## J Ruud Van Ommen

List of Publications by Year in descending order

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I PILLID VAN OMMEN

#	Article	IF	CITATIONS
1	Agglomeration in fluidized beds at high temperatures: Mechanisms, detection and prevention. Progress in Energy and Combustion Science, 2008, 34, 633-666.	31.2	314
2	Time-series analysis of pressure fluctuations in gas–solid fluidized beds – A review. International Journal of Multiphase Flow, 2011, 37, 403-428.	3.4	268
3	Fluidization of nanopowders: a review. Journal of Nanoparticle Research, 2012, 14, 737.	1.9	175
4	Atomic and molecular layer deposition: off the beaten track. Chemical Communications, 2017, 53, 45-71.	4.1	173
5	Scale-up of bubbling fluidized bed reactors — A review. Powder Technology, 2012, 217, 21-38.	4.2	162
6	Early warning of agglomeration in fluidized beds by attractor comparison. AICHE Journal, 2000, 46, 2183-2197.	3.6	160
7	Structured Packings for Multiphase Catalytic Reactors. Industrial & Engineering Chemistry Research, 2008, 47, 3720-3751.	3.7	160
8	Structuring catalyst and reactor – an inviting avenue to process intensification. Catalysis Science and Technology, 2015, 5, 807-817.	4.1	117
9	Fischer–Tropsch reaction–diffusion in a cobalt catalyst particle: aspects of activity and selectivity for a variable chain growth probability. Catalysis Science and Technology, 2012, 2, 1221.	4.1	108
10	Understanding and Controlling the Aggregative Growth of Platinum Nanoparticles in Atomic Layer Deposition: An Avenue to Size Selection. Journal of Physical Chemistry Letters, 2017, 8, 975-983.	4.6	98
11	Response characteristics of probe–transducer systems for pressure measurements in gas–solid fluidized beds: how to prevent pitfalls in dynamic pressure measurements. Powder Technology, 1999, 106, 199-218.	4.2	85
12	Nature–Inspired self–cleaning surfaces: Mechanisms, modelling, and manufacturing. Chemical Engineering Research and Design, 2020, 155, 48-65.	5.6	79
13	Atmospheric Pressure Process for Coating Particles Using Atomic Layer Deposition. Chemical Vapor Deposition, 2009, 15, 227-233.	1.3	77
14	Detecting regime transitions in slurry bubble columns using pressure time series. AICHE Journal, 2005, 51, 1951-1965.	3.6	76
15	Geopolymer Coating of Bacteria-containing Granules for Use in Self-healing Concrete. Procedia Engineering, 2015, 102, 475-484.	1.2	73
16	Structuring chaotic fluidized beds. Chemical Engineering Journal, 2003, 96, 117-124.	12.7	70
17	Similarity between chaos analysis and frequency analysis of pressure fluctuations in fluidized beds. Chemical Engineering Science, 2004, 59, 1829-1840.	3.8	70
18	The role of the hydrogen bond in dense nanoparticle–gas suspensions. Physical Chemistry Chemical Physics, 2013, 15, 5788.	2.8	66

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19	A method for agglomeration detection and control in full-scale biomass fired fluidized beds. Chemical Engineering Science, 2007, 62, 644-654.	3.8	65
20	Atomic layer deposition of platinum clusters on titania nanoparticles at atmospheric pressure. Journal of Materials Chemistry A, 2013, 1, 4647.	10.3	65
21	Review Article: Recommended reading list of early publications on atomic layer deposition—Outcome of the "Virtual Project on the History of ALD― Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	65
22	Effects of pressure and fines content on bubble diameter in a fluidized bed studied using fast X-ray tomography. Chemical Engineering Journal, 2012, 207-208, 711-717.	12.7	60
23	Bubble size estimation in slurry bubble columns from pressure fluctuations. AICHE Journal, 2005, 51, 1924-1937.	3.6	59
24	Photocatalytic Reactor Design: Guidelines for Kinetic Investigation. Industrial & Engineering Chemistry Research, 2019, 58, 5349-5357.	3.7	59
25	Measuring the Gas-Solids Distribution in Fluidized Beds A Review. International Journal of Chemical Reactor Engineering, 2008, 6, .	1.1	54
26	Improved Drying in a Pulsation-Assisted Fluidized Bed. Industrial & Engineering Chemistry Research, 2009, 48, 302-309.	3.7	54
27	The fractal scaling of fluidized nanoparticle agglomerates. Chemical Engineering Science, 2014, 112, 79-86.	3.8	53
28	Rapid detection of defluidization using the standard deviation of pressure fluctuations. Chemical Engineering and Processing: Process Intensification, 2004, 43, 1329-1335.	3.6	52
29	Experimental and numerical comparison of structured packings with a randomly packed bed reactor for Fischer–Tropsch synthesis. Catalysis Today, 2009, 147, S2-S9.	4.4	52
30	Enhanced Optical Performance of BaMgAl <sub>10</sub> O <sub>17</sub> :Eu <sup>2+</sup> Phosphor by a Novel Method of Carbon Coating. Journal of Physical Chemistry C, 2016, 120, 2355-2361.	3.1	51
31	Bubble characterization in a fluidized bed by means of optical probes. International Journal of Multiphase Flow, 2012, 41, 56-67.	3.4	50
32	Diffusionâ€Mediated Growth and Sizeâ€Dependent Nanoparticle Reactivity during Ruthenium Atomic Layer Deposition on Dielectric Substrates. Advanced Materials Interfaces, 2018, 5, 1800870.	3.7	50
33	Scale-Up Study of a Multiphase Photocatalytic Reactor—Degradation of Cyanide in Water over TiO <sub>2</sub> . Environmental Science & Technology, 2014, 48, 1574-1581.	10.0	46
34	Influence of vertical internals on a bubbling fluidized bed characterized by X-ray tomography. International Journal of Multiphase Flow, 2015, 75, 237-249.	3.4	45
35	Modeling the precursor utilization in atomic layer deposition on nanostructured materials in fluidized bed reactors. Chemical Engineering Journal, 2015, 268, 384-398.	12.7	44
36	Nanoparticle sintering in atomic layer deposition of supported catalysts: Kinetic modeling of the size distribution. Catalysis Today, 2018, 316, 51-61.	4.4	44

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37	Optimal placement of probes for dynamic pressure measurements in large-scale fluidized beds. Powder Technology, 2004, 139, 264-276.	4.2	42
38	An adhesive CFDâ€ÐEM model for simulating nanoparticle agglomerate fluidization. AICHE Journal, 2016, 62, 2259-2270.	3.6	42
39	Computational validation of the scaling rules for fluidized beds. Powder Technology, 2006, 163, 32-40.	4.2	41
40	Continuous production of nanostructured particles using spatial atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	41
41	Monitoring a lab-scale fluidized bed dryer: A comparison between pressure transducers, passive acoustic emissions and vibration measurements. Powder Technology, 2010, 197, 36-48.	4.2	40
42	Gas-Phase Deposition of Ultrathin Aluminium Oxide Films on Nanoparticles at Ambient Conditions. Materials, 2015, 8, 1249-1263.	2.9	39
43	Enhanced Particle Mixing in Pulsed Fluidized Beds and the Effect of Internals. Industrial & Engineering Chemistry Research, 2012, 51, 1713-1720.	3.7	38
44	Influence of Distributed Secondary Gas Injection on the Performance of a Bubbling Fluidized-Bed Reactor. Industrial & Engineering Chemistry Research, 2008, 47, 3601-3618.	3.7	37
45	Fast X-ray tomography for the quantification of the bubbling-, turbulent- and fast fluidization-flow regimes and void structures. Chemical Engineering Journal, 2013, 234, 437-447.	12.7	37
46	Use of stress fluctuations to monitor wet granulation of powders. Powder Technology, 2001, 117, 149-162.	4.2	36
47	Four Ways To Introduce Structure in Fluidized Bed Reactors. Industrial & Engineering Chemistry Research, 2007, 46, 4236-4244.	3.7	35
48	Photocatalytic-reactor efficiencies and simplified expressions to assess their relevance in kinetic experiments. Chemical Engineering Journal, 2012, 207-208, 607-615.	12.7	35
49	Comparison of bubble growth obtained from pressure fluctuation measurements to optical probing and literature correlations. Chemical Engineering Science, 2012, 74, 266-275.	3.8	35
50	Detection of agglomeration and gradual particle size changes in circulating fluidized beds. Powder Technology, 2010, 202, 24-38.	4.2	34
51	Selectivity of the Fischer–Tropsch process: deviations from single alpha product distribution explained by gradients in process conditions. Catalysis Science and Technology, 2013, 3, 2210.	4.1	34
52	Room-temperature pulsed CVD-grown SiO <sub>2</sub> protective layer on TiO <sub>2</sub> particles for photocatalytic activity suppression. RSC Advances, 2017, 7, 4547-4554.	3.6	34
53	Tuning the photocatalytic activity of TiO2 nanoparticles by ultrathin SiO2 films grown by low-temperature atmospheric pressure atomic layer deposition. Applied Surface Science, 2020, 530, 147244.	6.1	34
54	Area-Selective Deposition of Ruthenium by Area-Dependent Surface Diffusion. Chemistry of Materials, 2020, 32, 9560-9572.	6.7	34

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55	Detecting and Counteracting Agglomeration in Fluidized Bed Biomass Combustion. Energy & Fuels, 2009, 23, 157-169.	5.1	33
56	Monte Carlo simulation of the bubble size distribution in a fluidized bed with intrusive probes. International Journal of Multiphase Flow, 2012, 44, 1-14.	3.4	33
57	Process intensification of tubular reactors: Considerations on catalyst hold-up of structured packings. Catalysis Today, 2013, 216, 111-116.	4.4	33
58	Correlating bubble size and velocity distribution in bubbling fluidized bed based on X-ray tomography. Chemical Engineering Journal, 2016, 298, 17-25.	12.7	33
59	The influence of the particle size distribution on fluidized bed hydrodynamics using highâ€ŧhroughput experimentation. AICHE Journal, 2009, 55, 2013-2023.	3.6	32
60	Multidimensional Nature of Fluidized Nanoparticle Agglomerates. Langmuir, 2014, 30, 12696-12702.	3.5	32
61	X-ray measurements of bubble hold-up in fluidized beds with and without vertical internals. International Journal of Multiphase Flow, 2015, 74, 118-124.	3.4	32
62	Protecting the MoSi2 healing particles for thermal barrier coatings using a sol-gel produced Al2O3 coating. Journal of the European Ceramic Society, 2018, 38, 2728-2734.	5.7	32
63	Spatial, temporal and quantitative assessment of catalyst leaching in continuous flow. Catalysis Today, 2018, 308, 64-70.	4.4	32
64	Comparison of three different methodologies of pressure signal processing to monitor fluidized-bed dryers/granulators. Chemical Engineering Journal, 2011, 172, 487-499.	12.7	31
65	A model to estimate the size of nanoparticle agglomerates in gasâ^'solid fluidized beds. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	31
66	Intriguing luminescence properties of (Ba, Sr)3Si6O9N4: Eu2+ phosphors via modifying synthesis method and cation substitution. Journal of Alloys and Compounds, 2016, 682, 481-488.	5.5	31
67	Advances in scalable gas-phase manufacturing and processing of nanostructured solids: A review. Particuology, 2017, 30, 15-39.	3.6	31
68	Residence times in fluidized beds with secondary gas injection. Powder Technology, 2008, 180, 321-331.	4.2	30
69	Discrete particle simulations of an electric-field enhanced fluidized bed. Powder Technology, 2008, 183, 196-206.	4.2	30
70	Functionalization of lactose as a biological carrier for bovine serum albumin by electrospraying. International Journal of Pharmaceutics, 2011, 414, 1-5.	5.2	30
71	Bubble Characterization in a Fluidized Bed with Vertical Tubes. Industrial & Engineering Chemistry Research, 2012, 51, 4748-4758.	3.7	30
72	Design, characterization and model validation of a LED-based photocatalytic reactor for gas phase applications. Chemical Engineering Journal, 2018, 333, 456-466.	12.7	30

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73	Suppressing the Photocatalytic Activity of TiO2 Nanoparticles by Extremely Thin Al2O3 Films Grown by Gas-Phase Deposition at Ambient Conditions. Nanomaterials, 2018, 8, 61.	4.1	30
74	Assessing the Role of Pt Clusters on TiO <sub>2</sub> (P25) on the Photocatalytic Degradation of Acid Blue 9 and Rhodamine B. Journal of Physical Chemistry C, 2020, 124, 8269-8278.	3.1	30
75	The influence of vessel geometry on fluidized bed dryer hydrodynamics. Powder Technology, 2009, 194, 115-125.	4.2	29
76	Intensifying the Fischer–Tropsch Synthesis by reactor structuring – A model study. Chemical Engineering Journal, 2012, 207-208, 865-870.	12.7	29
77	Deposition Mechanism of Aluminum Oxide on Quantum Dot Films at Atmospheric Pressure and Room Temperature. Journal of Physical Chemistry C, 2016, 120, 4266-4275.	3.1	29
78	Imposing dynamic structures on fluidised beds. Catalysis Today, 2005, 105, 560-568.	4.4	27
79	Heat transport in structured packings with two-phase co-current downflow. Chemical Engineering Journal, 2012, 185-186, 250-266.	12.7	27
80	Performance improvement by alumina coatings on Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Ce <sup>3+</sup> phosphor powder deposited using atomic layer deposition in a fluidized bed reactor. RSC Advances, 2016, 6, 76454-76462.	3.6	27
81	Dependence of the photoluminescence properties of Eu <sup>2+</sup> doped M–Si–N (M = alkali,) Tj ETQq1 Materials Chemistry C, 2018, 6, 5671-5683.	1 0.78431 5.5	14 rgBT /O∨ 27
82	Effects of Surface Modification on Optical Properties and Thermal Stability of K <sub>2</sub> SiF <sub>6</sub> :Mn <sup>4+</sup> Red Phosphors by Deposition of an Ultrathin Al <sub>2</sub> O <sub>3</sub> ÂLayer Using Gas-Phase Deposition in a Fluidized Bed Reactor. ECS Journal of Solid State Science and Technology, 2019, 8, R88-R96.	1.8	27
83	Heat transport in structured packings with co-current downflow of gas and liquid. Chemical Engineering Science, 2010, 65, 420-426.	3.8	26
84	Scalable Production of Nanostructured Particles using Atomic Layer Deposition. KONA Powder and Particle Journal, 2014, 31, 234-246.	1.7	26
85	Contact mechanics of highly porous oxide nanoparticle agglomerates. Journal of Nanoparticle Research, 2016, 18, 200.	1.9	26
86	Enhanced thermal degradation stability of the Sr <sub>2</sub> Si <sub>5</sub> N <sub>8</sub> :Eu <sup>2+</sup> phosphor by ultra-thin Al <sub>2</sub> O <sub>3</sub> coating through the atomic layer deposition technique in a fluidized bed reactor. Journal of Materials Chemistry C, 2019, 7, 5772-5781.	5.5	26
87	Fluidization dynamics of cohesive Geldart B particles. Part I: X-ray tomography analysis. Chemical Engineering Journal, 2019, 359, 1024-1034.	12.7	26
88	Bubble size reduction in electric-field-enhanced fluidized beds. Journal of Electrostatics, 2005, 63, 943-948.	1.9	25
89	Insights in distributed secondary gas injection in a bubbling fluidized bed via discrete particle simulations. Powder Technology, 2008, 183, 454-466.	4.2	25
90	Numerical optimization of a structured tubular reactor for Fischer–Tropsch synthesis. Chemical Engineering Journal, 2016, 283, 1465-1483.	12.7	25

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91	Controlled Pulmonary Delivery of Carrier-Free Budesonide Dry Powder by Atomic Layer Deposition. ACS Nano, 2021, 15, 6684-6698.	14.6	25
92	Power-law distribution of pressure fluctuations in multiphase flow. Physical Review E, 2003, 67, 041305.	2.1	24
93	Characterization of the void size distribution in fluidized beds using statistics of pressure fluctuations. Powder Technology, 2005, 160, 81-92.	4.2	24
94	Intensification of co-current gas–liquid reactors using structured catalytic packings: A multiscale approach. Catalysis Today, 2009, 147, S138-S143.	4.4	24
95	Scalable gas-phase processes to create nanostructured particles. Particuology, 2010, 8, 572-577.	3.6	23
96	Dynamics of Single Rising Bubbles in Neutrally Buoyant Liquid-Solid Suspensions. Physical Review Letters, 2013, 110, 244501.	7.8	23
97	Effective coating of titania nanoparticles with alumina via atomic layer deposition. Applied Surface Science, 2017, 426, 480-496.	6.1	23
98	Atomic scale surface engineering of micro- to nano-sized pharmaceutical particles for drug delivery applications. Nanoscale, 2017, 9, 11410-11417.	5.6	23
99	Atomic Layer Deposition of ZnO on InP Quantum Dot Films for Charge Separation, Stabilization, and Solar Cell Formation. Advanced Materials Interfaces, 2020, 7, 1901600.	3.7	23
100	Fluidization dynamics of cohesive Geldart B particles. Part II: Pressure fluctuation analysis. Chemical Engineering Journal, 2019, 368, 627-638.	12.7	22
101	Improved thermal energy storage of nanoencapsulated phase change materials by atomic layer deposition. Solar Energy Materials and Solar Cells, 2020, 206, 110322.	6.2	22
102	Measurement of charge distribution around a rising bubble in a 2-D fluidized bed. AICHE Journal, 2006, 52, 174-184.	3.6	21
103	Case studies for selective agglomeration detection in fluidized beds: Application of a new screening methodology. Powder Technology, 2010, 203, 148-166.	4.2	21
104	Scale-up of fluidized beds with vertical internals: Studying the sectoral approach by means of optical probes. Chemical Engineering Journal, 2014, 252, 131-140.	12.7	21
105	Quantification of powder wetting by drop penetration time. Powder Technology, 2015, 274, 62-66.	4.2	21
106	Influence of composition and structure on the thermal quenching of the 5d–4f emission of Eu <sup>2+</sup> doped M–Si–N (M = alkali, alkaline earth, rare earth) nitridosilicates. Journal of Materials Chemistry C, 2019, 7, 6289-6300.	5.5	21
107	Universal stability curve for pattern formation in pulsed gas-solid fluidized beds of sandlike particles. Physical Review Fluids, 2018, 3, .	2.5	21
108	Local and global hydrodynamics in a two-phase internal loop airlift. Chemical Engineering Science, 2007, 62, 7068-7077.	3.8	20

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109	Effect of Distributor Design on the Bottom Zone Hydrodynamics in a Fluidized Bed Dryer Using 1-D X-ray Densitometry Imaging. Industrial & Engineering Chemistry Research, 2009, 48, 7004-7015.	3.7	20
110	Radial Bubble Distribution in a Fluidized Bed with Vertical Tubes. Industrial & Engineering Chemistry Research, 2012, 51, 13815-13824.	3.7	20
111	Drug powders with tunable wettability by atomic and molecular layer deposition: From highly hydrophilic to superhydrophobic. Applied Materials Today, 2021, 22, 100945.	4.3	20
112	Effect of particle lyophobicity in slurry bubble columns at elevated pressures. Chemical Engineering Science, 2007, 62, 5533-5537.	3.8	19
113	Methodology for the Screening of Signal Analysis Methods for Selective Detection of Hydrodynamic Changes in Fluidized Bed Systems. Industrial & Engineering Chemistry Research, 2009, 48, 3158-3166.	3.7	19
114	Gas Fraction and Bubble Dynamics in Structured Slurry Bubble Columns. Industrial & Engineering Chemistry Research, 2010, 49, 10689-10697.	3.7	19
115	Low-temperature atomic layer deposition delivers more active and stable Pt-based catalysts. Nanoscale, 2017, 9, 10802-10810.	5.6	19
116	Comparison of genetic algorithm and algebraic reconstruction for X-ray tomography in bubbling fluidized beds. Powder Technology, 2014, 253, 626-637.	4.2	18
117	Flowability characterization of nanopowders. Powder Technology, 2015, 286, 156-163.	4.2	18
118	Characterization of fluidized nanoparticle agglomerates by using adhesive CFD-DEM simulation. Powder Technology, 2016, 304, 198-207.	4.2	18
119	Tuning roughness and gloss of powder coating paint by encapsulating the coating particles with thin Al 2 O 3 films. Powder Technology, 2017, 318, 401-410.	4.2	18
120	Nanoengineering of Crystal and Amorphous Surfaces of Pharmaceutical Particles for Biomedical Applications. ACS Applied Bio Materials, 2019, 2, 1518-1530.	4.6	17
121	Thermal atomic layer deposition of gold nanoparticles: controlled growth and size selection for photocatalysis. Nanoscale, 2020, 12, 9005-9013.	5.6	17
122	Fluorocarbon Coatings Deposited on Micronâ€ <b>s</b> ized Particles by Atmospheric PECVD. Plasma Processes and Polymers, 2012, 9, 217-224.	3.0	16
123	Controlled Growth of Palladium Nanoparticles on Graphene Nanoplatelets via Scalable Atmospheric Pressure Atomic Layer Deposition. Journal of Physical Chemistry C, 2016, 120, 8832-8840.	3.1	16
124	Improving heat transfer of stabilised thermal oil-based tin nanofluids using biosurfactant and molecular layer deposition. Applied Thermal Engineering, 2020, 178, 115559.	6.0	16
125	A settling tube to determine the terminal velocity and size distribution of fluidized nanoparticle agglomerates. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	15
126	Synthesis of a nanosilica supported CO2 sorbent in a fluidized bed reactor. Applied Surface Science, 2015, 328, 548-553.	6.1	15

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127	X-ray measurements on the influence of optical probes on gas–solid fluidized beds. International Journal of Multiphase Flow, 2015, 74, 143-147.	3.4	15
128	Influence of vertical heat exchanger tubes, their arrangement and the column diameter on the hydrodynamics in a gas–solid bubbling fluidized bed. International Journal of Multiphase Flow, 2017, 97, 46-59.	3.4	15
129	Minimum pickup velocity (U pu) of nanoparticles in gas–solid pneumatic conveying. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	14
130	Controlled release from protein particles encapsulated by molecular layer deposition. Chemical Communications, 2015, 51, 12540-12543.	4.1	14
131	Accelerating Natural CO <sub>2</sub> Mineralization in a Fluidized Bed. Industrial & Engineering Chemistry Research, 2016, 55, 2946-2951.	3.7	14
132	Contact Forces between Single Metal Oxide Nanoparticles in Gas-Phase Applications and Processes. Langmuir, 2017, 33, 2477-2484.	3.5	14
133	Bubble Size Reduction in a Fluidized Bed by Electric Fields. International Journal of Chemical Reactor Engineering, 2003, 1, .	1.1	13
134	Evaluation of a sectoral scaling approach for bubbling fluidized beds with vertical internals. Chemical Engineering Journal, 2012, 197, 435-439.	12.7	13
135	Enhanced Barrier Performance of Engineered Paper by Atomic Layer Deposited Al <sub>2</sub> O <sub>3</sub> Thin Films. ACS Applied Materials & Interfaces, 2016, 8, 13590-13600.	8.0	13
136	Modeling the size distribution in a fluidized bed of nanopowder. Powder Technology, 2017, 312, 347-353.	4.2	13
137	Long-term fluidization of titania nanoparticle agglomerates. Powder Technology, 2017, 316, 441-445.	4.2	13
138	Fluidization of spherical versus elongated particles - experimental investigation using X-ray tomography. Chemical Engineering Journal, 2020, 397, 125203.	12.7	13
139	Gas Phase Modification of Silica Nanoparticles in a Fluidized Bed: Tailored Deposition of Aminopropylsiloxane. Langmuir, 2021, 37, 4481-4492.	3.5	13
140	Monitoring Fluidization by Dynamic Pressure Analysis. Chemical Engineering and Technology, 1999, 22, 773.	1.5	12
141	Prevention of flooding in a countercurrent trickle-bed reactor using additional void space. Chemical Engineering Journal, 2008, 138, 333-340.	12.7	12
142	Analysis of pressure fluctuations in fluidized beds. I. Similarities with turbulent flow. Chemical Engineering Science, 2011, 66, 2627-2636.	3.8	12
143	Bubbles scatter light, yet that does not hurt the performance of bubbly slurry photocatalytic reactors. Chemical Engineering Science, 2013, 100, 506-514.	3.8	12
144	Improved Blueâ€Emitting AlN:Eu <sup>2+</sup> Phosphors by Alloying with GaN. Journal of the American Ceramic Society, 2015, 98, 3897-3904.	3.8	12

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145	Modelâ€Based Optimization of a Photocatalytic Reactor with Lightâ€Emitting Diodes. Chemical Engineering and Technology, 2016, 39, 1946-1954.	1.5	12
146	Sub-nanoscale Surface Engineering of TiO <sub>2</sub> Nanoparticles by Molecular Layer Deposition of Poly(ethylene terephthalate) for Suppressing Photoactivity and Enhancing Dispersibility. ACS Applied Nano Materials, 2020, 3, 6737-6748.	5.0	12
147	Safe-by-Design in Engineering: An Overview and Comparative Analysis of Engineering Disciplines. International Journal of Environmental Research and Public Health, 2021, 18, 6329.	2.6	12
148	Mechanistic insight into the improved photocatalytic degradation of dyes for an ultrathin coating of SiO2 on TiO2 (P25) nanoparticles. Chemical Engineering Journal Advances, 2022, 10, 100288.	5.2	12
149	Early detection of foam formation in bubble columns by attractor comparison. AICHE Journal, 2003, 49, 2442-2444.	3.6	11
150	A hybrid tomographic reconstruction algorithm for high speed X-ray tomography. Computer Physics Communications, 2015, 196, 27-35.	7.5	11
151	Characterization of the Stratified Morphology of Nanoparticle Agglomerates. Journal of Physical Chemistry C, 2016, 120, 20446-20453.	3.1	11
152	Dynamic analysis of the scale-up of fluidized beds. Advanced Powder Technology, 2017, 28, 2621-2629.	4.1	11
153	Ceneration and evaluation of an artificial optical signal based on X-ray measurements for bubble characterization in fluidized beds with vertical internals. International Journal of Multiphase Flow, 2018, 107, 16-32.	3.4	11
154	The Multiresonant Hamiltonian Model and Polyad Quantum Numbers for Highly Excited Vibrational States. ACS Symposium Series, 1997, , 51-68.	0.5	10
155	Early Agglomeration Recognition System (EARS). , 2003, , 571.		10
156	A fast reconstruction algorithm for time-resolved X-ray tomography in bubbling fluidized beds. Powder Technology, 2016, 290, 33-44.	4.2	10
157	Characterization of TiO 2 nanoparticles fluidization using X-ray imaging and pressure signals. Powder Technology, 2017, 316, 446-454.	4.2	10
158	On the hydrodynamics of membrane assisted fluidized bed reactors using X-ray analysis. Chemical Engineering and Processing: Process Intensification, 2017, 122, 508-522.	3.6	10
159	Transition of Emission Colours as a Consequence of Heat-Treatment of Carbon Coated Ce3+-Doped YAG Phosphors. Materials, 2017, 10, 1180.	2.9	10
160	Oriented Attachment and Nanorod Formation in Atomic Layer Deposition of TiO <sub>2</sub> on Graphene Nanoplatelets. Journal of Physical Chemistry C, 2018, 122, 19981-19991.	3.1	10
161	Towards monitoring electrostatics in gas–solid fluidized beds. Canadian Journal of Chemical Engineering, 2008, 86, 493-505.	1.7	9
162	Optimizing off-lattice Diffusion-Limited Aggregation. Computer Physics Communications, 2014, 185, 841-846.	7.5	9

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163	Enhancing the activation of silicon carbide tracer particles for PEPT applications using gas-phase deposition of alumina at room temperature and atmospheric pressure. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 807, 108-113.	1.6	9
164	The application of automated feedback and feedforward control to a LED-based photocatalytic reactor. Chemical Engineering Journal, 2019, 362, 375-382.	12.7	9
165	Atomic Layer Deposition of Al <sub>2</sub> O <sub>3</sub> Using Aluminum Triisopropoxide (ATIP): A Combined Experimental and Theoretical Study. Journal of Physical Chemistry C, 2019, 123, 485-494.	3.1	9
166	Controlled growth of ultrasmall Cu <sub>2</sub> O clusters on TiO <sub>2</sub> nanoparticles by atmospheric-pressure atomic layer deposition for enhanced photocatalytic activity. Nanotechnology, 2021, 32, 425601.	2.6	9
167	Selectivity Enhancement for Ruthenium Atomic Layer Deposition in Subâ€50Ânm Nanopatterns by Diffusion and Sizeâ€Dependent Reactivity. Advanced Materials Interfaces, 2021, 8, 2100846.	3.7	9
168	Estimation of the overall mass flux in inclined standpipes by means of pressure fluctuation measurements. Chemical Engineering Journal, 2012, 204-206, 125-130.	12.7	8
169	Time-resolved characterization of a flat-base spouted bed with a high speed X-ray system. Chemical Engineering Journal, 2014, 254, 143-152.	12.7	8
170	Gas distribution of a downward micro-nozzle assisted fluidized bed of fine powder. Chemical Engineering Journal, 2015, 264, 945-953.	12.7	8
171	Aluminum tri-isopropoxide as an alternative precursor for atomic layer deposition of aluminum oxide thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	2.1	8
172	Dual promotional effect of Cu <sub><i>x</i></sub> O clusters grown with atomic layer deposition on TiO <sub>2</sub> for photocatalytic hydrogen production. Catalysis Science and Technology, 2022, 12, 4511-4523.	4.1	8
173	Monitoring slurry-loop reactors for early detection of hydrodynamic instabilities. Chemical Engineering and Processing: Process Intensification, 2005, 44, 959-968.	3.6	7
174	A convection-based single-parameter model for heat transport in multiphase tubular reactors packed with closed cross flow structures. Chemical Engineering Journal, 2013, 233, 265-273.	12.7	7
175	Minimum pickup velocity: The transition between nanoâ€scale and microâ€scale. AICHE Journal, 2017, 63, 1512-1519.	3.6	7
176	The application of atomic layer deposition in the production of sorbents for 99Mo/99mTc generator. Applied Radiation and Isotopes, 2020, 164, 109266.	1.5	7
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