

# Silvana Mattedi

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9487356/publications.pdf>

Version: 2024-02-01

101  
papers

1,953  
citations

279701

23  
h-index

315616

38  
g-index

106  
all docs

106  
docs citations

106  
times ranked

1870  
citing authors

#	ARTICLE	IF	CITATIONS
1	Brønsted Ionic Liquids for Sustainable Processes: Synthesis and Physical Properties. Journal of Chemical & Engineering Data, 2010, 55, 625-632.	1.0	133
2	Thermophysical properties of binary mixtures of {ionic liquid 2-hydroxy ethylammonium acetate + (water, methanol, or ethanol)}. Journal of Chemical Thermodynamics, 2011, 43, 997-1010.	1.0	131
3	High pressure CO <sub>2</sub> solubility in N-methyl-2-hydroxyethylammonium protic ionic liquids. Journal of Supercritical Fluids, 2011, 56, 224-230.	1.6	100
4	(Eco)toxicity and biodegradability of protic ionic liquids. Chemosphere, 2016, 147, 460-466.	4.2	96
5	Synthesis and thermophysical properties of two new protic long-chain ionic liquids with the oleate anion. Fluid Phase Equilibria, 2010, 299, 42-50.	1.4	78
6	Protic ionic liquid as additive on lipase immobilization using silica sol-gel. Enzyme and Microbial Technology, 2013, 52, 141-150.	1.6	70
7	Screening of protic ionic liquids for sugarcane bagasse pretreatment. Fuel, 2019, 235, 1506-1514.	3.4	66
8	Liquid-liquid equilibria data for systems containing aromatic + nonaromatic + sulfolane at 308.15 and 323.15 K. Fluid Phase Equilibria, 2002, 202, 263-276.	1.4	52
9	Pineapple crown delignification using low-cost ionic liquid based on ethanolamine and organic acids. Carbohydrate Polymers, 2019, 206, 302-308.	5.1	50
10	Experimental Density of Ionic Liquids and Thermodynamic Modeling with Group Contribution Equation of State Based on the Lattice Fluid Theory. Journal of Chemical & Engineering Data, 2016, 61, 348-353.	1.0	40
11	Thermophysical characterization of N-methyl-2-hydroxyethylammonium carboxylate ionic liquids. Journal of Chemical Thermodynamics, 2014, 68, 221-234.	1.0	38
12	Lipase Immobilization on Silica Xerogel Treated with Protic Ionic Liquid and its Application in Biodiesel Production from Different Oils. International Journal of Molecular Sciences, 2018, 19, 1829.	1.8	37
13	Thermodynamics of oxygenate fuel additives as a function of temperature. Physics and Chemistry of Liquids, 2008, 46, 223-237.	0.4	35
14	Synthesis and physico-chemical properties of two protic ionic liquids based on stearate anion. Fluid Phase Equilibria, 2014, 376, 132-140.	1.4	35
15	Protic Ionic Liquids Used as Metal-Forming Green Lubricants for Aluminum: Effect of Anion Chain Length. Materials Research, 2017, 20, 675-687.	0.6	33
16	Phase equilibria of binary mixtures containing methyl acetate, water, methanol or ethanol at 101.3 kPa. Physics and Chemistry of Liquids, 2011, 49, 52-71.	0.4	30
17	Influence of the calcination temperature and ionic liquid used during synthesis procedure on the physical and electrochemical properties of Ti/(RuO <sub>2</sub> ) <sub>0.8</sub> (Sb <sub>2</sub> O <sub>4</sub> ) <sub>0.2</sub> anodes. Journal of Electroanalytical Chemistry, 2018, 829, 116-128.	1.9	30
18	Group contribution equation of state based on the lattice fluid theory: Alkane-alkanol systems. Fluid Phase Equilibria, 1998, 142, 33-54.	1.4	29

#	ARTICLE	IF	CITATIONS
19	Low viscosity protic ionic liquid for CO <sub>2</sub> /CH <sub>4</sub> separation: Thermophysical and high-pressure phase equilibria for diethylammonium butanoate. <i>Fluid Phase Equilibria</i> , 2018, 459, 30-43.	1.4	29
20	DENSITY, REFRACTIVE INDEX, APPARENT VOLUMES AND EXCESS MOLAR VOLUMES OF FOUR PROTIC IONIC LIQUIDS + WATER AT T=298.15 AND 323.15 K. <i>Brazilian Journal of Chemical Engineering</i> , 2015, 32, 671-682.	0.7	28
21	An amino-based protic ionic liquid as a corrosion inhibitor of mild steel in aqueous chloride solutions. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2020, 71, 1175-1193.	0.8	27
22	Isobaric (vapor+liquid) equilibria of 1-ethyl-3-methylimidazolium ethylsulfate plus (propionaldehyde) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 895-900.	1.0	26
23	Use of protic ionic liquids as adjuvants in PEG-based ATPS for the purification of radish peroxidase. <i>Fluid Phase Equilibria</i> , 2017, 452, 1-8.	1.4	26
24	Separation of cellulose nanowhiskers from microcrystalline cellulose with an aqueous protic ionic liquid based on ammonium and hydrogensulphate. <i>Separation and Purification Technology</i> , 2018, 196, 200-207.	3.9	23
25	Influence of temperature on thermodynamic properties of substituted aromatic compounds. <i>Physics and Chemistry of Liquids</i> , 2010, 48, 257-271.	0.4	22
26	Solid-liquid equilibrium of substrates and products of the enzymatic synthesis of ampicillin. <i>AIChE Journal</i> , 2010, 56, 1578-1583.	1.8	21
27	Protic ionic liquids as a constituent of biphasic systems based on acetonitrile: Phase diagram and alkaloid partitioning. <i>Separation and Purification Technology</i> , 2018, 200, 318-326.	3.9	20
28	Oleate-Based Protic Ionic Liquids As Lubricants for Aluminum 1100. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 12386-12396.	1.8	20
29	Separation of Linalool from Limonene via Extractive Distillation with 1-Butyl-3-methylimidazolium Acetate as Entrainer. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 19449-19457.	1.8	20
30	Volumetric and acoustical properties of aqueous mixtures of N-methyl-2-hydroxyethylammonium propionate at T=(298.15 to 333.15)K. <i>Journal of Chemical Thermodynamics</i> , 2015, 88, 44-60.	1.0	19
31	Vapor-Liquid Equilibria Data for Binary Systems of Ethylbenzene + Xylene Isomers at 100.65 kPa. <i>Journal of Chemical &amp; Engineering Data</i> , 2005, 50, 1134-1138.	1.0	18
32	PHASE EQUILIBRIA FOR BINARY SYSTEMS CONTAINING IONIC LIQUID WITH WATER OR HYDROCARBONS. <i>Brazilian Journal of Chemical Engineering</i> , 2015, 32, 967-974.	0.7	18
33	New perspectives on the modification of silica aerogel particles with ionic liquid used in lipase immobilization with platform in ethyl esters production. <i>Process Biochemistry</i> , 2018, 75, 157-165.	1.8	18
34	High pressure vapor-liquid equilibria for binary methane and protic ionic liquid based on propionate anions. <i>Fluid Phase Equilibria</i> , 2016, 426, 65-74.	1.4	17
35	Experimental vapor-liquid equilibria data for binary mixtures of xylene isomers. <i>Brazilian Journal of Chemical Engineering</i> , 2005, 22, 453-462.	0.7	16
36	Solid-liquid equilibrium data of amoxicillin and hydroxyphenylglycine in aqueous media. <i>Brazilian Journal of Chemical Engineering</i> , 2013, 30, 45-54.	0.7	16

#	ARTICLE	IF	CITATIONS
37	Volumetric and acoustical properties of aqueous mixtures of N-methyl-2-hydroxyethylammonium butyrate and N-methyl-2-hydroxyethylammonium pentanoate at T = (298.15 to 333.15) K. <i>Journal of Chemical Thermodynamics</i> , 2016, 97, 191-205.	1.0	16
38	N-methyl-2-hydroxyethylammonium oleate ionic liquid performance as corrosion inhibitor for mild steel in hydrochloric acid medium. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2020, 71, 1885-1902.	0.8	16
39	Influence of the RuO <sub>2</sub> layer thickness on the physical and electrochemical properties of anodes synthesized by the ionic liquid method. <i>Electrochimica Acta</i> , 2020, 354, 136625.	2.6	16
40	Deterpenation of citrus essential oil with 1-ethyl-3-methylimidazolium acetate: A comparison of unit operations. <i>Separation and Purification Technology</i> , 2020, 250, 117208.	3.9	15
41	Measuring and modelling experimental densities and ultrasonic velocities of aromatic and halogenated environmental pollutants. <i>Chemosphere</i> , 2007, 67, 384-395.	4.2	14
42	Volumetric properties of binary aqueous solutions of protic ionic liquids based on bis (2-hydroxyethyl) ammonium. <i>Journal of Molecular Liquids</i> , 2016, 222, 867-872.	2.3	14
43	High pressure vapor-liquid equilibria for binary protic ionic liquids + methane or carbon dioxide. <i>Separation and Purification Technology</i> , 2018, 196, 32-40.	3.9	14
44	Influence of temperature on thermodynamics of ethanol + hydrocarbon gasoline additives. <i>Physics and Chemistry of Liquids</i> , 2010, 48, 337-384.	0.4	13
45	Density, refraction index and vapor-liquid equilibria of N-methyl-2-hydroxyethylammonium butyrate plus (methyl acetate or ethyl acetate or propyl acetate) at several temperatures. <i>Journal of Chemical Thermodynamics</i> , 2013, 62, 130-141.	1.0	13
46	Transesterification of babassu oil catalyzed by <i>Burkholderia cepacia</i> encapsulated in sol-gel matrix employing protic ionic liquid as an additive. <i>Acta Scientiarum - Technology</i> , 2014, 36, 445.	0.4	13
47	Remediation of petroleum contaminated saline water using value-added adsorbents derived from waste coconut fibres. <i>Chemosphere</i> , 2021, 279, 130562.	4.2	13
48	Influence of anion chain length of protic ionic liquids on the corrosion resistance of API X70 steel. <i>Corrosion Engineering Science and Technology</i> , 2015, 50, 547-558.	0.7	12
49	Solubility measurements of amoxicillin in mixtures of water and ethanol from 283.15 to 298.15 K. <i>Fluid Phase Equilibria</i> , 2016, 422, 78-86.	1.4	12
50	Influence of temperature and pressure on the density and speed of sound of 2-hydroxyethylammonium propionate ionic liquid. <i>Journal of Chemical Thermodynamics</i> , 2018, 122, 183-193.	1.0	12
51	Density, Refraction Index, and Vapor-Liquid Equilibria of N-Methyl-2-hydroxyethylammonium Hexanoate Plus (Methyl Acetate, Ethyl Acetate, or Propyl Acetate) at Several Temperatures. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 14543-14554.	1.8	11
52	Predicting the solubility of carbon dioxide or methane in imidazolium-based ionic liquids with GC-sPC-SAFT equation of state. <i>Fluid Phase Equilibria</i> , 2019, 479, 85-98.	1.4	11
53	2-hydroxyethylammonium oleate protic ionic liquid as corrosion inhibitor for aluminum in neutral medium. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2021, 72, 543-556.	0.8	11
54	Density and speed of sound prediction for binary mixtures of water and ammonium-based ionic liquids using feedforward and cascade forward neural networks. <i>Journal of Molecular Liquids</i> , 2020, 311, 113212.	2.3	11

#	ARTICLE	IF	CITATIONS
55	Azeotropic behaviour of (benzene+cyclohexane+chlorobenzene) ternary mixture using chlorobenzene as entrainer at 101.3kPa. <i>Journal of Chemical Thermodynamics</i> , 2006, 38, 1725-1736.	1.0	10
56	CHARACTERIZATION AND EVALUATION OF WAXY CRUDE OIL FLOW. <i>Brazilian Journal of Chemical Engineering</i> , 2016, 33, 1063-1071.	0.7	10
57	Protic ionic liquids influence on immobilization of Lipase <i>Burkholderia cepacia</i> on hybrid supports. <i>Journal of Chemical Technology and Biotechnology</i> , 2017, 92, 633-641.	1.6	10
58	Development of a bioelectrode based on catalase enzyme and the novel protic ionic liquid pentaethylenhexammonium acetate (PEHAA). <i>Journal of Molecular Liquids</i> , 2019, 280, 182-190.	2.3	10
59	Thermophysical properties of diethylammonium (acetate+water) mixtures at different temperatures. <i>Journal of Chemical Thermodynamics</i> , 2020, 145, 106093.	1.0	10
60	Effect of water on high-pressure ternary phase equilibria of CO <sub>2</sub> +H <sub>2</sub> O+alkanolamine based ionic liquid. <i>Journal of Molecular Liquids</i> , 2020, 306, 112775.	2.3	10
61	Determination of Cu, Ni, Mn and Zn in diesel oil samples using energy dispersive X-ray fluorescence spectrometry after solid phase extraction using sisal fiber. <i>Talanta</i> , 2021, 225, 121910.	2.9	10
62	THE NOVEL MESOPOROUS SILICA AEROGEL MODIFIED WITH PROTIC IONIC LIQUID FOR LIPASE IMMOBILIZATION. <i>Quimica Nova</i> , 2016, , .	0.3	9
63	High pressure vapor-liquid equilibria for binary carbon dioxide and protic ionic liquid based on ethanolanines+ butanoic acid. <i>Fluid Phase Equilibria</i> , 2018, 460, 162-174.	1.4	9
64	Toxicity of oleate-based amino protic ionic liquids towards <i>Escherichia coli</i> , <i>Danio rerio</i> embryos and human skin cells. <i>Journal of Hazardous Materials</i> , 2022, 422, 126896.	6.5	9
65	Vapor-liquid equilibrium of copolymer+solvent mixtures: Thermodynamic modeling by two theoretical equations of state. <i>Fluid Phase Equilibria</i> , 2006, 246, 52-63.	1.4	8
66	Properties of aqueous solutions of ammonium-based ionic liquids and thermodynamic modelling using Flory theory. <i>Journal of Molecular Liquids</i> , 2017, 229, 508-513.	2.3	8
67	LIQUID-LIQUID EQUILIBRIA DATA OF N-METHYL-2-HYDROXYETHYL AMMONIUM ALKYLATES WITH BUTANOL+WATER AND PENTANOL+WATER AT 293.15K, 313.15K AND 333.15K. <i>Brazilian Journal of Chemical Engineering</i> , 2018, 35, 299-312.	0.7	7
68	Influence of temperature and pressure on the density and speed of sound of N-ethyl-2-hydroxyethylammonium propionate ionic liquid. <i>Journal of Chemical Thermodynamics</i> , 2019, 131, 303-313.	1.0	7
69	Amine/Carboxylic Acid Ionic Liquid Composite Membranes for CO <sub>2</sub> Separation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 4405-4419.	1.8	7
70	Equations of state for chainlike polar fluids: a comparison of reference terms. <i>Fluid Phase Equilibria</i> , 1994, 99, 87-103.	1.4	6
71	Fluid phase behavior modeling of CO <sub>2</sub> + molten polymer systems using cubic and theoretically based equations of state. <i>Polymer Engineering and Science</i> , 2008, 48, 1157-1167.	1.5	6
72	Vapor-liquid equilibrium calculations for refrigerant mixtures with the Mattedi-Tavares-Castier EOS. <i>Fluid Phase Equilibria</i> , 2010, 296, 133-139.	1.4	6

#	ARTICLE	IF	CITATIONS
73	Proton Conducting Polymer Membrane Using The Ionic Liquid 2-Hydroxyethylammonium Lactate For Ethanol Fuel Cells. AIP Conference Proceedings, 2011, , .	0.3	6
74	A new approach for the thermodynamic modeling of the solubility of amino acids and $\beta$ -lactam compounds as a function of pH. Fluid Phase Equilibria, 2013, 354, 38-46.	1.4	6
75	Effect of different variables in the solubility of ampicillin and corresponding solid phase. Fluid Phase Equilibria, 2018, 459, 18-29.	1.4	6
76	Liquid-Liquid Equilibria Data of Protic Ionic Liquid (Ethyl-2-hydroxyethylammonium Propionate,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Journal of Chemical & Engineering Data, 2019, 64, 2915-2922.	1.0	6
77	Continuous flow reactor based with an immobilized biocatalyst for the continuous enzymatic transesterification of crude coconut oil. Biotechnology and Applied Biochemistry, 2020, 67, 404-413.	1.4	6
78	Estudo cinético e de equilíbrio de adsorção de petróleo utilizando fibras de coco pré-tratadas. Research, Society and Development, 2020, 9, e523974413.	0.0	6
79	IMMOBILIZATION OF LIPASE BY ENCAPSULATION IN SILICA AEROGEL. Quimica Nova, 2014, , .	0.3	6
80	Production of Anhydrous Ethanol by Extractive Distillation of Diluted Alcoholic Solutions with Ionic Liquids. Computer Aided Chemical Engineering, 2009, 27, 1137-1142.	0.3	5
81	GROUP CONTRIBUTION LATTICE FLUID EQUATION OF STATE: APPLICATION TO POLYMER+SOLVENT SYSTEMS. Brazilian Journal of Chemical Engineering, 1998, 15, 313-319.	0.7	5
82	Localized corrosion behavior studies by SVET of 1010 steel in different concentrations of sodium chloride containing [m-2HEA][OL] ionic liquid as corrosion inhibitor. Electrochimica Acta, 2022, 419, 140385.	2.6	5
83	Effect of ethanol on the solubility of ampicillin and phenylglycine in aqueous media. Fluid Phase Equilibria, 2016, 424, 105-113.	1.4	4
84	Protic ionic liquid+ water interactions studied by 1D NOESY NMR spectroscopy. Journal of Molecular Structure, 2019, 1186, 137-143.	1.8	4
85	Physical and chemical properties of binary mixtures of dibutylammonium-based ionic liquids and water. Brazilian Journal of Chemical Engineering, 2022, 39, 843-856.	0.7	4
86	High pressure phase equilibrium calculations for hydrocarbon systems using an equation of state based on the lattice fluid theory. Fluid Phase Equilibria, 2002, 194-197, 599-607.	1.4	3
87	Ionic liquids (IL) corrosion on A285 carbon steel. DYNA (Colombia), 2014, 81, 122.	0.2	3
88	Binary Mixture of Double Protic Ionic Liquid: Density, Viscosity, Refractive Index, Surface Tension, and Derivative Properties. Journal of Chemical & Engineering Data, 2021, 66, 4309-4325.	1.0	3
89	Structural and Aggregation Study of Protic Ionic Liquids. , 2011, , .		2
90	Studying the Liquid-Liquid Equilibrium of Systems Water +2-Hydroxyethylammonium Propanoate or 2-Hydroxyethylammonium Butanoate or 2-Hydroxyethylammonium Pentanoate +1-Pentanol at 293.15, 313.15, and 333.15 K: Experimental Determination and Thermodynamic Modeling. Journal of Chemical & Engineering Data, 2017, 62, 3758-3768.	1.0	2

#	ARTICLE	IF	CITATIONS
91	Liquid Phase Density, Sound Speed, and Vapor Pressure of Linear Alkanes Using the Mattedi-Tavares-Castier Equation of State. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 6767-6777.	1.8	2
92	Stabilization of water-in-oil emulsions using a wax ester synthesized by a new homemade heterogeneous biocatalyst. <i>Journal of Chemical Technology and Biotechnology</i> , 2022, 97, 1726-1735.	1.6	2
93	Feedforward and cascade forward networks for viscosity prediction for binary mixtures of ammonium-based ionic liquids and water. <i>Fluid Phase Equilibria</i> , 2022, 556, 113416.	1.4	2
94	Inundaç�o e carga em coluna de absorç�o recheada. <i>Research, Society and Development</i> , 2021, 10, e29410312369.	0.0	1
95	Holdup and characteristic velocity in a pulsed packed extraction column. <i>Research, Society and Development</i> , 2020, 9, e674982543.	0.0	1
96	Fluid phase topology of ethanol+benzene+cyclohexane at 101.3 kPa. <i>Physics and Chemistry of Liquids</i> , 2006, 44, 607-621.	0.4	0
97	Evaluation of ionic liquid treated sisal (agave sisalana) fiber as sorbent in biodiesel spill. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 348, 012006.	0.3	0
98	Avaliaç�o da separaç�o acetona-�gua em uma coluna de recheio. <i>Research, Society and Development</i> , 2021, 10, e76101018592.	0.0	0
99	STUDY OF THE PROPERTIES OF PROTIC IONIC LIQUIDS TO BE APPLIED IN THE ENHANCED OIL RECOVERY. <i>The Journal of Engineering and Exact Sciences</i> , 2019, 5, 0199-0202.	0.0	0
100	Evaluation of heat transfer fluids and nanofluids by process simulation: case study of a paraffin's hydrotreatment and fractionation plant. <i>Technical Papers ... Rio Oil &amp; Gas</i> , 2020, 20, 304-305.	0.0	0
101	Rambutan peel: An unconventional source of lignin and its potential applications in polymer science. <i>Research, Society and Development</i> , 2022, 11, e49911125320.	0.0	0