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	Crossover from incoherent to coherent phonon scattering in epitaxial oxide superlattices. Nature Materials, 2014, 13, 168-172.	27.5	399
2	Manipulating Thermal Conductance at Metalâ€“Graphene Contacts via Chemical Functionalization. Nano Letters, 2012, 12, 590-595.	9.1	240
3	Enhancing and tuning phonon transport at vibrationally mismatched solid-solid interfaces. Physical Review B, 2012, 85, .	3.2	157
4	Experimental Investigation of Size Effects on the Thermal Conductivity of Silicon-Germanium Alloy Thin Films. Physical Review Letters, 2012, 109, 195901.	7.8	138
5	Anharmonic Phonon Interactions at Interfaces and Contributions to Thermal Boundary Conductance. Journal of Heat Transfer, 2011, 133, .	2.1	109
6	Controlling thermal conductance through quantum dot roughening at interfaces. Physical Review B, 2011, 84, .	3.2	98
7	Extension of the diffuse mismatch model for thermal boundary conductance between isotropic and anisotropic materials. Applied Physics Letters, 2009, 95, .	3.3	81
8	Exceptionally Low Thermal Conductivities of Films of the Fullerene Derivative PCBM. Physical Review Letters, 2013, 110, 015902.	7.8	79
9	Systematically controlling Kapitza conductance via chemical etching. Applied Physics Letters, 2012, 100, .	3.3	78
10	Role of dispersion on phononic thermal boundary conductance. Journal of Applied Physics, 2010, 108, .	2.5	76
11	Thermal transport in organic semiconducting polymers. Applied Physics Letters, 2013, 102, 251912.	3.3	74
12	Thermal boundary conductance accumulation and interfacial phonon transmission: Measurements and theory. Physical Review B, 2015, 91, .	3.2	74
13	Effect of dislocation density on thermal boundary conductance across GaSb/GaAs interfaces. Applied Physics Letters, 2011, 98, .	3.3	73
14	Relationship of thermal boundary conductance to structure from an analytical model plus molecular dynamics simulations. Physical Review B, 2013, 87, .	3.2	71
15	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
16	Implications of cross-species interactions on the temperature dependence of Kapitza conductance. Physical Review B, 2011, 84, .	3.2	62
17	Influence of anisotropy on thermal boundary conductance at solid interfaces. Physical Review B, 2011, 84, .	3.2	53
18	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

#	Article	IF	Citations
19	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
20	Thermal conductivity of nano-grained SrTiO3 thin films. Applied Physics Letters, 2012, 101, .	3.3	50
21	Kapitza resistance and the thermal conductivity of amorphous superlattices. Journal of Applied Physics, 2015, 118, .	2.5	50
22	Inelastic phonon interactions at solidâ€“graphite interfaces. Superlattices and Microstructures, 2010, 47, 550-555.	3.1	46
23	Effect of interface adhesion and impurity mass on phonon transport at atomic junctions. Journal of Applied Physics, 2013, 113, .	2.5	36
24	Contribution of optical phonons to thermal boundary conductance. Applied Physics Letters, 2010, 97, .	3.3	34
25	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
26	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
27	On the Linear Temperature Dependence of Phonon Thermal Boundary Conductance in the Classical Limit. Journal of Heat Transfer, 2011, 133, .	2.1	28
28	Prediction and Measurement of Thermal Transport Across Interfaces Between Isotropic Solids and Graphitic Materials. Journal of Heat Transfer, 2012, 134, .	2.1	28
29	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
30	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
31	Assessment and prediction of thermal transport at solidâ€“self-assembled monolayer junctions. Journal of Chemical Physics, 2011, 134, 094704.	3.0	23
32	Thermal flux limited electron Kapitza conductance in copper-niobium multilayers. Applied Physics Letters, 2015, 106, .	3.3	21
33	Reducing thermal conductivity of binary alloys below the alloy limit via chemical ordering. Journal of Physics Condensed Matter, 2011, 23, 205401.	1.8	20
34	Bidirectionally tuning Kapitza conductance through the inclusion of substitutional impurities. Journal of Applied Physics, 2012, 112, 073519.	2.5	19
35	Effects of subconduction band excitations on thermal conductance at metal-metal interfaces. Applied Physics Letters, 2010, 96, .	3.3	14
36	Strategies for tuning phonon transport in multilayered structures using a mismatch-based particle model. Journal of Applied Physics, 2012, 111, .	2.5	14

#	Article	IF	Citations
37	Controlling Thermal Conductivity of Alloys via Atomic Ordering. Journal of Heat Transfer, 2012, 134, .	2.1	9
38	Ultrafast thermoelectric properties of gold under conditions of strong electron-phonon nonequilibrium. Journal of Applied Physics, 2010, 108, .	2.5	4
39	Contributions of Anharmonic Phonon Interactions to Thermal Boundary Conductance. , 2011, , .		0
40	Anharmonic Phonon Dispersion Relations, Group Velocities, and Branch-Dependent Specific Heat Capacities Measured Directly From Molecular Dynamics Simulations at Finite Temperatures. , 2012, , .		0