

# Paola Ammendola

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

2,369  
citations

136740

32  
h-index

214527

47  
g-index

59  
all docs

59  
docs citations

59  
times ranked

1858  
citing authors

#	ARTICLE	IF	CITATIONS
1	CO <sub>2</sub> adsorption on a fine activated carbon in a sound assisted fluidized bed: Thermodynamics and kinetics. Chemical Engineering Journal, 2017, 322, 302-313.	6.6	226
2	Adsorption of Carbon Dioxide for Post-combustion Capture: A Review. Energy & Fuels, 2021, 35, 12845-12868.	2.5	193
3	Isotherms and thermodynamics of CO <sub>2</sub> adsorption on a novel carbon-magnetite composite sorbent. Chemical Engineering Research and Design, 2018, 134, 540-552.	2.7	131
4	Kinetic study and breakthrough analysis of the hybrid physical/chemical CO <sub>2</sub> adsorption/desorption behavior of a magnetite-based sorbent. Chemical Engineering Journal, 2019, 372, 526-535.	6.6	109
5	CO <sub>2</sub> Capture by Temperature Swing Adsorption: Working Capacity As Affected by Temperature and CO <sub>2</sub> Partial Pressure. Industrial & Engineering Chemistry Research, 2020, 59, 3593-3605.	1.8	102
6	H <sub>2</sub> -rich syngas production by fluidized bed gasification of biomass and plastic fuel. Waste Management, 2012, 32, 724-732.	3.7	99
7	Gas-solid fluidization of cohesive powders. Chemical Engineering Research and Design, 2018, 133, 347-387.	2.7	86
8	CO <sub>2</sub> capture performance of HKUST-1 in a sound assisted fluidized bed. Chemical Engineering Journal, 2014, 239, 75-86.	6.6	77
9	Fluidization of binary mixtures of nanoparticles under the effect of acoustic fields. Advanced Powder Technology, 2011, 22, 174-183.	2.0	58
10	CO <sub>2</sub> adsorption on fine activated carbon in a sound assisted fluidized bed: Effect of sound intensity and frequency, CO <sub>2</sub> partial pressure and fluidization velocity. Applied Energy, 2014, 113, 1269-1282.	5.1	58
11	Fixed bed adsorption as affected by thermodynamics and kinetics: Yellow tuff for CO <sub>2</sub> capture. Powder Technology, 2020, 373, 446-458.	2.1	58
12	Enhancement of CO <sub>2</sub> capture at Ca-looping conditions by high-intensity acoustic fields. Applied Energy, 2013, 111, 538-549.	5.1	50
13	BTC-based metal-organic frameworks: Correlation between relevant structural features and CO <sub>2</sub> adsorption performances. Fuel, 2018, 222, 319-326.	3.4	50
14	Aeration and mixing behaviours of nano-sized powders under sound vibration. Powder Technology, 2010, 201, 49-56.	2.1	46
15	On improving the CO <sub>2</sub> recovery efficiency of a conventional TSA process in a sound assisted fluidized bed by separating heating and purging. Separation and Purification Technology, 2016, 167, 24-31.	3.9	46
16	Improving the thermal performance of fluidized beds for concentrated solar power and thermal energy storage. Powder Technology, 2016, 290, 97-101.	2.1	46
17	Rh-perovskite catalysts for conversion of tar from biomass pyrolysis. Chemical Engineering Journal, 2009, 154, 361-368.	6.6	45
18	CO <sub>2</sub> capture performances of fine solid sorbents in a sound-assisted fluidized bed. Powder Technology, 2014, 268, 347-356.	2.1	43

#	ARTICLE	IF	CITATIONS
19	Effect of operating conditions on the CO <sub>2</sub> recovery from a fine activated carbon by means of TSA in a fluidized bed assisted by acoustic fields. <i>Fuel Processing Technology</i> , 2015, 134, 494-501.	3.7	43
20	Calcium-looping for thermochemical energy storage in concentrating solar power applications: Evaluation of the effect of acoustic perturbation on the fluidized bed carbonation. <i>Chemical Engineering Journal</i> , 2020, 392, 123658.	6.6	42
21	Sound-Assisted Fluidization for Temperature Swing Adsorption and Calcium Looping: A Review. <i>Materials</i> , 2021, 14, 672.	1.3	42
22	Copper catalysts for H <sub>2</sub> production via CH <sub>4</sub> decomposition. <i>Journal of Molecular Catalysis A</i> , 2007, 266, 31-39.	4.8	41
23	Effect of Temperature on Fluidization of Geldart's Group A and C Powders: Role of Interparticle Forces. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 12811-12821.	1.8	41
24	Magnetite loaded carbon fine particles as low-cost CO <sub>2</sub> adsorbent in a sound assisted fluidized bed. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2801-2809.	2.4	38
25	A comparison between interparticle forces estimated with direct powder shear testing and with sound assisted fluidization. <i>Powder Technology</i> , 2018, 323, 1-7.	2.1	38
26	Slow pyrolysis of walnut shells in nitrogen and carbon dioxide. <i>Fuel</i> , 2018, 225, 419-425.	3.4	37
27	Effect of mixture composition, nanoparticle density and sound intensity on mixing quality of nanopowders. <i>Chemical Engineering and Processing: Process Intensification</i> , 2011, 50, 885-891.	1.8	35
28	Effect of acoustic field on CO <sub>2</sub> desorption in a fluidized bed of fine activated carbon. <i>Particuology</i> , 2015, 23, 8-15.	2.0	35
29	CO <sub>2</sub> sorption on surface-modified carbonaceous support: Probing the influence of the carbon black microporosity and surface polarity. <i>Applied Surface Science</i> , 2016, 360, 329-337.	3.1	35
30	Role of Acoustic Fields in Promoting the Gas-Solid Contact in a Fluidized Bed of Fine Particles. <i>KONA Powder and Particle Journal</i> , 2015, 32, 23-40.	0.9	34
31	Effect of sulphur on the performance of Rh-LaCoO <sub>3</sub> based catalyst for tar conversion to syngas. <i>Applied Catalysis B: Environmental</i> , 2012, 113-114, 11-18.	10.8	33
32	Production of hydrogen from thermo-catalytic decomposition of methane in a fluidized bed reactor. <i>Chemical Engineering Journal</i> , 2009, 154, 287-294.	6.6	32
33	Dual bed reactor for the study of catalytic biomass tars conversion. <i>Experimental Thermal and Fluid Science</i> , 2010, 34, 269-274.	1.5	29
34	Aluminum foam made via a new method based on cold gas dynamic sprayed powders mixed through sound assisted fluidization technique. <i>Journal of Materials Processing Technology</i> , 2016, 231, 265-276.	3.1	28
35	Insights into utilization of strontium carbonate for thermochemical energy storage. <i>Renewable Energy</i> , 2020, 157, 769-781.	4.3	27
36	Some issues in modelling methane catalytic decomposition in fluidized bed reactors. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 2679-2694.	3.8	26

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37	Devolatilization and Attrition Behavior of Fuel Pellets during Fluidized-Bed Gasification. <i>Energy &amp; Fuels</i> , 2011, 25, 1260-1266.	2.5	26
38	Alumina contribution to CO oxidation: A TPR and IR study. <i>Surface Science</i> , 2011, 605, 1812-1817.	0.8	22
39	An Innovative Method to Produce Metal Foam Using Cold Gas Dynamic Spray Process Assisted by Fluidized Bed Mixing of Precursors. <i>Key Engineering Materials</i> , 0, 651-653, 913-918.	0.4	16
40	Investigation of the catalytic activity of Rh-LaCoO <sub>3</sub> catalyst in the conversion of tar from biomass devolatilization products. <i>Applied Catalysis A: General</i> , 2010, 385, 123-129.	2.2	14
41	Kinetics of the carbonation reaction of an SrO-Al <sub>2</sub> O <sub>3</sub> composite for thermochemical energy storage. <i>Chemical Engineering Journal</i> , 2021, 420, 129618.	6.6	13
42	Regeneration Strategies of Deactivated Catalysts for Thermo-Catalytic Decomposition Process in a Fluidized Bed Reactor. <i>Combustion Science and Technology</i> , 2008, 180, 869-882.	1.2	12
43	Attrition of lignite char during fluidized bed gasification. <i>Experimental Thermal and Fluid Science</i> , 2012, 43, 9-12.	1.5	12
44	Thermochemical Stability of Alumina-Supported Rh-LaCoO <sub>3</sub> Catalysts for Tar Conversion. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 7475-7481.	1.8	12
45	Fluidized Bed Combustion and Gasification of Fossil and Renewable Slurry Fuels. <i>Energies</i> , 2021, 14, 7766.	1.6	12
46	Nonpremixed Catalytic Combustion of Methane in a Fluidized Bed Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2006, 45, 1009-1013.	1.8	11
47	Attrition of lignite char under fluidized bed gasification conditions: The effect of carbon conversion. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 2741-2747.	2.4	11
48	Regeneration of spent catalysts in oxy-combustion atmosphere. <i>Experimental Thermal and Fluid Science</i> , 2010, 34, 262-268.	1.5	9
49	The effect of pelletization on the attrition of wood under fluidized bed combustion and gasification conditions. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 2735-2740.	2.4	9
50	On the agglomeration tendency of carbonaceous fuels in fluidized beds. <i>Fuel</i> , 2020, 277, 118187.	3.4	7
51	Improvement of the Manufacturing Process of Tungsten Carbide-Cobalt Hard Metals by the Application of Sound Assisted Fluidization for the Mixing of the Powders. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 414-424.	1.8	6
52	Preliminary Assessment of Tuff as CO <sub>2</sub> Sorbent. <i>Energy Procedia</i> , 2017, 114, 46-52.	1.8	4
53	CO <sub>2</sub> Adsorption under Dynamic Conditions: An Overview on Rice Husk-Derived Sorbents and Other Materials. <i>Combustion Science and Technology</i> , 2019, 191, 1484-1498.	1.2	4
54	Hydrogen production by catalytic methane decomposition and catalyst regeneration by oxygen mixtures in fluidised and fixed bed reactors. <i>International Journal of Nuclear Hydrogen Production and Applications</i> , 2009, 2, 4.	0.2	2

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55	Partial Oxidation of Tar into Syngas over Rh-Based Catalysts. Combustion Science and Technology, 2014, 186, 563-573.	1.2	2
56	Carbonation Kinetics of Fine CaO Particles in a Sound-Assisted Fluidized Bed for Thermochemical Energy Storage. KONA Powder and Particle Journal, 2022, 39, 240-250.	0.9	2
57	Controlling thermal properties of dense gas fluidized beds for concentrated solar power by internal and external solids circulation. AIP Conference Proceedings, 2017, , .	0.3	1
58	Zero Emissions Hydrogen Production by Fluidized Bed Catalytic Decomposition of Methane. , 2009, , 1035-1040.		1