Aris P Sgouros

List of Publications by Year in descending order

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Version: 2024-02-01

758635 794141 33 413 12 19 h-index citations g-index papers 33 33 33 406 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Slip-Spring Model for the Linear and Nonlinear Viscoelastic Properties of Molten Polyethylene Derived from Atomistic Simulations. Macromolecules, 2017, 50, 4524-4541.	2.2	48
2	Molecular Simulations of Free and Graphite Capped Polyethylene Films: Estimation of the Interfacial Free Energies. Macromolecules, 2017, 50, 8827-8844.	2.2	46
3	Molecular dynamics simulations of EPON-862/DETDA epoxy networks: structure, topology, elastic constants, and local dynamics. Soft Matter, 2019, 15, 721-733.	1.2	41
4	Compressive response and buckling of graphene nanoribbons. Scientific Reports, 2018, 8, 9593.	1.6	25
5	Molecular Dynamics Study of Polyethylene under Extreme Confinement. Journal of Physics: Conference Series, 2016, 738, 012012.	0.3	21
6	Uniaxial compression of suspended single and multilayer graphenes. 2D Materials, 2016, 3, 025033.	2.0	21
7	Slip Spring-Based Mesoscopic Simulations of Polymer Networks: Methodology and the Corresponding Computational Code. Polymers, 2018, 10, 1156.	2.0	21
8	Mesoscopic Simulations of Free Surfaces of Molten Polyethylene: Brownian Dynamics/Kinetic Monte Carlo Coupled with Square Gradient Theory and Compared to Atomistic Calculations and Experiment. Macromolecules, 2018, 51, 9798-9815.	2.2	20
9	Multiscale Simulations of Graphite-Capped Polyethylene Melts: Brownian Dynamics/Kinetic Monte Carlo Compared to Atomistic Calculations and Experiment. Macromolecules, 2019, 52, 7503-7523.	2.2	17
10	Self-Consistent Field Theory Coupled with Square Gradient Theory of Free Surfaces of Molten Polymers and Compared to Atomistic Simulations and Experiment. Macromolecules, 2019, 52, 5337-5356.	2.2	14
11	Phononic band gap engineering in graphene. Journal of Applied Physics, 2012, 112, .	1.1	13
12	Ab initio study of boron and aluminum hydrides nanoparticles. International Journal of Hydrogen Energy, 2016, 41, 20210-20216.	3.8	13
13	Exotic carbon nanostructures obtained through controllable defect engineering. RSC Advances, 2015, 5, 39930-39937.	1.7	12
14	Structure and thermodynamics of grafted silica/polystyrene dilute nanocomposites investigated through self-consistent field theory. Soft Matter, 2021, 17, 4077-4097.	1.2	10
15	Efficient Mechanical Stress Transfer in Multilayer Graphene with a Ladder-like Architecture. ACS Applied Materials & Interfaces, 2021, 13, 4473-4484.	4.0	9
16	Potential of Mean Force between Bare or Grafted Silica/Polystyrene Surfaces from Self-Consistent Field Theory. Polymers, 2021, 13, 1197.	2.0	9
17	Transforming graphene nanoribbons into nanotubes by use of point defects. Journal of Physics Condensed Matter, 2014, 26, 125301.	0.7	8
18	Nanoscale phononic interconnects in THz frequencies. Physical Chemistry Chemical Physics, 2014, 16, 23355-23364.	1.3	8

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19	Fully Hydrogenated Beryllium Nanoclusters. Journal of the American Chemical Society, 2016, 138, 3218-3227.	6.6	8
20	Atomistic simulations of long-chain polyethylene melts flowing past gold surfaces: structure and wall-slip. Molecular Physics, 2020, 118, e1706775.	0.8	8
21	Multiscale Simulations of Polyzwitterions in Aqueous Bulk Solutions and Brush Array Configurations. Soft Matter, 2021, , .	1.2	8
22	Kinetic concepts and local failure in the interfacial shear strength of epoxy-graphene nanocomposites. Physical Review E, 2020, 102, 030501.	0.8	7
23	Computational study of phononic resonators and waveguides in monolayer transition metal dichalcogenides. Physical Chemistry Chemical Physics, 2017, 19, 8082-8090.	1.3	5
24	Temperature profiles and thermal conductivities of nanostructured transition metal dichalcogenides. International Journal of Heat and Mass Transfer, 2019, 140, 579-586.	2.5	5
25	Molecular Dynamics Test of the Stress-Thermal Rule in Polyethylene and Polystyrene Entangled Melts. Macromolecules, 2020, 53, 789-802.	2.2	5
26	Nanoscale Phononic Waveguides and Resonators on the $\tilde{a} \in 111\tilde{a} \in \infty$ Surface of GeSi. Journal of Surfaces and Interfaces of Materials, 2015, 3, 60-66.	0.5	4
27	Reflectivity reduction of nanopatterned c-Si solar cells with antireflective coatings exposed to a wide range of incidence angles. Photonics and Nanostructures - Fundamentals and Applications, 2021, 43, 100893.	1.0	2
28	RuSseL: A Self-Consistent Field Theory Code for Inhomogeneous Polymer Interphases. Computation, 2021, 9, 57.	1.0	2
29	A three-dimensional finite element methodology for addressing heterogeneous polymer systems with simulations based on self-consistent field theory. AIP Conference Proceedings, 2021, , .	0.3	2
30	Effect of Surface Nanopatterning on Slip: The Case of Couette Flow of Long-Chain Polyethylene Melt Flowing Past Gold Surfaces. Journal of Physical Chemistry B, 2021, 125, 6681-6696.	1.2	1
31	Coarse-grained simulations of bidisperse polymer melts. AIP Conference Proceedings, 2021, , .	0.3	0
32	Mesoscopic simulations of star polyethylene melts at equilibrium and under steady shear flow. AIP Conference Proceedings, 2021, , .	0.3	0
33	Delayed Thermal Relaxation in Lateral Heterostructures of Transition-Metal Dichalcogenides. Journal of Physical Chemistry C, 2022, 126, 6815-6824.	1.5	O