

# Koji Takahashi

## List of Publications by Year in descending order

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79  
papers

2,230  
citations

331670

21  
h-index

223800

46  
g-index

79  
all docs

79  
docs citations

79  
times ranked

2613  
citing authors

#	ARTICLE	IF	CITATIONS
1	Measuring the Thermal Conductivity of a Single Carbon Nanotube. <i>Physical Review Letters</i> , 2005, 95, 065502.	7.8	734
2	Experimental study of thermal rectification in suspended monolayer graphene. <i>Nature Communications</i> , 2017, 8, 15843.	12.8	210
3	Thermal and electrical conductivity of a suspended platinum nanofilm. <i>Applied Physics Letters</i> , 2005, 86, 171912.	3.3	126
4	Measurement of specific heat and thermal conductivity of supported and suspended graphene by a comprehensive Raman optothermal method. <i>Nanoscale</i> , 2017, 9, 10784-10793.	5.6	110
5	Simultaneous dropwise and filmwise condensation on hydrophilic microstructured surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2017, 114, 187-197.	4.8	51
6	Enhanced Thermoelectric Performance of As-Grown Suspended Graphene Nanoribbons. <i>ACS Nano</i> , 2019, 13, 9182-9189.	14.6	51
7	A T-type method for characterization of the thermoelectric performance of an individual free-standing single crystal Bi <sub>2</sub> S <sub>3</sub> nanowire. <i>Nanoscale</i> , 2016, 8, 2704-2710.	5.6	46
8	Droplet Nucleation on a Well-Defined Hydrophilic/Hydrophobic Surface of 10 nm Order Resolution. <i>Langmuir</i> , 2014, 30, 14532-14537.	3.5	44
9	Measurement of thermal contact resistance between individual carbon fibers using a laser-flash Raman mapping method. <i>Carbon</i> , 2019, 141, 92-98.	10.3	44
10	Temperature dependent thermal conductivity of a suspended submicron graphene ribbon. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	35
11	Early Onset of Nucleate Boiling on Gas-covered Biphilic Surfaces. <i>Scientific Reports</i> , 2017, 7, 2036.	3.3	34
12	Superstable Ultrathin Water Film Confined in a Hydrophilized Carbon Nanotube. <i>Nano Letters</i> , 2018, 18, 1869-1874.	9.1	34
13	Experimental study on the influences of grain boundary scattering on the charge and heat transport in gold and platinum nanofilms. <i>Heat and Mass Transfer</i> , 2011, 47, 893-898.	2.1	33
14	Nanoscale pinning effect evaluated from deformed nanobubbles. <i>Journal of Chemical Physics</i> , 2017, 146, 014708.	3.0	28
15	In-situ measurement of the heat transport in defect-engineered free-standing single-layer graphene. <i>Scientific Reports</i> , 2016, 6, 21823.	3.3	26
16	Thermal boundary resistance between the end of an individual carbon nanotube and a Au surface. <i>Nanotechnology</i> , 2011, 22, 315702.	2.6	24
17	Depinning of bubble contact line on a biphilic surface in subatmospheric boiling: Revisiting the theories of bubble departure. <i>International Journal of Heat and Mass Transfer</i> , 2018, 126, 715-720.	4.8	23
18	Variable-spot-size laser-flash Raman method to measure in-plane and interfacial thermal properties of 2D van der Waals heterostructures. <i>International Journal of Heat and Mass Transfer</i> , 2018, 125, 1230-1239.	4.8	23

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19	Experimental study on thermal characteristics of suspended platinum nanofilm sensors. International Journal of Heat and Mass Transfer, 2006, 49, 3879-3883.	4.8	22
20	Enhanced anisotropic heat conduction in multi-walled carbon nanotubes. Journal of Applied Physics, 2013, 113, .	2.5	22
21	Bubble activation from a hydrophobic spot at "negative" surface superheats in subcooled boiling. Applied Thermal Engineering, 2015, 88, 230-236.	6.0	22
22	Integrative characterization of the thermoelectric performance of an individual multiwalled carbon nanotube. Journal of Applied Physics, 2016, 120, .	2.5	22
23	Comment on "Divergent and Ultrahigh Thermal Conductivity in Millimeter-Long Nanotubes". Physical Review Letters, 2017, 119, 179601.	7.8	22
24	Nanobubble nucleation studied using Fresnel fringes in liquid cell electron microscopy. International Journal of Heat and Mass Transfer, 2017, 108, 1460-1465.	4.8	21
25	Wettability of AFM tip influences the profile of interfacial nanobubbles. Journal of Applied Physics, 2018, 123, .	2.5	21
26	Metastable Nanobubbles at the Solid-Liquid Interface Due to Contact Angle Hysteresis. Langmuir, 2015, 31, 982-986.	3.5	20
27	Adsorbed gas layers limit the mobility of micropancakes. Applied Physics Letters, 2019, 115, .	3.3	18
28	Simultaneous measurement of electrical and thermal conductivities of suspended monolayer graphene. Journal of Applied Physics, 2016, 119, 244306.	2.5	17
29	Water Confined in Hydrophobic Cup-Stacked Carbon Nanotubes beyond Surface-Tension Dominance. Journal of Physical Chemistry Letters, 2019, 10, 3744-3749.	4.6	17
30	Tuning Surface Wettability at the Submicron-Scale: Effect of Focused Ion Beam Irradiation on a Self-Assembled Monolayer. Journal of Physical Chemistry C, 2016, 120, 274-280.	3.1	16
31	Optical absorptance measurement of an individual multiwall carbon nanotube using a T type thermal probe method. Review of Scientific Instruments, 2013, 84, 104905.	1.3	15
32	Experimental study on thermal conductivity of free-standing fluorinated single-layer graphene. Applied Physics Letters, 2017, 111, .	3.3	15
33	Gas molecules sandwiched in hydration layers at graphite/water interfaces. Physical Chemistry Chemical Physics, 2020, 22, 13629-13636.	2.8	15
34	Hydrophilic Domains Enhance Nanobubble Stability. ChemPhysChem, 2016, 17, 1500-1504.	2.1	14
35	Deterioration of boiling heat transfer on biphilic surfaces under very low pressures. Experimental Thermal and Fluid Science, 2020, 113, 110026.	2.7	14
36	Thermal conductivity of liquid/carbon nanotube core-shell nanocomposites. Journal of Applied Physics, 2017, 121, .	2.5	12

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37	Thermal conductivity measurement of an individual millimeter-long expanded graphite ribbon using a variable-length T-type method. <i>International Journal of Heat and Mass Transfer</i> , 2021, 171, 121115.	4.8	12
38	Direct Growth of Bent Carbon Nanotubes on Surface Engineered Sapphire. <i>Journal of Physical Chemistry C</i> , 2009, 113, 13121-13124.	3.1	11
39	Thermal Boundary Conductance between Multi-Walled Carbon Nanotubes. <i>Journal of Thermal Science and Technology</i> , 2012, 7, 190-198.	1.1	11
40	Experimental and numerical studies on ballistic phonon transport of cup-stacked carbon nanofiber. <i>Physica B: Condensed Matter</i> , 2009, 404, 2431-2434.	2.7	10
41	Direct evaluation of ballistic phonon transport in a multi-walled carbon nanotube. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	10
42	Wettability on Inner and Outer Surface of Single Carbon Nanotubes. <i>Langmuir</i> , 2016, 32, 7064-7069.	3.5	10
43	Frequency-domain Raman method to measure thermal diffusivity of one-dimensional microfibers and nanowires. <i>International Journal of Heat and Mass Transfer</i> , 2019, 134, 539-546.	4.8	10
44	Slip length measurement in rectangular graphene nanochannels with a 3D flow analysis. <i>Carbon</i> , 2022, 189, 162-172.	10.3	10
45	Nanoscale Bubble Dynamics Induced by Damage of Graphene Liquid Cells. <i>ACS Omega</i> , 2020, 5, 11180-11185.	3.5	9
46	Round Robin Study on the Thermal Conductivity/Diffusivity of a Gold Wire with a Diameter of 30 $\mu\text{m}$ Tested via Five Measurement Methods. <i>Journal of Thermal Science</i> , 2022, 31, 1037-1051.	1.9	9
47	Separation Behavior of Anions on ODS Modified with Phthalocyanine Cobalt(III) Complex.. <i>Analytical Sciences</i> , 1997, 13, 195-198.	1.6	8
48	Thermal rectification of asymmetrically-defective materials. <i>Journal of Mechanical Science and Technology</i> , 2011, 25, 27-32.	1.5	8
49	Persistent reduction of boiling incipience of ethanol on biphilic porous textured surfaces. <i>International Journal of Multiphase Flow</i> , 2021, 142, 103739.	3.4	8
50	Unexpected Homogeneous Bubble Nucleation near a Solid-Liquid Interface. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28712-28716.	3.1	7
51	Modification of thermal transport in an individual carbon nanofiber by focused ion beam irradiation. <i>Carbon</i> , 2019, 153, 539-544.	10.3	7
52	Mechanistic Insights into Nanobubble Merging Studied Using In Situ Liquid-Phase Electron Microscopy. <i>Langmuir</i> , 2021, 37, 874-881.	3.5	7
53	Dynamic interplay between interfacial nanobubbles: oversaturation promotes anisotropic depinning and bubble coalescence. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 24652-24660.	2.8	7
54	On the linear dependence of a carbon nanofiber thermal conductivity on wall thickness. <i>AIP Advances</i> , 2016, 6, 115119.	1.3	6

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55	Precursor-Film-Mediated Thermocapillary Motion of Low-Surface-Tension Microdroplets. <i>Langmuir</i> , 2020, 36, 5096-5105.	3.5	6
56	Reflected Laser Interferometry: A Versatile Tool to Probe Condensation of Low-Surface-Tension Droplets. <i>Langmuir</i> , 2021, 37, 8073-8082.	3.5	6
57	Contact-line behavior in boiling on a heterogeneous surface: Physical insights from diffuse-interface modeling. <i>Physical Review Fluids</i> , 2020, 5, .	2.5	6
58	Voltammetric Response of a .GAMMA-Irradiated Poly(N-vinylcaprolactam) Modified Graphite Electrode to Catechol and Ascorbic Acid.. <i>Analytical Sciences</i> , 1999, 15, 181-184.	1.6	5
59	Limited Enhancement of Subatmospheric Boiling on Treated Structured Surfaces With Biphilic Pattern. <i>Journal of Heat Transfer</i> , 2021, 143, .	2.1	5
60	Pinning in a Contact and Noncontact Manner: Direct Observation of a Three-Phase Contact Line Using Graphene Liquid Cells. <i>Langmuir</i> , 2021, 37, 12271-12277.	3.5	5
61	Thermally induced mass transfer between nanobubbles and micropancakes. <i>International Journal of Heat and Mass Transfer</i> , 2021, 181, 122001.	4.8	5
62	Measurement of the Thermal Conductivity of Nanodeposited Material. <i>International Journal of Thermophysics</i> , 2009, 30, 1864-1874.	2.1	4
63	Non-Fourier heat conduction study for steady states in metallic nanofilms. <i>Science Bulletin</i> , 2012, 57, 3239-3243.	1.7	4
64	Dynamic Gas Environmental System Development for in situ Real-time SEM Imaging under Atmospheric Pressure. <i>Microscopy and Microanalysis</i> , 2015, 21, 1701-1702.	0.4	4
65	Effect of dissolved gas on bubble growth on a biphilic surface: A diffuse-interface simulation approach. <i>International Journal of Heat and Mass Transfer</i> , 2018, 126, 816-829.	4.8	4
66	Meniscus Motion and Void Generation Inside Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2018, 122, 21910-21918.	3.1	3
67	Zigzag gas phases on holey adsorbed layers. <i>RSC Advances</i> , 2020, 10, 44854-44859.	3.6	3
68	Concurrent thermal conductivity measurement and internal structure observation of individual one-dimensional materials using scanning transmission electron microscopy. <i>Applied Physics Letters</i> , 2022, 120, .	3.3	3
69	Temperature-dependent specific heat of suspended platinum nanofilms at 80â€“380 K. <i>Chinese Physics B</i> , 2016, 25, 114401.	1.4	2
70	Heat transfer enhancement of a loop thermosyphon with a hydrophobic spot-coated surface. <i>Journal of Thermal Science and Technology</i> , 2018, 13, JTST0011-JTST0011.	1.1	2
71	Study on the Cross Plane Thermal Transport of Polycrystalline Molybdenum Nanofilms by Applying Picosecond Laser Transient Thermoreflectance Method. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-8.	2.7	1
72	Influence of ion beam scattering on the electrical resistivity of platinum hot films. <i>Microelectronic Engineering</i> , 2016, 166, 15-18.	2.4	1

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73	New Developments in Capillary Electrophoresis. Development and Improvement of Capillary Electrophoresis. Separation of catechol derivatives by capillary electrophoresis using a polyvinylpyrrolidone solution.. Bunseki Kagaku, 1997, 46, 461-466.	0.2	0
74	Roles of Interfacial Functions in Analytical Chemistry. Retention behavior of hydroxybenzene derivatives on polymer resin immobilized with macrocyclic polyamines.. Bunseki Kagaku, 1998, 47, 1111-1115.	0.2	0
75	Thermal Transport in an Individual Multi-Walled Carbon Nanotube Defected by Focused Ion Beam Irradiation. Netsu Bussei, 2016, 29, 179-184.	0.1	0
76	D210 Study of Joule-Thomson micro-cooler. The Proceedings of the National Symposium on Power and Energy Systems, 2008, 2008.13, 425-426.	0.0	0
77	Intermittent boiling under reduced pressures on patterned hydrophobic surfaces. The Proceedings of Mechanical Engineering Congress Japan, 2016, 2016, G0600602.	0.0	0
78	Measurement of Adsorbed Gas Molecules on Graphite Surface by Using Frequency Modulation Atomic Force Microscopy in Liquid. The Proceedings of the Thermal Engineering Conference, 2018, 2018, 0128.	0.0	0
79	Thermal Conductivity Measurement of Suspended Graphene Nanoribbons of 40nm Width. The Proceedings of the Thermal Engineering Conference, 2018, 2018, 0134.	0.0	0