Benoit Rousseau

List of Publications by Year
in descending order

59	926	430874	501196
papers	citations	18 h-index	28 g-index

61	61	61	718
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A numerical method based on domain decomposition to solve coupled conduction-radiation physics using parallel computing within large porous media. Journal of Physics: Conference Series, 2021, 2116, 012057.	0.4	4
2	Conductive-radiative heat transfer within SiC-based cellular ceramics at high-temperatures: A discrete-scale finite element analysis. Finite Elements in Analysis and Design, 2020, 178, 103410.	3.2	12
3	Ample textures for electromagnetic scattering in radiative transfer. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 253, 107113.	2.3	0
4	AdÂhoc angular discretization of the radiative transfer equation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 225, 301-318.	2.3	7
5	Preconditioned Krylov subspace methods for solving radiative transfer problems with scattering and reflection. Computers and Mathematics With Applications, 2019, 77, 1453-1465.	2.7	13
6	CRITICAL MICRO-TEXTURAL DETAILS INFLUENCING RADIATIVE TRANSPORT IN HETEROGENEOUS MATERIALS. , 2019, , .		1
7	High performance computation of radiative transfer equation using the finite element method. Journal of Computational Physics, 2018, 360, 74-92.	3.8	38
8	Vectorial finite elements for solving the radiative transfer equation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 212, 59-74.	2.3	13
9	Study by molecular dynamics of the influence of temperature and pressure on the optical properties of undoped 3C-SiC structures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 205, 220-229.	2.3	4
10	Infrared reflectance, transmittance, and emittance spectra of MgO from first principles. Physical Review B, 2018, 98, .	3.2	15
11	COMBINING MICRO- MESO- AND MACRO-SCOPIC NUMERICAL METHODS FOR MULTISCALE RADIATIVE TRANSFER MODELING OF SiC-BASED FOAMS UP TO VERY HIGH TEMPERATURES. , 2018, , .		0
12	A simple expression for the normal spectral emittance of open-cell foams composed of optically thick and smooth struts. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 189, 329-338.	2.3	29
13	3D numerical modelling of the propagation of radiative intensity through a X-ray tomographied ligament. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 194, 86-97.	2.3	30
14	Specular reflection treatment for the 3D radiative transfer equation solved with the discrete ordinates method. Journal of Computational Physics, 2017, 334, 541-572.	3.8	19
15	Directional spectral reflectivity measurements of a carbon fibre reinforced composite up to 450 Â°C. International Journal of Heat and Mass Transfer, 2017, 112, 882-890.	4.8	20
16	Study of the reflective behaviour of carbon fibres reinforced polymer composite up to 450Â°C. AIP Conference Proceedings, 2017, , .	0.4	0
17	SPATIAL VERSUS ANGULAR PARALLELIZATION FOR SOLUTION OF RADIATIVE TRANSFER EQUATION IN PARTICIPATING MEDIA. , 2017, , .		0
18	Towards the development of simple methods for determining normal absorptances of open-cell foams based on opaque materials. Journal of Physics: Conference Series, 2016, 676, 012009.	0.4	1

#	Article	IF	Citations
19	Solution of the 2-D steady-state radiative transfer equation in participating media with specular reflections using SUPG and DG finite elements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 179, 149-164.	2.3	17
20	Far-and mid-infrared properties of carbon layers elaborated by plasma sputtering. Applied Surface Science, 2016, 390, 1002-1008.	6.1	0
21	Iterative and FEM methods to solve the 2â˜D Radiative Transfer Equation with specular reflexion. Journal of Physics: Conference Series, 2016, 676, 012013.	0.4	0
22	Simple method for measuring the spectral absorption cross-section of microalgae. Chemical Engineering Science, 2016, 146, 357-368.	3.8	33
23	Representative elementary volumes required to characterize the normal spectral emittance of silicon carbide foams used as volumetric solar absorbers. International Journal of Heat and Mass Transfer, 2016, 93, 118-129.	4.8	33
24	Regularization opportunities for the diffuse optical tomography problem. International Journal of Thermal Sciences, 2015, 98, 1-23.	4.9	4
25	Radiative thermal rectification between SiC and SiO_2. Optics Express, 2015, 23, A1388.	3.4	65
26	Functionalization of SiC-based materials by a selective YBa2Cu3O7-Î´ coating via solâ€“gel route in order to optimize their optical properties. Thin Solid Films, 2015, 596, 18-23.	1.8	3
27	A wavelet multi-scale method for the inverse problem of diffuse optical tomography. Journal of Computational and Applied Mathematics, 2015, 289, 267-281.	2.0	10
28	EVOLUTION OF THE HOMOGENIZED VOLUMETRIC RADIATIVE PROPERTIES OF A FAMILY OF Î±-SiC FOAMS WITH GROWING NOMINAL PORE DIAMETER. Journal of Porous Media, 2015, 18, 1031-1045.	1.9	10
29	Spectroscopic diagnostics of morphological changes arising in thermal processing of polypropylene. Applied Optics, 2014, 53, 2702.	1.8	13
30	Identification of the Radiative Properties of Î±-SiC Foams Realistically Designed With a Numerical Generator. , 2014, , .		2
31	Effect of Processing Temperature on Radiative Properties of Polypropylene and Heat Transfer in the Pure and Glassfibre Reinforced Polymer. , 2014, , .		4
32	Prediction of the radiative properties of reconstructed alpha-SiC foams used for concentrated solar applications. Materials Research Society Symposia Proceedings, 2013, 1545, 1.	0.1	5
33	Modeling heat transfer within porous multiconstituent materials. Journal of Physics: Conference Series, 2012, 369, 012001.	0.4	5
34	Investigations of the radiative properties of Alâ€“NiP foams using tomographic images and stereoscopic micrographs. International Journal of Heat and Mass Transfer, 2012, 55, 1606-1619.	4.8	71
35	High-Temperature Radiative Properties of an Yttria-Stabilized Hafnia Ceramic. Journal of the American Ceramic Society, 2011, 94, 1859-1864.	3.8	39
36	High-Temperature Radiative Behavior of an La2NiO4+Î´ Cathodic Layer for SOFCs (up to 900Â°C): Influence of Î´ and Texture. Journal of the American Ceramic Society, 2011, 94, 2535-2541.	3.8	3

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37	High Temperature Infrared Properties of <scp>YSZ</scp> Electrolyte Ceramics for <scp>SOFCs</scp>: Experimental Determination and Theoretical Modeling. Journal of the American Ceramic Society, 2011, 94, 4310-4316.	3.8	26
38	Modelling of the radiative properties of an opaque porous ceramic layer. Journal of Electroceramics, 2011, 27, 89-92.	2.0	9
39	Textural parameters influencing the radiative properties of a semitransparent porous media. International Journal of Thermal Sciences, 2011, 50, 178-186.	4.9	30
40	Transport properties and in-situ Raman spectroscopy study of BaCe0.9Y0.1O3â^'Î´ as a function of water partial pressures. Solid State Ionics, 2011, 191, 24-31.	2.7	50
41	Modeling of time-resolved coupled radiative and conductive heat transfer in multilayer semitransparent materials up to very high temperatures. Applied Physics Letters, 2011, 99, .	3.3	7
42	Modelling of the Thermal Radiative Properties of Oxide Ceramics. , 2010, , .		2
43	Synchrotron x-ray Î¼-tomography to model the thermal radiative properties of an opaque ceramic coating at T = 1000 K. Journal of Materials Research, 2010, 25, 1890-1897.	2.6	10
44	Prediction of thermal radiative properties (300â€“1000 K) of La2NiO4+Î´ ceramics. Applied Physics Letters, 2010, 97, 181917.	3.3	9
45	Material Parameters Influencing the Radiative Properties of Heterogeneous Optically Thick Oxide Ceramics. , 2009, , .		1
46	Prediction of the thermal radiative properties of an x-ray Î¼-tomographied porous silica glass. Applied Optics, 2007, 46, 4266.	2.1	25
47	Piecewise Polynomial Dielectric Function Model and its Application for the Retrieval of Optical Functions. Applied Spectroscopy, 2007, 61, 644-648.	2.2	13
48	Retrieval of Linear Optical Functions from Finite Range Spectra. Applied Spectroscopy, 2007, 61, 1390-1397.	2.2	8
49	Temperature effect (300â€“1500K) on the infrared photon transport inside an X-ray microtomographic reconstructed porous silica glass. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 104, 257-265.	2.3	8
50	Characterisation of YBa2Cu3O6+x films grown by the trifluoro-acetate metal organic decomposition route by infrared spectroscopy. Thin Solid Films, 2006, 515, 1607-1611.	1.8	4
51	Polar lattice dynamics of the MgAl2O4spinel up to the liquid state. Journal of Physics Condensed Matter, 2006, 18, 5669-5686.	1.8	27
52	CeO2 epitaxial films by spray MOD. Journal of the European Ceramic Society, 2005, 25, 2185-2189.	5.7	6
53	Temperature Measurement: Christiansen Wavelength and Blackbody Reference. International Journal of Thermophysics, 2005, 26, 1277-1286.	2.1	69
54	Combined synchrotron x-ray diffraction and micro-Raman for following in situ the growth of solution-deposited YBa2Cu3O7 thin films. Journal of Materials Research, 2005, 20, 3270-3273.	2.6	5

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55	Resistive substrate heater for film processing by spray pyrolysis. Review of Scientific Instruments, 2004, 75, 2884-2886.	1.3	1
56	Oxygen isotopic effect on the IR reflectivity spectra of a La2NiO4.14 single crystal. Solid State Sciences, 2004, 6, 1131-1137.	3.2	9
57	Use of cerium ethylhexanoate solutions for preparation of CeO2 buffer layers by spin coating. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 104, 185-191.	3.5	22
58	High emissivity of a rough Pr2NiO4 coating. Applied Physics Letters, 2001, 79, 3633-3635.	3.3	39
59	Dispersion Relations and Phase Retrieval in Infrared Reflection Spectra Analysis. Applied Spectroscopy, 2001, 55, 774-780.	2.2	20