Michele Marino

List of Publications by Year
in descending order

55	730	471371	580701
papers	citations	17 h-index	25 g-index

57	57	57	545
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Local approximate Gaussian process regression for data-driven constitutive models: development and comparison with neural networks. Computer Methods in Applied Mechanics and Engineering, 2022, 388, 114217.	3.4	32
2	Models and simulations as enabling technologies for bioprinting process design. , 2022, , 137-206.		1
3	Computational multiscale modelling of soft tissues mechanics: Application to tendons and ligaments. , 2021, , 121-153.		1
4	The Virtual Element Method for the numerical homogenization of electroâ€mechanical responses. Proceedings in Applied Mathematics and Mechanics, 2021, 20, .	0.2	0
5	Computational model of damage-induced growth in soft biological tissues considering the mechanobiology of healing. Biomechanics and Modeling in Mechanobiology, 2021, 20, 1297-1315.	1.4	12
6	Editorial: Special Issue of the Italian Chapter of the European Society of Biomechanics dedicated to â€œBiomechanics for in silico clinical trialsâ€• Medical Engineering and Physics, 2021, 89, 12-13.	0.8	0
7	Biomechanical Effects of a Cross Connector in Sacral Fractures â€“ A Finite Element Analysis. Frontiers in Bioengineering and Biotechnology, 2021, 9, 669321.	2.0	7
8	Mechano-chemo-biological Computational Models for Arteries in Health, Disease and Healing: From Tissue Remodelling to Drug-eluting Devices. Current Pharmaceutical Design, 2021, 27, 1904-1917.	0.9	3
9	PI/PID controller stabilizing sets of uncertain nonlinear systems: an efficient surrogate model-based approach. Nonlinear Dynamics, 2021, 105, 277-299.	2.7	6
10	Electro-magneto-mechanically response of polycrystalline materials: Computational homogenization via the Virtual Element Method. Computer Methods in Applied Mechanics and Engineering, 2021, 380, 113775.	3.4	11
11	Mixed variational formulations for structural topology optimization based on the phase-field approach. Structural and Multidisciplinary Optimization, 2021, 64, 2627-2652.	1.7	7
12	Chemo-mechanical modelling of swelling and crosslinking reaction kinetics in alginate hydrogels: A novel theory and its numerical implementation. Journal of the Mechanics and Physics of Solids, 2021, 153, 104476.	2.3	21
13	Model-data-driven constitutive responses: Application to a multiscale computational framework. International Journal of Engineering Science, 2021, 167, 103522.	2.7	32
14	A novel stress-induced anisotropic growth model driven by nutrient diffusion: Theory, FEM implementation and applications in bio-mechanical problems. Journal of the Mechanics and Physics of Solids, 2020, 144, 104097.	2.3	16
15	Multiscale modeling of a free-radical emulsion polymerization process: Numerical approximation by the Finite Element Method. Computers and Chemical Engineering, 2020, 140, 106974.	2.0	12
16	Nearly-constrained transversely isotropic linear elasticity: energetically consistent anisotropic deformation modes for mixed finite element formulations. International Journal of Solids and Structures, 2020, 202, 166-183.	1.3	5
17	Constitutive Modeling of Soft Tissues. , 2019, , 81-110.		7
18	Computational homogenization of polycrystalline materials with the Virtual Element Method. Computer Methods in Applied Mechanics and Engineering, 2019, 355, 349-372.	3.4	35

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19	Experimental characterization and computational modeling of hydrogel cross-linking for bioprinting applications. International Journal of Artificial Organs, 2019, 42, 548-557.	0.7	20
20	Molecular-level collagen damage explains softening and failure of arterial tissues: A quantitative interpretation of CHP data with a novel elasto-damage model. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 97, 254-271.	1.5	21
21	Sensitivity analysis for the mechanics of tendons and ligaments: Investigation on the effects of collagen structural properties via a multiscale modeling approach. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3209.	1.0	24
22	Direct and inverse identification of constitutive parameters from the structure of soft tissues. Part 2:Âdispersed arrangement of collagen fibers. Biomechanics and Modeling in Mechanobiology, 2019, 18, 897-920.	1.4	9
23	Computational modeling of hydrogel crossâ€linking based on reactionâ€diffusion theory. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900406.	0.2	1
24	A Computational Model for Biological Tissues Considering the Influence of Injury on Growth and Remodelling. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900259.	0.2	1
25	Microâ€“macro constitutive modeling and finite element analytical-based formulations for fibrous materials: A multiscale structural approach for crimped fibers. Computer Methods in Applied Mechanics and Engineering, 2019, 344, 938-969.	3.4	11
26	Direct and inverse identification of constitutive parameters from the structure of soft tissues. Part 1: micro- and nanostructure of collagen fibers. Biomechanics and Modeling in Mechanobiology, 2018, 17, 1011-1036.	1.4	17
27	Collisions in shape memory alloys. GAMM Mitteilungen, 2018, 40, 157-183.	2.7	0
28	Computational Mechanics in Science and Engineering â€“ Quo Vadis. Rad Hrvatske Akademije Znanosti I Umjetnosti TehniÄke Znanosti, 2018, 536, 1-32.	0.0	0
29	Finite strain response of crimped fibers under uniaxial traction: An analytical approach applied to collagen. Journal of the Mechanics and Physics of Solids, 2017, 98, 429-453.	2.3	33
30	Coupling Microscale Transport and Tissue Mechanics: Modeling Strategies for Arterial Multiphysics. , 2017, , 77-112.		3
31	A chemo-mechano-biological formulation for the effects of biochemical alterations on arterial mechanics: the role of molecular transport and multiscale tissue remodelling. Journal of the Royal Society Interface, 2017, 14, 20170615.	1.5	23
32	A FSI computational framework for vascular physiopathology: A novel flow-tissue multiscale strategy. Medical Engineering and Physics, 2017, 47, 25-37.	0.8	30
33	Shape Memory Alloys and Collisions. Springer Series in Solid and Structural Mechanics, 2017, , 225-255.	0.2	0
34	Computational multiscale methods for tissue biomechanics. International Journal for Computational Methods in Engineering Science and Mechanics, 2016, 17, 135-136.	1.4	0
35	Cardiovascular biomechanics in health and disease. Journal of Biomechanics, 2016, 49, 2319-2320.	0.9	0
36	An integrated computational approach for aortic mechanics including geometric, histological and chemico-physical data. Journal of Biomechanics, 2016, 49, 2331-2340.	0.9	18

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37	Molecular and intermolecular effects in collagen fibril mechanics: a multiscale analytical model compared with atomistic and experimental studies. Biomechanics and Modeling in Mechanobiology, 2016, 15, 133-154.	1.4	23
38	Multiscale hierarchical mechanics in soft tissues. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 35-38.	0.2	3
39	A Numerical Failure Analysis of Multi-bolted Joints in FRP Laminates Based on Basalt Fibers. Procedia Engineering, 2015, 109, 492-506.	1.2	23
40	Numerical modeling of failure modes in bolted composite laminates. AIP Conference Proceedings, 2015, , .	0.3	2
41	An ideal model for stress-induced martensitic transformations in shape-memory alloys. Frattura Ed Integrita Strutturale, 2014, 8, 96-110.	0.5	1
42	A finite-element approach for the analysis of pin-bearing failure of composite laminates. Frattura Ed Integrita Strutturale, 2014, 8, 241-250.	0.5	1
43	Stress and strain localization in stretched collagenous tissues via a multiscale modelling approach. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 11-30.	0.9	36
44	Influence of inter-molecular interactions on the elasto-damage mechanics of collagen fibrils: A bottom-up approach towards macroscopic tissue modeling. Journal of the Mechanics and Physics of Solids, 2014, 73, 38-54.	2.3	26
45	Computational modeling of soft tissues and ligaments. , 2014, , 141-172.		9
46	An operative algebraic formulation for the unilaterally-constrained mechanical problem of smart tensegrities. International Journal of Solids and Structures, 2014, 51, 3333-3349.	1.3	4
47	Age-Dependent Arterial Mechanics via a Multiscale Elastic Approach. International Journal for Computational Methods in Engineering Science and Mechanics, 2013, 14, 141-151.	1.4	28
48	Multiscale Elastic Models of Collagen Bio-structures: From Cross-Linked Molecules to Soft Tissues. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2013, , 73-102.	0.7	14
49	Equilibrium and stability of tensegrity structures: A convex analysis approach. Discrete and Continuous Dynamical Systems - Series S, 2013, 6, 461-478.	0.6	1
50	Integrated mechanical models for collagenous biostructures at different length scales. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1018-1022.	0.4	0
51	Equivalent Stiffness and Compliance of Curvilinear Elastic Fibers. Lecture Notes in Applied and Computational Mechanics, 2012, , 309-332.	2.0	8
52	An insight on multiscale tendon modeling in muscleâ€“tendon integrated behavior. Biomechanics and Modeling in Mechanobiology, 2012, 11, 505-517.	1.4	33
53	Convex analysis and ideal tensegrities. Comptes Rendus - Mecanique, 2011, 339, 683-691.	2.1	3
54	A unified multiscale mechanical model for soft collagenous tissues with regular fiber arrangement. Journal of Biomechanics, 2010, 43, 355-363.	0.9	93

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55	Enabling Technologies for Obtaining Desired Stiffness Gradients in GelMA Hydrogels Constructs. Macromolecular Chemistry and Physics, 0, , 2100326.	1.1	1