

# Masayuki Miyagi

## List of Publications by Year in descending order

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Version: 2024-02-01

103  
papers

2,348  
citations

218677

26  
h-index

254184

43  
g-index

103  
all docs

103  
docs citations

103  
times ranked

2407  
citing authors

#	ARTICLE	IF	CITATIONS
1	Radiographic evaluation of indirect decompression of mini-open anterior retroperitoneal lumbar interbody fusion: oblique lateral interbody fusion for degenerated lumbar spondylolisthesis. <i>European Spine Journal</i> , 2017, 26, 671-678.	2.2	180
2	Pain-related sensory innervation in monoiodoacetate-induced osteoarthritis in rat knees that gradually develops neuronal injury in addition to inflammatory pain. <i>BMC Musculoskeletal Disorders</i> , 2011, 12, 134.	1.9	173
3	Mini-Open Anterior Retroperitoneal Lumbar Interbody Fusion: Oblique Lateral Interbody Fusion for Lumbar Spinal Degeneration Disease. <i>Yonsei Medical Journal</i> , 2015, 56, 1051.	2.2	129
4	Pathomechanisms of discogenic low back pain in humans and animal models. <i>Spine Journal</i> , 2015, 15, 1347-1355.	1.3	123
5	Mini-Open Anterior Retroperitoneal Lumbar Interbody Fusion: Oblique Lateral Interbody Fusion for Degenerated Lumbar Spinal Kyphoscoliosis. <i>Asian Spine Journal</i> , 2015, 9, 565.	2.0	98
6	ISSLS Prize Winner. <i>Spine</i> , 2014, 39, 1345-1354.	2.0	89
7	Disk Injury in Rats Produces Persistent Increases in Pain-Related Neuropeptides in Dorsal Root Ganglia and Spinal Cord Glia but Only Transient Increases in Inflammatory Mediators. <i>Spine</i> , 2011, 36, 2260-2266.	2.0	78
8	ISSLS PRIZE IN CLINICAL SCIENCE 2019: clinical importance of trunk muscle mass for low back pain, spinal balance, and quality of life—a multicenter cross-sectional study. <i>European Spine Journal</i> , 2019, 28, 914-921.	2.2	56
9	ISSLS Prize Winner. <i>Spine</i> , 2012, 37, 1810-1818.	2.0	55
10	Nerve Growth Factor Regulation by TNF- $\alpha$ and IL-1 $\beta$ in Synovial Macrophages and Fibroblasts in Osteoarthritic Mice. <i>Journal of Immunology Research</i> , 2016, 2016, 1-8.	2.2	54
11	More than 6 Months of Teriparatide Treatment Was More Effective for Bone Union than Shorter Treatment Following Lumbar Posterolateral Fusion Surgery. <i>Asian Spine Journal</i> , 2015, 9, 573.	2.0	50
12	Assessment of Pain Behavior in a Rat Model of Intervertebral Disc Injury Using the Catwalk Gait Analysis System. <i>Spine</i> , 2013, 38, 1459-1465.	2.0	49
13	Efficacy of Direct Injection of Etanercept into Knee Joints for Pain in Moderate and Severe Knee Osteoarthritis. <i>Yonsei Medical Journal</i> , 2015, 56, 1379.	2.2	47
14	Oriented collagen tubes combined with basic fibroblast growth factor promote peripheral nerve regeneration in a 15Åmm sciatic nerve defect rat model. <i>Journal of Biomedical Materials Research - Part A</i> , 2017, 105, 8-14.	4.0	47
15	Single intradiscal injection of the interleukin-6 receptor antibody tocilizumab provides short-term relief of discogenic low back pain; prospective comparative cohort study. <i>Journal of Orthopaedic Science</i> , 2016, 21, 2-6.	1.1	43
16	Up-regulation of TNF $\alpha$ in DRG satellite cells following lumbar facet joint injury in rats. <i>European Spine Journal</i> , 2006, 15, 953-958.	2.2	41
17	Sensory nerve ingrowth, cytokines, and instability of discogenic low back pain: A review. <i>Spine Surgery and Related Research</i> , 2018, 2, 11-17.	0.7	41
18	Vascular endothelial growth factor expression and their action in the synovial membranes of patients with painful knee osteoarthritis. <i>BMC Musculoskeletal Disorders</i> , 2018, 19, 204.	1.9	41

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19	Changes in Nerve Growth Factor Expression and Macrophage Phenotype Following Intervertebral Disc Injury in Mice. <i>Journal of Orthopaedic Research</i> , 2019, 37, 1798-1804.	2.3	40
20	Diffusion tensor imaging of lumbar spinal nerve in subjects with degenerative lumbar disorders. <i>Magnetic Resonance Imaging</i> , 2015, 33, 956-961.	1.8	37
21	Macrophage-derived inflammatory cytokines regulate growth factors and pain-related molecules in mice with intervertebral disc injury. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2274-2279.	2.3	37
22	Change of Lumbar Ligamentum Flavum after Indirect Decompression Using Anterior Lumbar Interbody Fusion. <i>Asian Spine Journal</i> , 2017, 11, 105-112.	2.0	35
23	Investigation of resident and recruited macrophages following disc injury in mice. <i>Journal of Orthopaedic Research</i> , 2020, 38, 1703-1709.	2.3	34
24	Assessment of Gait in a Rat Model of Myofascial Inflammation Using the CatWalk System. <i>Spine</i> , 2011, 36, 1760-1764.	2.0	33
25	Efficacy of nerve growth factor antibody in a knee osteoarthritis pain model in mice. <i>BMC Musculoskeletal Disorders</i> , 2017, 18, 428.	1.9	32
26	Activation of calcitonin gene-related peptide signaling through the prostaglandin E2-EP1/EP2/EP4 receptor pathway in synovium of knee osteoarthritis patients. <i>Journal of Orthopaedic Surgery and Research</i> , 2016, 11, 117.	2.3	29
27	Increase and regulation of synovial calcitonin gene-related peptide expression in patients with painful knee osteoarthritis. <i>Journal of Pain Research</i> , 2017, Volume 10, 1099-1104.	2.0	29
28	Interleukin-6 and interleukin-6 receptor expression, localization, and involvement in pain-sensing neuron activation in a mouse intervertebral disc injury model. <i>Journal of Orthopaedic Research</i> , 2015, 33, 1508-1514.	2.3	28
29	Additional decompression at adjacent segments leads to adjacent segment degeneration after PLIF. <i>European Spine Journal</i> , 2013, 22, 1877-1883.	2.2	24
30	Pregabalin for Refractory Radicular Leg Pain due to Lumbar Spinal Stenosis: A Preliminary Prospective Study. <i>Pain Research and Management</i> , 2016, 2016, 1-10.	1.8	22
31	Transforming growth factor activating kinase 1 regulates extracellular matrix degrading enzymes and pain-related molecule expression following tumor necrosis factor- $\alpha$ stimulation of synovial cells: an in vitro study. <i>BMC Musculoskeletal Disorders</i> , 2017, 18, 283.	1.9	22
32	Miniopen Oblique Lateral L5-S1 Interbody Fusion: A Report of 2 Cases. <i>Case Reports in Orthopedics</i> , 2014, 2014, 1-5.	0.3	19
33	Less invasive corrective surgery using oblique lateral interbody fusion (OLIF) including L5-S1 fusion for severe lumbar kyphoscoliosis due to L4 compression fracture in a patient with Parkinson's disease: a case report. <i>BMC Research Notes</i> , 2015, 8, 126.	1.4	19
34	Increase of TRPV1-Immunoreactivity in Dorsal Root Ganglia Neurons Innervating the Femur in a Rat Model of Osteoporosis. <i>Yonsei Medical Journal</i> , 2014, 55, 1600.	2.2	18
35	Surgical outcomes of spinal fusion for osteoporotic vertebral fracture in the thoracolumbar spine: Comprehensive evaluations of 5 typical surgical fusion techniques. <i>Journal of Orthopaedic Science</i> , 2019, 24, 1020-1026.	1.1	18
36	Interspinous Ligament Lidocaine and Steroid Injections for the Management of Bastrup's Disease: A Case Series. <i>Asian Spine Journal</i> , 2014, 8, 260.	2.0	17

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37	PainVision Apparatus Is Effective for Assessing Low Back Pain. <i>Asian Spine Journal</i> , 2014, 8, 793.	2.0	17
38	Transforming growth factor- $\beta$ 2 stimulates nerve growth factor production in osteoarthritic synovium. <i>BMC Musculoskeletal Disorders</i> , 2019, 20, 204.	1.9	16
39	Surgical outcomes of spinal fusion for osteoporotic thoracolumbar vertebral fractures in patients with Parkinson's disease: what is the impact of Parkinson's disease on surgical outcome?. <i>BMC Musculoskeletal Disorders</i> , 2019, 20, 103.	1.9	16
40	Sequential CCL2 Expression Profile After Disc Injury in Mice. <i>Journal of Orthopaedic Research</i> , 2020, 38, 895-901.	2.3	16
41	Vein wrapping promotes M2 macrophage polarization in a rat chronic constriction injury model. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2210-2217.	2.3	15
42	Risk Factors for Proximal Junctional Fracture Following Fusion Surgery for Osteoporotic Vertebral Collapse with Delayed Neurological Deficits: A Retrospective Cohort Study of 403 Patients. <i>Spine Surgery and Related Research</i> , 2019, 3, 171-177.	0.7	15
43	Effect of bisphosphonates or teriparatide on mechanical complications after posterior instrumented fusion for osteoporotic vertebral fracture: a multi-center retrospective study. <i>BMC Musculoskeletal Disorders</i> , 2020, 21, 420.	1.9	15
44	Acceleration of bone formation during fracture healing by poly(hyaluronate) and basic fibroblast growth factor containing polycystic kidney disease and collagen-binding domains from <i>Clostridium histolyticum</i> collagenase. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 1372-1378.	4.0	14
45	Regulation of calcitonin gene-related peptide expression through the COX-2/mPGES-1/PGE2 pathway in the infrapatellar fat pad in knee osteoarthritis. <i>Lipids in Health and Disease</i> , 2018, 17, 215.	3.0	14
46	Evaluation of Lumbar Intervertebral Disc Degeneration Using T1 $\rho$ and T2 Magnetic Resonance Imaging in a Rabbit Disc Injury Model. <i>Asian Spine Journal</i> , 2018, 12, 317-324.	2.0	13
47	Hip-spine syndrome: cross-sectional-study of spinal alignment in patients with coxalgia. <i>HIP International</i> , 2019, 29, 21-25.	1.7	13
48	Role of CD14 <sup>+</sup> cells in inflammatory cytokine and pain-related molecule expression in human degenerated intervertebral discs. <i>Journal of Orthopaedic Research</i> , 2021, 39, 1755-1762.	2.3	13
49	Factors associated with pain-related disorders and gait disturbance scores from the Japanese orthopedic association back pain evaluation questionnaire and Oswestry Disability Index in patients with osteoporosis. <i>Archives of Osteoporosis</i> , 2022, 17, 1.	2.4	13
50	Differences in levels of inflammatory mediators in meniscal and synovial tissue of patients with meniscal lesions. <i>Journal of Experimental Orthopaedics</i> , 2016, 3, 7.	1.8	12
51	Body Composition in Japanese Girls with Adolescent Idiopathic Scoliosis. <i>Spine Surgery and Related Research</i> , 2021, 5, 68-74.	0.7	12
52	Incidence of Nocturnal Leg Cramps in Patients with Lumbar Spinal Stenosis before and after Conservative and Surgical Treatment. <i>Yonsei Medical Journal</i> , 2014, 55, 779.	2.2	11
53	Technical and Conceptual Review on the L5-S1 Oblique Lateral Interbody Fusion Surgery (OLIF51). <i>Spine Surgery and Related Research</i> , 2021, 5, 1-9.	0.7	11
54	<p></p>Increase in Tryptase and Its Role in the Synovial Membrane of Overweight and Obese Patients with Osteoarthritis of the Knee<p></p>. <i>Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy</i> , 2020, Volume 13, 1491-1497.	2.4	11

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55	The cytokine expression in synovial membrane and the relationship with pain and pathological findings at hip arthroscopy. <i>Journal of Experimental Orthopaedics</i> , 2017, 4, 12.	1.8	10
56	Wrapping With Basic Fibroblast Growth Factor-impregnated Collagen Sheet Reduces Rat Sciatic Nerve Allodynia. <i>Journal of Orthopaedic Research</i> , 2019, 37, 2258-2263.	2.3	10
57	Reduced TGF- $\beta$ 2 Expression and CD206-Positive Resident Macrophages in the Intervertebral Discs of Aged Mice. <i>BioMed Research International</i> , 2021, 2021, 1-7.	1.9	10
58	Safety and Efficacy of Treatment for Scoliosis Is Secondary to Spinal Muscular Atrophy Fused to Lumbar 5 Level. <i>Spine Surgery and Related Research</i> , 2018, 2, 294-298.	0.7	9
59	Classification of Chronic Back Muscle Degeneration after Spinal Surgery and Its Relationship with Low Back Pain. <i>Asian Spine Journal</i> , 2016, 10, 516.	2.0	9
60	The efficacy of nerve growth factor antibody in a mouse model of neuropathic cancer pain. <i>Experimental Animals</i> , 2016, 65, 337-343.	1.1	8
61	Relationship between synovial inflammatory cytokines and progression of osteoarthritis after hip arthroscopy: Experimental assessment. <i>Journal of Orthopaedic Surgery</i> , 2018, 26, 230949901877092.	1.0	8
62	Perioperative Complications in Posterior Spinal Fusion Surgery for Neuromuscular Scoliosis. <i>Spine Surgery and Related Research</i> , 2018, 2, 278-282.	0.7	8
63	Complications after spinal fixation surgery for osteoporotic vertebral collapse with neurological deficits: Japan Association of Spine Surgeons with ambition multicenter study. <i>Journal of Orthopaedic Science</i> , 2019, 24, 985-990.	1.1	8
64	Do Physical Symptoms Predict the Outcome of Surgical Fusion in Patients with Discogenic Low Back Pain?. <i>Asian Spine Journal</i> , 2016, 10, 509.	2.0	8
65	Progressive Change in Joint Degeneration in Patients with Knee or Hip Osteoarthritis Treated with Fentanyl in a Randomized Trial. <i>Yonsei Medical Journal</i> , 2014, 55, 1379.	2.2	7
66	Short- versus long-segment posterior spinal fusion with vertebroplasty for osteoporotic vertebral collapse with neurological impairment in thoracolumbar spine: a multicenter study. <i>BMC Musculoskeletal Disorders</i> , 2020, 21, 513.	1.9	7
67	A portable pneumatic compression device to prevent venous thromboembolism in orthopedic patients with the highest risks of both venous thrombosis and bleeding: A case series study. <i>Journal of Orthopaedic Surgery</i> , 2020, 28, 230949902090571.	1.0	7
68	Origin of M2 M $\phi$ and its macrophage polarization by TGF- $\beta$ 2 in a mice intervertebral injury model. <i>International Journal of Immunopathology and Pharmacology</i> , 2022, 36, 039463202211037.	2.1	7
69	Gender-specific analysis for the association between trunk muscle mass and spinal pathologies. <i>Scientific Reports</i> , 2021, 11, 7816.	3.3	6
70	Risk Factor for Poor Patient Satisfaction After Lumbar Spine Surgery in Elderly Patients Aged Over 80 years. <i>Clinical Spine Surgery</i> , 2021, 34, E223-E228.	1.3	6
71	Spinal Epidural Hematoma after Thoracolumbar Posterior Fusion Surgery without Decompression for Thoracic Vertebral Fracture. <i>Case Reports in Orthopedics</i> , 2016, 2016, 1-5.	0.3	5
72	Efficacy of Anti-NaV1.7 Antibody on the Sensory Nervous System in a Rat Model of Lumbar Intervertebral Disc Injury. <i>Yonsei Medical Journal</i> , 2016, 57, 748.	2.2	5

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73	Muscle injury in rats induces upregulation of inflammatory cytokines in injured muscle and calcitonin gene-related peptide in dorsal root ganglia innervating the injured muscle. <i>Muscle and Nerve</i> , 2016, 54, 776-782.	2.2	5
74	Regression of Retro-odontoid Pseudotumor Using External Orthosis without Atlantoaxial Fusion. <i>JBJS Case Connector</i> , 2019, 9, e0329-e0329.	0.3	5
75	Acceleration of bone union by in situ-formed hydrogel containing bone morphogenetic protein-2 in a mouse refractory fracture model. <i>Journal of Orthopaedic Surgery and Research</i> , 2020, 15, 426.	2.3	5
76	A High Body Mass Index and the Vacuum Phenomenon Upregulate Pain-Related Molecules in Human Degenerated Intervertebral Discs. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2973.	4.1	5
77	Answer to the Letter to the Editor of Wang Kai et al. concerning "Radiographic evaluation of indirect decompression of mini-open anterior retroperitoneal lumbar interbody fusion: oblique lateral interbody fusion for degenerated lumbar spondylolisthesis" by Jun Sato et al. <i>Eur Spine J</i> (2017) 26:671-678. <i>European Spine Journal</i> . 2018. 27. 240-241.	2.2	4
78	Posterior Spinal Correction and Fusion Surgery in Patients with Spinal Muscular Atrophy-Associated Scoliosis for Whom Treatment with Nusinersen Was Planned. <i>Spine Surgery and Related Research</i> , 2021, 5, 109-113.	0.7	4
79	Up-Regulation of Pain Behavior and Glial Activity in the Spinal Cord after Compression and Application of Nucleus Pulposus onto the Sciatic Nerve in Rats. <i>Asian Spine Journal</i> , 2014, 8, 549.	2.0	4
80	Evaluation of Behavior and Expression of Receptor Activator of Nuclear Factor-Kappa B Ligand in Dorsal Root Ganglia after Sciatic Nerve Compression and Application of Nucleus Pulposus in Rats. <i>Asian Spine Journal</i> , 2014, 8, 557.	2.0	4
81	Hyaluronic Acid (800kDa) Supplementation of University of Wisconsin Solution Improves Viability of Osteochondral Grafts and Reduces Matrix Metalloproteinase Expression during Cold Preservation. <i>Scientific World Journal</i> , The, 2015, 2015, 1-7.	2.1	3
82	Risk factors of cervical surgery related complications in patients older than 80 years. <i>Spine Surgery and Related Research</i> , 2017, 1, 179-184.	0.7	3
83	Possible Regulation of bFGF Expression by Mast Cells in Osteoarthritis Patients with Obesity: A Cross-Sectional Study. <i>Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy</i> , 2021, Volume 14, 3291-3297.	2.4	3
84	Association of occupational direct radiation exposure to the hands with longitudinal melanonychia and hand eczema in spine surgeons: a survey by the society for minimally invasive spinal treatment (MIST). <i>European Spine Journal</i> , 2021, 30, 3702-3708.	2.2	3
85	Factors Significantly Associated with Postoperative Neck Pain Deterioration after Surgery for Cervical Ossification of the Posterior Longitudinal Ligament: Study of a Cohort Using a Prospective Registry. <i>Journal of Clinical Medicine</i> , 2021, 10, 5026.	2.4	3
86	Treatment of nocturnal leg cramps by blockade of the medial branch of the deep peroneal nerve after lumbar spine surgery. <i>Brain and Behavior</i> , 2015, 5, e00370.	2.2	2
87	Basic Fibroblast Growth Factor-Anchored Multilayered Mesenchymal Cell Sheets Accelerate Periosteal Bone Formation. <i>BioMed Research International</i> , 2017, 2017, 1-8.	1.9	2
88	Cervical Hyperextension Treated by Posterior Spinal Correction and Fusion in A Patient with Ullrich Congenital Muscular Dystrophy. <i>JBJS Case Connector</i> , 2020, 10, e0392-e0392.	0.3	2
89	Management of regional bone bank during declaration of a state of emergency concerning the COVID-19 in Japan. <i>Cell and Tissue Banking</i> , 2021, 22, 703-709.	1.1	2
90	Prevalence and Characteristics of Spinal Sagittal Malalignment in Patients with Osteoporosis. <i>Journal of Clinical Medicine</i> , 2021, 10, 2827.	2.4	2

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91	Current Advances in Spinal Diseases of the Elderly: Introduction to the Special Issue. Journal of Clinical Medicine, 2021, 10, 3298.	2.4	2
92	Experience of an Orthopaedic Surgery Department Early During the COVID-19 Outbreak in Japan Including Real-Time Polymerase Chain Reaction Assay Results for SARS-CoV-2. Cureus, 2020, 12, e11140.	0.5	2
93	Nerve decompression surgery suppresses TNF $\alpha$ 's expression and T cell infiltration in a rat sciatic nerve chronic constriction injury model. Journal of Orthopaedic Research, 2022, 40, 2537-2545.	2.3	2
94	Decreased muscle mass and strength affected spinal sagittal malalignment. European Spine Journal, 2022, 31, 1431-1437.	2.2	2
95	Surgical treatment for suicidal jumper's fracture (unstable sacral fracture) with thoracolumbar burst fracture: a report of three cases. Spine Surgery and Related Research, 2017, 1, 100-106.	0.7	1
96	Spontaneous Spinal Epidural Hematoma in an Infant with Developmental Disabilities. Spine Surgery and Related Research, 2018, 2, 335-339.	0.7	1
97	Minimally invasive manganese-enhanced magnetic resonance imaging for the sciatic nerve tract tracing used intra-articularly administrated dextran-manganese encapsulated nanogels. JOR Spine, 2019, 2, e1059.	3.2	1
98	Improvements in Intractable Lumbar and Lower Extremity Symptoms after Systemic Administration of Tocilizumab, an Anti-interleukin-6 Receptor Antibody. Asian Spine Journal, 2021, , .	2.0	1
99	Neural Mechanisms of Discogenic Back Pain: How Does Nerve Growth Factor Play a Key Role?. Korean Journal of Spine, 2011, 8, 83.	0.9	1
100	Acceleration of Bone Healing by In Situ-Forming Dextran-Tyramine Conjugates Containing Basic Fibroblast Growth Factor in Mice. Cureus, 2020, 12, e10085.	0.5	1
101	Impact of obesity on cervical ossification of the posterior longitudinal ligament: a nationwide prospective study. Scientific Reports, 2022, 12, .	3.3	1
102	Remote Hemorrhage in the Cerebellum and Temporal Lobe after Lumbar Spine Surgery. Case Reports in Orthopedics, 2015, 2015, 1-5.	0.3	0
103	TNF- $\alpha$ Suppresses Apelin Receptor Expression in Mouse Quadriceps Femoris-Derived Cells. Current Issues in Molecular Biology, 2022, 44, 3146-3155.	2.4	0