Serdar GÃ¶ktepe

List of Publications by Year
in descending order

32 papers	1,618 citations	361413 20 h-index	526287 27 g-index
34 all docs	34 docs citations	34 times ranked	1154 citing authors

#	Article	IF	Citations
1	A multiscale model for eccentric and concentric cardiac growth through sarcomerogenesis. Journal of Theoretical Biology, 2010, 265, 433-442.	1.7	192
2	Electromechanics of the heart: a unified approach to the strongly coupled excitationâ€“contraction problem. Computational Mechanics, 2010, 45, 227-243.	4.0	178
3	A microâ€“macro approach to rubber-like materials. Part II: The micro-sphere model of finite rubber viscoelasticity. Journal of the Mechanics and Physics of Solids, 2005, 53, 2231-2258.	4.8	163
4	A microâ€“macro approach to rubber-like materials. Part III: The micro-sphere model of anisotropic Mullins-type damage. Journal of the Mechanics and Physics of Solids, 2005, 53, 2259-2283.	4.8	149
5	A generic approach towards finite growth with examples of athlete's heart, cardiac dilation, and cardiac wall thickening. Journal of the Mechanics and Physics of Solids, 2010, 58, 1661-1680.	4.8	125
6	Computational modeling of passive myocardium. International Journal for Numerical Methods in Biomedical Engineering, 2011, 27, 1-12.	2.1	117
7	Computational modeling of growth: systemic and pulmonary hypertension in the heart. Biomechanics and Modeling in Mechanobiology, 2011, 10, 799-811.	2.8	84
8	A fully implicit finite element method for bidomain models of cardiac electromechanics. Computer Methods in Applied Mechanics and Engineering, 2013, 253, 323-336.	6.6	82
9	In vivo dynamic strains of the ovine anterior mitral valve leaflet. Journal of Biomechanics, 2011, 44, 1149-1157.	2.1	64
10	Rigid, Complete Annuloplasty Rings Increase Anterior Mitral Leaflet Strains in the Normal Beating Ovine Heart. Circulation, 2011, 124, S81-96.	1.6	48
11	The generalized Hill model: A kinematic approach towards active muscle contraction. Journal of the Mechanics and Physics of Solids, 2014, 72, 20-39.	4.8	48
12	Modeling and simulation of viscous electro-active polymers. European Journal of Mechanics, A/Solids, 2014, 48, 112-128.	3.7	48
13	Computational modeling of coupled cardiac electromechanics incorporating cardiac dysfunctions. European Journal of Mechanics, A/Solids, 2014, 48, 60-73.	3.7	46
14	Atrial and ventricular fibrillation: computational simulation of spiral waves in cardiac tissue. Archive of Applied Mechanics, 2010, 80, 569-580.	2.2	41
15	Computational modeling of electrochemical coupling: A novel finite element approach towards ionic models for cardiac electrophysiology. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 3139-3158.	6.6	40
16	Coupled thermoviscoplasticity of glassy polymers in the logarithmic strain space based on the free volume theory. International Journal of Solids and Structures, 2011, 48, 1799-1817.	2.7	39
17	How do annuloplasty rings affect mitral leaflet dynamic motion?â˜†â˜†â˜†. European Journal of Cardio-thoracic Surgery, 2010, 38, 340-349.	1.4	33
18	A fully implicit finite element method for bidomain models of cardiac electrophysiology. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 645-656.	1.6	30

#	ARTICLE	IF	CITATIONS
19	Anterior Mitral Leaflet Curvature During the Cardiac Cycle in the Normal Ovine Heart. Circulation, 2010, 122, 1683-1689.	1.6	28
20	Anterior mitral leaflet curvature in the beating ovine heart: a case study using videofluoroscopic markers and subdivision surfaces. Biomechanics and Modeling in Mechanobiology, 2010, 9, 281-293.	2.8	23
21	Computational modeling of electrocardiograms: A finite element approach toward cardiac excitation. International Journal for Numerical Methods in Biomedical Engineering, 2010, 26, 524-533.	2.1	14
22	Computational Modeling of Myocardial Infarction. Procedia IUTAM, 2015, 12, 52-61.	1.2	9
23	Micro-structurally Based Kinematic Approaches to Electromechanics of the Heart. , 2013, , 175-187.		6
24	Electromechanics of Cardiac Tissue: A Unified Approach to the Fully Coupled Excitation-Contraction Problem. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 159-160.	0.2	3
25	A three-field, bi-domain based approach to the strongly coupled electromechanics of the heart. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 931-934.	0.2	3
26	Application of a Viscoelastic Material Model in Electro-Mechanics. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 387-388.	0.2	2
27	A modulus gradient model for an axially loaded inhomogeneous elastic rod. Meccanica, 2018, 53, 2573-2584.	2.0	1
28	Fitzhughâ€“Nagumo Equation. , 2015, , 553-556.		1
29	A modulus gradient model for inhomogeneous materials with isotropic linear elastic constituents. European Journal of Mechanics, A/Solids, 2019, 78, 103846.	3.7	0
30	Computational Modeling of Drying Shrinkage in Earlyâ€Age Concrete. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900415.	0.2	0
31	Computational Simulation of Traveling Arrhythmic Waves in Myocardial Tissue. , 2009, , .		0
32	In-Vivo Dynamic Strains of the Ovine Anterior Mitral Valve Leaflet. , 2011, , .		0