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List of Publications by Year
in descending order

119 papers	3,470 citations	126907 33 h-index	182427 51 g-index
119 all docs	119 docs citations	119 times ranked	1286 citing authors

#	Article	IF	Citations
1	Solving transient conduction and radiation heat transfer problems using the lattice Boltzmann method and the finite volume method. Journal of Computational Physics, 2007, 223, 89-107.	3.8	199
2	Conventional and newly developed bioheat transport models in vascularized tissues: A review. Journal of Thermal Biology, 2013, 38, 107-125.	2.5	141
3	Application of the lattice Boltzmann method for solving the energy equation of a 2-D transient conductionâ€“radiation problem. International Journal of Heat and Mass Transfer, 2005, 48, 3648-3659.	4.8	115
4	An inverse analysis of a transient 2-D conductionâ€“radiation problem using the lattice Boltzmann method and the finite volume method coupled with the genetic algorithm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 2060-2077.	2.3	109
5	Development and comparison of the DTM, the DOM and the FVM formulations for the short-pulse laser transport through a participating medium. International Journal of Heat and Mass Transfer, 2006, 49, 1820-1832.	4.8	105
6	A Lattice Boltzmann Formulation for the Analysis of Radiative Heat Transfer Problems in a Participating Medium. Numerical Heat Transfer, Part B: Fundamentals, 2010, 57, 126-146.	0.9	100
7	Transient Conduction-Radiation Heat Transfer in Participating Media Using the Lattice Boltzmann Method and the Discrete Transfer Method. Numerical Heat Transfer; Part A: Applications, 2005, 47, 935-954.	2.1	85
8	Simulation of Natural Convection in the Presence of Volumetric Radiation Using the Lattice Boltzmann Method. Numerical Heat Transfer; Part A: Applications, 2008, 55, 18-41.	2.1	84
9	Studies on porous radiant burners for LPG (liquefied petroleum gas) cooking applications. Energy, 2011, 36, 6074-6080.	8.8	78
10	Computational efficiency improvements of the radiative transfer problems with or without conductionâ€“â€“a comparison of the collapsed dimension method and the discrete transfer method. International Journal of Heat and Mass Transfer, 2003, 46, 3083-3095.	4.8	76
11	Discrete ordinate method with a new and a simple quadrature scheme. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 101, 249-262.	2.3	71
12	Discrete transfer method applied to radiative transfer in a variable refractive index semitransparent medium. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 102, 432-440.	2.3	71
13	An Inverse Analysis for Parameter Estimation Applied to a Non-Fourier Conductionâ€“Radiation Problem. Heat Transfer Engineering, 2011, 32, 455-466.	1.9	63
14	Estimation of tumor characteristics in a breast tissue with known skin surface temperature. Journal of Thermal Biology, 2013, 38, 311-317.	2.5	63
15	Numerical analysis for determination of the presence of a tumor and estimation of its size and location in a tissue. Journal of Thermal Biology, 2013, 38, 32-40.	2.5	57
16	Analysis of Solidification of a Semitransparent Planar Layer Using the Lattice Boltzmann Method and the Discrete Transfer Method. Numerical Heat Transfer; Part A: Applications, 2006, 49, 279-299.	2.1	55
17	Application of the Lattice Boltzmann Method and the Discrete Ordinates Method for Solving Transient Conduction and Radiation Heat Transfer Problems. Numerical Heat Transfer; Part A: Applications, 2007, 52, 757-775.	2.1	53
18	Multiparameter Estimation in a Transient Conduction-Radiation Problem Using the Lattice Boltzmann Method and the Finite-Volume Method Coupled with the Genetic Algorithms. Numerical Heat Transfer; Part A: Applications, 2008, 53, 1321-1338.	2.1	52

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19	Numerical and experimental analyses of LPG (liquefied petroleum gas) combustion in a domestic cooking stove with a porous radiant burner. Energy, 2016, 95, 404-414.	8.8	52
20	Lattice Boltzmann Method Applied to Variable Thermal Conductivity Conduction and Radiation Problems. Journal of Thermophysics and Heat Transfer, 2006, 20, 895-902.	1.6	50
21	Retrieval of thermal properties in a transient conductionâ€“radiation problem with variable thermal conductivity. International Journal of Heat and Mass Transfer, 2009, 52, 2749-2758.	4.8	47
22	Lattice Boltzmann Method Applied to the Solution of Energy Equation of a Radiation and Non-Fourier Heat Conduction Problem. Numerical Heat Transfer; Part A: Applications, 2008, 54, 798-818.	2.1	45
23	Simultaneous estimation of size, radial and angular locations of a malignant tumor in a 3-D human breast â€“ A numerical study. Journal of Thermal Biology, 2015, 52, 147-156.	2.5	42
24	Analysis of Conduction and Radiation Heat Transfer in a 2-D Cylindrical Medium Using the Modified Discrete Ordinate Method and the Lattice Boltzmann Method. Numerical Heat Transfer; Part A: Applications, 2011, 60, 254-287.	2.1	40
25	Inverse analysis applied to retrieval of parameters and reconstruction of temperature field in a transient conductionâ€“radiation heat transfer problem involving mixed boundary conditions. International Communications in Heat and Mass Transfer, 2010, 37, 52-57.	5.6	39
26	Analysis of conductionâ€“radiation problem in absorbing, emitting and anisotropically scattering media using the collapsed dimension method. International Journal of Heat and Mass Transfer, 2002, 45, 2159-2168.	4.8	37
27	Heat transfer characteristics of a porous radiant burner under the influence of a 2-D radiation field. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 84, 527-537.	2.3	37
28	Lattice Boltzmann method applied to the solution of the energy equations of the transient conduction and radiation problems on non-uniform lattices. International Journal of Heat and Mass Transfer, 2008, 51, 68-82.	4.8	36
29	Combined radiation and convection heat transfer in a porous channel bounded by isothermal parallel plates. International Journal of Heat and Mass Transfer, 2004, 47, 1001-1013.	4.8	35
30	Lattice Boltzmann Method Applied to the Analysis of Transient Conduction-Radiation Problems in a Cylindrical Medium. Numerical Heat Transfer; Part A: Applications, 2009, 56, 42-59.	2.1	35
31	Non-invasive estimation of size and location of a tumor in a human breast using a curve fitting technique. International Communications in Heat and Mass Transfer, 2014, 56, 63-70.	5.6	35
32	Analyses of non-Fourier heat conduction in 1-D cylindrical and spherical geometry â€“ An application of the lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2012, 55, 7015-7023.	4.8	34
33	Simultaneous Retrieval of Parameters in a Transient Conduction-Radiation Problem Using a Differential Evolution Algorithm. Numerical Heat Transfer; Part A: Applications, 2013, 63, 373-395.	2.1	33
34	Analysis of Conduction-Radiation Heat Transfer in a 2D Enclosure Using the Lattice Boltzmann Method. Numerical Heat Transfer; Part A: Applications, 2014, 66, 669-688.	2.1	33
35	Application of a Particle Swarm Algorithm for Parameter Retrieval in a Transient Conduction-Radiation Problem. Numerical Heat Transfer; Part A: Applications, 2011, 59, 672-692.	2.1	32
36	Analysis of radiative transport in a cylindrical enclosureâ€"An application of the modified discrete ordinate method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1065-1081.	2.3	32

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37	Analysis of transport of collimated radiation in a participating media using the lattice Boltzmann method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 2088-2099.	2.3	32
38	The combustion characteristics and performance evaluation of DME (dimethyl ether) as an alternative fuel in a two-section porous burner for domestic cooking application. Energy, 2018, 150, 176-189.	8.8	32
39	Analysis of radiative signals from normal and malignant human skins subjected to a short-pulse laser. International Journal of Heat and Mass Transfer, 2014, 68, 278-294.	4.8	31
40	Unstructured Polygonal Finite-Volume Solutions of Radiative Heat Transfer in a Complex Axisymmetric Enclosure. Numerical Heat Transfer, Part B: Fundamentals, 2010, 57, 227-239.	0.9	30
41	Analysis of non-Fourier conduction and radiation in a cylindrical medium using lattice Boltzmann method and finite volume method. International Journal of Heat and Mass Transfer, 2013, 61, 41-55.	4.8	30
42	Laser-induced hyperthermia of nanoshell mediated vascularized tissue â€“ A numerical study. Journal of Thermal Biology, 2014, 44, 55-62.	2.5	30
43	Solving transient heat conduction problems on uniform and non-uniform lattices using the lattice Boltzmann method. International Communications in Heat and Mass Transfer, 2009, 36, 322-328.	5.6	28
44	Lattice Boltzmann Method Applied to Radiative Transport Analysis in a Planar Participating Medium. Heat Transfer Engineering, 2014, 35, 1267-1278.	1.9	28
45	Suitability of frequency modulated thermal wave imaging for skin cancer detectionâ€"A theoretical prediction. Journal of Thermal Biology, 2015, 51, 65-82.	2.5	27
46	Some Studies on Fuel Characteristics of Mesua Ferrea. Heat Transfer Engineering, 2008, 29, 405-409.	1.9	26
47	Thermographic evaluation of early melanoma within the vascularized skin using combined non-Newtonian blood flow and bioheat models. Computers in Biology and Medicine, 2014, 53, 206-219.	7.0	26
48	Performance evaluation of four radiative transfer methods in solving multi-dimensional radiation and/or conduction heat transfer problems. International Journal of Heat and Mass Transfer, 2012, 55, 5819-5835.	4.8	25
49	TRANSIENT CONDUCTION AND RADIATION HEAT TRANSFER WITH VARIABLE THERMAL CONDUCTIVITY. Numerical Heat Transfer; Part A: Applications, 2002, 41, 851-867.	2.1	24
50	Radiative heat transfer in absorbingâ€“emittingâ€“scattering gray medium inside 1-D gray Cartesian enclosure using the collapsed dimension method. International Journal of Heat and Mass Transfer, 2002, 45, 697-700.	4.8	24
51	Lattice Boltzmann Method and Modified Discrete Ordinate Method Applied to Radiative Transport in a Spherical Medium with and without Conduction. Numerical Heat Transfer; Part A: Applications, 2010, 58, 852-881.	2.1	24
52	Transient response of a planar participating medium subjected to a train of short-pulse radiation. International Journal of Heat and Mass Transfer, 2008, 51, 2418-2432.	4.8	23
53	Solidification of a 2-D semitransparent medium using the lattice Boltzmann method and the finite volume method. International Journal of Heat and Mass Transfer, 2008, 51, 4447-4460.	4.8	23
54	Radiation Element Method Coupled with the Lattice Boltzmann Method Applied to the Analysis of Transient Conduction and Radiation Heat Transfer Problem with Heat Generation in a Participating Medium. Numerical Heat Transfer; Part A: Applications, 2010, 57, 346-368.	2.1	22

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55	Combined conduction and radiation heat transfer with variable thermal conductivity and variable refractive index. International Journal of Heat and Mass Transfer, 2008, 51, 83-90.	4.8	21
56	Analysis of transport of short-pulse radiation in a participating medium using lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2014, 77, 218-229.	4.8	21
57	Usability of porous burner in kerosene pressure stove: An experimental investigation aided by energy and exergy analyses. Energy, 2016, 103, 251-260.	8.8	21
58	Thermal signatures of a localized inhomogeneity in a 2-D participating medium subjected to an ultra-fast step-pulse laser wave. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 705-726.	2.3	20
59	Analysis of combustion of liquefied petroleum gas in a porous radiant burner. International Journal of Heat and Mass Transfer, 2016, 95, 488-498.	4.8	20
60	Boundary Surface Heat Fluxes in a Square Enclosure with an Embedded Design Element. Journal of Thermophysics and Heat Transfer, 2010, 24, 845-849.	1.6	19
61	Analysis of Non-Fourier Conduction-Radiation Heat Transfer in a Cylindrical Enclosure. Numerical Heat Transfer; Part A: Applications, 2010, 58, 943-962.	2.1	19
62	Analysis of collimated radiation in participating media using the discrete transfer method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 96, 123-135.	2.3	18
63	Optimization of Heat Fluxes on the Heater and the Design Surfaces of a Radiating-Conducting Medium. Numerical Heat Transfer; Part A: Applications, 2009, 56, 846-860.	2.1	18
64	Combined Mode Conduction and Radiation Heat Transfer in a Porous Medium and Estimation of the Optical Properties of the Porous Matrix. Numerical Heat Transfer; Part A: Applications, 2015, 67, 1119-1135.	2.1	18
65	Analysis of non-Fourier conduction and radiation in a differentially heated 2-D square cavity. International Journal of Heat and Mass Transfer, 2014, 79, 116-125.	4.8	17
66	Modeling skin cooling using optical windows and cryogens during laser induced hyperthermia in a multilayer vascularized tissue. Applied Thermal Engineering, 2015, 89, 28-35.	6.0	17
67	TRANSIENT CONDUCTION AND RADIATION HEAT TRANSFER WITH HEAT GENERATION IN A PARTICIPATING MEDIUM USING THE COLLAPSED DIMENSION METHOD. Numerical Heat Transfer; Part A: Applications, 2001, 39, 79-100.	2.1	17
68	Analysis of non-Fourier conduction and volumetric radiation in a concentric spherical shell using lattice Boltzmann method and finite volume method. International Journal of Heat and Mass Transfer, 2014, 68, 51-66.	4.8	16
69	EFFECT OF ANGULAR QUADRATURE SCHEMES ON THE COMPUTATIONAL EFFICIENCY OF THE DISCRETE TRANSFER METHOD FOR SOLVING RADIATIVE TRANSPORT PROBLEMS WITH PARTICIPATING MEDIUM. Numerical Heat Transfer, Part B: Fundamentals, 2004, 46, 463-478.	0.9	15
70	Numerical analysis of solidification of a 3-D semitransparent medium in presence of volumetric radiation. International Journal of Thermal Sciences, 2009, 48, 1116-1128.	4.9	15
71	Minimizing Tissue Surface Overheating Using Convective Cooling During Laser-Induced Thermal Therapy: A Numerical Study. Journal of Thermal Science and Engineering Applications, 2016, 8, .	1.5	15
72	Analysis of a Localized Fire in a 3-D Tunnel Using a Hybrid Solver: Lattice Boltzmann Method, Finite-Volume Method, and Fully Explicit Upwind Scheme. Numerical Heat Transfer; Part A: Applications, 2008, 53, 392-417.	2.1	14

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73	Analysis of a Hyperbolic Heat Conduction-Radiation Problem With Temperature Dependent Thermal Conductivity. Journal of Heat Transfer, 2009, 131, .	2.1	14
74	The lattice Boltzmann method and the finite volume method applied to conductionâ€“radiation problems with heat flux boundary conditions. International Journal for Numerical Methods in Engineering, 2009, 78, 172-195.	2.8	14
75	Study of thermal behavior of a biological tissue: An equivalence of Pennes bioheat equation and Wulff continuum model. Journal of Thermal Biology, 2014, 45, 103-109.	2.5	14
76	Thermal Analysis of the Increasing Subcutaneous Fat Thickness Within the Human Skinâ€”A Numerical Study. Numerical Heat Transfer; Part A: Applications, 2015, 67, 313-329.	2.1	14
77	Combined mode conduction and radiation heat transfer in a spherical geometry with non-Fourier effect. International Journal of Heat and Mass Transfer, 2011, 54, 2975-2989.	4.8	13
78	Thermal Assessment of Ablation Limit of Subsurface Tumor During Focused Ultrasound and Laser Heating. Journal of Thermal Science and Engineering Applications, 2016, 8, .	1.5	13
79	Interaction of a Short-Pulse Laser of a Gaussian Temporal Profile with an Inhomogeneous Medium. Numerical Heat Transfer; Part A: Applications, 2007, 53, 625-640.	2.1	12
80	Simultaneous Reconstruction of Thermal Field and Retrieval of Parameters in a Cylindrical Enclosure. Numerical Heat Transfer; Part A: Applications, 2008, 54, 983-998.	2.1	12
81	Thermal Modeling of Mg₂Ni-Based Solid-State Hydrogen Storage Reactor. Heat Transfer Engineering, 2014, 35, 1354-1362.	1.9	12
82	Analysis of Dual-Phase-Lag Non-Fourier Conduction and Radiation Heat Transfer in a Planar Slab. Numerical Heat Transfer; Part A: Applications, 2015, 68, 1010-1022.	2.1	12
83	Analysis of Radiative Heat Transfer in a Planar Participating Medium Subjected to Diffuse and/or Collimated Radiationâ€”A Comparison of the DTM, the DOM, and the FVM. Numerical Heat Transfer; Part A: Applications, 2007, 52, 481-496.	2.1	11
84	Transport of a train of short-pulse radiation of step temporal profile through a 2-D participating medium. International Journal of Heat and Mass Transfer, 2008, 51, 2282-2298.	4.8	11
85	The finite volume method approach to the collapsed dimension method in analyzing steady/transient radiative transfer problems in participating media. International Communications in Heat and Mass Transfer, 2011, 38, 291-297.	5.6	11
86	Estimation of power of heaters in a radiant furnace for uniform thermal conditions on 3-D irregular shaped objects. International Journal of Heat and Mass Transfer, 2012, 55, 4340-4351.	4.8	11
87	Analysis of Radiative Transport in a 2-D Cylindrical Participating Medium Subjected to Collimated Radiation. Numerical Heat Transfer; Part A: Applications, 2014, 66, 884-903.	2.1	11
88	Numerical Analysis of Rayleigh-BÃ©nard Convection with and Without Volumetric Radiation. Numerical Heat Transfer; Part A: Applications, 2014, 65, 144-164.	2.1	11
89	Simultaneous Estimation of Properties in a Combined Mode Conductionâ€“Radiation Heat Transfer in a Porous Medium. Heat Transfer - Asian Research, 2016, 45, 699-713.	2.8	11
90	Radiative Transfer of a Short-Pulse Laser Wave of Gaussian Temporal Profile through a Two-Dimensional Participating Medium Containing Inhomogeneities of Different Shapes at Various Locations. Numerical Heat Transfer; Part A: Applications, 2008, 54, 546-567.	2.1	10

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91	Numerical Analysis of an Inverse Boundary Design Problem of a 3-D Radiant Furnace with a 3-D Design Object. Numerical Heat Transfer; Part A: Applications, 2011, 60, 25-49.	2.1	10
92	Numerical Study of Dynamics of Bubbles Using Lattice Boltzmann Method. Industrial & Engineering Chemistry Research, 2012, 51, 6364-6376.	3.7	10
93	The DOM approach to the collapsed dimension method for solving radiative transport problems with participating media. International Journal of Heat and Mass Transfer, 2006, 49, 30-41.	4.8	9
94	Assessment of Signals from a Tissue Phantom Subjected to Radiation Sources of Temporal Spans of the Order of a Nano-, Pico-, and Femto-Secondâ€"A Numerical Study. Numerical Heat Transfer; Part A: Applications, 2011, 60, 154-170.	2.1	9
95	Uniform thermal conditions on 3-D object: Optimal power estimation of panel heaters in a 3-D radiant enclosure. International Journal of Thermal Sciences, 2012, 51, 63-76.	4.9	9
96	Theoretical and numerical investigations of an electroosmotic flow micropump with interdigitated electrodes. Microsystem Technologies, 2014, 20, 157-168.	2.0	9
97	Simultaneous estimation of four parameters in a combined-mode heat transfer in a 2D porous matrix with heat generation. Numerical Heat Transfer; Part A: Applications, 2017, 71, 677-692.	2.1	9
98	Collapsed Dimension Method Applied to Radiative Transfer Problems in Complex Enclosures with Participating Medium. Numerical Heat Transfer, Part B: Fundamentals, 2002, 42, 367-388.	0.9	8
99	An Insight Into The Modeling of Short-Pulse Laser Transport Through A Participating Medium. Numerical Heat Transfer, Part B: Fundamentals, 2007, 52, 373-385.	0.9	8
100	View factor calculation in the 2-D geometries using the collapsed dimension method. International Communications in Heat and Mass Transfer, 2008, 35, 630-636.	5.6	8
101	Analyses of dual-phase lag heat conduction in 1-D cylindrical and spherical geometry â€" An application of the lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2016, 96, 627-642.	4.8	8
102	Analysis of hyperbolic heat conduction in 1-D planar, cylindrical, and spherical geometry using the lattice Boltzmann method. International Communications in Heat and Mass Transfer, 2016, 74, 48-54.	5.6	8
103	Simultaneous estimation of parameters in analyzing porous medium combustionâ€"assessment of seven optimization tools. Numerical Heat Transfer; Part A: Applications, 2017, 71, 666-676.	2.1	8
104	Comparison of the thermal effects of the transport of a short-pulse laser and a multi-pulse laser through a participating medium. International Journal of Heat and Mass Transfer, 2012, 55, 5583-5596.	4.8	7
105	TRANSIENT CONDUCTION-RADIATION INTERACTION IN A PLANAR PACKED BED WITH VARIABLE POROSITY. Numerical Heat Transfer; Part A: Applications, 2003, 44, 281-297.	2.1	6
106	Effects of the Incidence of a Gaussian Temporal Short-Pulse Laser of Different Spatial Profiles on a Two-Dimensional, Rectangular, Inhomogeneous Participating Medium. Numerical Heat Transfer; Part A: Applications, 2008, 54, 525-545.	2.1	6
107	Analysis of combined mode heat transfer in a porous medium using the lattice Boltzmann method. Numerical Heat Transfer; Part A: Applications, 2016, 69, 1092-1105.	2.1	6
108	Numerical analysis of combined-mode dual-phase-lag heat conduction and radiation in an absorbing, emitting, and scattering cylindrical medium. Numerical Heat Transfer; Part A: Applications, 2017, 71, 769-788.	2.1	6

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109	Effect of a step short-pulse laser train on an inhomogeneous planar participating medium. International Communications in Heat and Mass Transfer, 2008, 35, 1073-1078.	5.6	5
110	Analysis of 3-D Conduction - Radiation Heat Transfer Using the Lattice Boltzmann Method. Journal of Thermophysics and Heat Transfer, 2009, 23, 210-216.	1.6	5
111	Analysis of the Transport of a Train of Short-Pulse Radiation of Gaussian Temporal Profile Through a 2-D Participating Medium. Heat Transfer Engineering, 2009, 30, 1197-1207.	1.9	5
112	Effects of locations of a 3-D design object in a 3-D radiant furnace for prescribed uniform thermal conditions. Applied Thermal Engineering, 2011, 31, 3262-3274.	6.0	5
113	Detection of Subsurface Skin Lesion Using Frequency Modulated Thermal Wave Imaging: A Numerical Study. , 2013, , .		3
114	Nanoparticle Mediated Transmittance Signals From Pulsed Laser Irradiated Cancerous Lung as a Function of Respiration. Optik, 2015, 126, 5605-5609.	2.9	3
115	Effect of Dimethyl Ether as an Additive to Liquefied Petroleum Gas Flame in SiCâ€"Al2O3-Based Porous Inert Burner. Energy & Fuels, 2017, 31, 12721-12740.	5.1	3
116	On Configuration of Load in Radiant Furnace for Uniform Thermal Conditions. Heat Transfer Engineering, 2014, 35, 94-109.	1.9	2
117	Modeling bioheat transfer processes and thermoregulatory responses. Journal of Thermal Biology, 2016, 62, 97.	2.5	1
118	Selected Papers Presented at the First International Conference on Thermal Energy and Environment. Heat Transfer Engineering, 2014, 35, 1225-1226.	1.9	0
119	Analysis of Conduction and Radiation Heat Transfer in a Differentially Heated 2â€Đ Square Enclosure. Heat Transfer - Asian Research, 2017, 46, 384-408.	2.8	0