Silvio A B Vieira De Melo

List of Publications by Year
in descending order

62 papers	946 citations	430874 18 h-index	526287 27 g-index
64 all docs	64 docs citations	64 times ranked	1083 citing authors

#	Article	IF	Citations
1	Liposomes preparation using a supercritical fluid assisted continuous process. Chemical Engineering Journal, 2014, 249, 153-159.	12.7	73
2	Extraction of caffeine, chlorogenic acids and lipids from green coffee beans using supercritical carbon dioxide and co-solvents. Brazilian Journal of Chemical Engineering, 2008, 25, 543-552.	1.3	62
3	Efficient encapsulation of proteins in submicro liposomes using a supercritical fluid assisted continuous process. Journal of Supercritical Fluids, 2016, 107, 163-169.	3.2	50
4	Transesterification of waste frying oil using a zinc aluminate catalyst. Fuel Processing Technology, 2013, 106, 102-107.	7.2	46
5	Transesterification of Waste Frying Oils Using ZnAl2O4 as Heterogeneous Catalyst. Procedia Engineering, 2012, 42, 1928-1945.	1.2	32
6	Curcumin-loaded solid lipid particles by PGSS technology. Journal of Supercritical Fluids, 2016, 107, 534-541.	3.2	32
7	Catalytic supercritical water gasification of eucalyptus wood chips in a batch reactor. Fuel, 2019, 255, 115804.	6.4	31
8	Decision-making models and support systems for supply chain risk: literature mapping and future research agenda. European Research on Management and Business Economics, 2020, 26, 63-70.	6.9	31
9	Solubility and Solubility Modeling of Polycyclic Aromatic Hydrocarbons in Subcritical Water. Industrial & Engineering Chemistry Research, 2013, 52, 5806-5814.	3.7	29
10	Liposomes Size Engineering by Combination of Ethanol Injection and Supercritical Processing. Journal of Pharmaceutical Sciences, 2015, 104, 3842-3850.	3.3	26
11	Copaiba oil-loaded commercial wound dressings using supercritical CO 2 : A potential alternative topical antileishmanial treatment. Journal of Supercritical Fluids, 2017, 129, 106-115.	3.2	25
12	Supercritical solvent impregnation/deposition of spilanthol-enriched extracts into a commercial collagen/cellulose-based wound dressing. Journal of Supercritical Fluids, 2018, 133, 503-511.	3.2	24
13	Dense CO2 antisolvent precipitation of levothyroxine sodium: A comparative study of GAS and ARISE techniques based on morphology and particle size distributions. Journal of Supercritical Fluids, 2014, 93, 112-120.	3.2	23
14	Solid pure component property effects on modeling upper crossover pressure for supercritical fluid process synthesis: A case study for the separation of Annatto pigments using SC-CO2. Journal of Supercritical Fluids, 2009, 49, 1-8.	3.2	22
15	Evaluation and Improvement of Screening Methods Applied to Asphaltene Precipitation. Energy & Fuels, 2017, 31, 3380-3391.	5.1	22
16	Modeling high-pressure vapor–liquid equilibrium of limonene, linalool and carbon dioxide systems. Journal of Supercritical Fluids, 1999, 16, 107-117.	3.2	21
17	A comparative study of CPA and PC-SAFT equations of state to calculate the asphaltene onset pressure and phase envelope. Fluid Phase Equilibria, 2019, 494, 74-92.	2.5	21
18	A new approach to select solvents and operating conditions for supercritical antisolvent precipitation processes by using solubility parameter and group contribution methods. Journal of Supercritical Fluids, 2013, 81, 128-146.	3.2	20

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19	Generalized qâ€Weibull model and the bathtub curve. International Journal of Quality and Reliability Management, 2013, 30, 720-736.	2.0	20
20	Dense CO2 technology: Overview of recent applications for drug processing/formulation/delivery. Chemical Engineering and Processing: Process Intensification, 2019, 140, 64-77.	3.6	17
21	Catalytic Properties and Recycling of NiFe2O4 Catalyst for Hydrogen Production by Supercritical Water Gasification of Eucalyptus Wood Chips. Energies, 2020, 13, 4553.	3.1	17
22	HIGH-PRESSURE VAPOR-LIQUID EQUILIBRIUM DATA FOR BINARY AND TERNARY SYSTEMS FORMED BY SUPERCRITICAL CO2, LIMONENE AND LINALOOL. Brazilian Journal of Chemical Engineering, 1999, 16, 7-17.	1.3	17
23	Solubility and Solubility Modeling of Polycyclic Aromatic Hydrocarbons in Subcritical Ethanol and Water Mixtures. Industrial & Engineering Chemistry Research, 2014, 53, 10238-10248.	3.7	15
24	Modelling solubility of solid active principle ingredients in sc-CO2 with and without cosolvents: A comparative assessment of semiempirical models based on Chrastil's equation and its modifications. Journal of Supercritical Fluids, 2014, 93, 91-102.	3.2	15
25	Multicriteria Decision-Making System for Supplier Selection Considering Risk: A Computational Fuzzy AHP-Based Approach. IEEE Latin America Transactions, 2021, 19, 1564-1572.	1.6	15
26	Modeling of solidâ€"liquid equilibria for polyethylene and polypropylene solutions with equations of state. Journal of Applied Polymer Science, 2011, 121, 1832-1849.	2.6	14
27	Modeling of the Asphaltene Onset Pressure from Few Experimental Data: A Comparative Evaluation of the Hirschberg Method and the Cubic-Plus-Association Equation of State. Energy & Fuels, 2019, 33, 3733-3742.	5.1	14
28	Supercritical CO2 recovery of caffeine from green coffee oil: new experimental solubility data and modeling. Quimica Nova, 2008, 31, .	0.3	13
29	Prediction of vaporâ€"liquid and liquidâ€"liquid equilibria for polymer systems: Comparison of activity coefficient models. Fluid Phase Equilibria, 2008, 267, 140-149.	2.5	12
30	Simulation of Flash Separation in Polyethylene Industrial Processing: Comparison of SRK and SL Equations of State. Industrial & Engineering Chemistry Research, 2009, 48, 8613-8628.	3.7	12
31	Modeling high pressure vaporâ€"liquid equilibrium of ternary systems containing supercritical CO2 and mixed organic solvents using Pengâ€"Robinson equation of state. Journal of Supercritical Fluids, 2014, 93, 82-90.	3.2	10
32	Improvement of the Expanded Fluid Viscosity Model for Crude Oils: Effects of the Plus-Fraction Characterization Method and Density. Energy & Fuels, 2018, 32, 1624-1633.	5.1	10
33	High pressure phase equilibrium data for carbon dioxide, methyl methacrylate and poly (dimethylsiloxane) systems. Journal of Supercritical Fluids, 2019, 143, 346-352.	3.2	10
34	Biopesticide Encapsulation Using Supercritical CO2: A Comprehensive Review and Potential Applications. Molecules, 2021, 26, 4003.	3.8	10
35	Calculation of Pressureˆ^Temperature Diagrams and Distance for Phase Transition in Polyethylene Solutions. Industrial & Engineering Chemistry Research, 2010, 49, 12242-12253.	3.7	9
36	Failure analysis and design of a front bumper using finite element method along with durability and rig tests. International Journal of Vehicle Design, 2012, 60, 71.	0.3	9

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37	Effect of scCO2 sorption capacity on the total amount of borage oil loaded by scCO2 impregnation/deposition into a polyurethane-based wound dressing. Journal of Supercritical Fluids, 2016, 115, 1-9.	3.2	9
38	Supply chain risk management modelling: A systematic literature network analysis review. IMA Journal of Management Mathematics, 2020, 31, 387-416.	1.6	9
39	Kinetics of Toluene Disproportionation: Modeling and Experiments. Industrial & Engineering Chemistry Research, 2012, 51, 171-183.	3.7	8
40	Modeling failure rate of a robotic welding station using generalized q-distributions. International Journal of Quality and Reliability Management, 2015, 32, 156-166.	2.0	8
41	Assessment of the liquid mixture density effect on the prediction of supercritical carbon dioxide volume expansion of organic solvents by Peng-Robinson equation of state. Fluid Phase Equilibria, 2016, 425, 196-205.	2.5	8
42	Solubility of l-Dopa in supercritical carbon dioxide: prediction using a cubic equation of state. Journal of Supercritical Fluids, 2005, 34, 231-236.	3.2	7
43	A novel method to predict the risk of asphaltene precipitation due to CO2 displacement in oil reservoirs. Journal of Petroleum Science and Engineering, 2019, 176, 1008-1017.	4.2	7
44	Dispersion Polymerization of Methyl Methacrylate in Supercritical CO_2: A Preliminary Evaluation of In Situ Incorporation of Copaiba Oil. Industrial & Engineering Chemistry Research, 2020, 59, 9398-9407.	3.7	7
45	A Comparative Study of Biofuels and Fischer–Tropsch Diesel Blends on the Engine Combustion Performance for Reducing Exhaust Gaseous and Particulate Emissions. Energies, 2021, 14, 1538.	3.1	7
46	Valorization of Prosopis juliflora Woody Biomass in Northeast Brazilian through Dry Torrefaction. Energies, 2021, 14, 3465.	3.1	7
47	Stress analysis of a front bumper fascia using the boundary element method. Engineering Analysis With Boundary Elements, 2012, 36, 1296-1300.	3.7	6
48	Aerobic, Anaerobic Treatability and Biogas Production Potential of a Wastewater from a Biodiesel Industry. Waste and Biomass Valorization, 2016, 7, 691-702.	3.4	6
49	Bioactive compounds of Copaifera sp. impregnated into three-dimensional gelatin dressings. Drug Delivery and Translational Research, 2020, 10, 1537-1551.	5.8	4
50	Correlation and prediction of surface tension in single and mixed aqueous electrolyte solutions based on the mean ionic activity coefficient: A comparative analysis of Pitzer, E-NRTL and E-UNIQUAC models. Fluid Phase Equilibria, 2020, 516, 112618.	2.5	4
51	Fischer-Tropsch Diesel and Biofuels Exergy and Energy Analysis for Low Emissions Vehicles. Applied Sciences (Switzerland), 2021, 11, 5958.	2.5	4
52	High-Pressure Modeling of Asphaltene Precipitation during Oil Depletion Based on the Solid Model. Energy & Fuels, 2017, 31, 7911-7918.	5.1	3
53	Modeling the Saturation Pressure of Systems Containing Crude Oils and CO2 Using the SRK Equation of State. Journal of Chemical & Engineering Data, 2019, 64, 2134-2142.	1.9	3
54	Computational Aspects for Optimization of High Pressure Phase Equilibrium for Polymer Industrial Systems. Computer Aided Chemical Engineering, 2009, 27, 405-410.	0.5	2

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55	Stress analysis using BEM as support for fatigue life prediction in the automotive industry. International Journal of Vehicle Systems Modelling and Testing, 2013, 8, 88.	0.1	2
56	CO_2–oil saturation pressure and onset asphaltene precipitation. Canadian Journal of Chemical Engineering, 2015, 93, 1697-1704.	1.7	2
57	Valuation of Clean Technology Projects: An Application of Real Options Theory. Computer Aided Chemical Engineering, 2009, 27, 2079-2084.	0.5	1
58	Calculation of Bubble Pressure for Crude Oils: The Effect of q-Weibull Distribution for Splitting the Heavy Fraction. Journal of Chemical & Engineering Data, 2019, 64, 1885-1897.	1.9	1
59	Safety Assessment of Highly Integrated and Complex Mechatronic Systems. , 2008, , .		0
60	Torrefaction as a Pre-Treatment of Biomass: A Bibliometric Analysis. International Journal for Innovation Education and Research, 2021, 9, 289-313.	0.1	0
61	Process integration for industrial water reuse: A case study from a Brazilian biodiesel commercial plant. Revista Ibero-americana De Ciências Ambientais, 2015, 6, 125-131.	0.1	0
62	CHANGING ENERGY GEOPOLITICS: WHAT IS THE ROLE OF SUSTAINABILITY IN THE GLOBAL ENERGY GEOPOLITICS?. Austral: Brazilian Journal of Strategy and International Relations, 2018, 6, .	0.1	0