

Ashish D Diwan

List of Publications by Year in descending order

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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	Cliniciansâ€™ perceptions around discectomy surgery for lumbar disc herniation: a survey of orthopaedic and neuro-surgeons in Australia and New Zealand. Archives of Orthopaedic and Trauma Surgery, 2023, 143, 189-201.	2.4	1
2	Singleâ€Cell Transcriptome Profiling Reveals Multicellular Ecosystem of Nucleus Pulposus during Degeneration Progression. Advanced Science, 2022, 9, e2103631.	11.2	35
3	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
4	Blood-Spinal Cord Barrier: Its Role in Spinal Disorders and Emerging Therapeutic Strategies. NeuroSci, 2022, 3, 1-27.	1.2	6
5	Intraoperative pressure sensors improve soft-tissue balance but not clinical outcomes in total knee arthroplasty: a multicentre randomized controlled trial. Bone and Joint Journal, 2022, 104-B, 604-612.	4.4	10
6	Surgeon-defined assessment is a poor predictor of knee balance in total knee arthroplasty: a prospective, multicenter study. Knee Surgery, Sports Traumatology, Arthroscopy, 2021, 29, 498-506.	4.2	18
7	Growth differentiation factorâ€™6 attenuates inflammatory and painâ€related factors and degenerated discâ€induced pain behaviors in rat model. Journal of Orthopaedic Research, 2021, 39, 959-970.	2.3	8
8	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. European Spine Journal, 2021, 30, 837-845.	2.2	36
9	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. Journal of Arthroplasty, 2021, 36, 514-519.	3.1	13
10	Replacing the Nucleus Pulposus for Degenerative Disc Disease and Disc Herniation: Disc Preservation Following Discectomy. , 2021, , 1111-1129.		0
11	Intradiscal Therapeutics for Degenerative Disc Disease. , 2021, , 1091-1110.		0
12	Degenerative Cervical Myelopathy: Insights into Its Pathobiology and Molecular Mechanisms. Journal of Clinical Medicine, 2021, 10, 1214.	2.4	31
13	Changes in Back Pain Scores after Bariatric Surgery in Obese Patients: A Systematic Review and Meta-Analysis. Journal of Clinical Medicine, 2021, 10, 1443.	2.4	5
14	Pathophysiological Correlation between Cigarette Smoking and Amyotrophic Lateral Sclerosis. NeuroSci, 2021, 2, 120-134.	1.2	1
15	The association between pain scores and disc height change following discectomy surgery in lumbar disc herniation patients: a systematic review and meta-analysis. European Spine Journal, 2021, 30, 3265-3277.	2.2	11
16	Finite element modeling of temporal bone graft changes in XLIF: Quantifying biomechanical effects at adjacent levels. Journal of Orthopaedic Research, 2021, , .	2.3	4
17	Magnetic resonance elastography: A non-invasive biomarker for low back pain studies. Biomedical Engineering Advances, 2021, 2, 100014.	3.8	0
18	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?. Spine, 2021, 46, 678-686.	2.0	10

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19	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
20	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
21	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
22	Regenerative Response of Degenerate Human Nucleus Pulposus Cells to GDF6 Stimulation. <i>International Journal of Molecular Sciences</i> , 2020, 21, 7143.	4.1	8
23	Advanced Strategies for the Regeneration of Lumbar Disc Annulus Fibrosus. <i>International Journal of Molecular Sciences</i> , 2020, 21, 4889.	4.1	28
24	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
25	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
26	Restoring the constitutional alignment with a restrictive kinematic protocol improves quantitative soft-tissue balance in total knee arthroplasty: a randomized controlled trial. <i>Bone and Joint Journal</i> , 2020, 102-B, 117-124.	4.4	115
27	Smart orthopaedic implants: A targeted approach for continuous postoperative evaluation in the spine. <i>Journal of Biomechanics</i> , 2020, 104, 109690.	2.1	19
28	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
29	Intradiscal Therapeutics for Degenerative Disc Disease. , 2020, , 1-20.		0
30	Answer to the Letter to the Editor of Miao Yu et al. concerning “L5-S1 motion segment different from the rest? A radiographic kinematic assessment of 72 patients with chronic low back pain” by AB Sabnis et al. (<i>Eur. Spine J</i> ; 27(5):1127-1135). <i>European Spine Journal</i> , 2019, 28, 1249-1249.	2.2	0
31	A novel magnetic resonance imaging postprocessing technique for the assessment of intervertebral disc degeneration—Correlation with histological grading in a rabbit disc degeneration model. <i>JOR Spine</i> , 2019, 2, e1060.	3.2	1
32	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
33	Complication rates of different discectomy techniques for the treatment of lumbar disc herniation: a network meta-analysis. <i>European Spine Journal</i> , 2019, 28, 2588-2601.	2.2	32
34	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
35	A Definition of “Flare” in Low Back Pain: A Multiphase Process Involving Perspectives of Individuals With Low Back Pain and Expert Consensus. <i>Journal of Pain</i> , 2019, 20, 1267-1275.	1.4	25
36	Therapeutic potential of growth differentiation factors in the treatment of degenerative disc diseases. <i>JOR Spine</i> , 2019, 2, e1045.	3.2	55

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37	Reliability, validity and generalizability of multidimensional pain assessment tools used in postoperative adult patients. JBI Database of Systematic Reviews and Implementation Reports, 2019, 17, 1334-1340.	1.7	3
38	Replacing the Nucleus Pulposus for Degenerative Disc Disease and Disc Herniation: Disc Preservation Following Discectomy. , 2019, , 1-20.		3
39	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
40	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. JOR Spine, 2018, 1, e1006.	3.2	10
41	The Role of Sacral Slope in the Progression of a Bilateral Spondylolytic Defect at L5 to Spondylolisthesis: A Biomechanical Investigation Using Finite Element Analysis. Global Spine Journal, 2018, 8, 460-470.	2.3	9
42	Mild (not severe) disc degeneration is implicated in the progression of bilateral L5 spondylolysis to spondylolisthesis. BMC Musculoskeletal Disorders, 2018, 19, 98.	1.9	3
43	Is L5-S1 motion segment different from the rest? A radiographic kinematic assessment of 72 patients with chronic low back pain. European Spine Journal, 2018, 27, 1127-1135.	2.2	20
44	Plasma processing of PDMS based spinal implants for covalent protein immobilization, cell attachment and spreading. Journal of Materials Science: Materials in Medicine, 2018, 29, 178.	3.6	7
45	Annular closure device for disc herniation: meta-analysis of clinical outcome and complications. BMC Musculoskeletal Disorders, 2018, 19, 290.	1.9	40
46	Leaping the hurdles in developing regenerative treatments for the intervertebral disc from preclinical to clinical. JOR Spine, 2018, 1, e1027.	3.2	40
47	What is the Rate of Revision Discectomies After Primary Discectomy on a National Scale?. Clinical Orthopaedics and Related Research, 2017, 475, 2752-2762.	1.5	37
48	Is Stand-Alone Anterior Lumbar Interbody Fusion a Safe and Efficacious Treatment for Isthmic Spondylolisthesis of L5-S1?. Global Spine Journal, 2017, 7, 587-595.	2.3	10
49	Expression and functional roles of estrogen receptor GPR30 in human intervertebral disc. Journal of Steroid Biochemistry and Molecular Biology, 2016, 158, 46-55.	2.5	20
50	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
51	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. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2015, 229, 812-821.	1.8	8
52	Bone Scans Are Reliable for the Identification of Lumbar Disk and Facet Pathology. Global Spine Journal, 2015, 5, 23-29.	2.3	14
53	Localization of bone morphogenetic protein 13 in human intervertebral disc and its molecular and functional effects in vitro in 3D culture. Journal of Orthopaedic Research, 2015, 33, 1769-1775.	2.3	15
54	Cartilage Derived Morphogenetic Protein-2 Induces Cell Migration and Its Chondrogenic Potential in C28/I2 Cells. International Journal of Spine Surgery, 2015, 9, 52.	1.5	5

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55	Letters. Spine, 2014, 39, 921.	2.0	3
56	The timing of surgery in lumbar disc prolapse: A systematic review. Indian Journal of Orthopaedics, 2014, 48, 127-135.	1.1	45
57	Interpedicular kinematics in an in vitro biomechanical assessment of a bilateral lumbar spondylyotic defect. Clinical Biomechanics, 2014, 29, 1108-1115.	1.2	10
58	Role of nutritional supplementation in elderly patients with hip fractures. Journal of Orthopaedic Translation, 2014, 2, 26-34.	3.9	7
59	Pedicle screw-based posterior dynamic stabilizers for degenerative spine: <i>In vitro</i> biomechanical testing and clinical outcomes. Journal of Biomedical Materials Research - Part A, 2014, 102, 3324-3340.	4.0	21
60	Australian medical students and their choice of surgery as a career: a review. ANZ Journal of Surgery, 2014, 84, 653-655.	0.7	34
61	Cartilage derived morphogenetic protein 2 – A potential therapy for intervertebral disc regeneration?. Biologicals, 2014, 42, 65-73.	1.4	6
62	Prevalence and Factors of Burnout among Australian Orthopaedic Trainees: A Cross-Sectional Study. Journal of Orthopaedic Surgery, 2014, 22, 374-377.	1.0	28
63	Mesenchymal stem cells: potential application in intervertebral disc regeneration. Translational Pediatrics, 2014, 3, 71-90.	1.2	32
64	An Overview of Intervertebral Disc Degeneration Therapies and an Evaluation of the Chondrogenic and Chemotactic Potential of CDMP-2. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 2013, 18, 97-118.	0.7	0
65	Review article: Burnout in emergency medicine physicians. EMA - Emergency Medicine Australasia, 2013, 25, 491-495.	1.1	159
66	Backing up the stories: The psychological and social costs of chronic low-back pain. International Journal of Spine Surgery, 2013, 7, e29-e38.	1.5	36
67	Bone morphogenetic protein-7 accelerates fracture healing in osteoporotic rats. Indian Journal of Orthopaedics, 2013, 47, 540.	1.1	16
68	Burnout in orthopaedic surgeons: a review. ANZ Journal of Surgery, 2013, 83, 512-515.	0.7	73
69	Polymethylmethacrylate bone cements and additives: A review of the literature. World Journal of Orthopedics, 2013, 4, 67.	1.8	151
70	Pedicle screw-based posterior dynamic stabilizers for degenerative spine: in vitro biomechanical testing and clinical outcomes. Journal of Biomedical Materials Research - Part A, 2013, 102, n/a-n/a.	4.0	2
71	Veillonella spondylodiscitis in a healthy 76-year-old lady. European Spine Journal, 2012, 21, 413-417.	2.2	11
72	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

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73	The Effect of Running Exercise on Intervertebral Disc Extracellular Matrix Production in a Rat Model. <i>Spine</i> , 2010, 35, 1429-1436.	2.0	33
74	Multiple Lumbar Pedicle Fractures in Osteopetrosis. <i>Spine</i> , 2010, 35, E311-E315.	2.0	8
75	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
76	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
77	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
78	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
79	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
80	Restoration of compressive loading properties of lumbar discs with a nucleus implant—a finite element analysis study. <i>Spine Journal</i> , 2010, 10, 602-609.	1.3	30
81	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
82	BMP13 Prevents the Effects of Annular Injury in an Ovine Model. <i>International Journal of Biological Sciences</i> , 2009, 5, 388-396.	6.4	65
83	BMP-13 Emerges as a Potential Inhibitor of Bone Formation. <i>International Journal of Biological Sciences</i> , 2009, 5, 192-200.	6.4	63
84	Tourette Syndrome and Klippel-Feil Anomaly in a Child with Chromosome 22q11 Duplication. <i>Case Reports in Medicine</i> , 2009, 2009, 1-5.	0.7	23
85	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
86	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. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2009, 64A, 599-609.	3.6	154
87	The fate of transplanted xenogeneic bone marrow-derived stem cells in rat intervertebral discs. <i>Journal of Orthopaedic Research</i> , 2009, 27, 374-379.	2.3	69
88	Primum non nocere and randomised placebo-controlled surgical trials: a dilemma?. <i>ANZ Journal of Surgery</i> , 2009, 79, 508-509.	0.7	5
89	BMP-2 Enhances TGF- β -Mediated Chondrogenic Differentiation of Human Bone Marrow Multipotent Mesenchymal Stromal Cells in Alginate Bead Culture. <i>Tissue Engineering - Part A</i> , 2009, 15, 1311-1320.	3.1	104
90	Methodology and Baseline Characteristics for the Sarcopenia and Hip Fracture Study: A 5-Year Prospective Study. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2009, 64A, 568-574.	3.6	72

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91	Mutations in GDF6 are associated with vertebral segmentation defects in Klippel-Feil syndrome. Human Mutation, 2008, 29, 1017-1027.	2.5	170
92	Bone morphogenetic protein-7 protects human intervertebral disc cells in vitro from apoptosis. Spine Journal, 2008, 8, 466-474.	1.3	74
93	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
94	Unveiling the Bmp13 Enigma: Redundant Morphogen or Crucial Regulator?. International Journal of Biological Sciences, 2008, 4, 318-329.	6.4	28
95	Nucleus Pulposus Cellular Longevity by Telomerase Gene Therapy. Spine, 2007, 32, 1188-1196.	2.0	38
96	In Vivo Measurement of Facet Joint Nitric Oxide in Patients With Chronic Low Back Pain. Spine, 2007, 32, 1488-1492.	2.0	13
97	Estimation of thigh muscle cross-sectional area by dual-energy X-ray absorptiometry in frail elderly patients. American Journal of Clinical Nutrition, 2007, 86, 952-958.	4.7	59
98	Technical note: the swimmer's view for cervical facet joint injections. European Spine Journal, 2006, 15, 1150-1152.	2.2	6
99	Deletion of iNOS gene impairs mouse fracture healing. Bone, 2005, 37, 32-36.	2.9	49
100	The Biology of Bone Grafting. Journal of the American Academy of Orthopaedic Surgeons, The, 2005, 13, 77-86.	2.5	638
101	Cell therapy for disc degeneration's potentials and pitfalls. Orthopedic Clinics of North America, 2004, 35, 85-93.	1.2	57
102	When is spinal pain "neuropathic?". Orthopedic Clinics of North America, 2004, 35, 73-84.	1.2	6
103	Chronic low back pain: issues and management, part II. Orthopedic Clinics of North America, 2004, 35, ix.	1.2	0
104	The molecular basis of intervertebral disk degeneration. Orthopedic Clinics of North America, 2003, 34, 209-219.	1.2	35
105	Failed degenerative lumbar spine surgery. Orthopedic Clinics of North America, 2003, 34, 309-324.	1.2	33
106	Threaded Cortical Bone Dowels in Lumbosacral Arthrodesis. Clinical Orthopaedics and Related Research, 2003, 414, 101-111.	1.5	5
107	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
108	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

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109	Current concepts in anterior surgery for thoracolumbar trauma. Orthopedic Clinics of North America, 2002, 33, 403-412.	1.2	11
110	Localization of Nitric Oxide Synthases During Fracture Healing. Journal of Bone and Mineral Research, 2002, 17, 1470-1477.	2.8	29
111	Osteoporosis influences the early period of fracture healing in a rat osteoporotic model. Bone, 2001, 28, 80-86.	2.9	336
112	Temporal expression of nitric oxide synthase isoforms in healing Achilles tendon. Journal of Orthopaedic Research, 2001, 19, 136-142.	2.3	44
113	Nitric Oxide Synthase Isoforms During Fracture Healing. Journal of Bone and Mineral Research, 2001, 16, 535-540.	2.8	53
114	CURRENT CONCEPTS IN INTERVERTEBRAL DISK RESTORATION. Orthopedic Clinics of North America, 2000, 31, 453-464.	1.2	48
115	GENE THERAPY FOR SPINE FUSION. Orthopedic Clinics of North America, 2000, 31, 473-484.	1.2	13
116	Nitric Oxide Modulates Fracture Healing. Journal of Bone and Mineral Research, 2000, 15, 342-351.	2.8	136
117	Heterogeneity in Klippel-Feil syndrome: a new classification. Pediatric Radiology, 1998, 28, 967-974.	2.0	101
118	Unusual cause of third-body wear in total hip arthroplasty. Journal of Arthroplasty, 1997, 12, 586-588.	3.1	15
119	A Kangaroo Spine Lumbar Motion Segment Model: Biomechanical Analysis of a Novel <i>In Situ</i> Curing Nucleus Replacement Device. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 0, 9, 25-35.	0.7	9