TomÃ¡Å¡ KrÃ¡lÃ-k

List of Publications by Year
in descending order

28 papers	510 citations	840776 11 h-index	642732 23 g-index
28 all docs	28 docs citations	28 times ranked	396 citing authors

#	Article	IF	Citations
1	Thermal Waves and Heat Transfer Efficiency Enhancement in Harmonically Modulated Turbulent Thermal Convection. Physical Review Letters, 2022, 128, 134502.	7.8	9
2	Low-emittance copper-coating system using atomic-layer-deposited aluminum oxide. Thin Solid Films, 2022, 749, 139179.	1.8	4
3	Near field radiative heat transfer between macro-scale metallic surfaces at cryogenic temperatures. Cryogenics, 2021, 113, 103156.	1.7	3
4	Nanostructures for Achieving Selective Properties of a Thermophotovoltaic Emitter. Nanomaterials, 2021, 11, 2443.	4.1	1
5	Thermal radiation in Rayleigh-BÃ©nard convection experiments. Physical Review E, 2020, 101, 043106.	2.1	4
6	Strong suppression of near-field radiative heat transfer by superconductivity in NbN. Physical Review B, 2019, 99, .	3.2	9
7	Elusive transition to the ultimate regime of turbulent Rayleigh-BÃ©nard convection. Physical Review E, 2019, 99, 011101.	2.1	10
8	A database of metallic materials emissivities and absorptivities for cryogenics. Cryogenics, 2019, 97, 85-99.	1.7	17
9	Effect of superconductivity on near-field radiative heat transfer. Physical Review B, 2017, 95, .	3.2	10
10	Reynolds number scaling in cryogenic turbulent Rayleighâ€“BÃ©nard convection in a cylindrical aspect ratio one cell. Journal of Fluid Mechanics, 2017, 832, 721-744.	3.4	14
11	Low temperature thermal radiative properties of gold coated metals. International Journal of Refrigeration, 2017, 82, 51-55.	3.4	5
12	Method for measurement of emissivity and absorptivity of highly reflective surfaces from 20â€‰K to room temperatures. Metrologia, 2016, 53, 743-753.	1.2	31
13	Heat transfer in cryogenic helium gas by turbulent Rayleighâ€“BÃ©nard convection in a cylindrical cell of aspect ratio 1. New Journal of Physics, 2014, 16, 053042.	2.9	38
14	UrbanetÂal.Reply:. Physical Review Letters, 2013, 110, 199402.	7.8	4
15	Effect of Boundary Layers Asymmetry on Heat Transfer Efficiency in Turbulent Rayleigh-BÃ©nard Convection at Very High Rayleigh Numbers. Physical Review Letters, 2012, 109, 154301.	7.8	36
16	Publisherâ€™s Note: Effect of Boundary Layers Asymmetry on Heat Transfer Efficiency in Turbulent Rayleigh-BÃ©nard Convection at Very High Rayleigh Numbers [Phys. Rev. Lett.109, 154301 (2012)]. Physical Review Letters, 2012, 109, .	7.8	0
17	Strong Near-Field Enhancement of Radiative Heat Transfer between Metallic Surfaces. Physical Review Letters, 2012, 109, 224302.	7.8	151
18	Comments on heat transfer efficiency in cryogenic helium turbulent Rayleigh-BÃ©nard convection. Journal of Physics: Conference Series, 2011, 318, 082012.	0.4	2

#	Article	IF	Citations
19	Cryogenic apparatus for study of near-field heat transfer. Review of Scientific Instruments, 2011, 82, 055106.	1.3	48
20	Influence of condensed water on heat radiation absorptivity at cryogenic temperatures. Cryogenics, 2010, 50, 331-335.	1.7	5
21	Thermal conductivity of a CuCrZr alloy from 5K to room temperatures. Cryogenics, 2010, 50, 737-742.	1.7	12
22	Helium cryostat for experimental study of natural turbulent convection. Review of Scientific Instruments, 2010, 81, 085103.	1.3	20
23	Black surfaces for infrared, aerospace, and cryogenic applications. Proceedings of SPIE, 2009, , .	0.8	7
24	Thermal radiative properties of a DLC coating. Cryogenics, 2008, 48, 455-457.	1.7	10
25	Effect of different treatments of copper surface on its total hemispherical absorptivity bellow 77K. Cryogenics, 2007, 47, 257-261.	1.7	8
26	Low temperature radiative properties of materials used in cryogenics. Cryogenics, 2005, 45, 529-536.	1.7	36
27	Economical helium bath cryopump: design and testing. Vacuum, 2004, 74, 77-83.	3.5	1
28	Optical characterization of thin films non-uniform in thickness by a multiple-wavelength reflectance method. Surface and Interface Analysis, 2002, 34, 660-663.	1.8	15