

Brian D Iverson

List of Publications by Year in descending order

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54
papers

2,499
citations

430874

18
h-index

254184

43
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all docs

54
docs citations

54
times ranked

2565
citing authors

#	ARTICLE	IF	CITATIONS
1	Review of high-temperature central receiver designs for concentrating solar power. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 29, 835-846.	16.4	575
2	Recent advances in microscale pumping technologies: a review and evaluation. <i>Microfluidics and Nanofluidics</i> , 2008, 5, 145-174.	2.2	402
3	Supercritical CO ₂ Brayton cycles for solar-thermal energy. <i>Applied Energy</i> , 2013, 111, 957-970.	10.1	398
4	High-efficiency thermodynamic power cycles for concentrated solar power systems. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 30, 758-770.	16.4	210
5	Hybrid concentrated solar thermal power systems: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 80, 215-237.	16.4	176
6	System-level simulation of a solar power tower plant with thermocline thermal energy storage. <i>Applied Energy</i> , 2014, 113, 86-96.	10.1	127
7	Heat and Mass Transport in Heat Pipe Wick Structures. <i>Journal of Thermophysics and Heat Transfer</i> , 2007, 21, 392-404.	1.6	68
8	High Aspect Ratio Carbon Nanotube Membranes Decorated with Pt Nanoparticle Urchins for Micro Underwater Vehicle Propulsion via H ₂ O ₂ Decomposition. <i>ACS Nano</i> , 2015, 9, 7791-7803.	14.6	51
9	Thermal and mechanical properties of nitrate thermal storage salts in the solid-phase. <i>Solar Energy</i> , 2012, 86, 2897-2911.	6.1	48
10	CIP2A immunosensor comprised of vertically-aligned carbon nanotube interdigitated electrodes towards point-of-care oral cancer screening. <i>Biosensors and Bioelectronics</i> , 2018, 117, 68-74.	10.1	37
11	Electrochemical Glucose Sensors Enhanced by Methyl Viologen and Vertically Aligned Carbon Nanotube Channels. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 28351-28360.	8.0	37
12	Thermally Developing Electroosmotic Convection in Rectangular Microchannels With Vanishing Debye-Layer Thickness. <i>Journal of Thermophysics and Heat Transfer</i> , 2004, 18, 486-493.	1.6	29
13	Simulation of Drop-Size Distribution During Dropwise and Jumping Drop Condensation on a Vertical Surface: Implications for Heat Transfer Modeling. <i>Langmuir</i> , 2019, 35, 12858-12875.	3.5	26
14	Dynamic Control of Radiative Surface Properties With Origami-Inspired Design. <i>Journal of Heat Transfer</i> , 2016, 138, .	2.1	21
15	Extending the upper temperature range of gas chromatography with all-silicon microchip columns using a heater/clamp assembly. <i>Journal of Chromatography A</i> , 2017, 1517, 134-141.	3.7	20
16	Total hemispherical apparent radiative properties of the infinite V-groove with specular reflection. <i>International Journal of Heat and Mass Transfer</i> , 2018, 124, 168-176.	4.8	19
17	Effects of discrete-electrode configuration on traveling-wave electrohydrodynamic pumping. <i>Microfluidics and Nanofluidics</i> , 2009, 6, 221-230.	2.2	18
18	Economic Optimization of a Concentrating Solar Power Plant With Molten-Salt Thermocline Storage. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2014, 136, .	1.8	18

#	ARTICLE	IF	CITATIONS
19	Improving sensitivity of electrochemical sensors with convective transport in free-standing, carbon nanotube structures. <i>Sensors and Actuators B: Chemical</i> , 2017, 246, 20-28.	7.8	18
20	Experimental characterization of induction electrohydrodynamics for integrated microchannel pumping. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 055015.	2.6	16
21	Control of Net Radiative Heat Transfer With a Variable-Emissivity Accordion Tessellation. <i>Journal of Heat Transfer</i> , 2019, 141, .	2.1	14
22	3D Interdigitated Vertically Aligned Carbon Nanotube Electrodes for Electrochemical Impedimetric Biosensing. <i>ACS Applied Nano Materials</i> , 2020, 3, 10166-10175.	5.0	14
23	Noise analysis and sensitivity enhancement in immunomagnetic nanomechanical biosensors. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	13
24	Stainless-Steel Column for Robust, High-Temperature Microchip Gas Chromatography. <i>Analytical Chemistry</i> , 2019, 91, 792-796.	6.5	12
25	Transient heat transfer of impinging jets on superheated wetting and non-wetting surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2021, 175, 121056.	4.8	11
26	A Parametric Study of the Impact of Various Error Contributions on the Flux Distribution of a Solar Dish Concentrator. , 2010, , .		10
27	Two-phase flow pressure drop in superhydrophobic channels. <i>International Journal of Heat and Mass Transfer</i> , 2017, 110, 515-522.	4.8	10
28	Total Hemispherical Apparent Radiative Properties of the Infinite V-Groove with Diffuse Reflection. <i>Journal of Thermophysics and Heat Transfer</i> , 2018, 32, 1109-1112.	1.6	10
29	Experimental demonstration of heat loss and turn-down ratio for a multi-panel, actively deployed radiator. <i>Applied Thermal Engineering</i> , 2020, 178, 115658.	6.0	7
30	Simulating Capillary Gas Chromatographic Separations including Thermal Gradient Conditions. <i>Analytical Chemistry</i> , 2021, 93, 2291-2298.	6.5	7
31	Note: Thermal analog to atomic force microscopy force-displacement measurements for nanoscale interfacial contact resistance. <i>Review of Scientific Instruments</i> , 2010, 81, 036111.	1.3	6
32	Thermal Property Testing of Nitrate Thermal Storage Salts in the Solid-Phase. , 2011, , .		6
33	Infrared Visualization of the Cavity Effect Using Origami-Inspired Surfaces. <i>Journal of Heat Transfer</i> , 2016, 138, .	2.1	6
34	Bubble nucleation in superhydrophobic microchannels due to subcritical heating. <i>International Journal of Heat and Mass Transfer</i> , 2018, 121, 196-206.	4.8	6
35	Superhydrophobic, carbon-infiltrated carbon nanotubes on Si and 316L stainless steel with tunable geometry. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	6
36	ADAPTIVE NET RADIATIVE HEAT TRANSFER AND THERMAL MANAGEMENT WITH ORIGAMI-STRUCTURED SURFACES. , 2018, , .		6

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37	Thermocline Bed Properties for Deformation Analysis. Journal of Solar Energy Engineering, Transactions of the ASME, 2014, 136, .	1.8	5
38	Heat transfer, efficiency and turn-down ratio of a dynamic radiative heat exchanger. International Journal of Heat and Mass Transfer, 2019, 143, 118441.	4.8	5
39	Porous Silica Nanotube Thin Films as Thermally Insulating Barrier Coatings. ACS Applied Nano Materials, 2020, 3, 3168-3173.	5.0	4
40	Freeze-Thaw Tests on Trough Receivers Employing a Molten Salt Working Fluid. , 2010, , .		3
41	Microfabrication with smooth thin carbon nanotube composite sheets. Materials Research Express, 2017, 4, 035032.	1.6	3
42	Comparison of the Dynamic Thermal Gradient to Temperature-Programmed Conditions in Gas Chromatography Using a Stochastic Transport Model. Analytical Chemistry, 2021, 93, 11785-11791.	6.5	3
43	Passive CubeSats for remote inspection of space vehicles. Journal of Applied Remote Sensing, 2019, 13, 1.	1.3	3
44	Optimization of solar-coal hybridization for low solar augmentation. Applied Energy, 2022, 319, 119225.	10.1	3
45	Experimental Measurements of Heat and Mass Transport in Heat Pipe Wicks. , 2004, , 209.		2
46	Simulation of a Concentrating Solar Power Plant With Molten-Salt Thermocline Storage for Optimized Annual Performance. , 2013, , .		2
47	Influence of micro-structured superhydrophobic surfaces on nucleation and natural convection in a heated pool. International Journal of Heat and Mass Transfer, 2019, 129, 1095-1109.	4.8	2
48	Additive manufacturing and characterization of AgI and AgI-Al ₂ O ₃ composite electrolytes for resistive switching devices. Journal of Applied Physics, 2020, 128, 035103.	2.5	2
49	Comparison of Static Thermal Gradient to Isothermal Conditions in Gas Chromatography Using a Stochastic Transport Model. Analytical Chemistry, 2021, 93, 6739-6745.	6.5	2
50	Numerical Investigation of the Flow and Heat Transfer Due to a Miniature Piezoelectric Fan. , 2004, , 29.		1
51	Dynamic Control of Radiative Surface Properties With Origami-Inspired Design. , 2014, , .		1
52	Enhanced Electrohydrodynamic Pumping at the Microscale. , 2006, , 239.		0
53	Closed-Loop, Axial Temperature Control of Etched Silicon Microcolumn for Tunable Thermal Gradient Gas Chromatography. Journal of Microelectromechanical Systems, 2020, 29, 76-85.	2.5	0
54	Performance Characterization of a Traveling-Wave Electrohydrodynamic Micropump. , 2008, , .		0