Kevin D Cole

List of Publications by Year
in descending order

52 papers	1,239 citations	471061 17 h-index	525886 27 g-index
52 all docs	52 docs citations	52 times ranked	803 citing authors

#	Article	IF	Citations
1	Heat Conduction Using Green's Function. , 0, , .		332
2	Toward the digital twin of additive manufacturing: Integrating thermal simulations, sensing, and analytics to detect process faults. IISE Transactions, 2020, 52, 1204-1217.	1.6	97
3	Heat Conduction Using Greens Functions. , 0, , .		93
4	Anisotropic thermal conductivity measurement of carbon-fiber/epoxy composite materials. International Journal of Heat and Mass Transfer, 2012, 55, 6530-6537.	2.5	69
5	Solutions of the heat conduction equation in multilayers for photothermal deflection experiments. Journal of Applied Physics, 1992, 72, 1362-1373.	1.1	51
6	Intrinsic verification and a heat conduction database. International Journal of Thermal Sciences, 2014, 78, 36-47.	2.6	49
7	Conjugate heat transfer from a small heated strip. International Journal of Heat and Mass Transfer, 1997, 40, 2709-2719.	2.5	43
8	The effect of axial conduction on heat transfer in a liquid microchannel flow. International Journal of Heat and Mass Transfer, 2011, 54, 2542-2549.	2.5	43
9	Experiments and models for the thermal response of railroad tapered-roller bearings. International Journal of Heat and Mass Transfer, 2008, 51, 5794-5803.	2.5	38
10	Thermal Modeling in Metal Additive Manufacturing Using Graph Theory. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	1.3	38
11	Part-scale thermal simulation of laser powder bed fusion using graph theory: Effect of thermal history on porosity, microstructure evolution, and recoater crash. Materials and Design, 2021, 204, 109685.	3.3	38
12	Green's functions, temperature and heat flux in the rectangle. International Journal of Heat and Mass Transfer, 2001, 44, 3883-3894.	2.5	31
13	Thermal models of railroad wheels and bearings. International Journal of Heat and Mass Transfer, 2010, 53, 1636-1645.	2.5	24
14	Fast-converging steady-state heat conduction in a rectangular parallelepiped. International Journal of Heat and Mass Transfer, 2002, 45, 3585-3596.	2.5	23
15	Steady-Periodic Greenâ€™s Functions and Thermal-Measurement Applications in Rectangular Coordinates. Journal of Heat Transfer, 2006, 128, 709-716.	1.2	23
16	Analysis of flux-base fins for estimation of heat transfer coefficient. International Journal of Heat and Mass Transfer, 2009, 52, 92-99.	2.5	23
17	Conduction in rectangular plates with boundary temperatures specified. International Journal of Heat and Mass Transfer, 2008, 51, 4676-4690.	2.5	21
18	Improving convergence of summations in heat conduction. International Journal of Heat and Mass Transfer, 2007, 50, 257-268.	2.5	17

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19	Microchannel Heat Transfer with Slip Flow and Wall Effects. Journal of Thermophysics and Heat Transfer, 2014, 28, 455-462.	0.9	17
20	Thermal modeling in metal additive manufacturing using graph theory â€“ Application to laser powder bed fusion of a large volume impeller. Additive Manufacturing, 2021, 41, 101956.	1.7	16
21	Thermal Modeling in Metal Additive Manufacturing Using Graph Theory: Experimental Validation With Laser Powder Bed Fusion Using In Situ Infrared Thermography Data. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2020, 142, .	1.3	16
22	Thermal characterization of thin films by photothermally induced laser beam deflection. Thin Solid Films, 1993, 224, 22-27.	0.8	15
23	Computational heat transfer with spectral graph theory: Quantitative verification. International Journal of Thermal Sciences, 2020, 153, 106383.	2.6	15
24	Steady-Periodic Heating of a Cylinder. Journal of Heat Transfer, 2009, 131, .	1.2	9
25	Semi-analytical source (SAS) method for 3-D transient heat conduction problems with moving heat source of arbitrary shape. International Journal of Heat and Mass Transfer, 2021, 165, 120692.	2.5	9
26	Analysis of two-dimensional incompressible flows by a subsurface panel method. AIAA Journal, 1980, 18, 526-533.	1.5	8
27	Computer programs for temperature in fins and slab bodies with the method of Green's functions. Computer Applications in Engineering Education, 2004, 12, 189-197.	2.2	8
28	Design Rules for Additive Manufacturing â€“ Understanding the Fundamental Thermal Phenomena to Reduce Scrap. Procedia Manufacturing, 2019, 33, 375-382.	1.9	8
29	Dynamic Bearing Testing Aimed at Identifying the Root Cause of Warm Bearing Temperature Trending. , 2008, , .		7
30	Steady-periodic heating in parallel-plate microchannel flow with participating walls. International Journal of Heat and Mass Transfer, 2010, 53, 870-878.	2.5	7
31	Fast-converging series for heat conduction in the circular cylinder. Journal of Engineering Mathematics, 2004, 49, 217-232.	0.6	6
32	Modeling of Joule heating and convective cooling in a thick-walled micro-tube. International Journal of Thermal Sciences, 2017, 119, 24-36.	2.6	6
33	Influence Functions for the Infinite and Semi-Infinite Strip. Journal of Thermophysics and Heat Transfer, 2001, 15, 431-438.	0.9	5
34	Design of Experiments for Thermal Characterization of Metallic Foam. Journal of Thermophysics and Heat Transfer, 2005, 19, 367-374.	0.9	5
35	Unsteady heat film transfer from a thick hot-film sensor. Journal of Thermophysics and Heat Transfer, 1994, 8, 797-799.	0.9	4
36	Thermal Analysis of Railroad Bearings: Effect of Wheel Heating. , 2009, , .		4

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37	Discrete Greenâ€™s functions and spectral graph theory for computationally efficient thermal modeling. International Journal of Heat and Mass Transfer, 2022, 183, 122112.	2.5	4
38	Flush-Mounted Steady-Periodic Heated Film With Application to Shear-Stress Measurement. Journal of Heat Transfer, 2008, 130, .	1.2	3
39	Analysis of Pulse Heating on a Fluid-Cooled Surface for Fluid Shear Stress. , 2002, , 277.		2
40	Thermal Characterization of Functionally Graded Materials: Design of Optimal Experiments. Journal of Thermophysics and Heat Transfer, 2004, 18, 289-294.	0.9	2
41	More carrot than stick: Encouraging computer programming in thermal design projects. Computer Applications in Engineering Education, 2013, 21, 698-703.	2.2	2
42	Efficient Numerical Evaluation of Exact Solutions for One-Dimensional and Two-Dimensional Infinite Cylindrical Heat Conduction Problems. Journal of Heat Transfer, 2017, 139, .	1.2	2
43	Green's Functions for Steady Two-Dimension Heat Conduction. , 1994, , .		2
44	Predicting Part-Level Thermal History in Metal Additive Manufacturing Using Graph Theory: Experimental Validation With Directed Energy Deposition of Titanium Alloy Parts. , 2019, , .		2
45	Thermal Characterization of Functionally Graded Materials-Design of Optimum Experiments. , 2002, , .		1
46	Enabling the Application of Large Footprint Openâ€Bottom Permeameters Through New Shape Factors. Water Resources Research, 2021, 57, e2020WR029315.	1.7	1
47	Wavefront Curvature Sensing Based on Diffraction Grating and Fractional Fourier Transforms. Optical Review, 2004, 11, 344-347.	1.2	0
48	Design of Experiments for the Thermal Characterization of Metallic Foam. , 2004, , .		0
49	Steady-Periodic Greenâ€™s Functions and Thermal-Measurement Applications in Rectangular Coordinates. , 2005, , 459.		0
50	Applications in Education for a Heat Conduction Database. , 2015, , .		0
51	Flush-Mounted Steady-Periodic Heated Film With Application to Fluid-Flow Measurement. , 2006, , .		0
52	Investigation of Numerical Evaluation Improvement for Three-Dimensional Infinite Cylindrical Heat Conduction Problems. Journal of Heat Transfer, 2020, 142, .	1.2	0