Philippe Ben-Abdallah

List of Publications by Year
in descending order

76 papers	4,889 citations	87888 38 h-index	91884 69 g-index
78 all docs	78 docs citations	78 times ranked	1590 citing authors

#	Article	IF	Citations
1	Graphene-based enhancement of near-field radiative-heat-transfer rectification. Applied Physics Letters, 2022, 120, .	3.3	9
2	Radiative cooling induced by time-symmetry breaking in periodically driven systems. Physical Review B, 2021, 103, .	3.2	6
3	Near-field radiative heat transfer in many-body systems. Reviews of Modern Physics, 2021, 93, .	45.6	143
4	Radiative thermal rectification in many-body systems. Physical Review B, 2021, 104, .	3.2	23
5	Smart thermal management with near-field thermal radiation [invited]. Optics Express, 2021, 29, 24816.	3.4	18
6	Strong slowing down of the thermalization of solids interacting in the extreme near field. Physical Review B, 2021, 104, .	3.2	7
7	Graphene-based autonomous pyroelectric system for near-field energy conversion. Scientific Reports, 2021, 11, 19489.	3.3	7
8	Mechanical relations between conductive and radiative heat transfer. Physical Review B, 2020, 102, .	3.2	2
9	Conduction-Radiation Coupling between Two Closely Separated Solids. Physical Review Letters, 2020, 125, 224302.	7.8	9
10	Anomalous photon thermal Hall effect. Physical Review B, 2020, 101, .	3.2	33
11	Saturation of radiative heat transfer due to many-body thermalization. Scientific Reports, 2020, 10, 8938.	3.3	6
12	Scalable radiative thermal logic gates based on nanoparticle networks. Scientific Reports, 2020, 10, 3596.	3.3	23
13	Many-body near-field radiative heat pumping. Physical Review B, 2020, 101, .	3.2	14
14	Thermomechanical bistability of phase-transition oscillators driven by near-field heat exchange. Physical Review B, 2020, 101, .	3.2	3
15	Harvesting the Electromagnetic Energy Confined Close to a Hot Body. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2019, 74, 689-696.	1.5	7
16	Dynamical Response of a Radiative Thermal Transistor Based on Suspended Insulator-Metal-Transition Membranes. Physical Review Applied, 2019, 11, .	3.8	26
17	Thermal photon drag in many-body systems. Physical Review B, 2019, 99, .	3.2	15
18	Radiative thermal diode driven by nonreciprocal surface waves. Applied Physics Letters, 2019, 114, .	3.3	76

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19	Multitip Near-Field Scanning Thermal Microscopy. Physical Review Letters, 2019, 123, 264301.	7.8	29
20	Magnetothermoplasmonics: from theory to applications. Journal of Photonics for Energy, 2019, 9, 1.	1.3	36
21	Ballistic near-field heat transport in dense many-body systems. Physical Review B, 2018, 97, .	3.2	29
22	Anisotropic Thermal Magnetoresistance for an Active Control of Radiative Heat Transfer. ACS Photonics, 2018, 5, 705-710.	6.6	80
23	Surface-mode-assisted amplification of radiative heat transfer between nanoparticles. Physical Review B, 2018, 97, .	3.2	54
24	Limitations of kinetic theory to describe near-field heat exchanges in many-body systems. Physical Review B, 2018, 98, .	3.2	22
25	Fluctuations of radiative heat exchange between two bodies. Physical Review B, 2018, 97, .	3.2	6
26	A Thermal Diode Based on Nanoscale Thermal Radiation. ACS Nano, 2018, 12, 5774-5779.	14.6	167
27	Radiative Heat Shuttling. Physical Review Letters, 2018, 121, 023903.	7.8	25
28	Circular heat and momentum flux radiated by magneto-optical nanoparticles. Physical Review B, 2018, 97, .	3.2	41
29	Energy harvesting from lukewarm photons. Nature Nanotechnology, 2018, 13, 772-773.	31.5	2
30	Near-Field Heat Transfer between Multilayer Hyperbolic Metamaterials. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2017, 72, 115-127.	1.5	38
31	Thermal memristor and neuromorphic networks for manipulating heat flow. AIP Advances, 2017, 7, .	1.3	18
32	Thermotronics: Towards Nanocircuits to Manage Radiative Heat Flux. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2017, 72, 151-162.	1.5	22
33	Radiative heat transfer and nonequilibrium Casimir-Lifshitz force in many-body systems with planar geometry. Physical Review B, 2017, 95, .	3.2	59
34	Graphene-based amplification and tuning of near-field radiative heat transfer between dissimilar polar materials. Physical Review B, 2017, 96, .	3.2	44
35	Giant Thermal Magnetoresistance in Plasmonic Structures. Physical Review Letters, 2017, 118, 173902.	7.8	86
36	Towards Boolean operations with thermal photons. Physical Review B, 2016, 94, .	3.2	49

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37	Hyperbolic waveguide for long-distance transport of near-field heat flux. Physical Review B, 2016, 94, .	3.2	55
38	Revisiting super-Planckian thermal emission in the far-field regime. Physical Review B, 2016, 93, .	3.2	33
39	Photon Thermal Hall Effect. Physical Review Letters, 2016, 116, 084301.	7.8	122
40	Heat Engine Driven by Photon Tunneling in Many-Body Systems. Physical Review Applied, 2015, 4, .	3.8	34
41	Fundamental limits for light absorption and scattering induced by cooperative electromagnetic interactions. Physical Review B, 2015, 91, .	3.2	30
42	Blackbody Theory for Hyperbolic Materials. Physical Review Letters, 2015, 115, 174301.	7.8	21
43	Contactless heat flux control with photonic devices. AIP Advances, 2015, 5, .	1.3	63
44	Radiative heat flux predictions in hyperbolic metamaterials. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 158, 17-26.	2.3	25
45	Modulation and amplification of radiative far field heat transfer: Towards a simple radiative thermal transistor. Applied Physics Letters, 2015, 106, .	3.3	66
46	Heat flux splitter for near-field thermal radiation. Applied Physics Letters, 2015, 107, .	3.3	45
47	Microsecond switchable thermal antenna. Journal of Applied Physics, 2014, 116, 034306.	2.5	14
48	Near-Field Thermal Transistor. Physical Review Letters, 2014, 112, 044301.	7.8	406
49	Strong tipâ€“sample coupling in thermal radiation scanning tunneling microscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 136, 1-15.	2.3	46
50	High temperature layered absorber for thermo-solar systems. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 149, 8-15.	2.3	12
51	Radiative Bistability and Thermal Memory. Physical Review Letters, 2014, 113, 074301.	7.8	156
52	Cooperative electromagnetic interactions between nanoparticles for solar energy harvesting. Optics Express, 2014, 22, A577.	3.4	22
53	Graphene-based photovoltaic cells for near-field thermal energy conversion. Scientific Reports, 2013, 3, 1383.	3.3	215
54	Super-Planckian near-field thermal emission with phonon-polaritonic hyperbolic metamaterials. Applied Physics Letters, 2013, 102, .	3.3	156

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55	Heat Superdiffusion in Plasmonic Nanostructure Networks. Physical Review Letters, 2013, 111, 174301.	7.8	73
56	Tuning the electromagnetic local density of states in graphene-covered systems via strong coupling with graphene plasmons. Physical Review B, 2013, 87, .	3.2	56
57	Fluctuation-electrodynamic theory and dynamics of heat transfer in systems of multiple dipoles. Physical Review B, 2013, 88, .	3.2	119
58	On the limits of the effective description of hyperbolic materials in the presence of surface waves. Journal of Optics (United Kingdom), 2013, 15, 105101.	2.2	50
59	Phase-change radiative thermal diode. Applied Physics Letters, 2013, 103, .	3.3	203
60	Three-Body Amplification of Photon Heat Tunneling. Physical Review Letters, 2012, 109, 244302.	7.8	109
61	Hyperbolic Metamaterials as an Analog of a Blackbody in the Near Field. Physical Review Letters, 2012, 109, 104301.	7.8	349
62	Radiative cooling of nanoparticles close to a surface. European Physical Journal B, 2012, 85, 1.	1.5	36
63	Coherent thermal conductance of 1-D photonic crystals. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 3462-3465.	2.1	13
64	Many-Body Radiative Heat Transfer Theory. Physical Review Letters, 2011, 107, 114301.	7.8	194
65	Modulation of near-field heat transfer between two gratings. Applied Physics Letters, 2011, 98, .	3.3	146
66	Phonon polaritons enhance near-field thermal transfer across the phase transition of VO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2011, 84, .	3.2	123
67	Nanoscale heat flux between nanoporous materials. Optics Express, 2011, 19, A1088.	3.4	169
68	Fundamental limits for noncontact transfers between two bodies. Physical Review B, 2010, 82, .	3.2	101
69	Surface Bloch waves mediated heat transfer between two photonic crystals. Applied Physics Letters, 2010, 96, .	3.3	47
70	Noncontact heat transfer between two metamaterials. Physical Review B, 2010, 81, .	3.2	72
71	Tailoring the local density of states of nonradiative field at the surface of nanolayered materials. Applied Physics Letters, 2009, 94, 153117.	3.3	27
72	Near-field heat transfer mediated by surface wave hybridization between two films. Journal of Applied Physics, 2009, 106, .	2.5	85

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73	Heat transport through plasmonic interactions in closely spaced metallic nanoparticle chains. Physical Review B, 2008, 77, .	3.2	62
74	Ab initiodesign of coherent thermal sources. Journal of Applied Physics, 2007, 102, 114305.	2.5	47
75	Heat transfer through near-field interactions in nanofluids. Applied Physics Letters, 2006, 89, 113117.	3.3	49
76	Nanoscale Radiative Heat Transfer and Its Applications. , 0, , .		3