

# Brittany Coats

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3217516/publications.pdf>

Version: 2024-02-01

44  
papers

1,241  
citations

471371

17  
h-index

454834

30  
g-index

44  
all docs

44  
docs citations

44  
times ranked

1074  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Rate Anisotropic Properties in Human Infant Parietal and Occipital Bone. Journal of Biomechanical Engineering, 2021, 143, .	0.6	4
2	The Effect of Impact Angle and Fall Height on Skull Fracture Patterns in Infants. Journal of Biomechanical Engineering, 2021, 143, .	0.6	2
3	Mechanical characterization of the human pia-arachnoid complex. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 120, 104579.	1.5	7
4	Cervical Muscle Activation Characteristics and Head Kinematics in Males and Females Following Acoustic Warnings and Impulsive Head Forces. Annals of Biomedical Engineering, 2021, 49, 3438.	1.3	0
5	Optimization of a Soft Robotic Bladder Array for Dissipating High Impact Loads: an Initial Study in Designing a Smart Helmet. , 2020, , .		5
6	Spatial distribution of human arachnoid trabeculae. Journal of Anatomy, 2020, 237, 275-284.	0.9	15
7	Morphological Analysis of Retinal Microvasculature to Improve Understanding of Retinal Hemorrhage Mechanics in Infants. , 2020, 61, 16.		5
8	An adaptive-remeshing framework to predict impact-induced skull fracture in infants. Biomechanics and Modeling in Mechanobiology, 2020, 19, 1595-1605.	1.4	7
9	Infant skull fracture risk for low height falls. International Journal of Legal Medicine, 2019, 133, 847-862.	1.2	23
10	Finite Element Design Optimization of a Hyaluronic Acid-Based Hydrogel Drug Delivery Device for Improved Retention. Annals of Biomedical Engineering, 2018, 46, 211-221.	1.3	17
11	Changes in Vitreoretinal Adhesion With Age and Region in Human and Sheep Eyes. Frontiers in Bioengineering and Biotechnology, 2018, 6, 153.	2.0	14
12	Long Term Temporal Changes in Structure and Function of Rat Visual System After Blast Exposure. , 2018, 59, 349.		12
13	Biomechanical Forensics in Pediatric Head Trauma. , 2018, , 2447-2462.		0
14	Cyclic Head Rotations Produce Modest Brain Injury in Infant Piglets. Journal of Neurotrauma, 2017, 34, 235-247.	1.7	28
15	Biomechanics of the classic metaphyseal lesion: finite element analysis. Pediatric Radiology, 2017, 47, 1622-1630.	1.1	18
16	Coefficient of Friction Between Carboxymethylated Hyaluronic Acid-Based Polymer Films and the Ocular Surface. , 2017, 58, 6166.		4
17	Biomechanical Forensics in Pediatric Head Trauma. , 2017, , 1-16.		0
18	Optimization and Evaluation of a Vascular Coupling Device for End-to-End Anastomosis: A Finite-Element Analysis. Journal of Medical Devices, Transactions of the ASME, 2016, 10, .	0.4	2

#	ARTICLE	IF	CITATIONS
19	Utilizing multiple scale models to improve predictions of extra-axial hemorrhage in the immature piglet. <i>Biomechanics and Modeling in Mechanobiology</i> , 2016, 15, 1101-1119.	1.4	22
20	A simulation technique for 3D MR-guided acoustic radiation force imaging. <i>Medical Physics</i> , 2015, 42, 674-684.	1.6	10
21	Characterization and evaluation of tissue-mimicking gelatin phantoms for use with MRgFUS. <i>Journal of Therapeutic Ultrasound</i> , 2015, 3, 9.	2.2	95
22	A New Vascular Coupler Design for End-to-End Anastomosis: Fabrication and Proof-of-Concept Evaluation. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2015, 9, .	0.4	3
23	Biofidelic neck influences head kinematics of parietal and occipital impacts following short falls in infants. <i>Accident Analysis and Prevention</i> , 2015, 82, 143-153.	3.0	11
24	Microstructural Characterization of the Pia-Arachnoid Complex Using Optical Coherence Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2015, 34, 1452-1459.	5.4	23
25	White matter tract-oriented deformation predicts traumatic axonal brain injury and reveals rotational direction-specific vulnerabilities. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 877-896.	1.4	93
26	Age-related changes in dynamic moduli of ovine vitreous. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 41, 315-324.	1.5	24
27	Molded polymer-coated composite bone void filler improves tobramycin controlled release kinetics. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2014, 102, 1074-1083.	1.6	13
28	Experimental Injury Biomechanics of the Pediatric Head and Brain. , 2013, , 157-189.		11
29	Biological Sample Preparation for SEM Imaging of Porcine Retina. <i>Microscopy Today</i> , 2012, 20, 28-31.	0.2	26
30	Finite element model predictions of intracranial hemorrhage from non-impact, rapid head rotations in the piglet. <i>International Journal of Developmental Neuroscience</i> , 2012, 30, 191-200.	0.7	36
31	Stress profile of infant rib in the setting of child abuse: A finite element parametric study. <i>Journal of Biomechanics</i> , 2012, 45, 1861-1868.	0.9	22
32	Biomechanics of Head Trauma in Infants and Young Children. , 2011, , 359-363.		1
33	Biomechanics of pediatric TBI. , 2010, , 7-17.		3
34	Ocular Hemorrhages in Neonatal Porcine Eyes from Single, Rapid Rotational Events. , 2010, 51, 4792.		44
35	In Situ Deformations in the Immature Brain During Rapid Rotations. <i>Journal of Biomechanical Engineering</i> , 2010, 132, 044501.	0.6	19
36	What can we learn from computational model studies of the eye?. <i>Journal of AAPOS</i> , 2009, 13, 332.	0.2	6

#	ARTICLE	IF	CITATIONS
37	Potential for head injuries in infants from low-height falls. Journal of Neurosurgery: Pediatrics, 2008, 2, 321-330.	0.8	57
38	Parametric study of head impact in the infant. Stapp Car Crash Journal, 2007, 51, 1-15.	1.1	68
39	Material properties of porcine parietal cortex. Journal of Biomechanics, 2006, 39, 2521-2525.	0.9	76
40	Material Properties of Human Infant Skull and Suture at High Rates. Journal of Neurotrauma, 2006, 23, 1222-1232.	1.7	191
41	Anthropomorphic simulations of falls, shakes, and inflicted impacts in infants. Journal of Neurosurgery, 2003, 99, 143-150.	0.9	203
42	Abusive head trauma: clinical, biomechanical, and imaging considerations. , 0, , 345-356.		1
43	Abusive head trauma: scalp, subscalp, and cranium. , 0, , 357-393.		4
44	Parametric Study of Head Impact in the Infant. , 0, , .		16