

Eric A Nauman

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6657862/publications.pdf>

Version: 2024-02-01

69
papers

3,009
citations

236612

25
h-index

168136

53
g-index

69
all docs

69
docs citations

69
times ranked

2654
citing authors

#	ARTICLE	IF	CITATIONS
1	A preliminary model of football-related neural stress that integrates metabolomics with transcriptomics and virtual reality. <i>IScience</i> , 2022, 25, 103483.	1.9	2
2	Normalized Brain Tissueâ€œLevel Evaluation of Volumetric Changes of Youth Athletes Participating in Collision Sports. <i>Neurotrauma Reports</i> , 2022, 3, 57-69.	0.5	4
3	An EMG-Based Constitutive Law for Force Generation in Skeletal Muscle - Part I: Model Development. <i>Journal of Biomechanical Engineering</i> , 2022, , .	0.6	1
4	Metabolomic response to collegiate football participation: Pre- and Post-season analysis. <i>Scientific Reports</i> , 2022, 12, 3091.	1.6	4
5	An EMG-Based Constitutive Law for Force Generation in Skeletal Muscle - Part II: Model Validation On the Ankle Joint Complex. <i>Journal of Biomechanical Engineering</i> , 2022, , .	0.6	0
6	American Football Position-Specific Neurometabolic Changes in High School Athletes: A Magnetic Resonance Spectroscopic Study. <i>Journal of Neurotrauma</i> , 2022, 39, 1168-1182.	1.7	4
7	Multimodal Approaches to Preventing Asymptomatic Repetitive Head Injury in Adolescent Athletes. , 2021, , 333-355.		0
8	Development of brain atlases for early-to-middle adolescent collision-sport athletes. <i>Scientific Reports</i> , 2021, 11, 6440.	1.6	1
9	Evaluation of the Effectiveness of Newer Helmet Designs with Emergent Shell and Padding Technologies Versus Older Helmet Models for Preserving White Matter Following a Season of High School Football. <i>Annals of Biomedical Engineering</i> , 2021, 49, 2863-2874.	1.3	8
10	In vivo intervertebral disc deformation: intratissue strain patterns within adjacent discs during flexionâ€œextension. <i>Scientific Reports</i> , 2021, 11, 729.	1.6	14
11	Distribution of Head Acceleration Events Varies by Position and Play Type in North American Football. <i>Clinical Journal of Sport Medicine</i> , 2021, 31, e245-e250.	0.9	12
12	Head acceleration event metrics in youth contact sports more dependent on sport than level of play. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2021, 235, 208-221.	1.0	5
13	311â€œ...Heading a soccer ball and the characterization of parameters that influence its peak impact force. , 2021, , .		0
14	Accumulation of high magnitude acceleration events predicts cerebrovascular reactivity changes in female high school soccer athletes. <i>Brain Imaging and Behavior</i> , 2020, 14, 164-174.	1.1	28
15	Collagen Coating Effects on Feâ€œMn Bioresorbable Alloys. <i>Journal of Orthopaedic Research</i> , 2020, 38, 523-535.	1.2	12
16	The effects of loading-direction and strain-rate on the mechanical behaviors of human frontal skull bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 103, 103597.	1.5	16
17	Characterizing <sc>nearâ€œinfrared</sc> spectroscopy signal under hypercapnia. <i>Journal of Biophotonics</i> , 2020, 13, e202000173.	1.1	5
18	The Effect of Increasing Fracture Site Stiffness on Boneâ€œPin Interface Stress and Foot Contact Pressure within the Equine Distal Limb Transfixation Cast: A Finite Element Analysis. <i>Veterinary and Comparative Orthopaedics and Traumatology</i> , 2020, 33, 348-355.	0.2	0

#	ARTICLE	IF	CITATIONS
19	Finite deformation elastography of articular cartilage and biomaterials based on imaging and topology optimization. <i>Scientific Reports</i> , 2020, 10, 7980.	1.6	7
20	Mitigating the Consequences of Subconcussive Head Injuries. <i>Annual Review of Biomedical Engineering</i> , 2020, 22, 387-407.	5.7	13
21	Finite Element Analysis of Six Transcortical Pin Parameters and Their Effect on Bone-Pin Interface Stresses in the Equine Third Metacarpal Bone. <i>Veterinary and Comparative Orthopaedics and Traumatology</i> , 2020, 33, 121-129.	0.2	1
22	Brain Perfusion Mediates the Relationship Between miRNA Levels and Postural Control. <i>Cerebral Cortex Communications</i> , 2020, 1, tgaa078.	0.7	5
23	Evaluation of Impulse Attenuation by Football Helmets in the Frequency Domain. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	0.6	1
24	Factors affecting peak impact force during soccer headers and implications for the mitigation of head injuries. <i>PLoS ONE</i> , 2020, 15, e0240162.	1.1	10
25	Dependence on subconcussive impacts of brain metabolism in collision sport athletes: an MR spectroscopic study. <i>Brain Imaging and Behavior</i> , 2019, 13, 735-749.	1.1	42
26	Every hit matters: White matter diffusivity changes in high school football athletes are correlated with repetitive head acceleration event exposure. <i>NeuroImage: Clinical</i> , 2019, 24, 101930.	1.4	27
27	Impact attenuation of male and female lacrosse helmets using a modal impulse hammer. <i>Journal of Biomechanics</i> , 2019, 95, 109313.	0.9	8
28	Quantitative evaluation of impact attenuation by football helmets using a modal impulse hammer. <i>Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology</i> , 2019, 233, 301-311.	0.4	4
29	Investigation of porosity on mechanical properties, degradation and in-vitro cytotoxicity limit of Fe30Mn using space holder technique. <i>Materials Science and Engineering C</i> , 2019, 99, 1048-1057.	3.8	31
30	Mechanical Response of Human Muscle at Intermediate Strain Rates. <i>Journal of Biomechanical Engineering</i> , 2019, 141, .	0.6	2
31	KIAA0319 Genotype Predicts the Number of Past Concussions in a Division I Football Team: A Pilot Study. <i>Journal of Neurotrauma</i> , 2019, 36, 1115-1124.	1.7	7
32	Subconcussive trauma. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2018, 158, 245-255.	1.0	9
33	The effect of football helmet facemasks on impact behavior during linear drop tests. <i>Journal of Biomechanics</i> , 2018, 79, 227-231.	0.9	12
34	Functional MRI can detect changes in intratissue strains in a full thickness and critical sized ovine cartilage defect model. <i>Journal of Biomechanics</i> , 2018, 66, 18-25.	0.9	16
35	Cerebrovascular reactivity changes in asymptomatic female athletes attributable to high school soccer participation. <i>Brain Imaging and Behavior</i> , 2017, 11, 98-112.	1.1	72
36	Contributing Causes of Injury or Death in Grain Entrapment, Engulfment, and Extrication. <i>Journal of Agromedicine</i> , 2017, 22, 159-169.	0.9	9

#	ARTICLE	IF	CITATIONS
37	Bioresorbable Fe-Mn and Fe-Mn-HA Materials for Orthopedic Implantation: Enhancing Degradation through Porosity Control. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700120.	3.9	33
38	The Ability of an Aftermarket Helmet Add-On Device to Reduce Impact-Force Accelerations During Drop Tests. <i>Journal of Athletic Training</i> , 2017, 52, 802-808.	0.9	20
39	Reliability and accuracy of helmet-mounted and head-mounted devices used to measure head accelerations. <i>Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology</i> , 2017, 231, 144-153.	0.4	30
40	Nanoporous metals for biodegradable implants: Initial bone mesenchymal stem cell adhesion and degradation behavior. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 1747-1758.	2.1	19
41	In vivo articular cartilage deformation: noninvasive quantification of intratissue strain during joint contact in the human knee. <i>Scientific Reports</i> , 2016, 6, 19220.	1.6	105
42	Impact attenuation capabilities of football and lacrosse helmets. <i>Journal of Biomechanics</i> , 2016, 49, 2838-2844.	0.9	22
43	fMRI of Visual Working Memory in High School Football Players. <i>Developmental Neuropsychology</i> , 2015, 40, 63-68.	1.0	22
44	Post-Season Neurophysiological Deficits Assessed by ImpACT and fMRI in Athletes Competing in American Football. <i>Developmental Neuropsychology</i> , 2015, 40, 85-91.	1.0	39
45	Sub-Concussive Hit Characteristics Predict Deviant Brain Metabolism in Football Athletes. <i>Developmental Neuropsychology</i> , 2015, 40, 12-17.	1.0	63
46	The Role of Location of Subconcussive Head Impacts in fMRI Brain Activation Change. <i>Developmental Neuropsychology</i> , 2015, 40, 74-79.	1.0	31
47	Impact attenuation properties of new and used lacrosse helmets. <i>Journal of Biomechanics</i> , 2015, 48, 3782-3787.	0.9	15
48	Alteration of Default Mode Network in High School Football Athletes Due to Repetitive Subconcussive Mild Traumatic Brain Injury: A Resting-State Functional Magnetic Resonance Imaging Study. <i>Brain Connectivity</i> , 2015, 5, 91-101.	0.8	173
49	Effects of Repetitive Sub-Concussive Brain Injury on the Functional Connectivity of Default Mode Network in High School Football Athletes. <i>Developmental Neuropsychology</i> , 2015, 40, 51-56.	1.0	69
50	Collegiate women's soccer players suffer greater cumulative head impacts than their high school counterparts. <i>Journal of Biomechanics</i> , 2015, 48, 3720-3723.	0.9	122
51	The Role of Medical Imaging in the Recharacterization of Mild Traumatic Brain Injury Using Youth Sports as a Laboratory. <i>Frontiers in Neurology</i> , 2015, 6, 273.	1.1	35
52	Detecting Neurocognitive and Neurophysiological Changes as a Result of Subconcussive Blows Among High School Football Athletes. <i>Athletic Training & Sports Health Care</i> , 2014, 6, 119-127.	0.4	43
53	Biological variability in biomechanical engineering research: Significance and meta-analysis of current modeling practices. <i>Journal of Biomechanics</i> , 2014, 47, 1241-1250.	0.9	28
54	Functionally-Detected Cognitive Impairment in High School Football Players without Clinically-Diagnosed Concussion. <i>Journal of Neurotrauma</i> , 2014, 31, 327-338.	1.7	489

#	ARTICLE	IF	CITATIONS
55	MR Spectroscopic Evidence of Brain Injury in the Non-Diagnosed Collision Sport Athlete. <i>Developmental Neuropsychology</i> , 2014, 39, 459-473.	1.0	75
56	Comparison of intervertebral disc displacements measured under applied loading with MRI at 3.0T and 9.4T. <i>Journal of Biomechanics</i> , 2014, 47, 2801-2806.	0.9	11
57	Characterization of cancellous and cortical bone strain in the in vivo mouse tibial loading model using microCT-based finite element analysis. <i>Bone</i> , 2014, 66, 131-139.	1.4	84
58	Role of subconcussion in repetitive mild traumatic brain injury. <i>Journal of Neurosurgery</i> , 2013, 119, 1235-1245.	0.9	424
59	A biomechanical analysis of finger joint forces and stresses developed during common daily activities. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 131-140.	0.9	24
60	Biomechanical correlates of symptomatic and asymptomatic neurophysiological impairment in high school football. <i>Journal of Biomechanics</i> , 2012, 45, 1265-1272.	0.9	240
61	Cold-Drawn Bioabsorbable Ferrous and Ferrous Composite Wires: An Evaluation of Mechanical Strength and Fatigue Durability. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2012, 43, 984-994.	1.0	26
62	Development of Subject-Specific Geometric Spine Model through Use of Automated Active Contour Segmentation and Kinematic Constraint-Limited Registration. <i>Journal of Digital Imaging</i> , 2011, 24, 926-942.	1.6	2
63	Contribution of Cytoskeletal Elements to the Mechanical Property of Axons. , 2010, , .		1
64	Novel Quantitative Biosystem for Modeling Physiological Fluid Shear Stress on Cells. <i>Applied and Environmental Microbiology</i> , 2007, 73, 699-705.	1.4	60
65	Development and characterization of a porous poly(methyl methacrylate) scaffold with controllable modulus and permeability. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007, 80B, 360-369.	1.6	49
66	Development of Ligament-Like Structural Organization and Properties in Cell-Seeded Collagen Scaffolds in vitro. <i>Annals of Biomedical Engineering</i> , 2006, 34, 726-736.	1.3	72
67	Effect of porosity on the fluid flow characteristics and mechanical properties of tantalum scaffolds. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2005, 73B, 315-324.	1.6	168
68	The relationship between bone mineral density and biomechanics in patients with osteoporosis and scoliosis. <i>Osteoporosis International</i> , 2005, 16, 1857-1863.	1.3	22
69	Biomedical Engineering Advancements after Management of Myelomeningocele Study (MOMS): A Narrative Review. <i>International Journal of Medical Students</i> , 0, , .	0.2	1