

# Wei Yao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6172689/publications.pdf>

Version: 2024-02-01

46  
papers

1,402  
citations

361296

20  
h-index

330025

37  
g-index

46  
all docs

46  
docs citations

46  
times ranked

1414  
citing authors

#	ARTICLE	IF	CITATIONS
1	Volumetric interfacial area prediction in upward bubbly two-phase flow. International Journal of Heat and Mass Transfer, 2004, 47, 307-328.	2.5	212
2	High-Density Carbon Nanotube Buckypapers with Superior Transport and Mechanical Properties. Nano Letters, 2012, 12, 4848-4852.	4.5	170
3	Harvesting environment energy from water-evaporation over free-standing graphene oxide sponges. Carbon, 2019, 148, 1-8.	5.4	113
4	Disorder-induced multifractal superconductivity in monolayer niobium dichalcogenides. Nature Physics, 2019, 15, 904-910.	6.5	86
5	Computation and validation of the interphase force models for bubbly flow. International Journal of Heat and Mass Transfer, 2016, 98, 799-813.	2.5	61
6	Modeling of subcooled boiling by extending the RPI wall boiling model to ultra-high pressure conditions. Applied Thermal Engineering, 2017, 124, 571-584.	3.0	56
7	A heat transient model for the thermal behavior prediction of stratospheric airships. Applied Thermal Engineering, 2014, 70, 380-387.	3.0	45
8	Excellent heat dissipation properties of the super-aligned carbon nanotube films. RSC Advances, 2016, 6, 61686-61694.	1.7	42
9	Ultralight PEDOT:PSS/graphene oxide composite aerogel sponges for electric power harvesting from thermal fluctuations and moist environment. Nano Energy, 2020, 77, 105096.	8.2	41
10	Effect of an Auxiliary Plate on Passive Heat Dissipation of Carbon Nanotube-Based Materials. Nano Letters, 2018, 18, 1770-1776.	4.5	34
11	Enhancement of Natural Convection by Carbon Nanotube Films Covered Microchannel-Surface for Passive Electronic Cooling Devices. ACS Applied Materials & Interfaces, 2016, 8, 31202-31211.	4.0	32
12	Performance analysis of a lunar based solar thermal power system with regolith thermal storage. Energy, 2016, 107, 227-233.	4.5	31
13	Hard Carbon Nanotube Sponges for Highly Efficient Cooling <i>via</i> Moisture Absorption-Desorption Process. ACS Nano, 2020, 14, 14091-14099.	7.3	31
14	Sub-2 nm ultra-thin Bi <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> nanosheets with abundant Bi-O structures toward formic acid electrosynthesis over a wide potential window. Nano Research, 2022, 15, 2919-2927.	5.8	27
15	Dynamic modeling of bubble growth in vapor-liquid phase change covering a wide range of superheats and pressures. Chemical Engineering Science, 2017, 172, 169-181.	1.9	26
16	Interfacial thermal resistance and thermal rectification in carbon nanotube film-copper systems. Nanoscale, 2017, 9, 3133-3139.	2.8	24
17	Enhanced catalytic performance with Fe <sup>0</sup> /Fe <sub>2</sub> O <sub>3</sub> thin nanosheets by synergistic effect of photocatalysis and Fenton-like process. Journal of Physics and Chemistry of Solids, 2021, 150, 109886.	1.9	24
18	A Three-Dimensional Two-Fluid Modeling of Stratified Flow with Condensation for Pressurized Thermal Shock Investigations. Nuclear Technology, 2005, 152, 129-142.	0.7	23

#	ARTICLE	IF	CITATIONS
19	Directly measuring of thermal pulse transfer in one-dimensional highly aligned carbon nanotubes. <i>Scientific Reports</i> , 2013, 3, 2549.	1.6	23
20	Conversion of low-grade heat via thermal-evaporation-induced electricity generation on nanostructured carbon films. <i>Applied Thermal Engineering</i> , 2020, 166, 114623.	3.0	22
21	Actuation of a Nonconductive Droplet in an Aqueous Fluid by Reversed Electrowetting Effect. <i>Langmuir</i> , 2020, 36, 8152-8164.	1.6	21
22	Icephobic behaviors of superhydrophobic amorphous carbon nano-films synthesized from a flame process. <i>Journal of Colloid and Interface Science</i> , 2019, 552, 613-621.	5.0	19
23	Analysis of the performance of an alkali metal thermoelectric converter (AMTEC) based on a lumped thermal-electrochemical model. <i>Applied Energy</i> , 2018, 216, 195-211.	5.1	18
24	Enhancement of evaporative heat transfer on carbon nanotube sponges by electric field reinforced wettability. <i>Applied Surface Science</i> , 2018, 454, 262-269.	3.1	18
25	Numerical investigation of flow boiling in manifold microchannel-based heat exchangers. <i>International Journal of Heat and Mass Transfer</i> , 2020, 163, 120493.	2.5	18
26	Validation of a dynamic model for vapor bubble growth and collapse under microgravity conditions. <i>International Communications in Heat and Mass Transfer</i> , 2018, 95, 63-73.	2.9	17
27	Extraterrestrial artificial photosynthetic materials for <i>in-situ</i> resource utilization. <i>National Science Review</i> , 2021, 8, nwab104.	4.6	17
28	Droplet impact on a layer of solid particles placed above a substrate: A 3D lattice Boltzmann study. <i>Computers and Fluids</i> , 2019, 188, 18-30.	1.3	15
29	Temperature Dependence of Thermal Boundary Resistances between Multiwalled Carbon Nanotubes and Some Typical Counterpart Materials. <i>ACS Nano</i> , 2012, 6, 3057-3062.	7.3	14
30	Efficient Mesh Interface Engineering: Insights from Bubble Dynamics in Electrocatalysis. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 45346-45354.	4.0	14
31	Electrical potential induced switchable wettability of super-aligned carbon nanotube films. <i>Applied Surface Science</i> , 2018, 427, 628-635.	3.1	13
32	Manipulation of a Nonconductive Droplet in an Aqueous Fluid with AC Electric Fields: Droplet Dewetting, Oscillation, and Detachment. <i>Langmuir</i> , 2021, 37, 12098-12111.	1.6	13
33	The electrically induced bubble behaviors considering different bubble injection directions. <i>International Journal of Heat and Mass Transfer</i> , 2017, 104, 729-742.	2.5	12
34	Numerical simulation of bubble motions in a coaxial annular electric field under microgravity. <i>Aerospace Science and Technology</i> , 2020, 96, 105525.	2.5	12
35	The dynamics of droplet detachment in reversed electrowetting (REW). <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 616, 126303.	2.3	10
36	Prediction of Parameters Distribution of Upward Boiling Two-Phase Flow With Two-Fluid Models. , 2002, , 801.		7

#	ARTICLE	IF	CITATIONS
37	Liquid penetration in metal wire mesh between parallel plates under normal gravity and microgravity conditions. <i>Applied Thermal Engineering</i> , 2020, 167, 114722.	3.0	7
38	Altitude control performance of a natural energy driven stratospheric aerostat. <i>Advances in Space Research</i> , 2015, 56, 2508-2514.	1.2	6
39	Experimental study on particles directed transport by an alternating travelling-wave electrostatic field. <i>Powder Technology</i> , 2022, 397, 117107.	2.1	6
40	A selection limiter of DSMC for near continuum flows. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2008, 13, 2203-2212.	1.7	5
41	Exergy analysis of a lunar based solar thermal power system with finite-time thermodynamics. <i>Energy Procedia</i> , 2019, 158, 792-796.	1.8	5
42	Dynamic modelling and simulation of a heat engine aerobot for atmospheric energy utilization. <i>Energy</i> , 2015, 79, 439-446.	4.5	4
43	Numerical study of particle transport by an alternating travelling-wave electrostatic field. <i>Acta Astronautica</i> , 2021, 188, 505-517.	1.7	4
44	Numerical Simulation of Convective-radiative Coupled Heat Transfer Performance for High Altitude Airships. <i>Procedia Engineering</i> , 2015, 126, 612-616.	1.2	2
45	Investigation of Dropwise Condensation on a Super-Aligned Carbon Nanotube Mesh-Coated Surface. <i>Langmuir</i> , 2021, 37, 2629-2638.	1.6	2
46	A Direct Calculation Method for Space-Based Active Detection of Greenhouse Gas-Flux. <i>Advances in Astronautics Science and Technology</i> , 2021, 4, 133-141.	0.5	0