

Fernando J Muzzio

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6617489/publications.pdf>

Version: 2024-02-01

161
papers

7,065
citations

47409

49
h-index

81351

76
g-index

166
all docs

166
docs citations

166
times ranked

3474
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of liquid addition on the bulk and flow properties of cohesive powders. Particulate Science and Technology, 2022, 40, 141-150.	1.1	2
2	Residence time distribution as a traceability method for lot changes in a pharmaceutical continuous manufacturing system. International Journal of Pharmaceutics, 2022, 611, 121313.	2.6	2
3	SEM/EDX and Raman chemical imaging of pharmaceutical tablets: A comparison of tablet surface preparation and analysis methods. International Journal of Pharmaceutics, 2022, 611, 121331.	2.6	7
4	Prediction of entire tablet formulations from pure powder componentsâ€™ spectra via a two-step non-linear optimization methodology. International Journal of Pharmaceutics, 2022, 615, 121472.	2.6	1
5	Characterization of material properties. , 2022, , 9-28.		1
6	Outlookâ€™what comes next in continuous manufacturing (andâ€™in advanced pharmaceutical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542		
7	Loss-in-weight feeding. , 2022, , 29-57.		1
8	Continuous powder mixing and lubrication. , 2022, , 59-92.		0
9	Improving Feedability of Highly Adhesive Active Pharmaceutical Ingredients by Silication. Journal of Pharmaceutical Innovation, 2021, 16, 279-292.	1.1	6
10	Sampling optimization for blend monitoring of a low dose formulation in a tablet press feed frame using spatially resolved near-infrared spectroscopy. International Journal of Pharmaceutics, 2021, 602, 120594.	2.6	9
11	Integrating sensors for monitoring blend content in a pharmaceutical continuous manufacturing plant. International Journal of Pharmaceutics, 2021, 606, 120085.	2.6	3
12	Binder-free twin-screw melt granulation: An effective approach to manufacture high-dose API formulations. International Journal of Pharmaceutics, 2021, 606, 120886.	2.6	4
13	Performance assessment of linear iterative optimization technology (IOT) for Raman chemical mapping of pharmaceutical tablets. Journal of Pharmaceutical and Biomedical Analysis, 2021, 205, 114305.	1.4	6
14	Using residence time distribution in pharmaceutical solid dose manufacturing â€™ A critical review. International Journal of Pharmaceutics, 2021, 610, 121248.	2.6	11
15	Dissolution Study on Grape Polyphenol Hard Gelatin Capsule Dietary Supplements. Frontiers in Nutrition, 2021, 8, 780260.	1.6	4
16	Identifying a Loss-in-Weight Feeder Design Space Based on Performance and Material Properties. Journal of Pharmaceutical Innovation, 2020, 15, 482-495.	1.1	10
17	Prediction of tablet weight variability in continuous manufacturing. International Journal of Pharmaceutics, 2020, 575, 118727.	2.6	12
18	Method transfer of a near-infrared spectroscopic method for blend uniformity in a poorly flowing and hygroscopic blend. Journal of Pharmaceutical and Biomedical Analysis, 2020, 180, 113054.	1.4	8

#	ARTICLE	IF	CITATIONS
19	Characterization of NIR interfaces for the feeding and in-line monitoring of a continuous granulation process. <i>International Journal of Pharmaceutics</i> , 2020, 574, 118848.	2.6	12
20	A Large-Content Uniformity Process Analytical Technology (PAT) Method for Phenytoin Sodium Tablets. <i>Journal of Pharmaceutical Sciences</i> , 2019, 108, 494-505.	1.6	12
21	Mixing Cell: a Device to Mimic Extent of Lubrication and Shear in Continuous Tubular Blenders. <i>AAPS PharmSciTech</i> , 2019, 20, 262.	1.5	1
22	Continuous high-shear granulation: Mechanistic understanding of the influence of process parameters on critical quality attributes via elucidating the internal physical and chemical microstructure. <i>Advanced Powder Technology</i> , 2019, 30, 1765-1781.	2.0	7
23	Prediction of dissolution profiles by non-destructive NIR spectroscopy in bilayer tablets. <i>International Journal of Pharmaceutics</i> , 2019, 565, 419-436.	2.6	22
24	Modeling fluidized bed impregnation of active pharmaceutical ingredients onto porous excipients. <i>Chemical Engineering Science</i> , 2019, 202, 36-54.	1.9	1
25	Advanced process design and understanding of continuous twin-screw granulation via implementation of in-line process analytical technologies. <i>Advanced Powder Technology</i> , 2019, 30, 879-894.	2.0	34
26	Assessment of blend uniformity in a continuous tablet manufacturing process. <i>International Journal of Pharmaceutics</i> , 2019, 560, 322-333.	2.6	52
27	A comprehensive analysis and optimization of continuous twin-screw granulation processes via sequential experimentation strategy. <i>International Journal of Pharmaceutics</i> , 2019, 556, 349-362.	2.6	20
28	Effect of material properties on the residence time distribution (RTD) characterization of powder blending unit operations. Part II of II: Application of models. <i>Powder Technology</i> , 2019, 344, 525-544.	2.1	31
29	Effect of tracer material properties on the residence time distribution (RTD) of continuous powder blending operations. Part I of II: Experimental evaluation. <i>Powder Technology</i> , 2019, 342, 744-763.	2.1	56
30	Combined Feedforward/Feedback Control of an Integrated Continuous Granulation Process. <i>Journal of Pharmaceutical Innovation</i> , 2019, 14, 259-285.	1.1	10
31	Manufacturing of Pharmaceuticals by Impregnation of an Active Pharmaceutical Ingredient onto a Mesoporous Carrier: Impact of Solvent and Loading. <i>Journal of Pharmaceutical Innovation</i> , 2019, 14, 194-205.	1.1	3
32	Cross-sectional analysis of impregnated excipient particles by energy dispersive X-ray spectroscopy. <i>Powder Technology</i> , 2018, 332, 197-209.	2.1	2
33	A Training on: Continuous Manufacturing (Direct Compaction) of Solid Dose Pharmaceutical Products. <i>Journal of Pharmaceutical Innovation</i> , 2018, 13, 155-187.	1.1	22
34	A drop penetration method to measure powder blend wettability. <i>International Journal of Pharmaceutics</i> , 2018, 538, 112-118.	2.6	13
35	Modeling the effects of material properties on tablet compaction: A building block for controlling both batch and continuous pharmaceutical manufacturing processes. <i>International Journal of Pharmaceutics</i> , 2018, 543, 274-287.	2.6	27
36	Measurement of the residence time distribution of a cohesive powder in a flighted rotary kiln. <i>Chemical Engineering Science</i> , 2018, 191, 56-66.	1.9	7

#	ARTICLE	IF	CITATIONS
37	Using a material property library to find surrogate materials for pharmaceutical process development. Powder Technology, 2018, 339, 659-676.	2.1	47
38	Effects of Process and Design Parameters on Granule Size Distribution in a Continuous High Shear Granulation Process. Journal of Pharmaceutical Innovation, 2017, 12, 283-295.	1.1	10
39	Analysis of the origins of content non-uniformity in high-shear wet granulation. International Journal of Pharmaceutics, 2017, 528, 578-585.	2.6	32
40	Capillary Drop Penetration Method to Characterize the Liquid Wetting of Powders. Langmuir, 2017, 33, 56-65.	1.6	31
41	Predicting feeder performance based on material flow properties. Powder Technology, 2017, 308, 135-148.	2.1	63
42	Diminished segregation in continuous powder mixing. Powder Technology, 2017, 309, 79-88.	2.1	43
43	Controlled shear system and resonant acoustic mixing: Effects on lubrication and flow properties of pharmaceutical blends. Powder Technology, 2017, 322, 332-339.	2.1	15
44	The effect of operating conditions on the residence time distribution and axial dispersion coefficient of a cohesive powder in a rotary kiln. Chemical Engineering Science, 2017, 158, 50-57.	1.9	22
45	Perspectives on the continuous manufacturing of powder-based pharmaceutical processes. AICHE Journal, 2016, 62, 1846-1862.	1.8	127
46	Improving dissolution kinetics of pharmaceuticals by fluidized bed impregnation of active pharmaceutical ingredients. AICHE Journal, 2016, 62, 4201-4214.	1.8	10
47	Quantitative validation and analysis of the regime map approach for the wet granulation of industrially relevant zirconium hydroxide powders. Powder Technology, 2016, 294, 177-184.	2.1	8
48	Effect of resonant acoustic mixing on pharmaceutical powder blends and tablets. Advanced Powder Technology, 2016, 27, 1141-1148.	2.0	36
49	Characterization of resonant acoustic mixing using near-infrared chemical imaging. Powder Technology, 2016, 297, 349-356.	2.1	32
50	Effects of processing parameters and blade patterns on continuous pharmaceutical powder mixing. Chemical Engineering and Processing: Process Intensification, 2016, 109, 59-67.	1.8	23
51	Near infrared spectroscopic calibration models for real time monitoring of powder density. International Journal of Pharmaceutics, 2016, 512, 61-74.	2.6	53
52	Enabling real time release testing by NIR prediction of dissolution of tablets made by continuous direct compression (CDC). International Journal of Pharmaceutics, 2016, 512, 96-107.	2.6	59
53	Statistical analysis and comparison of a continuous high shear granulator with a twin screw granulator: Effect of process parameters on critical granule attributes and granulation mechanisms. International Journal of Pharmaceutics, 2016, 513, 357-375.	2.6	47
54	A novel consolidation method to measure powder flow properties using a small amount of material. AICHE Journal, 2016, 62, 4193-4200.	1.8	1

#	ARTICLE	IF	CITATIONS
55	Using Residence Time Distributions (RTDs) to Address the Traceability of Raw Materials in Continuous Pharmaceutical Manufacturing. <i>Journal of Pharmaceutical Innovation</i> , 2016, 11, 64-81.	1.1	128
56	The effect of mechanical strain on properties of lubricated tablets compacted at different pressures. <i>Powder Technology</i> , 2016, 301, 657-664.	2.1	18
57	Effect of Shear Applied During a Pharmaceutical Process on Near Infrared Spectra. <i>Applied Spectroscopy</i> , 2016, 70, 455-466.	1.2	6
58	Prediction of conductive heating time scales of particles in a rotary drum. <i>Chemical Engineering Science</i> , 2016, 152, 45-54.	1.9	44
59	Predicting flow behavior of pharmaceutical blends using shear cell methodology: A quality by design approach. <i>Powder Technology</i> , 2016, 294, 22-29.	2.1	30
60	Prediction of dissolution profiles by non-destructive near infrared spectroscopy in tablets subjected to different levels of strain. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 117, 568-576.	1.4	54
61	Measurement of the axial dispersion coefficient of powders in a rotating cylinder: dependence on bulk flow properties. <i>Powder Technology</i> , 2016, 292, 298-306.	2.1	17
62	A method to analyze shear cell data of powders measured under different initial consolidation stresses. <i>Powder Technology</i> , 2016, 294, 105-112.	2.1	50
63	Effect of liquid addition on the bulk and flow properties of fine and coarse glass beads. <i>AIChE Journal</i> , 2016, 62, 648-658.	1.8	8
64	A Quantitative Approach to Understand Raw Material Variability. <i>Methods in Pharmacology and Toxicology</i> , 2016, , 85-104.	0.1	3
65	Advanced Control of Continuous Pharmaceutical Tablet Manufacturing Processes. <i>Methods in Pharmacology and Toxicology</i> , 2016, , 191-224.	0.1	11
66	Statistical comparison of dissolution profiles. <i>Drug Development and Industrial Pharmacy</i> , 2016, 42, 796-807.	0.9	20
67	Loss-in-Weight Feeding Trials Case Study: Pharmaceutical Formulation. <i>Journal of Pharmaceutical Innovation</i> , 2015, 10, 56-75.	1.1	63
68	Feedrate deviations caused by hopper refill of loss-in-weight feeders. <i>Powder Technology</i> , 2015, 283, 389-400.	2.1	76
69	Comparison of three rotational shear cell testers: Powder flowability and bulk density. <i>Powder Technology</i> , 2015, 283, 103-112.	2.1	47
70	Evaluation of resonant acoustic mixing performance. <i>Powder Technology</i> , 2015, 278, 46-56.	2.1	87
71	The effects of improper mixing and preferential wetting of active and excipient ingredients on content uniformity in high shear wet granulation. <i>Powder Technology</i> , 2015, 278, 266-277.	2.1	54
72	A simple color concentration measurement technique for powders. <i>Powder Technology</i> , 2015, 286, 392-400.	2.1	17

#	ARTICLE	IF	CITATIONS
73	Assessment of Blend and Content Uniformity. Technical Discussion of Sampling Plans and Application of ASTM E2709/E2810. <i>Journal of Pharmaceutical Innovation</i> , 2015, 10, 84-97.	1.1	19
74	Recommendations for the Assessment of Blend and Content Uniformity: Modifications to Withdrawn FDA Draft Stratified Sampling Guidance. <i>Journal of Pharmaceutical Innovation</i> , 2015, 10, 76-83.	1.1	29
75	A quantitative study of the effect of process parameters on key granule characteristics in a high shear wet granulation process involving a two component pharmaceutical blend. <i>Advanced Powder Technology</i> , 2015, 26, 315-322.	2.0	51
76	Characterization of pharmaceutical powder blends using in situ near-infrared chemical imaging. <i>Chemical Engineering Science</i> , 2014, 108, 244-257.	1.9	36
77	Implementation of an advanced hybrid MPC–PID control system using PAT tools into a direct compaction continuous pharmaceutical tablet manufacturing pilot plant. <i>International Journal of Pharmaceutics</i> , 2014, 473, 38-54.	2.6	80
78	A systematic framework for onsite design and implementation of a control system in a continuous tablet manufacturing process. <i>Computers and Chemical Engineering</i> , 2014, 66, 186-200.	2.0	85
79	Improving Continuous Powder Blending Performance Using Projection to Latent Structures Regression. <i>Journal of Pharmaceutical Innovation</i> , 2013, 8, 99-110.	1.1	8
80	Reduced-order discrete element method modeling. <i>Chemical Engineering Science</i> , 2013, 95, 12-26.	1.9	46
81	Effects of powder flow properties and shear environment on the performance of continuous mixing of pharmaceutical powders. <i>Powder Technology</i> , 2013, 246, 63-72.	2.1	102
82	Scale-up strategy for continuous powder blending process. <i>Powder Technology</i> , 2013, 235, 55-69.	2.1	20
83	Measurement of residence time distribution in a rotary calciner. <i>AIChE Journal</i> , 2013, 59, 4068-4076.	1.8	31
84	Effects of powder flow properties on capsule filling weight uniformity. <i>Drug Development and Industrial Pharmacy</i> , 2013, 39, 1464-1475.	0.9	44
85	Development of a methodology to estimate error in the on-line measurements of blend uniformity in a continuous powder mixing process. <i>Powder Technology</i> , 2013, 241, 263-271.	2.1	51
86	Role of consolidation state in the measurement of bulk density and cohesion. <i>Powder Technology</i> , 2013, 239, 366-373.	2.1	32
87	Determination of the Confidence Interval of the Relative Standard Deviation Using Convolution. <i>Journal of Pharmaceutical Innovation</i> , 2013, 8, 72-82.	1.1	27
88	Method to study the effect of blend flowability on the homogeneity of acetaminophen. <i>Drug Development and Industrial Pharmacy</i> , 2013, 39, 252-258.	0.9	6
89	Formulation and manufacture of pharmaceuticals by fluidized–bed impregnation of active pharmaceutical ingredients onto porous carriers. <i>AIChE Journal</i> , 2013, 59, 4538-4552.	1.8	20
90	Continuous direct tablet compression: effects of impeller rotation rate, total feed rate and drug content on the tablet properties and drug release. <i>Drug Development and Industrial Pharmacy</i> , 2013, 39, 1802-1808.	0.9	39

#	ARTICLE	IF	CITATIONS
91	Improvement of Tablet Coating Uniformity Using a Quality by Design Approach. AAPS PharmSciTech, 2012, 13, 231-246.	1.5	20
92	An integrated approach for dynamic flowsheet modeling and sensitivity analysis of a continuous tablet manufacturing process. Computers and Chemical Engineering, 2012, 42, 30-47.	2.0	150
93	Optimizing continuous powder mixing processes using periodic section modeling. Chemical Engineering Science, 2012, 80, 70-80.	1.9	44
94	Impact of process parameters on critical performance attributes of a continuous blenderâ€”A DEMâ€”based study. AIChE Journal, 2012, 58, 3676-3684.	1.8	18
95	Method for characterization of loss-in-weight feeder equipment. Powder Technology, 2012, 228, 395-403.	2.1	86
96	A review of the Residence Time Distribution (RTD) applications in solid unit operations. Powder Technology, 2012, 228, 416-423.	2.1	175
97	Computational Approaches for Studying the Granular Dynamics of Continuous Blending Processes, 2 â€” Population Balance and Dataâ€”Based Methods. Macromolecular Materials and Engineering, 2012, 297, 9-19.	1.7	39
98	Periodic section modeling of convective continuous powder mixing processes. AIChE Journal, 2012, 58, 69-78.	1.8	32
99	Powder hydrophobicity and flow properties: Effect of feed frame design and operating parameters. AIChE Journal, 2012, 58, 697-706.	1.8	40
100	Effect of speed, loading and spray pattern on coating variability in a pan coater. Chemical Engineering Science, 2011, 66, 5107-5115.	1.9	28
101	Analysis of Pharmaceutical Tablet Coating Uniformity by Laser-Induced Breakdown Spectroscopy (LIBS). Journal of Pharmaceutical Innovation, 2011, 6, 77-87.	1.1	22
102	Computational Approaches for Studying the Granular Dynamics of Continuous Blending Processes, 1 â€” DEM Based Methods. Macromolecular Materials and Engineering, 2011, 296, 290-307.	1.7	64
103	Characterization of feeder effects on continuous solid mixing using fourier series analysis. AIChE Journal, 2011, 57, 1144-1153.	1.8	30
104	Investigation on the effect of blade patterns on continuous solid mixing performance. Canadian Journal of Chemical Engineering, 2011, 89, 969-984.	0.9	15
105	Characterizing continuous powder mixing using residence time distribution. Chemical Engineering Science, 2011, 66, 417-425.	1.9	166
106	Mixing order of glidant and lubricant â€” Influence on powder and tablet properties. International Journal of Pharmaceutics, 2011, 409, 269-277.	2.6	63
107	Effect of operating conditions and design parameters in a continuous powder mixer. Powder Technology, 2011, 208, 26-36.	2.1	153
108	Shear and flow behavior of pharmaceutical blends â€” Method comparison study. Powder Technology, 2011, 208, 628-636.	2.1	53

#	ARTICLE	IF	CITATIONS
109	Evaluation of strain-induced hydrophobicity of pharmaceutical blends and its effect on drug release rate under multiple compression conditions. <i>Drug Development and Industrial Pharmacy</i> , 2011, 37, 428-435.	0.9	24
110	Effects of shear and electrical properties on flow characteristics of pharmaceutical blends. <i>AIChE Journal</i> , 2010, 56, 570-583.	1.8	3
111	Investigation of the effect of impeller rotation rate, powder flow rate, and cohesion on powder flow behavior in a continuous blender using PEPT. <i>Chemical Engineering Science</i> , 2010, 65, 5658-5668.	1.9	79
112	Experimentally validated computations of heat transfer in granular materials in rotary calciners. <i>Powder Technology</i> , 2010, 198, 6-15.	2.1	83
113	Measuring the hydrophobicity of lubricated blends of pharmaceutical excipients. <i>Powder Technology</i> , 2010, 198, 101-107.	2.1	30
114	Design Space of Pharmaceutical Processes Using Data-Driven-Based Methods. <i>Journal of Pharmaceutical Innovation</i> , 2010, 5, 119-137.	1.1	70
115	Predictive modeling of pharmaceutical processes with missing and noisy data. <i>AIChE Journal</i> , 2010, 56, 2860-2872.	1.8	28
116	A simple correlation for predicting effective diffusivities in immobilized cell systems. <i>Biotechnology and Bioengineering</i> , 2010, 49, 223-227.	1.7	45
117	Study of the effects of feed frames on powder blend properties during the filling of tablet press dies. <i>Powder Technology</i> , 2010, 200, 105-116.	2.1	93
118	Real-time monitoring of drug concentration in a continuous powder mixing process using NIR spectroscopy. <i>Chemical Engineering Science</i> , 2010, 65, 5728-5733.	1.9	182
119	Predictive Modeling for Pharmaceutical Processes Using Kriging and Response Surface. <i>Journal of Pharmaceutical Innovation</i> , 2009, 4, 174-186.	1.1	34
120	An observed correlation between flow and electrical properties of pharmaceutical blends. <i>Powder Technology</i> , 2009, 192, 157-165.	2.1	39
121	Effects of rotation rate, mixing angle, and cohesion in two continuous powder mixers—A statistical approach. <i>Powder Technology</i> , 2009, 194, 217-227.	2.1	68
122	Effect of High Shear Blending Protocols and Blender Parameters on the Degree of API Agglomeration in Solid Formulations. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 93-101.	1.8	14
123	Shear-induced APAP de-agglomeration. <i>Drug Development and Industrial Pharmacy</i> , 2009, 35, 1487-1495.	0.9	11
124	Practical methods for improving flow properties of active pharmaceutical ingredients. <i>Drug Development and Industrial Pharmacy</i> , 2009, 35, 1460-1469.	0.9	31
125	Using Compartment Modeling to Investigate Mixing Behavior of a Continuous Mixer. <i>Journal of Pharmaceutical Innovation</i> , 2008, 3, 161-174.	1.1	30
126	Quality by Design Methodology for Development and Scale-up of Batch Mixing Processes. <i>Journal of Pharmaceutical Innovation</i> , 2008, 3, 258-270.	1.1	30

#	ARTICLE	IF	CITATIONS
127	Characterization of continuous convective powder mixing processes. Powder Technology, 2008, 182, 368-378.	2.1	115
128	Evaluating the mixing performance of a ribbon blender. Powder Technology, 2008, 186, 247-254.	2.1	58
129	Spontaneous Separation of Charged Grains. Physical Review Letters, 2007, 99, 058001.	2.9	57
130	Hybrid DEM-compartment modeling approach for granular mixing. AIChE Journal, 2007, 53, 119-128.	1.8	39
131	A method for predicting hopper flow characteristics of pharmaceutical powders. Chemical Engineering Science, 2007, 62, 1536-1542.	1.9	44
132	Influence of shear intensity and total shear on properties of blends and tablets of lactose and cellulose lubricated with magnesium stearate. International Journal of Pharmaceutics, 2007, 336, 284-291.	2.6	66
133	Effect of moisture and magnesium stearate concentration on flow properties of cohesive granular materials. International Journal of Pharmaceutics, 2007, 336, 338-345.	2.6	79
134	A Quantitative Method for Modeling Blend Composition Distributions in the Presence of Agglomerates. Journal of Pharmaceutical Innovation, 2007, 2, 51-64.	1.1	0
135	Modeling and designing powder mixing processes utilizing compartment modeling. Computer Aided Chemical Engineering, 2006, 21, 1039-1044.	0.3	2
136	Characterizing powder mixing processes utilizing compartment models. International Journal of Pharmaceutics, 2006, 320, 14-22.	2.6	28
137	An experimental/computational approach for examining unconfined cohesive powder flow. International Journal of Pharmaceutics, 2006, 324, 116-127.	2.6	47
138	Avalanching flow of cohesive powders. Powder Technology, 2006, 164, 13-21.	2.1	111
139	Cohesive effects in powder mixing in a tumbling blender. Powder Technology, 2006, 165, 105-114.	2.1	142
140	Modeling of heat transfer in granular flow in rotating vessels. Chemical Engineering Science, 2006, 61, 6348-6360.	1.9	184
141	Flow - induced dilation of cohesive granular materials. AIChE Journal, 2006, 52, 4124-4132.	1.8	38
142	V-blender segregation patterns for free-flowing materials: effects of blender capacity and fill level. International Journal of Pharmaceutics, 2004, 269, 19-28.	2.6	37
143	A Homogeneity Study Using NIR Spectroscopy: Tracking Magnesium Stearate in Bohle Bin-Blender. Drug Development and Industrial Pharmacy, 2003, 29, 679-687.	0.9	50
144	Laminar Mixing in Eccentric Stirred Tank Systems. Canadian Journal of Chemical Engineering, 2002, 80, 546-557.	0.9	89

#	ARTICLE	IF	CITATIONS
145	Noise to order. <i>Nature</i> , 2001, 410, 251-258.	13.7	144
146	Granular segregation in the double-cone blender: Transitions and mechanisms. <i>Physics of Fluids</i> , 2001, 13, 578-587.	1.6	43
147	Experimentally validated computations of flow, mixing and segregation of non-cohesive grains in 3D tumbling blenders. <i>Powder Technology</i> , 2000, 109, 58-71.	2.1	174
148	Effect of Resin Characteristics on Fluidized Bed Adsorption of Proteins. <i>Biotechnology Progress</i> , 1999, 15, 932-940.	1.3	10
149	Spontaneous chaotic granular mixing. <i>Nature</i> , 1999, 397, 675-678.	13.7	87
150	Experimental and Modeling Studies of Diffusion in Immobilized Cell Systems: A Review of Recent Literature and Patents. <i>Applied Biochemistry and Biotechnology</i> , 1999, 80, 151-188.	1.4	24
151	Laser-induced fluorescence technique for the quantification of mixing in impinging jets. <i>AIChE Journal</i> , 1999, 45, 2477-2486.	1.8	82
152	Batch Uptake of Lysozyme: Effect of Solution Viscosity and Mass Transfer on Adsorption. <i>Biotechnology Progress</i> , 1998, 14, 913-921.	1.3	43
153	Mixing of granular material in a drum mixer undergoing rotational and rocking motions I. Uniform particles. <i>Powder Technology</i> , 1998, 98, 113-124.	2.1	44
154	Experimental and numerical characterization of viscous flow and mixing in an impinging jet contactor. <i>Canadian Journal of Chemical Engineering</i> , 1998, 76, 546-555.	0.9	51
155	Simulation of flow and mixing of particles in a rotating and rocking cylinder. <i>AIChE Journal</i> , 1998, 44, 1266-1276.	1.8	50
156	Analytic expression for the short-time rate of growth of the intermaterial contact perimeter in two-dimensional chaotic flows and Hamiltonian systems. <i>Physical Review E</i> , 1998, 58, 447-458.	0.8	27
157	Effect of Oxygen Limitations on Monoclonal Antibody Production by Immobilized Hybridoma Cells. <i>Biotechnology Progress</i> , 1997, 13, 301-310.	1.3	7
158	Sampling practices in powder blending. <i>International Journal of Pharmaceutics</i> , 1997, 155, 153-178.	2.6	185
159	Laminar Mixing: A Dynamical Systems Approach. , 0, , 89-143.		10
160	Solids Mixing. , 0, , 887-985.		6
161	Starch Products as Candidate Excipients in a Continuous Direct Compression Line. <i>Journal of Pharmaceutical Innovation</i> , 0, , 1.	1.1	0