# Issam Mudawar

List of Publications by Year
in descending order

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| 151 papers | 14,177 citations | 12330 69 h-index | 21540 114 g-index |
| 151 all docs | 151 docs citations | 151 times ranked | 4116 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Assessment of the effectiveness of nanofluids for single-phase and two-phase heat transfer in micro-channels. International Journal of Heat and Mass Transfer, 2007, 50, 452-463. | 4.8 | 546 |
| 2 | Flow boiling heat transfer in two-phase micro-channel heat sinksâ€“â€“I. Experimental investigation and assessment of correlation methods. International Journal of Heat and Mass Transfer, 2003, 46, 2755-2771. | 4.8 | 532 |
| 3 | Measurement and prediction of pressure drop in two-phase micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2003, 46, 2737-2753. | 4.8 | 454 |
| 4 | Review of pool boiling enhancement by surface modification. International Journal of Heat and Mass Transfer, 2019, 128, 892-933. | 4.8 | 400 |
| 5 | Measurement and correlation of critical heat flux in two-phase micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2004, 47, 2045-2059. | 4.8 | 384 |
| 6 | Review of spray cooling â€“ Part 1: Single-phase and nucleate boiling regimes, and critical heat flux. International Journal of Heat and Mass Transfer, 2017, 115, 1174-1205. | 4.8 | 379 |
| 7 | Review of drop impact on heated walls. International Journal of Heat and Mass Transfer, 2017, 106, 103-126. | 4.8 | 379 |
| 8 | Two-phase flow in high-heat-flux micro-channel heat sink for refrigeration cooling applications: Part IIâ€”heat transfer characteristics. International Journal of Heat and Mass Transfer, 2005, 48, 941-955. | 4.8 | 349 |
| 9 | Review of computational studies on boiling and condensation. International Journal of Heat and Mass Transfer, 2017, 108, 1164-1196. | 4.8 | 322 |
| 10 | Universal approach to predicting saturated flow boiling heat transfer in mini/micro-channels â€“ Part II. Two-phase heat transfer coefficient. International Journal of Heat and Mass Transfer, 2013, 64, 1239-1256. | 4.8 | 281 |
| 11 | Two-phase flow in high-heat-flux micro-channel heat sink for refrigeration cooling applications: Part Iâ€“â€“pressure drop characteristics. International Journal of Heat and Mass Transfer, 2005, 48, 928-940. | 4.8 | 273 |
| 12 | Correlation of sauter mean diameter and critical heat flux for spray cooling of small surfaces. International Journal of Heat and Mass Transfer, 1995, 38, 2985-2996. | 4.8 | 271 |
| 13 | Effects of carbon nanotube arrays on nucleate pool boiling. International Journal of Heat and Mass Transfer, 2007, 50, 4023-4038. | 4.8 | 260 |
| 14 | Two-Phase Microchannel Heat Sinks: Theory, Applications, and Limitations. Journal of Electronic Packaging, Transactions of the ASME, 2011, 133, . | 1.8 | 255 |
| 15 | Universal approach to predicting two-phase frictional pressure drop for adiabatic and condensing mini/micro-channel flows. International Journal of Heat and Mass Transfer, 2012, 55, 3246-3261. | 4.8 | 227 |
| 16 | Review of spray cooling â€“ Part 2: High temperature boiling regimes and quenching applications. International Journal of Heat and Mass Transfer, 2017, 115, 1206-1222. | 4.8 | 212 |
| 17 | Review of mass and momentum interactions during drop impact on a liquid film. International Journal of Heat and Mass Transfer, 2016, 101, 577-599. | 4.8 | 208 |
| 18 | Review of databases and predictive methods for heat transfer in condensing and boiling mini/micro-channel flows. International Journal of Heat and Mass Transfer, 2014, 77, 627-652. | 4.8 | 196 |

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| 19 | Recent Advances in High-Flux, Two-Phase Thermal Management. Journal of Thermal Science and Engineering Applications, 2013, 5, . | 1.5 | 192 |
| 20 | Flow boiling heat transfer in two-phase micro-channel heat sinksâ€“â€“II. Annular two-phase flow model. International Journal of Heat and Mass Transfer, 2003, 46, 2773-2784. | 4.8 | 190 |
| 21 | Universal approach to predicting heat transfer coefficient for condensing mini/micro-channel flow. International Journal of Heat and Mass Transfer, 2013, 56, 238-250. | 4.8 | 172 |
| 22 | Critical heat flux (CHF) for water flow in tubesâ€”II.. International Journal of Heat and Mass Transfer, 2000, 43, 2605-2640. | 4.8 | 165 |
| 23 | Universal approach to predicting two-phase frictional pressure drop for mini/micro-channel saturated flow boiling. International Journal of Heat and Mass Transfer, 2013, 58, 718-734. | 4.8 | 163 |
| 24 | Ultra-high critical heat flux (CHF) for subcooled water flow boilingâ€”I: CHF data and parametric effects for small diameter tubes. International Journal of Heat and Mass Transfer, 1999, 42, 1405-1428. | 4.8 | 158 |
| 25 | Pool boiling critical heat flux (CHF) â€“ Part 1: Review of mechanisms, models, and correlations. International Journal of Heat and Mass Transfer, 2018, 117, 1352-1367. | 4.8 | 158 |
| 26 | Single-phase and two-phase cooling characteristics of upward-facing and downward-facing sprays. International Journal of Heat and Mass Transfer, 2006, 49, 5-16. | 4.8 | 157 |
| 27 | Orientation effects on pool boiling critical heat flux (CHF) and modeling of CHF for near-vertical surfaces. International Journal of Heat and Mass Transfer, 1999, 42, 1665-1688. | 4.8 | 156 |
| 28 | Fluid flow and heat transfer characteristics of low temperature two-phase micro-channel heat sinks â€“ Part 1: Experimental methods and flow visualization results. International Journal of Heat and Mass Transfer, 2008, 51, 4315-4326. | 4.8 | 147 |
| 29 | Review of single-phase and two-phase nanofluid heat transfer in macro-channels and micro-channels. International Journal of Heat and Mass Transfer, 2019, 136, 324-354. | 4.8 | 146 |
| 30 | Review of pool boiling enhancement with additives and nanofluids. International Journal of Heat and Mass Transfer, 2018, 124, 423-453. | 4.8 | 139 |
| 31 | Critical heat flux for subcooled flow boiling in micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2009, 52, 3341-3352. | 4.8 | 138 |
| 32 | Flow condensation in parallel micro-channels ? Part 2: Heat transfer results and correlation technique. International Journal of Heat and Mass Transfer, 2012, 55, 984-994. | 4.8 | 136 |
| 33 | Transport Phenomena in Two-Phase Micro-Channel Heat Sinks. Journal of Electronic Packaging, Transactions of the ASME, 2004, 126, 213-224. | 1.8 | 134 |
| 34 | Prediction and measurement of incipient boiling heat flux in micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2002, 45, 3933-3945. | 4.8 | 131 |
| 35 | Universal approach to predicting saturated flow boiling heat transfer in mini/micro-channels â€“ Part I. Dryout incipience quality. International Journal of Heat and Mass Transfer, 2013, 64, 1226-1238. | 4.8 | 131 |
| 36 | Critical heat flux (CHF) for water flow in tubesâ€”I. Compilation and assessment of world CHF data. International Journal of Heat and Mass Transfer, 2000, 43, 2573-2604. | 4.8 | 126 |

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| 37 | Emissivity characteristics of roughened aluminum alloy surfaces and assessment of multispectral radiation thermometry (MRT) emissivity models. International Journal of Heat and Mass Transfer, 2004, 47, 3591-3605. | 4.8 | 126 |
| 38 | Two-Phase Spray Cooling of Hybrid Vehicle Electronics. IEEE Transactions on Components and Packaging Technologies, 2009, 32, 501-512. | 1.3 | 125 |
| 39 | Theoretical and experimental study of the effects of spray inclination on two-phase spray cooling and critical heat flux. International Journal of Heat and Mass Transfer, 2008, 51, 2398-2410. | 4.8 | 124 |
| 40 | Review of databases and predictive methods for pressure drop in adiabatic, condensing and boiling mini/micro-channel flows. International Journal of Heat and Mass Transfer, 2014, 77, 74-97. | 4.8 | 124 |
| 41 | Experimental and computational investigation of vertical downflow condensation. International Journal of Heat and Mass Transfer, 2015, 85, 865-879. | 4.8 | 124 |
| 42 | Experimental and numerical investigation of single-phase heat transfer using a hybrid jet-impingement/micro-channel cooling scheme. International Journal of Heat and Mass Transfer, 2006, 49, 682-694. | 4.8 | 122 |
| 43 | Review of flow boiling and critical heat flux in microgravity. International Journal of Heat and Mass Transfer, 2015, 80, 469-493. | 4.8 | 122 |
| 44 | Flow condensation in parallel micro-channels â€“ Part 1: Experimental results and assessment of pressure drop correlations. International Journal of Heat and Mass Transfer, 2012, 55, 971-983. | 4.8 | 120 |
| 45 | Film boiling heat transfer of droplet streams and sprays. International Journal of Heat and Mass Transfer, 1997, 40, 2579-2593. | 4.8 | 119 |
| 46 | A universal approach to predicting temperature response of metallic parts to spray quenching. International Journal of Heat and Mass Transfer, 1994, 37, 347-362. | 4.8 | 108 |
| 47 | Single-phase hybrid micro-channel/micro-jet impingement cooling. International Journal of Heat and Mass Transfer, 2008, 51, 4342-4352. | 4.8 | 106 |
| 48 | Comparison of Two-Phase Electronic Cooling Using Free Jets and Sprays. Journal of Electronic Packaging, Transactions of the ASME, 1995, 117, 323-332. | 1.8 | 104 |
| 49 | A Leidenfrost Point Model for Impinging Droplets and Sprays. Journal of Heat Transfer, 2004, 126, 272-278. | 2.1 | 103 |
| 50 | Flow boiling CHF in microgravity. International Journal of Heat and Mass Transfer, 2005, 48, 3107-3118. | 4.8 | 103 |
| 51 | Review of channel flow boiling enhancement by surface modification, and instability suppression schemes. International Journal of Heat and Mass Transfer, 2020, 146, 118864. | 4.8 | 101 |
| 52 | Fluid flow and heat transfer characteristics of low temperature two-phase micro-channel heat sinks â€“ Part 2. Subcooled boiling pressure drop and heat transfer. International Journal of Heat and Mass Transfer, 2008, 51, 4327-4341. | 4.8 | 100 |
| 53 | An Ultra-High Power Two-Phase Jet-Impingement Avionic Clamshell Module. Journal of Electronic Packaging, Transactions of the ASME, 1996, 118, 264-270. | 1.8 | 99 |
| 54 | Ultra-high critical heat flux (CHF) for subcooled water flow boilingâ€"II: high-CHF database and design equations. International Journal of Heat and Mass Transfer, 1999, 42, 1429-1456. | 4.8 | 98 |

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| 55 | Effects of heater length and orientation on the trigger mechanism for near-saturated flow boiling critical heat fluxâ€"I. Photographic study and statistical characterization of the near-wall interfacial features. International Journal of Heat and Mass Transfer, 1995, 38, 629-641. | 4.8 | 96 |
| 56 | Application of Two-Phase Spray Cooling for Thermal Management of Electronic Devices. IEEE Transactions on Components and Packaging Technologies, 2009, 32, 784-793. | 1.3 | 95 |
| 57 | Experimental and theoretical study of orientation effects on flow boiling CHF. International Journal of Heat and Mass Transfer, 2002, 45, 4463-4477. | 4.8 | 94 |
| 58 | A Cavity Activation and Bubble Growth Model of the Leidenfrost Point. Journal of Heat Transfer, 2002, 124, 864-874. | 2.1 | 92 |
| 59 | Experimental and numerical study of quenching complex-shaped metallic alloys with multiple, overlapping sprays. International Journal of Heat and Mass Transfer, 1995, 38, 1201-1216. | 4.8 | 88 |
| 60 | Critical heat flux in a long, rectangular channel subjected to one-sided heatingâ€"I. flow visualization. International Journal of Heat and Mass Transfer, 1999, 42, 1835-1847. | 4.8 | 88 |
| 61 | Effects of high subcooling on two-phase spray cooling and critical heat flux. International Journal of Heat and Mass Transfer, 2008, 51, 5269-5278. | 4.8 | 86 |
| 62 | Review of two-phase flow instabilities in macro- and micro-channel systems. International Journal of Heat and Mass Transfer, 2020, 157, 119738. | 4.8 | 86 |
| 63 | Theoretical model for annular flow condensation in rectangular micro-channels. International Journal of Heat and Mass Transfer, 2012, 55, 958-970. | 4.8 | 85 |
| 64 | Two-Phase Electronic Cooling Using Mini-Channel and Micro-Channel Heat Sinks: Part 1â€"Design Criteria and Heat Diffusion Constraints. Journal of Electronic Packaging, Transactions of the ASME, 1994, 116, 290-297. | 1.8 | 84 |
| 65 | Pumpless Loop for Narrow Channel and Micro-Channel Boiling. Journal of Electronic Packaging, Transactions of the ASME, 2003, 125, 431-441. | 1.8 | 84 |
| 66 | Experimental assessment of the effects of body force, surface tension force, and inertia on flow boiling CHF. International Journal of Heat and Mass Transfer, 2002, 45, 4079-4095. | 4.8 | 80 |
| 67 | Measurement of mass and momentum transport in wavy-laminar falling liquid films. International Journal of Heat and Mass Transfer, 1993, 36, 4151-4162. | 4.8 | 79 |
| 68 | Single-phase and two-phase heat transfer characteristics of low temperature hybrid micro-channel/micro-jet impingement cooling module. International Journal of Heat and Mass Transfer, 2008, 51, 3882-3895. | 4.8 | 75 |
| 69 | Pool boiling critical heat flux (CHF) â€“ Part 2: Assessment of models and correlations. International Journal of Heat and Mass Transfer, 2018, 117, 1368-1383. | 4.8 | 75 |
| 70 | Thermal transients in a capillary evaporator prior to the initiation of boiling. International Journal of Heat and Mass Transfer, 2000, 43, 3937-3952. | 4.8 | 73 |
| 71 | Mass and momentum transport in smooth falling liquid films laminarized at relatively high Reynolds numbers. International Journal of Heat and Mass Transfer, 1993, 36, 3437-3448. | 4.8 | 68 |
| 72 | Effects of heater length and orientation on the trigger mechanism for near-saturated flow boiling critical heat fluxâ€"II. Critical heat flux model. International Journal of Heat and Mass Transfer, 1995, 38, 643-654. | 4.8 | 65 |

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| 73 | Experimental and Computational Investigation of Flow Development and Pressure Drop in a Rectangular Micro-channel. Journal of Electronic Packaging, Transactions of the ASME, 2006, 128, 1-9. | 1.8 | 65 |
| 74 | Computational modeling of turbulent evaporating falling films. International Journal of Heat and Mass Transfer, 2015, 81, 52-62. | 4.8 | 60 |
| 75 | Experimental and theoretical investigation of annular flow condensation in microgravity. International Journal of Heat and Mass Transfer, 2013, 61, 293-309. | 4.8 | 56 |
| 76 | Investigation of flow boiling in large micro-channel heat exchangers in a refrigeration loop for space applications. International Journal of Heat and Mass Transfer, 2016, 97, 110-129. | 4.8 | 55 |
| 77 | Review of two-phase critical flow models and investigation of the relationship between choking, premature CHF, and CHF in micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2015, 87, 497-511. | 4.8 | 54 |
| 78 | Experimental and computational investigation on two-phase flow and heat transfer of highly subcooled flow boiling in vertical upflow. International Journal of Heat and Mass Transfer, 2019, 136, 1199-1216. | 4.8 | 50 |
| 79 | Investigation of subcooled and saturated boiling heat transfer mechanisms, instabilities, and transient flow regime maps for large length-to-diameter ratio micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2018, 123, 172-191. | 4.8 | 49 |
| 80 | Micro-channel evaporator for space applications â€“ 1. Experimental pressure drop and heat transfer results for different orientations in earth gravity. International Journal of Heat and Mass Transfer, 2014, 77, 1213-1230. | 4.8 | 48 |
| 81 | Analytical and computational methodology for modeling spray quenching of solid alloy cylinders. International Journal of Heat and Mass Transfer, 2010, 53, 5871-5883. | 4.8 | 43 |
| 82 | Theoretical model for local heat transfer coefficient for annular flow boiling in circular mini/micro-channels. International Journal of Heat and Mass Transfer, 2014, 73, 731-742. | 4.8 | 43 |
| 83 | Review of nanoscale boiling enhancement techniques and proposed systematic testing strategy to ensure cooling reliability and repeatability. Applied Thermal Engineering, 2021, 184, 115982. | 6.0 | 41 |
| 84 | Flow boiling in microgravity: Part 1 â€“ Interfacial behavior and experimental heat transfer results. International Journal of Heat and Mass Transfer, 2015, 81, 705-720. | 4.8 | 40 |
| 85 | A Method for Assessing the Importance of Body Force on Flow Boiling CHF. Journal of Heat Transfer, 2004, 126, 161-168. | 2.1 | 39 |
| 86 | Experimental and computational investigation of vertical upflow condensation in a circular tube. International Journal of Heat and Mass Transfer, 2016, 95, 249-263. | 4.8 | 36 |
| 87 | CHF model for subcooled flow boiling in Earth gravity and microgravity. International Journal of Heat and Mass Transfer, 2007, 50, 4039-4051. | 4.8 | 35 |
| 88 | Enhancement of boiling heat transfer using highly wetting liquids with pressed-on fins at low contact forces. International Journal of Heat and Mass Transfer, 1997, 40, 2379-2392. | 4.8 | 34 |
| 89 | A Systematic Approach to Predicting Critical Heat Flux for Inclined Sprays. Journal of Electronic Packaging, Transactions of the ASME, 2007, 129, 452-459. | 1.8 | 34 |
| 90 | Effects of subcooling and two-phase inlet on flow boiling heat transfer and critical heat flux in a horizontal channel with one-sided and double-sided heating. International Journal of Heat and Mass Transfer, 2015, 91, 1187-1205. | 4.8 | 33 |

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| 91 | Effects of two-phase inlet quality, mass velocity, flow orientation, and heating perimeter on flow boiling in a rectangular channel: Part 1 â€“ Two-phase flow and heat transfer results. International Journal of Heat and Mass Transfer, 2016, 103, 1261-1279. | 4.8 | 33 |
| 92 | Two-Phase Flow and Heat Transfer in Rectangular Micro-Channels. Journal of Electronic Packaging, Transactions of the ASME, 2004, 126, 288-300. | 1.8 | 31 |
| 93 | Frequency analysis of pressure oscillations in large length-to-diameter two-phase micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2018, 116, 273-291. | 4.8 | 31 |
| 94 | Investigation of interfacial behavior during the flow boiling CHF transient. International Journal of Heat and Mass Transfer, 2004, 47, 1275-1288. | 4.8 | 30 |
| 95 | Investigation of the influence of orientation on critical heat flux for flow boiling with two-phase inlet. International Journal of Heat and Mass Transfer, 2013, 61, 176-190. | 4.8 | 30 |
| 96 | Experimental measurement and modeling of downflow condensation in a circular tube. International Journal of Heat and Mass Transfer, 2013, 57, 567-581. | 4.8 | 30 |
| 97 | Flow Boiling and Flow Condensation in Reduced Gravity. Advances in Heat Transfer, 2017, 49, 225-306. | 0.9 | 30 |
| 98 | Experimental investigation into the impact of density wave oscillations on flow boiling system dynamic behavior and stability. International Journal of Heat and Mass Transfer, 2018, 120, 144-166. | 4.8 | 30 |
| 99 | Implementation of Microchannel Evaporator for High-Heat-Flux Refrigeration Cooling Applications. Journal of Electronic Packaging, Transactions of the ASME, 2006, 128, 30-37. | 1.8 | 29 |
| 100 | Flow boiling and critical heat flux in horizontal channel with one-sided and double-sided heating. International Journal of Heat and Mass Transfer, 2015, 90, 323-338. | 4.8 | 29 |
| 101 | Flow boiling in microgravity: Part 2 â€“ Critical heat flux interfacial behavior, experimental data, and model. International Journal of Heat and Mass Transfer, 2015, 81, 721-736. | 4.8 | 29 |
| 102 | Transient characteristics of flow boiling in large micro-channel heat exchangers. International Journal of Heat and Mass Transfer, 2016, 103, 186-202. | 4.8 | 29 |
| 103 | 3-D computational investigation and experimental validation of effect of shear-lift on two-phase flow and heat transfer characteristics of highly subcooled flow boiling in vertical upflow. International Journal of Heat and Mass Transfer, 2020, 150, 119291. | 4.8 | 28 |
| 104 | Assessment of body force effects in flow condensation, part II: Criteria for negating influence of gravity. International Journal of Heat and Mass Transfer, 2017, 106, 313-328. | 4.8 | 27 |
| 105 | Experimental and theoretical study of critical heat flux in vertical upflow with inlet vapor void. International Journal of Heat and Mass Transfer, 2012, 55, 360-374. | 4.8 | 26 |
| 106 | Assessing advantages and disadvantages of macro- and micro-channel flow boiling for high-heat-flux thermal management using computational and theoretical/empirical methods. International Journal of Heat and Mass Transfer, 2021, 169, 120787. | 4.8 | 26 |
| 107 | Optimization of quench history of aluminum parts for superior mechanical properties. International Journal of Heat and Mass Transfer, 1996, 39, 81-95. | 4.8 | 25 |
| 108 | Transition Boiling Heat Transfer of Droplet Streams and Sprays. Journal of Heat Transfer, 2007, 129, 1605-1610. | 2.1 | 25 |

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| 109 | Determination of flow regimes and heat transfer coefficient for condensation in horizontal tubes. International Journal of Heat and Mass Transfer, 2015, 80, 698-716. | 4.8 | 25 |
| 110 | Effects of two-phase inlet quality, mass velocity, flow orientation, and heating perimeter on flow boiling in a rectangular channel: Part 2 â€“ CHF experimental results and model. International Journal of Heat and Mass Transfer, 2016, 103, 1280-1296. | 4.8 | 23 |
| 111 | Experimental investigation and analysis of parametric trends of instability in two-phase micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2021, 170, 120980. | 4.8 | 22 |
| 112 | Consolidated methodology to predicting flow boiling critical heat flux for inclined channels in Earth gravity and for microgravity. International Journal of Heat and Mass Transfer, 2016, 92, 467-482. | 4.8 | 21 |
| 113 | Experimental investigation of frequency and amplitude of density wave oscillations in vertical upflow boiling. International Journal of Heat and Mass Transfer, 2018, 125, 1240-1263. | 4.8 | 21 |
| 114 | Photographic study and modeling of critical heat flux in horizontal flow boiling with inlet vapor void. International Journal of Heat and Mass Transfer, 2012, 55, 4154-4168. | 4.8 | 20 |
| 115 | Investigation of eddy diffusivity and heat transfer coefficient for free-falling turbulent liquid films subjected to sensible heating. International Journal of Heat and Mass Transfer, 2013, 64, 647-660. | 4.8 | 20 |
| 116 | Analytical and experimental determination of slug flow parameters, pressure drop and heat transfer coefficient in micro-channel condensation. International Journal of Heat and Mass Transfer, 2017, 111, 1218-1233. | 4.8 | 20 |
| 117 | Mechanistic model to predict frequency and amplitude of Density Wave Oscillations in vertical upflow boiling. International Journal of Heat and Mass Transfer, 2018, 123, 143-171. | 4.8 | 20 |
| 118 | Experimental and analytical investigation of flow loop induced instabilities in micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2019, 140, 303-330. | 4.8 | 20 |
| 119 | Review of Critical Heat Flux (CHF) in Jet Impingement Boiling. International Journal of Heat and Mass Transfer, 2021, 169, 120893. | 4.8 | 20 |
| 120 | Experimental investigation of subcooled flow boiling in annuli with reference to thermal management of ultra-fast electric vehicle charging cables. International Journal of Heat and Mass Transfer, 2021, 172, 121176. | 4.8 | 20 |
| 121 | Methodology for predicting spray quenching of thick-walled metal alloy tubes. International Journal of Heat and Mass Transfer, 2012, 55, 2953-2964. | 4.8 | 19 |
| 122 | Climbing film, flooding and falling film behavior in upflow condensation in tubes. International Journal of Heat and Mass Transfer, 2013, 65, 44-61. | 4.8 | 19 |
| 123 | Universal Critical Heat Flux (CHF) Correlations for Cryogenic Flow Boiling in Uniformly Heated Tubes. International Journal of Heat and Mass Transfer, 2021, 166, 120678. | 4.8 | 19 |
| 124 | Experimental heat transfer results and flow visualization of vertical upflow boiling in Earth gravity with subcooled inlet conditions â€“ In preparation for experiments onboard the International Space Station. International Journal of Heat and Mass Transfer, 2022, 188, 122603. | 4.8 | 19 |
| 125 | An Experimental Investigation Into the Relationship Between Temperature-Time History and Surface Roughness in the Spray Quenching of Aluminum Parts. Journal of Engineering Materials and Technology, Transactions of the ASME, 1996, 118, 127-134. | 1.4 | 17 |
| 126 | Experimental Investigation of Flow Condensation in Microgravity. Journal of Heat Transfer, 2014, 136, . | 2.1 | 17 |

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| 127 | Pressure drop characteristics of large length-to-diameter two-phase micro-channel heat sinks. International Journal of Heat and Mass Transfer, 2017, 115, 1258-1275. | 4.8 | 17 |
| 128 | Experimental study of forced convective heat transfer in grille-particle composite packed beds. International Journal of Heat and Mass Transfer, 2019, 129, 103-112. | 4.8 | 17 |
| 129 | Theoretical Leidenfrost point (LFP) model for sessile droplet. International Journal of Heat and Mass Transfer, 2020, 146, 118802. | 4.8 | 17 |
| 130 | Experimental and computational investigation of flow boiling in microgravity. International Journal of Heat and Mass Transfer, 2022, 183, 122237. | 4.8 | 17 |
| 131 | Assessment of body force effects in flow condensation, Part I: Experimental investigation of liquid film behavior for different orientations. International Journal of Heat and Mass Transfer, 2017, 106, 295-312. | 4.8 | 16 |
| 132 | Critical heat flux enhancement by means of liquid subcooling and centrifugal force induced by flow curvature. International Journal of Heat and Mass Transfer, 1992, 35, 1247-1260. | 4.8 | 15 |
| 133 | Critical heat flux in a long, curved channel subjected to concave heating. International Journal of Heat and Mass Transfer, 1999, 42, 3831-3848. | 4.8 | 15 |
| 134 | Thermal and thermodynamic performance, and pressure oscillations of refrigeration loop employing large micro-channel evaporators. International Journal of Heat and Mass Transfer, 2016, 103, 1313-1326. | 4.8 | 15 |
| 135 | Computational and experimental investigation of condensation flow patterns and heat transfer in parallel rectangular micro-channels. International Journal of Heat and Mass Transfer, 2020, 149, 119158. | 4.8 | 15 |
| 136 | Experimental results and interfacial lift-off model predictions of critical heat flux for flow boiling with subcooled inlet conditions â€“ In preparation for experiments onboard the International Space Station. International Journal of Heat and Mass Transfer, 2022, 183, 122241. | 4.8 | 15 |
| 137 | Transport Phenomena in Two-Phase Micro-Channel Heat Sinks. , 2002, , 135. | | 14 |
| 138 | Flow condensation heat transfer in a smooth tube at different orientations: Experimental results and predictive models. International Journal of Heat and Mass Transfer, 2019, 140, 533-563. | 4.8 | 14 |
| 139 | Enhanced model for annular flow in micro-channel heat sinks, including effects of droplet entrainment/deposition and core turbulence. International Journal of Heat and Mass Transfer, 2019, 133, 510-530. | 4.8 | 14 |
| 140 | Flow visualization, heat transfer, and critical heat flux of flow boiling in Earth gravity with saturated liquidâ€vapor mixture inlet conditions â€“ In preparation for experiments onboard the International Space Station. International Journal of Heat and Mass Transfer, 2022, 192, 122890. | 4.8 | 13 |
| 141 | Subcooled flow boiling heat transfer in a partially-heated rectangular channel at different orientations in Earth gravity. International Journal of Heat and Mass Transfer, 2022, 195, 123200. | 4.8 | 12 |
| 142 | Computational prediction of key heat transfer mechanisms and hydrodynamic characteristics of critical heat flux (CHF) in subcooled vertical upflow boiling. International Journal of Heat and Mass Transfer, 2020, 161, 120262. | 4.8 | 11 |
| 143 | Time-averaged and transient pressure drop for flow boiling with saturated inlet conditions. International Journal of Heat and Mass Transfer, 2016, 103, 133-153. | 4.8 | 10 |
| 144 | SIMULTANEOUS MEASUREMENTS OF THICKNESS AND TEMPERATURE PROFILE IN A WAVY LIQUID FILM FALLING FREELY ON A HEATING WALL. Experimental Heat Transfer, 1991, 4, 217-233. | 3.2 | 8 |

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| 145 | Identification of condensation flow regime at different orientations using temperature and pressure measurements. International Journal of Heat and Mass Transfer, 2019, 135, 569-590. | 4.8 | 8 |
| 146 | Mechanistic method to predicting minimum heat flux point wall temperature in saturated pool boiling. International Journal of Heat and Mass Transfer, 2020, 156, 119854. | 4.8 | 7 |
| 147 | Flow condensation pressure oscillations at different orientations. International Journal of Heat and Mass Transfer, 2018, 127, 784-809. | 4.8 | 6 |
| 148 | Universal Correlations for Post-CHF Saturated and Superheated Flow Film Boiling Heat Transfer Coefficient, Minimum Heat Flux and Rewet Temperature for Cryogenic Fluids in Uniformly Heated Tubes. International Journal of Heat and Mass Transfer, 2022, 195, 123054. | 4.8 | 6 |
| 149 | Critical Heat Flux of Confined Round Single Jet and Jet Array Impingement Boiling. International Journal of Heat and Mass Transfer, 2021, 169, 120857. | 4.8 | 5 |
| 150 | Review of Cryogenic Pool Boiling Critical Heat Flux Databases, Assessment of Models and Correlations, and Development of New Universal Correlations. International Journal of Heat and Mass Transfer, 2022, 190, 122579. | 4.8 | 4 |
| 151 | Effects of two-phase inlet quality, mass velocity, flow orientation, and heating perimeter on flow boiling in a rectangular channel: Part 1 - Two-phase flow and heat transfer results. International Journal of Heat and Mass Transfer, 2016, 103, 1261-1279. | 4.8 | 3 |