## Antonio Soria

## List of Publications by Year in descending order

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304602 330025 1,559 60 22 37 h-index citations g-index papers 60 60 60 1327 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Insights into the co–pyrolysis of olive stone, waste polyvinyl chloride and Spirulina microalgae blends through thermogravimetric analysis. Algal Research, 2022, 62, 102635.	2.4	5
2	Design of Novel Cooling Systems Based on Metal Plates with Channels of Shapes Inspired by Nature. Applied Sciences (Switzerland), 2022, 12, 3350.	1.3	1
3	Kinetics mechanism of inert and oxidative torrefaction of biomass. Energy Conversion and Management, 2022, 267, 115892.	4.4	21
4	Evaluation of the number of first-order reactions required to accurately model biomass pyrolysis. Chemical Engineering Journal, 2021, 408, 127291.	6.6	7
5	Synthesis, characterization and absorbability of Crocus sativus petals hydrothermal carbonized hydrochar and activated hydrochar. Chemical Engineering and Processing: Process Intensification, 2021, 159, 108236.	1.8	24
6	The influence of the elemental and structural chemical composition on the ash fusibility of sugarcane bagasse and sugarcane straw. Fuel, 2021, 304, 121404.	3.4	5
7	Modeling the motion of fuel particles in a fluidized bed. Fuel, 2021, 305, 121424.	3.4	11
8	Numerical and Experimental Evaluation and Heat Transfer Characteristics of a Soft Magnetic Transformer Built from Laminated Steel Plates. Sensors, 2021, 21, 7939.	2.1	2
9	Experimental study of bubble dynamics and flow transition recognition in a fluidized bed with wet particles. Chemical Engineering Science, 2020, 211, 115257.	1.9	19
10	Pyrolysis of sludge and biomass residues. , 2020, , 155-181.		3
11	Microalgae pyrolysis under isothermal and non-isothermal conditions. Algal Research, 2020, 51, 102031.	2.4	12
12	Thermal behavior, thermodynamics and kinetics of co-pyrolysis of binary and ternary mixtures of biomass through thermogravimetric analysis. Fuel, 2020, 280, 118665.	3.4	53
13	Evaluation of heat transfer models at various fluidization velocities for biomass pyrolysis conducted in a bubbling fluidized bed. International Journal of Heat and Mass Transfer, 2020, 160, 120175.	2.5	18
14	Experimental evaluation of the convection heat transfer coefficient of large particles moving freely in a fluidized bed reactor. International Journal of Heat and Mass Transfer, 2020, 153, 119612.	2.5	14
15	On the characteristic heating and pyrolysis time of thermally small biomass particles in a bubbling fluidized bed reactor. Renewable Energy, 2020, 160, 312-322.	4.3	9
16	Pollutant emissions released during sewage sludge combustion in a bubbling fluidized bed reactor. Waste Management, 2020, 105, 27-38.	3.7	24
17	Comparison of wood pyrolysis kinetic data derived from thermogravimetric experiments by model-fitting and model-free methods. Energy Conversion and Management, 2020, 212, 112818.	4.4	53
18	BLIND PEER REVIEW OF ACADEMIC RESEARCH PROJECTS OF RENEWABLE ENERGIES BY STUDENTS. , 2020, , .		0

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19	Effect of bed material density on the performance of steam gasification of biomass in bubbling fluidized beds. Fuel, 2019, 257, 116118.	3.4	20
20	Pyrolysis and Combustion Kinetic Study and Complementary Study of Ash Fusibility Behavior of Sugarcane Bagasse, Sugarcane Straw, and Their Pelletsâ€"Case Study of Agro-Industrial Residues. Energy & Study of Agro-Industrial Residues.	2.5	19
21	Numerical study of the effect of pressure and temperature on the fluidization of solids with air and (supercritical) CO2. Journal of Supercritical Fluids, 2019, 147, 271-283.	1.6	17
22	Exergy recovery from solar heated particles to supercritical CO2. Applied Thermal Engineering, 2019, 146, 469-481.	3.0	18
23	Lateral solids meso-mixing in pseudo-2D fluidized beds by means of TFM simulations. Powder Technology, 2018, 334, 183-191.	2.1	18
24	Analyzing the pyrolysis kinetics of several microalgae species by various differential and integral isoconversional kinetic methods and the Distributed Activation Energy Model. Algal Research, 2018, 32, 11-29.	2.4	57
25	Combining the lumped capacitance method and the simplified distributed activation energy model to describe the pyrolysis of thermally small biomass particles. Energy Conversion and Management, 2018, 175, 164-172.	4.4	17
26	Pyrolysis of Cynara cardunculus L. samples – Effect of operating conditions and bed stage on the evolution of the conversion. Chemical Engineering Journal, 2018, 351, 371-381.	6.6	17
27	Pyrolysis of biofuels of the future: Sewage sludge and microalgae – Thermogravimetric analysis and modelling of the pyrolysis under different temperature conditions. Energy Conversion and Management, 2017, 138, 261-272.	4.4	69
28	Improvement of the simulation of fuel particles motion in a fluidized bed by considering wall friction. Chemical Engineering Journal, 2017, 321, 175-183.	6.6	11
29	Pyrolysis of sewage sludge in a fixed and a bubbling fluidized bed – Estimation and experimental validation of the pyrolysis time. Energy Conversion and Management, 2017, 144, 235-242.	4.4	39
30	The role of fuel mixing on char conversion in a fluidized bed. Powder Technology, 2017, 316, 677-686.	2.1	17
31	Experimental study on the characteristic mixing time of solids and its link with the lateral dispersion coefficient in bubbling fluidized beds. Chemical Engineering Journal, 2017, 307, 113-121.	6.6	35
32	Modeling of the pyrolysis of biomass under parabolic and exponential temperature increases using the Distributed Activation Energy Model. Energy Conversion and Management, 2016, 118, 223-230.	4.4	20
33	Modeling the thin-layer drying process of Granny Smith apples: Application in an indirect solar dryer. Applied Thermal Engineering, 2016, 108, 1086-1094.	3.0	42
34	Multiresolution Analysis of a Drying Process in a Rotating-Distributor Fluidized Bed. Drying Technology, 2016, 34, 119-131.	1.7	4
35	Evaluation of the Maximum Evaporation Rate in Small-Scale Indirect Solar Dryers. Journal of Solar Energy Engineering, Transactions of the ASME, $2016,138,.$	1.1	6
36	Agglomeration detection by pressure fluctuation analysis during Cynara cardunculus L. gasification in a fluidized bed. Chemical Engineering Journal, 2016, 284, 640-649.	6.6	35

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37	Stagnant regions estimation in fluidized beds from bed surface observation. Chemical Engineering Journal, 2015, 281, 109-118.	6.6	4
38	Effect of the number of TGA curves employed on the biomass pyrolysis kinetics results obtained using the Distributed Activation Energy Model. Fuel Processing Technology, 2015, 134, 360-371.	3.7	74
39	Fully coupled TFM-DEM simulations to study the motion of fuel particles in a fluidized bed. Chemical Engineering Science, 2015, 134, 57-66.	1.9	25
40	Maldistribution detection in bubbling fluidized beds. Chemical Engineering Journal, 2015, 270, 272-281.	6.6	8
41	Experimental analysis and simulation of the performance of a box-type solar cooker. Energy for Sustainable Development, 2015, 29, 65-71.	2.0	47
42	Optimization of the feeding ports location in a fluidized bed combustor based on Monte Carlo simulations of fuel particles motion. Fuel, 2015, 141, 82-92.	3.4	16
43	Thermal design guidelines of solar power towers. Applied Thermal Engineering, 2014, 63, 428-438.	3.0	147
44	Evaluating the accuracy of the Distributed Activation Energy Model for biomass devolatilization curves obtained at high heating rates. Energy Conversion and Management, 2014, 86, 1045-1049.	4.4	49
45	Simulation and experimental study on the motion of non-reacting objects in the freeboard of a fluidized bed. Powder Technology, 2014, 263, 112-120.	2.1	13
46	The effect of temperature on the distributor design in bubbling fluidized beds. Powder Technology, 2014, 261, 176-184.	2.1	21
47	Moving bed syngas conditioning: Modelling. Applied Thermal Engineering, 2014, 62, 809-822.	3.0	2
48	Energy and exergy analysis of an absorption power cycle. Applied Thermal Engineering, 2013, 55, 69-77.	3.0	51
49	Experimental quantification of the particle–wall frictional forces in pseudo-2D gas fluidised beds. Chemical Engineering Science, 2013, 102, 257-267.	1.9	17
50	Simulation of object motion in a bubbling fluidized bed using a Monte Carlo method. Chemical Engineering Science, 2013, 96, 26-32.	1.9	14
51	Estimation and experimental validation of the circulation time in a 2D gas–solid fluidized beds. Powder Technology, 2013, 235, 669-676.	2.1	27
52	Analysis of biomass and sewage sludge devolatilization using the distributed activation energy model. Energy Conversion and Management, 2013, 65, 239-244.	4.4	80
53	Fluidized bed with a rotating distributor operated under defluidization conditions. Chemical Engineering Journal, 2012, 195-196, 198-207.	6.6	25
54	Circulation of an object immersed in a bubbling fluidized bed. Chemical Engineering Science, 2011, 66, 78-87.	1.9	59

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#	Article	IF	CITATION
55	Motion of a large object in a bubbling fluidized bed with a rotating distributor. Chemical Engineering and Processing: Process Intensification, 2011, 50, 859-868.	1.8	28
56	Buoyancy effects on objects moving in a bubbling fluidized bed. Chemical Engineering Science, 2011, 66, 2833-2841.	1.9	46
57	Solid conduction effects and design criteria in moving bed heat exchangers. Applied Thermal Engineering, 2011, 31, 1200-1207.	3.0	21
58	Exergy Optimization in a Steady Moving Bed Heat Exchanger. Annals of the New York Academy of Sciences, 2009, 1161, 584-600.	1.8	7
59	Airport electric vehicle powered by fuel cell. Journal of Power Sources, 2007, 169, 184-193.	4.0	36
60	Modelling and Design of Indirect Solar Dryers for Batch Drying. Renewable Energy and Power Quality Journal, 0, , 1093-1098.	0.2	0