Cameron P Brown

List of Publications by Year
in descending order

45 papers	1,104 citations	361296 20 h-index	414303 32 g-index
48 all docs	48 docs citations	48 times ranked	1659 citing authors

#	Article	IF	Citations
1	Enhancing Mechanical Energy Transfer of Piezoelectric Supercapacitors. Advanced Materials Technologies, 2022, 7, 2100550.	3.0	5
2	Enhancing Mechanical Energy Transfer of Piezoelectric Supercapacitors (Adv. Mater. Technol. 4/2022). Advanced Materials Technologies, 2022, 7, .	3.0	0
3	Single cell force profiling of human myofibroblasts reveals a biophysical spectrum of cell states. Biology Open, 2020, 9, .	0.6	6
4	Raman spectroscopy reveals age- and sex-related differences in cortical bone from people with osteoarthritis. Scientific Reports, 2020, 10, 19443.	1.6	10
5	Saliency Improvement in Feature-Poor Surgical Environments Using Local Laplacian of Specified Histograms. IEEE Access, 2020, 8, 213378-213388.	2.6	2
6	Embrittlement of collagen in early-stage human osteoarthritis. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 104, 103663.	1.5	6
7	<scp>RASSF</scp> 1A controls tissue stiffness and cancer stemâ€like cells in lung adenocarcinoma. EMBO Journal, 2019, 38, e100532.	3.5	83
8	The combined impact of tissue heterogeneity and fixed charge for models of cartilage: the one-dimensional biphasic swelling model revisited. Biomechanics and Modeling in Mechanobiology, 2019, 18, 953-968.	1.4	9
9	Mechanical properties of silk of the Australian golden orb weaversNephila pilipesandN. plumipes. Biology Open, 2018, 7, .	0.6	16
10	A preliminary modeling investigation into the safe correction zone for high tibial osteotomy. Knee, 2018, 25, 286-295.	0.8	34
11	Using an industrial braiding machine to upscale the production and modulate the design of electrospun medical yarns. Polymer Testing, 2018, 69, 188-198.	2.3	12
12	Effect of crosslinking in cartilage-like collagen microstructures. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 66, 138-143.	1.5	21
13	Effect of annealing on the mechanical properties and the degradation of electrospun polydioxanone filaments. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 67, 127-134.	1.5	32
14	3D cell bioprinting of self-assembling peptide-based hydrogels. Materials Letters, 2017, 190, 103-106.	1.3	97
15	Characterizing the macro and micro mechanical properties of scaffolds for rotator cuff repair. Journal of Shoulder and Elbow Surgery, 2017, 26, 2038-2046.	1.2	33
16	Fast interferometric second harmonic generation microscopy. Biomedical Optics Express, 2016, 7, 399.	1.5	18
17	A constituent-based preprocessing approach for characterising cartilage using NIR absorbance measurements. Biomedical Physics and Engineering Express, 2016, 2, 017002.	0.6	1
18	An overview of multiphase cartilage mechanical modelling and its role in understanding function and pathology. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 62, 139-157.	1.5	49

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19	Modulation of Mechanical Interactions by Local Piezoelectric Effects. Advanced Functional Materials, 2016, 26, 7662-7667.	7.8	13
20	Imaging and Modelling Tissue Structure to Inform the Development of Musculoskeletal Therapies. Procedia CIRP, 2016, 49, 99-104.	1.0	1
21	Vitamin D receptor expression in human bone tissue and dose-dependent activation in resorbing osteoclasts. Bone Research, 2016, 4, 16030.	5.4	42
22	Analysis of forward and backward Second Harmonic Generation images to probe the nanoscale structure of collagen within bone and cartilage. Journal of Biophotonics, 2015, 8, 993-1001.	1.1	45
23	With great structure comes great functionality: Understanding and emulating spider silk. Journal of Materials Research, 2015, 30, 108-120.	1.2	12
24	The Impact of Collagen Fibril Polarity on Second Harmonic Generation Microscopy. Biophysical Journal, 2015, 109, 2501-2510.	0.2	44
25	Imaging and modeling collagen architecture from the nano to micro scale. Biomedical Optics Express, 2014, 5, 233.	1.5	49
26	Imaging the noncentrosymmetric structural organization of tendon with Interferometric Second Harmonic Generation microscopy. Journal of Biophotonics, 2014, 7, 638-646.	1.1	33
27	Advancing musculoskeletal research with nanoscience. Nature Reviews Rheumatology, 2013, 9, 614-623.	3.5	17
28	Acoustic, mechanical and near-infrared profiling of osteoarthritic progression in bovine joints. Physics in Medicine and Biology, 2012, 57, 547-559.	1.6	14
29	Rough Fibrils Provide a Toughening Mechanism in Biological Fibers. ACS Nano, 2012, 6, 1961-1969.	7.3	59
30	Damage initiation and progression in the cartilage surface probed by nonlinear optical microscopy. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 5, 62-70.	1.5	38
31	Second Harmonic Generation (SHG) microscopy of articular cartilage to image osteoarthritis. , 2012, , .		0
32	The critical role of water in spider silk and its consequence for protein mechanics. Nanoscale, 2011, 3, 3805.	2.8	35
33	Spider silk as a load bearing biomaterial: tailoring mechanical properties via structural modifications. Nanoscale, 2011, 3, 870.	2.8	28
34	Characterization of early stage cartilage degradation using diffuse reflectance near infrared spectroscopy. Physics in Medicine and Biology, 2011, 56, 2299-2307.	1.6	25
35	ISSUES AND ADVANCES IN THE EARLY STAGE DIAGNOSIS OF OSTEOARTHRITIS. International Journal of Nanoscience, 2010, 09, 39-45.	0.4	3
36	An alternative mechanical parameter for assessing the viability of articular cartilage. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2009, 223, 53-62.	1.0	16

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37	Assessment of common hyperelastic constitutive equations for describing normal and osteoarthritic articular cartilage. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2009, 223, 643-652.	1.0	60
38	Diffuse reflectance near infrared spectroscopy can distinguish normal from enzymatically digested cartilage. Physics in Medicine and Biology, 2009, 54, 5579-5594.	1.6	27
39	In Search of a Parameter to Distinguish Viable from Non-Viable Articular Cartilage â€“ Indentation and Ultrasound Studies. Advanced Materials Research, 2008, 32, 223-228.	0.3	0
40	Joint laminate degradation assessed by reflected ultrasound from the cartilage surface and osteochondral junction. Physics in Medicine and Biology, 2008, 53, 4123-4135.	1.6	7
41	Indentation stiffness does not discriminate between normal and degraded articular cartilage. Clinical Biomechanics, 2007, 22, 843-848.	0.5	25
42	A Novel Approach to the Development of Benchmarking Parameters for Characterizing Cartilage Health. Connective Tissue Research, 2007, 48, 52-61.	1.1	12
43	Ultrasound Assessment of Articular Cartilage: Analysis of the Frequency Profile of Reflected Signals from Naturally and Artificially Degraded Samples. Connective Tissue Research, 2007, 48, 277-285.	1.1	19
44	In vitro degradation of articular cartilage: does trypsin treatment produce consistent results?. Journal of Anatomy, 2006, 209, 259-267.	0.9	40
45	Hierarchical Piezoresponse in Collagen. Advanced Materials Technologies, 0, , 2101166.	3.0	4