Denis Lemonnier

List of Publications by Year
in descending order

56	1,209	394421	377865
papers	citations	19 h-index	34 g-index

60	60	60	632
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Monte Carlo transient phonon transport in silicon and germanium at nanoscales. Physical Review B, 2005, 72, .	3.2	203
2	Discrete ordinates solution of radiative transfer across a slab with variable refractive index. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 73, 195-204.	2.3	110
3	Monte Carlo simulation of phonon confinement in silicon nanostructures: Application to the determination of the thermal conductivity of silicon nanowires. Applied Physics Letters, 2006, 89, 103104.	3.3	100
4	Coupling of turbulent natural convection with radiation in an air-filled differentially-heated cavity at Ra=1.5Ã—109. Computers and Fluids, 2013, 88, 115-125.	2.5	58
5	The rank correlated SLW model of gas radiation in non-uniform media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 197, 26-44.	2.3	57
6	Numerical prediction of heat transfer by natural convection and radiation in an enclosure filled with an isotropic scattering medium. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1689-1704.	2.3	46
7	Meshless method for solving radiative transfer problems in complex two-dimensional and three-dimensional geometries. International Journal of Thermal Sciences, 2010, 49, 2282-2288.	4.9	39
8	Numerical study of coupled double-diffusive natural convection and radiation in a square cavity filled with A N2â€“CO2 mixture. International Communications in Heat and Mass Transfer, 2009, 36, 197-202.	5.6	38
9	The SLW-1 model for efficient prediction of radiative transfer in high temperature gases. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1205-1212.	2.3	35
10	Radiative heat transfer in orthogonal curvilinear coordinates using the discrete ordinates method. Journal of Quantitative Spectroscopy and Radiative Transfer, 1996, 55, 7-17.	2.3	33
11	Prediction of the thermal conductivity anisotropy of Si nanofilms. Results of several numerical methods. International Journal of Thermal Sciences, 2009, 48, 1467-1476.	4.9	30
12	Three-dimensional modelling and optimisation of thermal fields induced in a human body during hyperthermia. International Journal of Thermal Sciences, 2002, 41, 500-508.	4.9	29
13	Modeling semiconductor nanostructures thermal properties: The dispersion role. Journal of Applied Physics, 2009, 105, 073516.	2.5	28
14	MRT-lattice Boltzmann computations of natural convection and volumetric radiation in a tilted square enclosure. International Journal of Thermal Sciences, 2012, 54, 125-141.	4.9	27
15	Numerical study of double-diffusion convection coupled to radiation in a square cavity filled with a participating grey gas. Journal Physics D: Applied Physics, 2008, 41, 195501.	2.8	26
16	Combined double-diffusive convection and radiation in a square enclosure filled with semitransparent fluid. Computers and Fluids, 2012, 69, 172-178.	2.5	26
17	Coupled Radiation and Double Diffusive Convection in Nongray Air-CO₂and Air-H₂O Mixtures in Cooperating Situations. Numerical Heat Transfer; Part A: Applications, 2009, 56, 1-19.	2.1	24
18	Computation of surface radiation and natural convection in a heated horticultural greenhouse. Applied Energy, 2010, 87, 894-900.	10.1	21

#	Article	IF	Citations
19	Laminar natural convection flow in a cylindrical cavity application to the storage of LNG. Journal of Petroleum Science and Engineering, 2010, 71, 126-132.	4.2	21
20	Inhomogeneous radiative model of refractive and dispersive semi-transparent stellar atmospheres. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 69, 61-80.	2.3	19
21	Comonotonic global spectral models of gas radiation in non-uniform media based on arbitrary probability measures. Applied Mathematical Modelling, 2017, 50, 741-754.	4.2	19
22	SLW-1 Modeling of Radiative Heat Transfer in Nonisothermal Nonhomogeneous Gas Mixtures With Soot. Journal of Heat Transfer, 2011, 133, .	2.1	18
23	Efficient cumulative wavenumber model of radiative transfer in gaseous media bounded by non-gray walls. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 128, 2-9.	2.3	14
24	The Generalized SLW Model. Journal of Physics: Conference Series, 2016, 676, 012022.	0.4	13
25	Interaction of radiation with double-diffusive natural convection in a three-dimensional cubic cavity filled with a non-gray gas mixture in cooperating cases. Numerical Heat Transfer; Part A: Applications, 2016, 69, 479-496.	2.1	13
26	The Scaled SLW model of gas radiation in non-uniform media based on Planck-weighted moments of gas absorption cross-section. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 206, 198-212.	2.3	13
27	Locally correlated SLW model for prediction of gas radiation in non-uniform media and its relationship to other global methods. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 245, 106857.	2.3	13
28	Addition of a water mist on a small-scale liquid pool fire: Effect on radiant heat transfer at the surface. Proceedings of the Combustion Institute, 2002, 29, 377-384.	3.9	12
29	Gas radiation effects on opposing double-diffusive convection in a non-gray airâ€“H2O mixture. International Journal of Thermal Sciences, 2014, 77, 38-46.	4.9	12
30	Extension of the exact SLW model to non-isothermal gaseous media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 143, 83-91.	2.3	12
31	Numerical investigation of coupled natural convection and radiation in a differentially heated cubic cavity filled with humid air. Effects of the cavity size. Numerical Heat Transfer; Part A: Applications, 2017, 72, 495-518.	2.1	11
32	Conductiveâ€“radiative coupling in an absorbingâ€“emitting axisymmetric medium. Journal of Quantitative Spectroscopy and Radiative Transfer, 2000, 65, 787-803.	2.3	10
33	Numerical simulation of transient phonon heat transfer in silicon nanowires and nanofilms. Journal of Physics: Conference Series, 2007, 92, 012077.	0.4	8
34	Simultaneous identification of thermophysical properties of semitransparent media using an artificial neural network trained by a 2-D axisymmetric direct model. Numerical Heat Transfer; Part A: Applications, 2020, 77, 890-912.	2.1	8
35	Reduced Order Models for conduction and radiation inside semi-transparent media via the Modal Identification Method. International Journal of Heat and Mass Transfer, 2021, 168, 120598.	4.8	8
36	The generalized k-moment method for the modeling of cumulative k-distributions of H2O at high temperature. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 143, 92-99.	2.3	7

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37	Coupled velocity and temperature measurements in an air-filled differentially heated cavity at Ra=1.2E11. International Journal of Thermal Sciences, 2018, 123, 151-161.	4.9	7
38	Effect on Radiant Heat Transfer at the Surface of a Pool Fire Interacting With a Water Mist. Journal of Heat Transfer, 2010, 132, .	2.1	6
39	Monte Carlo modeling of phonon transport in nanodevices. Journal of Physics: Conference Series, 2007, 92, 012078.	0.4	5
40	Modeling the cumulative distribution of absorption coefficients of gases using the generalized k-moment method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 124, 49-61.	2.3	5
41	Solution of the Boltzmann Equationfor Phonon Transport. , 0, , 77-106.		4
42	Numerical study of an unsteady confined thermal plume under the influence of gas radiation. International Journal of Thermal Sciences, 2020, 156, 106474.	4.9	4
43	The Fifth International Symposium on Radiative Transfer. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 177-179.	2.3	3
44	Comparative Study of Radiative Effects on Double Diffusive Convection in Nongray Air-CO₂Mixtures in Cooperating and Opposing Flow. Mathematical Problems in Engineering, 2015, 2015, 1-17.	1.1	3
45	Experimental investigations in an air-filled differentially-heated cavity at large Rayleigh Numbers. Journal of Physics: Conference Series, 2012, 395, 012119.	0.4	2
46	Heat Pulse Propagation in Silicon Nanostructures by Solving Phonon Transport Equation. , 2008, , .		1
47	Restitution of the Temperature Field Inside a Cylinder of Semitransparent Dense Medium From Directional Intensity Data. Journal of Heat Transfer, 2009, 131, .	2.1	1
48	SLW-1 Modeling of Radiative Heat Transfer in Non-Isothermal Non-Homogeneous Gas Mixtures With Soot. , 2010, , .		1
49	Coupled temperature and velocity measurements in turbulent natural convection flows. Journal of Physics: Conference Series, 2012, 395, 012067.	0.4	1
50	Non-gray gas radiation effect on mixed convection in lid driven square cavity. AIP Conference Proceedings, 2016, , .	0.4	1
51	Natural Convection and Volumetric Radiation Interactions in a Concentric Square Annulus. Journal of Thermophysics and Heat Transfer, 2021, 35, 547-559.	1.6	1
52	Special issue based on Eurotherm Seminar No. 83: Computational thermal radiation in participating media III. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 262-263.	2.3	0
53	The Sixth International Symposium on Radiative Transfer. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1139-1140.	2.3	0
54	Eurotherm Conference No. 95: Computational Thermal Radiation in Participating Media IV. Journal of Physics: Conference Series, 2012, 369, 011001.	0.4	0

#	Article	IF	Citations
55	Effect of horizontal walls emissivity on coupled double diffusive convection and non gray-gas radiation of air-H<inf>2</inf>O mixture in a cooperating case. , 2015, , .		0
56	Influence of surface radiation on the transition to unsteadiness for a natural convection flow in a differentially heated cavity. Numerical Heat Transfer; Part A: Applications, 2020, 78, 291-305.	2.1	0