

Iwona Helena Kowalczyk

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Effectiveness of O-bridged cationic gemini surfactants as corrosion inhibitors for stainless steel in 3 M HCl: Experimental and theoretical studies. <i>Journal of Molecular Liquids</i> , 2018, 249, 1113-1124.	4.9	89
2	Gemini surfactant as multifunctional corrosion and biocorrosion inhibitors for mild steel. <i>Bioelectrochemistry</i> , 2019, 128, 252-262.	4.6	51
3	Strong hydrogen bonds in 1:1 and 2:1 complexes of pyridine betaine with strong acids. <i>Journal of Molecular Structure</i> , 1994, 322, 297-308.	3.6	48
4	Synthesis, Molecular Structure, Spectral Properties and Antifungal Activity of Polymethylene-bis(N,N-dimethyl-N-dodecyloammonium Bromides). <i>Molecules</i> , 2011, 16, 319-335.	3.8	47
5	Influence of different counterions on gemini surfactants with polyamine platform as corrosion inhibitors for stainless steel AISI 304 in 3 M HCl. <i>Journal of Molecular Liquids</i> , 2018, 268, 824-831.	4.9	41
6	Functionalised novel gemini surfactants as corrosion inhibitors for mild steel in 50 mM NaCl: Experimental and theoretical insights. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 580, 123699.	4.7	37
7	Biodegradability and aquatic toxicity of new cleavable betainate cationic oligomeric surfactants. <i>Journal of Hazardous Materials</i> , 2019, 371, 108-114.	12.4	27
8	Influence of Electrostatic Interactions on Complexes with Short O-H...O Hydrogen Bonds in Basic Salts of Pyridine Betaines and Acid Salts of Phenylalkanoic Acids. <i>Israel Journal of Chemistry</i> , 1999, 39, 253-260.	2.3	26
9	Synthesis, Structure, Surface and Antimicrobial Properties of New Oligomeric Quaternary Ammonium Salts with Aromatic Spacers. <i>Molecules</i> , 2017, 22, 1810.	3.8	25
10	Polyamines. I. Spectroscopic properties of N,N-bis-(phthalimidopropyl)-N-propylamine and supramolecular interactions in its crystals. <i>Journal of Molecular Structure</i> , 2006, 791, 137-143.	3.6	24
11	Cationic cleavable surfactants as highly efficient corrosion inhibitors of stainless steel AISI 304: Electrochemical study. <i>Journal of Molecular Liquids</i> , 2020, 315, 113675.	4.9	24
12	Synthesis, Molecular Structure and Spectral Properties of Quaternary Ammonium Derivatives of 1,1-Dimethyl-1,3-propylenediamine. <i>Molecules</i> , 2008, 13, 379-390.	3.8	20
13	The structure of 4-(trimethylammonium)benzoic acid chloride studied by X-ray diffraction, DFT calculations, NMR and FTIR spectroscopy. <i>Journal of Molecular Structure</i> , 2011, 996, 75-81.	3.6	19
14	Synthesis, Spectroscopic and Theoretical Studies of New Quasi-Podands from Bile Acid Derivatives Linked by 1,2,3-Triazole Rings. <i>Molecules</i> , 2014, 19, 2557-2570.	3.8	19
15	Crystal and molecular structure, hydrogen bonding and electrostatic interactions of bis(pyridine) Tj ETQq1 1 0.784314 rgBT /Overlock 18	3.6	18
16	Crystal and molecular structure of 3-(2-amino-pyridinium)-propionate monohydrate. <i>Journal of Molecular Structure</i> , 2006, 786, 25-32.	3.6	16
17	Heteroatoms and lone electrons as favorable factors for efficient corrosion protection. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2019, 70, 1099-1110.	1.5	16
18	Effect of the alkyl chain length on micelle formation for bis(N-alkyl-N,N-dimethylethylammonium)ether dibromides. <i>Comptes Rendus Chimie</i> , 2019, 22, 386-392.	0.5	16

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19	Structure of 1H-2-oxo-2,3-dihydroimidazo[1,2-a]pyridinium perchlorate studied by X-ray diffraction, DFT calculations and by FTIR and NMR spectroscopy. <i>Journal of Molecular Structure</i> , 2010, 976, 119-128.	3.6	14
20	Comparison of low-barrier hydrogen bonds in acid salts of carboxylic acids and basic salts of betaines – FTIR study. <i>Journal of Molecular Structure</i> , 1999, 484, 117-124.	3.6	13
21	Spectroscopic properties of N-n-butyltetrachlorophthalimide and supramolecular interactions in its crystals. <i>Journal of Molecular Structure</i> , 2007, 833, 197-202.	3.6	13
22	Spectroscopic studies, molecular structure and hydrogen bonding in hydrates of Gemini betaines. <i>Journal of Molecular Structure</i> , 2010, 973, 163-172.	3.6	12
23	Study of Cyclic Quaternary Ammonium Bromides by B3LYP Calculations, NMR and FTIR Spectroscopies. <i>Molecules</i> , 2010, 15, 5644-5657.	3.8	11
24	Antimicrobial Activity of Gemini Surfactants with Azapolymethylene Spacer. <i>Molecules</i> , 2020, 25, 4054.	3.8	10
25	Quaternary Alkylammonium Salts as Cleaning and Disinfectant Agents. <i>Tenside, Surfactants, Detergents</i> , 2018, 55, 432-438.	1.2	10
26	Structure of dimethylphenyl betaine hydrochloride studied by X-ray diffraction, DFT calculation, NMR and FTIR spectra. <i>Journal of Molecular Structure</i> , 2013, 1031, 49-55.	3.6	9
27	Synthesis, Spectroscopic and Theoretical Studies of New Quaternary N,N-Dimethyl-3-phthalimidopropylammonium Conjugates of Sterols and Bile Acids. <i>Molecules</i> , 2014, 19, 4212-4233.	3.8	9
28	Antimicrobial Activity of Gemini Surfactants with Ether Group in the Spacer Part. <i>Molecules</i> , 2021, 26, 5759.	3.8	9
29	Structure of 3-aminopyridine betaine hydrochloride studied by X-ray diffraction, DFT calculations, FTIR and NMR spectroscopy. <i>Journal of Molecular Structure</i> , 2010, 979, 12-21.	3.6	8
30	Structure of 4-(trimethylammonium)benzoate hydrate studied by X-ray diffraction, DFT calculations, NMR and FTIR spectra. <i>Journal of Molecular Structure</i> , 2011, 1005, 144-151.	3.6	8
31	Electrochemical characterization of the hydrophobic microenvironment within gemini surfactant micellar-hybridized supramolecular gels. <i>Electrochimica Acta</i> , 2013, 90, 326-331.	5.2	8
32	Structure, conformation and hydrogen bonding of some pyridiniumpropionate complexes. <i>Journal of Molecular Structure</i> , 1998, 448, 77-89.	3.6	7
33	DFT studies of the structure, vibrational and NMR spectra of 2-amino-pyridine betaine monohydrate. <i>Journal of Molecular Structure</i> , 2005, 754, 85-95.	3.6	7
34	Structure and spectroscopic properties of bis(1-carboxyethyl-3-aminopyridinium) hydrobromide monohydrate. <i>Journal of Molecular Structure</i> , 2011, 994, 13-20.	3.6	7
35	Synthesis, Spectroscopic and Semiempirical Studies of New Quaternary Alkylammonium Conjugates of Sterols. <i>Molecules</i> , 2013, 18, 14961-14976.	3.8	7
36	Structure of methyl 4-(trimethylammonium)benzoate iodide studied by X-ray diffraction, DFT calculations, NMR and FTIR spectra. <i>Journal of Molecular Structure</i> , 2011, 1006, 330-336.	3.6	6

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37	Structure of methyl 3-(trimethylammonium)benzoate iodide studied by X-ray diffraction, DFT calculations, NMR and FTIR spectra. <i>Journal of Molecular Structure</i> , 2012, 1017, 115-122.	3.6	6
38	Synthesis, Spectroscopic and Theoretical Studies of New Dimeric Quaternary Alkylammonium Conjugates of Sterols. <i>Molecules</i> , 2014, 19, 9419-9434.	3.8	6
39	Chalcogen analogues of nicotine lactam studied by NMR, FTIR, DFT and X-ray methods. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 128, 773-780.	3.9	6
40	Design, synthesis and application of new bile acid ligands with 1,2,3-triazole ring. <i>Supramolecular Chemistry</i> , 2017, 29, 81-93.	1.2	6
41	Structure of 1-methyl-2-oxo-pyrido[2,1-b][3,4]dihydropyrimidinium bromide studied by X-ray diffraction, FTIR and NMR spectroscopy and DFT calculations. <i>Journal of Molecular Structure</i> , 2007, 843, 107-115.	3.6	5
42	Spectroscopic properties of N-n-hexyltetrachlorophthalimide and supramolecular interactions in its crystals. <i>Journal of Molecular Structure</i> , 2008, 874, 145-150.	3.6	5
43	Prototropic equilibrium between 1-H-2-oxo-pyrido[2,1-b][3,4]dihydropyrimidinium chloride and 3-(2-aminopyridinium)propionate hydrochloride studied by X-ray, FTIR, Raman, NMR and ab initio methods. <i>Journal of Molecular Structure</i> , 2008, 875, 244-253.	3.6	5
44	Unusual hydrogen-bonding aggregation in 4-amino-1-(2-carboxyethyl)pyridinium bromide hemihydrate. <i>Journal of Molecular Structure</i> , 2012, 1026, 150-158.	3.6	5
45	Polyamines. Part II: Spectroscopic properties of N,N-dimethyl-3-phthalimidopropylammonium acetate and hydrochloride and supramolecular interactions in their crystals. <i>Journal of Molecular Structure</i> , 2008, 891, 205-213.	3.6	4
46	Polyamines. III. Spectroscopic properties of N,N-bis-(phthalimidopropyl)-N-octylamine and supramolecular interactions in its crystals. <i>Journal of Molecular Structure</i> , 2010, 967, 34-41.	3.6	4
47	Spectroscopic methods and theoretical studies of bromoacetic substituted derivatives of bile acids. <i>Acta Chimica Slovenica</i> , 2015, 62, 15-27.	0.6	4
48	Conformational flexibility and pseudosymmetric aggregation in a betainium salt hydrate. <i>Structural Chemistry</i> , 2017, 28, 859-865.	2.0	4
49	Study of N,N-dimethyl(carboethoxymethyl)-3-phthalimidopropylammonium chloride dihydrate by DFT calculations, NMR and FTIR spectroscopy. <i>Journal of Molecular Structure</i> , 2009, 928, 12-17.	3.6	3
50	Polyamines V: The structure of tetramethylene-1,4-bis(N-deoxyglucitolammonium chloride) studied by X-ray diffraction, DFT calculations, NMR and FTIR spectroscopy. <i>Journal of Molecular Structure</i> , 2012, 1020, 41-47.	3.6	3
51	Rare stoichiometry of carboxylate benzbetaine complexes: in vitro versus in silico. <i>CrystEngComm</i> , 2015, 17, 4143-4149.	2.6	2
52	Crystal and single molecule structures of N-(carboethoxymethyl)-pyridinium perchlorate. <i>Journal of Molecular Structure</i> , 2003, 657, 125-136.	3.6	1
53	Molecular structure, spectral and thermal properties and in silico biological activity of new bis-phthalimidopropylalkylammonium conjugates of bile acids. <i>Journal of Molecular Structure</i> , 2021, 1243, 130814.	3.6	1
54	Synthesis, Molecular Structure and Spectral Properties of New Aminosteroid Analogs of Squalamine Derivatives. <i>Letters in Organic Chemistry</i> , 2015, 12, 674-684.	0.5	0