Toru Ishigami

List of Publications by Year
in descending order

59	1,299	361045	360668
papers	citations	20 h-index	35 g-index

59	59	59	1446
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Amino acid ionic liquid-based facilitated transport membranes for CO2 separation. Chemical Communications, 2012, 48, 6903.	2.2	135
2	Effect of kinds of membrane materials on membrane fouling with BSA. Journal of Membrane Science, 2011, 384, 157-165.	4.1	133
3	Fouling reduction of reverse osmosis membrane by surface modification via layer-by-layer assembly. Separation and Purification Technology, 2012, 99, 1-7.	3.9	119
4	Effect of water in ionic liquids on CO2 permeability in amino acid ionic liquid-based facilitated transport membranes. Journal of Membrane Science, 2012, 415-416, 168-175.	4.1	88
5	Effects of three natural organic matter types on cellulose acetate butyrate microfiltration membrane fouling. Journal of Membrane Science, 2011, 379, 233-238.	4.1	68
6	Effect of membrane polymeric materials on relationship between surface pore size and membrane fouling in membrane bioreactors. Applied Surface Science, 2015, 330, 351-357.	3.1	49
7	Three-dimensional phase-field simulations of membrane porous structure formation by thermally induced phase separation in polymer solutions. Journal of Membrane Science, 2015, 483, 104-111.	4.1	48
8	Improvement of Antifouling Properties of Polyvinylidene Fluoride Hollow Fiber Membranes by Simple Dip Coating of Phosphorylcholine Copolymer via Hydrophobic Interactions. Industrial & Engineering Chemistry Research, 2014, 53, 2491-2497.	1.8	45
9	Permeation of concentrated oil-in-water emulsions through a membrane pore: numerical simulation using a coupled level set and the volume-of-fluid method. Soft Matter, 2014, 10, 7985-7992.	1.2	41
10	Host manipulation by an ichneumonid spider ectoparasitoid that takes advantage of preprogrammed web-building behaviour for its cocoon protection. Journal of Experimental Biology, 2015, 218, 2326-2332.	0.8	39
11	The Effect of Membrane Material and Surface Pore Size on the Fouling Properties of Submerged Membranes. Water (Switzerland), 2016, 8, 602.	1.2	33
12	Numerical Modeling of Concentration Polarization in Spacer-filled Channel with Permeation across Reverse Osmosis Membrane. Industrial & Engineering Chemistry Research, 2015, 54, 1665-1674.	1.8	30
13	Preparation of hydrophilic vinyl chloride copolymer hollow fiber membranes with antifouling properties. Applied Surface Science, 2015, 324, 718-724.	3.1	27
14	Permeation of oilâ€inâ€water emulsions through coalescing filter: Twoâ€dimensional simulation based on phaseâ€field model. AICHE Journal, 2016, 62, 2525-2532.	1.8	27
15	Permeation of Dispersed Particles through a Pore and Transmembrane Pressure Behavior in Dead-End Constant-Flux Microfiltration by Two-Dimensional Direct Numerical Simulation. Industrial & Engineering Chemistry Research, 2013, 52, 4650-4659.	1.8	25
16	Solidification characteristics of polymer solution during polyvinylidene fluoride membrane preparation by nonsolvent-induced phase separation. Journal of Membrane Science, 2013, 438, 77-82.	4.1	25
17	Solidification Behavior of Polymer Solution during Membrane Preparation by Thermally Induced Phase Separation. Membranes, 2014, 4, 113-122.	1.4	25
18	Preparation and characterization of antifouling poly(vinyl chloride- co -poly(ethylene glycol)methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	4.1	24

#	Article	IF	Citations
19	Flow and heat transfer characteristics of ammonium alum hydrate slurries. International Journal of Refrigeration, 2013, 36, 81-87.	1.8	22
20	Numerical simulation of coalescence phenomena of oil-in-water emulsions permeating through straight membrane pore. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 491, 70-77.	2.3	22
21	Preparation of a PVDF hollow fiber blend membrane via thermally induced phase separation (TIPS) method using new synthesized zwitterionic copolymer. Desalination and Water Treatment, 2015, 54, 2911-2919.	1.0	20
22	Phase-Field Simulation of the Coalescence of Droplets Permeating through a Fibrous Filter Obtained from X-ray Computed Tomography Images: Effect of the Filter Microstructure. Langmuir, 2020, 36, 4711-4720.	1.6	18
23	Direct numerical simulation and experimental validation of flow resistivity of nonwoven fabric filter. AICHE Journal, 2020, 66, e16832.	1.8	17
24	Direct numerical simulation of permeation of particles through a realistic fibrous filter obtained from X-ray computed tomography images utilizing signed distance function. Powder Technology, 2021, 385, 131-143.	2.1	17
25	Influence of pulse-jet cleaning interval on performance of compact dust collector with pleated filter. Separation and Purification Technology, 2021, 279, 119688.	3.9	16
26	A continuous-flow exposure method to determine degradation of polyphenylene sulfide non-woven bag-filter media by NO2 gas at high temperature. Advanced Powder Technology, 2019, 30, 2881-2889.	2.0	14
27	Direct Visualization of Fouling Inside a Hollow-Fiber Ultrafiltration Membrane Caused by Sodium Alginate. Industrial & Engineering Chemistry Research, 2013, 52, 16375-16383.	1.8	13
28	Effect of Surface Wettability on Droplet Coalescence and Pressure Drop in a Fibrous Filter: Direct Numerical Simulation Coordinated with X-ray Computed Tomography Images. Industrial & Engineering Chemistry Research, 2021, 60, 4168-4179.	1.8	12
29	Distributions of Fiber Mass, Air Permeability, and Filter Efficiency in Nonwoven Fabric Bag Filters. Chemical Engineering and Technology, 2021, 44, 535-541.	0.9	12
30	Mechanisms of Adhesive Micropatterning of Functional Colloid Thin Layers. ACS Applied Materials & Interfaces, 2019, 11, 40602-40612.	4.0	11
31	High-Resolution Numerical Simulation of Microfiltration of Oil-in-Water Emulsion Permeating through a Realistic Membrane Microporous Structure Generated by Focused Ion Beam Scanning Electron Microscopy Images. Langmuir, 2022, 38, 2094-2108.	1.6	11
32	Effect of solidification rate of polymer solution on the die-swell during hollow fiber spinning by non-solvent induced phase separation. Journal of Membrane Science, 2014, 472, 194-201.	4.1	10
33	Existence Form of Potassium Components in Woody Biomass Combustion Ashes and Estimation Method of Its Enrichment Degree. Energy & Fuels, 2018, 32, 517-524.	2.5	10
34	Flow and Heat Transfer Characteristics of Ammonium Alum Hydrate Slurry Treated with Surfactants. Journal of Chemical Engineering of Japan, 2012, 45, 136-141.	0.3	9
35	Size and composition analyses of colloids in deep granitic groundwater using microfiltration/ultrafiltration while maintaining in situ hydrochemical conditions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 461, 279-286.	2.3	9
36	Effects of NO2 gas concentration on the degradation of polyphenylene sulfide non-woven bag filter at high temperature. Advanced Powder Technology, 2021, 32, 3278-3287.	2.0	8

#	Article	IF	Citations
37	CFD Model Development and Experimental Measurements for Ammoniaâ€“Water Separation Using a Vacuum Membrane Distillation Module. Industrial & Engineering Chemistry Research, 2022, 61, 7381-7396.	1.8	8
38	Effects of Surface Finish of Nonwoven Fabric Bag Filters on Filter Efficiency. Chemical Engineering and Technology, 2022, 45, 92-99.	0.9	7
39	Utilization of woody biomass combustion fly ash as a filler in the glue used for plywood production. Advanced Powder Technology, 2020, 31, 4482-4490.	2.0	6
40	Micro-transfer patterning of dense nanoparticle layers: roles of rheology, adhesion and fracture in transfer dynamics. Soft Matter, 2020, 16, 3276-3284.	1.2	6
41	Synthesis of NiCuZn ferrite nanoparticles from metallic nitrate solutions using the microwave direct denitration method and evaluation of its properties. Particulate Science and Technology, 2021, 39, 427-435.	1.1	6
42	Synthesis of zeolites with hierarchical porous structures using a microwave heating method. Colloids and Interface Science Communications, 2021, 42, 100430.	2.0	6
43	Influence of pulse-jet cleaning pressure on performance of compact dust collector with pleated filter operated in clean-on-time mode. Advanced Powder Technology, 2022, 33, 103602.	2.0	6
44	Synthesis of potassium-type zeolites by the reverse-micelle method with microwave heating. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 555, 532-538.	2.3	3
45	Semiphenomenological model to predict hardening of solidâ€“liquidâ€“liquid systems by liquid bridges. Granular Matter, 2019, 21, 1.	1.1	3
46	Microwave direct denitration for synthesis of Cu-Ce-Zr-O composite oxide and its characterization. Powder Technology, 2020, 362, 26-31.	2.1	3
47	Simulation of Permeation of Colloidal Particle Dispersion through Membrane Pores in Microfiltration. Journal of the Society of Powder Technology, Japan, 2017, 54, 362-369.	0.0	3
48	ã€Original Contributionã€‘ Numerical Simulation of Membrane Permeation of Oilâ€“inâ€“Water Emulsions containing Surfactants. Membrane, 2015, 40, 155-160.	0.0	2
49	Multiscale Simulation Method for Flow and Mass-Transfer Characteristics in a Reverse Osmosis Membrane Module. Industrial & Engineering Chemistry Research, 2015, 54, 11413-11419.	1.8	2
50	Electrophoretic classification based on differences in electrophoretic mobility caused by change in the applied electric field. Powder Technology, 2020, 362, 586-590.	2.1	2
51	Coordinated Numerical Simulation of Porous Membrane Formation by the Phase Field Method and Particulate-Laden Flow. Kagaku Kogaku Ronbunshu, 2014, 40, 230-233.	0.1	2
52	Development of a Liquid Film Model for the Evaporator in an Absorption Chiller. Kagaku Kogaku Ronbunshu, 2009, 35, 417-424.	0.1	1
53	Numerical Simulation of Emulsion Permeating through Fibrous Filter in Coalescer. Japanese Journal of Multiphase Flow, 2020, 34, 310-317.	0.1	1
54	Numerical Study on Non-Absorbable Gas Control Using an Immersed Plate and Extraction in Evaporator/Absorber of Absorption Chiller. Journal of Chemical Engineering of Japan, 2010, 43, 561-568.	0.3	0

#	Article	IF	Citations
55	Effect of ion species on change in particle electrophoresis caused by change in applied electric field. Colloids and Interface Science Communications, 2021, 43, 100462.	2.0	0
56	Flow and Heat Transfer Characteristics of Na₂HPO₄Hydrate Slurries. , 2010, , .		0
57	Preparation of Poly(vinyl chloride) Blend Hollow Fiber Membranes with Improved Antifouling Properties. Membrane, 2014, 39, 168-172.	0.0	0
58	Numerical Analysis of Filter Collection Coordinated with Imaging. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2020, 27, 19-24.	0.0	0
59	Numerical Simulation of Granular and Multiphase Flows through Porous Media Obtained by Image Analysis. Journal of the Society of Powder Technology, Japan, 2022, 59, 167-177.	0.0	0