

Jian Xie

List of Publications by Year in descending order

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39
papers

976
citations

361296
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docs citations

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times ranked

602
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Supercritical "boiling" number, a new parameter to distinguish two regimes of carbon dioxide heat transfer in tubes. <i>International Journal of Thermal Sciences</i> , 2019, 136, 254-266. | 2.6 | 112 |
| 2 | Perspective of sCO ₂ power cycles. <i>Energy</i> , 2019, 186, 115831. | 4.5 | 106 |
| 3 | Dropwise condensation on superhydrophobic nanostructure surface, Part I: Long-term operation and nanostructure failure. <i>International Journal of Heat and Mass Transfer</i> , 2019, 129, 86-95. | 2.5 | 59 |
| 4 | The general supercritical heat transfer correlation for vertical up-flow tubes: K number correlation. <i>International Journal of Heat and Mass Transfer</i> , 2020, 148, 119080. | 2.5 | 58 |
| 5 | Froude number dominates condensation heat transfer of R245fa in tubes: Effect of inclination angles. <i>International Journal of Multiphase Flow</i> , 2015, 71, 98-115. | 1.6 | 50 |
| 6 | Mode selection between sliding and rolling for droplet on inclined surface: Effect of surface wettability. <i>International Journal of Heat and Mass Transfer</i> , 2018, 122, 45-58. | 2.5 | 46 |
| 7 | Critical supercritical-boiling-number to determine the onset of heat transfer deterioration for supercritical fluids. <i>Solar Energy</i> , 2020, 195, 27-36. | 2.9 | 39 |
| 8 | Dropwise condensation on superhydrophobic nanostructure surface, part II: Mathematical model. <i>International Journal of Heat and Mass Transfer</i> , 2018, 127, 1170-1187. | 2.5 | 38 |
| 9 | Water drop impacts on a single-layer of mesh screen membrane: Effect of water hammer pressure and advancing contact angles. <i>Experimental Thermal and Fluid Science</i> , 2017, 82, 83-93. | 1.5 | 37 |
| 10 | Flow pattern modulation in a horizontal tube by the passive phase separation concept. <i>International Journal of Multiphase Flow</i> , 2012, 45, 12-23. | 1.6 | 36 |
| 11 | Mixed dropwise-filmwise condensation heat transfer on biphilic surface. <i>International Journal of Heat and Mass Transfer</i> , 2020, 150, 119273. | 2.5 | 29 |
| 12 | The critical nanofluid concentration as the crossover between changed and unchanged solar-driven droplet evaporation rates. <i>Nano Energy</i> , 2019, 57, 791-803. | 8.2 | 27 |
| 13 | Convective dropwise condensation heat transfer in mini-channels with biphilic surface. <i>International Journal of Heat and Mass Transfer</i> , 2019, 134, 69-84. | 2.5 | 27 |
| 14 | Condensation heat transfer of R245fa in tubes with and without lyophilic porous-membrane-tube insert. <i>International Journal of Heat and Mass Transfer</i> , 2015, 88, 261-275. | 2.5 | 25 |
| 15 | Stratified two-phase flow pattern modulation in a horizontal tube by the mesh pore cylinder surface. <i>Applied Energy</i> , 2013, 112, 1283-1290. | 5.1 | 24 |
| 16 | The phase separation concept condensation heat transfer in horizontal tubes for low-grade energy utilization. <i>Energy</i> , 2014, 69, 787-800. | 4.5 | 24 |
| 17 | Numerical simulation of the modulated flow pattern for vertical upflows by the phase separation concept. <i>International Journal of Multiphase Flow</i> , 2013, 56, 105-118. | 1.6 | 23 |
| 18 | The K number, a new analogy criterion number to connect pressure drop and heat transfer of sCO ₂ in vertical tubes. <i>Applied Thermal Engineering</i> , 2021, 182, 116078. | 3.0 | 23 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | A comprehensive understanding of enhanced condensation heat transfer using phase separation concept. <i>Energy</i> , 2019, 172, 661-674. | 4.5 | 21 |
| 20 | Numerical simulation of modulated heat transfer tube in laminar flow regime. <i>International Journal of Thermal Sciences</i> , 2014, 75, 171-183. | 2.6 | 20 |
| 21 | A New Mechanism of Light-Induced Bubble Growth to Propel Microbubble Piston Engine. <i>Small</i> , 2020, 16, e2001548. | 5.2 | 20 |
| 22 | Non-dimensional numerical study of droplet impacting on heterogeneous hydrophilicity/hydrophobicity surface. <i>International Journal of Heat and Mass Transfer</i> , 2018, 116, 951-968. | 2.5 | 18 |
| 23 | Coupling Diffusion Welding Technique and Mesh Screen Creates Heterogeneous Metal Surface for Droplets Array. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700684. | 1.9 | 17 |
| 24 | Modulated heat transfer tube with mesh cylinder inserted. <i>International Communications in Heat and Mass Transfer</i> , 2014, 56, 15-24. | 2.9 | 14 |
| 25 | Synergetics: The cooperative phenomenon in multi-compressions S-CO ₂ power cycles. <i>Energy Conversion and Management: X</i> , 2020, 7, 100042. | 0.9 | 10 |
| 26 | Modulated flow patterns for vertical upflow by the phase separation concept. <i>Experimental Thermal and Fluid Science</i> , 2014, 52, 297-307. | 1.5 | 9 |
| 27 | Large scale generation of micro-droplet array by vapor condensation on mesh screen piece. <i>Scientific Reports</i> , 2017, 7, 39932. | 1.6 | 9 |
| 28 | Heat Transfer Prediction of Supercritical Carbon Dioxide in Vertical Tube Based on Artificial Neural Networks. <i>Journal of Thermal Science</i> , 2021, 30, 1751-1767. | 0.9 | 9 |
| 29 | Experimental study on the flexural behavior of stone beams strengthened with a combination of angle steels and PET belts. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 1013-1024. | 1.3 | 8 |
| 30 | A comprehensive comparison between substrate heating and light heating induced nanofluid droplet evaporations. <i>Applied Thermal Engineering</i> , 2020, 175, 115389. | 3.0 | 8 |
| 31 | Tests on strengths of steel strand and strand-concrete (or cement slurry) bond stress under cryogenic temperatures. <i>Structural Concrete</i> , 2017, 18, 872-882. | 1.5 | 7 |
| 32 | In-situ phase separation to improve phase change heat transfer performance. <i>Energy</i> , 2021, 230, 120845. | 4.5 | 7 |
| 33 | Effect of gravity levels on the flow pattern modulation by the phase separation concept. <i>Computers and Fluids</i> , 2015, 108, 43-56. | 1.3 | 6 |
| 34 | Multiscale Characteristic in Symmetric/Asymmetric Solar-Driven Nanofluid Droplet Evaporation. <i>Langmuir</i> , 2020, 36, 1680-1690. | 1.6 | 5 |
| 35 | Significant heat transfer enhancement for R123 condensation by micromembrane cylinder. <i>Science Bulletin</i> , 2014, 59, 3676-3685. | 1.7 | 2 |
| 36 | Analysis of a coal-fired power system integrated with a reheat S-CO ₂ cycle. <i>Energy Procedia</i> , 2019, 158, 1461-1466. | 1.8 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Special Issue dedicated to the 1st International Conference on Supercritical CO2 Power System (ICSCPS 2018). Journal of Thermal Science, 2019, 28, 393-393. | 0.9 | 1 |
| 38 | The engineering application and development direction of Recycled Concrete. , 2011, , . | | 0 |
| 39 | Condensation heat transfer deterioration on superhydrophobic surface with dense nanostructures. Journal of Physics: Conference Series, 2022, 2230, 012027. | 0.3 | 0 |