

# Kyle Daun

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2208635/publications.pdf>

Version: 2024-02-01

90  
papers

1,760  
citations

279798

23  
h-index

361022

35  
g-index

94  
all docs

94  
docs citations

94  
times ranked

840  
citing authors

#	ARTICLE	IF	CITATIONS
1	Interpreting the radiative properties of advanced high strength steel strip using a hybrid thin film/geometric optics model. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 277, 107963.	2.3	2
2	Effect of Annealing Atmosphere and Steel Alloy Composition on Oxide Formation and Radiative Properties of Advanced High-Strength Steel Strip. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 380-393.	2.1	6
3	Laser-induced incandescence for non-soot nanoparticles: recent trends and current challenges. Applied Physics B: Lasers and Optics, 2022, 128, 72.	2.2	21
4	Enhancing optical quantification of combustion products using thermochemical manifold reduction. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 289, 108293.	2.3	0
5	Interrogating Gas-Borne Nanoparticles Using Laser-Based Diagnostics and Bayesian Data Fusion. Journal of Physical Chemistry C, 2021, 125, 8382-8390.	3.1	10
6	Multiphoton induced photoluminescence during time-resolved laser-induced incandescence experiments on silver and gold nanoparticles. Journal of Applied Physics, 2021, 129, .	2.5	8
7	Crumpled few-layer graphene: Connection between morphology and optical properties. Carbon, 2021, 182, 677-690.	10.3	9
8	Phase-sensitive detection of gas-borne Si nanoparticles via line-of-sight UV/VIS attenuation. Optics Express, 2021, 29, 21795.	3.4	6
9	Time-Resolved Laser-Induced Incandescence Measurements on Aerosolized Nickel Nanoparticles. Journal of Physical Chemistry A, 2021, 125, 6273-6285.	2.5	7
10	Interpreting the radiative properties of advanced high strength steel using the geometric optics ray-tracing approximation. International Journal of Heat and Mass Transfer, 2021, 176, 121429.	4.8	7
11	The Past and Future of the Monte Carlo Method in Thermal Radiation Transfer. Journal of Heat Transfer, 2021, 143, .	2.1	25
12	Development of a multivariate spectral emissivity model for an advanced high strength steel alloy through factorial design-of-experiments. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 271, 107693.	2.3	7
13	Assessing Flare Combustion Efficiency using Imaging Fourier Transform Spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 273, 107835.	2.3	7
14	Optimal filter selection for quantitative gas mixture imaging. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 254, 107208.	2.3	2
15	Uncertainty analysis of a water flow calorimeter while welding in short-circuit and spray transfer regimes. Welding in the World, Le Soudage Dans Le Monde, 2020, 64, 1615-1624.	2.5	1
16	Inferring the surface roughness of Al-Si coated 22MnB5 steel using an in situ laser speckle characterization technique. IOP Conference Series: Materials Science and Engineering, 2020, 967, 012075.	0.6	2
17	Evaluation of 22MnB5 Steel Austenitization Sub-Models for Simulating the Heating Phase of Hot Stamping. IOP Conference Series: Materials Science and Engineering, 2020, 967, 012076.	0.6	1
18	Characterization of few-layer graphene aerosols by laser-induced incandescence. Carbon, 2020, 167, 870-880.	10.3	20

#	ARTICLE	IF	CITATIONS
19	Investigating coating liquefaction and solidification of furnace-heated Al-Si coated 22MnB5 steel using laser reflectance. <i>Surface and Coatings Technology</i> , 2020, 393, 125795.	4.8	8
20	Investigating temporal variation in the apparent volume fraction measured by time-resolved laser-induced incandescence. <i>Applied Physics B: Lasers and Optics</i> , 2019, 125, 1.	2.2	13
21	Laser-induced incandescence on metal nanoparticles: validity of the Rayleigh approximation. <i>Applied Physics B: Lasers and Optics</i> , 2019, 125, 1.	2.2	16
22	Evaluation of Drude parameters for liquid Germanium nanoparticles through aerosol-based line-of-sight attenuation measurements. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 226, 146-156.	2.3	4
23	Can soot primary particle size distributions be determined using laser-induced incandescence?. <i>Applied Physics B: Lasers and Optics</i> , 2019, 125, 1.	2.2	30
24	Detector calibration and measurement issues in multi-color time-resolved laser-induced incandescence. <i>Applied Physics B: Lasers and Optics</i> , 2019, 125, 1.	2.2	12
25	Tailoring by Direct Contact Heating During Hot Forming/Die Quenching. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 3705-3713.	2.2	3
26	Multiparameter gas sensing with linear hyperspectral absorption tomography. <i>Measurement Science and Technology</i> , 2019, 30, 105401.	2.6	44
27	Development and Validation of a Thermometallurgical Model for Furnace-Based Austenitization During Hot Stamping. <i>Journal of Heat Transfer</i> , 2019, 141, .	2.1	7
28	Efficient Bayesian inference of absorbance spectra from transmitted intensity spectra. <i>Optics Express</i> , 2019, 27, 26893.	3.4	16
29	Predicting the heat of vaporization of iron at high temperatures using time-resolved laser-induced incandescence and Bayesian model selection. <i>Journal of Applied Physics</i> , 2018, 123, 095103.	2.5	16
30	Development of an Austenitization Kinetics Model for 22MnB5 Steel. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 1792-1802.	2.5	9
31	Gaussian model for emission rate measurement of heated plumes using hyperspectral data. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2018, 206, 125-134.	2.3	11
32	Minimizing the Cycle Time of a Roller Hearth Furnace for Hot-Forming Die-Quenching. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 418, 012016.	0.6	0
33	Intercritical Annealing of 22MnB5 for Hot Forming Die Quenching. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 418, 012010.	0.6	4
34	Plasma emission during time-resolved laser-induced incandescence measurements of aerosolized metal nanoparticles. <i>Applied Physics B: Lasers and Optics</i> , 2018, 124, 1.	2.2	9
35	Instantaneous 3D flame imaging by background-oriented schlieren tomography. <i>Combustion and Flame</i> , 2018, 196, 284-299.	5.2	96
36	Effect of Surface Interatomic Potential on Thermal Accommodation Coefficients Derived from Molecular Dynamics. <i>Journal of Physical Chemistry C</i> , 2018, 122, 20431-20443.	3.1	17

#	ARTICLE	IF	CITATIONS
37	Kalman filter approach for uncertainty quantification in time-resolved laser-induced incandescence. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2018, 35, 386.	1.5	8
38	Time-resolved laser-induced incandescence characterization of metal nanoparticles. <i>Applied Physics B: Lasers and Optics</i> , 2017, 123, 1.	2.2	39
39	Quantifying uncertainty in auto-compensating laser-induced incandescence parameters due to multiple nuisance parameters. <i>Applied Physics B: Lasers and Optics</i> , 2017, 123, 1.	2.2	14
40	Broadband chemical species tomography: Measurement theory and a proof-of-concept emission detection experiment. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 198, 145-154.	2.3	13
41	Soot aggregate sizing through multiangle elastic light scattering: Influence of model error. <i>Journal of Aerosol Science</i> , 2017, 111, 36-50.	3.8	16
42	Spectroscopic models for laser-heated silicon and copper nanoparticles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 197, 3-11.	2.3	21
43	Measurement-based meshing, basis selection, and prior assignment in chemical species tomography. <i>Optics Express</i> , 2017, 25, 25135.	3.4	21
44	General error model for analysis of laser-induced incandescence signals. <i>Applied Optics</i> , 2017, 56, 8436.	1.8	26
45	Defining regimes and analytical expressions for fluence curves in pulsed laser heating of aerosolized nanoparticles. <i>Optics Express</i> , 2017, 25, 5684.	3.4	14
46	Uncertainty quantification and design-of-experiment in absorption-based aqueous film parameter measurements using Bayesian inference. <i>Applied Optics</i> , 2017, 56, E1.	2.1	6
47	Laser-induced atomic emission of silicon nanoparticles during laser-induced heating. <i>Applied Optics</i> , 2017, 56, E50.	2.1	19
48	Improving chemical species tomography of turbulent flows using covariance estimation. <i>Applied Optics</i> , 2017, 56, 3900.	2.1	19
49	Non-stationary Bayesian estimation of parameters from a body cover model of the vocal folds. <i>Journal of the Acoustical Society of America</i> , 2016, 139, 2683-2696.	1.1	25
50	Quantifying uncertainty in soot volume fraction estimates using Bayesian inference of auto-correlated laser-induced incandescence measurements. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	2.2	48
51	Bayesian approach to the design of chemical species tomography experiments. <i>Applied Optics</i> , 2016, 55, 5772.	2.1	39
52	Evolution of the Spectral Emissivity and Phase Transformations of the Al-Si Coating on Usibor® 1500P Steel During Austenitization. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016, 47, 3301-3309.	2.1	6
53	Laser-induced incandescence from laser-heated silicon nanoparticles. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	2.2	37
54	Discussion of Normal Spectral Emissivity Measurement of Liquid Iron and Nickel Using Electromagnetic Levitation in Direct Current Magnetic Field. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 3300-3302.	2.2	2

#	ARTICLE	IF	CITATIONS
55	Sizing aerosolized fractal nanoparticle aggregates through Bayesian analysis of wide-angle light scattering (WALS) data. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016, 184, 27-39.	2.3	37
56	Direct contact heating for hot forming die quenching. <i>Applied Thermal Engineering</i> , 2016, 98, 1165-1173.	6.0	20
57	Chemical species tomography of turbulent flows: Discrete ill-posed and rank deficient problems and the use of prior information. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016, 172, 58-74.	2.3	79
58	LASER-INDUCED INCANDESCENCE MEASUREMENTS OF SILICON AND COPPER NANOPARTICLES: SPECTROSCOPIC MODEL. , 2016, , .		1
59	Laser-induced atomic emission of silicon nanoparticles during synthesis in a microwave plasma reactor. , 2016, , .		1
60	Spectral emissivity characteristics of the Usibor <sup>®</sup> 1500P steel during austenitization in argon and air atmospheres. <i>International Journal of Heat and Mass Transfer</i> , 2015, 91, 818-828.	4.8	24
61	Quantifying the Thermal Accommodation Coefficient for Iron Surfaces Using Molecular Dynamics Simulations. , 2015, , .		1
62	Inferring the specific heat of an ultra high strength steel during the heating stage of hot forming die quenching, through inverse analysis. <i>Applied Thermal Engineering</i> , 2015, 83, 98-107.	6.0	23
63	Examination of the thermal accommodation coefficient used in the sizing of iron nanoparticles by time-resolved laser-induced incandescence. <i>Applied Physics B: Lasers and Optics</i> , 2015, 119, 561-575.	2.2	34
64	Effect of recondensation of sublimed species on nanoparticle temperature evolution in time-resolved laser-induced incandescence. <i>Applied Physics B: Lasers and Optics</i> , 2015, 119, 607-620.	2.2	4
65	Investigation of melting in the Al <sup>+</sup> Si coating of a boron steel sheet by differential scanning calorimetry. <i>Journal of Materials Processing Technology</i> , 2015, 216, 89-94.	6.3	27
66	Inverse analysis and regularisation in conditional source-term estimation modelling. <i>Combustion Theory and Modelling</i> , 2014, 18, 474-499.	1.9	25
67	In situ nanoparticle size measurements of gas-borne silicon nanoparticles by time-resolved laser-induced incandescence. <i>Applied Physics B: Lasers and Optics</i> , 2014, 116, 623-636.	2.2	62
68	Experimental heat transfer coefficient measurements during hot forming die quenching of boron steel at high temperatures. <i>International Journal of Heat and Mass Transfer</i> , 2014, 71, 396-404.	4.8	64
69	Gas Dynamics of Sublimed Nanoclusters in High-Fluence Time-Resolved Laser-Induced Incandescence. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2014, 65, 393-409.	0.9	7
70	Line-of-sight-attenuation chemical species tomography through the level set method. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014, 143, 25-34.	2.3	11
71	Time Resolved Laser Induced Incandescence for Sizing Aerosolized Iron Nanoparticles. , 2014, , .		0
72	Thermal accommodation coefficients for laser-induced incandescence sizing of metal nanoparticles in monatomic gases. <i>Applied Physics B: Lasers and Optics</i> , 2013, 112, 409-420.	2.2	35

#	ARTICLE	IF	CITATIONS
73	Experimental Characterization of Heat Transfer Coefficients During Hot Forming Die Quenching of Boron Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 332-343.	2.1	33
74	Sizing of Molybdenum Nanoparticles Using Time-Resolved Laser-Induced Incandescence. Journal of Heat Transfer, 2013, 135, .	2.1	23
75	In Situ Particle Size Measurements of Gas-Borne Silicon Nanoparticles by Time-Resolved Laser-Induced Incandescence. , 2013, , .		0
76	Laser-absorption tomography beam arrangement optimization using resolution matrices. Applied Optics, 2012, 51, 7059.	1.8	51
77	Application of the conditional source-term estimation model for turbulence chemistry interactions in a premixed flame. Combustion Theory and Modelling, 2012, 16, 301-320.	1.9	35
78	Influence of particle curvature on transition regime heat conduction from aerosolized nanoparticles. International Journal of Heat and Mass Transfer, 2012, 55, 7668-7676.	4.8	11
79	Molecular dynamics simulation of thermal accommodation coefficients for laser-induced incandescence sizing of nickel particles. Applied Physics B: Lasers and Optics, 2012, 107, 221-228.	2.2	26
80	Optimization of measurement angles for soot aggregate sizing by elastic light scattering, through design-of-experiment theory. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 355-365.	2.3	17
81	Geometric Optimization of Radiant Enclosures Containing Specularly-Reflecting Surfaces through Quasi-Monte Carlo Simulation. Numerical Heat Transfer; Part A: Applications, 2011, 59, 81-97.	2.1	14
82	Design Optimization of a Two-Stage Porous Radiant Burner through Response Surface Modeling. Numerical Heat Transfer; Part A: Applications, 2011, 60, 727-745.	2.1	23
83	Infrared species tomography of a transient flow field using Kalman filtering. Applied Optics, 2011, 50, 891.	2.1	20
84	Geometric Optimization of Concentrating Solar Collectors using Monte Carlo Simulation. Journal of Solar Energy Engineering, Transactions of the ASME, 2010, 132, .	1.8	11
85	Dynamic Optimization of a Radiation Paint Cure Oven Using the Nominal Cure Point Criterion. Drying Technology, 2010, 28, 1405-1415.	3.1	6
86	Molecular dynamics simulations of translational thermal accommodation coefficients for time-resolved LII. Applied Physics B: Lasers and Optics, 2009, 94, 39-49.	2.2	40
87	Investigation of Thermal Accommodation Coefficients in Time-Resolved Laser-Induced Incandescence. Journal of Heat Transfer, 2008, 130, .	2.1	40
88	Infinitesimal-Area Radiative Analysis Using Parametric Surface Representation, Through NURBS. Journal of Heat Transfer, 2001, 123, 249-256.	2.1	16
89	Thermal Radiation Heat Transfer. , 0, , .		105
90	Choosing an Optimal Austenitization Submodel Using Bayesian Model Selection. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 0, , .	2.2	1