John C Duda

List of Publications by Year
in descending order

40 papers	2,545 citations	201674 27 h-index	315739 38 g-index
41 all docs	41 docs citations	41 times ranked	2523 citing authors

#	Article	IF	Citations
1	Kapitza resistance and the thermal conductivity of amorphous superlattices. Journal of Applied Physics, 2015, 118, .	2.5	50
2	Thermal boundary conductance accumulation and interfacial phonon transmission: Measurements and theory. Physical Review B, 2015, 91, .	3.2	74
3	Modifying Surface Energy of Graphene via Plasma-Based Chemical Functionalization to Tune Thermal and Electrical Transport at Metal Interfaces. Nano Letters, 2015, 15, 4876-4882.	9.1	68
4	Thermal flux limited electron Kapitza conductance in copper-niobium multilayers. Applied Physics Letters, 2015, 106, .	3.3	21
5	Thermal Conductance across Phosphonic Acid Molecules and Interfaces: Ballistic versus Diffusive Vibrational Transport in Molecular Monolayers. Journal of Physical Chemistry C, 2015, 119, 20931-20939.	3.1	24
6	Ion irradiation of the native oxide/silicon surface increases the thermal boundary conductance across aluminum/silicon interfaces. Physical Review B, 2014, 90, .	3.2	53
7	Crossover from incoherent to coherent phonon scattering in epitaxial oxide superlattices. Nature Materials, 2014, 13, 168-172.	27.5	399
8	Protein Thermal Conductivity Measured in the Solid State Reveals Anharmonic Interactions of Vibrations in a Fractal Structure. Journal of Physical Chemistry Letters, 2014, 5, 1077-1082.	4.6	34
9	Thermal transport in organic semiconducting polymers. Applied Physics Letters, 2013, 102, 251912.	3.3	74
10	Relationship of thermal boundary conductance to structure from an analytical model plus molecular dynamics simulations. Physical Review B, 2013, 87, .	3.2	71
11	Exceptionally Low Thermal Conductivities of Films of the Fullerene Derivative PCBM. Physical Review Letters, 2013, 110, 015902.	7.8	79
12	Effect of interface adhesion and impurity mass on phonon transport at atomic junctions. Journal of Applied Physics, 2013, 113, .	2.5	36
13	Ultrafast and steady-state laser heating effects on electron relaxation and phonon coupling mechanisms in thin gold films. Applied Physics Letters, 2013, 103, .	3.3	34
14	Thermal conductivity of nano-grained SrTiO3 thin films. Applied Physics Letters, 2012, 101, .	3.3	50
15	Systematically controlling Kapitza conductance via chemical etching. Applied Physics Letters, 2012, 100, .	3.3	78
16	Bidirectionally tuning Kapitza conductance through the inclusion of substitutional impurities. Journal of Applied Physics, 2012, 112, 073519.	2.5	19
17	Enhancing and tuning phonon transport at vibrationally mismatched solid-solid interfaces. Physical Review B, 2012, 85, .	3.2	157
18	Controlling Thermal Conductivity of Alloys via Atomic Ordering. Journal of Heat Transfer, 2012, 134, .	2.1	9

#	Article	IF	Citations
19	Prediction and Measurement of Thermal Transport Across Interfaces Between Isotropic Solids and Graphitic Materials. Journal of Heat Transfer, 2012, 134, .	2.1	28
20	Strategies for tuning phonon transport in multilayered structures using a mismatch-based particle model. Journal of Applied Physics, 2012, 111, .	2.5	14
21	Anharmonic Phonon Dispersion Relations, Group Velocities, and Branch-Dependent Specific Heat Capacities Measured Directly From Molecular Dynamics Simulations at Finite Temperatures. , 2012, , .		0
22	Experimental Investigation of Size Effects on the Thermal Conductivity of Silicon-Germanium Alloy Thin Films. Physical Review Letters, 2012, 109, 195901.	7.8	138
23	Manipulating Thermal Conductance at Metalâ€“Graphene Contacts via Chemical Functionalization. Nano Letters, 2012, 12, 590-595.	9.1	240
24	On the Linear Temperature Dependence of Phonon Thermal Boundary Conductance in the Classical Limit. Journal of Heat Transfer, 2011, 133, .	2.1	28
25	Influence of anisotropy on thermal boundary conductance at solid interfaces. Physical Review B, 2011, 84, .	3.2	53
26	Implications of cross-species interactions on the temperature dependence of Kapitza conductance. Physical Review B, 2011, 84, .	3.2	62
27	Controlling thermal conductance through quantum dot roughening at interfaces. Physical Review B, 2011, 84, .	3.2	98
28	Effect of dislocation density on thermal boundary conductance across GaSb/GaAs interfaces. Applied Physics Letters, 2011, 98, .	3.3	73
29	Contributions of Anharmonic Phonon Interactions to Thermal Boundary Conductance. , 2011, , .		0
30	Anharmonic Phonon Interactions at Interfaces and Contributions to Thermal Boundary Conductance. Journal of Heat Transfer, 2011, 133, .	2.1	109
31	Reducing thermal conductivity of binary alloys below the alloy limit via chemical ordering. Journal of Physics Condensed Matter, 2011, 23, 205401.	1.8	20
32	Assessment and prediction of thermal transport at solidâ€“self-assembled monolayer junctions. Journal of Chemical Physics, 2011, 134, 094704.	3.0	23
33	Effects of subconduction band excitations on thermal conductance at metal-metal interfaces. Applied Physics Letters, 2010, 96, .	3.3	14
34	Inelastic phonon interactions at solidâ€“graphite interfaces. Superlattices and Microstructures, 2010, 47, 550-555.	3.1	46
35	On the Assumption of Detailed Balance in Prediction of Diffusive Transmission Probability During Interfacial Transport. Nanoscale and Microscale Thermophysical Engineering, 2010, 14, 21-33.	2.6	50
36	Role of dispersion on phononic thermal boundary conductance. Journal of Applied Physics, 2010, 108, .	2.5	76

#	Article	IF	Citations
37	Ultrafast thermoelectric properties of gold under conditions of strong electron-phonon nonequilibrium. Journal of Applied Physics, 2010, 108, .	2.5	4
38	Contribution of optical phonons to thermal boundary conductance. Applied Physics Letters, 2010, 97, .	3.3	34
39	Extension of the diffuse mismatch model for thermal boundary conductance between isotropic and anisotropic materials. Applied Physics Letters, 2009, 95, .	3.3	81
40	Effects of Intra- and Interband Transitions on Electron-Phonon Coupling and Electron Heat Capacity After Short-Pulsed Laser Heating. Nanoscale and Microscale Thermophysical Engineering, 2008, 12, 320-333.	2.6	24