Clark T Hung

List of Publications by Year
in descending order

50 papers	1,622 citations	393982 19 h-index	301761 39 g-index
51 all docs	51 docs citations	51 times ranked	2042 citing authors

#	Article	IF	Citations
1	Toward Development of a Diabetic Synovium Culture Model. Frontiers in Bioengineering and Biotechnology, 2022, 10, 825046.	2.0	3
2	Biophysical Modulation of Mesenchymal Stem Cell Differentiation in the Context of Skeletal Repair. International Journal of Molecular Sciences, 2022, 23, 3919.	1.8	4
3	Sustained Delivery of SB-431542, a Type I Transforming Growth Factor Beta-1 Receptor Inhibitor, to Prevent Arthrofibrosis. Tissue Engineering - Part A, 2021, 27, 1411-1421.	1.6	9
4	Attachment of cartilage wear particles to the synovium negatively impacts friction properties. Journal of Biomechanics, 2021, 127, 110668.	0.9	7
5	Direct Osmotic Pressure Measurements in Articular Cartilage Demonstrate Nonideal and Concentration-Dependent Phenomena. Journal of Biomechanical Engineering, 2021, 143, .	0.6	13
6	Sustained low-dose dexamethasone delivery via a PLGA microsphere-embedded agarose implant for enhanced osteochondral repair. Acta Biomaterialia, 2020, 102, 326-340.	4.1	57
7	Pulsed electromagnetic fields promote repair of focal articular cartilage defects with engineered osteochondral constructs. Biotechnology and Bioengineering, 2020, 117, 1584-1596.	1.7	16
8	Immature bovine cartilage wear by fatigue failure and delamination. Journal of Biomechanics, 2020, 107, 109852.	0.9	10
9	Cartilage Wear Particles Induce an Inflammatory Response Similar to Cytokines in Human Fibroblastâ€Like Synoviocytes. Journal of Orthopaedic Research, 2019, 37, 1979-1987.	1.2	15
10	A Functional Tissue-Engineered Synovium Model to Study Osteoarthritis Progression and Treatment. Tissue Engineering - Part A, 2019, 25, 538-553.	1.6	18
11	Musculoskeletal mechanobiology: A new era for MechanoMedicine. Journal of Orthopaedic Research, 2018, 36, 531-532.	1.2	7
12	Chondrogenic properties of collagen type XI, a component of cartilage extracellular matrix. Biomaterials, 2018, 173, 47-57.	5.7	51
13	Human chondrocyte migration behaviour to guide the development of engineered cartilage. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 877-886.	1.3	23
14	Transient expression of the diseased phenotype of osteoarthritic chondrocytes in engineered cartilage. Journal of Orthopaedic Research, 2017, 35, 829-836.	1.2	8
15	<sup />Constrained Cage Culture Improves Engineered Cartilage Functional Properties by Enhancing Collagen Network Stability. Tissue Engineering - Part A, 2017, 23, 847-858.	1.6	11
16	Fibroblast-like synoviocyte mechanosensitivity to fluid shear is modulated by interleukin-1Î±. Journal of Biomechanics, 2017, 60, 91-99.	0.9	20
17	Optimizing nutrient channel spacing and revisiting TGF-beta in large engineered cartilage constructs. Journal of Biomechanics, 2016, 49, 2089-2094.	0.9	8
18	Biphasic Analysis of Cartilage Stresses in the Patellofemoral Joint. Journal of Knee Surgery, 2016, 29, 092-098.	0.9	20

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19	High seeding density of human chondrocytes in agarose produces tissue-engineered cartilage approaching native mechanical and biochemical properties. Journal of Biomechanics, 2016, 49, 1909-1917.	0.9	49
20	Nutrient Channels Aid the Growth of Articular Surface-Sized Engineered Cartilage Constructs. Tissue Engineering - Part A, 2016, 22, 1063-1074.	1.6	20
21	Longâ€term storage and preservation of tissue engineered articular cartilage. Journal of Orthopaedic Research, 2016, 34, 141-148.	1.2	14
22	Grading of osteoarthritic cartilage: Correlations between histology and biomechanics. Journal of Orthopaedic Research, 2016, 34, 8-9.	1.2	10
23	Heterogeneous engineered cartilage growth results from gradients of media-supplemented active TGF-Î² and is ameliorated by the alternative supplementation of latent TGF-Î². Biomaterials, 2016, 77, 173-185.	5.7	62
24	A puzzle assembly strategy for fabrication of large engineered cartilage tissue constructs. Journal of Biomechanics, 2016, 49, 668-677.	0.9	8
25	Continuum theory of fibrous tissue damage mechanics using bond kinetics: application to cartilage tissue engineering. Interface Focus, 2016, 6, 20150063.	1.5	35
26	Dexamethasone Release from Within Engineered Cartilage as a Chondroprotective Strategy Against Interleukin-1Î±. Tissue Engineering - Part A, 2016, 22, 621-632.	1.6	24
27	High intensity focused ultrasound as a tool for tissue engineering: Application to cartilage. Medical Engineering and Physics, 2016, 38, 192-198.	0.8	4
28	Cytokine preconditioning of engineered cartilage provides protection against interleukin-1 insult. Arthritis Research and Therapy, 2015, 17, 361.	1.6	8
29	Hedgehog signalling does not stimulate cartilage catabolism and is inhibited by Interleukin-1Î². Arthritis Research and Therapy, 2015, 17, 373.	1.6	21
30	Matrix Production in Large Engineered Cartilage Constructs Is Enhanced by Nutrient Channels and Excess Media Supply. Tissue Engineering - Part C: Methods, 2015, 21, 747-757.	1.1	32
31	Wear and damage of articular cartilage with friction against orthopedic implant materials. Journal of Biomechanics, 2015, 48, 1957-1964.	0.9	68
32	Fabrication of tissue engineered osteochondral grafts for restoring the articular surface of diarthrodial joints. Methods, 2015, 84, 103-108.	1.9	12
33	Biocompatibility of polysebacic anhydride microparticles with chondrocytes in engineered cartilage. Colloids and Surfaces B: Biointerfaces, 2015, 136, 207-213.	2.5	9
34	Porous titanium bases for osteochondral tissue engineering. Acta Biomaterialia, 2015, 27, 286-293.	4.1	35
35	The friction coefficient of shoulder joints remains remarkably low over 24h of loading. Journal of Biomechanics, 2015, 48, 3945-3949.	0.9	11
36	Silk microfiber-reinforced silk hydrogel composites for functional cartilage tissue repair. Acta Biomaterialia, 2015, 11, 27-36.	4.1	220

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37	Nutrient channels and stirring enhanced the composition and stiffness of large cartilage constructs. Journal of Biomechanics, 2014, 47, 3847-3854.	0.9	27
38	Synthesis rates and binding kinetics of matrix products in engineered cartilage constructs using chondrocyte-seeded agarose gels. Journal of Biomechanics, 2014, 47, 2165-2172.	0.9	30
39	Effect of glutaraldehyde fixation on the frictional response of immature bovine articular cartilage explants. Journal of Biomechanics, 2014, 47, 694-701.	0.9	16
40	Growth Factor Priming Differentially Modulates Components of the Extracellular Matrix Proteome in Chondrocytes and Synovium-Derived Stem Cells. PLoS ONE, 2014, 9, e88053.	1.1	22
41	Articular Cartilage Wear Characterization With a Particle Sizing and Counting Analyzer. Journal of Biomechanical Engineering, 2013, 135, 024501.	0.6	16
42	Growth Factor Priming of Synovium-Derived Stem Cells for Cartilage Tissue Engineering. Tissue Engineering - Part A, 2011, 17, 2259-2265.	1.6	55
43	One Breath Closer to Making Engineered Tissues a Clinical Reality. Cell Stem Cell, 2009, 4, 5-6.	5.2	4
44	Differences in Interleukin-1 Response Between Engineered and Native Cartilage. Tissue Engineering - Part A, 2008, 14, 1721-1730.	1.6	53
45	Functional Tissue Engineering of Anatomically Shaped Cartilage Constructs. FASEB Journal, 2008, 22, 232.2.	0.2	0
46	The Effect of Applied Compressive Loading on Tissue-Engineered Cartilage Constructs Cultured with TGF-ÃŸ3. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
47	Chondrocyte Nuclear Response to Osmotic Loading. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
48	A Paradigm for Functional Tissue Engineering of Articular Cartilage via Applied Physiologic Deformational Loading. Annals of Biomedical Engineering, 2004, 32, 35-49.	1.3	225
49	Anatomically shaped osteochondral constructs for articular cartilage repair. Journal of Biomechanics, 2003, 36, 1853-1864.	0.9	195
50	Disparate aggrecan gene expression in chondrocytes subjected to hypotonic and hypertonic loading in 2D and 3D culture. Biorheology, 2003, 40, 61-72.	1.2	25