

# Joze Grdadolnik

## List of Publications by Year in descending order

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59  
papers

2,562  
citations

172207

29  
h-index

189595

50  
g-index

59  
all docs

59  
docs citations

59  
times ranked

3800  
citing authors

#	ARTICLE	IF	CITATIONS
1	Origin of hydrophobicity and enhanced water hydrogen bond strength near purely hydrophobic solutes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 322-327.	3.3	169
2	Simple synthesis of anatase/rutile/brookite TiO <sub>2</sub> nanocomposite with superior mineralization potential for photocatalytic degradation of water pollutants. Applied Catalysis B: Environmental, 2016, 181, 465-474.	10.8	151
3	Bovine serum albumin observed by infrared spectrometry. I. Methodology, structural investigation, and water uptake. Biopolymers, 2001, 62, 40-53.	1.2	149
4	Production of Nonclassical Inclusion Bodies from Which Correctly Folded Protein Can Be Extracted. Biotechnology Progress, 2008, 21, 632-639.	1.3	149
5	Urea and urea "water solutions" an infrared study. Journal of Molecular Structure, 2002, 615, 177-189.	1.8	137
6	Engineering inclusion bodies for non denaturing extraction of functional proteins. Microbial Cell Factories, 2008, 7, 34.	1.9	133
7	Intrinsic backbone preferences are fully present in blocked amino acids. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1272-1277.	3.3	113
8	An infrared spectroscopic study of H-bond network in hyperbranched polyester polyol. Journal of Molecular Structure, 2003, 658, 143-152.	1.8	109
9	Populations of the three major backbone conformations in 19 amino acid dipeptides. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1794-1798.	3.3	104
10	Probing electrochemical reactions in organic cathode materials via in operando infrared spectroscopy. Nature Communications, 2018, 9, 661.	5.8	100
11	Electrochemical performance and redox mechanism of naphthalene-hydrazine diimide polymer as a cathode in magnesium battery. Journal of Power Sources, 2018, 395, 25-30.	4.0	76
12	Determination of Conformational Preferences of Dipeptides Using Vibrational Spectroscopy. Journal of Physical Chemistry B, 2008, 112, 2712-2718.	1.2	73
13	Proton Dynamics in the Strong Chelate Hydrogen Bond of Crystalline Picolinic Acid <i>N</i> -Oxide. A New Computational Approach and Infrared, Raman and INS Study. Journal of Physical Chemistry A, 2008, 112, 1576-1586.	1.1	68
14	In situ UV-Vis and ex situ IR spectroelectrochemical investigations of amorphous and crystalline electrochromic Nb <sub>2</sub> O <sub>5</sub> films in charged/discharged states. Journal of Solid State Electrochemistry, 1998, 2, 221-236.	1.2	65
15	Bovine serum albumin observed by infrared spectrometry. II. Hydration mechanisms and interaction configurations of embedded H <sub>2</sub> O molecules. Biopolymers, 2001, 62, 54-67.	1.2	58
16	Proton Potential in Acetylacetone. Journal of Physical Chemistry A, 2001, 105, 2039-2044.	1.1	57
17	Hydrogen Bond Dynamics of Histamine Monocation in Aqueous Solution: Car Parrinello Molecular Dynamics and Vibrational Spectroscopy Study. Journal of Physical Chemistry B, 2011, 115, 5999-6010.	1.2	56
18	Mechanisms of amyloid fibril formation " focus on domain swapping. FEBS Journal, 2011, 278, 2263-2282.	2.2	55

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19	The structure of poly-L-lysine in different solvents. <i>Biophysical Chemistry</i> , 2013, 175-176, 47-53.	1.5	53
20	Novel Polysilsesquioxane <sup>13</sup> -Ionic Electrolyte for Dye-Sensitized Photoelectrochemical Cells. <i>Journal of Physical Chemistry B</i> , 2005, 109, 14387-14395.	1.2	50
21	Proton Transfer Dynamics in Acetylacetone: A Mixed Quantum-Classical Simulation of Vibrational Spectra. <i>Journal of Physical Chemistry A</i> , 2001, 105, 2045-2051.	1.1	47
22	Electrochemical Performance and Mechanism of Calcium Metal-Organic Battery. <i>Batteries and Supercaps</i> , 2021, 4, 214-220.	2.4	44
23	Infrared difference spectroscopy. <i>Vibrational Spectroscopy</i> , 2003, 31, 279-288.	1.2	40
24	Identification of hydrogen bond modes in polarized Raman spectra of single crystals of oxalic acid dihydrate. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 1605-1614.	1.2	39
25	Hyperbranched poly(esteramides) as solubility enhancers for poorly water-soluble drug glimepiride. <i>International Journal of Pharmaceutics</i> , 2010, 396, 119-126.	2.6	35
26	Effect of Annealing on the Rheological and Thermal Properties of Aliphatic Hyperbranched Polyester Based on 2,2-Bis(methylol)propionic Acid. <i>Macromolecules</i> , 2005, 38, 3933-3942.	2.2	33
27	Tracking electrochemical reactions inside organic electrodes by operando IR spectroscopy. <i>Energy Storage Materials</i> , 2019, 21, 347-353.	9.5	32
28	Infrared attenuated total reflection spectroscopy studies of aprotic condensation of (EtO) <sub>3</sub> SiRSi(OEt) <sub>3</sub> and RSi(OEt) <sub>3</sub> systems with carboxylic acids. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 530-549.	1.5	30
29	Structural, Vibrational, and Gasochromic Properties of Porous WO <sub>3</sub> Films Templated with a Sol-Gel Organic-Inorganic Hybrid. <i>Monatshefte für Chemie</i> , 2002, 133, 1115-1133.	0.9	29
30	Structural characterization of a phenolic lipid and its derivative using vibrational spectroscopy. <i>Vibrational Spectroscopy</i> , 2006, 41, 14-20.	1.2	24
31	Redox Mechanisms in Li and Mg Batteries Containing Poly(phenanthrene quinone)/Graphene Cathodes using Operando ATR-IR Spectroscopy. <i>ChemSusChem</i> , 2020, 13, 2328-2336.	3.6	23
32	Weakened Hydrogen Bonds in Water Confined between Lipid Bilayers: The Existence of a Long-Range Attractive Hydration Force. <i>ChemPhysChem</i> , 2009, 10, 1438-1441.	1.0	22
33	The N-Terminal Peptides of the Three Human Isoforms of the Mitochondrial Voltage-Dependent Anion Channel Have Different Helical Propensities. <i>Biochemistry</i> , 2015, 54, 5646-5656.	1.2	19
34	Iodide-Interactions of Perhalogenated Quinoid Rings in Co-crystals with Organic Bases. <i>Crystal Growth and Design</i> , 2018, 18, 5182-5193.	1.4	19
35	1,8-dihydroxy naphthalene (DHN) - melanin confers tolerance to cadmium in isolates of melanised dark septate endophytes. <i>Ecotoxicology and Environmental Safety</i> , 2021, 222, 112493.	2.9	16
36	Hydrogen-Deuterium Exchange in Bovine Serum Albumin Protein Monitored by Fourier Transform Infrared Spectroscopy, Part I: Structural Studies. <i>Applied Spectroscopy</i> , 2005, 59, 1347-1356.	1.2	15

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37	Determination of the interaction between glimepiride and hyperbranched polymers in solid dispersions. <i>Journal of Pharmaceutical Sciences</i> , 2011, 100, 4700-4709.	1.6	15
38	Nitrilic acid hexahydrate, a novel benchmark system of the Zundel cation in an intrinsically asymmetric environment: spectroscopic features and hydrogen bond dynamics characterised by experimental and theoretical methods. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 998-1007.	1.3	14
39	Emulsion-templated synthetic polypeptide scaffolds prepared by ring-opening polymerization of $\alpha$ -N-carboxyanhydrides. <i>Polymer Chemistry</i> , 2020, 11, 4260-4270.	1.9	14
40	Determination of the botanical origin of hops ( <i>Humulus lupulus</i> L.) using different analytical techniques in combination with statistical methods. <i>Journal of the Institute of Brewing</i> , 2016, 122, 452-461.	0.8	13
41	Infrared difference spectroscopy. <i>Vibrational Spectroscopy</i> , 2003, 31, 289-294.	1.2	12
42	Binding of cadmium dication to glutathione facilitates cysteine SH deprotonation: A computational DFT study. <i>Journal of Inorganic Biochemistry</i> , 2013, 119, 90-94.	1.5	11
43	The hydration of Concanavalin A studied by infrared spectroscopy. <i>Journal of Molecular Structure</i> , 2017, 1135, 138-143.	1.8	11
44	Mineral Deposition in Bacteria-Filled and Bacteria-Free Calcium Bodies in the Crustacean <i>Hyloniscus riparius</i> (Isopoda: Oniscidea). <i>PLoS ONE</i> , 2013, 8, e58968.	1.1	10
45	Infrared spectra of hydrogen bond network in lamellar perfluorocarboxylic acid monohydrates. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 253, 119551.	2.0	10
46	Hydrogen-Deuterium Exchange in Bovine Serum Albumin Protein Monitored by Fourier Transform Infrared Spectroscopy, Part II: Kinetic Studies. <i>Applied Spectroscopy</i> , 2005, 59, 1357-1364.	1.2	8
47	The amide III vibrational circular dichroism band as a probe to detect conformational preferences of alanine dipeptide in water. <i>Biopolymers</i> , 2014, 101, 814-818.	1.2	8
48	Solute-induced changes in the water H-bond network of different alcohol-aqueous systems. <i>Journal of Molecular Liquids</i> , 2021, 341, 117349.	2.3	7
49	Evidence of Polaron Excitations in Low Temperature Raman Spectra of Oxalic Acid Dihydrate. <i>Journal of Physical Chemistry A</i> , 2016, 120, 2789-2796.	1.1	6
50	Structural stabilization and characterization of active peroxy species on TiO <sub>2</sub> -nanotube based materials in mild catalytic wet peroxide oxidation process. <i>Applied Catalysis A: General</i> , 2018, 562, 276-283.	2.2	6
51	Spectroscopic Characterization of Omeprazole and Its Salts. <i>Journal of Spectroscopy</i> , 2017, 2017, 1-11.	0.6	5
52	Endogenous modulators of neurotrophin signaling: Landscape of the transient ATP-NGF interactions. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 2938-2949.	1.9	5
53	Synthesis, Conformation, and Stereodynamics of a Salt of 2-([2-(3,4-Dichlorophenyl)-ethyl]propylamino)-1-pyridin-3-ylethanol. <i>Journal of Organic Chemistry</i> , 2006, 71, 792-795.	1.7	4
54	The Finite Size Effects and Two-State Paradigm of Protein Folding. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2184.	1.8	4

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55	Analysis of the polarized IR reflectance spectra of the monoclinic $\hat{\pm}$ -oxalic acid dihydrate. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 218, 1-8.	2.0	3
56	Implicit water model within the Zimm-Bragg approach to analyze experimental data for heat and cold denaturation of proteins. <i>Communications Chemistry</i> , 2021, 4, .	2.0	2
57	Untangling the Conformational Plasticity of V66M Human proBDNF Polymorphism as a Modifier of Psychiatric Disorder Susceptibility. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6596.	1.8	2
58	<title>H-Bond network in biological systems: an infrared study</title>. , 2004, , .		0
59	Strong Hydrogen Bonds in Acetylenedicarboxylic Acid Dihydrate. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6164.	1.8	0