Hideki Tanaka

List of Publications by Year
in descending order

61	2,073	304743	233421
papers	citations	22 h-index	45 g-index

63	63	63	2044
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Apatiteâ€“Graphene Interface Channel-Aided Rapid and Selective H₂ Permeation. Journal of Physical Chemistry C, 2022, 126, 3653-3660.	3.1	0
2	High-Performance Carbon Molecular Sieves for the Separation of Propylene and Propane. ACS Applied Materials & Interfaces, 2022, 14, 17878-17888.	8.0	5
3	Enhancement in the Charge-Transfer Kinetics of Pseudocapacitive Iridium-Doped Layered Manganese Oxide. Inorganic Chemistry, 2022, 61, 4566-4571.	4.0	1
4	Ultrapermeable 2D-channeled graphene-wrapped zeolite molecular sieving membranes for hydrogen separation. Science Advances, 2022, 8, eabl3521.	10.3	21
5	Liquid exfoliation of five-coordinate layered titanate K₂Ti₂O₅ single crystals in water. CrystEngComm, 2022, 24, 5112-5119.	2.6	1
6	Structural adsorption mechanism of chloroform in narrow micropores of pitch-based activated carbon fibres. Carbon, 2021, 171, 681-688.	10.3	16
7	Adsorption separation of heavier isotope gases in subnanometer carbon pores. Nature Communications, 2021, 12, 546.	12.8	18
8	The Long and Bright Path of a Lanthanide MOF: From Basics towards the Application. Chemistry - A European Journal, 2021, 27, 7376-7382.	3.3	10
9	Highly oxidation-resistant graphene-based porous carbon as a metal catalyst support. Carbon Trends, 2021, 3, 100029.	3.0	4
10	The subtracting pore effect method for an accurate and reliable surface area determination of porous carbons. Carbon, 2021, 175, 77-86.	10.3	15
11	Slacking of Gate Adsorption Behavior on Metalâ€“Organic Frameworks under an External Force. ACS Applied Materials & Interfaces, 2021, 13, 30213-30223.	8.0	10
12	Physicochemical Understanding of the Impact of Pore Environment and Species of Adsorbates on Adsorption Behaviour. Angewandte Chemie, 2021, 133, 20667-20673.	2.0	1
13	Physicochemical Understanding of the Impact of Pore Environment and Species of Adsorbates on Adsorption Behaviour. Angewandte Chemie - International Edition, 2021, 60, 20504-20510.	13.8	8
14	High-density monolithic pellets of double-sided graphene fragments based on zeolite-templated carbon. Journal of Materials Chemistry A, 2021, 9, 7503-7507.	10.3	17
15	Efficiency of Thermal Management Using Phase-Change Material for Nonisothermal Adsorption Process. Industrial & Engineering Chemistry Research, 2020, 59, 14485-14495.	3.7	8
16	High-throughput gas separation by flexible metalâ€“organic frameworks with fast gating and thermal management capabilities. Nature Communications, 2020, 11, 3867.	12.8	99
17	Structural mechanism of reactivation with steam of pitch-based activated carbon fibers. Journal of Colloid and Interface Science, 2020, 578, 422-430.	9.4	22
18	A flexible two-dimensional layered metalâ€“organic framework functionalized with (trifluoromethyl)trifluoroborate: synthesis, crystal structure, and adsorption/separation properties. Dalton Transactions, 2020, 49, 3692-3699.	3.3	17

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19	Fast continuous measurement of synchrotron powder diffraction synchronized with controlling gas and vapour pressures at beamline BL02B2 ofÂSPring-8. Journal of Synchrotron Radiation, 2020, 27, 616-624.	2.4	20
20	Low-temperature hydrogen-graphite system revisited: Experimental study and Monte Carlo simulation. Journal of Chemical Physics, 2019, 151, 024704.	3.0	4
21	Highly Crystalline Niâ€“Co Layered Double Hydroxide Fabricated via Topochemical Transformation with a High Adsorption Capacity for Nitrate Ions. Inorganic Chemistry, 2019, 58, 15710-15719.	4.0	13
22	Force-driven reversible liquidâ€“gas phase transition mediated by elastic nanosponges. Nature Communications, 2019, 10, 2559.	12.8	46
23	CO2 Storage on Metal-Organic Frameworks. Green Energy and Technology, 2019, , 331-358.	0.6	1
24	Free energy calculations for adsorption-induced deformation of flexible metalâ€“organic frameworks. Current Opinion in Chemical Engineering, 2019, 24, 19-25.	7.8	15
25	In silico synthesis of carbon molecular sieves for high-performance air separation. Carbon, 2019, 141, 626-634.	10.3	11
26	Selective molecular-gating adsorption in a novel copper-based metalâ€“organic framework. Journal of Materials Chemistry A, 2018, 6, 5910-5918.	10.3	23
27	CHF₃â€“CHClF₂ Binary Competitive Adsorption Equilibria in Graphitic Slit Pores: Monte Carlo Simulations and Breakthrough Curve Experiments. Industrial & Engineering Chemistry Research, 2018, 57, 6440-6450.	3.7	8
28	Graphene-based ordered framework with a diverse range of carbon polygons formed in zeolite nanochannels. Carbon, 2018, 129, 854-862.	10.3	70
29	Diffusion phenomena of propane and propylene in colloidal zeolitic imidazolate Framework-8 particles. Journal of the Taiwan Institute of Chemical Engineers, 2018, 90, 79-84.	5.3	1
30	Central metal dependent modulation of induced-fit gas uptake in molecular porphyrin solids. Chemical Communications, 2018, 54, 7822-7825.	4.1	2
31	What is the Smallest Atom as a Probe for Characterizing Nanostructures?. Journal of Physical Chemistry C, 2018, 122, 15446-15455.	3.1	2
32	Synthesis of zeolite-templated carbons for methane storage: A molecular simulation study. Tanso, 2018, 2018, 197-203.	0.1	4
33	Mechanism of Kinetically Controlled Capillary Condensation in Nanopores: A Combined Experimental and Monte Carlo Approach. ACS Nano, 2017, 11, 269-276.	14.6	20
34	Synthesis of zeolitic imidazolate framework-8 particles of controlled sizes, shapes, and gate adsorption characteristics using a central collision-type microreactor. Chemical Engineering Journal, 2017, 313, 724-733.	12.7	72
35	Intrinsic Thermal Management Capabilities of Flexible Metalâ€“Organic Frameworks for Carbon Dioxide Separation and Capture. ACS Applied Materials & Interfaces, 2017, 9, 41066-41077.	8.0	61
36	Free Energy Analysis for Adsorption-Induced Structural Transition of Colloidal Zeolitic Imidazolate Framework-8 Particles. Journal of Physical Chemistry C, 2017, 121, 20366-20374.	3.1	12

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37	Comprehensive Modeling of Capillary Condensation in Open-Ended Nanopores: Equilibrium, Metastability, and Spinodal. Journal of Physical Chemistry C, 2017, 121, 26877-26886.	3.1	13
38	Critical energy barrier for capillary condensation in mesopores: Hysteresis and reversibility. Journal of Chemical Physics, 2016, 144, 164705.	3.0	15
39	Understanding gate adsorption behaviour of CO₂ on elastic layer-structured metalâ€“organic framework-11. Dalton Transactions, 2016, 45, 4193-4202.	3.3	43
40	Potential theory for gate adsorption on soft porous crystals. Molecular Simulation, 2015, 41, 1329-1338.	2.0	6
41	Modeling and Visualization of CO₂ Adsorption on Elastic Layer-Structured Metalâ€“Organic Framework-11: Toward a Better Understanding of Gate Adsorption Behavior. Journal of Physical Chemistry C, 2015, 119, 11533-11543.	3.1	41
42	Dependence of adsorption-induced structural transition on framework structure of porous coordination polymers. Journal of Chemical Physics, 2014, 140, 044707.	3.0	19
43	Fluids in nanospaces: molecular simulation studies to find out key mechanisms for engineering. Adsorption, 2014, 20, 213-223.	3.0	23
44	Adsorption-Induced Structural Transition of ZIF-8: A Combined Experimental and Simulation Study. Journal of Physical Chemistry C, 2014, 118, 8445-8454.	3.1	84
45	Capillary condensation in mesoporous silica with surface roughness. Adsorption, 2013, 19, 631-641.	3.0	18
46	Reversible Pore Size Control of Elastic Microporous Material by Mechanical Force. Chemistry - A European Journal, 2013, 19, 13009-13016.	3.3	23
47	Simulation study for adsorption-induced structural transition in stacked-layer porous coordination polymers: Equilibrium and hysteretic adsorption behaviors. Journal of Chemical Physics, 2013, 138, 054708.	3.0	45
48	Determination of phase equilibria in confined systems by open pore cell Monte Carlo method. Journal of Chemical Physics, 2013, 138, 084709.	3.0	12
49	Quantum Molecular Sieving Effects of H₂ and D₂ on Bundled and Nonbundled Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2012, 116, 20918-20922.	3.1	31
50	Confinement in Carbon Nanospace-Induced Production of KI Nanocrystals of High-Pressure Phase. Journal of the American Chemical Society, 2011, 133, 10344-10347.	13.7	86
51	Anomaly of CH₄ Molecular Assembly Confined in Single-Wall Carbon Nanohorn Spaces. Journal of the American Chemical Society, 2011, 133, 2022-2024.	13.7	33
52	Hydrogen Isotope Separation in Carbon Nanopores. Journal of Chemical Engineering of Japan, 2011, 44, 355-363.	0.6	6
53	Quantum Effects on Hydrogen Isotopes Adsorption inÂNanopores. Journal of Low Temperature Physics, 2009, 157, 352-373.	1.4	38
54	Elastic layer-structured metal organic frameworks (ELMs). Journal of Colloid and Interface Science, 2009, 334, 1-7.	9.4	104

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55	Free energy analysis for adsorption-induced lattice transition of flexible coordination framework. Journal of Chemical Physics, 2009, 130, 164707.	3.0	57
56	Novel Expansion/Shrinkage Modulation of 2D Layered MOF Triggered by Clathrate Formation with CO2Molecules. Nano Letters, 2006, 6, 2581-2584.	9.1	254
57	New approach to determination of surface heterogeneity of adsorbents and catalysts from the temperature programmed desorption (TPD) technique: One step beyond the condensation approximation (CA) method. Journal of Colloid and Interface Science, 2005, 291, 334-344.	9.4	16
58	Storage of Hydrogen at 303 K in Graphite Slitlike Pores from Grand Canonical Monte Carlo Simulation. Journal of Physical Chemistry B, 2005, 109, 17174-17183.	2.6	101
59	Quantum Effects on Hydrogen Isotope Adsorption on Single-Wall Carbon Nanohorns. Journal of the American Chemical Society, 2005, 127, 7511-7516.	13.7	189
60	Grand Canonical Monte Carlo Simulation Study of Methane Adsorption at an Open Graphite Surface and in Slitlike Carbon Pores at 273 K. Langmuir, 2005, 21, 5639-5646.	3.5	83
61	Quantum Effects on Hydrogen Adsorption in Internal Nanospaces of Single-Wall Carbon Nanohorns. Journal of Physical Chemistry B, 2004, 108, 17457-17465.	2.6	75