Wen-Jay Lee

List of Publications by Year
in descending order

45	372	933447 10	839539 18
papers	citations	h-index	g-index

45	45	45	443
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Machine-learning and high-throughput studies for high-entropy materials. Materials Science and Engineering Reports, 2022, 147, 100645.	31.8	44
2	Molecular-weight and cooling-rate dependence of polymer thermodynamics in molecular dynamics simulation. Polymer Journal, 2021, 53, 455-462.	2.7	5
3	Impact of lattice plane orientation in TiO2 based resistive switching memory: A computational approach. Applied Physics Letters, 2021, 118, .	3.3	3
4	Inherent Dipole Layer Formation Driven by Surface Energy at Nonplanar Dielectric Interface. IEEE Transactions on Electron Devices, 2021, 68, 294-298.	3.0	1
5	The mechanism underlying silicon oxide based resistive random-access memory (ReRAM). Nanotechnology, 2020, 31, 145709.	2.6	6
6	Subthreshold Swing Saturation of Nanoscale MOSFETs Due to Source-to-Drain Tunneling at Cryogenic Temperatures. IEEE Electron Device Letters, 2020, 41, 1296-1299.	3.9	20
7	Carrier Mobility Calculation for Monolayer Black Phosphorous. Journal of Nanoscience and Nanotechnology, 2019, 19, 6821-6825.	0.9	2
8	Impact of Semiconductor Permittivity Reduction on Electrical Characteristics of Nanoscale MOSFETs. IEEE Transactions on Electron Devices, 2019, 66, 2509-2512.	3.0	4
9	An FET With a Source Tunneling Barrier Showing Suppressed Short-Channel Effects for Low-Power Applications. IEEE Transactions on Electron Devices, 2018, 65, 855-859.	3.0	3
10	Interfacial topography and properties of graphene sheets on different reconstructed silicon surfaces. Carbon, 2016, 96, 29-39.	10.3	2
11	Using a functional C₈₄ monolayer to improve the mechanical properties and alter substrate deformation. RSC Advances, 2015, 5, 47498-47505.	3.6	1
12	Mechanical and structural properties of helical and non-helical silica nanowire. Computational Materials Science, 2014, 82, 165-171.	3.0	3
13	Investigation of the fracture mechanism of Cuâ€“Al gradient structure. RSC Advances, 2014, 4, 11975.	3.6	2
14	Investigation into the formation of 13-6 helical multi-shell gold nanowires. Computational Materials Science, 2014, 82, 226-230.	3.0	1
15	Effect of Au nanotube size on molecular behavior of water/ethanol mixtures. RSC Advances, 2013, 3, 5860.	3.6	5
16	Influence of oriented topological defects on the mechanical properties of carbon nanotube heterojunctions. Journal of Applied Physics, 2013, 114, 144306.	2.5	2
17	Investigation into the mechanical properties of single-walled carbon nanotube heterojunctions. Physical Chemistry Chemical Physics, 2013, 15, 11579.	2.8	6
18	Target Molecular Simulations of RecA Family Protein Filaments. International Journal of Molecular Sciences, 2012, 13, 7138-7148.	4.1	4

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19	Diffusion of the vacancy defect leading to the formation of multi-shell structures in the nanowire and nanobridge. Journal of Applied Physics, 2012, 112, 114301.	2.5	0
20	Plastic Deformation of a Nanoâ€Precipitate Strengthened Niâ€Base Alloy Investigated by Complementary In Situ Neutron Diffraction Measurements and Molecularâ€Dynamics Simulations. Advanced Engineering Materials, 2012, 14, 902-908.	3.5	14
21	Mechanism of local stress release in armchair single-wall zinc oxide nanotube under tensile loading. Journal of Nanoparticle Research, 2011, 13, 4749-4756.	1.9	1
22	The Interfacial Behavior of Water/PMMA Thin Film Under Normal Compression. Journal of Nanoscience and Nanotechnology, 2010, 10, 7075-7078.	0.9	1
23	Electronic properties of a silicon carbide nanotube under uniaxial tensile strain: a density function theory study. Journal of Nanoparticle Research, 2010, 12, 2919-2928.	1.9	12
24	Hydrogen-Bond Structure at the Interfaces between Water/Poly(methyl methacrylate), Water/Poly(methacrylic acid), and Water/Poly(2-aminoethylmethacrylamide). Langmuir, 2010, 26, 12640-12647.	3.5	41
25	Dynamical Property of Water Droplets of Different Sizes Adsorbed onto a Poly(methyl methacrylate) Surface. Langmuir, 2010, 26, 438-446.	3.5	6
26	Effect of Surface Structure on the Dynamical Behavior of an Aromatic Carboxylic Acid Molecule on Au Surfaces. Journal of Physical Chemistry C, 2009, 113, 5573-5584.	3.1	1
27	Chain-length and tacticity effects on the conformational behavior of MMA-oligomer thin films on an Au (111) substrate. Computational Materials Science, 2009, 45, 867-874.	3.0	3
28	Modeling of the polyethylene and poly(L-lactide) triblock copolymer: A dissipative particle dynamics study. Journal of Chemical Physics, 2009, 131, 124901.	3.0	16
29	Penetration and Adsorption of a Water Droplet Causing Local Deformation of the Poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.6	10
30	Combined Molecular Dynamics and Dissipative Particle Dynamics to Study of the Microstructure of Poly(L-lactide)/Polyethylene Blends. Journal of Nanoscience and Nanotechnology, 2009, 9, 731-735.	0.9	1
31	Chain-Length Effects on Conformations of Methyl Methacrylate-Oligomer Thin Films on an Au(111) Substrate. Journal of Nanoscience and Nanotechnology, 2009, 9, 1623-1626.	0.9	0
32	Temperature Effect on the Dynamic Behavior of Tricarboxylic Acid Derivatives in Two-Dimensional Network Structures. Journal of Nanoscience and Nanotechnology, 2009, 9, 889-892.	0.9	0
33	An investigation into the axial deformation of helical multi-shell gold nanowires. Journal of Physics and Chemistry of Solids, 2008, 69, 658-660.	4.0	2
34	Investigation of the adsorption mechanism of water nanocluster on the substrate: The size and interaction strength effect. Applied Surface Science, 2008, 254, 3606-3612.	6.1	2
35	Phonon spectra in ultrathin gold nanowire under stretching. Computational Materials Science, 2008, 42, 595-599.	3.0	4
36	Adsorption mechanism of water molecules surrounding Au nanoparticles of different sizes. Journal of Chemical Physics, 2008, 128, 154703.	3.0	25

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37	Lock and key behaviours of an aromatic carboxylic acid molecule with differing conformations on an Au (111) surface. Molecular Physics, 2008, 106, 2371-2380.	1.7	1
38	Dynamic behaviour of multi-shell 14-7-1 gold nanowire under different axial tensile strains. Nanotechnology, 2007, 18, 205706.	2.6	4
39	Molecular dynamics simulation of the dynamical behaviors of an aromatic carboxylic acid molecule with different conformations on a Au (111) surface. Applied Physics Letters, 2007, 90, 143112.	3.3	7
40	The behavior of water molecules nanoconfined between parallel Au plates. Computational Materials Science, 2007, 39, 359-364.	3.0	7
41	Hydrogen-bond dynamics of interior and surface molecules in a water nanocluster: temperature and size effects. Molecular Physics, 2007, 105, 429-436.	1.7	11
42	Molecular Dynamics Investigation into the Effect of Temperature on the Structure and Properties of Methyl Methacrylate Thin Films on a Au(111) Surface. Langmuir, 2007, 23, 8067-8073.	3.5	8
43	Strain rate effect on tensile behavior of the helical multi-shell gold nanowires. Materials Chemistry and Physics, 2006, 100, 48-53.	4.0	10
44	Dynamical behaviour of 7-1 gold nanowire under different axial tensile strains. Nanotechnology, 2006, 17, 3253-3258.	2.6	12
45	A molecular dynamics study of the tensile behaviour of ultrathin gold nanowires. Nanotechnology, 2004, 15, 1221-1225.	2.6	59