

# Kunihiro Fukui

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8754411/publications.pdf>

Version: 2024-02-01

128  
papers

1,954  
citations

279798

23  
h-index

330143

37  
g-index

128  
all docs

128  
docs citations

128  
times ranked

1177  
citing authors

#	ARTICLE	IF	CITATIONS
1	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. <i>Langmuir</i> , 2022, 38, 2094-2108.	3.5	11
2	CFD Model Development and Experimental Measurements for Ammonia-Water Separation Using a Vacuum Membrane Distillation Module. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 7381-7396.	3.7	8
3	Influence of pulse-jet cleaning pressure on performance of compact dust collector with pleated filter operated in clean-on-time mode. <i>Advanced Powder Technology</i> , 2022, 33, 103602.	4.1	6
4	Synthesis of NiCuZn ferrite nanoparticles from metallic nitrate solutions using the microwave direct denitration method and evaluation of its properties. <i>Particulate Science and Technology</i> , 2021, 39, 427-435.	2.1	6
5	Effect of Surface Wettability on Droplet Coalescence and Pressure Drop in a Fibrous Filter: Direct Numerical Simulation Coordinated with X-ray Computed Tomography Images. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 4168-4179.	3.7	12
6	Synthesis of zeolites with hierarchical porous structures using a microwave heating method. <i>Colloids and Interface Science Communications</i> , 2021, 42, 100430.	4.1	6
7	Direct numerical simulation of permeation of particles through a realistic fibrous filter obtained from X-ray computed tomography images utilizing signed distance function. <i>Powder Technology</i> , 2021, 385, 131-143.	4.2	17
8	Effects of NO <sub>2</sub> gas concentration on the degradation of polyphenylene sulfide non-woven bag filter at high temperature. <i>Advanced Powder Technology</i> , 2021, 32, 3278-3287.	4.1	8
9	Influence of pulse-jet cleaning interval on performance of compact dust collector with pleated filter. <i>Separation and Purification Technology</i> , 2021, 279, 119688.	7.9	16
10	Distributions of Fiber Mass, Air Permeability, and Filter Efficiency in Nonwoven Fabric Bag Filters. <i>Chemical Engineering and Technology</i> , 2021, 44, 535-541.	1.5	12
11	Direct numerical simulation and experimental validation of flow resistivity of nonwoven fabric filter. <i>AIChE Journal</i> , 2020, 66, e16832.	3.6	17
12	Microwave direct denitration for synthesis of Cu-Ce-Zr-O composite oxide and its characterization. <i>Powder Technology</i> , 2020, 362, 26-31.	4.2	3
13	Electrophoretic classification based on differences in electrophoretic mobility caused by change in the applied electric field. <i>Powder Technology</i> , 2020, 362, 586-590.	4.2	2
14	Utilization of woody biomass combustion fly ash as a filler in the glue used for plywood production. <i>Advanced Powder Technology</i> , 2020, 31, 4482-4490.	4.1	6
15	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. <i>Langmuir</i> , 2020, 36, 4711-4720.	3.5	18
16	Numerical Study on Mechanism of Aerosol Permeation through Filter. <i>Hosokawa Powder Technology Foundation ANNUAL REPORT</i> , 2020, 27, 173-177.	0.0	0
17	Evaluation of the Characteristics of Metal Nitrate Aqueous Solutions by Microwave Heating and the Morphologies of Synthesized Metal Oxide Powders. <i>Journal of the Society of Powder Technology, Japan</i> , 2020, 57, 485-494.	0.1	0
18	Semiphenomenological model to predict hardening of solid-liquid systems by liquid bridges. <i>Granular Matter</i> , 2019, 21, 1.	2.2	3

#	ARTICLE	IF	CITATIONS
19	A continuous-flow exposure method to determine degradation of polyphenylene sulfide non-woven bag-filter media by NO <sub>2</sub> gas at high temperature. <i>Advanced Powder Technology</i> , 2019, 30, 2881-2889.	4.1	14
20	Existence Form of Potassium Components in Woody Biomass Combustion Ashes and Estimation Method of Its Enrichment Degree. <i>Energy &amp; Fuels</i> , 2018, 32, 517-524.	5.1	10
21	Effects of particle mass loading on the hydrodynamics and separation efficiency of a cyclone separator. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018, 90, 61-67.	5.3	45
22	Utilization of incineration fly ash from biomass power plants for zeolite synthesis from coal fly ash by microwave hydrothermal treatment. <i>Advanced Powder Technology</i> , 2018, 29, 450-456.	4.1	34
23	Classification performance analysis of a novel cyclone with a slit on the conical part by CFD simulation. <i>Separation and Purification Technology</i> , 2018, 190, 25-32.	7.9	38
24	Synthesis of potassium-type zeolites by the reverse-micelle method with microwave heating. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 555, 532-538.	4.7	3
25	Component Separation in a Vibrating Fluidized Bed Based on Differences in Agglomeration Properties of Particles. <i>Journal of Chemical Engineering of Japan</i> , 2018, 51, 576-583.	0.6	3
26	Development of Microwave Heating Thermogravimetry Apparatus and Its Application to Synthesis of Functional Powder. <i>Hosokawa Powder Technology Foundation ANNUAL REPORT</i> , 2018, 26, 149-152.	0.0	0
27	Synthesis of zeolite from coal fly ash by microwave hydrothermal treatment with pulverization process. <i>Advanced Powder Technology</i> , 2017, 28, 798-804.	4.1	47
28	Effect of cold air stream injection on cyclone performance at high temperature. <i>Separation and Purification Technology</i> , 2017, 183, 293-303.	7.9	12
29	Validation of measured microwave absorption and temperature change for development of a single-mode-type microwave heating thermogravimetry apparatus. <i>Review of Scientific Instruments</i> , 2017, 88, 024101.	1.3	7
30	Utilization of incineration fly ash from biomass power plants for zeolite synthesis from coal fly ash by hydrothermal treatment. <i>Fuel Processing Technology</i> , 2017, 167, 92-98.	7.2	46
31	Influence of a laminarizer at the inlet on the classification performance of a cyclone separator. <i>Separation and Purification Technology</i> , 2017, 174, 408-416.	7.9	55
32	Morphology of woody biomass combustion ash and enrichment of potassium components by particle size classification. <i>Fuel Processing Technology</i> , 2017, 156, 1-8.	7.2	28
33	Fine particle classification by a vertical type electrical water-sieve with various particle dispersion methods. <i>Separation and Purification Technology</i> , 2017, 175, 107-114.	7.9	6
34	Effect of Solids Loading on the Performance of a Cyclone Type Classifier for Separating Coarse Particles. <i>Journal of the Society of Powder Technology, Japan</i> , 2017, 54, 390-397.	0.1	2
35	Classification Characteristics of a Cyclone Type Classifier with Improved Collection Boxes for Separating Particles near the Wall Surface. <i>Journal of Chemical Engineering of Japan</i> , 2017, 50, 492-500.	0.6	8
36	Wet Classification of a Submicron Silica Particle Using Counter-Electrophoresis and Orthogonal-Electrophoresis Method. <i>Journal of the Society of Powder Technology, Japan</i> , 2017, 54, 17-22.	0.1	1

#	ARTICLE	IF	CITATIONS
37	Effects of Sintered Metal Cone Length on Gas Cyclone Classification Performance. Chemical Engineering and Technology, 2016, 39, 484-490.	1.5	5
38	Influence of the heating method on the particle characteristics of copper oxide powders synthesized from copper nitrate aqueous solutions. Chemical Engineering Science, 2016, 153, 108-116.	3.8	7
39	Effect of new blade of centrifugal separator on particle separation performance. Separation and Purification Technology, 2016, 162, 120-126.	7.9	12
40	Improvement of particle separation performance by new type hydro cyclone. Separation and Purification Technology, 2016, 158, 223-229.	7.9	17
41	Improvement of Particle Separation in Louver-type Separator by Use of Numerical Simulation. Journal of the Society of Powder Technology, Japan, 2015, 52, 252-259.	0.1	3
42	Development and Evaluation of a Cyclone Type Classifier for Separating Coarse Particles. Journal of the Society of Powder Technology, Japan, 2015, 52, 435-444.	0.1	5
43	Nickel oxide powder synthesis from aqueous solution of nickel nitrate hexahydrate by a microwave denitration method. Advanced Powder Technology, 2015, 26, 983-990.	4.1	9
44	The effect of particle size distribution on effective zeta-potential by use of the sedimentation method. Advanced Powder Technology, 2015, 26, 650-656.	4.1	63
45	Effect of ring shape attached on upper outlet pipe on fine particle classification of gas-cyclone. Separation and Purification Technology, 2015, 141, 84-93.	7.9	27
46	Effect of Inlet Clean Air and Guide Plate on Fine Particle Classification of Gas-cyclone. Journal of the Society of Powder Technology, Japan, 2014, 51, 614-622.	0.1	2
47	Fine Particle Classification by Vertical Type Water-sieve with Electro-potential Applied to Flow. Journal of the Society of Powder Technology, Japan, 2014, 51, 68-76.	0.1	2
48	Effect of free air inflow method on fine particle classification of gas-cyclone. Separation and Purification Technology, 2013, 118, 670-679.	7.9	23
49	A new method of zeta-potential measurement by the use of the sedimentation balance method. Powder Technology, 2013, 237, 303-308.	4.2	7
50	Effect of packing fraction on indium tin oxide powder synthesis via a solid-phase reaction with microwave heating. Chemical Engineering Science, 2013, 98, 17-24.	3.8	8
51	Mechanism of synthesis of metallic oxide powder from aqueous metallic nitrate solution by microwave denitration method. Chemical Engineering Journal, 2012, 211-212, 1-8.	12.7	12
52	Theoretical calculation of uncertainty region based on the general size distribution in the preparation of standard reference particles for particle size measurement. Advanced Powder Technology, 2012, 23, 185-190.	4.1	8
53	Effect of conical length on separation performance of sub-micron particles by electrical hydro-cyclone. Powder Technology, 2012, 219, 29-36.	4.2	31
54	Classification of Particles Dispersed by Bead Milling with Electrophoresis. KONA Powder and Particle Journal, 2011, 29, 125-133.	1.7	4

#	ARTICLE	IF	CITATIONS
55	Improvement of Hydro-cyclone Performance by Use of Local Electrostatic Potential Field and Fluid Flow Control Method. Journal of the Society of Powder Technology, Japan, 2011, 48, 526-533.	0.1	3
56	Classification of particles by centrifugal separator and analysis of the fluid behavior. Advanced Powder Technology, 2011, 22, 294-299.	4.1	15
57	Effects of clean-air injection on particle-separation performance of novel cyclone with sintered metal cone. Separation and Purification Technology, 2011, 80, 356-363.	7.9	7
58	Separation of Unburned Carbon in Fly Ash Particles Using Special Louver Separator. Journal of Chemical Engineering of Japan, 2011, 44, 146-154.	0.6	1
59	Enhancement of the Classification Performance of Electrical Field-Flow Fractionation Using Horizontal Electrophoresis. Journal of Chemical Engineering of Japan, 2011, 44, 398-404.	0.6	6
60	Effect of apex cone shape on fine particle classification of gas-cyclone. Powder Technology, 2010, 204, 54-62.	4.2	55
61	AFM investigation of the surface properties of silica particles dispersed by bead milling. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 362, 97-101.	4.7	16
62	Classification of Particles Dispersed by Bead Milling Using Electrical Field-Flow Fractionation. Journal of Chemical Engineering of Japan, 2009, 42, 720-727.	0.6	12
63	Separation performance of sub-micron silica particles by electrical hydrocyclone. Powder Technology, 2009, 196, 147-155.	4.2	19
64	Synthesis of calcium phosphate hydrogel from waste incineration fly ash and its application to fuel cell. Journal of Environmental Management, 2009, 90, 2709-2714.	7.8	5
65	Synthesis of calcium phosphate hydrogel from waste incineration fly ash and bone powder. Journal of Hazardous Materials, 2009, 163, 391-395.	12.4	14
66	Performance of fuel cell using calcium phosphate hydrogel membrane prepared from waste incineration fly ash and chicken bone powder. Journal of Hazardous Materials, 2009, 168, 1617-1621.	12.4	10
67	Effect of inner structure of centrifugal separator on particle classification performance. Powder Technology, 2009, 192, 268-272.	4.2	11
68	Improvement of gas-cyclone performance by use of local fluid flow control method. Powder Technology, 2009, 193, 6-14.	4.2	39
69	Utilization of NaCl for phillipsite synthesis from fly ash by hydrothermal treatment with microwave heating. Advanced Powder Technology, 2009, 20, 35-40.	4.1	45
70	Continuous fine particle classification by water elutriator with applied electro-potential. Advanced Powder Technology, 2009, 20, 398-405.	4.1	11
71	Erratum to "Continuous fine particle classification by water elutriator with applied electro-potential" [Adv. Powder Technol. 20 (2009) 398-405]. Advanced Powder Technology, 2009, 20, 509.	4.1	0
72	Synthesis of indium tin oxide powder by solid-phase reaction with microwave heating. Advanced Powder Technology, 2009, 20, 488-492.	4.1	13

#	ARTICLE	IF	CITATIONS
73	Investigation of Particle Collection and De-sulfurization Performance by Modified Axial Flow Cyclone. Journal of the Society of Powder Technology, Japan, 2009, 46, 681-687.	0.1	0
74	Effect of multi-inlet flow on particle classification performance of hydro-cyclones. Powder Technology, 2008, 184, 352-360.	4.2	30
75	Effects of Pretreatments on Calcium Phosphate Hydrogel Synthesis from Waste Incineration Fly Ash. Journal of the Society of Powder Technology, Japan, 2008, 45, 684-689.	0.1	3
76	Effect of Multi-Inlet Flow on Particle Classification Performance of Hydro-Cyclones and New Estimating Equation. Journal of Chemical Engineering of Japan, 2008, 41, 756-765.	0.6	1
77	Synthesis of Calcium Phosphate Hydrogel from Waste Incineration Fly Ash. Kagaku Kogaku Ronbunshu, 2008, 34, 304-308.	0.3	5
78	Centrifugal Classification of Particles and Analysis of the Fluid Dynamics. Journal of the Society of Powder Technology, Japan, 2007, 44, 345-352.	0.1	2
79	Experimental and Computational Study of Classification of Particles by Improved Centrifugal Separator. Journal of the Society of Powder Technology, Japan, 2007, 44, 861-867.	0.1	2
80	Effects of microwave irradiation on the crystalline phase of zeolite synthesized from fly ash by hydrothermal treatment. Advanced Powder Technology, 2007, 18, 381-393.	4.1	42
81	Improvement of Particle Collection Performance of Dry-Cyclone by Use of Local Fluid Flow Control Method. Kagaku Kogaku Ronbunshu, 2007, 33, 92-100.	0.3	6
82	Synthesis of Fast Proton Conductor from Waste Incineration Ash. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2007, 15, 58-61.	0.0	0
83	Effects of NaOH Concentration on Zeolite Synthesis from Fly Ash with a Hydrothermal Treatment Method [Translated]. KONA Powder and Particle Journal, 2006, 24, 183-191.	1.7	15
84	Synthesis Rate of Zeolite from Incineration Ash by Hydrothermal Treatment Method. Journal of the Society of Powder Technology, Japan, 2006, 43, 500-506.	0.1	2
85	Particle Classification Performance of Hydro-cyclone with Forced-vortex Type. Journal of the Society of Powder Technology, Japan, 2006, 43, 666-675.	0.1	10
86	Continuous Fine Particle Classification by Water-Elutriator with Applied Electro-potential. Journal of the Society of Powder Technology, Japan, 2006, 43, 550-558.	0.1	8
87	Effect of blade rotation on particle classification performance of hydro-cyclones. Powder Technology, 2006, 164, 103-110.	4.2	15
88	Particle separation performance by use of electrical hydro-cyclone. Separation and Purification Technology, 2006, 50, 330-335.	7.9	17
89	Phillipsite synthesis from fly ash prepared by hydrothermal treatment with microwave heating. Advanced Powder Technology, 2006, 17, 369-382.	4.1	39
90	Improvement in the Purity and Yield of Phillipsite Synthesized from Incineration Ash with Multi-stages Synthesis Method. Journal of the Society of Powder Technology, Japan, 2005, 42, 31-38.	0.1	4

#	ARTICLE	IF	CITATIONS
91	Improvement in Classification Performance of Gas-cyclone by Local Fluid Velocity Control. Journal of the Society of Powder Technology, Japan, 2005, 42, 401-408.	0.1	11
92	The effect of a new method of fluid flow control on submicron particle classification in gas-cyclones. Powder Technology, 2005, 149, 139-147.	4.2	51
93	A new method for the control of dilute suspension sedimentation by horizontal movement. Powder Technology, 2005, 150, 9-19.	4.2	10
94	Selective Synthesis of Phillipsite from Fly Ash and Rice Husk Ash Prepared by Hydrothermal Treatment. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2005, 13, 131-131.	0.0	0
95	Effect of inlet shape and slurry temperature on the classification performance of hydro-cyclones. Powder Technology, 2004, 140, 1-9.	4.2	27
96	Effects of initial slurry concentration distribution on the particle size distribution measured with a sedimentation balance method. Advanced Powder Technology, 2004, 15, 181-200.	4.1	2
97	Selective Synthesis of Phillipsite from Fly Ash and Rice Husk Ash Prepared by Hydrothermal Treatment. Journal of the Society of Powder Technology, Japan, 2004, 41, 738-744.	0.1	6
98	Effect of apex cone height on particle classification performance of a cyclone separator. Advanced Powder Technology, 2003, 14, 263-278.	4.1	46
99	Particle size measurement of standard reference particle candidates with improved size measurement devices. Advanced Powder Technology, 2003, 14, 17-31.	4.1	18
100	Effects of NaOH Concentration on Zeolite Synthesis from Fly Ash with a Hydrothermal Treatment Method. Journal of the Society of Powder Technology, Japan, 2003, 40, 497-504.	0.1	16
101	Selective Synthesis of Phillipsite from Fly Ash of Low Silica Content by Hydrothermal Treatment.. Kagaku Kogaku Ronbunshu, 2003, 29, 299-304.	0.3	7
102	Control of Product Particle Size by Closed-circuit Pulverization System.. Kagaku Kogaku Ronbunshu, 2003, 29, 272-277.	0.3	0
103	Effect of Fly Ash Content on Zeolite Synthesis from Coal Fly Ash Prepared by Hydrothermal Treatment.. Kagaku Kogaku Ronbunshu, 2002, 28, 155-160.	0.3	19
104	Influence of the Behavior of Particles and Dispersion Medium on the Particle Size Measurement with the Sedimentation Balance Method.. Kagaku Kogaku Ronbunshu, 2002, 28, 161-167.	0.3	5
105	Study of Stabilizing Conditions for Closed-circuit Pulverization System.. Kagaku Kogaku Ronbunshu, 2002, 28, 36-42.	0.3	2
106	Zeolite Synthesis from Coal Fly Ash Prepared by Hydrothermal Treatment Method and Effect of Particle Size on Its Reaction Mechanism [Translated]&sup>â€&sup>. KONA Powder and Particle Journal, 2001, 19, 232-239.	1.7	1
107	Particle Classification with Improved Hydro-cyclone Separator.. Journal of the Society of Powder Technology, Japan, 2001, 38, 626-632.	0.1	19
108	Particle size measurement with an improved sedimentation balance method and microscopic method together with computer simulation of necessary sample size. Advanced Powder Technology, 2001, 12, 79-94.	4.1	35

#	ARTICLE	IF	CITATIONS
109	Particle separation by linoya's type gas cyclone. Powder Technology, 2001, 118, 16-23.	4.2	42
110	Methods of Numerically Analyzing and Visually Measuring Transport Phenomena in Chemical Equipment. Fine Control of Cut Size with Dry Cyclone.. Kagaku Kogaku Ronbunshu, 2001, 27, 574-580.	0.3	8
111	Effect of Inlet Duct Shape on Particle Separation Performance of Cyclone Separator.. Journal of Chemical Engineering of Japan, 2000, 33, 273-276.	0.6	5
112	Analysis of Dynamic Characteristics and Optimum Control in Initial Stage of Closed-circuit Pulverization System.. Kagaku Kogaku Ronbunshu, 2000, 26, 654-660.	0.3	3
113	Investigation about Data Reduction and Sedimentation Distance of Sedimentation Balance Method.. Journal of Chemical Engineering of Japan, 2000, 33, 393-399.	0.6	17
114	Particle Classification of Fly Ash Using a Modified Louver-type Separator and Reduction of Unburned Carbon Amount [Translated] <sup>â€‹</sup>. KONA Powder and Particle Journal, 2000, 18, 221-229.	1.7	2
115	Effect of particle properties on the morphological change induced by impaction against a solid surface for tristearin powder mixed with hard particles. Advanced Powder Technology, 1999, 10, 295-313.	4.1	2
116	Zeolite Synthesis from Coal Fly Ash Prepared by Hydro-thermal Treatment Method and Effect of Particle Size on its Reaction Mechanism.. Kagaku Kogaku Ronbunshu, 1999, 25, 987-992.	0.3	16
117	Simulation of Dynamic Characteristics of Closed-circuit Pulverization System.. Kagaku Kogaku Ronbunshu, 1999, 25, 59-65.	0.3	6
118	Effect of Packing Structure on Separation Performance of Packed Bed.. Kagaku Kogaku Ronbunshu, 1998, 24, 37-41.	0.3	0
119	Thermal Energy Storage, Heat Pump and Thermal Energy Transportation Technologies. Data Reduction in Measurement of Size Distribution using Sedimentation Balance Method.. Kagaku Kogaku Ronbunshu, 1998, 24, 928-933.	0.3	8
120	Computation Transport Phenomena in Chemical Engineering. Three Dimensional Numerical Simulation in Cyclone Classifier Using Direct Method.. Kagaku Kogaku Ronbunshu, 1997, 23, 885-891.	0.3	3
121	The Control of Particle Size Separation by the Use of a Hydrocyclone.. Journal of the Society of Powder Technology, Japan, 1997, 34, 690-696.	0.1	22
122	The Effect of Environmental Temperature on the Compression Behavior of Tristearin Powder.. Journal of the Society of Powder Technology, Japan, 1997, 34, 499-507.	0.1	2
123	Morphological Change of Hardened Oil Particles Induced by Impaction against a Solid Surface. Aerosol Science and Technology, 1997, 26, 343-355.	3.1	3
124	Morphological Change of Antimony Trioxide Fine Particles through Impaction, Compaction or Grinding.. Journal of the Society of Powder Technology, Japan, 1995, 32, 23-30.	0.1	2
125	Influence of wall properties on the morphological change of Sb <sub>2</sub> O <sub>3</sub> fine particles induced by impaction against a wall. Advanced Powder Technology, 1995, 6, 177-189.	4.1	4
126	Indiumâ€‹tin oxide thin films prepared by chemical vapor deposition. Journal of Applied Physics, 1991, 70, 3848-3851.	2.5	149



#	ARTICLE	IF	CITATIONS
127	Indium tin oxide thin films prepared by chemical vapour deposition. Thin Solid Films, 1991, 203, 297-302.	1.8	125
128	Fluorine-Doped Indium Oxide Thin Films Prepared by Chemical Vapor Deposition. Japanese Journal of Applied Physics, 1990, 29, L1705-L1707.	1.5	22