Dun-Yen Kang

List of Publications by Year
in descending order

75 papers	2,029 citations	236612 25 h-index	264894 42 g-index
78 all docs	78 docs citations	78 times ranked	2415 citing authors

#	Article	IF	Citations
1	Highly adhesive and disposable inorganic barrier films: made from 2D silicate nanosheets and water. Journal of Materials Chemistry A, 2022, 10, 1956-1964.	5.2	1
2	Chemistry-Encoded Convolutional Neural Networks for Predicting Gaseous Adsorption in Porous Materials. Journal of Physical Chemistry C, 2022, 126, 2813-2822.	1.5	19
3	Thin Film Growth of 3D Srâ€based Metalâ€Organic Framework on Conductive Glass via Electrochemical Deposition. ChemistryOpen, 2022, 11, e202100295.	0.9	4
4	Metal-organic framework membranes for gas separation and pervaporation. , 2022, , 215-238.		0
5	Highly CO₂ Selective Metalâ€"Organic Framework Membranes with Favorable Coulombic Effect. Advanced Functional Materials, 2021, 31, 2006924.	7.8	42
6	Facile Defect Engineering of Zeolitic Imidazolate Frameworks towards Enhanced C₃H₆/C₃H₈ Separation Performance. Advanced Functional Materials, 2021, 31, 2105577.	7.8	26
7	Suppressing Defect Formation in Metalâ€"Organic Framework Membranes via Plasma-Assisted Synthesis for Gas Separations. ACS Applied Materials & Interfaces, 2021, 13, 41904-41915.	4.0	23
8	Transport-Relevant Pore Limiting Diameter for Molecular Separations in Metalâ€"Organic Framework Membranes. Journal of Physical Chemistry C, 2021, 125, 20416-20425.	1.5	6
9	Solubility selectivity-enhanced SIFSIX-3-Ni-containing mixed matrix membranes for improved CO2/CH4 separation efficiency. Journal of Membrane Science, 2021, 633, 119390.	4.1	13
10	Pillared-bilayer metal-organic framework membranes for dehydration of isopropanol. Microporous and Mesoporous Materials, 2021, 326, 111344.	2.2	15
11	NaP1 zeolite membranes with high selectivity for water-alcohol pervaporation. Journal of Membrane Science, 2021, 639, 119762.	4.1	18
12	Coulombic effect on permeation of CO2 in metal-organic framework membranes. Journal of Membrane Science, 2021, 639, 119742.	4.1	23
13	Conformational-change-induced selectivity enhancement of CAU-10-PDC membrane for H2/CH4 and CO2/CH4 separation. , 2021, 1, 100005.		7
14	High-flux mixed matrix membranes containing bimetallic zeolitic imidazole framework-8 for C3H6/C3H8 separation. Journal of Membrane Science, 2020, 596, 117735.	4.1	39
15	Enhanced pervaporation performance of zeolite membranes treated by atmospheric-pressure plasma. Journal of the Taiwan Institute of Chemical Engineers, 2020, 116, 112-120.	2.7	12
16	Exploiting interior surface functionalization in reverse osmosis desalination membranes to mitigate permeabilityâ€"selectivity trade-off: Molecular simulations of nanotube-based membranes. Desalination, 2020, 491, 114537.	4.0	17
17	Toward Long-Lasting Low-Haze Antifog Coatings through the Deposition of Zeolites. Industrial & Engineering Chemistry Research, 2020, 59, 13042-13050.	1.8	8
18	Zinc(II)â€"Organic Framework Films with Thermochromic and Solvatochromic Applications. Chemistry - A European Journal, 2020, 26, 4204-4208.	1.7	14

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19	Hybrid membrane process for post-combustion CO2 capture from coal-fired power plant. Journal of Membrane Science, 2020, 603, 118001.	4.1	24
20	Core-Shell Metal-Organic Frameworks with Improving Cyclic Stability for Water Adsorption. Journal of Chemical Engineering of Japan, 2020, 53, 376-382.	0.3	1
21	Wetting Properties and Thin-Film Quality in the Wet Deposition of Zeolites. ACS Omega, 2019, 4, 13488-13495.	1.6	5
22	Activation-Controlled Structure Deformation of Pillared-Bilayer Metalâ€"Organic Framework Membranes for Gas Separations. Chemistry of Materials, 2019, 31, 7666-7677.	3.2	32
23	Transparent Conductive Films Derived from Single-Walled Aluminosilicate Nanotubes. ACS Applied Nano Materials, 2019, 2, 6677-6689.	2.4	5
24	Zeolite-Based Antifogging Coating via Direct Wet Deposition. Langmuir, 2019, 35, 2538-2546.	1.6	22
25	Membrane adsorber containing a new Sm(<scp>iii</scp>)â€"organic framework for dye removal. Environmental Science: Nano, 2019, 6, 1067-1076.	2.2	15
26	Hexagonal Superalignment of Nano-Objects with Tunable Separation in a Dilute and Spacer-Free Solution. Physical Review Letters, 2019, 123, 238002.	2.9	10
27	Investigation of the Water Adsorption Properties and Structural Stability of MIL-100(Fe) with Different Anions. Langmuir, 2018, 34, 4180-4187.	1.6	33
28	High-throughput fabrication of zeolite thin films via ultrasonic nozzle spray deposition. Microporous and Mesoporous Materials, 2018, 267, 171-180.	2.2	13
29	Atmospheric Pressure Plasma Jet-Assisted Synthesis of Zeolite-Based Low-<i>k</i> Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 900-908.	4.0	16
30	Properties of Single-Walled Aluminosilicate Nanotube/Poly(vinyl alcohol) Aqueous Dispersions. Journal of Physical Chemistry B, 2018, 122, 380-391.	1.2	11
31	Direct wet deposition of zeolite FAU thin films using stabilized colloidal suspensions. Microporous and Mesoporous Materials, 2018, 272, 286-295.	2.2	9
32	Scalable Wet Deposition of Zeolite AEI with a High Degree of Preferred Crystal Orientation. Angewandte Chemie, 2018, 130, 13455-13460.	1.6	4
33	Scalable Wet Deposition of Zeolite AEI with a High Degree of Preferred Crystal Orientation. Angewandte Chemie - International Edition, 2018, 57, 13271-13276.	7.2	10
34	Metalâ€"organic frameworks for dye sorption: structureâ€"property relationships and scalable deposition of the membrane adsorber. CrystEngComm, 2018, 20, 5465-5474.	1.3	30
35	Detailed Simulation of Fluid Dynamics and Heat Transfer in Coffee Bean Roaster. Journal of Food Process Engineering, 2017, 40, e12398.	1.5	8
36	Influence of interwall interaction in double-walled aluminogermanate nanotubes on mechanical properties. Computational Materials Science, 2017, 135, 54-63.	1.4	4

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37	Vapor-phase synthesis of poly(p -xylylene) membranes for gas separations. Journal of Membrane Science, 2017, 539, 101-107.	4.1	6
38	Simulation and design of catalytic membrane reactor for hydrogen production via methylcyclohexane dehydrogenation. International Journal of Hydrogen Energy, 2017, 42, 26296-26307.	3.8	39
39	Multifunctional nanoparticles with controllable dimensions and tripled orthogonal reactivity. Nanoscale, 2017, 9, 14787-14791.	2.8	11
40	High-permeance metalâ€“organic framework-based membrane adsorber for the removal of dye molecules in aqueous phase. Environmental Science: Nano, 2017, 4, 2205-2214.	2.2	41
41	Surface Engineering Layered Metalâ€“Organic Framework to Enhance Processability and Stability in Water. ChemNanoMat, 2017, 3, 902-908.	1.5	9
42	Surfactant-mediated self-assembly of nanocrystals to form hierarchically structured zeolite thin films with controlled crystal orientation. RSC Advances, 2017, 7, 49048-49055.	1.7	6
43	Investigating the Potential of Singleâ€Walled Aluminosilicate Nanotubes in Water Desalination. ChemPhysChem, 2017, 18, 179-183.	1.0	26
44	Defective Singleâ€Walled Aluminosilicate Nanotubes: Structural Stability and Mechanical Properties. ChemNanoMat, 2016, 2, 189-195.	1.5	14
45	Solution-processed ultra-low-k thin films comprising single-walled aluminosilicate nanotubes. Nanoscale, 2016, 8, 17427-17432.	2.8	11
46	Polymorphism/pseudopolymorphism of metalâ€“organic frameworks composed of zinc(<scp>ii</scp>) and 2-methylimidazole: synthesis, stability, and application in gas storage. RSC Advances, 2016, 6, 89148-89156.	1.7	79
47	cif2tube â€“ Algorithm for constructing nanotube and nanoscroll models from crystallographic information files. Journal of the Taiwan Institute of Chemical Engineers, 2016, 68, 415-422.	2.7	2
48	Influence of crystal topology and interior surface functionality of metal-organic frameworks on PFOA sorption performance. Microporous and Mesoporous Materials, 2016, 236, 202-210.	2.2	51
49	Relationships between the solution and solid-state properties of solution-cast low-k silica thin films. Physical Chemistry Chemical Physics, 2016, 18, 20371-20380.	1.3	3
50	Microwaveâ€Assisted Synthesis of Highly Monodispersed Singleâ€Walled Alunminosilicate Nanotubes. ChemistrySelect, 2016, 1, 6212-6216.	0.7	8
51	Pseudopolymorphic seeding for the rational synthesis of hybrid membranes with a zeolitic imidazolate framework for enhanced molecular separation performance. Journal of Materials Chemistry A, 2016, 4, 4172-4179.	5.2	33
52	Incorporation of single-walled aluminosilicate nanotubes for the control of crystal size and porosity of zeolitic imidazolate framework-L. CrystEngComm, 2016, 18, 881-887.	1.3	14
53	Highly selective mixed-matrix membranes with layered fillers for molecular separation. Journal of Membrane Science, 2016, 497, 394-401.	4.1	19
54	Solutionâ€Processed Ultrathin Aluminosilicate Nanotubeâ€“Poly(vinyl alcohol) Composite Membranes with Partial Alignment of Nanotubes. ChemNanoMat, 2015, 1, 102-108.	1.5	14

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55	Relationships among the structural topology, bond strength, and mechanical properties of single-walled aluminosilicate nanotubes. Nanoscale, 2015, 7, 16222-16229.	2.8	15
56	Predictions of effective diffusivity of mixed matrix membranes with tubular fillers. Journal of Membrane Science, 2015, 485, 123-131.	4.1	17
57	Design, synthesis, photophysical and electrochemical properties of 2-(4,5-diphenyl-1-p-aryl-1H-imidazol-2-yl)phenol-based boron complexes. Dalton Transactions, 2015, 44, 10228-10236.	1.6	16
58	Estimations of effective diffusivity of hollow fiber mixed matrix membranes. Journal of Membrane Science, 2015, 495, 269-275.	4.1	12
59	Synthesis of Zeolitic Imidazolate Framework Coreâ€“Shell Nanosheets Using Zinc-Imidazole Pseudopolymorphs. ACS Applied Materials & Interfaces, 2015, 7, 18353-18361.	4.0	50
60	Investigating Friction as a Main Source of Entropy Generation in the Expansion of Confined Gas in a Piston-and-Cylinder Device. Journal of Chemical Education, 2015, 92, 1667-1671.	1.1	3
61	Simulations of DNA stretching by flow field in microchannels with complex geometry. Biomicrofluidics, 2014, 8, 014106.	1.2	3
62	Phosphorescent light-emitting diodes using triscarbazole/bis(oxadiazole) hosts: comparison of homopolymer blends and random and block copolymers. Journal of Materials Chemistry C, 2014, 2, 6743.	2.7	11
63	Direct synthesis of single-walled aminoaluminosilicate nanotubes with enhanced molecular adsorption selectivity. Nature Communications, 2014, 5, 3342.	5.8	73
64	Structureâ€“processingâ€“property correlations in solution-processed, small-molecule, organic solar cells. Journal of Materials Chemistry C, 2013, 1, 5250.	2.7	22
65	A generalized kinetic model for the formation and growth of single-walled metal oxide nanotubes. Chemical Engineering Science, 2013, 90, 200-212.	1.9	35
66	Rigorous calculations of permeation in mixed-matrix membranes: Evaluation of interfacial equilibrium effects and permeability-based models. Journal of Membrane Science, 2013, 448, 160-169.	4.1	44
67	Single-Walled Aluminosilicate Nanotube/Poly(vinyl alcohol) Nanocomposite Membranes. ACS Applied Materials & Interfaces, 2012, 4, 965-976.	4.0	83
68	Enhanced CO₂ Adsorption over Polymeric Amines Supported on Heteroatomâ€Incorporated SBAâ€15 Silica: Impact of Heteroatom Type and Loading on Sorbent Structure and Adsorption Performance. Chemistry - A European Journal, 2012, 18, 16649-16664.	1.7	118
69	Shaping Single-Walled Metal Oxide Nanotubes from Precursors of Controlled Curvature. Nano Letters, 2012, 12, 827-832.	4.5	71
70	Transition metal-catalyzed Câ€“H activation as a route to structurally diverse di(arylthiophenyl)-diketopyrrolopyrroles. Journal of Materials Chemistry, 2012, 22, 21392.	6.7	42
71	Dramatic Enhancement of CO₂ Uptake by Poly(ethyleneimine) Using Zirconosilicate Supports. Journal of the American Chemical Society, 2012, 134, 10757-10760.	6.6	205
72	Single-Walled Aluminosilicate Nanotubes with Organic-Modified Interiors. Journal of Physical Chemistry C, 2011, 115, 7676-7685.	1.5	72

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73	Modeling molecular transport in composite membranes with tubular fillers. Journal of Membrane Science, 2011, 381, 50-63.	4.1	56
74	Dehydration, Dehydroxylation, and Rehydroxylation of Single-Walled Aluminosilicate Nanotubes. ACS Nano, 2010, 4, 4897-4907.	7.3	82
75	Modeling white light-emitting diodes with phosphor layers. Applied Physics Letters, 2006, 89, 231102.	1.5	73