

Naoto Ohmura

List of Publications by Year in descending order

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123
papers

911
citations

623574

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26
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125
all docs

125
docs citations

125
times ranked

702
citing authors

#	ARTICLE	IF	CITATIONS
1	Emulsion polymerization of styrene in a continuous Taylor vortex flow reactor. <i>Chemical Engineering Science</i> , 1995, 50, 1409-1416.	1.9	100
2	Selective separation of CO ₂ by using novel facilitated transport membrane at elevated temperatures and pressures. <i>Journal of Membrane Science</i> , 2007, 291, 157-164.	4.1	98
3	Effective mass diffusion over cell boundaries in a Taylor-Couette flow system. <i>Chemical Engineering Science</i> , 1997, 52, 1757-1765.	1.9	47
4	Construction of a xylose-metabolizing yeast by genome integration of xylose isomerase gene and investigation of the effect of xylitol on fermentation. <i>Applied Microbiology and Biotechnology</i> , 2010, 88, 1215-1221.	1.7	39
5	Advances in Biological Liquid Crystals. <i>Small</i> , 2019, 15, e1900019.	5.2	27
6	Observation of Isolated Mixing Regions in a Stirred Vessel.. <i>Journal of Chemical Engineering of Japan</i> , 2001, 34, 574-578.	0.3	26
7	Sugar consumption and ethanol fermentation by transporter-overexpressed xylose-metabolizing <i>Saccharomyces cerevisiae</i> harboring a xyloseisomerase pathway. <i>Journal of Bioscience and Bioengineering</i> , 2012, 114, 209-211.	1.1	24
8	Controlling particle size by self-sustained oscillations in continuous emulsion polymerization of vinyl acetate. <i>Chemical Engineering Science</i> , 1998, 53, 2129-2135.	1.9	23
9	Dynamics of the helical flow between rotating conical cylinders. <i>Journal of Fluids and Structures</i> , 2005, 20, 331-344.	1.5	23
10	Process intensification of continuous starch hydrolysis with a Couetteâ€“Taylor flow reactor. <i>Chemical Engineering Research and Design</i> , 2013, 91, 2259-2264.	2.7	21
11	Enhanced mixing of Newtonian fluids in a stirred vessel using impeller speed modulation. <i>Canadian Journal of Chemical Engineering</i> , 2009, 87, 839-846.	0.9	19
12	Prediction of onset of Taylor-Couette instability for shear-thinning fluids. <i>Rheologica Acta</i> , 2017, 56, 73-84.	1.1	19
13	Improvement of separation performance by fluid motion in the membrane module with a helical baffle. <i>Separation and Purification Technology</i> , 2018, 198, 52-59.	3.9	19
14	Solidâ€“liquid separation by particle-flow-instability. <i>Energy and Environmental Science</i> , 2014, 7, 3982-3988.	15.6	18
15	MECHANISM OF MODE SELECTION FOR TAYLOR VORTEX FLOW BETWEEN COAXIAL CONICAL ROTATING CYLINDERS. <i>Journal of Fluids and Structures</i> , 2002, 16, 247-262.	1.5	17
16	Particle classification in Taylor vortex flow with an axial flow. <i>Journal of Physics: Conference Series</i> , 2005, 14, 64-71.	0.3	16
17	Inclined-Shaft Agitation for Improved Viscous Mixing. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 11741-11751.	1.8	14
18	Intensification of hollow fiber membrane cross-flow filtration by the combination of helical baffle and oscillatory flow. <i>Journal of Membrane Science</i> , 2018, 554, 134-139.	4.1	14

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19	Transition of Organized Flow Structure in a Stirred Vessel at Low Reynolds Numbers.. Journal of Chemical Engineering of Japan, 2003, 36, 1458-1463.	0.3	14
20	Intensification of Starch Processing Using Apparatus with Taylor-Couette Flow. Journal of Food Process Engineering, 2013, 36, 774-785.	1.5	12
21	Methods of Numerically Analyzing and Visually Measuring Transport Phenomena in Chemical Equipment. Isolated Mixing Region in a Taylor-Vortex-flow Reactor.. Kagaku Kogaku Ronbunshu, 2001, 27, 566-573.	0.1	12
22	Measurement of Drying Rate of Glue Coating by Modified Temperature Change Method. Kagaku Kogaku Ronbunshu, 2009, 35, 246-251.	0.1	12
23	Intercellular mass transfer in wavy/turbulent Taylor vortex flow. International Journal of Heat and Fluid Flow, 1998, 19, 159-166.	1.1	11
24	Optimized Stirred Reactor for Enhanced Particle Dispersion. Chemical Engineering and Technology, 2016, 39, 680-688.	0.9	11
25	Process development of starch hydrolysis using mixing characteristics of Taylor vortices. Bioscience, Biotechnology and Biochemistry, 2017, 81, 755-761.	0.6	11
26	Synthesis of thiol-capped gold nanoparticle with a flow system using organosilane as a reducing agent. Tetrahedron Letters, 2012, 53, 4457-4459.	0.7	10
27	Effect of ultrasonic pretreatment on emulsion polymerization of styrene. Ultrasonics Sonochemistry, 2016, 31, 337-341.	3.8	10
28	Enzymatic starch hydrolysis performance of Taylor-Couette flow reactor with ribbed inner cylinder. Chemical Engineering Science, 2021, 231, 116270.	1.9	10
29	Novel Operating Method for Controlling Latex Particle Size Distribution in Emulsion Polymerization of Vinyl Acetate. Industrial & Engineering Chemistry Research, 2001, 40, 5177-5183.	1.8	9
30	Flow dynamics in Taylor-Couette flow reactor with axial distribution of temperature. AIChE Journal, 2018, 64, 1075-1082.	1.8	9
31	Heat transfer characteristics of Taylor vortex flow with shear-thinning fluids. International Journal of Heat and Mass Transfer, 2019, 130, 274-281.	2.5	9
32	Numerical Computation of Apex Angle Effects on Taylor Vortices in Rotating Conical Cylinders Systems.. Journal of Chemical Engineering of Japan, 2002, 35, 22-31.	0.3	8
33	Mixing Characteristics in a Conical Taylor-Couette Flow System at Low Reynolds Numbers. Journal of Chemical Engineering of Japan, 2004, 37, 546-550.	0.3	8
34	Effect of wall alignment in a very short rotating annulus. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 613-621.	1.7	8
35	Process Development for Ultrasonic Fracturing of Zirconium Phosphate Particles. Journal of Chemical Engineering of Japan, 2014, 47, 124-129.	0.3	8
36	Effect of geometrical configuration of reactor on a ZrP nano-dispersion process using ultrasonic irradiation. Ultrasonics Sonochemistry, 2019, 52, 157-163.	3.8	8

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37	Prediction of Polymer Content Profile in Convective Dried Porous Slab Wetted with Polymer Solution.. Kagaku Kogaku Ronbunshu, 2003, 29, 819-822.	0.1	8
38	Drying Rate and Surface Optical Characteristic of Slurry Coating. Kagaku Kogaku Ronbunshu, 2009, 35, 297-303.	0.1	8
39	Effect of Vortex Cell Structure on Bifurcation Properties in a Taylor Vortex Flow System.. Journal of Chemical Engineering of Japan, 1995, 28, 758-764.	0.3	7
40	Flow Mechanism of a Submerged Jet Impinging on a Free Interface.. Journal of Chemical Engineering of Japan, 2001, 34, 912-918.	0.3	7
41	Flow and sedimentation characteristics of silica hard-shell microcapsule slurries treated with additives. International Journal of Refrigeration, 2019, 106, 18-23.	1.8	7
42	Emulsion Polymerization of Vinyl Acetate in a System of Two CSTR in Series. Journal of Chemical Engineering of Japan, 2005, 38, 722-726.	0.3	7
43	Effect of the Emulsifier on the Dynamic Behavior of Particle Size Distribution in Continuous Emulsion Polymerization of Vinyl Acetate. Journal of Chemical Engineering of Japan, 2004, 37, 461-464.	0.3	6
44	Computation Transport Phenomena in Chemical Engineering. Vortex Generation and Properties of Transition to Turbulence in a Taylor-Couette Flow System with Small Aspect Ratio.. Kagaku Kogaku Ronbunshu, 1997, 23, 741-748.	0.1	5
45	Numerical Simulation of Sterilization Processes for Shear-Thinning Food in Taylor-Couette Flow Systems. Chemical Engineering and Technology, 2019, 42, 859-866.	0.9	5
46	Representative shear rate for particle agglomeration in a mixing tank. Chemical Engineering Research and Design, 2021, 171, 73-79.	2.7	5
47	Effect of Rheological Property of Fluids on Mixing Time in a Stirred Vessel. Kagaku Kogaku Ronbunshu, 2009, 35, 539-542.	0.1	5
48	Intensifying the Fermentation of <i>Aspergillus oryzae</i> in a Stirred Bioreactor Using Maxblend Impeller. Open Chemical Engineering Journal, 2016, 10, 88-109.	0.4	5
49	Advances in Mixing Technology: Recent Advances in Mixing Research and Development. International Journal of Chemical Engineering, 2012, 2012, 1-2.	1.4	4
50	Characterizations of the submerged fermentation of <i>Aspergillus oryzae</i> using a Fullzone impeller in a stirred tank bioreactor. Journal of Bioscience and Bioengineering, 2017, 123, 101-108.	1.1	4
51	Intensification of Mixing Processes with Complex Fluids. Journal of Chemical Engineering of Japan, 2018, 51, 129-135.	0.3	4
52	Dispersion of Floating Particles in a Taylor Vortex Flow Reactor. Journal of Chemical Engineering of Japan, 2010, 43, 319-325.	0.3	4
53	Stochastic Modeling of Dynamic Behavior of Particle Size Distribution in Continuous Emulsion Polymerization. Journal of Chemical Engineering of Japan, 2007, 40, 228-234.	0.3	4
54	Liquid-liquid two phase flow of millichannel with a dynamic mixer. Chemical Engineering and Processing: Process Intensification, 2011, 50, 1-8.	1.8	3

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55	Using a flexible shaft agitator to enhance the rheology of a complex fungal fermentation culture. <i>Bioprocess and Biosystems Engineering</i> , 2016, 39, 1793-1801.	1.7	3
56	Effect of Shear Rate Distribution on Particle Aggregation in a Stirred Vessel. <i>Chemical Engineering and Technology</i> , 2017, 40, 493-497.	0.9	3
57	Effect of Baffle Clearance on Scale Deposition in an Agitated Vessel. <i>ACS Omega</i> , 2021, 6, 24070-24074.	1.6	3
58	Global Convection Characteristics of Conical Taylor-Couette Flow with Shear-Thinning Fluids. <i>Chemical Engineering and Technology</i> , 2021, 44, 2049-2055.	0.9	3
59	Effect of Particle Motion in Isolated Mixing Regions on Mixing in Stirred Vessel. <i>Journal of Chemical Engineering of Japan</i> , 2009, 42, 459-463.	0.3	3
60	Drying of Wet Porous Material Using a Combined Convective and Microwave Dryer of Laboratory Scale. <i>Kagaku Kogaku Ronbunshu</i> , 2003, 29, 718-721.	0.1	3
61	EFFECTS OF FABRICATION CONDITIONS ON SILICA HARD-SHELL MICROCAPSULES CONTAINING PHASE CHANGE MATERIALS. , 2018, , .		3
62	Nonlinear Phenomena. Effect of Reactor Volume on Concentration Oscillations of Belousov-Zhabotinsky Reaction System in CSTR.. <i>Kagaku Kogaku Ronbunshu</i> , 1999, 25, 559-563.	0.1	2
63	A numerical study of Taylor vortex flow in a finite length tapered annulus. <i>Journal of Physics: Conference Series</i> , 2005, 14, 20-29.	0.3	2
64	Characterisation of Isolated Mixing Regions in a Stirred Vessel. <i>International Journal of Chemical Reactor Engineering</i> , 2008, 6, .	0.6	2
65	Bioethanol production from mixed sugars using sugar uptake ability enhanced yeast strain by overexpression of transporters. <i>Journal of Bioscience and Bioengineering</i> , 2009, 108, S53.	1.1	2
66	Effect of Temperature Change on Geometric Structure of Isolated Mixing Regions in Stirred Vessel. <i>International Journal of Chemical Engineering</i> , 2012, 2012, 1-6.	1.4	2
67	Mixing Characteristics of Submerged Fungal Fluid in a Flexible Stirred Mixer System. <i>Journal of Chemical Engineering of Japan</i> , 2018, 51, 143-151.	0.3	2
68	Characteristics of Continuous Emulsion Polymerization of Vinyl Acetate with a Compartment Reactor. <i>Journal of Chemical Engineering of Japan</i> , 2010, 43, 70-75.	0.3	2
69	A New Estimation Method of Turbulent Flow Structures Effective for Impingement Heat Transfer Augmentation.. <i>Journal of Chemical Engineering of Japan</i> , 2001, 34, 1136-1140.	0.3	2
70	Effect of Inhomogeneous Mixing on Chemical Reaction in a Taylor Vortex Flow Reactor.. <i>Journal of Chemical Engineering of Japan</i> , 2002, 35, 692-695.	0.3	2
71	Combined Convective and Microwave Drying of Porous Material Wetted with Polymer Solutions.. <i>Kagaku Kogaku Ronbunshu</i> , 2004, 30, 98-101.	0.1	2
72	Gas Absorption Enhancement of Slug Flow in the Presence of Non-Porous Silica Fine Particles. <i>Journal of Chemical Engineering of Japan</i> , 2020, 53, 409-413.	0.3	2

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73	Topology and dynamics of streakline on the mixing boundary of two-dimensional chaotic flow induced by a rotationally reciprocating anchor impeller. Journal of the Taiwan Institute of Chemical Engineers, 2022, 131, 104213.	2.7	2
74	Electrochemical observation of instabilities of the Belousov-Zhabotinskii reaction in CSTR. Journal of Applied Electrochemistry, 1994, 24, 647-651.	1.5	1
75	Instabilities of the Belousov-Zhabotinsky Reaction in a Taylor Vortex Flow Reactor with Constant Axial Flow.. Journal of Chemical Engineering of Japan, 1997, 30, 388-395.	0.3	1
76	Improving Heat Transfer with Taylor Vortices in a Compact Modified Couette-Taylor Apparatus. Journal of Chemical Engineering of Japan, 2007, 40, 951-956.	0.3	1
77	Thermal treatment of starch slurry in Couette-Taylor flow apparatus. Chemical and Process Engineering - Inzynieria Chemiczna I Procesowa, 2017, 38, 345-361.	0.7	1
78	Dynamical Particle Motions in Vortex Flows. , 2017, , .		1
79	Enhancement of Gas Hold-Up with a Taylor Vortex Flow System Equipped with Ribs. Journal of Chemical Engineering of Japan, 2013, 46, 27-32.	0.3	1
80	Mixing-Effective Motion of High Viscosity Fluid Around a Rotating Elliptic Cylinder.. Journal of Chemical Engineering of Japan, 2000, 33, 420-426.	0.3	1
81	Time-Dependent Structures of a Two-Dimensional Turbulent Impinging Jet Accompanied by Longitudinal Vortex Paris. Journal of Chemical Engineering of Japan, 2004, 37, 299-303.	0.3	1
82	Control of Polymer Content Profile within Dried Porous Material Wetted with Aqueous Polymer Solution by Sequential Drying with Microwave and Convection.. Kagaku Kogaku Ronbunshu, 2004, 30, 91-94.	0.1	1
83	Correlative Method for Drying Rate Curves of Coated Film with Constant Temperature of Hot Air. Kagaku Kogaku Ronbunshu, 2009, 35, 639-645.	0.1	1
84	Kinetic Analysis of Syngas Formation from Carbon Dioxide (Dry Reforming of Methane with Carbon) Tj ETQq0 0 0 rgBT /Overlpc 10 Tf 5	0.1	1
85	Process Intensification of Continuous Emulsion Polymerization of Vinyl Acetate by a Method of Function Module Representation. Kagaku Kogaku Ronbunshu, 2011, 37, 134-139.	0.1	1
86	Numerical Study of Swirl Properties of Rotating Conical Channel with Axial Flow. Journal of Chemical Engineering of Japan, 2000, 32, 732-741.	0.3	1
87	Dynamics of a Surface Bump Generated by an Air-Water Free Surface Jet Impingement.. Journal of Chemical Engineering of Japan, 2003, 36, 147-154.	0.3	1
88	Continuous Emulsion Polymerization of Vinyl Acetate with Periodic Alternation of Reaction Temperature. Kagaku Kogaku Ronbunshu, 2003, 29, 378-381.	0.1	1
89	Dynamics of Emulsion Polymerization of Vinyl Acetate by Batch and Continuous Flow Operations. Kagaku Kogaku Ronbunshu, 2003, 29, 363-367.	0.1	1
90	Prediction of Adsorption Rate on Slab with an Adsorption Amount-dependent Diffusion Coefficient. Kagaku Kogaku Ronbunshu, 2004, 30, 243-245.	0.1	1

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91	Mixing Characteristics of a "VIBRO MIXER" Vibration Mixer.. Kagaku Kogaku Ronbunshu, 2004, 30, 1-6.	0.1	1
92	A Model of Continuous Hot-Air Drying of Film Coated with Water-Based Polymer in an Unsteady-State Operation. Kagaku Kogaku Ronbunshu, 2008, 34, 463-470.	0.1	1
93	Drying Rate and Surface Temperature in Solidification of Glass Particle Layer with Inorganic Binder by Microwave Drying. Kagaku Kogaku Ronbunshu, 2009, 35, 229-231.	0.1	1
94	Preface to the Special Issue for IWPI 2008. Journal of Chemical Engineering of Japan, 2010, 43, 1.	0.3	1
95	Preparation of a Photoresponsive Tracer to Evaluate the Performance of Dry-Type Powder Photoreactors. Journal of Chemical Engineering of Japan, 2017, 50, 710-715.	0.3	1
96	Impacts of the Surfactant Concentration on the Sedimentation Characteristics of Silica Hard-Shell Microcapsules Containing Phase Change Materials. Journal of Chemical Engineering of Japan, 2020, 53, 431-437.	0.3	1
97	Stress development of latex coatings in a convection drying with the accumulation and deformation of polymer particles. Progress in Organic Coatings, 2022, 170, 106941.	1.9	1
98	Analysis of quasi-steady acceleration in circular Couette flow. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 1796-1800.	1.7	0
99	Outstanding Paper of 2007. Journal of Chemical Engineering of Japan, 2008, 41, 737-738.	0.3	0
100	Development of Advanced Reforming System for H ₂ Station Using CO Converter Equipped with CO ₂ Selective Membrane II. ECS Transactions, 2009, 17, 589-598.	0.3	0
101	JCEJ Outstanding Paper Award of 2008. Journal of Chemical Engineering of Japan, 2009, 42, 457-458.	0.3	0
102	Effect of Circulating Flow on Particle Dispersion in a Stirred Vessel with Dual Paddle Impellers. Journal of the Society of Powder Technology, Japan, 2010, 47, 317-326.	0.0	0
103	Preface to the Special Issue for the 3rd ASIAN CONFERENCE ON MIXING (ACOM). Journal of Chemical Engineering of Japan, 2011, 44, 829.	0.3	0
104	Process Intensification of Emulsion Polymerization Using a Compartment Reactor. Chemical Engineering and Technology, 2012, 35, 1273-1280.	0.9	0
105	Cutting-Edge Research at the Membrane Center in Kobe University in Japan. Biotechnology and Biotechnological Equipment, 2013, 27, 3478-3484.	0.5	0
106	Using Motion Analysis to Evaluate Techniques for Whipping Heavy Cream by Hand. Journal of Chemical Engineering of Japan, 2018, 51, 180-184.	0.3	0
107	Evaporative Heat Transfer Characteristics of a Novel Continuous, Multi-Staged Evaporator/Distiller with Unsteady Falling Liquid Film Flow. Kagaku Kogaku Ronbunshu, 2018, 44, 107-112.	0.1	0
108	Computer-aided Semi-empirical Model of Interphase Mass and Enthalpy Transfer in a Packed Column Distillation Process. Computer Aided Chemical Engineering, 2020, 48, 1-6.	0.3	0

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109	Forced Motion of a Single Particle in Micron-sized Particle Dispersion. Journal of the Society of Powder Technology, Japan, 2021, 58, 138-146.	0.0	0
110	Convective-conductive Drying of a Thin Shrinkable Fibrous Layer Wetted with Latex as a Binder. Kagaku Kogaku Ronbunshu, 2003, 29, 722-725.	0.1	0
111	Time-Dependent Flow Properties in Doubly Periodic and Weakly Turbulent Wavy Vortex Flows in a Taylor-Couette Flow System. Journal of Chemical Engineering of Japan, 2004, 37, 572-576.	0.3	0
112	Regular Regime and Drying Characteristic Function of Porous Slab with Surface Resistance for Mass Transfer. Kagaku Kogaku Ronbunshu, 2004, 30, 368-371.	0.1	0
113	Reaction/Coagulation Dynamics in a Continuous Emulsion Polymerization Process of Vinyl Acetate. Kagaku Kogaku Ronbunshu, 2008, 34, 125-129.	0.1	0
114	Outstanding Paper of 2007. Kagaku Kogaku Ronbunshu, 2008, 34, 415-416.	0.1	0
115	Effect of Microwave on Solidification of Particle Layer by Drying. Kagaku Kogaku Ronbunshu, 2009, 35, 279-281.	0.1	0
116	Outstanding Paper of 2008. Kagaku Kogaku Ronbunshu, 2009, 35, 337-338.	0.1	0
117	Thermal Power Generated in a Wet Porous Slab by Dielectric Drying. Kagaku Kogaku Ronbunshu, 2010, 36, 379-382.	0.1	0
118	Preface to the Special Issue "Development of Process Intensification Based on Analysis of Dynamic Phenomena". Kagaku Kogaku Ronbunshu, 2011, 37, 79.	0.1	0
119	Operation for Fine Particle Dispersion in Shear-Thinning Fluid in a Stirred Vessel. Journal of Chemical Engineering of Japan, 2012, 45, 258-264.	0.3	0
120	Experimental Study on Mass Transfer in a Packed Distillation Column. Journal of Chemical Engineering of Japan, 2020, 53, 402-408.	0.3	0
121	Friction Factor Distribution at the Side Wall of a Turbulent Agitated Vessel with Baffles Using a MAXBLEND Impeller. Industrial & Engineering Chemistry Research, 2022, 61, 1514-1522.	1.8	0
122	Drying rate of latex coating affected by the deformability of resin particles in convection drying. European Physical Journal E, 2022, 45, 2.	0.7	0
123	Reaction rate enhancement of three-phase hydrogenation using the Taylor flow reactor. Journal of Advanced Manufacturing and Processing, 0, , .	1.4	0