Svetoslav Nikolov

List of Publications by Year
in descending order

18	776	840776 11	940533 16
papers	citations	h-index	g-index

18	18	18	1048
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Revealing the Design Principles of Highâ€Performance Biological Composites Using Ab initio and Multiscale Simulations: The Example of Lobster Cuticle. Advanced Materials, 2010, 22, 519-526.	21.0	285
2	Hierarchical Modeling of the Elastic Properties of Bone at Submicron Scales: The Role of Extrafibrillar Mineralization. Biophysical Journal, 2008, 94, 4220-4232.	0.5	112
3	Robustness and optimal use of design principles of arthropod exoskeletons studied by ab initio-based multiscale simulations. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 129-145.	3.1	91
4	Indentation size effects in polymers and related rotation gradients. Journal of Materials Research, 2007, 22, 1662-1672.	2.6	72
5	Ab initio study of thermodynamic, structural, and elastic properties of Mg-substituted crystalline calcite. Acta Biomaterialia, 2010, 6, 4506-4512.	8.3	44
6	Functional adaptation of crustacean exoskeletal elements through structural and compositional diversity: a combined experimental and theoretical study. Bioinspiration and Biomimetics, 2016, 11, 055006.	2.9	35
7	Ab initio study of single-crystalline and polycrystalline elastic properties of Mg-substituted calcite crystals. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 20, 296-304.	3.1	32
8	Biomathematical modeling and analysis of blood flow in an intracranial aneurysm. Neurological Research, 2003, 25, 497-504.	1.3	28
9	A model-based strategy to investigate the role of microRNA regulation in cancer signalling networks. Theory in Biosciences, 2011, 130, 55-69.	1.4	18
10	Size Dependent Hardness of Polyamide/Imide. Open Mechanics Journal, 2008, 2, 89-92.	0.5	18
11	Principal difference between stability and structural stability (robustness) as used in systems biology. Nonlinear Dynamics, Psychology, and Life Sciences, 2007, 11, 413-33.	0.2	12
12	Dynamics of a miRNA Model with Two Delays. Biotechnology and Biotechnological Equipment, 2012, 26, 3315-3320.	1.3	10
13	Mathematical Modelling in Biomedicine: A Primer for the Curious and the Skeptic. International Journal of Molecular Sciences, 2021, 22, 547.	4.1	7
14	Valuation of the Extraocular Effective Elastance on the Base of Dynamical Model. Nonlinear Dynamics, Psychology, and Life Sciences, 1998, 2, 1-20.	0.2	4
15	Effects of homogenization technique and introduction of interfaces in a multiscale approach to predict the elastic properties of arthropod cuticle. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 23, 103-116.	3.1	4
16	CHAPTER 9. Multiâ€scale Modelling of a Biological Material: The Arthropod Exoskeleton. RSC Smart Materials, 2013, , 197-218.	0.1	2
17	Quantum-Mechanical Study of Single-Crystalline and Polycrystalline Elastic Properties of Mg-Substituted Calcite Crystals. Key Engineering Materials, 0, 592-593, 335-341.	0.4	2
18	An Analytical Study of the Roadway Automobile Stability. Systems Analysis Modelling Simulation, 2002, 42, 1271-1281.	0.1	0