Aaron Scurto

List of Publications by Year
in descending order

64 papers	2,497 citations	218677 26 h-index	197818 49 g-index
68 all docs	68 docs citations	68 times ranked	2462 citing authors

#	Article	IF	Citations
1	CO2 as a Separation Switch for Ionic Liquid/Organic Mixtures. Journal of the American Chemical Society, 2002, 124, 10276-10277.	13.7	312
2	Viscosity of Imidazolium-Based Ionic Liquids at Elevated Pressures: Cation and Anion Effects. International Journal of Thermophysics, 2008, 29, 1222-1243.	2.1	174
3	Cellulose Solubility in Ionic Liquid Mixtures: Temperature, Cosolvent, and Antisolvent Effects. Journal of Physical Chemistry B, 2016, 120, 7906-7919.	2.6	129
4	Carbon dioxide induced separation of ionic liquids and water. Chemical Communications, 2003, , 572-573.	4.1	124
5	High-pressure phase equilibria of {carbon dioxide (CO2)+n-alkyl-imidazolium bis(trifluoromethylsulfonyl)amide} ionic liquids. Journal of Chemical Thermodynamics, 2010, 42, 305-311.	2.0	123
6	Improved 1-butene/isobutane alkylation with acidic ionic liquids and tunable acid/ionic liquid mixtures. Journal of Catalysis, 2009, 268, 243-250.	6.2	107
7	Phase equilibria of imidazolium ionic liquids and the refrigerant gas, 1,1,1,2-tetrafluoroethane (R-134a). Fluid Phase Equilibria, 2009, 286, 1-7.	2.5	101
8	Microsphere-based scaffolds for cartilage tissue engineering: Using subcritical CO2 as a sintering agent. Acta Biomaterialia, 2010, 6, 137-143.	8.3	85
9	Expanding the useful range of ionic liquids: melting point depression of organic salts with carbon dioxide for biphasic catalytic reactions. Chemical Communications, 2006, , 3681.	4.1	82
10	Melting Point Depression of Ionic Liquids with CO₂:â€‰ Phase Equilibria. Industrial & Engineering Chemistry Research, 2008, 47, 493-501.	3.7	69
11	Ternary Phase Behavior of Ionic Liquid (IL)â^'Organicâ^'CO2 Systems. Industrial & Engineering Chemistry Research, 2006, 45, 5574-5585.	3.7	64
12	Viscosity of n-alkyl-3-methyl-imidazolium bis(trifluoromethylsulfonyl)amide ionic liquids saturated with compressed CO2. Fluid Phase Equilibria, 2009, 286, 72-78.	2.5	64
13	Design of ionic liquids via computational molecular design. Computers and Chemical Engineering, 2010, 34, 1476-1480.	3.8	62
14	Reliable Computation of High-Pressure Solidâ^'Fluid Equilibrium. Industrial & Engineering Chemistry Research, 2000, 39, 1624-1636.	3.7	51
15	Kinetics and solvent effects in the synthesis of ionic liquids: imidazolium. Green Chemistry, 2009, 11, 694.	9.0	50
16	The Future of Carbon Dioxide for Polymer Processing in Tissue Engineering. Tissue Engineering - Part B: Reviews, 2013, 19, 221-232.	4.8	50
17	High-pressure phase equilibria with compressed gases. Review of Scientific Instruments, 2007, 78, 125104.	1.3	47
18	Whole-Cell Biocatalysis with Ionic Liquids. Current Organic Chemistry, 2009, 13, 1242-1258.	1.6	44

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19	Understanding Biphasic Ionic Liquid/CO₂ Systems for Homogeneous Catalysis: Hydroformylation. Industrial & Engineering Chemistry Research, 2009, 48, 4254-4265.	3.7	44
20	Phase Equilibrium, Volumetric, and Interfacial Properties of the Ionic Liquid, 1-Hexyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)amide and 1-Octene. Journal of Chemical & Engineering Data, 2010, 55, 1611-1617.	1.9	44
21	High-Pressure Viscosity of Biodiesel from Soybean, Canola, and Coconut Oils. Energy & Fuels, 2010, 24, 5708-5716.	5.1	40
22	Gas-Expanded Liquids: Fundamentals and Applications. ACS Symposium Series, 2009, , 3-37.	0.5	38
23	Spectroscopy, Solubility, and Modeling of Cosolvent Effects on Metal Chelate Complexes in Supercritical Carbon Dioxide Solutions. Industrial & Engineering Chemistry Research, 2001, 40, 980-989.	3.7	37
24	Solubilities of CO and H₂ in Neat and CO₂-Expanded Hydroformylation Reaction Mixtures Containing 1-Octene and Nonanal up to 353.15 K and 9 MPa. Journal of Chemical & Engineering Data, 2009, 54, 1633-1642.	1.9	28
25	Review of Isobutane Alkylation Technology Using Ionic Liquid-Based Catalystsâ€"Where Do We Stand?. Industrial & Engineering Chemistry Research, 2020, 59, 15811-15838.	3.7	28
26	Experimental measurement and modeling of the vaporâ€"liquid equilibrium of carbon dioxide + chloroform. Fluid Phase Equilibria, 2001, 190, 135-147.	2.5	27
27	High-pressure phase equilibria for the synthesis of ionic liquids in compressed CO2 for 1-hexyl-3-methylimidazolium bromide with 1-bromohexane and 1-methylimidazole. Journal of Supercritical Fluids, 2009, 51, 1-9.	3.2	27
28	Global phase behavior of imidazolium ionic liquids and compressed 1,1,1,2â€tetrafluoroethane (Râ€134a). AICHE Journal, 2009, 55, 486-493.	3.6	26
29	Subcritical CO2 sintering of microspheres of different polymeric materials to fabricate scaffolds for tissue engineering. Materials Science and Engineering C, 2013, 33, 4892-4899.	7.3	25
30	Viscosity of compressed CO2-saturated n-alkanes: CO2/n-hexane, CO2/n-decane, and CO2/n-tetradecane. Journal of Supercritical Fluids, 2018, 133, 411-420.	3.2	24
31	Modeling of solidâ€"supercritical fluid phase equilibria with a cubic equation of stateâ€"Gex model. Journal of Supercritical Fluids, 2001, 21, 123-134.	3.2	22
32	Viscosity and Diffusivity for the Ionic Liquid 1-Hexyl-3-methyl-imidazolium Bis(trifluoromethylsulfonyl)amide with 1-Octene. Journal of Chemical & Engineering Data, 2011, 56, 3715-3721.	1.9	22
33	High-Pressure Viscosity of Soybean-Oil-Based Biodiesel Blends with Ultra-Low-Sulfur Diesel Fuel. Energy & Fuels, 2012, 26, 7023-7036.	5.1	22
34	Effect of different sintering methods on bioactivity and release of proteins from PLGA microspheres. Materials Science and Engineering C, 2013, 33, 4343-4351.	7.3	22
35	Viscosity and self-diffusivity of ionic liquids with compressed hydrofluorocarbons: 1-Hexyl-3-methyl-imidazolium bis(trifluoromethylsulfonyl)amide and 1,1,1,2-tetrafluoroethane. Fluid Phase Equilibria, 2017, 437, 34-42.	2.5	22
36	Enzymatic degradation of polyacrylamide in aqueous solution with peroxidase and H₂O₂. Journal of Applied Polymer Science, 2017, 134, .	2.6	22

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37	Gas solubility in ionic liquids. Current Opinion in Green and Sustainable Chemistry, 2021, 28, 100425.	5.9	21
38	Carbon Dioxide Solubility Enhancement through Silicone Functionalization: â€œCO₂-philicâ€• Oligo(dimethylsiloxane)-substituted Diphosphonatesâ^—. Separation Science and Technology, 2008, 43, 2520-2536.	2.5	17
39	Tailoring of processing parameters for sintering microsphereâ€based scaffolds with denseâ€phase carbon dioxide. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 330-337.	3.4	17
40	Phase Behavior and Reliable Computation of High-Pressure Solidâ^'Fluid Equilibrium with Cosolvents. Industrial & Engineering Chemistry Research, 2003, 42, 6464-6475.	3.7	16
41	Ionic Liquids: Current State and Future Directions. ACS Symposium Series, 2017, , 1-13.	0.5	16
42	Phase Behavior and Equilibria of Ionic Liquids and Refrigerants: 1-Ethyl-3-methyl-imidazolium Bis(trifluoromethylsulfonyl)imide ([EMIm][Tf₂N]) and R-134a. ACS Symposium Series, 2009, , 112-128.	0.5	15
43	High-pressure phase equilibrium for the hydroformylation of 1-octene to nonanal in compressed CO2. Journal of Supercritical Fluids, 2009, 51, 142-147.	3.2	14
44	Viscosity of 1-Alkyl-1-methylpyrrolidinium Bis(trifluoromethylsulfonyl)imide Ionic Liquids Saturated with Compressed CO₂. Journal of Chemical & Engineering Data, 2019, 64, 4658-4667.	1.9	14
45	Viscosity and Density of a Polyol Ester Lubricating Oil Saturated with Compressed Hydrofluoroolefin Refrigerants. Journal of Chemical & Engineering Data, 2020, 65, 4335-4346.	1.9	14
46	Reversible and non-reactive cellulose separations from ionic liquid mixtures with compressed carbon dioxide. Chemical Communications, 2015, 51, 12649-12652.	4.1	11
47	Solubility and Diffusivity of Hydrofluoroolefin Refrigerants in a Polyol Ester Lubricant. Industrial & Engineering Chemistry Research, 2020, 59, 6279-6287.	3.7	10
48	High-Pressure Vaporâ^'Liquid Equilibria of 1-Alkyl-1-Methylpyrrolidinium Bis(trifluoromethylsulfonyl)imide Ionic Liquids and CO₂. Journal of Chemical & Engineering Data, 2019, 64, 4668-4678.	1.9	9
49	Hydrogenation in Biphasic Ionic Liquidâ€"Carbon Dioxide Systems. ACS Symposium Series, 2009, , 218-234.	0.5	8
50	Vaporâ€"liquid equilibrium in the production of the ionic liquid, 1-hexyl-3-methylimidazolium bromide ([HMIm][Br]), in acetone. Fluid Phase Equilibria, 2014, 365, 11-19.	2.5	7
51	Heat Transport Properties of CO₂-Expanded Liquids: n-Hexane, n-Decane, and n-Tetradecane. Industrial & Engineering Chemistry Research, 2017, 56, 12822-12832.	3.7	7
52	Understanding Sulfur Content in Alkylate from Sulfuric Acid-Catalyzed C₃/C₄ Alkylations. Energy & Fuels, 2019, 33, 4659-4670.	5.1	6
53	Phase equilibrium and diffusivities of hydrofluorocarbons in a synthetic polyol ester lubricant. AICHE Journal, 2020, 66, e16241.	3.6	6
54	Why Wasnâ€™t My Manuscript Sent Out for Review?. Industrial & Engineering Chemistry Research, 2017, 56, 7109-7111.	3.7	5

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55	Thermal conductivity of the ionic liquid [<scp>HMIm</scp>][<scp>Tf₂N</scp>] with compressed carbon dioxide. AIChE Journal, 2022, 68, .	3.6	5
56	Reply to â€œComment on â€˜Characterization of the Ability of CO₂ to Act as an Antisolvent for Ionic Liquid/Organic Mixturesâ€™â€• Journal of Physical Chemistry B, 2009, 113, 6581-6581.	2.6	4
57	Kinetics and polarity effects in the synthesis of the ionic liquid, 1-hexyl-3-methyl-imidazolium bromide, using compressed CO2. Journal of Supercritical Fluids, 2015, 96, 171-179.	3.2	4
58	Viscosity and Rheology of Ionic Liquid Mixtures Containing Cellulose and Cosolvents for Advanced Processing. ACS Symposium Series, 2017, , 189-208.	0.5	4
59	ACS Virtual Issue on Carbon Capture and Sequestration. Journal of Chemical & Engineering Data, 2015, 60, 2187-2187.	1.9	3
60	Power generation from waste heat: Ionic liquidâ€based absorption cycle versus organic Rankine cycle. AIChE Journal, 2021, 67, e17038.	3.6	2
61	Viscosity and Density of an ISO VG 32 Polyol Ester Lubricant Saturated with Compressed Hydrofluorocarbon Gases: R-134a, R-32, and R-125. Journal of Chemical & Engineering Data, 2022, 67, 1824-1833.	1.9	2
62	Experimental Measurement and Modeling of the Vapor-Liquid Equilibrium of Î²-Diketones with CO2. ACS Symposium Series, 2003, , 245-258.	0.5	0
63	Other Biphasic Concepts: Section 7.4. , 2005, , 665-685.		0
64	Recent Progress in the Development of Supercritical Carbon Dioxide-Soluble Metal Ion Extractants: Solubility Enhancement through Silicon Functionalization. ACS Symposium Series, 2006, , 250-267.	0.5	0