

# Luz Sanchez-Silva

## List of Publications by Year in descending order

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105  
papers

4,614  
citations

109137

35  
h-index

110170

64  
g-index

106  
all docs

106  
docs citations

106  
times ranked

4846  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermogravimetric-mass spectrometric analysis of lignocellulosic and marine biomass pyrolysis. <i>Bioresource Technology</i> , 2012, 109, 163-172.	4.8	332
2	Development of thermo-regulating textiles using paraffin wax microcapsules. <i>Thermochimica Acta</i> , 2010, 498, 16-21.	1.2	218
3	Pyrolysis, combustion and gasification characteristics of <i>Nannochloropsis gaditana</i> microalgae. <i>Bioresource Technology</i> , 2013, 130, 321-331.	4.8	218
4	Microencapsulation of PCMs with a polystyrene shell. <i>Colloid and Polymer Science</i> , 2007, 285, 1377-1385.	1.0	197
5	Microencapsulation of PCMs with a styrene-methyl methacrylate copolymer shell by suspension-like polymerisation. <i>Chemical Engineering Journal</i> , 2010, 157, 216-222.	6.6	181
6	Thermogravimetric-mass spectrometric analysis on combustion of lignocellulosic biomass. <i>Bioresource Technology</i> , 2013, 143, 562-574.	4.8	154
7	Kinetic analysis and thermal characterization of the microalgae combustion process by thermal analysis coupled to mass spectrometry. <i>Applied Energy</i> , 2014, 114, 227-237.	5.1	145
8	Improvement of the thermal behaviour of gypsum blocks by the incorporation of microcapsules containing PCMS obtained by suspension polymerization with an optimal core/coating mass ratio. <i>Applied Thermal Engineering</i> , 2010, 30, 1164-1169.	3.0	136
9	Three integrated process simulation using aspen plus®: Pine gasification, syngas cleaning and methanol synthesis. <i>Energy Conversion and Management</i> , 2018, 177, 416-427.	4.4	134
10	Influence of Different Improved Hummers Method Modifications on the Characteristics of Graphite Oxide in Order to Make a More Easily Scalable Method. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 12836-12847.	1.8	118
11	Influence of the reduction strategy in the synthesis of reduced graphene oxide. <i>Advanced Powder Technology</i> , 2017, 28, 3195-3203.	2.0	116
12	Thermal testing and numerical simulation of gypsum wallboards incorporated with different PCMs content. <i>Applied Energy</i> , 2011, 88, 930-937.	5.1	111
13	Pyrolysis of three different types of microalgae: Kinetic and evolved gas analysis. <i>Energy</i> , 2014, 73, 33-43.	4.5	105
14	Influence of operation conditions on the microencapsulation of PCMs by means of suspension-like polymerization. <i>Colloid and Polymer Science</i> , 2008, 286, 1019-1027.	1.0	102
15	Gasification of lignocellulosic biomass char obtained from pyrolysis: Kinetic and evolved gas analyses. <i>Energy</i> , 2014, 71, 456-467.	4.5	95
16	Synthesis and Characterization of Paraffin Wax Microcapsules with Acrylic-Based Polymer Shells. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 12204-12211.	1.8	92
17	Comparative study of different scalable routes to synthesize graphene oxide and reduced graphene oxide. <i>Materials Chemistry and Physics</i> , 2018, 203, 284-292.	2.0	92
18	Life cycle assessment of swine and dairy manure: Pyrolysis and combustion processes. <i>Bioresource Technology</i> , 2015, 182, 184-192.	4.8	86

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19	Kinetic analysis of manure pyrolysis and combustion processes. <i>Waste Management</i> , 2016, 58, 230-240.	3.7	85
20	Simulation of the gasification of animal wastes in a dual gasifier using Aspen Plus®. <i>Energy Conversion and Management</i> , 2017, 140, 211-217.	4.4	84
21	Effect of the operation conditions on the selective oxidation of glycerol with catalysts based on Au supported on carbonaceous materials. <i>Chemical Engineering Journal</i> , 2011, 178, 423-435.	6.6	70
22	Simulation of biomass gasification in bubbling fluidized bed reactor using aspen plus®. <i>Energy Conversion and Management</i> , 2021, 235, 113981.	4.4	65
23	Energetic, economic and environmental assessment of the pyrolysis and combustion of microalgae and their oils. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 51, 1752-1770.	8.2	59
24	Valorization of Mexican biomasses through pyrolysis, combustion and gasification processes. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 71, 509-522.	8.2	57
25	Synthesis and characterization of Au supported on carbonaceous material-based catalysts for the selective oxidation of glycerol. <i>Chemical Engineering Journal</i> , 2011, 172, 418-429.	6.6	54
26	Thermal and morphological stability of polystyrene microcapsules containing phase change materials. <i>Journal of Applied Polymer Science</i> , 2011, 120, 291-297.	1.3	53
27	Solvent-Based Exfoliation via Sonication of Graphitic Materials for Graphene Manufacture. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 845-855.	1.8	51
28	Effects of freeze-drying conditions on aerogel properties. <i>Journal of Materials Science</i> , 2016, 51, 8977-8985.	1.7	46
29	Immobilized laccase on polyimide aerogels for removal of carbamazepine. <i>Journal of Hazardous Materials</i> , 2019, 376, 83-90.	6.5	46
30	Applying an Experimental Design to Improve the Characteristics of Microcapsules Containing Phase Change Materials for Fabric Uses. <i>Industrial &amp; Engineering Chemistry Research</i> , 2008, 47, 9783-9790.	1.8	45
31	Catalytic oxidation of crude glycerol using catalysts based on Au supported on carbonaceous materials. <i>Applied Catalysis A: General</i> , 2013, 450, 189-203.	2.2	44
32	Comparison of the steam gasification performance of three species of microalgae by thermogravimetric-mass spectrometric analysis. <i>Fuel</i> , 2014, 134, 1-10.	3.4	42
33	Performing the best composition of supported Co/SiC catalyst for selective FTS diesel production. <i>Fuel</i> , 2012, 95, 587-598.	3.4	40
34	Synthesis and characterization of graphene: influence of synthesis variables. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 2962.	1.3	40
35	Life cycle assessment of olive pomace valorisation through pyrolysis. <i>Renewable Energy</i> , 2018, 122, 589-601.	4.3	40
36	Synergistic effect in the steam co-gasification of olive pomace, coal and petcoke: Thermogravimetric-mass spectrometric analysis. <i>Energy Conversion and Management</i> , 2018, 159, 140-150.	4.4	39

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37	Environmental assessment of olive pomace valorization through two different thermochemical processes for energy production. <i>Journal of Cleaner Production</i> , 2018, 186, 771-781.	4.6	36
38	CO <sub>2</sub> gasification process performance for energetic valorization of microalgae. <i>Energy</i> , 2017, 119, 37-43.	4.5	35
39	Linear and crosslinked polyimide aerogels: synthesis and characterization. <i>Journal of Materials Research and Technology</i> , 2019, 8, 2638-2648.	2.6	35
40	Influence of different suspension stabilizers on the preparation of Rubitherm RT31 microcapsules. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 390, 62-66.	2.3	34
41	Characterization of different heat transfer fluids and degradation study by using a pilot plant device operating at real conditions. <i>Energy</i> , 2013, 54, 240-250.	4.5	33
42	Preparation and characterization of Fe-PILCs. Influence of the synthesis parameters. <i>Clays and Clay Minerals</i> , 2005, 53, 613-621.	0.6	32
43	Dolomite effect on steam co-gasification of olive pomace, coal and petcoke: TGA-MS analysis, reactivity and synergistic effect. <i>Fuel</i> , 2018, 234, 142-150.	3.4	32
44	PVA/nanoclay/graphene oxide aerogels with enhanced sound absorption properties. <i>Applied Acoustics</i> , 2019, 156, 40-45.	1.7	30
45	Combustion kinetic study of woody and herbaceous crops by thermal analysis coupled to mass spectrometry. <i>Energy</i> , 2015, 90, 1626-1635.	4.5	29
46	CO <sub>2</sub> gasification of dairy and swine manure: A life cycle assessment approach. <i>Renewable Energy</i> , 2016, 95, 552-560.	4.3	28
47	Experimental investigation of a thermal storage system using phase change materials. <i>Applied Thermal Engineering</i> , 2016, 107, 264-270.	3.0	27
48	Environmental and economic analysis of bioethanol production from sugarcane molasses and agave juice. <i>Environmental Science and Pollution Research</i> , 2021, 28, 64374-64393.	2.7	27
49	Scale-up of a suspension-like polymerization process for the microencapsulation of phase change materials. <i>Journal of Microencapsulation</i> , 2010, 27, 583-593.	1.2	26
50	Valorization of olive oil industry subproducts: ash and olive pomace fast pyrolysis. <i>Food and Bioproducts Processing</i> , 2021, 125, 37-45.	1.8	25
51	Effect of different concentrations of O <sub>2</sub> under inert and CO <sub>2</sub> atmospheres on the swine manure combustion process. <i>Fuel</i> , 2017, 195, 23-32.	3.4	24
52	Poly(urea-formaldehyde) microcapsules containing commercial paraffin: in situ polymerization study. <i>Colloid and Polymer Science</i> , 2018, 296, 1449-1457.	1.0	23
53	Hydroxyethyl cellulose/alumina-based aerogels as lightweight insulating materials with high mechanical strength. <i>Journal of Materials Science</i> , 2018, 53, 1556-1567.	1.7	22
54	Life cycle assessment of electricity generation from combustion and gasification of biomass in Mexico. <i>Sustainable Production and Consumption</i> , 2021, 27, 72-85.	5.7	22

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55	Gasification versus fast pyrolysis bio-oil production: A life cycle assessment. <i>Journal of Cleaner Production</i> , 2022, 336, 130373.	4.6	22
56	Nanoclay-Based PVA Aerogels: Synthesis and Characterization. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 6218-6225.	1.8	21
57	Optimization of the synthesis procedure of microparticles containing gold for the selective oxidation of glycerol. <i>Applied Catalysis A: General</i> , 2014, 472, 11-20.	2.2	20
58	CNF-reinforced polymer aerogels: Influence of the synthesis variables and economic evaluation. <i>Chemical Engineering Journal</i> , 2015, 262, 691-701.	6.6	20
59	Utilization and reusability of hydroxyethyl cellulose alumina based aerogels for the removal of spilled oil. <i>Chemosphere</i> , 2020, 260, 127568.	4.2	20
60	PtRu nanoparticles supported on noble carbons for ethanol electrooxidation. <i>Journal of Energy Chemistry</i> , 2022, 66, 168-180.	7.1	20
61	Comparison of three Mexican biomasses valorization through combustion and gasification: Environmental and economic analysis. <i>Energy</i> , 2019, 189, 116095.	4.5	19
62	Synthesis and Characterization of Nitrogen-Doped Carbon Nanospheres Decorated with Au Nanoparticles for the Liquid-Phase Oxidation of Glycerol. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 16696-16706.	1.8	17
63	Thickness control of graphene deposited over polycrystalline nickel. <i>New Journal of Chemistry</i> , 2015, 39, 4414-4423.	1.4	17
64	Obtaining activated biochar from olive stone using a bench scale high-pressure thermobalance. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105374.	3.3	16
65	Preparation of coated thermo-regulating textiles using Rubitherm®T31 microcapsules. <i>Journal of Applied Polymer Science</i> , 2012, 124, 4809-4818.	1.3	15
66	Smart microcapsules containing nonpolar chemical compounds and carbon nanofibers. <i>Chemical Engineering Journal</i> , 2012, 181-182, 813-822.	6.6	15
67	Mexican biomasses valorization through pyrolysis process: Environmental and costs analysis. <i>Waste Management</i> , 2019, 95, 171-181.	3.7	15
68	Energetic and Economic Improvement for a Steam Methane-Reforming Industrial Plant: Simulation Tool. <i>Energies</i> , 2020, 13, 3807.	1.6	13
69	Catalytic effect of alkali and alkaline earth metals on fast pyrolysis pre-treatment of agricultural waste. <i>Biofuels, Bioproducts and Biorefining</i> , 2021, 15, 1473-1484.	1.9	13
70	Pyrolysis and combustion kinetics of microcapsules containing carbon nanofibers by thermal analysis-mass spectrometry. <i>Journal of Analytical and Applied Pyrolysis</i> , 2012, 94, 246-252.	2.6	12
71	Tailor-Made Aerogels Based on Carbon Nanofibers by Freeze-Drying. <i>Science of Advanced Materials</i> , 2014, 6, 665-673.	0.1	12
72	Novel etchings to transfer CVD-grown graphene from copper to arbitrary substrates. <i>Chemical Physics Letters</i> , 2014, 614, 89-94.	1.2	12

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73	Improving the growth of monolayer CVD-graphene over polycrystalline iron sheets. <i>New Journal of Chemistry</i> , 2017, 41, 5066-5074.	1.4	12
74	Pyrolysis process using a bench scale high pressure thermobalance. <i>Fuel Processing Technology</i> , 2017, 167, 345-354.	3.7	11
75	Simulator-based learning in the teaching of chemical engineering. <i>Computer Applications in Engineering Education</i> , 2019, 27, 1267-1276.	2.2	11
76	Olive pomace versus natural gas for methanol production: a life cycle assessment. <i>Environmental Science and Pollution Research</i> , 2021, 28, 30335-30350.	2.7	11
77	Fast pyrolysis of agroindustrial wastes blends: Hydrocarbon production enhancement. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 157, 105242.	2.6	11
78	CVD-graphene growth on different polycrystalline transition metals. <i>AIMS Materials Science</i> , 2017, 4, 194-208.	0.7	11
79	Binary Blends Versus Ternary Blends in Steam Cogasification by Means of TGA-MS: Reactivity and $H_2/CO$ Ratio. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 12801-12811.	1.8	10
80	Fast pyrolysis as an alternative to the valorization of olive mill wastes. <i>Journal of the Science of Food and Agriculture</i> , 2021, 101, 2650-2658.	1.7	10
81	Kinetic study of the $CO_2$ gasification of manure samples. <i>Journal of Thermal Analysis and Calorimetry</i> , 2017, 127, 2499-2509.	2.0	9
82	Process simulation and economic feasibility assessment of the methanol production via tri-reforming using experimental kinetic equations. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 26623-26636.	3.8	9
83	Game-Based Learning and Just-in-Time Teaching to Address Misconceptions and Improve Safety and Learning in Laboratory Activities. <i>Journal of Chemical Education</i> , 2021, 98, 3118-3130.	1.1	9
84	The effect of the dry glass transition temperature on the synthesis of paraffin microcapsules obtained by suspension-like polymerization. <i>Polymer Engineering and Science</i> , 2014, 54, 208-214.	1.5	7
85	Long-Term Performance of Nanomodified Coated Concrete Structures under Hostile Marine Climate Conditions. <i>Nanomaterials</i> , 2021, 11, 869.	1.9	7
86	Enhancement of BTX production via catalytic fast pyrolysis of almond shell, olive pomace with polyvinyl chloride mixtures. <i>Chemical Engineering Research and Design</i> , 2022, , .	2.7	7
87	Stabilizer effects on the synthesis of gold-containing microparticles. Application to the liquid phase oxidation of glycerol. <i>Journal of Colloid and Interface Science</i> , 2014, 431, 105-111.	5.0	6
88	Is methanol synthesis from co-gasification of olive pomace and petcoke economically feasible?. <i>Fuel</i> , 2020, 278, 118284.	3.4	6
89	CATALYTIC AND NON-CATALYTIC PYROLYSIS OF BIOLOGICALLY TREATED MANURE. <i>Environmental Engineering and Management Journal</i> , 2015, 14, 349-355.	0.2	6
90	Functionalization of microcapsules for the removal of heavy metal ions. <i>Journal of Chemical Technology and Biotechnology</i> , 2011, 86, 437-446.	1.6	5

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91	Nickel supported carbon nanofibers as an active and selective catalyst for the gas-phase hydrogenation of 2-tert-butylphenol. <i>Journal of Colloid and Interface Science</i> , 2012, 380, 173-181.	5.0	5
92	Improvement of the mechanical and flame-retardant properties of polyetherimide membranes modified with Graphene oxide. <i>Polymer-Plastics Technology and Materials</i> , 2019, 58, 1170-1177.	0.6	5
93	Effects of oxidizing procedures on carbon nanofibers surface and dispersability in an epoxy resin. <i>Materials Chemistry and Physics</i> , 2020, 243, 122571.	2.0	5
94	Olive Waste Valorization Through TGA-MS Gasification: A Diatomaceous Earth Effect. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 7505-7515.	1.8	5
95	Using Neural Networks or Linear Models to Predict the Characteristics of Microcapsules Containing Phase Change Materials. <i>Macromolecular Symposia</i> , 2010, 287, 162-167.	0.4	4
96	Effective Method of Microcapsules Production for Smart Fabrics. , 0, , .		4
97	Influence of the Total Gas Flow at Different Reaction Times for CVD-Graphene Synthesis on Polycrystalline Nickel. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-9.	1.5	4
98	Impact of the forecast price on economic results for methanol production from olive waste. <i>Fuel</i> , 2021, 295, 120631.	3.4	4
99	Temperature influence on the fast pyrolysis of manure samples: char, bio-oil and gases production. <i>E3S Web of Conferences</i> , 2017, 22, 00043.	0.2	2
100	Taylor-made aerogels through a freeze-drying process: economic assessment. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 89, 436-447.	1.1	2
101	Multi-criteria analysis for selecting the optimum blend in the co-gasification process. <i>Computers and Chemical Engineering</i> , 2020, 141, 106983.	2.0	2
102	Pyrolysis of Biomass for Biofuel Production. <i>Green Energy and Technology</i> , 2016, , 467-483.	0.4	1
103	Synthesis, Characterization and Catalytic Application of Gold-Containing Materials. <i>Science of Advanced Materials</i> , 2013, 5, 1907-1915.	0.1	1
104	Comparison of nanoclay/polyvinyl alcohol aerogels scale production: Life Cycle Assessment. <i>Chemical Engineering Research and Design</i> , 2021, 176, 243-253.	2.7	1
105	Study cases methodology in process dynamic and industrial plants control subject. <i>Computer Applications in Engineering Education</i> , 2020, 28, 1434-1448.	2.2	0