Frank Niemeyer

List of Publications by Year
in descending order

24	647	840776 11	580821 25
papers	citations	h-index	g-index

25	25	25	796
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cervical spine MRI phenotypes and prediction of pain, disability and adjacent segment degeneration/disease after ACDF. Journal of Orthopaedic Research, 2021, 39, 657-670.	2.3	13
2	Radiographic cervical spine degenerative findings: a study on a large population from age 18 to 97Âyears. European Spine Journal, 2021, 30, 431-443.	2.2	24
3	ISSLS Prize in Bioengineering Science 2021: in vivo sagittal motion of the lumbar spine in low back pain patientsâ€"a radiological big data study. European Spine Journal, 2021, 30, 1108-1116.	2.2	8
4	Simulating Metaphyseal Fracture Healing in the Distal Radius. Biomechanics, 2021, 1, 29-42.	1.2	5
5	The impact of age, sex, disc height loss and T1 slope on the upper and lower cervical lordosis: a large-scale radiologic study. European Spine Journal, 2021, 30, 2434-2442.	2.2	10
6	Sagittal wedging of intervertebral discs and vertebral bodies in the cervical spine and their associations with age, sex and cervical lordosis: A largeâ€scale morphological study. Clinical Anatomy, 2021, 34, 1111-1120.	2.7	2
7	A Deep Learning Model for the Accurate and Reliable Classification of Disc Degeneration Based on MRI Data. Investigative Radiology, 2021, 56, 78-85.	6.2	29
8	Estimating the three-dimensional vertebral orientation from a planar radiograph: Is it feasible?. Journal of Biomechanics, 2020, 102, 109328.	2.1	4
9	Cervical Spine Endplate Abnormalities and Association With Pain, Disability, and Adjacent Segment Degeneration After Anterior Cervical Discectomy and Fusion. Spine, 2020, 45, E917-E926.	2.0	15
10	The Impact of Modic Changes on Preoperative Symptoms and Clinical Outcomes in Anterior Cervical Discectomy and Fusion Patients. Neurospine, 2020, 17, 190-203.	2.9	9
11	Fully automated radiological analysis of spinal disorders and deformities: a deep learning approach. European Spine Journal, 2019, 28, 951-960.	2.2	98
12	Asymmetrical intrapleural pressure distribution: a cause for scoliosis? A computational analysis. European Journal of Applied Physiology, 2018, 118, 1315-1329.	2.5	7
13	Uncertainty analysis of material properties and morphology parameters in numerical models regarding the motion of lumbar vertebral segments. Computer Methods in Biomechanics and Biomedical Engineering, 2018, 21, 673-683.	1.6	6
14	Influence of morphology and material properties on the range of motion of the costovertebral joint â€“ a probabilistic finite element analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2018, 21, 731-739.	1.6	7
15	Do Prophylactic Knee Braces Protect the Knee Against Impacts or Tibial Moments? An In Vitro Multisensory Study. Orthopaedic Journal of Sports Medicine, 2018, 6, 232596711880539.	1.7	7
16	Exploring the Potential of Generative Adversarial Networks for Synthesizing Radiological Images of the Spine to be Used in In Silico Trials. Frontiers in Bioengineering and Biotechnology, 2018, 6, 53.	4.1	34
17	Characteristic morphological patterns within adolescent idiopathic scoliosis may be explained by mechanical loading. European Spine Journal, 2018, 27, 2184-2191.	2.2	14
18	Simulating lateral distraction osteogenesis. PLoS ONE, 2018, 13, e0194500.	2.5	12

#	Article	IF	Citations
19	Prediction of fracture healing under axial loading, shear loading and bending is possible using distortional and dilatational strains as determining mechanical stimuli. Journal of the Royal Society Interface, 2013, 10, 20130389.	3.4	42
20	Geometry strongly influences the response of numerical models of the lumbar spineâ€"A probabilistic finite element analysis. Journal of Biomechanics, 2012, 45, 1414-1423.	2.1	112
21	Effect of the fixator stiffness on the young regenerate bone after bone transport: Computational approach. Journal of Biomechanics, 2011, 44, 917-923.	2.1	26
22	Internal forces and moments in the femur of the rat during gait. Journal of Biomechanics, 2010, 43, 2473-2479.	2.1	53
23	Influence of the fixation stability on the healing time â€" A numerical study of a patient-specific fracture healing process. Clinical Biomechanics, 2010, 25, 606-612.	1.2	62
24	Simulation of the nutrient supply in fracture healing. Journal of Biomechanics, 2009, 42, 2575-2583.	2.1	47