

Ashish D Diwan

List of Publications by Year in descending order

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Version: 2024-02-01

119
papers

4,569
citations

126907

33
h-index

110387

64
g-index

121
all docs

121
docs citations

121
times ranked

5435
citing authors

#	ARTICLE	IF	CITATIONS
1	The Biology of Bone Grafting. Journal of the American Academy of Orthopaedic Surgeons, The, 2005, 13, 77-86.	2.5	638
2	Osteoporosis influences the early period of fracture healing in a rat osteoporotic model. Bone, 2001, 28, 80-86.	2.9	336
3	Mutations in GDF6 are associated with vertebral segmentation defects in Klippel-Feil syndrome. Human Mutation, 2008, 29, 1017-1027.	2.5	170
4	Review article: Burnout in emergency medicine physicians. EMA - Emergency Medicine Australasia, 2013, 25, 491-495.	1.1	159
5	Recurrent and Injurious Falls in the Year Following Hip Fracture: A Prospective Study of Incidence and Risk Factors From the Sarcopenia and Hip Fracture Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2009, 64A, 599-609.	3.6	154
6	Polymethylmethacrylate bone cements and additives: A review of the literature. World Journal of Orthopedics, 2013, 4, 67.	1.8	151
7	Nitric Oxide Modulates Fracture Healing. Journal of Bone and Mineral Research, 2000, 15, 342-351.	2.8	136
8	The role of BMP-7 in chondrogenic and osteogenic differentiation of human bone marrow multipotent mesenchymal stromal cells in vitro. Journal of Cellular Biochemistry, 2010, 109, 406-416.	2.6	130
9	Histologic Evaluation of the Efficacy of rhBMP-2 Compared With Autograft Bone in Sheep Spinal Anterior Interbody Fusion. Spine, 2002, 27, 567-575.	2.0	117
10	Restoring the constitutional alignment with a restrictive kinematic protocol improves quantitative soft-tissue balance in total knee arthroplasty: a randomized controlled trial. Bone and Joint Journal, 2020, 102-B, 117-124.	4.4	115
11	BMP-2 Enhances TGF- β -Mediated Chondrogenic Differentiation of Human Bone Marrow Multipotent Mesenchymal Stromal Cells in Alginate Bead Culture. Tissue Engineering - Part A, 2009, 15, 1311-1320.	3.1	104
12	Heterogeneity in Klippel-Feil syndrome: a new classification. Pediatric Radiology, 1998, 28, 967-974.	2.0	101
13	Bone morphogenetic protein-7 protects human intervertebral disc cells in vitro from apoptosis. Spine Journal, 2008, 8, 466-474.	1.3	74
14	Burnout in orthopaedic surgeons: a review. ANZ Journal of Surgery, 2013, 83, 512-515.	0.7	73
15	Methodology and Baseline Characteristics for the Sarcopenia and Hip Fracture Study: A 5-Year Prospective Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2009, 64A, 568-574.	3.6	72
16	The fate of transplanted xenogeneic bone marrow-derived stem cells in rat intervertebral discs. Journal of Orthopaedic Research, 2009, 27, 374-379.	2.3	69
17	BMP13 Prevents the Effects of Annular Injury in an Ovine Model. International Journal of Biological Sciences, 2009, 5, 388-396.	6.4	65
18	BMP-13 Emerges as a Potential Inhibitor of Bone Formation. International Journal of Biological Sciences, 2009, 5, 192-200.	6.4	63

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19	Estimation of thigh muscle cross-sectional area by dual-energy X-ray absorptiometry in frail elderly patients. <i>American Journal of Clinical Nutrition</i> , 2007, 86, 952-958.	4.7	59
20	Cell therapy for disc degenerationâ€”potentials and pitfalls. <i>Orthopedic Clinics of North America</i> , 2004, 35, 85-93.	1.2	57
21	Therapeutic potential of growth differentiation factors in the treatment of degenerative disc diseases. <i>JOR Spine</i> , 2019, 2, e1045.	3.2	55
22	Nitric Oxide Synthase Isoforms During Fracture Healing. <i>Journal of Bone and Mineral Research</i> , 2001, 16, 535-540.	2.8	53
23	Differentiation of Rodent Bone Marrow Mesenchymal Stem Cells into Intervertebral Disc-like Cells Following Coculture with Rat Disc Tissue. <i>Tissue Engineering - Part A</i> , 2009, 15, 2581-2593.	3.1	50
24	Deletion of iNOS gene impairs mouse fracture healing. <i>Bone</i> , 2005, 37, 32-36.	2.9	49
25	CURRENT CONCEPTS IN INTERVERTEBRAL DISK RESTORATION. <i>Orthopedic Clinics of North America</i> , 2000, 31, 453-464.	1.2	48
26	The timing of surgery in lumbar disc prolapse: A systematic review. <i>Indian Journal of Orthopaedics</i> , 2014, 48, 127-135.	1.1	45
27	Temporal expression of nitric oxide synthase isoforms in healing Achilles tendon. <i>Journal of Orthopaedic Research</i> , 2001, 19, 136-142.	2.3	44
28	Annular closure device for disc herniation: meta-analysis of clinical outcome and complications. <i>BMC Musculoskeletal Disorders</i> , 2018, 19, 290.	1.9	40
29	Leaping the hurdles in developing regenerative treatments for the intervertebral disc from preclinical to clinical. <i>JOR Spine</i> , 2018, 1, e1027.	3.2	40
30	Complication rates of different discectomy techniques for symptomatic lumbar disc herniation: a systematic review and meta-analysis. <i>European Spine Journal</i> , 2020, 29, 1752-1770.	2.2	40
31	Nucleus Pulposus Cellular Longevity by Telomerase Gene Therapy. <i>Spine</i> , 2007, 32, 1188-1196.	2.0	38
32	What is the Rate of Revision Discectomies After Primary Discectomy on a National Scale?. <i>Clinical Orthopaedics and Related Research</i> , 2017, 475, 2752-2762.	1.5	37
33	Backing up the stories: The psychological and social costs of chronic low-back pain. <i>International Journal of Spine Surgery</i> , 2013, 7, e29-e38.	1.5	36
34	Fat infiltration in the multifidus muscle is related to inflammatory cytokine expression in the muscle and epidural adipose tissue in individuals undergoing surgery for intervertebral disc herniation. <i>European Spine Journal</i> , 2021, 30, 837-845.	2.2	36
35	The molecular basis of intervertebral disk degeneration. <i>Orthopedic Clinics of North America</i> , 2003, 34, 209-219.	1.2	35
36	Singleâ€”Cell Transcriptome Profiling Reveals Multicellular Ecosystem of Nucleus Pulposus during Degeneration Progression. <i>Advanced Science</i> , 2022, 9, e2103631.	11.2	35

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37	Australian medical students and their choice of surgery as a career: a review. ANZ Journal of Surgery, 2014, 84, 653-655.	0.7	34
38	Failed degenerative lumbar spine surgery. Orthopedic Clinics of North America, 2003, 34, 309-324.	1.2	33
39	The Effect of Running Exercise on Intervertebral Disc Extracellular Matrix Production in a Rat Model. Spine, 2010, 35, 1429-1436.	2.0	33
40	Posterolateral Intertransverse Spinal Fusion Possible in Osteoporotic Rats With BMP-7 in a Higher Dose Delivered on a Composite Carrier. Spine, 2008, 33, 242-249.	2.0	32
41	Complication rates of different discectomy techniques for the treatment of lumbar disc herniation: a network meta-analysis. European Spine Journal, 2019, 28, 2588-2601.	2.2	32
42	Mesenchymal stem cells: potential application in intervertebral disc regeneration. Translational Pediatrics, 2014, 3, 71-90.	1.2	32
43	Degenerative Cervical Myelopathy: Insights into Its Pathobiology and Molecular Mechanisms. Journal of Clinical Medicine, 2021, 10, 1214.	2.4	31
44	Restoration of compressive loading properties of lumbar discs with a nucleus implant—a finite element analysis study. Spine Journal, 2010, 10, 602-609.	1.3	30
45	Localization of Nitric Oxide Synthases During Fracture Healing. Journal of Bone and Mineral Research, 2002, 17, 1470-1477.	2.8	29
46	Preoperative Magnetic Resonance Imaging Screening for a Surgical Decision Regarding the Approach for Anterior Spine Fusion at the Cervicothoracic Junction. Spine, 2002, 27, 675-681.	2.0	28
47	Unveiling the Bmp13 Enigma: Redundant Morphogen or Crucial Regulator?. International Journal of Biological Sciences, 2008, 4, 318-329.	6.4	28
48	Prevalence and Factors of Burnout among Australian Orthopaedic Trainees: A Cross-Sectional Study. Journal of Orthopaedic Surgery, 2014, 22, 374-377.	1.0	28
49	Advanced Strategies for the Regeneration of Lumbar Disc Annulus Fibrosus. International Journal of Molecular Sciences, 2020, 21, 4889.	4.1	28
50	ISSLS PRIZE IN BASIC SCIENCE 2018: Growth differentiation factor-6 attenuated pro-inflammatory molecular changes in the rabbit anular-puncture model and degenerated disc-induced pain generation in the rat xenograft radiculopathy model. European Spine Journal, 2018, 27, 739-751.	2.2	27
51	A Definition of "Flare" in Low Back Pain: A Multiphase Process Involving Perspectives of Individuals With Low Back Pain and Expert Consensus. Journal of Pain, 2019, 20, 1267-1275.	1.4	25
52	Expression of growth differentiation factor 6 in the human developing fetal spine retreats from vertebral ossifying regions and is restricted to cartilaginous tissues. Journal of Orthopaedic Research, 2016, 34, 279-289.	2.3	24
53	Tourette Syndrome and Klippel-Feil Anomaly in a Child with Chromosome 22q11 Duplication. Case Reports in Medicine, 2009, 2009, 1-5.	0.7	23
54	Demographic, clinical, and operative risk factors associated with postoperative adjacent segment disease in patients undergoing lumbar spine fusions: a systematic review and meta-analysis. Spine Journal, 2022, 22, 1038-1069.	1.3	22

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55	Pedicle screw-based posterior dynamic stabilizers for degenerative spine: <i>In vitro</i> biomechanical testing and clinical outcomes. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 3324-3340.	4.0	21
56	Expression and functional roles of estrogen receptor GPR30 in human intervertebral disc. <i>Journal of Steroid Biochemistry and Molecular Biology</i> , 2016, 158, 46-55.	2.5	20
57	Is L5-S1 motion segment different from the rest? A radiographic kinematic assessment of 72 patients with chronic low back pain. <i>European Spine Journal</i> , 2018, 27, 1127-1135.	2.2	20
58	Elastic fibers: The missing key to improve engineering concepts for reconstruction of the Nucleus Pulposus in the intervertebral disc. <i>Acta Biomaterialia</i> , 2020, 113, 407-416.	8.3	20
59	Smart orthopaedic implants: A targeted approach for continuous postoperative evaluation in the spine. <i>Journal of Biomechanics</i> , 2020, 104, 109690.	2.1	19
60	Surgeon-defined assessment is a poor predictor of knee balance in total knee arthroplasty: a prospective, multicenter study. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2021, 29, 498-506.	4.2	18
61	Fusion Versus Disk Replacement for Degenerative Conditions of the Lumbar and Cervical Spine: Quid Est Testimonium?. <i>Orthopedic Clinics of North America</i> , 2010, 41, 167-181.	1.2	16
62	Bone morphogenetic protein-7 accelerates fracture healing in osteoporotic rats. <i>Indian Journal of Orthopaedics</i> , 2013, 47, 540.	1.1	16
63	Unusual cause of third-body wear in total hip arthroplasty. <i>Journal of Arthroplasty</i> , 1997, 12, 586-588.	3.1	15
64	Localization of bone morphogenetic protein 13 in human intervertebral disc and its molecular and functional effects in vitro in 3D culture. <i>Journal of Orthopaedic Research</i> , 2015, 33, 1769-1775.	2.3	15
65	The ultrastructural organization of elastic fibers at the interface of the nucleus and annulus of the intervertebral disk. <i>Acta Biomaterialia</i> , 2020, 114, 323-332.	8.3	15
66	Bone Scans Are Reliable for the Identification of Lumbar Disk and Facet Pathology. <i>Global Spine Journal</i> , 2015, 5, 23-29.	2.3	14
67	GENE THERAPY FOR SPINE FUSION. <i>Orthopedic Clinics of North America</i> , 2000, 31, 473-484.	1.2	13
68	In Vivo Measurement of Facet Joint Nitric Oxide in Patients With Chronic Low Back Pain. <i>Spine</i> , 2007, 32, 1488-1492.	2.0	13
69	Does the Use of Intraoperative Pressure Sensors for Knee Balancing in Total Knee Arthroplasty Improve Clinical Outcomes? A Comparative Study With a Minimum Two-Year Follow-Up. <i>Journal of Arthroplasty</i> , 2021, 36, 514-519.	3.1	13
70	Current concepts in anterior surgery for thoracolumbar trauma. <i>Orthopedic Clinics of North America</i> , 2002, 33, 403-412.	1.2	11
71	Retroperitoneal lymphocele after lumbar total disc replacement: a case report and review of literature. <i>SAS Journal</i> , 2010, 4, 87-91.	1.3	11
72	Veillonella spondylodiscitis in a healthy 76-year-old lady. <i>European Spine Journal</i> , 2012, 21, 413-417.	2.2	11

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73	The association between pain scores and disc height change following discectomy surgery in lumbar disc herniation patients: a systematic review and meta-analysis. <i>European Spine Journal</i> , 2021, 30, 3265-3277.	2.2	11
74	Interpedicular kinematics in an in vitro biomechanical assessment of a bilateral lumbar spondylolytic defect. <i>Clinical Biomechanics</i> , 2014, 29, 1108-1115.	1.2	10
75	Is Stand-Alone Anterior Lumbar Interbody Fusion a Safe and Efficacious Treatment for Isthmic Spondylolisthesis of L5-S1?. <i>Global Spine Journal</i> , 2017, 7, 587-595.	2.3	10
76	Publication trends in spine research from 2007 to 2016: Comparison of the Orthopaedic Research Society Spine Section and the International Society for the Study of the Lumbar Spine. <i>JOR Spine</i> , 2018, 1, e1006.	3.2	10
77	Do Markers of Inflammation and/or Muscle Regeneration in Lumbar Multifidus Muscle and Fat Differ Between Individuals with Good or Poor Outcome Following Microdiscectomy for Lumbar Disc Herniation?. <i>Spine</i> , 2021, 46, 678-686.	2.0	10
78	Intraoperative pressure sensors improve soft-tissue balance but not clinical outcomes in total knee arthroplasty: a multicentre randomized controlled trial. <i>Bone and Joint Journal</i> , 2022, 104-B, 604-612.	4.4	10
79	A Kangaroo Spine Lumbar Motion Segment Model: Biomechanical Analysis of a Novel & In Situ Curing Nucleus Replacement Device. <i>Journal of Biomimetics, Biomaterials, and Tissue Engineering</i> , 0, 9, 25-35.	0.7	9
80	The Role of Sacral Slope in the Progression of a Bilateral Spondylolytic Defect at L5 to Spondylolisthesis: A Biomechanical Investigation Using Finite Element Analysis. <i>Global Spine Journal</i> , 2018, 8, 460-470.	2.3	9
81	Bony stress in the lumbar spine is associated with intervertebral disc degeneration and low back pain: a retrospective case-control MRI study of patients under 25 years of age. <i>European Spine Journal</i> , 2019, 28, 2470-2477.	2.2	9
82	Does soft tissue balancing using intraoperative pressure sensors improve clinical outcomes in total knee arthroplasty? A protocol of a multicentre randomised controlled trial. <i>BMJ Open</i> , 2019, 9, e027812.	1.9	9
83	Multiple Lumbar Pedicle Fractures in Osteopetrosis. <i>Spine</i> , 2010, 35, E311-E315.	2.0	8
84	Global and segmental kinematic changes following sequential resection of posterior osteoligamentous structures in the lumbar spine: An in vitro biomechanical investigation using pure moment testing protocols. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2015, 229, 812-821.	1.8	8
85	Regenerative Response of Degenerate Human Nucleus Pulposus Cells to GDF6 Stimulation. <i>International Journal of Molecular Sciences</i> , 2020, 21, 7143.	4.1	8
86	Growth differentiation factor-6 attenuates inflammatory and pain-related factors and degenerated disc-induced pain behaviors in rat model. <i>Journal of Orthopaedic Research</i> , 2021, 39, 959-970.	2.3	8
87	Nitric oxide modulates recombinant human bone morphogenetic protein-2-induced corticocancellous autograft incorporation: a study in rat intertransverse fusion. <i>European Spine Journal</i> , 2010, 19, 931-939.	2.2	7
88	Role of nutritional supplementation in elderly patients with hip fractures. <i>Journal of Orthopaedic Translation</i> , 2014, 2, 26-34.	3.9	7
89	Plasma processing of PDMS based spinal implants for covalent protein immobilization, cell attachment and spreading. <i>Journal of Materials Science: Materials in Medicine</i> , 2018, 29, 178.	3.6	7
90	When is spinal pain "neuropathic?". <i>Orthopedic Clinics of North America</i> , 2004, 35, 73-84.	1.2	6

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91	Technical note: the swimmer's view for cervical facet joint injections. <i>European Spine Journal</i> , 2006, 15, 1150-1152.	2.2	6
92	Post-traumatic thoracic scoliosis with rib head dislocation and intrusion into the spinal canal: a case report and review of literature. <i>European Spine Journal</i> , 2010, 19, 183-186.	2.2	6
93	Cartilage derived morphogenetic protein 2 – A potential therapy for intervertebral disc regeneration?. <i>Biologicals</i> , 2014, 42, 65-73.	1.4	6
94	A novel tool to provide predictable alignment data irrespective of source and image quality acquired on mobile phones: what engineers can offer clinicians. <i>European Spine Journal</i> , 2020, 29, 387-395.	2.2	6
95	Blood-Spinal Cord Barrier: Its Role in Spinal Disorders and Emerging Therapeutic Strategies. <i>NeuroSci</i> , 2022, 3, 1-27.	1.2	6
96	Threaded Cortical Bone Dowels in Lumbosacral Arthrodesis. <i>Clinical Orthopaedics and Related Research</i> , 2003, 414, 101-111.	1.5	5
97	Primum non nocere and randomised placebo-controlled surgical trials: a dilemma?. <i>ANZ Journal of Surgery</i> , 2009, 79, 508-509.	0.7	5
98	BMP-7 in Combination with Estrogen Enhances Bone Formation in a Fracture Callus Explant Culture. <i>Tohoku Journal of Experimental Medicine</i> , 2010, 221, 61-68.	1.2	5
99	Morphological characteristics of the kangaroo lumbar intervertebral discs and comparison with other animal models used in spine research. <i>European Spine Journal</i> , 2020, 29, 652-662.	2.2	5
100	Changes in Back Pain Scores after Bariatric Surgery in Obese Patients: A Systematic Review and Meta-Analysis. <i>Journal of Clinical Medicine</i> , 2021, 10, 1443.	2.4	5
101	Cartilage Derived Morphogenetic Protein-2 Induces Cell Migration and Its Chondrogenic Potential in C28/I2 Cells. <i>International Journal of Spine Surgery</i> , 2015, 9, 52.	1.5	5
102	An Interlocking Ligamentous Spinal Disk Arthroplasty with Neural Network Infrastructure. <i>Journal of Biomimetics, Biomaterials, and Tissue Engineering</i> , 2010, 7, 55-79.	0.7	4
103	Finite element modeling of temporal bone graft changes in XLIF: Quantifying biomechanical effects at adjacent levels. <i>Journal of Orthopaedic Research</i> , 2021, , .	2.3	4
104	Letters. <i>Spine</i> , 2014, 39, 921.	2.0	3
105	Mild (not severe) disc degeneration is implicated in the progression of bilateral L5 spondylolysis to spondylolisthesis. <i>BMC Musculoskeletal Disorders</i> , 2018, 19, 98.	1.9	3
106	Reliability, validity and generalizability of multidimensional pain assessment tools used in postoperative adult patients. <i>JBI Database of Systematic Reviews and Implementation Reports</i> , 2019, 17, 1334-1340.	1.7	3
107	Replacing the Nucleus Pulposus for Degenerative Disc Disease and Disc Herniation: Disc Preservation Following Discectomy. , 2019, , 1-20.		3
108	Assessment of degenerative cervical stenosis on T2-weighted MR imaging: sensitivity to change and reliability of mid-sagittal and axial plane metrics. <i>Spinal Cord</i> , 2020, 58, 238-246.	1.9	2

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109	Pedicle screw-based posterior dynamic stabilizers for degenerative spine: in vitro biomechanical testing and clinical outcomes. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 102, n/a-n/a.	4.0	2
110	A novel magnetic resonance imaging postprocessing technique for the assessment of intervertebral disc degenerationâ€”Correlation with histological grading in a rabbit disc degeneration model. <i>JOR Spine</i> , 2019, 2, e1060.	3.2	1
111	Pathophysiological Correlation between Cigarette Smoking and Amyotrophic Lateral Sclerosis. <i>NeuroSci</i> , 2021, 2, 120-134.	1.2	1
112	Cliniciansâ€™ perceptions around discectomy surgery for lumbar disc herniation: a survey of orthopaedic and neuro-surgeons in Australia and New Zealand. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2023, 143, 189-201.	2.4	1
113	Chronic low back pain: issues and management, part II. <i>Orthopedic Clinics of North America</i> , 2004, 35, ix.	1.2	0
114	An Overview of Intervertebral Disc Degeneration Therapies and an Evaluation of the Chondrogenic and Chemotactic Potential of CDMP-2. <i>Journal of Biomimetics, Biomaterials, and Tissue Engineering</i> , 2013, 18, 97-118.	0.7	0
115	Answer to the Letter to the Editor of Miao Yu et al. concerning â€œL5-S1 motion segment different from the rest? A radiographic kinematic assessment of 72 patients with chronic low back painâ€”by AB Sabnis et al. (<i>Eur. Spine J</i> ; 27(5):1127â€“1135). <i>European Spine Journal</i> , 2019, 28, 1249-1249.	2.2	0
116	Replacing the Nucleus Pulposus for Degenerative Disc Disease and Disc Herniation: Disc Preservation Following Discectomy. , 2021, , 1111-1129.		0
117	Intradiscal Therapeutics for Degenerative Disc Disease. , 2021, , 1091-1110.		0
118	Magnetic resonance elastography: A non-invasive biomarker for low back pain studies. <i>Biomedical Engineering Advances</i> , 2021, 2, 100014.	3.8	0
119	Intradiscal Therapeutics for Degenerative Disc Disease. , 2020, , 1-20.		0