

Jose Manuel Valverde

List of Publications by Year in descending order

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200
papers

7,482
citations

41323

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69214

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206
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docs citations

206
times ranked

3268
citing authors

#	ARTICLE	IF	CITATIONS
1	The Sevilla Powder Tester: A Tool for Measuring the Flow Properties of Cohesive Powders at High Temperatures. KONA Powder and Particle Journal, 2022, 39, 29-44.	0.9	1
2	The Calcium Looping process for energy storage: Insights from in situ XRD analysis. Chemical Engineering Journal, 2022, 429, 132244.	6.6	27
3	Effect of Steam Injection during Carbonation on the Multicyclic Performance of Limestone (CaCO ₃) under Different Calcium Looping Conditions: A Comparative Study. ACS Sustainable Chemistry and Engineering, 2022, 10, 850-859.	3.2	20
4	The SrCO ₃ /SrO system for thermochemical energy storage at ultra-high temperature. Solar Energy Materials and Solar Cells, 2022, 238, 111632.	3.0	10
5	Steam-enhanced calcium-looping performance of limestone for thermochemical energy storage: The role of particle size. Journal of Energy Storage, 2022, 51, 104305.	3.9	14
6	Albero: An alternative natural material for solar energy storage by the calcium-looping process. Chemical Engineering Journal, 2022, 440, 135707.	6.6	15
7	Low-pressure calcination to enhance the calcium looping process for thermochemical energy storage. Journal of Cleaner Production, 2022, 363, 132295.	4.6	12
8	Modelling of a fluidized bed carbonator reactor for post-combustion CO ₂ capture considering bed hydrodynamics and sorbent characteristics. Chemical Engineering Journal, 2021, 406, 126762.	6.6	16
9	Multi-objective optimisation and guidelines for the design of dispatchable hybrid solar power plants with thermochemical energy storage. Applied Energy, 2021, 282, 116257.	5.1	23
10	Scaling-up the Calcium-Looping Process for CO ₂ Capture and Energy Storage. KONA Powder and Particle Journal, 2021, 38, 189-208.	0.9	37
11	Increasing the solar share in combined cycles through thermochemical energy storage. Energy Conversion and Management, 2021, 229, 113730.	4.4	28
12	The cohesive behavior of granular solids at high temperature in solar energy storage. Energy Conversion and Management, 2021, 240, 114217.	4.4	16
13	Thermochemical Energy Storage Based on Carbonates: A Brief Overview. Energies, 2021, 14, 4336.	1.6	5
14	Calcination under low CO ₂ pressure enhances the calcium Looping performance of limestone for thermochemical energy storage. Chemical Engineering Journal, 2021, 417, 127922.	6.6	24
15	Kinetics and cyclability of limestone (CaCO ₃) in presence of steam during calcination in the CaL scheme for thermochemical energy storage. Chemical Engineering Journal, 2021, 417, 129194.	6.6	45
16	Solar combined cycle with high-temperature thermochemical energy storage. Energy Conversion and Management, 2021, 241, 114274.	4.4	35
17	FMEA and Risks Assessment for Thermochemical Energy Storage Systems Based on Carbonates. Energies, 2021, 14, 6013.	1.6	3
18	Nanosilica to improve the flowability of fine limestone powders in thermochemical storage units. Chemical Engineering Journal, 2021, 426, 131789.	6.6	11

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19	Cross effect between temperature and consolidation on the flow behavior of granular materials in thermal energy storage systems. Powder Technology, 2020, 363, 135-145.	2.1	14
20	Role of particle size on the cohesive behavior of limestone powders at high temperature. Chemical Engineering Journal, 2020, 391, 123520.	6.6	8
21	In situ XRD analysis of dolomite calcination under CO ₂ in a humid environment. CrystEngComm, 2020, 22, 6502-6516.	1.3	7
22	Calcium-Looping Performance of Biomaterialized CaCO ₃ for CO ₂ Capture and Thermochemical Energy Storage. Industrial & Engineering Chemistry Research, 2020, 59, 12924-12933.	1.8	33
23	The effect of particle aggregation on the collapse of gas-fluidized beds. , 2020, , 569-572.		0
24	The mobility of fine particles in uniform gas-fluidized beds. , 2020, , 573-576.		0
25	Correlation between bulk and interparticle contact forces for fine powders. , 2020, , 51-54.		0
26	Carbon Dioxide Capture in Fluidized Beds of Nanosilica/Ca(OH) ₂ . Springer Proceedings in Energy, 2020, , 415-421.	0.2	0
27	Sample-controlled analysis under high pressure for accelerated process studies. Journal of the American Ceramic Society, 2019, 102, 1338-1346.	1.9	1
28	Tensile strength and compressibility of fine CaCO_3 powders. Effect of nanosilica addition.. Chemical Engineering Journal, 2019, 378, 122166.	6.6	12
29	The Calcium-Looping (CaCO ₃ /CaO) process for thermochemical energy storage in Concentrating Solar Power plants. Renewable and Sustainable Energy Reviews, 2019, 113, 109252.	8.2	180
30	Off-design model of concentrating solar power plant with thermochemical energy storage based on calcium-looping. AIP Conference Proceedings, 2019, , .	0.3	10
31	Unusual Isotopic Abundances in a Fully Convective Stellar Binary. Astrophysical Journal Letters, 2019, 871, L3.	3.0	9
32	Dispatchability of solar photovoltaics from thermochemical energy storage. Energy Conversion and Management, 2019, 191, 237-246.	4.4	38
33	A laboratory-scale study on the role of mechanical vibrations in pore pressure generation in pyroclastic materials: implications for pyroclastic flows. Bulletin of Volcanology, 2019, 81, 1.	1.1	3
34	High-performance and low-cost macroporous calcium oxide based materials for thermochemical energy storage in concentrated solar power plants. Applied Energy, 2019, 235, 543-552.	5.1	115
35	Effect of temperature on flow properties of magnetofluidized beds at low consolidations. Chemical Engineering Journal, 2019, 361, 50-59.	6.6	5
36	Multicycle CO ₂ capture activity and fluidizability of Al-based synthesized CaO sorbents. Chemical Engineering Journal, 2019, 358, 679-690.	6.6	90

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37	Carbonation of Limestone Derived CaO for Thermochemical Energy Storage: From Kinetics to Process Integration in Concentrating Solar Plants. ACS Sustainable Chemistry and Engineering, 2018, 6, 6404-6417.	3.2	93
38	Pressure Effect on the Multicycle Activity of Natural Carbonates and a Ca/Zr Composite for Energy Storage of Concentrated Solar Power. ACS Sustainable Chemistry and Engineering, 2018, 6, 7849-7858.	3.2	44
39	The Ca-looping process for CO ₂ capture and energy storage: role of nanoparticle technology. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	25
40	Process integration of Calcium-Looping thermochemical energy storage system in concentrating solar power plants. Energy, 2018, 155, 535-551.	4.5	112
41	Effect of milling mechanism on the CO ₂ capture performance of limestone in the Calcium Looping process. Chemical Engineering Journal, 2018, 346, 549-556.	6.6	35
42	Dry carbonate process for CO ₂ capture and storage: Integration with solar thermal power. Renewable and Sustainable Energy Reviews, 2018, 82, 1796-1812.	8.2	31
43	Calcium-Looping performance of mechanically modified Al ₂ O ₃ -CaO composites for energy storage and CO ₂ capture. Chemical Engineering Journal, 2018, 334, 2343-2355.	6.6	138
44	Low-cost Ca-based composites synthesized by biotemplate method for thermochemical energy storage of concentrated solar power. Applied Energy, 2018, 210, 108-116.	5.1	97
45	Role of calcium looping conditions on the performance of natural and synthetic Ca-based materials for energy storage. Journal of CO ₂ Utilization, 2018, 28, 374-384.	3.3	110
46	Biomass District Heating Systems Based on Agriculture Residues. Applied Sciences (Switzerland), 2018, 8, 476.	1.3	18
47	Crystallographic and Morphological Transformation of Natrite and Nahcolite in the Dry Carbonate Process for CO ₂ Capture. Crystal Growth and Design, 2018, 18, 4578-4592.	1.4	6
48	Identification of best available thermal energy storage compounds for low-to-moderate temperature storage applications in buildings. Materiales De Construccion, 2018, 68, 160.	0.2	26
49	District heating systems based on low-carbon energy technologies in Mediterranean areas. Energy, 2017, 120, 397-416.	4.5	43
50	Large-Scale Storage of Concentrated Solar Power from Industrial Waste. ACS Sustainable Chemistry and Engineering, 2017, 5, 2265-2272.	3.2	22
51	Optimizing the CSP-Calcium Looping integration for Thermochemical Energy Storage. Energy Conversion and Management, 2017, 136, 85-98.	4.4	136
52	CO ₂ capture performance of Ca-Mg acetates at realistic Calcium Looping conditions. Fuel, 2017, 196, 497-507.	3.4	35
53	Limestone calcination under calcium-looping conditions for CO ₂ capture and thermochemical energy storage in the presence of H ₂ O: an <i>in situ</i> XRD analysis. Physical Chemistry Chemical Physics, 2017, 19, 7587-7596.	1.3	35
54	Effect of Thermal Pretreatment and Nanosilica Addition on Limestone Performance at Calcium-Looping Conditions for Thermochemical Energy Storage of Concentrated Solar Power. Energy & Fuels, 2017, 31, 4226-4236.	2.5	66

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55	Large-scale high-temperature solar energy storage using natural minerals. <i>Solar Energy Materials and Solar Cells</i> , 2017, 168, 14-21.	3.0	119
56	Magnetic stabilization of fluidized beds: Effect of magnetic field orientation. <i>Chemical Engineering Journal</i> , 2017, 313, 1335-1345.	6.6	29
57	Multicycle activity of natural CaCO ₃ minerals for thermochemical energy storage in Concentrated Solar Power plants. <i>Solar Energy</i> , 2017, 153, 188-199.	2.9	112
58	The Oxy-CaL process: A novel CO ₂ capture system by integrating partial oxy-combustion with the Calcium-Looping process. <i>Applied Energy</i> , 2017, 196, 1-17.	5.1	39
59	Carbon capture and utilization for sodium bicarbonate production assisted by solar thermal power. <i>Energy Conversion and Management</i> , 2017, 149, 860-874.	4.4	36
60	Power cycles integration in concentrated solar power plants with energy storage based on calcium looping. <i>Energy Conversion and Management</i> , 2017, 149, 815-829.	4.4	129
61	Calcium-Looping performance of steel and blast furnace slags for thermochemical energy storage in concentrated solar power plants. <i>Journal of CO₂ Utilization</i> , 2017, 22, 143-154.	3.3	43
62	Advances in thermal energy storage materials and their applications towards zero energy buildings: A critical review. <i>Applied Energy</i> , 2017, 203, 219-239.	5.1	270
63	Enhancement of CO ₂ capture in limestone and dolomite granular beds by high intensity sound waves. <i>EPJ Web of Conferences</i> , 2017, 140, 14001.	0.1	1
64	Dynamical weakening of pyroclastic flows by mechanical vibrations. <i>EPJ Web of Conferences</i> , 2017, 140, 12001.	0.1	0
65	On the Multicycle Activity of Natural Limestone/Dolomite for Thermochemical Energy Storage of Concentrated Solar Power. <i>Energy Technology</i> , 2016, 4, 1013-1019.	1.8	95
66	Use of steel slag for CO ₂ capture under realistic calcium-looping conditions. <i>RSC Advances</i> , 2016, 6, 37656-37663.	1.7	28
67	Thermochemical energy storage of concentrated solar power by integration of the calcium looping process and a CO ₂ power cycle. <i>Applied Energy</i> , 2016, 173, 589-605.	5.1	241
68	On the relevant role of solids residence time on their CO ₂ capture performance in the Calcium Looping technology. <i>Energy</i> , 2016, 113, 160-171.	4.5	22
69	High Intensity Sound Enhances Calcination and CO ₂ Capture of Limestone and Dolomite at Ca-Looping Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 8671-8678.	1.8	7
70	Energy Consumption for CO ₂ Capture by means of the Calcium Looping Process: A Comparative Analysis using Limestone, Dolomite, and Steel Slag. <i>Energy Technology</i> , 2016, 4, 1317-1327.	1.8	24
71	Reduction of Calcination Temperature in the Calcium Looping Process for CO ₂ Capture by Using Helium: In Situ XRD Analysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 7090-7097.	3.2	34
72	Influence of Ball Milling on CaO Crystal Growth During Limestone and Dolomite Calcination: Effect on CO ₂ Capture at Calcium Looping Conditions. <i>Crystal Growth and Design</i> , 2016, 16, 7025-7036.	1.4	39

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73	Acoustic streaming and Sun's meridional circulation. <i>Research in Astronomy and Astrophysics</i> , 2016, 16, 013.	0.7	0
74	Effect of dolomite decomposition under CO ₂ on its multicycle CO ₂ capture behaviour under calcium looping conditions. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 16325-16336.	1.3	22
75	A new integration model of the calcium looping technology into coal fired power plants for CO ₂ capture. <i>Applied Energy</i> , 2016, 169, 408-420.	5.1	53
76	The Calcium-Looping technology for CO ₂ capture: On the important roles of energy integration and sorbent behavior. <i>Applied Energy</i> , 2016, 162, 787-807.	5.1	286
77	Dynamical weakening by fluidization under oscillatory viscous flows. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 7641-7654.	1.4	2
78	Effect of particle size polydispersity on the yield stress of magnetofluidized beds as depending on the magnetic field orientation. <i>Chemical Engineering Journal</i> , 2015, 277, 269-285.	6.6	20
79	A new model of the carbonator reactor in the calcium looping technology for post-combustion CO ₂ capture. <i>Fuel</i> , 2015, 160, 328-338.	3.4	45
80	Synthesis of a nanosilica supported CO ₂ sorbent in a fluidized bed reactor. <i>Applied Surface Science</i> , 2015, 328, 548-553.	3.1	15
81	Pattern-formation under acoustic driving forces. <i>Contemporary Physics</i> , 2015, 56, 338-358.	0.8	13
82	Limestone Calcination Nearby Equilibrium: Kinetics, CaO Crystal Structure, Sintering and Reactivity. <i>Journal of Physical Chemistry C</i> , 2015, 119, 1623-1641.	1.5	130
83	On the negative activation energy for limestone calcination at high temperatures nearby equilibrium. <i>Chemical Engineering Science</i> , 2015, 132, 169-177.	1.9	40
84	Crystallographic transformation of limestone during calcination under CO ₂ . <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 21912-21926.	1.3	66
85	Convection and fluidization in oscillatory granular flows: The role of acoustic streaming. <i>European Physical Journal E</i> , 2015, 38, 66.	0.7	12
86	Comparison of cohesive powder flowability measured by Schulze Shear Cell, Raining Bed Method, Sevilla Powder Tester and new Ball Indentation Method. <i>Powder Technology</i> , 2015, 286, 807-816.	2.1	31
87	Thermal decomposition of dolomite under CO ₂ : insights from TGA and in situ XRD analysis. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 30162-30176.	1.3	97
88	Ca-looping for postcombustion CO ₂ capture: A comparative analysis on the performances of dolomite and limestone. <i>Applied Energy</i> , 2015, 138, 202-215.	5.1	115
89	Vibration-induced dynamical weakening of pyroclastic flows: Insights from rotating drum experiments. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 6182-6190.	1.4	11
90	Vibration-induced dynamical weakening of pyroclastic flows: Insights from rotating drum experiments. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, , n/a-n/a.	1.4	0

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91	Effect of magnetic field orientation on fluidized beds of magnetic particles: Theory and experiment. <i>Particuology</i> , 2014, 12, 54-63.	2.0	14
92	Nanosilica supported CaO: A regenerable and mechanically hard CO ₂ sorbent at Ca-looping conditions. <i>Applied Energy</i> , 2014, 118, 92-99.	5.1	80
93	High and stable CO_2 capture capacity of natural limestone at Ca-looping conditions by heat pretreatment and recarbonation synergy. <i>Fuel</i> , 2014, 123, 79-85.	5.4	88
94	Effect of Heat Pretreatment/Recarbonation in the Ca-Looping Process at Realistic Calcination Conditions. <i>Energy & Fuels</i> , 2014, 28, 4062-4067.	2.5	33
95	Role of precalcination and regeneration conditions on postcombustion CO ₂ capture in the Ca-looping technology. <i>Applied Energy</i> , 2014, 136, 347-356.	5.1	51
96	Role of crystal structure on CO_2 capture by limestone derived CaO subjected to carbonation/recarbonation/calcination cycles at Ca-looping conditions. <i>Applied Energy</i> , 2014, 125, 264-275.	5.1	47
97	Relevant Influence of Limestone Crystallinity on CO_2 Capture in The Ca-Looping Technology at Realistic Calcination Conditions. <i>Environmental Science & Technology</i> , 2014, 48, 9882-9889.	4.6	39
98	Multicyclic conversion of limestone at Ca-looping conditions: The role of solid-state diffusion controlled carbonation. <i>Fuel</i> , 2014, 127, 131-140.	3.4	34
99	Calcium-looping for post-combustion CO ₂ capture. On the adverse effect of sorbent regeneration under CO ₂ . <i>Applied Energy</i> , 2014, 126, 161-171.	5.1	88
100	Acoustic streaming in gas-fluidized beds of small particles. <i>Soft Matter</i> , 2013, 9, 8792.	1.2	27
101	Acoustic Streaming Enhances the Multicyclic CO_2 Capture of Natural Limestone at Ca-Looping Conditions. <i>Environmental Science & Technology</i> , 2013, 47, 9538-9544.	4.6	11
102	Fluidization of Fine Powders. <i>Particle Technology Series</i> , 2013, , .	0.5	18
103	Flow properties of CO ₂ sorbent powders modified with nanosilica. <i>Powder Technology</i> , 2013, 249, 443-455.	2.1	13
104	Stabilization of fluidized beds of particles magnetized by an external field: effects of particle size and field orientation. <i>Journal of Fluid Mechanics</i> , 2013, 732, 282-303.	1.4	16
105	Constant rate thermal analysis for enhancing the long-term CO ₂ capture of CaO at Ca-looping conditions. <i>Applied Energy</i> , 2013, 108, 108-120.	5.1	59
106	Dry gas-solid carbonation in fluidized beds of Ca(OH) ₂ and nanosilica/Ca(OH) ₂ at ambient temperature and low CO ₂ pressure. <i>Chemical Engineering Journal</i> , 2013, 222, 546-552.	6.6	21
107	Enhancement of CO ₂ capture at Ca-looping conditions by high-intensity acoustic fields. <i>Applied Energy</i> , 2013, 111, 538-549.	5.1	50
108	Use of silica nanopowder to accelerate CO ₂ sorption by Ca(OH) ₂ . <i>Particuology</i> , 2013, 11, 448-453.	2.0	10

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109	A model on the CaO multicyclic conversion in the Ca-looping process. Chemical Engineering Journal, 2013, 228, 1195-1206.	6.6	64
110	Role of Looping-Calcination Conditions on Self-Reactivation of Thermally Pretreated CO ₂ Sorbents Based on CaO. Energy & Fuels, 2013, 27, 3373-3384.	2.5	30
111	CO ₂ multicyclic capture of pretreated/doped CaO in the Ca-looping process. Theory and experiments. Physical Chemistry Chemical Physics, 2013, 15, 11775.	1.3	43
112	The yield stress of jammed magnetofluidized beds. Granular Matter, 2013, 15, 477-485.	1.1	2
113	Attrition of Ca-based CO ₂ adsorbents by a high velocity gas jet. AIChE Journal, 2013, 59, 1096-1107.	1.8	34
114	The Use of Additives to Control Powder Flow. Mechanical Properties of Fine Powder Beds. Particle Technology Series, 2013, , 99-120.	0.5	0
115	Introduction. The Classical Geldart™s Diagram and the New Type of Gas-Fluidization Behavior. Particle Technology Series, 2013, , 1-6.	0.5	1
116	Ca-based synthetic materials with enhanced CO ₂ capture efficiency. Journal of Materials Chemistry A, 2013, 1, 447-468.	5.2	141
117	The Structure of Geldart A Gas-Fluidized Beds. Particle Technology Series, 2013, , 7-12.	0.5	0
118	The Modified Geldart™s Diagram. Particle Technology Series, 2013, , 55-64.	0.5	0
119	Fluidlike Fluidization as Affected by External Fields. Particle Technology Series, 2013, , 85-97.	0.5	0
120	On the Question of Fluid-Like Fluidization Stability. Particle Technology Series, 2013, , 41-46.	0.5	0
121	Dynamic Aggregation of Fine Particles in Gas-Fluidized Beds. Particle Technology Series, 2013, , 47-54.	0.5	0
122	The Fluidlike Behavior of Fine and Ultrafine Powders Fluidized by Gas. Particle Technology Series, 2013, , 29-39.	0.5	0
123	Fluidization Assistance Techniques. Particle Technology Series, 2013, , 121-134.	0.5	0
124	The Fluidlike Behavior of Granular Materials Fluidized by Liquids. Particle Technology Series, 2013, , 23-28.	0.5	0
125	Fluidization of Nanopowders. Particle Technology Series, 2013, , 65-73.	0.5	0
126	Magneto-Stabilization of Fluidized Beds as due to Short Ranged Interparticle Forces. International Journal of Chemical Reactor Engineering, 2012, 10, .	0.6	0

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127	Effects of Particle Size and Field Orientation on the Yield Stress of Magnetostabilized Fluidized Beds. Industrial & Engineering Chemistry Research, 2012, 51, 8134-8140.	1.8	2
128	Enhancing the catalytic activity and selectivity of the partial oxidation of methanol by electrochemical promotion. Journal of Catalysis, 2012, 293, 149-157.	3.1	26
129	Enhancement of Fast CO ₂ Capture by a Nano-SiO ₂ /CaO Composite at Ca-Looping Conditions. Environmental Science & Technology, 2012, 46, 6401-6408.	4.6	127
130	Electrofluidization of Silica Nanoparticle Agglomerates. Industrial & Engineering Chemistry Research, 2012, 51, 531-538.	1.8	41
131	Helical buckling of a whirling conducting rod in a uniform magnetic field. International Journal of Non-Linear Mechanics, 2012, 47, 38-53.	1.4	2
132	CO ₂ capture enhancement in a fluidized bed of a modified Geldart C powder. Powder Technology, 2012, 224, 247-252.	2.1	30
133	Fluidization of nanopowders: a review. Journal of Nanoparticle Research, 2012, 14, 737.	0.8	175
134	Improving the gas-solids contact efficiency in a fluidized bed of CO ₂ adsorbent fine particles. Physical Chemistry Chemical Physics, 2011, 13, 14906.	1.3	50
135	Probing the nature of the contact between fine particles by using ultrasound propagation. Particuology, 2011, 9, 659-662.	2.0	4
136	Stabilization of gas-fluidized beds of magnetic powders by a cross-flow magnetic field. Journal of Fluid Mechanics, 2011, 680, 80-113.	1.4	20
137	Enhanced nanofluidization by alternating electric fields. AIChE Journal, 2010, 56, 54-65.	1.8	22
138	CORRELATION BETWEEN MICROSTRUCTURE AND YIELD STRESS IN MAGNETICALLY STABILIZED FLUIDIZED BEDS. Journal of Multiscale Modeling, 2010, 02, 185-198.	1.0	0
139	Particle structuring and yield stress in magnetofluidized beds. , 2010, , .		0
140	Magnetic field induced inversion in the effect of particle size on powder cohesiveness. Journal of Chemical Physics, 2010, 133, 024706.	1.2	5
141	Fluid to solid transition in magnetofluidized beds of fine powders. Journal of Applied Physics, 2010, 108, .	1.1	12
142	Rheology of magnetofluidized fine powders: The role of interparticle contact forces. Journal of Rheology, 2010, 54, 719-740.	1.3	13
143	Electromechanics of fluidized beds of nanoparticles. Physical Review E, 2009, 79, 011304.	0.8	25
144	Pull-off force of coated fine powders under small consolidation. Physical Review E, 2009, 79, 041305.	0.8	43

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145	Magnetofluidization of fine magnetite powder. <i>Physical Review E</i> , 2009, 79, 031306.	0.8	16
146	Extension of Geldart's Diagram to Fluidizable Fine and Ultrafine Particles. , 2009, , .		2
147	Mesoscopic structuring and yield stress of magnetofluidized fine particles. <i>Europhysics Letters</i> , 2009, 88, 24003.	0.7	2
148	Cohesion and Internal Friction of Fine Glass Beads as Affected by Small Intensity Vertical Vibration. , 2009, , .		3
149	Magnetofluidization of Fine Magnetite Particles. , 2009, , .		0
150	Mechanical Strength of Humidified Glass Beads. , 2009, , .		0
151	Alternating Field Electronanofluidization. , 2009, , .		0
152	Electrofluidized bed of silica nanoparticles. <i>Journal of Electrostatics</i> , 2009, 67, 439-444.	1.0	16
153	Avalanches in moistened beds of glass beads. <i>Powder Technology</i> , 2009, 196, 257-262.	2.1	15
154	Nanofluidization as affected by vibration and electrostatic fields. <i>Chemical Engineering Science</i> , 2008, 63, 5559-5569.	1.9	36
155	Fluidization of fine and ultrafine particles using nitrogen and neon as fluidizing gases. <i>AIChE Journal</i> , 2008, 54, 86-103.	1.8	56
156	Effect of vibration on flow properties of fine glass beads. <i>AIChE Journal</i> , 2008, 54, 886-896.	1.8	8
157	A modified Richardson-Zaki equation for fluidization of Geldart B magnetic particles. <i>Powder Technology</i> , 2008, 181, 347-350.	2.1	16
158	Effect of inclination on gas-fluidized beds of fine cohesive powders. <i>Powder Technology</i> , 2008, 182, 398-405.	2.1	21
159	Fluidization of nanoparticles: A simple equation for estimating the size of agglomerates. <i>Chemical Engineering Journal</i> , 2008, 140, 296-304.	6.6	55
160	Bubbling Suppression in Fluidized Beds of Fine and Ultrafine Powders. <i>Particulate Science and Technology</i> , 2008, 26, 197-213.	1.1	8
161	Nanofluidization electrostatics. <i>Physical Review E</i> , 2008, 77, 031301.	0.8	33
162	Types of gas fluidization of cohesive granular materials. <i>Physical Review E</i> , 2007, 75, 031306.	0.8	45

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163	Novel instrument to characterize dry granular materials at low consolidations. Review of Scientific Instruments, 2007, 78, 073901.	0.6	12
164	Magnetic field assisted fluidization: A modified Richardson-Zaki equation. Particuology: Science and Technology of Particles, 2007, 5, 61-70.	0.4	14
165	Fluidization, bubbling and jamming of nanoparticle agglomerates. Chemical Engineering Science, 2007, 62, 6947-6956.	1.9	56
166	Adhesive elastic plastic contact: theory and numerical simulation. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2007, 87, 128-138.	0.9	14
167	The transitional behaviour of avalanches in cohesive granular materials. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P07015-P07015.	0.9	12
168	Compaction of fine powders: from fluidized agglomerates to primary particles. Granular Matter, 2006, 9, 19-24.	1.1	12
169	Stability and Bifurcation Analysis of a Spinning Space Tether. Journal of Nonlinear Science, 2006, 16, 507-542.	1.0	11
170	Fluidization of nanoparticles: A modified Richardson-Zaki Law. AIChE Journal, 2006, 52, 838-842.	1.8	51
171	Effect of vibration on agglomerate particulate fluidization. AIChE Journal, 2006, 52, 1705-1714.	1.8	57
172	Adhesion force between fine particles with controlled surface properties. AIChE Journal, 2006, 52, 1715-1728.	1.8	57
173	Random loose packing of cohesive granular materials. Europhysics Letters, 2006, 75, 985-991.	0.7	63
174	Effect of compaction history on the fluidization behavior of fine cohesive powders. Physical Review E, 2006, 73, 056310.	0.8	5
175	High viscosity gas fluidization of fine particles: An extended window of quasihomogeneous flow. Physical Review E, 2006, 74, 021302.	0.8	17
176	Physics of Compaction of Fine Cohesive Particles. Physical Review Letters, 2005, 94, 075501.	2.9	50
177	Rheological Testing of Xerographic Liquid Inks: A Need for Printing Technology. Applied Rheology, 2004, 14, 190-196.	3.5	2
178	The Sevilla Powder Tester: A Tool for Characterizing the Physical Properties of Fine Cohesive Powders at Very Small Consolidations. KONA Powder and Particle Journal, 2004, 22, 66-81.	0.9	59
179	Jamming Threshold of Dry Fine Powders. Physical Review Letters, 2004, 92, 258303.	2.9	63
180	Granular avalanches: Deterministic, correlated and decorrelated dynamics. Europhysics Letters, 2004, 68, 818-824.	0.7	3

#	ARTICLE	IF	CITATIONS
181	Interparticle contact forces in fine cohesive powders. Theory and experiments. Proceedings in Applied Mathematics and Mechanics, 2003, 3, 206-207.	0.2	8
182	The memory of granular materials. Contemporary Physics, 2003, 44, 389-399.	0.8	31
183	Effect of particle size and interparticle force on the fluidization behavior of gas-fluidized beds. Physical Review E, 2003, 67, 051305.	0.8	65
184	Experimental study on the dynamics of gas-fluidized beds. Physical Review E, 2003, 67, 016303.	0.8	44
185	Fine cohesive powders in rotating drums: Transition from rigid-plastic flow to gas-fluidized regime. Physical Review E, 2002, 65, 061301.	0.8	24
186	The settling of fine cohesive powders. Europhysics Letters, 2001, 54, 329-334.	0.7	39
187	Mechanical stresses of a layer of colloidal particles aggregated by means of an electric field. Journal of Electrostatics, 2001, 53, 107-121.	1.0	5
188	The tensile strength and free volume of cohesive powders compressed by gas flow. Powder Technology, 2001, 115, 45-50.	2.1	34
189	The effect of particle size on interparticle adhesive forces for small loads. Powder Technology, 2001, 118, 236-241.	2.1	17
190	Correlation between bulk stresses and interparticle contact forces in fine powders. Physical Review E, 2001, 64, 031301.	0.8	68
191	Looking for Self-Organized Critical Behavior in Avalanches of Slightly Cohesive Powders. Physical Review Letters, 2001, 87, 194301.	2.9	25
192	Aggregation and sedimentation in gas-fluidized beds of cohesive powders. Physical Review E, 2001, 64, 041304.	0.8	61
193	Self-Diffusion in a Gas-Fluidized Bed of Fine Powder. Physical Review Letters, 2001, 86, 3020-3023.	2.9	65
194	Effect of vibration on the stability of a gas-fluidized bed of fine powder. Physical Review E, 2001, 64, 021302.	0.8	37
195	State Diagram of fine cohesive powders at zero shear. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2000, 80, 423-424.	0.9	3
196	Avalanches in fine, cohesive powders. Physical Review E, 2000, 62, 6851-6860.	0.8	52
197	An automated apparatus for measuring the tensile strength and compressibility of fine cohesive powders. Review of Scientific Instruments, 2000, 71, 2791-2795.	0.6	49
198	On the breakup of slender liquid bridges: Experiments and a 1-D numerical analysis. European Journal of Mechanics, B/Fluids, 1999, 18, 649-658.	1.2	15

#	ARTICLE	IF	CITATIONS
199	Flow Regimes in Fine Cohesive Powders. <i>Physical Review Letters</i> , 1999, 82, 1156-1159.	2.9	100
200	The tensile strength of cohesive powders and its relationship to consolidation, free volume and cohesivity. <i>Powder Technology</i> , 1998, 97, 237-245.	2.1	96