Lilia M Woods

List of Publications by Year
in descending order

90 papers	2,322 citations	218677 26 h-index	223800 46 g-index
91 all docs	91 docs citations	91 times ranked	2922 citing authors

#	Article	IF	Citations
1	Multilayer Thermionic Refrigeration. Physical Review Letters, 1998, 80, 4016-4019.	7.8	339
2	Adsorption of simple benzene derivatives on carbon nanotubes. Physical Review B, 2007, 75, .	3.2	195
3	Model of transport properties of thermoelectric nanocomposite materials. Physical Review B, 2009, 79, .	3.2	168
4	Casimir forces and graphene sheets. Physical Review B, 2010, 82, .	3.2	115
5	Electron-phonon effects in graphene and armchair (10,10) single-wall carbon nanotubes. Physical Review B, 2000, 61, 10651-10663.	3.2	99
6	Adsorption of Adenine and Thymine and Their Radicals on Single-Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2007, 111, 18174-18181.	3.1	75
7	Interlayer Interactions in van der Waals Heterostructures: Electron and Phonon Properties. ACS Applied Materials & Interfaces, 2016, 8, 6286-6292.	8.0	63
8	Bournonite PbCuSbS₃: Stereochemically Active Loneâ€Pair Electrons that Induce Low Thermal Conductivity. ChemPhysChem, 2015, 16, 3264-3270.	2.1	56
9	Casimir force phase transitions in the graphene family. Nature Communications, 2017, 8, 14699.	12.8	56
10	Casimir interactions between graphene sheets and metamaterials. Physical Review A, 2011, 84, .	2.5	50
11	Many-Body van der Waals Interactions between Graphitic Nanostructures. Journal of Physical Chemistry Letters, 2010, 1, 1356-1362.	4.6	49
12	Temperature dependent graphene suspension due to thermal Casimir interaction. Applied Physics Letters, 2012, 101, .	3.3	39
13	Enhanced thermoelectricity in composites by electronic structure modifications and nanostructuring. Applied Physics Letters, 2010, 97, .	3.3	37
14	Electronic and magnetic properties of deformed and defective single wall carbon nanotubes. Carbon, 2009, 47, 3252-3262.	10.3	35
15	Casimir-Polder effect for a stack of conductive planes. Physical Review A, 2016, 94, .	2.5	35
16	Electronic Structure Modulations of Radially Deformed Single Wall Carbon Nanotubes under Transverse External Electric Fields. Journal of Physical Chemistry C, 2009, 113, 4792-4796.	3.1	34
17	Near-field heat transfer between gold nanoparticle arrays. Journal of Applied Physics, 2013, 114, .	2.5	31
18	Effects of spatial dispersion on the Casimir force between graphene sheets. European Physical Journal B, 2012, 85, 1.	1.5	30

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19	Cloaking of Thermoelectric Transport. Scientific Reports, 2017, 7, 6988.	3.3	30
20	Thermal Casimir and Casimirâ€“Polder interactions in N parallel 2D Dirac materials. 2D Materials, 2018, 5, 035032.	4.4	30
21	Thermoelectric properties of Bi-doped PbTe composites. Journal of Applied Physics, 2011, 109, .	2.5	29
22	Thermodynamic stability of alkali-metalâ€“zinc double-cation borohydrides at low temperatures. Physical Review B, 2013, 88, .	3.2	29
23	Giant spin Seebeck effect through an interface organic semiconductor. Materials Horizons, 2020, 7, 1413-1420.	12.2	29
24	Interaction of a graphene sheet with a ferromagnetic metal plate. Physical Review B, 2012, 86, .	3.2	28
25	A carbon nanotube oscillator as a surface profiling device. Nanotechnology, 2008, 19, 435702.	2.6	26
26	Tunable Spin-Dependent Properties of Zigzag Silicene Nanoribbons. Physical Review Applied, 2014, 1, .	3.8	26
27	High-pressure phases of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mg</mml:mi><mml:mn>2</mml:mn></m first principles. Physical Review B, 2016, 93, .	3.2	26
28	Synthesis, transport properties, and electronic structure of Cu2CdSnTe4. Applied Physics Letters, 2014, 104, .	3.3	25
29	A synthetic approach for enhanced thermoelectric properties of PEDOT:PSS bulk composites. Applied Physics Letters, 2015, 107, .	3.3	25
30	Surface plasmon resonances of protein-conjugated gold nanoparticles on graphitic substrates. Applied Physics Letters, 2013, 103, .	3.3	23
31	Polaronic transport in Ag-based quaternary chalcogenides. Journal of Applied Physics, 2017, 122, .	2.5	20
32	Nonlocal optical response in topological phase transitions in the graphene family. Physical Review Materials, 2018, 2, .	2.4	20
33	Signatures of complex optical response in Casimir interactions of type I and II Weyl semimetals. Communications Materials, 2020, 1, .	6.9	19
34	Electronic structure ofCa2RuO4:A comparison with the electronic structures of other ruthenates. Physical Review B, 2000, 62, 7833-7838.	3.2	17
35	Chirality dependent carbon nanotube interactions. Physical Review B, 2011, 83, .	3.2	17
36	Transverse Electric Mode for Nearâ€Field Radiative Heat Transfer in Grapheneâ€“Metamaterial Systems. Advanced Optical Materials, 2014, 2, 1038-1042.	7.3	17

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37	Electronic structure properties of CuZn2InTe4 and AgZn2InTe4 quaternary chalcogenides. Journal of Applied Physics, 2019, 125, 155101.	2.5	17
38	Quantum and Thermal Dispersion Forces: Application to Graphene Nanoribbons. Physical Review Letters, 2014, 112, 025501.	7.8	16
39	Folded graphene nanoribbons with single and double closed edges. Physical Review B, 2012, 85, .	3.2	15
40	Valleytronics, Carrier Filtering and Thermoelectricity in Bismuth: Magnetic Field Polarization Effects. Advanced Functional Materials, 2012, 22, 3945-3949.	14.9	15
41	Casimir effect for a stack of conductive planes. Physical Review D, 2015, 92, .	4.7	14
42	Confinement effects on the solar thermal heating process of TiN nanoparticle solutions. Physical Chemistry Chemical Physics, 2019, 21, 19915-19920.	2.8	13
43	Synthesis, transport properties and electronic structure of p-type Cu1+xMn2â˜'xInTe4 (x = 0, 0.2, 0.3). Dalton Transactions, 2020, 49, 2273-2279.	3.3	12
44	van der Waals interactions between nanostructures: Some analytic results from series expansions. Physical Review A, 2014, 89, .	2.5	11
45	Casimir energy for surfaces with constant conductivity. Physical Review D, 2014, 89, .	4.7	11
46	Structure and properties of DOTA-chelated radiopharmaceuticals within the²²⁵Ac decay pathway. MedChemComm, 2018, 9, 1155-1163.	3.4	11
47	Enhanced solar photothermal effect of PANi fabrics with plasmonic nanostructures. RSC Advances, 2020, 10, 28447-28453.	3.6	11
48	Perspective on Some Recent and Future Developments in Casimir Interactions. Applied Sciences (Switzerland), 2021, 11, 293.	2.5	11
49	Telescopic hot double wall carbon nanotube for nanolithography. Applied Physics Letters, 2009, 95, 203507.	3.3	10
50	Casimir Effects in 2D Dirac Materials (Scientific Summary). JETP Letters, 2019, 110, 183-192.	1.4	10
51	Transformation optics for thermoelectric flow. JPhys Energy, 2019, 1, 025002.	5.3	10
52	A perspective on two-dimensional van der Waals opto-spin-caloritronics. Applied Physics Letters, 2021, 119, .	3.3	10
53	Mechanical properties of defective single wall carbon nanotubes. Journal of Applied Physics, 2010, 107, 061803.	2.5	9
54	Thermally driven anomalous Hall effect transitions in FeRh. Physical Review B, 2018, 97, .	3.2	9

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55	Electron spin dynamics due to hyperfine coupling in quantum dots. Physical Review B, 2008, 77, .	3.2	8
56	Thermoelectricity in polymer composites due to fluctuation-induced tunneling. Physical Chemistry Chemical Physics, 2015, 17, 27883-27888.	2.8	8
57	Exploring Phase Stability and Properties of Iâ€ˆ 2 â€ˆIIIâ€ˆVI 4 Quaternary Chalcogenides. Advanced Theory and Simulations, 2020, 3, 2000041.	2.8	8
58	Composition and stacking dependent topology in bilayers from the graphene family. Physical Review Materials, 2019, 3, .	2.4	8
59	Charge-Induced Fluctuation Forces in Graphitic Nanostructures. Physical Review X, 2016, 6, .	8.9	7
60	Compositional Effects and Electron Loneâ€pair Distortions in Doped Bournonites. ChemPhysChem, 2018, 19, 2635-2644.	2.1	7
61	Synthesis, Structure, and Electrical Properties of the Single Crystal Ba₈Cu₁₆As₃₀. Inorganic Chemistry, 2018, 57, 9327-9334.	4.0	7
62	Thermoelectric transport control with metamaterial composites. Journal of Applied Physics, 2020, 128, .	2.5	7
63	Optical Response of MoTe2 and WTe2 Weyl Semimetals: Distinguishing between Bulk and Surface Contributions. Advanced Theory and Simulations, 2020, 3, 1900247.	2.8	7
64	Vibrational properties and thermal transport in quaternary chalcogenides: The case of Te-based compositions. Physical Review Materials, 2021, 5, .	2.4	7
65	Advanced Thermoelectrics. Journal of Applied Physics, 2020, 127, 060401.	2.5	7
66	Phonon-modulated electron-electron interactions. Physical Review B, 1999, 60, 5276-5281.	3.2	6
67	Zigzag graphene nanoribbons with curved edges. RSC Advances, 2013, 3, 10014.	3.6	6
68	Repulsive interactions of a lipid membrane with graphene in composite materials. Journal of Chemical Physics, 2013, 139, 184703.	3.0	6
69	Cage disorder and gas encapsulation as routes to tailor properties of inorganic clathrates. Acta Materialia, 2017, 131, 475-481.	7.9	6
70	Zero-point energy of a cylindrical layer of finite thickness. Physical Review A, 2008, 78, .	2.5	5
71	Magnetic field and nanostructuring effects on the thermoelectric performance of bismuth. Physical Review B, 2012, 85, .	3.2	5
72	Transport theory within a generalized Boltzmann equation for multiband wave packets. Physical Review Research, 2020, 2, .	3.6	5

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73	Dispersive interactions in graphitic nanostructures. Chemical Physics, 2013, 413, 116-122.	1.9	4
74	Van der Waals interactions between graphitic nanowiggles. Journal of Applied Physics, 2013, 114, 044308.	2.5	4
75	The Casimir effect for planar layered system. International Journal of Modern Physics A, 2016, 31, 1641028.	1.5	4
76	Multiband effects in equations of motion of observables beyond the semiclassical approach. New Journal of Physics, 2019, 21, 103007.	2.9	4
77	Nonlinear electron-phonon heat exchange. Physical Review B, 1998, 57, 7679-7685.	3.2	3
78	Modeling of DNA Base Interactions with Carbon Nanotubes: ab initio Calculations and SEIRA Data. , 2009, , .		3
79	Radiative Exchange between Graphitic Nanostructures: A Microscopic Perspective. Journal of Physical Chemistry Letters, 2013, 4, 4196-4200.	4.6	3
80	Structure and Transport Properties of Dense Polycrystalline Clathrate-II (K,Ba)16(Ga,Sn)136 Synthesized by a New Approach Employing SPS. Materials, 2016, 9, 732.	2.9	3
81	Casimir force, causality, and the Gurzhi model. Physical Review B, 2020, 101, .	3.2	3
82	Off-stoichiometric semiconductors Cu1.33+xZn1.33-xIn1.33Se4 (x = 0, 0.1, 0.2 and 0.3): Synthesis, structure, and thermal and electrical properties. Journal of Solid State Chemistry, 2021, 297, 122058.	2.9	3
83	Surface exciton-plasmons and optical response of small-diameter carbon nanotubes. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2010, 108, 376-384.	0.6	2
84	On the role of interband surface plasmons in carbon nanotubes. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.6	2
85	Ab Initio Investigation of Bi-Rich Bi1â€“x Sb x Alloys. Journal of Electronic Materials, 2014, 43, 3110-3116.	2.2	2
86	Graphene nanoribbons anchored to SiC substrates. Journal of Physics Condensed Matter, 2016, 28, 364001.	1.8	2
87	Dispersive interactions between standard and Dirac materials and the role of dimensionality. JPhys Materials, 2022, 5, 034001.	4.2	2
88	Temperature phase transition model for the DNA-CNTs-based nanotweezers. Journal of Mathematical Chemistry, 2013, 51, 278-288.	1.5	1
89	Electron Spin Decoherence due to Hyperfine Coupling in Quantum Dots. AIP Conference Proceedings, 2005, , .	0.4	0
90	Thermoelectric efficiency of anisotropic materials with an application in layered systems. JPhys Energy, 0, , .	5.3	0