Ya-Tao Ren

List of Publications by Year
in descending order

94 papers	1,729 citations	279798 23 h-index	377865 34 g-index
95 all docs	95 docs citations	95 times ranked	906 citing authors

#	Article	IF	Citations
1	Thermal dosage investigation for optimal temperature distribution in gold nanoparticle enhanced photothermal therapy. International Journal of Heat and Mass Transfer, 2017, 106, 212-221.	4.8	84
2	Application of homogenous continuous Ant Colony Optimization algorithm to inverse problem of one-dimensional coupled radiation and conduction heat transfer. International Journal of Heat and Mass Transfer, 2013, 66, 507-516.	4.8	74
3	Plasmonic Optical Tweezers for Particle Manipulation: Principles, Methods, and Applications. ACS Nano, 2021, 15, 6105-6128.	14.6	67
4	Magnetoplasmonic manipulation of nanoscale thermal radiation using twisted graphene gratings. International Journal of Heat and Mass Transfer, 2020, 150, 119305.	4.8	64
5	Application of the hybrid particle swarm optimization algorithms for simultaneous estimation of multi-parameters in a transient conduction–radiation problem. International Journal of Heat and Mass Transfer, 2015, 83, 428-440.	4.8	61
6	Active control of near-field radiative heat transfer by a graphene-gratings coating-twisting method. Optics Letters, 2020, 45, 2914.	3.3	49
7	Periodic trapezoidal VO_2-Ge multilayer absorber for dynamic radiative cooling. Optics Express, 2020, 28, 20609.	3.4	44
8	Localized surface plasmon resonance of nanotriangle dimers at different relative positions. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 199, 45-51.	2.3	40
9	Graphene-based thermal repeater. Applied Physics Letters, 2019, 115, .	3.3	40
10	Optimization configuration of selective solar absorber using multi-island genetic algorithm. Solar Energy, 2021, 224, 947-955.	6.1	40
11	Improved social spider optimization algorithms for solving inverse radiation and coupled radiation–conduction heat transfer problems. International Communications in Heat and Mass Transfer, 2017, 87, 132-146.	5.6	39
12	Near-field radiative heat transfer in multilayered graphene system considering equilibrium temperature distribution. Optics Express, 2019, 27, A953.	3.4	36
13	A novel parametric level set method coupled with Tikhonov regularization for tomographic laser absorption reconstruction. Applied Thermal Engineering, 2022, 201, 117819.	6.0	36
14	Solution of inverse radiation-conduction problems using a Kalman filter coupled with the recursive least–square estimator. International Journal of Heat and Mass Transfer, 2017, 111, 582-592.	4.8	35
15	Simultaneous retrieval of the complex refractive index and particle size distribution. Optics Express, 2015, 23, 19328.	3.4	34
16	Experimental Comparison of Photothermal Conversion Efficiency of Gold Nanotriangle and Nanorod in Laser Induced Thermal Therapy. Nanomaterials, 2017, 7, 416.	4.1	32
17	Acoustic tomography of two dimensional velocity field by using meshless radial basis function and modified Tikhonov regularization method. Measurement: Journal of the International Measurement Confederation, 2021, 175, 109107.	5.0	30
18	Reverse Monte Carlo coupled with Runge-Kutta ray tracing method for radiative heat transfer in graded-index media. Infrared Physics and Technology, 2019, 99, 5-13.	2.9	28

#	Article	IF	Citations
19	Application of an improved firework algorithm for simultaneous estimation of temperature-dependent thermal and optical properties of molten salt. International Communications in Heat and Mass Transfer, 2016, 77, 33-42.	5.6	27
20	Multi-parameter estimation in semitransparent graded-index media based on coupled optical and thermal information. International Journal of Thermal Sciences, 2017, 113, 116-129.	4.9	26
21	Boosting photoelectric performance of thin film GaAs solar cell based on multi-objective optimization for solar energy utilization. Solar Energy, 2021, 230, 1122-1132.	6.1	25
22	Graphene-mediated near field thermostat based on three-body photon tunneling. International Journal of Heat and Mass Transfer, 2019, 137, 12-19.	4.8	24
23	An on-line extended Kalman filtering technique for reconstructing the transient heat flux and temperature field in two-dimensional participating media. International Journal of Thermal Sciences, 2020, 148, 106069.	4.9	24
24	Acoustic tomography of temperature and velocity fields by using the radial basis function and alternating direction method of multipliers. International Journal of Heat and Mass Transfer, 2022, 188, 122660.	4.8	24
25	Application of improved krill herd algorithms to inverse radiation problems. International Journal of Thermal Sciences, 2016, 103, 24-34.	4.9	22
26	Optical properties of truncated Au nanocages with different size and shape. AIP Advances, 2017, 7, .	1.3	22
27	Radiative thermal switch driven by anisotropic black phosphorus plasmons. Optics Express, 2020, 28, 26922.	3.4	22
28	Application of Landweber Method for Three-Dimensional Temperature Field Reconstruction Based on the Light-Field Imaging Technique. Journal of Heat Transfer, 2018, 140, .	2.1	21
29	Application of the sequential quadratic programming algorithm for reconstructing the distribution of optical parameters based on the time-domain radiative transfer equation. Optics Express, 2016, 24, 24297.	3.4	20
30	Simultaneous retrieval of temperature-dependent absorption coefficient and conductivity of participating media. Scientific Reports, 2016, 6, 21998.	3.3	19
31	Estimation of thermophysical properties of phase change material by the hybrid SSO algorithms. International Journal of Thermal Sciences, 2017, 120, 121-135.	4.9	19
32	Influence of PEG coating on optical and thermal response of gold nanoshperes and nanorods. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 212, 1-9.	2.3	19
33	Phase transition induced by localized surface plasmon resonance of nanoparticle assemblies. International Journal of Heat and Mass Transfer, 2018, 127, 244-252.	4.8	19
34	Real-time reconstruction of the time-dependent heat flux and temperature distribution in participating media by using the Kalman filtering technique. Applied Thermal Engineering, 2019, 157, 113667.	6.0	19
35	Temperature field reconstruction of 3D luminous flames based on light field tomography theory. Science China Technological Sciences, 2021, 64, 223-236.	4.0	19
36	A modified spectral method for simulating arbitrary directional radiative intensity in participating media with graded refractive index. International Journal of Heat and Mass Transfer, 2017, 106, 167-176.	4.8	18

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37	Application of stochastic particle swarm optimization algorithm to determine the graded refractive index distribution in participating media. Infrared Physics and Technology, 2016, 79, 74-84.	2.9	17
38	A forward-angle-scattering method for the determination of optical constants and particle size distribution by collimated laser irradiation. Optics Communications, 2017, 389, 258-264.	2.1	17
39	Characteristic analysis of light and heat transfer in photothermal therapy using multiple-light-source heating strategy. International Journal of Thermal Sciences, 2020, 158, 106533.	4.9	17
40	Fast method of retrieving the asymmetry factor and scattering albedo from the maximum time-resolved reflectance of participating media. Applied Optics, 2015, 54, 5234.	2.1	16
41	Simultaneous identification of optical constants and PSD of spherical particles by multi-wavelength scattering–transmittance measurement. Optics Communications, 2018, 413, 317-328.	2.1	16
42	Giant thermal magnetoresistance driven by graphene magnetoplasmon. Applied Physics Letters, 2020, 117, .	3.3	16
43	Real-time estimation of time-dependent imposed heat flux in graded index media by KF-RLSE algorithm. Applied Thermal Engineering, 2019, 150, 1-10.	6.0	15
44	Efficient and robust prediction of internal temperature distribution and boundary heat flux in participating media by using the Kalman smoothing technique. International Journal of Heat and Mass Transfer, 2020, 147, 118851.	4.8	15
45	Efficient equation-solving integral equation method based on the radiation distribution factor for calculating radiative transfer in 3D anisotropic scattering medium. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 275, 107886.	2.3	15
46	Apparent directional spectral emissivity determination of semitransparent materials. Chinese Physics B, 2016, 25, 047801.	1.4	14
47	Optimal temperature control of tissue embedded with gold nanoparticles for enhanced thermal therapy based on two-energy equation model. Journal of Thermal Biology, 2018, 74, 264-274.	2.5	14
48	Simultaneous measurement of flame temperature and species concentration distribution from nonlinear tomographic absorption spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 241, 106693.	2.3	14
49	Magnetoplasmon-surface phonon polaritons' coupling effects in radiative heat transfer. Optics Letters, 2020, 45, 5148.	3.3	14
50	Fast reconstructing two-dimensional temperature distribution in participating media with different surfaces conditions. Infrared Physics and Technology, 2019, 103, 103080.	2.9	13
51	Optofluidic control using light illuminated plasmonic nanostructure as microvalve. International Journal of Heat and Mass Transfer, 2019, 133, 1019-1025.	4.8	13
52	Passive control of temperature distribution in cancerous tissue during photothermal therapy using optical phase change nanomaterials. International Journal of Thermal Sciences, 2021, 161, 106754.	4.9	13
53	Application of KF-RLSE algorithm for on-line estimating the time-dependent melting thickness and input heat flux in participating media. International Journal of Thermal Sciences, 2018, 125, 1-10.	4.9	12
54	Improved integral equation method based on radiation distribution factors for high-resolution radiative intensity in graded index media. International Journal of Thermal Sciences, 2019, 138, 393-404.	4.9	12

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55	Thermal Performance Characteristics of Porous Media Receiver Exposed to Concentrated Solar Radiation. Journal of Energy Engineering - ASCE, 2017, 143, 04017013.	1.9	11
56	Fast non-intrusive estimation of liquid-phase interface and boundary heat flux in participating media by the Kalman filtering methods. International Journal of Heat and Mass Transfer, 2019, 142, 118418.	4.8	11
57	Experimental research on noninvasive reconstruction of optical parameter fields based on transient radiative transfer equation for diagnosis applications. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 222-223, 1-11.	2.3	11
58	Application of SQP algorithm for fluorescence tomography with the time-domain equation of radiative transfer. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 193, 21-30.	2.3	10
59	A multi-stage optimization technique for simultaneous reconstruction of infrared optical and thermophysical parameters in semitransparent media. Infrared Physics and Technology, 2018, 92, 219-233.	2.9	10
60	Reconstruction of 3D flame temperature and absorption coefficient field by the hybrid light-field imaging and laser extinction technique. Infrared Physics and Technology, 2020, 109, 103404.	2.9	10
61	Tailoring radiative properties of a complex trapezoidal grating solar absorber by coupling between SPP and multi-order MP for solar energy harvesting. Optics Communications, 2021, 479, 126416.	2.1	10
62	Simultaneous estimation of internal temperature field and boundary time-dependent heat flux in absorbing and scattering media using the unscented Kalman smoothing technique. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 255, 107262.	2.3	9
63	Research on Modulated Thermal Wave Radar Imaging Technique for Photothermal Properties of Semi-transparent Materials. International Journal of Thermophysics, 2020, 41, 1.	2.1	9
64	Efficient optical parameter mapping based on time-domain radiative transfer equation combined with parallel programming. Optics Express, 2020, 28, 270.	3.4	9
65	Photoacoustic response optimization of gold nanorods in the near-infrared region. Results in Physics, 2022, 34, 105209.	4.1	9
66	Spectral collocation method with a flexible angular discretization scheme for radiative transfer in multi-layer graded index medium. Infrared Physics and Technology, 2017, 82, 144-153.	2.9	8
67	Application of hybrid SPSO-SQP algorithm for simultaneous estimation of space-dependent absorption coefficient and scattering coefficient fields in participating media. International Journal of Thermal Sciences, 2018, 124, 424-432.	4.9	8
68	Combined lock-in thermography and SQP algorithm for non-intrusive reconstruction of optical and thermal properties in semitransparent medium. International Journal of Thermal Sciences, 2018, 132, 446-456.	4.9	8
69	Manipulation of Microscale Fluid Using Laser-Irradiated Nanoparticle Arrays. Plasmonics, 2019, 14, 1555-1563.	3.4	8
70	Effective solution of three-dimensional inverse radiation problem in participating medium based on RDFIEM. International Journal of Thermal Sciences, 2020, 156, 106462.	4.9	8
71	A hybrid LSQP algorithm for simultaneous reconstruction of the temperature and absorption coefficient field from the light-field image. Infrared Physics and Technology, 2020, 105, 103196.	2.9	8
72	Prediction of the coupled heat radiation and conduction parameters and boundary condition using the unscented Kalman filter. Science China Technological Sciences, 2020, 63, 422-433.	4.0	8

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73	An efficient equation-solving method for calculating radiative transfer in isotropic scattering medium. International Journal of Heat and Mass Transfer, 2021, 174, 121298.	4.8	8
74	Inverse Transient Radiative Analysis in Two-Dimensional Turbid Media by Particle Swarm Optimizations. Mathematical Problems in Engineering, 2015, 2015, 1-15.	1.1	7
75	Real-time retrieval of transient heat flux on the surface of participating medium by using the EKF-RLSE technique. Infrared Physics and Technology, 2018, 95, 113-121.	2.9	7
76	Three-dimensional temperature reconstruction of diffusion flame from the light-field convolution imaging by the focused plenoptic camera. Science China Technological Sciences, 2022, 65, 302-323.	4.0	7
77	Dependence of the Nonlinear Photoacoustic Response of Gold Nanoparticles on the Heat-Transfer Process. Journal of Physical Chemistry C, 2022, 126, 3489-3501.	3.1	7
78	Nonlinear Acoustic Tomography for Measuring the Temperature and Velocity Fields by Using the Covariance Matrix Adaptation Evolution Strategy Algorithm. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-14.	4.7	6
79	Anisotropic scattering characteristics of nanoparticles in different morphologies: improving the temperature uniformity of tumors during thermal therapy using forward scattering. Biomedical Optics Express, 2021, 12, 893.	2.9	5
80	Simultaneous determination of primary particle size distribution and thermal accommodation coefficient of soot aggregates using low-fluence LII. Optics Express, 2020, 28, 37249.	3.4	5
81	Inverse heat transfer analysis to determine the temperature or phase change-dependent refractive index of semitransparent materials. Inverse Problems in Science and Engineering, 2021, 29, 586-608.	1.2	4
82	Application of the time-domain and frequency-domain radiative measurement signals in retrieving the spectral complex refractive index of microalgae. International Journal of Hydrogen Energy, 2017, 42, 10591-10603.	7.1	3
83	Estimation of radiative parameters in participating media using shuffled frog leaping algorithm. Thermal Science, 2017, 21, 2287-2297.	1.1	3
84	An equation-solving method based on radiation distribution factor for radiative transfer in participating media with diffuse boundaries. Results in Physics, 2022, 36, 105418.	4.1	3
85	Modified accelerate iteration for optical property reconstruction based on time-domain radiative transfer equation. Laser Physics, 2021, 31, 095601.	1.2	2
86	Semi-analytical equation-solving RDFIEM method for radiative transfer in a plane-parallel anisotropic scattering medium. International Journal of Thermal Sciences, 2021, 166, 106946.	4.9	2
87	Improved optical tomography based on hybrid frequency-domain and time-domain radiative transfer model. Infrared Physics and Technology, 2020, 111, 103484.	2.9	2
88	A Parametric Investigation of Corneal Laser Surgery Based on the Multilayer Dynamic Photothermal Model. Journal of Biomechanical Engineering, 2021, 143, .	1.3	2
89	Retrieval of Optical Constant and Particle Size Distribution of Particulate Media Using the PSO-Based Neural Network Algorithm. , 2016, , .		1
90	Inverse Method to Estimate Temperature-Dependent Thermal and Optical Properties of Semitransparent Media. Journal of Thermophysics and Heat Transfer, 2017, 31, 947-955.	1.6	1

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91	Estimation of space-dependent thermophysical properties in participating media by using a Lie-group shooting method. International Journal of Heat and Mass Transfer, 2018, 127, 1064-1075.	4.8	1
92	An Inverse Numerical Simulation for Simultaneous Measurement of Non Spherical Particle Size and Optical Constant by Forward Elastic Light Scattering and Transmittance. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2019, 127, 1133-1140.	0.6	1
93	An inverse simulation for simultaneous identification of randomly oriented arbitrarily shaped particle size distribution and its degree of non-sphericity from spectral transmittance measurement. Measurement Science and Technology, 2021, 32, 075205.	2.6	1
94	Non-spherical particle size retrieval by angular resolved elastic light scattering using the T-matrix method. Laser Physics Letters, 2020, 17, 065701.	1.4	1