

Ronan Grimes

List of Publications by Year in descending order

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71
papers

887
citations

471509

17
h-index

526287

27
g-index

71
all docs

71
docs citations

71
times ranked

666
citing authors

#	ARTICLE	IF	CITATIONS
1	PIV measurements of flow within plugs in a microchannel. <i>Microfluidics and Nanofluidics</i> , 2007, 3, 463-472.	2.2	78
2	Active cooling of a mobile phone handset. <i>Applied Thermal Engineering</i> , 2010, 30, 2363-2369.	6.0	56
3	A review of steady-state thermal and mechanical modelling on tubular solar receivers. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 119, 109591.	16.4	47
4	Modeling Electronic Cooling Axial Fan Flows. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2001, 123, 112-119.	1.8	46
5	Low profile fan and heat sink thermal management solution for portable applications. <i>International Journal of Thermal Sciences</i> , 2007, 46, 1182-1190.	4.9	38
6	The effect of wind on the optimal design and performance of a modular air-cooled condenser for a concentrated solar power plant. <i>Energy</i> , 2014, 68, 886-895.	8.8	35
7	Modelling the thermodynamic performance of a concentrated solar power plant with a novel modular air-cooled condenser. <i>Energy</i> , 2014, 69, 378-391.	8.8	34
8	A theoretical and experimental investigation into the thermodynamic performance of a 50MW power plant with a novel modular air-cooled condenser. <i>Applied Thermal Engineering</i> , 2014, 71, 119-129.	6.0	33
9	Levelized cost of electricity evaluation of liquid sodium receiver designs through a thermal performance, mechanical reliability, and pressure drop analysis. <i>Solar Energy</i> , 2018, 166, 472-485.	6.1	33
10	Thermal Management of Low Profile Electronic Equipment Using Radial Fans and Heat Sinks. <i>Journal of Heat Transfer</i> , 2008, 130, .	2.1	32
11	Interaction of quantitative PCR components with polymeric surfaces. <i>Biomedical Microdevices</i> , 2007, 9, 261-266.	2.8	26
12	Thermal and mechanical analysis of a sodium-cooled solar receiver operating under a novel heliostat aiming point strategy. <i>Applied Energy</i> , 2018, 230, 590-614.	10.1	25
13	Thermohydraulic analysis of single phase heat transfer fluids in CSP solar receivers. <i>Renewable Energy</i> , 2018, 129, 150-167.	8.9	23
14	Profile Scaling of Miniature Centrifugal Fans. <i>Heat Transfer Engineering</i> , 2009, 30, 130-137.	1.9	22
15	Flat plate heat transfer with impinging axial fan flows. <i>International Journal of Heat and Mass Transfer</i> , 2010, 53, 5629-5638.	4.8	21
16	Air Flow and Heat Transfer in Fan Cooled Electronic Systems. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2004, 126, 124-134.	1.8	20
17	The Effect of Reynolds Number on Microaxial Flow Fan Performance. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2008, 130, 101101.	1.5	19
18	Pressure drop analysis of steam condensation in air-cooled circular tube bundles. <i>Applied Thermal Engineering</i> , 2015, 87, 106-116.	6.0	17

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19	Effect of Geometric Scaling on Aerodynamic Performance. AIAA Journal, 2005, 43, 2293-2298.	2.6	16
20	Design and Testing of a Novel Air-cooled Condenser for Concentrated Solar Power Plants. Energy Procedia, 2014, 49, 1439-1449.	1.8	15
21	Influence of segmenting fluids on efficiency, crossing point and fluorescence level in real time quantitative PCR. Biomedical Microdevices, 2006, 8, 59-64.	2.8	13
22	Thermal Analysis of Miniature Low Profile Heat Sinks With and Without Fins. Journal of Electronic Packaging, Transactions of the ASME, 2009, 131, .	1.8	13
23	The Influence of the Steam-side Characteristics of a Modular Air-cooled Condenser on CSP Plant Performance. Energy Procedia, 2014, 49, 1450-1459.	1.8	13
24	Forced Convection Board Level Thermal Design Methodology for Electronic Systems. Journal of Electronic Packaging, Transactions of the ASME, 2001, 123, 120-126.	1.8	12
25	Optical measurement of electronic system air flow and temperature distribution. Journal of Optics, 2004, 6, 617-626.	1.5	12
26	Segmenting Fluid Effect on PCR Reactions in Microfluidic Platforms. Biomedical Microdevices, 2005, 7, 269-272.	2.8	12
27	Integrated optical-thermal-mechanical model for investigations into high temperature sodium receiver operation. Solar Energy, 2019, 194, 751-765.	6.1	12
28	An Experimental Investigation of the Flow Fields Within Geometrically Similar Miniature-Scale Centrifugal Pumps. Journal of Fluids Engineering, Transactions of the ASME, 2009, 131, .	1.5	10
29	Viscous Scaling Phenomena in Miniature Centrifugal Flow Cooling Fans: Theory, Experiments and Correlation. Journal of Electronic Packaging, Transactions of the ASME, 2010, 132, .	1.8	10
30	Sodium receiver designs for integration with high temperature power cycles. Energy, 2019, 187, 115994.	8.8	10
31	The Effect of Reynolds Number on the Aerodynamic Performance of Micro Radial Flow Fans. , 2005, , 549.		9
32	Development of Compact Thermal-Fluid Models at the Electronic Equipment Level. Journal of Thermal Science and Engineering Applications, 2012, 4, .	1.5	9
33	The effect of fan operating point and location on temperature distribution in electronic systems. , 0, , .		8
34	Acoustic Emissions From Active Cooling Solutions for Portable Devices. IEEE Transactions on Components and Packaging Technologies, 2009, 32, 776-783.	1.3	8
35	Enhanced performance of air-cooled thermal power plants using low temperature thermal storage. Applied Energy, 2019, 250, 1673-1685.	10.1	7
36	The Effects of Diameter and Rotational Speed on the Aerodynamic Performance of Low Profile Miniature Radial Flow Fans. , 2007, , .		6

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37	Flow Distribution Measurements From an Air Cooled Condenser in a ~400MW Power Plant. , 2011, , .		6
38	Steam-Side Characterisation of a Modular Air-Cooled Condenser. , 2012, , .		6
39	Transient hygrothermal behaviour of portable electronics. , 0, , .		5
40	Two-phase flow regime identification through local temperature mapping. Experimental Thermal and Fluid Science, 2020, 115, 110077.	2.7	5
41	Design of a Variable Conductance Heat Pipe for a Photonic Component. , 2006, , 143.		4
42	Film Thickness for Two Phase Flow in a Microchannel. , 2006, , 207.		4
43	Scaling of Flow Characteristics and Power Consumption With Profile Height for Miniature Centrifugal Fans. , 2007, , .		4
44	Influence of the Flow From an Axial Fan on the Performance of a Heat Exchanger. , 2011, , .		4
45	Performance Analysis of a Modular Air Cooled Condenser for a Concentrated Solar Power Plant. , 2012, , .		4
46	Thermal and flow characteristics of a single-row circular-finned tube heat exchanger under elevated free-stream turbulence. International Journal of Heat and Fluid Flow, 2016, 57, 48-57.	2.4	4
47	An experimental study on the performance of miniature heat sinks for forced convection air cooling. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	3
48	The performance of active cooling in a mobile phone. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	3
49	Jets and rotary flows for single-phase liquid cooling: An overview of some recent experimental findings. , 2010, , .		3
50	Optimization analysis of innovative modular air-cooled condensers for CSP plants. , 2012, , .		3
51	Reduced Power Precision Temperature Control Using Variable Conductance Heat Pipes. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2013, 3, 2048-2058.	2.5	3
52	A Compact Modeling Approach to Enhance Collaborative Design of Thermal-Fluid Systems. Journal of Electronic Packaging, Transactions of the ASME, 2014, 136, .	1.8	3
53	Characterisation of a Variable Conductance Heat Pipe Prototype for a Photonic Application. , 2007, , .		3
54	A Theoretical and Experimental Investigation of the Scaling of Micro Fan Performance. , 2003, , 553.		2

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55	Constructal Theory of the Minimum Requirements for Forced Convection Cooling Solutions. , 2005, , 711.		2
56	An Experimental Investigation of Flow Fields Within Miniature Scale Centrifugal Pumps. , 2006, , 81.		2
57	PIV Measurements of the Effects of Geometric Scale on Electronics Cooling Axial Fan Flow. , 2007, , .		2
58	Acoustic emissions from active cooling solutions for portable devices. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	2
59	On the Characterisation of Finned and Finless Heat Sinks for Portable Electronics. , 2007, , .		2
60	Compatibility of Segmenting Fluids in Continuous-Flow Microfluidic PCR. Journal of Medical Devices, Transactions of the ASME, 2007, 1, 241-245.	0.7	1
61	The Effects of Reynolds Number on the Aerodynamic Performance of Geometrically Similar Fans. , 2008, , .		1
62	On the Performance of Miniature Centrifugal Fans With Varying Blade Cord Length. , 2008, , .		1
63	FINLESS Heat Sinks, High Performance and Low Cost for Low Profile Cooling Applications. , 2011, , .		1
64	Experimental and numerical investigation of the velocity profiles through a porous medium downstream of a sharp bend. , 2012, , .		1
65	Finless Heat Sinks, High Performance and Low Cost for Low Profile Cooling Applications. Journal of Thermal Science and Engineering Applications, 2013, 5, .	1.5	1
66	Thermal Management of Low Profile Applications. , 2007, , .		1
67	An Analysis of the Flow Fields Within Geometrically-Similar Miniature Scale Centrifugal Pumps. , 2008, , .		1
68	A Micromixer Based Upon Buoyancy. , 2005, , 223.		0
69	Thermal Performance of Two and Three Dimensional Radial Flow Heat Sinks. , 2009, , .		0
70	The Response of Portable Electronics to Transient Conditions of Temperature and Humidity. , 2005, , .		0
71	An Experimental and Theoretical Investigation of the Pumping Performance of Geometrically Similar Flow Fields Within Miniature-Scale Centrifugal Pumps. , 2007, , .		0