Samuel P Veres

List of Publications by Year
in descending order

27 papers	902 citations	516710 16 h-index	526287 27 g-index
27 all docs	27 docs citations	27 times ranked	841 citing authors

#	Article	IF	Citations
1	The influence of torsion on disc herniation when combined with flexion. European Spine Journal, 2010, 19, 1468-1478.	2.2	93
2	ISSLS Prize Winner: Microstructure and Mechanical Disruption of the Lumbar Disc Annulus. Spine, 2008, 33, 2711-2720.	2.0	85
3	Collagen fibrils in functionally distinct tendons have differing structural responses to tendon rupture and fatigue loading. Acta Biomaterialia, 2016, 42, 296-307.	8.3	79
4	The Morphology of Acute Disc Herniation. Spine, 2009, 34, 2288-2296.	2.0	78
5	ISSLS Prize Winner: How Loading Rate Influences Disc Failure Mechanics. Spine, 2010, 35, 1897-1908.	2.0	72
6	Designed to Fail: A Novel Mode of Collagen Fibril Disruption and Its Relevance to Tissue Toughness. Biophysical Journal, 2012, 102, 2876-2884.	0.5	71
7	Repeated subrupture overload causes progression of nanoscaled discrete plasticity damage in tendon collagen fibrils. Journal of Orthopaedic Research, 2013, 31, 731-737.	2.3	65
8	Mechanically overloading collagen fibrils uncoils collagen molecules, placing them in a stable, denatured state. Matrix Biology, 2014, 33, 54-59.	3.6	65
9	In tendons, differing physiological requirements lead to functionally distinct nanostructures. Scientific Reports, 2018, 8, 4409.	3.3	54
10	Differences in collagen cross-linking between the four valves of the bovine heart: a possible role in adaptation to mechanical fatigue. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H1898-H1906.	3.2	33
11	High spatial resolution (1.1 Î¼m and 20 nm) FTIR polarization contrast imaging reveals pre-rupture disorder in damaged tendon. Faraday Discussions, 2016, 187, 555-573.	3.2	27
12	Macrophage-like U937 cells recognize collagen fibrils with strain-induced discrete plasticity damage. Journal of Biomedical Materials Research - Part A, 2015, 103, 397-408.	4.0	26
13	Advanced glycation end-product cross-linking inhibits biomechanical plasticity and characteristic failure morphology of native tendon. Journal of Applied Physiology, 2019, 126, 832-841.	2.5	24
14	Crossâ€link stabilization does not affect the response of collagen molecules, fibrils, or tendons to tensile overload. Journal of Orthopaedic Research, 2013, 31, 1907-1913.	2.3	20
15	Ultrastructure of tendon rupture depends on strain rate and tendon type. Journal of Orthopaedic Research, 2018, 36, 2842-2850.	2.3	19
16	Development of overuse tendinopathy: A new descriptive model for the initiation of tendon damage during cyclic loading. Journal of Orthopaedic Research, 2018, 36, 467-476.	2.3	16
17	Bowstring Stretching and Quantitative Imaging of Single Collagen Fibrils via Atomic Force Microscopy. PLoS ONE, 2016, 11, e0161951.	2.5	13
18	Use of tendon to produce decellularized sheets of mineralized collagen fibrils for bone tissue repair and regeneration. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 845-856.	3.4	13

#	Article	IF	Citations
19	Combining tensile testing and structural analysis at the single collagen fibril level. Scientific Data, 2018, 5, 180229.	5.3	12
20	Ultrastructural response of tendon to excessive level or duration of tensile load supports that collagen fibrils are mechanically continuous. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 97, 30-40.	3.1	11
21	Effect of testing temperature on the nanostructural response of tendon to tensile mechanical overload. Journal of Biomechanics, 2020, 104, 109720.	2.1	8
22	A new longitudinal variation in the structure of collagen fibrils and its relationship to locations of mechanical damage susceptibility. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 110, 103849.	3.1	5
23	Alternate soaking enables easy control of mineralized collagen scaffold mechanics from nano- to macro-scale. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 110, 103863.	3.1	5
24	Quantitative phase measurements of tendon collagen fibres. Journal of Biophotonics, 2017, 10, 111-117.	2.3	3
25	Gouy phase shift measurement using interferometric second-harmonic generation. Optics Letters, 2018, 43, 1958.	3.3	2
26	ISSLS PRIZE IN BASIC SCIENCE 2020: Beyond microstructureâ€”circumferential specialization within the lumbar intervertebral disc annulus extends to collagen nanostructure, with counterintuitive relationships to macroscale material properties. European Spine Journal, 2020, 29, 670-685.	2.2	2
27	Effect of increasing mineralization on pre-osteoblast response to native collagen fibril scaffolds for bone tissue repair and regeneration. Journal of Applied Biomaterials and Functional Materials, 2022, 20, 228080002211040.	1.6	1