 36, 1197-1203.	1.0	10
97	Inflammatory Cytokine and Chemokine Expression Is Differentially Modulated Acutely in the Dorsal Root Ganglion in Response to Different Nerve Root Compressions. <i>Spine</i> , 2011, 36, 197-202.	1.0	13
98	The potential for salmon fibrin and thrombin to mitigate pain subsequent to cervical nerve root injury. <i>Biomaterials</i> , 2011, 32, 9738-9746.	5.7	11
99	Detection of Altered Collagen Fiber Alignment in the Cervical Facet Capsule After Whiplash-Like Joint Retraction. <i>Annals of Biomedical Engineering</i> , 2011, 39, 2163-2173.	1.3	22
100	Impaired performance on the angle board test is induced in a model of painful whiplash injury but is only transient in a model of cervical radiculopathy. <i>Journal of Orthopaedic Research</i> , 2011, 29, 562-566.	1.2	2
101	Schwann Cell Proliferation and Macrophage Infiltration Are Evident at Day 14 after Painful Cervical Nerve Root Compression in the Rat. <i>Journal of Neurotrauma</i> , 2011, 28, 2429-2438.	1.7	29
102	Spinal Facet Joint Biomechanics and Mechanotransduction in Normal, Injury and Degenerative Conditions. <i>Journal of Biomechanical Engineering</i> , 2011, 133, 071010.	0.6	247
103	Superparamagnetic iron oxide-enhanced magnetic resonance imaging of neuroinflammation in a rat model of radicular pain. <i>Molecular Imaging</i> , 2011, 10, 206-14.	0.7	12
104	Development of a duration threshold for modulating evoked neuronal responses after nerve root compression injury. <i>Stapp Car Crash Journal</i> , 2011, 55, 1-24.	1.1	10
105	Cytokine Antagonism Reduces Pain and Modulates Spinal Astrocytic Reactivity After Cervical Nerve Root Compression. <i>Annals of Biomedical Engineering</i> , 2010, 38, 2563-2576.	1.3	35
106	Neuronal hyperexcitability in the dorsal horn after painful facet joint injury. <i>Pain</i> , 2010, 151, 414-421.	2.0	62
107	Anomalous fiber realignment during tensile loading of the rat facet capsular ligament identifies mechanically induced damage and physiological dysfunction. <i>Journal of Biomechanics</i> , 2010, 43, 1870-1875.	0.9	30
108	Full field strain measurements of collagenous tissue by tracking fiber alignment through vector correlation. <i>Journal of Biomechanics</i> , 2010, 43, 2637-2640.	0.9	24

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109	Simulated Whiplash Modulates Expression of the Glutamatergic System in the Spinal Cord Suggesting Spinal Plasticity Is Associated with Painful Dynamic Cervical Facet Loading. <i>Journal of Neurotrauma</i> , 2010, 27, 163-174.	1.7	44
110	Metabotropic Glutamate Receptor-5 and Protein Kinase C-Epsilon Increase in Dorsal Root Ganglion Neurons and Spinal Glial Activation in an Adolescent Rat Model of Painful Neck Injury. <i>Journal of Neurotrauma</i> , 2010, 27, 2261-2271.	1.7	30
111	Nerve and Nerve Root Biomechanics. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , 2010, , 203-229.	0.7	6
112	Is there an antinociceptive role for peripheral brain-derived neurotrophic factor?. <i>Spine Journal</i> , 2010, 10, 733-735.	0.6	3
113	Time-Dependent Mechanics and Measures of Glial Activation and Behavioral Sensitivity in a Rodent Model of Radiculopathy. <i>Journal of Neurotrauma</i> , 2010, 27, 803-814.	1.7	36
114	A rat model of temporomandibular joint pain with histopathologic modifications. <i>Journal of Orofacial Pain</i> , 2010, 24, 298-304.	1.7	14
115	Vector correlation technique for pixel-wise detection of collagen fiber realignment during injurious tensile loading. <i>Journal of Biomedical Optics</i> , 2009, 14, 054010.	1.4	34
116	Spinal microglial proliferation is evident in a rat model of painful disc herniation both in the presence of behavioral hypersensitivity and following minocycline treatment sufficient to attenuate allodynia. <i>Journal of Neuroscience Research</i> , 2009, 87, 2709-2717.	1.3	26
117	Controlled release of GDNF reduces nerve root-mediated behavioral hypersensitivity. <i>Journal of Orthopaedic Research</i> , 2009, 27, 120-127.	1.2	11
118	The Anatomy and Biomechanics of Acute and Chronic Whiplash Injury. <i>Traffic Injury Prevention</i> , 2009, 10, 101-112.	0.6	98
119	Cytokine mRNA Expression in Painful Radiculopathy. <i>Journal of Pain</i> , 2009, 10, 90-99.	0.7	56
120	Joint Distraction Magnitude Is Associated With Different Behavioral Outcomes and Substance P Levels for Cervical Facet Joint Loading in the Rat. <i>Journal of Pain</i> , 2009, 10, 436-445.	0.7	56
121	Transient cervical nerve root compression modulates pain: Load thresholds for allodynia and sustained changes in spinal neuropeptide expression. <i>Journal of Biomechanics</i> , 2008, 41, 677-685.	0.9	44
122	Painful facet joint injury induces neuronal stress activation in the DRG: Implications for cellular mechanisms of pain. <i>Neuroscience Letters</i> , 2008, 443, 90-94.	1.0	42
123	Dorsal root compression produces myelinated axonal degeneration near the biomechanical thresholds for mechanical behavioral hypersensitivity. <i>Experimental Neurology</i> , 2008, 212, 482-489.	2.0	36
124	Altered collagen fiber kinematics define the onset of localized ligament damage during loading. <i>Journal of Applied Physiology</i> , 2008, 105, 1881-1888.	1.2	65
125	Capsular Ligament Involvement in the Development of Mechanical Hyperalgesia after Facet Joint Loading: Behavioral and Inflammatory Outcomes in a Rodent Model of Pain. <i>Journal of Neurotrauma</i> , 2008, 25, 1383-1393.	1.7	63
126	Rigid model-based 3D segmentation of the bones of joints in MR and CT images for motion analysis. <i>Medical Physics</i> , 2008, 35, 3637-3649.	1.6	21



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127	An Intact Facet Capsular Ligament Modulates Behavioral Sensitivity and Spinal Glial Activation Produced by Cervical Facet Joint Tension. <i>Spine</i> , 2008, 33, 856-862.	1.0	37
128	Head-Turned Postures Increase the Risk of Cervical Facet Capsule Injury During Whiplash. <i>Spine</i> , 2008, 33, 1643-1649.	1.0	27
129	Transduction, Transmission and Perception of Pain. , 2008, , 29-37.		2
130	The role of graded nerve root compression on axonal damage, neuropeptide changes, and pain-related behaviors. <i>Stapp Car Crash Journal</i> , 2008, 52, 33-58.	1.1	18
131	Cervical facet capsular ligament yield defines the threshold for injury and persistent joint-mediated neck pain. <i>Journal of Biomechanics</i> , 2007, 40, 2299-2306.	0.9	60
132	Chemical and mechanical nerve root insults induce differential behavioral sensitivity and glial activation that are enhanced in combination. <i>Brain Research</i> , 2007, 1181, 30-43.	1.1	51
133	Structural changes in the cervical facet capsular ligament: potential contributions to pain following subfailure loading. <i>Stapp Car Crash Journal</i> , 2007, 51, 169-87.	1.1	33
134	CT Imaging Techniques for Describing Motions of the Cervicothoracic Junction and Cervical Spine During Flexion, Extension, and Cervical Traction. <i>Spine</i> , 2006, 31, 44-50.	1.0	24
135	Tensile cervical facet capsule ligament mechanics: Failure and subfailure responses in the rat. <i>Journal of Biomechanics</i> , 2006, 39, 1256-1264.	0.9	34
136	Transient Cervical Nerve Root Compression in the Rat Induces Bilateral Forepaw Allodynia and Spinal Glial Activation: Mechanical Factors in Painful Neck Injuries. <i>Spine</i> , 2005, 30, 1924-1932.	1.0	73
137	Spinal Neuropeptide Responses in Persistent and Transient Pain Following Cervical Nerve Root Injury. <i>Spine</i> , 2005, 30, 2491-2496.	1.0	47
138	Mechanical Thresholds for Initiation and Persistence of Pain Following Nerve Root Injury: Mechanical and Chemical Contributions at Injury. <i>Journal of Biomechanical Engineering</i> , 2004, 126, 258-263.	0.6	30
139	A novel rodent neck pain model of facet-mediated behavioral hypersensitivity: implications for persistent pain and whiplash injury. <i>Journal of Neuroscience Methods</i> , 2004, 137, 151-159.	1.3	84
140	Mechanisms of central sensitization, neuroimmunology & injury biomechanics in persistent pain: implications for musculoskeletal disorders. <i>Journal of Electromyography and Kinesiology</i> , 2004, 14, 87-93.	0.7	59
141	In vivo cervical facet capsule distraction: mechanical implications for whiplash and neck pain. <i>Stapp Car Crash Journal</i> , 2004, 48, 373-95.	1.1	47
142	Lumbar Nerve Root Injury Induces Central Nervous System Neuroimmune Activation and Neuroinflammation in the Rat. <i>Spine</i> , 2002, 27, 1604-1613.	1.0	65
143	The Role of Mechanical Deformation in Lumbar Radiculopathy. <i>Spine</i> , 2002, 27, 27-33.	1.0	68
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