Katarzyna Grzybowska

List of Publications by Year in Descending Order

92 papers	2,438 citations	32 h-index	44 g-index
94 ext. papers	2,659 ext. citations	4.3 avg, IF	4.78 L-index

#	Paper	IF	Citations
92	Aromaticity effect on supramolecular aggregation. Aromatic vs. cyclic monohydroxy alcohols.. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2022**, 276, 121235	4.4	1
91	Influence of molecular geometry on the formation, architecture and dynamics of H-bonded supramolecular associates in 1-phenyl alcohols. *Journal of Molecular Liquids*, **2021**, 326, 115349	6	3
90	Local structure and molecular dynamics of highly polar propylene carbonate derivative infiltrated within alumina and silica porous templates. *Journal of Chemical Physics*, **2021**, 154, 064701	3.9	2
89	Phenyl Ring: A Steric Hindrance or a Source of Different Hydrogen Bonding Patterns in Self-Organizing Systems?. *Journal of Physical Chemistry Letters*, **2021**, 12, 2142-2147	6.4	9
88	The impact of the length of alkyl chain on the behavior of benzyl alcohol homologues - the interplay between dispersive and hydrogen bond interactions. *Physical Chemistry Chemical Physics*, **2021**, 23, 23796-23807	3.6	3
87	Molecular Dynamics and Physical Stability of Ibuprofen in Binary Mixtures with an Acetylated Derivative of Maltose. *Molecular Pharmaceutics*, **2020**, 17, 3087-3105	5.6	2
86	Hydrostatic pressure influence on electric relaxation response of bismuth manganite ceramics. *Journal of the American Ceramic Society*, **2020**, 103, 3732-3738	3.8	4
85	New paradigm of dielectric relaxation of sizable and rigid molecular glass formers. *Physical Review E*, **2020**, 101, 010603	2.4	6
84	Essential meaning of high pressure measurements in discerning the properties of monohydroxy alcohols with a single phenyl group. *Journal of Molecular Liquids*, **2020**, 305, 112863	6	7
83	Dynamics of Pyrrolidinium-Based Ionic Liquids under Confinement. II. The Effects of Pore Size, Inner Surface, and Cationic Alkyl Chain Length. *Journal of Physical Chemistry C*, **2020**, 124, 5395-5408	3.8	10
82	Relationship between Nanoscale Supramolecular Structure, Effectiveness of Hydrogen Bonds, and Appearance of Debye Process. *Journal of Physical Chemistry C*, **2020**, 124, 2672-2679	3.8	9
81	Interplay between structural static and dynamical parameters as a key factor to understand peculiar behaviour of associated liquids. *Journal of Molecular Liquids*, **2020**, 319, 114084	6	13
80	Conformational analysis and molecular dynamics of glass-forming aromatic thiacrown ethers. *Physical Chemistry Chemical Physics*, **2020**, 22, 17948-17959	3.6	1
79	Effect of Cation n-Alkyl Side-Chain Length, Temperature, and Pressure on the Glass-Transition Dynamics and Crystallization Tendency of the [CnC1Pyrr]+[Tf2N]□Ionic Liquid Family. *Journal of Physical Chemistry C*, **2019**,	3.8	11
78	Molecular Factors Governing the Liquid and Glassy States Recrystallization of Celecoxib in Binary Mixtures with Excipients of Different Molecular Weights. *Molecular Pharmaceutics*, **2017**, 14, 1154-1168	5.6	22
77	Changing the Tendency of Glass-Forming Liquid To Crystallize by Moving Along Different Isolines in theT□PPhase Diagram. *Crystal Growth and Design*, **2016**, 16, 6263-6268	3.5	12
76	Stabilization of the Amorphous Ezetimibe Drug by Confining Its Dimension. *Molecular Pharmaceutics*, **2016**, 13, 1308-16	5.6	36

75	Recent developments in the experimental investigations of relaxations in pharmaceuticals by dielectric techniques at ambient and elevated pressure. *Advanced Drug Delivery Reviews*, **2016**, 100, 158-82	18.5	56
74	Molecular Dynamics and Physical Stability of Amorphous Nimesulide Drug and Its Binary Drug-Polymer Systems. *Molecular Pharmaceutics*, **2016**, 13, 1937-46	5.6	32
73	Application of Broadband Dielectric Spectroscopy to Study Molecular Mobility in Pharmaceutical Systems **2016**, 301-360		6
72	Does the Johari□Goldstein □Relaxation Exist in Polypropylene Glycols?. *Macromolecules*, **2015**, 48, 4151-4157	5.5	8
71	Heterogeneous Nature of Relaxation Dynamics of Room-Temperature Ionic Liquids (EMIm)2[Co(NCS)4] and (BMIm)2[Co(NCS)4]. *Journal of Physical Chemistry C*, **2015**, 119, 20363-20368	3.8	23
70	Toward a Better Understanding of the Physical Stability of Amorphous Anti-Inflammatory Agents: The Roles of Molecular Mobility and Molecular Interaction Patterns. *Molecular Pharmaceutics*, **2015**, 12, 3628-38	5.6	33
69	Molecular Dynamics and Physical Stability of Coamorphous Ezetimib and Indapamide Mixtures. *Molecular Pharmaceutics*, **2015**, 12, 3610-9	5.6	62
68	In search of correlations between the four-point measure of dynamic heterogeneity and other characteristics of glass-forming liquids under high pressure. *Journal of Non-Crystalline Solids*, **2015**, 407, 196-205	3.9	7
67	Role of entropy in the thermodynamic evolution of the time scale of molecular dynamics near the glass transition. *Physical Review E*, **2015**, 91, 062305	2.4	10
66	Ionic liquids and their bases: Striking differences in the dynamic heterogeneity near the glass transition. *Scientific Reports*, **2015**, 5, 16876	4.9	11
65	Adam-Gibbs model in the density scaling regime and its implications for the configurational entropy scaling. *Scientific Reports*, **2015**, 5, 13998	4.9	11
64	Effects of dynamic heterogeneity and density scaling of molecular dynamics on the relationship among thermodynamic coefficients at the glass transition. *Journal of Chemical Physics*, **2015**, 143, 024502	3.9	3
63	Kinetics of Cold Crystallization of 4-Cyano-3-fluorophenyl 4-Butylbenzoate (4CFPB) Glass Forming Liquid Crystal. I. Nonisothermal Process As Studied by Microscopic, Calorimetric, and Dielectric Methods. *Crystal Growth and Design*, **2015**, 15, 2891-2900	3.5	37
62	Molecular origin of enhanced proton conductivity in anhydrous ionic systems. *Journal of the American Chemical Society*, **2015**, 137, 1157-64	16.4	37
61	Effect of polymer structure on the molecular dynamics and thermal behavior of poly(allyl acetoacetate) and copolymers. *Polymer*, **2014**, 55, 1040-1047	3.9	8
60	Structure and thermal properties of salicylate-based-protic ionic liquids as new heat storage media. COSMO-RS structure characterization and modeling of heat capacities. *Physical Chemistry Chemical Physics*, **2014**, 16, 3549-57	3.6	30
59	Correction to Effect of High Pressure on Crystallization Kinetics of van der Waals Liquid: An Experimental and Theoretical Study. *Crystal Growth and Design*, **2014**, 14, 4226-4226	3.5	1
58	Effect of High Pressure on Crystallization Kinetics of van der Waals Liquid: An Experimental and Theoretical Study. *Crystal Growth and Design*, **2014**, 14, 2097-2104	3.5	35

57	Isothermal Cold Crystallization Kinetics Study of Sildenafil. *Crystal Growth and Design*, **2014**, 14, 3199-3209	4.1	25
56	The influence of amorphization methods on the apparent solubility and dissolution rate of tadalafil. *European Journal of Pharmaceutical Sciences*, **2014**, 62, 132-40	5.1	46
55	Physical stability of the amorphous anticholesterol agent (ezetimibe): the role of molecular mobility. *Molecular Pharmaceutics*, **2014**, 11, 4280-90	5.6	46
54	Toward Better Understanding Crystallization of Supercooled Liquids under Compression: Isochronal Crystallization Kinetics Approach. *Crystal Growth and Design*, **2013**, 13, 4648-4654	3.5	33
53	Effect of temperature and density fluctuations on the spatially heterogeneous dynamics of glass-forming Van der Waals liquids under high pressure. *Physical Review Letters*, **2013**, 111, 125701	7.4	19
52	High pressure as a key factor to identify the conductivity mechanism in protic ionic liquids. *Physical Review Letters*, **2013**, 111, 225703	7.4	59
51	Spatially Heterogeneous Dynamics in the Density Scaling Regime: Time and Length Scales of Molecular Dynamics near the Glass Transition. *Journal of Physical Chemistry Letters*, **2013**, 4, 4273-8	6.4	11
50	Molecular dynamics of the supercooled pharmaceutical agent posaconazole studied via differential scanning calorimetry and dielectric and mechanical spectroscopies. *Molecular Pharmaceutics*, **2013**, 10, 3934-45	5.6	26
49	Molecular dynamics of itraconazole at ambient and high pressure. *Physical Chemistry Chemical Physics*, **2013**, 15, 20742-52	3.6	54
48	Activation volume in the density scaling regime: Equation of state and its test by using experimental and simulation data. *Physical Review B*, **2013**, 87,	3.3	17
47	Relaxation dynamics and crystallization study of sildenafil in the liquid and glassy states. *Molecular Pharmaceutics*, **2013**, 10, 2270-82	5.6	53
46	Decoupling of conductivity relaxation from structural relaxation in protic ionic liquids and general properties. *Physical Chemistry Chemical Physics*, **2013**, 15, 9205-11	3.6	35
45	Comparative Study on the Molecular Dynamics of a Series of Polypropylene Glycols. *Macromolecules*, **2013**, 46, 1973-1980	5.5	20
44	Molecular dynamics, physical stability and solubility advantage from amorphous indapamide drug. *Molecular Pharmaceutics*, **2013**, 10, 3612-27	5.6	42
43	High-pressure crystallization of 1-methyl-3-trimethylsilylmethylimidazolium tetrafluoroborate ionic liquid. *Chemical Physics Letters*, **2012**, 546, 150-152	2.5	4
42	Molecular dynamics in supercooled liquid and glassy states of antibiotics: azithromycin, clarithromycin and roxithromycin studied by dielectric spectroscopy. Advantages given by the amorphous state. *Molecular Pharmaceutics*, **2012**, 9, 1748-63	5.6	30
41	Molecular dynamics studies on the water mixtures of pharmaceutically important ionic liquid lidocaine HCl. *Molecular Pharmaceutics*, **2012**, 9, 1250-61	5.6	44
40	Enhancement of amorphous celecoxib stability by mixing it with octaacetylmaltose: the molecular dynamics study. *Molecular Pharmaceutics*, **2012**, 9, 894-904	5.6	49

39	Impact of water on molecular dynamics of amorphous □ □ and □cyclodextrins studied by dielectric spectroscopy. *Physical Review E*, **2012**, 86, 031506	2.4	18
38	Pressure coefficient of the glass transition temperature in the thermodynamic scaling regime. *Physical Review E*, **2012**, 86, 041502	2.4	18
37	Effects of lowering temperature and raising pressure on the spatially heterogeneous dynamics of glass-forming van der Waals liquids. *Physical Review B*, **2012**, 85,	3.3	20
36	Quantifying the Structural Dynamics of Pharmaceuticals in the Glassy State. *Journal of Physical Chemistry Letters*, **2012**, 3, 1238-41	6.4	43
35	Anomalous electrical conductivity behavior at elevated pressure in the protic ionic liquid procainamide hydrochloride. *Physical Review Letters*, **2012**, 108, 015701	7.4	56
34	Fundamentals of ionic conductivity relaxation gained from study of procaine hydrochloride and procainamide hydrochloride at ambient and elevated pressure. *Journal of Chemical Physics*, **2012**, 136, 164507	3.9	27
33	High pressure study of molecular dynamics of protic ionic liquid lidocaine hydrochloride. *Journal of Chemical Physics*, **2012**, 136, 224501	3.9	24
32	Effect of cryogrinding on chemical stability of the sparingly water-soluble drug furosemide. *Pharmaceutical Research*, **2011**, 28, 3220-36	4.5	34
31	Molecular dynamics of the cryomilled base and hydrochloride ziprasidones by means of dielectric spectroscopy. *Journal of Pharmaceutical Sciences*, **2011**, 100, 2642-57	3.9	23
30	Molecular dynamics and crystallization phenomenon of supercooled and glassy DNA and RNA nucleosides: □adenosine, □thymidine, and □uridine. *Physical Review E*, **2011**, 84, 051507	2.4	14
29	Density scaling in viscous systems near the glass transition. *Physical Review E*, **2011**, 83, 041505	2.4	47
28	Fragility versus activation volume: insight into molecular dynamics of glass-forming hydrogen-bonded liquids. *Physical Review E*, **2011**, 84, 052501	2.4	9
27	Comprehensive studies on physical and chemical stability in liquid and glassy states of telmisartan (TEL): solubility advantages given by cryomilled and quenched material. *Philosophical Magazine*, **2011**, 91, 1926-1948	1.6	24
26	Dynamics of the slow mode in the family of six-carbon monosaccharides monitored by dielectric spectroscopy. *Journal of Physics Condensed Matter*, **2010**, 22, 365103	1.8	7
25	Communication: Relationships between Intermolecular potential, thermodynamics, and dynamic scaling in viscous systems. *Journal of Chemical Physics*, **2010**, 133, 161101	3.9	42
24	Study of molecular dynamics of the pharmaceutically important protic ionic liquid verapamil hydrochloride. II. Test of entropic models. *Journal of Chemical Physics*, **2010**, 132, 094506	3.9	19
23	Molecular dynamics and physical stability of amorphous anti-inflammatory drug: celecoxib. *Journal of Physical Chemistry B*, **2010**, 114, 12792-801	3.4	101
22	On the kinetics of tautomerism in drugs: New application of broadband dielectric spectroscopy. *Journal of Chemical Physics*, **2010**, 133, 094507	3.9	46

21	Study of the amorphous glibenclamide drug: analysis of the molecular dynamics of quenched and cryomilled material. *Molecular Pharmaceutics*, **2010**, 7, 1692-707	5.6	76
20	Comment on "Density scaling of the diffusion coefficient at various pressures in viscous liquids". *Physical Review E*, **2010**, 82, 013501	2.4	15
19	Density scaling of supercooled simple liquids near the glass transition. *Journal of Physical Chemistry B*, **2010**, 114, 11544-51	3.4	31
18	Dynamic Crossover of Water Relaxation in Aqueous Mixtures: Effect of Pressure. *Journal of Physical Chemistry Letters*, **2010**, 1, 1170-1175	6.4	19
17	Observation of the dynamics of clusters in D-glucose with the use of dielectric spectroscopy. *Physical Chemistry Chemical Physics*, **2010**, 12, 723-30	3.6	14
16	Dielectric relaxation studies and dissolution behavior of amorphous verapamil hydrochloride. *Journal of Pharmaceutical Sciences*, **2010**, 99, 828-39	3.9	53
15	Transformation of the Strongly Hydrogen Bonded System into van der Waals one Reflected in Molecular Dynamics. *NATO Science for Peace and Security Series A: Chemistry and Biology*, **2010**, 359-376	0.1	1
14	Study of molecular dynamics of pharmaceutically important protic ionic liquid-verapamil hydrochloride. I. Test of thermodynamic scaling. *Journal of Chemical Physics*, **2009**, 131, 104505	3.9	75
13	Broadband dielectric relaxation study at ambient and elevated pressure of molecular dynamics of pharmaceutical: indomethacin. *Journal of Physical Chemistry B*, **2009**, 113, 12536-45	3.4	116
12	Consequences of an equation of state in the thermodynamic scaling regime. *Journal of Physical Chemistry B*, **2009**, 113, 7419-22	3.4	33
11	Recent advances in fundamental understanding of glass transition. *Journal of Non-Crystalline Solids*, **2008**, 354, 5085-5088	3.9	19
10	Role of defects in the nonmonotonic behavior of secondary relaxation of polypropylene glycols. *Journal of Chemical Physics*, **2008**, 128, 134904	3.9	9
9	Effect of high pressure on the relaxation dynamics of glass-forming liquids. *Journal of Physics Condensed Matter*, **2007**, 19, 205117	1.8	49
8	Anomalous behavior of secondary dielectric relaxation in polypropylene glycols. *Journal of Physics Condensed Matter*, **2007**, 19, 376105	1.8	15
7	Reply to "Comment on R̃Correlations between isobaric and isochoric fragilities and thermodynamical scaling exponent for glass-forming liquidsR̃". *Physical Review E*, **2007**, 76, 013502	2.4	10
6	Changes of relaxation dynamics of a hydrogen-bonded glass former after removal of the hydrogen bonds. *Journal of Chemical Physics*, **2006**, 125, 144507	3.9	50
5	Correlations between isobaric and isochoric fragilities and thermodynamical scaling exponent for glass-forming liquids. *Physical Review E*, **2006**, 74, 041503	2.4	27
4	Dielectric secondary relaxations in polypropylene glycols. *Journal of Chemical Physics*, **2006**, 125, 44904	3.9	32

3	Temperature behavior of secondary relaxation dynamics in tripropylene glycol. *Physical Review B*, **2005**, 71,	3.3	18
2	Dielectric relaxation processes in water mixtures of tripropylene glycol. *Journal of Chemical Physics*, **2005**, 123, 204506	3.9	25
1	Test of the dynamic lattice liquid model of glass-forming liquids. *Journal of Molecular Liquids*, **2004**, 109, 137-141	6	3