

J Ruud Van Ommen

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

204
papers

5,023
citations

35
h-index

59
g-index

211
ext. papers

5,684
ext. citations

5.8
avg, IF

5.9
L-index

#	Paper	IF	Citations
204	Elutriation and agglomerate size distribution in a silica nanoparticle vibro-fluidized bed. <i>Chemical Engineering Journal</i> , 2022 , 434, 134654	14.7	1
203	Safe-and-Sustainable-by-Design Framework Based on a Prospective Life Cycle Assessment: Lessons Learned from a Nano-Titanium Dioxide Case Study.. <i>International Journal of Environmental Research and Public Health</i> , 2022 , 19,	4.6	3
202	Mechanistic insight into the improved photocatalytic degradation of dyes for an ultrathin coating of SiO ₂ on TiO ₂ (P25) nanoparticles. <i>Chemical Engineering Journal Advances</i> , 2022 , 10, 100288	3.6	1
201	Selectivity Enhancement for Ruthenium Atomic Layer Deposition in Sub-50nm Nanopatterns by Diffusion and Size-Dependent Reactivity. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2100846	4.6	2
200	Drug powders with tunable wettability by atomic and molecular layer deposition: From highly hydrophilic to superhydrophobic. <i>Applied Materials Today</i> , 2021 , 22, 100945	6.6	6
199	Gas Phase Modification of Silica Nanoparticles in a Fluidized Bed: Tailored Deposition of Aminopropylsiloxane. <i>Langmuir</i> , 2021 , 37, 4481-4492	4	2
198	Safe-by-Design in Engineering: An Overview and Comparative Analysis of Engineering Disciplines. <i>International Journal of Environmental Research and Public Health</i> , 2021 , 18,	4.6	1
197	Controlled growth of ultrasmall CuO clusters on TiO ₂ nanoparticles by atmospheric-pressure atomic layer deposition for enhanced photocatalytic activity. <i>Nanotechnology</i> , 2021 , 32,	3.4	2
196	Static and Dynamic Stickiness Tests to Measure Particle Stickiness. <i>KONA Powder and Particle Journal</i> , 2021 , 38, 26-41	3.4	2
195	Fluidization of fine lactose for dry powder inhalation: A comparison of assisting methods. <i>Canadian Journal of Chemical Engineering</i> , 2021 , 99, 1696-1705	2.3	0
194	Controlled Pulmonary Delivery of Carrier-Free Budesonide Dry Powder by Atomic Layer Deposition. <i>ACS Nano</i> , 2021 , 15, 6684-6698	16.7	5
193	X-ray tomography analysis of bubbles and slugs in a fluidized bed with inter-particle force. <i>International Journal of Multiphase Flow</i> , 2021 , 145, 103835	3.6	0
192	Multitarget Evaluation of the Photocatalytic Activity of P25-SiO ₂ Prepared by Atomic Layer Deposition. <i>Catalysts</i> , 2020 , 10, 450	4	1
191	Improving heat transfer of stabilised thermal oil-based tin nanofluids using biosurfactant and molecular layer deposition. <i>Applied Thermal Engineering</i> , 2020 , 178, 115559	5.8	8
190	Sub-nanoscale Surface Engineering of TiO ₂ Nanoparticles by Molecular Layer Deposition of Poly(ethylene terephthalate) for Suppressing Photoactivity and Enhancing Dispersibility. <i>ACS Applied Nano Materials</i> , 2020 , 3, 6737-6748	5.6	5
189	Assessing the Role of Pt Clusters on TiO ₂ (P25) on the Photocatalytic Degradation of Acid Blue 9 and Rhodamine B. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 8269-8278	3.8	13
188	Thermal atomic layer deposition of gold nanoparticles: controlled growth and size selection for photocatalysis. <i>Nanoscale</i> , 2020 , 12, 9005-9013	7.7	7

187	Fluidization of spherical versus elongated particles - experimental investigation using X-ray tomography. <i>Chemical Engineering Journal</i> , 2020 , 397, 125203	14.7	3
186	Lutetium coating of nanoparticles by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020 , 38, 022414	2.9	2
185	Atomic Layer Deposition of ZnO on InP Quantum Dot Films for Charge Separation, Stabilization, and Solar Cell Formation. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1901600	4.6	14
184	Cu enrichment using the Szilard-Chalmers effect - The influence of dose. <i>Applied Radiation and Isotopes</i> , 2020 , 160, 109135	1.7	
183	Nature-inspired self-cleaning surfaces: Mechanisms, modelling, and manufacturing. <i>Chemical Engineering Research and Design</i> , 2020 , 155, 48-65	5.5	32
182	Improved thermal energy storage of nanoencapsulated phase change materials by atomic layer deposition. <i>Solar Energy Materials and Solar Cells</i> , 2020 , 206, 110322	6.4	10
181	Tuning the photocatalytic activity of TiO ₂ nanoparticles by ultrathin SiO ₂ films grown by low-temperature atmospheric pressure atomic layer deposition. <i>Applied Surface Science</i> , 2020 , 530, 147244	6.7	14
180	Area-Selective Deposition of Ruthenium by Area-Dependent Surface Diffusion. <i>Chemistry of Materials</i> , 2020 , 32, 9560-9572	9.6	14
179	Synthesis of a Rationally Designed Multi-Component Photocatalyst Pt:SiO:TiO(P25) with Improved Activity for Dye Degradation by Atomic Layer Deposition. <i>Nanomaterials</i> , 2020 , 10,	5.4	1
178	The application of atomic layer deposition in the production of sorbents for Mo/Tc generator. <i>Applied Radiation and Isotopes</i> , 2020 , 164, 109266	1.7	3
177	Moving reaction fronts in fractal nanoparticle agglomerates. <i>Chemical Engineering Science</i> , 2019 , 206, 180-186	4.4	2
176	Influence of composition and structure on the thermal quenching of the 5d ⁴ f emission of Eu ²⁺ -doped M ₂ Si ₂ N ₈ (M = alkali, alkaline earth, rare earth) nitridosilicates. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 6289-6300	7.1	14
175	Enhanced thermal degradation stability of the Sr ₂ Si ₅ N ₈ :Eu ²⁺ phosphor by ultra-thin Al ₂ O ₃ coating through the atomic layer deposition technique in a fluidized bed reactor. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 5772-5781	7.1	14
174	Photocatalytic Reactor Design: Guidelines for Kinetic Investigation. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 5349-5357	3.9	29
173	Nanoengineering of Crystal and Amorphous Surfaces of Pharmaceutical Particles for Biomedical Applications.. <i>ACS Applied Bio Materials</i> , 2019 , 2, 1518-1530	4.1	11
172	Aluminum tri-isopropoxide as an alternative precursor for atomic layer deposition of aluminum oxide thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019 , 37, 040901	2.9	3
171	Effects of Surface Modification on Optical Properties and Thermal Stability of K ₂ SiF ₆ :Mn ⁴⁺ Red Phosphors by Deposition of an Ultrathin Al ₂ O ₃ Layer Using Gas-Phase Deposition in a Fluidized Bed Reactor. <i>ECS Journal of Solid State Science and Technology</i> , 2019 , 8, R88-R96	2	16
170	Structured millichannel multiphase reactors. <i>Computer Aided Chemical Engineering</i> , 2019 , 46, 1789-1794	0.6	1

169	Fluidization dynamics of cohesive Geldart B particles. Part II: Pressure fluctuation analysis. <i>Chemical Engineering Journal</i> , 2019 , 368, 627-638	14.7	10
168	Scalable manufacturing of nanostructured materials by atomic layer deposition in fluidized bed reactors. <i>Computer Aided Chemical Engineering</i> , 2019 , 403-408	0.6	3
167	The application of automated feedback and feedforward control to a LED-based photocatalytic reactor. <i>Chemical Engineering Journal</i> , 2019 , 362, 375-382	14.7	8
166	Fluidization dynamics of cohesive Geldart B particles. Part I: X-ray tomography analysis. <i>Chemical Engineering Journal</i> , 2019 , 359, 1024-1034	14.7	12
165	Atomic Layer Deposition of Al ₂ O ₃ Using Aluminum Triisopropoxide (ATIP): A Combined Experimental and Theoretical Study. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 485-494	3.8	5
164	Dependence of the photoluminescence properties of Eu ²⁺ doped M ₂ Si ₂ N ₆ (M = alkali, alkaline earth or rare earth metal) nitridosilicates on their structure and composition. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 5671-5683	7.1	19
163	Protecting the MoSi ₂ healing particles for thermal barrier coatings using a sol-gel produced Al ₂ O ₃ coating. <i>Journal of the European Ceramic Society</i> , 2018 , 38, 2728-2734	6	23
162	Nanoparticle sintering in atomic layer deposition of supported catalysts: Kinetic modeling of the size distribution. <i>Catalysis Today</i> , 2018 , 316, 51-61	5.3	34
161	Generation and evaluation of an artificial optical signal based on X-ray measurements for bubble characterization in fluidized beds with vertical internals. <i>International Journal of Multiphase Flow</i> , 2018 , 107, 16-32	3.6	9
160	Spatial, temporal and quantitative assessment of catalyst leaching in continuous flow. <i>Catalysis Today</i> , 2018 , 308, 64-70	5.3	23
159	Design, characterization and model validation of a LED-based photocatalytic reactor for gas phase applications. <i>Chemical Engineering Journal</i> , 2018 , 333, 456-466	14.7	18
158	Suppressing the Photocatalytic Activity of TiO ₂ Nanoparticles by Extremely Thin Al ₂ O ₃ Films Grown by Gas-Phase Deposition at Ambient Conditions. <i>Nanomaterials</i> , 2018 , 8,	5.4	23
157	Oriented Attachment and Nanorod Formation in Atomic Layer Deposition of TiO ₂ on Graphene Nanoplatelets. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 19981-19991	3.8	10
156	Universal stability curve for pattern formation in pulsed gas-solid fluidized beds of sandlike particles. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	14
155	Diffusion-Mediated Growth and Size-Dependent Nanoparticle Reactivity during Ruthenium Atomic Layer Deposition on Dielectric Substrates. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800870	4.6	37
154	Characterization of TiO ₂ nanoparticles fluidization using X-ray imaging and pressure signals. <i>Powder Technology</i> , 2017 , 316, 446-454	5.2	6
153	Modeling the size distribution in a fluidized bed of nanopowder. <i>Powder Technology</i> , 2017 , 312, 347-353	5.2	7
152	Modeling the size distribution in a fluidized bed of nanopowder. <i>Environmental Science: Nano</i> , 2017 , 4, 670-678	7.1	4

151	Contact Forces between Single Metal Oxide Nanoparticles in Gas-Phase Applications and Processes. <i>Langmuir</i> , 2017 , 33, 2477-2484	4	10
150	Minimum pickup velocity: The transition between nano-scale and micro-scale. <i>AIChE Journal</i> , 2017 , 63, 1512-1519	3.6	6
149	Understanding and Controlling the Aggregative Growth of Platinum Nanoparticles in Atomic Layer Deposition: An Avenue to Size Selection. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 975-983	6.4	75
148	Room-temperature pulsed CVD-grown SiO ₂ protective layer on TiO ₂ particles for photocatalytic activity suppression. <i>RSC Advances</i> , 2017 , 7, 4547-4554	3.7	23
147	Tuning roughness and gloss of powder coating paint by encapsulating the coating particles with thin Al ₂ O ₃ films. <i>Powder Technology</i> , 2017 , 318, 401-410	5.2	16
146	Long-term fluidization of titania nanoparticle agglomerates. <i>Powder Technology</i> , 2017 , 316, 441-445	5.2	5
145	Simulation of atomic layer deposition on nanoparticle agglomerates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 01B116	2.9	3
144	Review Article: Recommended reading list of early publications on atomic layer deposition Outcome of the Virtual Project on the History of ALD <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 010801	2.9	55
143	Effective coating of titania nanoparticles with alumina via atomic layer deposition. <i>Applied Surface Science</i> , 2017 , 426, 480-496	6.7	17
142	On the hydrodynamics of membrane assisted fluidized bed reactors using X-ray analysis. <i>Chemical Engineering and Processing: Process Intensification</i> , 2017 , 122, 508-522	3.7	7
141	Dynamic analysis of the scale-up of fluidized beds. <i>Advanced Powder Technology</i> , 2017 , 28, 2621-2629	4.6	8
140	Influence of vertical heat exchanger tubes, their arrangement and the column diameter on the hydrodynamics in a gas-solid bubbling fluidized bed. <i>International Journal of Multiphase Flow</i> , 2017 , 97, 46-59	3.6	9
139	Low-temperature atomic layer deposition delivers more active and stable Pt-based catalysts. <i>Nanoscale</i> , 2017 , 9, 10802-10810	7.7	15
138	Atomic scale surface engineering of micro- to nano-sized pharmaceutical particles for drug delivery applications. <i>Nanoscale</i> , 2017 , 9, 11410-11417	7.7	18
137	Advances in scalable gas-phase manufacturing and processing of nanostructured solids: A review. <i>Particuology</i> , 2017 , 30, 15-39	2.8	23
136	Transition of Emission Colours as a Consequence of Heat-Treatment of Carbon Coated Ce-Doped YAG Phosphors. <i>Materials</i> , 2017 , 10,	3.5	9
135	Characterization of the Stratified Morphology of Nanoparticle Agglomerates. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 20446-20453	3.8	9
134	Contact mechanics of highly porous oxide nanoparticle agglomerates. <i>Journal of Nanoparticle Research</i> , 2016 , 18, 200	2.3	20

133	An adhesive CFD-DEM model for simulating nanoparticle agglomerate fluidization. <i>AIChE Journal</i> , 2016 , 62, 2259-2270	3.6	29
132	Enhancing the activation of silicon carbide tracer particles for PEPT applications using gas-phase deposition of alumina at room temperature and atmospheric pressure. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2016 , 807, 108-113	1.2	7
131	Intriguing luminescence properties of (Ba, Sr) ₃ Si ₆ O ₉ N ₄ : Eu ²⁺ phosphors via modifying synthesis method and cation substitution. <i>Journal of Alloys and Compounds</i> , 2016 , 682, 481-488	5.7	28
130	A fast reconstruction algorithm for time-resolved X-ray tomography in bubbling fluidized beds. <i>Powder Technology</i> , 2016 , 290, 33-44	5.2	7
129	Accelerating Natural CO ₂ Mineralization in a Fluidized Bed. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 2946-2951	3.9	11
128	Enhanced Optical Performance of BaMgAl ₁₀ O ₁₇ :Eu ²⁺ Phosphor by a Novel Method of Carbon Coating. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 2355-2361	3.8	47
127	Numerical optimization of a structured tubular reactor for Fischer-Tropsch synthesis. <i>Chemical Engineering Journal</i> , 2016 , 283, 1465-1483	14.7	21
126	Atomic and molecular layer deposition: off the beaten track. <i>Chemical Communications</i> , 2016 , 53, 45-71	5.8	128
125	Model-Based Optimization of a Photocatalytic Reactor with Light-Emitting Diodes. <i>Chemical Engineering and Technology</i> , 2016 , 39, 1946-1954	2	9
124	Direct simulation Monte Carlo calculation of rarefied gas drag using an immersed boundary method 2016 ,		1
123	Correlating bubble size and velocity distribution in bubbling fluidized bed based on X-ray tomography. <i>Chemical Engineering Journal</i> , 2016 , 298, 17-25	14.7	24
122	Controlled Growth of Palladium Nanoparticles on Graphene Nanoplatelets via Scalable Atmospheric Pressure Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 8832-8840	3.8	15
121	Deposition Mechanism of Aluminum Oxide on Quantum Dot Films at Atmospheric Pressure and Room Temperature. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 4266-4275	3.8	26
120	Enhanced Barrier Performance of Engineered Paper by Atomic Layer Deposited Al ₂ O ₃ Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 13590-600	9.5	12
119	Characterization of fluidized nanoparticle agglomerates by using adhesive CFD-DEM simulation. <i>Powder Technology</i> , 2016 , 304, 198-207	5.2	11
118	Performance improvement by alumina coatings on Y ₃ Al ₅ O ₁₂ :Ce ³⁺ phosphor powder deposited using atomic layer deposition in a fluidized bed reactor. <i>RSC Advances</i> , 2016 , 6, 76454-76462	3.7	23
117	A hybrid tomographic reconstruction algorithm for high speed X-ray tomography. <i>Computer Physics Communications</i> , 2015 , 196, 27-35	4.2	7
116	X-ray measurements on the influence of optical probes on gas-solid fluidized beds. <i>International Journal of Multiphase Flow</i> , 2015 , 74, 143-147	3.6	14

115	Controlled release from protein particles encapsulated by molecular layer deposition. <i>Chemical Communications</i> , 2015 , 51, 12540-3	5.8	11
114	Gas-Phase Deposition of Ultrathin Aluminium Oxide Films on Nanoparticles at Ambient Conditions. <i>Materials</i> , 2015 , 8, 1249-1263	3.5	33
113	Influence of vertical internals on a bubbling fluidized bed characterized by X-ray tomography. <i>International Journal of Multiphase Flow</i> , 2015 , 75, 237-249	3.6	33
112	Gas distribution of a downward micro-nozzle assisted fluidized bed of fine powder. <i>Chemical Engineering Journal</i> , 2015 , 264, 945-953	14.7	6
111	X-ray measurements of bubble hold-up in fluidized beds with and without vertical internals. <i>International Journal of Multiphase Flow</i> , 2015 , 74, 118-124	3.6	29
110	Geopolymer Coating of Bacteria-containing Granules for Use in Self-healing Concrete. <i>Procedia Engineering</i> , 2015 , 102, 475-484		50
109	Continuous production of nanostructured particles using spatial atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015 , 33, 021513	2.9	34
108	Structuring catalyst and reactor in an inviting avenue to process intensification. <i>Catalysis Science and Technology</i> , 2015 , 5, 807-817	5.5	94
107	Quantification of powder wetting by drop penetration time. <i>Powder Technology</i> , 2015 , 274, 62-66	5.2	18
106	Minimum pickup velocity (U_{pu}) of nanoparticles in gas-solid pneumatic conveying. <i>Journal of Nanoparticle Research</i> , 2015 , 17, 1	2.3	11
105	Improved Blue-Emitting AlN:Eu ²⁺ Phosphors by Alloying with GaN. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 3897-3904	3.8	11
104	Flowability characterization of nanopowders. <i>Powder Technology</i> , 2015 , 286, 156-163	5.2	15
103	Synthesis of a nanosilica supported CO ₂ sorbent in a fluidized bed reactor. <i>Applied Surface Science</i> , 2015 , 328, 548-553	6.7	12
102	Transformation of local bubble rise velocity measurements to global results: Shown by a Monte Carlo simulation of a fluidized bed. <i>International Journal of Multiphase Flow</i> , 2015 , 70, 89-95	3.6	4
101	Modeling the precursor utilization in atomic layer deposition on nanostructured materials in fluidized bed reactors. <i>Chemical Engineering Journal</i> , 2015 , 268, 384-398	14.7	37
100	Scale-up study of a multiphase photocatalytic reactor--degradation of cyanide in water over TiO ₂ . <i>Environmental Science & Technology</i> , 2014 , 48, 1574-81	10.3	37
99	Comparison of genetic algorithm and algebraic reconstruction for X-ray tomography in bubbling fluidized beds. <i>Powder Technology</i> , 2014 , 253, 626-637	5.2	16
98	Scale-up of fluidized beds with vertical internals: Studying the sectoral approach by means of optical probes. <i>Chemical Engineering Journal</i> , 2014 , 252, 131-140	14.7	18

97	Numerical Validation of a Simplified Engineering Approach for Heat Transfer in a Closed-Cross-Flow Structured Tubular Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 16579-16585	3.9	5
96	Multidimensional nature of fluidized nanoparticle agglomerates. <i>Langmuir</i> , 2014 , 30, 12696-702	4	30
95	The fractal scaling of fluidized nanoparticle agglomerates. <i>Chemical Engineering Science</i> , 2014 , 112, 79-86	4.4	47
94	Optimizing off-lattice Diffusion-Limited Aggregation. <i>Computer Physics Communications</i> , 2014 , 185, 841-846	4.6	8
93	Time-resolved characterization of a flat-base spouted bed with a high speed X-ray system. <i>Chemical Engineering Journal</i> , 2014 , 254, 143-152	14.7	7
92	Reactors 2014 , 159-183		
91	Scalable Production of Nanostructured Particles using Atomic Layer Deposition. <i>KONA Powder and Particle Journal</i> , 2014 , 31, 234-246	3.4	22
90	Synthesis Gas Utilization for Transportation Fuel Production 2014 , 525-546		0
89	Processes 2014 , 184-229		
88	Diffusion limitations in stagnant photocatalytic reactors. <i>Chemical Engineering Journal</i> , 2014 , 247, 314-319	4.7	2
87	A settling tube to determine the terminal velocity and size distribution of fluidized nanoparticle agglomerates. <i>Journal of Nanoparticle Research</i> , 2014 , 16, 1	2.3	13
86	The role of the hydrogen bond in dense nanoparticle-gas suspensions. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 5788-93	3.6	49
85	Process intensification of tubular reactors: Considerations on catalyst hold-up of structured packings. <i>Catalysis Today</i> , 2013 , 216, 111-116	5.3	25
84	A model to estimate the size of nanoparticle agglomerates in gas-solid fluidized beds. <i>Journal of Nanoparticle Research</i> , 2013 , 15, 1	2.3	26
83	Fast X-ray tomography for the quantification of the bubbling-, turbulent- and fast fluidization-flow regimes and void structures. <i>Chemical Engineering Journal</i> , 2013 , 234, 437-447	14.7	30
82	Selectivity of the Fischer-Tropsch process: deviations from single alpha product distribution explained by gradients in process conditions. <i>Catalysis Science and Technology</i> , 2013 , 3, 2210	5.5	27
81	A convection-based single-parameter model for heat transport in multiphase tubular reactors packed with closed cross flow structures. <i>Chemical Engineering Journal</i> , 2013 , 233, 265-273	14.7	7
80	Bubbles scatter light, yet that does not hurt the performance of bubbly slurry photocatalytic reactors. <i>Chemical Engineering Science</i> , 2013 , 100, 506-514	4.4	10

79	Atomic layer deposition of platinum clusters on titania nanoparticles at atmospheric pressure. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 4647	13	60
78	Dynamics of single rising bubbles in neutrally buoyant liquid-solid suspensions. <i>Physical Review Letters</i> , 2013 , 110, 244501	7.4	18
77	Multidimensionality in fluidized nanopowder agglomerates 2013 ,		2
76	Bubble characterization in a fluidized bed by means of optical probes. <i>International Journal of Multiphase Flow</i> , 2012 , 41, 56-67	3.6	48
75	Monte Carlo simulation of the bubble size distribution in a fluidized bed with intrusive probes. <i>International Journal of Multiphase Flow</i> , 2012 , 44, 1-14	3.6	28
74	Scale-up of bubbling fluidized bed reactors □A review. <i>Powder Technology</i> , 2012 , 217, 21-38	5.2	129
73	Fluidization of nanopowders: a review. <i>Journal of Nanoparticle Research</i> , 2012 , 14, 737	2.3	135
72	Effects of pressure and fines content on bubble diameter in a fluidized bed studied using fast X-ray tomography. <i>Chemical Engineering Journal</i> , 2012 , 207-208, 711-717	14.7	51
71	Photocatalytic-reactor efficiencies and simplified expressions to assess their relevance in kinetic experiments. <i>Chemical Engineering Journal</i> , 2012 , 207-208, 607-615	14.7	33
70	Bubble Characterization in a Fluidized Bed with Vertical Tubes. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 4748-4758	3.9	27
69	Radial Bubble Distribution in a Fluidized Bed with Vertical Tubes. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 13815-13824	3.9	18
68	Evaluation of a sectoral scaling approach for bubbling fluidized beds with vertical internals. <i>Chemical Engineering Journal</i> , 2012 , 197, 435-439	14.7	10
67	Estimation of the overall mass flux in inclined standpipes by means of pressure fluctuation measurements. <i>Chemical Engineering Journal</i> , 2012 , 204-206, 125-130	14.7	7
66	Intensifying the Fischer-Tropsch Synthesis by reactor structuring □A model study. <i>Chemical Engineering Journal</i> , 2012 , 207-208, 865-870	14.7	24
65	Enhanced Particle Mixing in Pulsed Fluidized Beds and the Effect of Internals. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 1713-1720	3.9	31
64	Fluorocarbon Coatings Deposited on Micron-Sized Particles by Atmospheric PECVD. <i>Plasma Processes and Polymers</i> , 2012 , 9, 217-224	3.4	16
63	Fischer-Tropsch reaction □diffusion in a cobalt catalyst particle: aspects of activity and selectivity for a variable chain growth probability. <i>Catalysis Science and Technology</i> , 2012 , 2, 1221	5.5	88
62	Heat transport in structured packings with two-phase co-current downflow. <i>Chemical Engineering Journal</i> , 2012 , 185-186, 250-266	14.7	25

61	Continuous process to deposit nanoparticles onto microparticles. <i>Chemical Engineering Journal</i> , 2012 , 181-182, 798-805	14.7	3
60	Comparison of bubble growth obtained from pressure fluctuation measurements to optical probing and literature correlations. <i>Chemical Engineering Science</i> , 2012 , 74, 266-275	4.4	30
59	Functionalization of lactose as a biological carrier for bovine serum albumin by electrospraying. <i>International Journal of Pharmaceutics</i> , 2011 , 414, 1-5	6.5	26
58	Comparison of three different methodologies of pressure signal processing to monitor fluidized-bed dryers/granulators. <i>Chemical Engineering Journal</i> , 2011 , 172, 487-499	14.7	30
57	Analysis of pressure fluctuations in fluidized beds. I. Similarities with turbulent flow. <i>Chemical Engineering Science</i> , 2011 , 66, 2627-2636	4.4	12
56	Time-series analysis of pressure fluctuations in gas-solid fluidized beds [A review]. <i>International Journal of Multiphase Flow</i> , 2011 , 37, 403-428	3.6	228
55	Agglomeration in Fluidized Bed Combustion: Mechanisms, Detection, and Counteraction 2010 , 471		
54	Gas Fraction and Bubble Dynamics in Structured Slurry Bubble Columns. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 10689-10697	3.9	16
53	Detection of agglomeration and gradual particle size changes in circulating fluidized beds. <i>Powder Technology</i> , 2010 , 202, 24-38	5.2	25
52	Intensified operation of slurry bubble columns using structured gas injection. <i>Canadian Journal of Chemical Engineering</i> , 2010 , 88, n/a-n/a	2.3	3
51	Monitoring a lab-scale fluidized bed dryer: A comparison between pressure transducers, passive acoustic emissions and vibration measurements. <i>Powder Technology</i> , 2010 , 197, 36-48	5.2	38
50	Case studies for selective agglomeration detection in fluidized beds: Application of a new screening methodology. <i>Powder Technology</i> , 2010 , 203, 148-166	5.2	20
49	Scalable gas-phase processes to create nanostructured particles. <i>Particuology</i> , 2010 , 8, 572-577	2.8	22
48	Heat transport in structured packings with co-current downflow of gas and liquid. <i>Chemical Engineering Science</i> , 2010 , 65, 420-426	4.4	25
47	The influence of the particle size distribution on fluidized bed hydrodynamics using high-throughput experimentation. <i>AIChE Journal</i> , 2009 , 55, 2013-2023	3.6	26
46	Atmospheric Pressure Process for Coating Particles Using Atomic Layer Deposition. <i>Chemical Vapor Deposition</i> , 2009 , 15, 227-233		65
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