## Evelyn N Wang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

| 183         | 12,809                | 54      | 111     |
|-------------|-----------------------|---------|---------|
| papers      | citations             | h-index | g-index |
| 201         | 15,457 ext. citations | 9.3     | 6.95    |
| ext. papers |                       | avg, IF | L-index |

| #   | Paper  | IF     | Citations |
|-----|--|--------|-----------|
| 183 | Kinetics of Sorption in Hygroscopic Hydrogels <i>Nano Letters</i> , <b>2022</b> ,  | 11.5   | 6         |
| 182 | Alteration of pool boiling heat transfer on metallic surfaces by in situ oxidation. <i>International Journal of Heat and Mass Transfer</i> , <b>2022</b> , 185, 122320   | 4.9    | О         |
| 181 | Boiling crisis due to bubble interactions. <i>International Journal of Heat and Mass Transfer</i> , <b>2022</b> , 182, 12  | 1949.4 | 4         |
| 180 | Highly efficient and salt rejecting solar evaporation via a wick-free confined water layer <i>Nature Communications</i> , <b>2022</b> , 13, 849  | 17.4   | 7         |
| 179 | Thermophotovoltaic efficiency of 40 <i>Nature</i> , <b>2022</b> , 604, 287-291   | 50.4   | 13        |
| 178 | Design and modeling of a multiscale porous ceramic heat exchanger for high temperature applications with ultrahigh power density. <i>International Journal of Heat and Mass Transfer</i> , <b>2022</b> , 194, 122996   | 4.9    | O         |
| 177 | Zinc sulfide-pigmented polyethylene aerogel covers for daytime radiative cooling. <i>Journal of Photonics for Energy</i> , <b>2021</b> , 11,   | 1.2    | 2         |
| 176 | Unified descriptor for enhanced critical heat flux during pool boiling of hemi-wicking surfaces. <i>International Journal of Heat and Mass Transfer</i> , <b>2021</b> , 122189   | 4.9    | 2         |
| 175 | Numerical validation of the dusty-gas model for binary diffusion in low aspect ratio capillaries. <i>Physics of Fluids</i> , <b>2021</b> , 33, 121701  | 4.4    | 2         |
| 174 | Rational Fabrication of Nano-to-Microsphere Polycrystalline Opals Using Slope Self-Assembly. <i>Langmuir</i> , <b>2021</b> , 37, 12568-12576   | 4      | 2         |
| 173 | Microtube Surfaces for the Simultaneous Enhancement of Efficiency and Critical Heat Flux during Pool Boiling. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2021</b> , 13, 12629-12635   | 9.5    | 6         |
| 172 | Bubble growth and departure modes on wettable/non-wettable porous foams in alkaline water splitting. <i>Joule</i> , <b>2021</b> , 5, 887-900   | 27.8   | 15        |
| 171 | Dual-Stage Atmospheric Water Harvesting Device for Scalable Solar-Driven Water Production. <i>Joule</i> , <b>2021</b> , 5, 166-182   | 27.8   | 54        |
| 170 | A unified relationship between bubble departure frequency and diameter during saturated nucleate pool boiling. <i>International Journal of Heat and Mass Transfer</i> , <b>2021</b> , 165, 120640  | 4.9    | 5         |
| 169 | Solar-Driven Soft Robots. <i>Advanced Science</i> , <b>2021</b> , 8, 2004235   | 13.6   | 8         |
| 168 | Bottom-Up Synthesized All-Thermal-Catalyst Aerogels for Heat-Regenerative Air Filtration. <i>Nano Letters</i> , <b>2021</b> , 21, 8160-8165  | 11.5   | О         |
| 167 | Toward Optimal Heat Transfer of 2D-3D Heterostructures van der Waals Binding Effects. <i>ACS Applied Materials &amp; Applied &amp; Appli</i> | 9.5    | 5         |

## (2020-2021)

| 166 | Passive, high-efficiency thermally-localized solar desalination. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 1771-1793   | 35.4    | 32  |
|-----|--|---------|-----|
| 165 | Nucleation Site Distribution Probed by Phase-Enhanced Environmental Scanning Electron Microscopy. <i>Cell Reports Physical Science</i> , <b>2020</b> , 1, 100262   | 6.1     | 6   |
| 164 | Wide-Field Magnetic Field and Temperature Imaging Using Nanoscale Quantum Sensors. <i>ACS Applied Materials &amp; Discourse (Materials &amp; Discours)</i> , 12, 26525-26533   | 9.5     | 18  |
| 163 | Heat transfer suppression by suspended droplets on microstructured surfaces. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 233703  | 3.4     | 8   |
| 162 | Effects of airborne hydrocarbon adsorption on pool boiling heat transfer. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 253702   | 3.4     | 7   |
| 161 | High Heat Flux Evaporation of Low Surface Tension Liquids from Nanoporous Membranes. <i>ACS Applied Materials &amp; Discrete Applied &amp; Di</i> | 9.5     | 23  |
| 160 | Ultrahigh-efficiency desalination via a thermally-localized multistage solar still. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 830-839  | 35.4    | 153 |
| 159 | Modeling and performance analysis of high-efficiency thermally-localized multistage solar stills. <i>Applied Energy</i> , <b>2020</b> , 266, 114864  | 10.7    | 17  |
| 158 | Criteria for antibubble formation from drop pairs impinging on a free surface. <i>Physical Review Fluids</i> , <b>2020</b> , 5,  | 2.8     | 5   |
| 157 | Jumping droplet condensation in internal convective vapor flow. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 163, 120398   | 4.9     | 2   |
| 156 | Capillary-fed, thin film evaporation devices. Journal of Applied Physics, 2020, 128, 130901  | 2.5     | 20  |
| 155 | A Passive High-Temperature High-Pressure Solar Steam Generator for Medical Sterilization. <i>Joule</i> , <b>2020</b> , 4, 2733-2745  | 27.8    | 29  |
| 154 | Polymer Infused Porous Surfaces for Robust, Thermally Conductive, Self-Healing Coatings for Dropwise Condensation. <i>ACS Nano</i> , <b>2020</b> , 14, 14878-14886   | 16.7    | 17  |
| 153 | Transport-Based Modeling of Bubble Nucleation on Gas Evolving Electrodes. <i>Langmuir</i> , <b>2020</b> , 36, 15112  | 2-45118 | 84  |
| 152 | Thermodynamic analysis and optimization of adsorption-based atmospheric water harvesting. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 161, 120253   | 4.9     | 20  |
| 151 | Understanding triggering mechanisms for critical heat flux in pool boiling based on direct numerical simulations. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 163, 120546   | 4.9     | 10  |
| 150 | Framework for analyzing the thermoreflectance spectra of metal thermal transducers with spectrally tunable time-domain thermoreflectance. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 055107  | 2.5     | 2   |
| 149 | Quasi-Newtonian Environmental Scanning Electron Microscopy (QN-ESEM) for Monitoring Material Dynamics in High-Pressure Gaseous Environments. <i>Advanced Science</i> , <b>2020</b> , 7, 2001268  | 13.6    | 2   |

| 148 | Stefan flow induced natural convection suppression on high-flux evaporators. <i>International Communications in Heat and Mass Transfer</i> , <b>2020</b> , 110, 104255   | 5.8  | 7   |
|-----|--|------|-----|
| 147 | Manipulating Water and Heat with Nanoengineered Surfaces. <i>Women in Engineering and Science</i> , <b>2020</b> , 85-99  | 0.5  |     |
| 146 | The potential for atmospheric water harvesting to accelerate household access to safe water. <i>Lancet Planetary Health, The</i> , <b>2020</b> , 4, e91-e92  | 9.8  | 13  |
| 145 | Plasmonic absorption-induced haze suppression in random scattering media. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 251102   | 3.4  | O   |
| 144 | Harnessing Heat Beyond 200 LC from Unconcentrated Sunlight with Nonevacuated Transparent Aerogels. <i>ACS Nano</i> , <b>2019</b> , 13, 7508-7516   | 16.7 | 51  |
| 143 | A unified relationship for evaporation kinetics at low Mach numbers. <i>Nature Communications</i> , <b>2019</b> , 10, 2368   | 17.4 | 51  |
| 142 | Thermal Expansion Coefficient of Monolayer Molybdenum Disulfide Using Micro-Raman Spectroscopy. <i>Nano Letters</i> , <b>2019</b> , 19, 4745-4751  | 11.5 | 31  |
| 141 | Adsorption-Based Atmospheric Water Harvesting: Impact of Material and Component Properties on System-Level Performance. <i>Accounts of Chemical Research</i> , <b>2019</b> , 52, 1588-1597   | 24.3 | 104 |
| 140 | Size distribution theory for jumping-droplet condensation. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 163701  | 3.4  | 13  |
| 139 | Simultaneous prediction of dryout heat flux and local temperature for thin film evaporation in micropillar wicks. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 136, 170-177  | 4.9  | 14  |
| 138 | High temperature stability of transparent silica aerogels for solar thermal applications. <i>APL Materials</i> , <b>2019</b> , 7, 081104   | 5.7  | 18  |
| 137 | Theoretical and experimental investigation of haze in transparent aerogels. <i>Optics Express</i> , <b>2019</b> , 27, A39-A50  | 3.3  | 18  |
| 136 | Bubble nucleation, growth, and departure: A new, dynamic understanding. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 145, 118803   | 4.9  | 9   |
| 135 | High-performance subambient radiative cooling enabled by optically selective and thermally insulating polyethylene aerogel. <i>Science Advances</i> , <b>2019</b> , 5, eaat9480  | 14.3 | 136 |
| 134 | Corrections to Design and Modeling of Membrane-Based Evaporative Cooling Devices for Thermal Management of High Heat Fluxes[Jul 16 1056-1065]. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2019</b> , 9, 1663-1663 | 1.7  | 0   |
| 133 | Embedded Microjets for Thermal Management of High Power-Density Electronic Devices. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2019</b> , 9, 269-278  | 1.7  | 7   |
| 132 | Enhanced Environmental Scanning Electron Microscopy Using Phase Reconstruction and Its Application in Condensation. <i>ACS Nano</i> , <b>2019</b> , 13, 1953-1960  | 16.7 | 9   |
| 131 | Jumping Droplets Push the Boundaries of Condensation Heat Transfer. <i>Joule</i> , <b>2018</b> , 2, 205-207  | 27.8 | 24  |

130 Bioinspired Surfaces for Enhanced Boiling **2018**, 47-71

| 129 | A Hybrid Electric and Thermal Solar Receiver. <i>Joule</i> , <b>2018</b> , 2, 962-975   | 27.8                | 54  |
|-----|---|---------------------|-----|
| 128 | Hotspot Thermal Management via Thin-Film Evaporation Part I: Experimental Characterization. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2018</b> , 8, 88-98 | 1.7                 | 7   |
| 127 | Theory of Thermal Time Constants in GaN High-Electron-Mobility Transistors. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2018</b> , 8, 606-620               | 1.7                 | 13  |
| 126 | Predicting Surface Tensions of Surfactant Solutions from Statistical Mechanics. <i>Langmuir</i> , <b>2018</b> , 34, 238   | 6 <sub>4</sub> 239! | 5 5 |
| 125 | Heat Transfer Enhancement During Water and Hydrocarbon Condensation on Lubricant Infused Surfaces. <i>Scientific Reports</i> , <b>2018</b> , 8, 540   | 4.9                 | 79  |
| 124 | Effects of millimetric geometric features on dropwise condensation under different vapor conditions. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 119, 931-938            | 4.9                 | 40  |
| 123 | Hotspot Thermal Management via Thin-Film EvaporationPart II: Modeling. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2018</b> , 8, 99-112                     | 1.7                 | 4   |
| 122 | Charging of miniature flat heat pipes. Heat and Mass Transfer, 2018, 54, 3131-3136  | 2.2                 |     |
| 121 | Salt rejection in flow-between capacitive deionization devices. <i>Desalination</i> , <b>2018</b> , 437, 154-163  | 10.3                | 20  |
| 120 | Gravitationally Driven Wicking for Enhanced Condensation Heat Transfer. <i>Langmuir</i> , <b>2018</b> , 34, 4658-466  | 544                 | 27  |
| 119 | Precise control of pore hydrophilicity enabled by post-synthetic cation exchange in metal-organic frameworks. <i>Chemical Science</i> , <b>2018</b> , 9, 3856-3859                                  | 9.4                 | 46  |
| 118 | Adsorption-based atmospheric water harvesting device for arid climates. <i>Nature Communications</i> , <b>2018</b> , 9, 1191  | 17.4                | 227 |
| 117 | Nanoporous membrane device for ultra high heat flux thermal management. <i>Microsystems and Nanoengineering</i> , <b>2018</b> , 4, 1  | 7.7                 | 85  |
| 116 | Specular side reflectors for high efficiency thermal-to-optical energy conversion. <i>Optics Express</i> , <b>2018</b> , 26, A462-A479  | 3.3                 | 5   |
| 115 | Radiative Thermal Runaway Due to Negative-Differential Thermal Emission Across a Solid-Solid Phase Transition. <i>Physical Review Applied</i> , <b>2018</b> , 10,                                   | 4.3                 | 16  |
| 114 | Optimization and thermal characterization of uniform silicon micropillar based evaporators. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 127, 51-60                       | 4.9                 | 19  |
| 113 | Multiscale Dynamic Growth and Energy Transport of Droplets during Condensation. <i>Langmuir</i> , <b>2018</b> , 34, 9085-9095   | 4                   | 21  |

| 112 | Passive directional sub-ambient daytime radiative cooling. <i>Nature Communications</i> , <b>2018</b> , 9, 5001   | 17.4 | 106 |
|-----|---|------|-----|
| 111 | Tunable Metal-Organic Frameworks Enable High-Efficiency Cascaded Adsorption Heat Pumps.<br>Journal of the American Chemical Society, <b>2018</b> , 140, 17591-17596               | 16.4 | 46  |
| 110 | Toward Condensation-Resistant Omniphobic Surfaces. ACS Nano, 2018, 12, 11013-11021  | 16.7 | 36  |
| 109 | Active fume hood sash height monitoring with audible feedback. <i>Energy Reports</i> , <b>2018</b> , 4, 645-652   | 4.6  | 4   |
| 108 | Characterization of thin film evaporation in micropillar wicks using micro-Raman spectroscopy. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 163701                         | 3.4  | 9   |
| 107 | Suppressing high-frequency temperature oscillations in microchannels with surface structures. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 033501                          | 3.4  | 24  |
| 106 | High temperature annealing for structural optimization of silica aerogels in solar thermal applications. <i>Journal of Non-Crystalline Solids</i> , <b>2017</b> , 462, 72-77      | 3.9  | 40  |
| 105 | Experimental Characterization of the Thermal Time Constants of GaN HEMTs Via Micro-Raman Thermometry. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 2121-2128  | 2.9  | 27  |
| 104 | Water harvesting from air with metal-organic frameworks powered by natural sunlight. <i>Science</i> , <b>2017</b> , 356, 430-434  | 33.3 | 800 |
| 103 | Record Atmospheric Fresh Water Capture and Heat Transfer with a Material Operating at the Water Uptake Reversibility Limit. <i>ACS Central Science</i> , <b>2017</b> , 3, 668-672 | 16.8 | 178 |
| 102 | Nanoengineered materials for liquid Dapour phase-change heat transfer. <i>Nature Reviews Materials</i> , <b>2017</b> , 2,   | 73.3 | 277 |
| 101 | A thermophysical battery for storage-based climate control. <i>Applied Energy</i> , <b>2017</b> , 189, 31-43  | 10.7 | 30  |
| 100 | Parametric study of thin film evaporation from nanoporous membranes. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 171603   | 3.4  | 36  |
| 99  | An Ultrathin Nanoporous Membrane Evaporator. <i>Nano Letters</i> , <b>2017</b> , 17, 6217-6220  | 11.5 | 39  |
| 98  | Combined selective emitter and filter for high performance incandescent lighting. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 094103                                      | 3.4  | 5   |
| 97  | Coexistence of Pinning and Moving on a Contact Line. <i>Langmuir</i> , <b>2017</b> , 33, 8970-8975  | 4    | 17  |
| 96  | Response to Comment on "Water harvesting from air with metal-organic frameworks powered by natural sunlight". <i>Science</i> , <b>2017</b> , 358,                                 | 33.3 | 2   |
| 95  | Response to Comment on "Water harvesting from air with metal-organic frameworks powered by natural sunlight". <i>Science</i> , <b>2017</b> , 358,                                 | 33.3 | 13  |

| 94 | Design of Lubricant Infused Surfaces. ACS Applied Materials & Interfaces, 2017, 9, 42383-42392  | 9.5  | 91  |
|----|---|------|-----|
| 93 | Enhanced water transport and salt rejection through hydrophobic zeolite pores. <i>Nanotechnology</i> , <b>2017</b> , 28, 505703   | 3.4  | 9   |
| 92 | Simultaneous measurement of temperature, stress, and electric field in GaN HEMTs with micro-Raman spectroscopy. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 113111  | 1.7  | 30  |
| 91 | Athermal operation of multi-section slotted tunable lasers. <i>Optics Express</i> , <b>2017</b> , 25, 14414-14426   | 3.3  | 8   |
| 90 | Optimization and thermal characterization of uniform micropillar based silicon evaporator in advanced vapor chambers <b>2016</b> ,  |      | 1   |
| 89 | Three-dimensional graphene enhanced heat conduction of porous crystals. <i>Journal of Porous Materials</i> , <b>2016</b> , 23, 1647-1652  | 2.4  | 12  |
| 88 | Detailed thermal resistance model for characterization of the overall effective thermal conductivity of a flat heat pipe <b>2016</b> ,  |      | O   |
| 87 | Interplay between hydrophilicity and surface barriers on water transport in zeolite membranes. <i>Nature Communications</i> , <b>2016</b> , 7, 12762  | 17.4 | 64  |
| 86 | Characterization of Adsorption Enthalpy of Novel Water-Stable Zeolites and Metal-Organic Frameworks. <i>Scientific Reports</i> , <b>2016</b> , 6, 19097   | 4.9  | 44  |
| 85 | Design of micropillar wicks for thin-film evaporation. <i>International Journal of Heat and Mass Transfer</i> , <b>2016</b> , 101, 280-294  | 4.9  | 71  |
| 84 | Prediction and Characterization of Dry-out Heat Flux in Micropillar Wick Structures. <i>Langmuir</i> , <b>2016</b> , 32, 1920-7   | 4    | 44  |
| 83 | Dynamic Evolution of the Evaporating Liquid-Vapor Interface in Micropillar Arrays. <i>Langmuir</i> , <b>2016</b> , 32, 519-26   | 4    | 16  |
| 82 | RECENT ADVANCES IN ADSORPTION-BASED HEATING AND COOLING SYSTEMS. <i>Annual Review of Heat Transfer</i> , <b>2016</b> , 19, 199-239  | 2.7  | 2   |
| 81 | Methylammonium Bismuth Iodide as a Lead-Free, Stable Hybrid Organic-Inorganic Solar Absorber. <i>Chemistry - A European Journal</i> , <b>2016</b> , 22, 2605-10   | 4.8  | 253 |
| 80 | Porous Cu Nanowire Aerosponges from One-Step Assembly and their Applications in Heat Dissipation. <i>Advanced Materials</i> , <b>2016</b> , 28, 1413-9  | 24   | 85  |
| 79 | Design and Modeling of Membrane-Based Evaporative Cooling Devices for Thermal Management of High Heat Fluxes. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2016</b> , 6, 1056-1065 | 1.7  | 40  |
| 78 | Controlled Wetting in Nanoporous Membranes for Thin Film Evaporation. <i>Journal of Heat Transfer</i> , <b>2016</b> , 138,  | 1.8  | 7   |
| 77 | Experiments on the ultrathin silicon vapor chamber for enhanced heat transfer performance <b>2016</b> ,   |      | 3   |

| 76   | Surface Structure Enhanced Microchannel Flow Boiling. Journal of Heat Transfer, 2016, 138,  | 1.8                         | 96                          |
|--|---|-----------------------------|-----------------------------|
| 75   | Thermal transport in suspended silicon membranes measured by laser-induced transient gratings. <i>AIP Advances</i> , <b>2016</b> , 6, 121903  | 1.5                         | 28                          |
| 74   | Electric field dependence of optical phonon frequencies in wurtzite GaN observed in GaN high electron mobility transistors. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 155104   | 2.5                         | 8                           |
| 73   | Modeling silica aerogel optical performance by determining its radiative properties. <i>AIP Advances</i> , <b>2016</b> , 6, 025123  | 1.5                         | 31                          |
| 72   | Contributed Review: Experimental characterization of inverse piezoelectric strain in GaN HEMTs via micro-Raman spectroscopy. <i>Review of Scientific Instruments</i> , <b>2016</b> , 87, 061501   | 1.7                         | 9                           |
| 71   | Electrically induced drop detachment and ejection. <i>Physics of Fluids</i> , <b>2016</b> , 28, 022101  | 4.4                         | 37                          |
| 70   | Electrowetting-on-dielectric actuation of a vertical translation and angular manipulation stage. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 244102   | 3.4                         | 15                          |
| 69   | Spectral splitting optimization for high-efficiency solar photovoltaic and thermal power generation. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 243904   | 3.4                         | 20                          |
| 68   | Transient thermal dynamics of GaN HEMTs <b>2016</b> ,   |                             | 8                           |
|  |   |                             |                             |
| 67   | Thermal battery for portable climate control. <i>Applied Energy</i> , <b>2015</b> , 149, 104-116  | 10.7                        | 43                          |
| 66   | Thermal battery for portable climate control. <i>Applied Energy</i> , <b>2015</b> , 149, 104-116  Scalable graphene coatings for enhanced condensation heat transfer. <i>Nano Letters</i> , <b>2015</b> , 15, 2902-9  | 10.7                        | 43<br>173                   |
|  |   |                             |                             |
| 66   | Scalable graphene coatings for enhanced condensation heat transfer. <i>Nano Letters</i> , <b>2015</b> , 15, 2902-9  In-situ aging microwave heating synthesis of LTA zeolite layer on mesoporous TiO2 coated porous   | 11.5                        | 173                         |
| 66<br>65   | Scalable graphene coatings for enhanced condensation heat transfer. <i>Nano Letters</i> , <b>2015</b> , 15, 2902-9  In-situ aging microwave heating synthesis of LTA zeolite layer on mesoporous TiO2 coated porous alumina support. <i>Journal of Crystal Growth</i> , <b>2015</b> , 432, 123-128  Turning bubbles on and off during boiling using charged surfactants. <i>Nature Communications</i> , <b>2015</b> ,   | 11.5                        | 173<br>3<br>83              |
| <ul><li>66</li><li>65</li><li>64</li></ul>                       | Scalable graphene coatings for enhanced condensation heat transfer. <i>Nano Letters</i> , <b>2015</b> , 15, 2902-9  In-situ aging microwave heating synthesis of LTA zeolite layer on mesoporous TiO2 coated porous alumina support. <i>Journal of Crystal Growth</i> , <b>2015</b> , 432, 123-128  Turning bubbles on and off during boiling using charged surfactants. <i>Nature Communications</i> , <b>2015</b> , 6, 8599   | 11.5<br>1.6<br>17.4         | 173<br>3<br>83              |
| <ul><li>66</li><li>65</li><li>64</li><li>63</li></ul>            | Scalable graphene coatings for enhanced condensation heat transfer. <i>Nano Letters</i> , <b>2015</b> , 15, 2902-9  In-situ aging microwave heating synthesis of LTA zeolite layer on mesoporous TiO2 coated porous alumina support. <i>Journal of Crystal Growth</i> , <b>2015</b> , 432, 123-128  Turning bubbles on and off during boiling using charged surfactants. <i>Nature Communications</i> , <b>2015</b> , 6, 8599  Concentrating Solar Power. <i>Chemical Reviews</i> , <b>2015</b> , 115, 12797-838  Modeling of Evaporation from Nanopores with Nonequilibrium and Nonlocal Effects. <i>Langmuir</i> ,  | 11.5<br>1.6<br>17.4<br>68.1 | 173<br>3<br>83<br>298       |
| <ul><li>66</li><li>65</li><li>64</li><li>63</li><li>62</li></ul> | Scalable graphene coatings for enhanced condensation heat transfer. <i>Nano Letters</i> , <b>2015</b> , 15, 2902-9  In-situ aging microwave heating synthesis of LTA zeolite layer on mesoporous TiO2 coated porous alumina support. <i>Journal of Crystal Growth</i> , <b>2015</b> , 432, 123-128  Turning bubbles on and off during boiling using charged surfactants. <i>Nature Communications</i> , <b>2015</b> , 6, 8599  Concentrating Solar Power. <i>Chemical Reviews</i> , <b>2015</b> , 115, 12797-838  Modeling of Evaporation from Nanopores with Nonequilibrium and Nonlocal Effects. <i>Langmuir</i> , <b>2015</b> , 31, 9817-24  Zeolite Y Adsorbents with High Vapor Uptake Capacity and Robust Cycling Stability for Potential Applications in Advanced Adsorption Heat Pumps. <i>Microporous and Mesoporous Materials</i> , <b>2015</b> , | 11.5<br>1.6<br>17.4<br>68.1 | 173<br>3<br>83<br>298<br>56 |

| 58 | A nanophotonic solar thermophotovoltaic device. <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 126-30   | 28.7              | 543 |
|----|--|-------------------|-----|
| 57 | Framework water capacity and infiltration pressure of MFI zeolites. <i>Microporous and Mesoporous Materials</i> , <b>2014</b> , 190, 84-91   | 5.3               | 17  |
| 56 | One-pot Solvothermal Synthesis of Well-ordered Layered Sodium Aluminoalcoholate Complex: A Useful Precursor for the Preparation of Porous AlO Particles. <i>CrystEngComm</i> , <b>2014</b> , 16, 2950-2958         | 3.3               | 5   |
| 55 | Real-time manipulation with magnetically tunable structures. Advanced Materials, 2014, 26, 6442-6  | 24                | 86  |
| 54 | Jumping-droplet electrostatic energy harvesting. Applied Physics Letters, 2014, 105, 013111  | 3.4               | 131 |
| 53 | High-resolution liquid patterns via three-dimensional droplet shape control. <i>Nature Communications</i> , <b>2014</b> , 5, 4975  | 17.4              | 70  |
| 52 | Enabling ideal selective solar absorption with 2D metallic dielectric photonic crystals. <i>Advanced Materials</i> , <b>2014</b> , 26, 8041-5  | 24                | 98  |
| 51 | Metallic Photonic Crystal Absorber-Emitter for Efficient Spectral Control in High-Temperature Solar Thermophotovoltaics. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400334                               | 21.8              | 171 |
| 50 | How coalescing droplets jump. ACS Nano, 2014, 8, 10352-62  | 16.7              | 239 |
| 49 | Application of the Kirchhoff Transform to Thermal Spreading Problems With Convection Boundary Conditions. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2014</b> , 4, 408-42 | 20 <sup>1.7</sup> | 32  |
| 48 | Analytical Solution for Temperature Rise in Complex Multilayer Structures With Discrete Heat Sources. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology,</i> <b>2014</b> , 4, 817-830     | 1.7               | 41  |
| 47 | Effect of hydrophilic defects on water transport in MFI zeolites. <i>Langmuir</i> , <b>2014</b> , 30, 6446-53  | 4                 | 40  |
| 46 | Optimization of adsorption processes for climate control and thermal energy storage. <i>International Journal of Heat and Mass Transfer</i> , <b>2014</b> , 77, 288-300  | 4.9               | 42  |
| 45 | Ostwald Ripening During Freezing on Scalable Superhydrophobic Surfaces. <i>Journal of Heat Transfer</i> , <b>2014</b> , 136,   | 1.8               | 1   |
| 44 | Photonic Crystals: Enabling Ideal Selective Solar Absorption with 2D Metallic Dielectric Photonic Crystals (Adv. Mater. 47/2014). <i>Advanced Materials</i> , <b>2014</b> , 26, 7922-7922                          | 24                | 1   |
| 43 | Jumping Droplet Electrostatic Charging and Effect on Vapor Drag. <i>Journal of Heat Transfer</i> , <b>2014</b> , 136,  | 1.8               | 18  |
| 42 | Experimental characterization of Si micropillar based evaporator for advanced vapor chambers <b>2014</b> ,   |                   | 3   |
| 41 | Effect of hydrocarbon adsorption on the wettability of rare earth oxide ceramics. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 011601   | 3.4               | 119 |

| 40 | Designed single-step synthesis, structure, and derivative textural properties of well-ordered layered penta-coordinate silicon alcoholate complexes. <i>Chemistry - A European Journal</i> , <b>2014</b> , 20, 6315-              | ·2 <sup>4</sup> ·8 | 3   |
|----|---|--------------------|-----|
| 39 | Focusing of phase change microparticles for local heat transfer enhancement in laminar flows. <i>International Journal of Heat and Mass Transfer</i> , <b>2013</b> , 56, 380-389  | 4.9                | 24  |
| 38 | Thermal pulse energy harvesting. <i>Energy</i> , <b>2013</b> , 57, 632-640  | 7.9                | 25  |
| 37 | Electrostatic charging of jumping droplets. <i>Nature Communications</i> , <b>2013</b> , 4, 2517  | 17.4               | 165 |
| 36 | Non-wetting droplets on hot superhydrophilic surfaces. <i>Nature Communications</i> , <b>2013</b> , 4, 2518   | 17.4               | 106 |
| 35 | Experiment and modeling of microstructured capillary wicks for thermal management of electronics <b>2013</b> ,  |                    | 4   |
| 34 | Jumping-droplet-enhanced condensation on scalable superhydrophobic nanostructured surfaces. <i>Nano Letters</i> , <b>2013</b> , 13, 179-87  | 11.5               | 766 |
| 33 | Pulsed evaporative transient thermometry for temporally-resolved thermal measurements. <i>International Journal of Heat and Mass Transfer</i> , <b>2013</b> , 67, 147-152   | 4.9                |     |
| 32 | Negative pressures in nanoporous membranes for thin film evaporation. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 123103  | 3.4                | 72  |
| 31 | Wettability of graphene. <i>Nano Letters</i> , <b>2013</b> , 13, 1509-15  | 11.5               | 326 |
| 30 | Hierarchically structured surfaces for boiling critical heat flux enhancement. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 151602   | 3.4                | 170 |
| 29 | Electric-field-enhanced condensation on superhydrophobic nanostructured surfaces. <i>ACS Nano</i> , <b>2013</b> , 7, 11043-54   | 16.7               | 144 |
| 28 | Thermal Spreading Resistance and Heat Source Temperature in Compound Orthotropic Systems With Interfacial Resistance. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2013</b> , 3, 1826-1841 | 1.7                | 45  |
| 27 | Modeling and Optimization of Superhydrophobic Condensation. <i>Journal of Heat Transfer</i> , <b>2013</b> , 135,  | 1.8                | 166 |
| 26 | Condensation heat transfer on superhydrophobic surfaces. MRS Bulletin, 2013, 38, 397-406  | 3.2                | 274 |
| 25 | Condensation on Superhydrophobic Copper Oxide Nanostructures. <i>Journal of Heat Transfer</i> , <b>2013</b> , 135,  | 1.8                | 147 |
| 24 | Immersion condensation on oil-infused heterogeneous surfaces for enhanced heat transfer. <i>Scientific Reports</i> , <b>2013</b> , 3, 1988  | 4.9                | 179 |
| 23 | Optimization of nanofluid volumetric receivers for solar thermal energy conversion. <i>Solar Energy</i> , <b>2012</b> , 86, 253-265   | 6.8                | 326 |

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| 22 | Effect of droplet morphology on growth dynamics and heat transfer during condensation on superhydrophobic nanostructured surfaces. <i>ACS Nano</i> , <b>2012</b> , 6, 1776-85                               | 16.7             | 417 |
|----|---|------------------|-----|
| 21 | Unified model for contact angle hysteresis on heterogeneous and superhydrophobic surfaces. <i>Langmuir</i> , <b>2012</b> , 28, 15777-88   | 4                | 96  |
| 20 | Numerical investigation of liquid flow with phase change nanoparticles in microchannels. <i>International Journal of Heat and Fluid Flow</i> , <b>2012</b> , 38, 159-167                                    | 2.4              | 17  |
| 19 | Design of an Integrated Loop Heat Pipe Air-Cooled Heat Exchanger for High Performance Electronics. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2012</b> , 2, 1637-1 | 1648             | 32  |
| 18 | Scaling the performance of an air-cooled loop heat pipe with the addition of modular condensers <b>2012</b> ,   |                  | 1   |
| 17 | Condensation on superhydrophobic surfaces: the role of local energy barriers and structure length scale. <i>Langmuir</i> , <b>2012</b> , 28, 14424-32   | 4                | 284 |
| 16 | Structured surfaces for enhanced pool boiling heat transfer. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 241603   | 3.4              | 343 |
| 15 | Analytical model for the design of volumetric solar flow receivers. <i>International Journal of Heat and Mass Transfer</i> , <b>2012</b> , 55, 556-564  | 4.9              | 86  |
| 14 | Biotemplated hierarchical surfaces and the role of dual length scales on the repellency of impacting droplets. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 263701                                   | 3.4              | 73  |
| 13 | Modeling and optimization of hybrid solar thermoelectric systems with thermosyphons. <i>Solar Energy</i> , <b>2011</b> , 85, 2843-2855  | 6.8              | 86  |
| 12 | Nanostructured materials for water desalination. <i>Nanotechnology</i> , <b>2011</b> , 22, 292001   | 3.4              | 465 |
| 11 | Enhancement of convective heat transfer in an air-cooled heat exchanger using interdigitated impeller blades. <i>International Journal of Heat and Mass Transfer</i> , <b>2011</b> , 54, 4549-4559          | 4.9              | 10  |
| 10 | Microscale liquid dynamics and the effect on macroscale propagation in pillar arrays. <i>Langmuir</i> , <b>2011</b> , 27, 10360-4   | 4                | 30  |
| 9  | Uni-directional liquid spreading on asymmetric nanostructured surfaces. <i>Nature Materials</i> , <b>2010</b> , 9, 413-   | -7 <sub>27</sub> | 413 |
| 8  | Prediction and optimization of liquid propagation in micropillar arrays. <i>Langmuir</i> , <b>2010</b> , 26, 15070-5  | 4                | 117 |
| 7  | Multilayer liquid spreading on superhydrophilic nanostructured surfaces. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 193104  | 3.4              | 22  |
| 6  | Droplet mixing using electrically tunable superhydrophobic nanostructured surfaces. <i>Microfluidics and Nanofluidics</i> , <b>2009</b> , 7, 137-140  | 2.8              | 18  |
| 5  | Design of a Microbreather for Two-Phase Microchannel Heat Sinks. <i>Nanoscale and Microscale Thermophysical Engineering</i> , <b>2009</b> , 13, 151-164   | 3.7              | 8   |

| 4 | Reversible wetting-dewetting transitions on electrically tunable superhydrophobic nanostructured surfaces. <i>Langmuir</i> , <b>2007</b> , 23, 9128-33 | 4   | 231 |
|---|--|-----|-----|
| 3 | A hybrid method for bubble geometry reconstruction in two-phase microchannels. <i>Experiments in Fluids</i> , <b>2006</b> , 40, 847-858                | 2.5 | 12  |
| 2 | Phase change phenomena in silicon microchannels. <i>International Journal of Heat and Mass Transfer</i> , <b>2005</b> , 48, 1572-1582                  | 4.9 | 138 |
| 1 | Effect of Al2O3 ALD coating on thermal stability of silica aerogel. <i>Journal of Porous Materials</i> ,1  | 2.4 | О   |