

# Jacek Gapinski

## List of Publications by Year in descending order

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107  
papers

2,703  
citations

186265

28  
h-index

214800

47  
g-index

107  
all docs

107  
docs citations

107  
times ranked

3156  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparative Analysis of Viscosity of Complex Liquids and Cytoplasm of Mammalian Cells at the Nanoscale. <i>Nano Letters</i> , 2011, 11, 2157-2163.	9.1	212
2	Scaling the $\alpha$ -relaxation time of supercooled fragile organic liquids. <i>European Physical Journal B</i> , 2004, 42, 309-319.	1.5	161
3	Scaling form of viscosity at all length-scales in poly(ethylene glycol) solutions studied by fluorescence correlation spectroscopy and capillary electrophoresis. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 9025.	2.8	160
4	Temperature and pressure study of Brillouin transverse modes in the organic glass-forming liquid orthoterphenyl. <i>Physical Review E</i> , 2003, 68, 011204.	2.1	121
5	Does fragility depend on pressure? A dynamic light scattering study of a fragile glass-former. <i>Journal of Chemical Physics</i> , 2001, 114, 8048-8055.	3.0	77
6	Many-Body Hydrodynamic Interactions in Charge-Stabilized Suspensions. <i>Physical Review Letters</i> , 2006, 96, 138303.	7.8	73
7	Single-molecule imaging of DNA gyrase activity in living <i>Escherichia coli</i> . <i>Nucleic Acids Research</i> , 2019, 47, 210-220.	14.5	72
8	Spectrum of fast dynamics in glass forming liquids: Does the $\alpha$ -relaxation exist?. <i>Journal of Chemical Physics</i> , 1999, 110, 2312-2315.	3.0	70
9	Comparison of three rheological models of shear flow behavior studied on blood samples from post-infarction patients. <i>Medical and Biological Engineering and Computing</i> , 2007, 45, 837-844.	2.8	67
10	Pressure and temperature dependence of structural relaxation in diglycidylether of bisphenol A. <i>Journal of Chemical Physics</i> , 2003, 118, 3177-3186.	3.0	61
11	Light-scattering study of a supercooled epoxy resin. <i>Physical Review E</i> , 1999, 60, 3086-3096.	2.1	56
12	Diffusion of spheres in crowded suspensions of rods. <i>Journal of Chemical Physics</i> , 2005, 122, 044905.	3.0	56
13	Diffusion and microstructural properties of solutions of charged nanosized proteins: Experiment versus theory. <i>Journal of Chemical Physics</i> , 2005, 123, 054708.	3.0	54
14	Light Gradients in Spherical Photosynthetic Vesicles. <i>Biophysical Journal</i> , 1998, 75, 124-133.	0.5	51
15	Size and Shape of Micelles Studied by Means of SANS, PCS, and FCS. <i>Langmuir</i> , 2010, 26, 9304-9314.	3.5	45
16	Peptide-functionalized ZCIS QDs as fluorescent nanoprobe for targeted HER2-positive breast cancer cells imaging. <i>Acta Biomaterialia</i> , 2016, 35, 293-304.	8.3	45
17	Structure and short-time dynamics in suspensions of charged silica spheres in the entire fluid regime. <i>Journal of Chemical Physics</i> , 2009, 130, 084503.	3.0	44
18	Pressure effects on the $\alpha$ and $\beta$ relaxations in polymethylphenylsiloxane. <i>Journal of Chemical Physics</i> , 2006, 124, 104901.	3.0	42

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19	Theranostic liposomes as a bimodal carrier for magnetic resonance imaging contrast agent and photosensitizer. <i>Journal of Inorganic Biochemistry</i> , 2018, 180, 1-14.	3.5	40
20	Amplitude and Polarity of the Light Gradient Photovoltage from Chloroplasts. <i>Journal of Theoretical Biology</i> , 1994, 170, 129-143.	1.7	37
21	Effect of electrostatic interactions on the structure and dynamics of a model polyelectrolyte. I. Diffusion. <i>Journal of Chemical Physics</i> , 1998, 109, 7556-7566.	3.0	36
22	Effect of electrostatic interactions on the structure and dynamics of a model polyelectrolyte. II. Intermolecular correlations. <i>Journal of Chemical Physics</i> , 1999, 110, 1794-1800.	3.0	34
23	Film Formation and Redispersion of Waterborne Latex Coatings. <i>Journal of Colloid and Interface Science</i> , 2000, 224, 91-98.	9.4	34
24	Self-organizing silver and ultrasmall iron oxide nanoparticles prepared with ginger rhizome extract: Characterization, biomedical potential and microstructure analysis of hydrocolloids. <i>Materials and Design</i> , 2017, 133, 307-324.	7.0	34
25	Interparticle correlations due to electrostatic interactions: A small angle x-ray and dynamic light scattering study. I. Apoferritin. <i>Journal of Chemical Physics</i> , 2002, 117, 413-426.	3.0	33
26	Movement of Proteins in an Environment Crowded by Surfactant Micelles: Anomalous versus Normal Diffusion. <i>Journal of Physical Chemistry B</i> , 2006, 110, 7367-7373.	2.6	32
27	Structuring Effects and Hydration Phenomena in Poly(Ethylene Glycol)/Water Mixtures Investigated by Brillouin Scattering. <i>Journal of Physical Chemistry B</i> , 2006, 110, 20533-20539.	2.6	32
28	Rapamycin Loaded Solid Lipid Nanoparticles as a New Tool to Deliver mTOR Inhibitors: Formulation and in Vitro Characterization. <i>Nanomaterials</i> , 2016, 6, 87.	4.1	31
29	A comparison of relaxation processes in structurally related van der Waals glass formers: The role of internal degrees of freedom. <i>Journal of Chemical Physics</i> , 2005, 122, 074506.	3.0	29
30	Adsorption of bacteriophages on polypropylene labware affects the reproducibility of phage research. <i>Scientific Reports</i> , 2021, 11, 7387.	3.3	29
31	Collective diffusion in charge-stabilized suspensions: Concentration and salt effects. <i>Journal of Chemical Physics</i> , 2007, 126, 104905.	3.0	27
32	Solution Structure of Biopolymers: A New Method of Constructing a Bead Model. <i>Biophysical Journal</i> , 2000, 78, 70-78.	0.5	26
33	Correlation between nonexponential relaxation and non-Arrhenius behavior under conditions of high compression. <i>Physical Review E</i> , 2002, 66, 011501.	2.1	26
34	Dynamics of core-shell particles in concentrated suspensions. <i>Physical Review E</i> , 2004, 69, 042401.	2.1	26
35	Successful FCS Experiment in Nonstandard Conditions. <i>Langmuir</i> , 2014, 30, 8945-8955.	3.5	26
36	Rapamycin-loaded solid lipid nanoparticles: Morphology and impact of the drug loading on the phase transition between lipid polymorphs. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 502, 54-65.	4.7	24

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37	Effect of electrostatic interactions on the dynamics of semiflexible monodisperse DNA fragments. <i>Journal of Chemical Physics</i> , 2000, 113, 6001-6010.	3.0	22
38	Relationship between $T_0$ , $T_g$ and their pressure dependence for supercooled liquids. <i>Journal of Non-Crystalline Solids</i> , 2003, 330, 259-263.	3.1	21
39	Evidences of Nonideal Mixing in Poly(ethylene Glycol)/Organic Solvent Mixtures by Brillouin Scattering. <i>Journal of Physical Chemistry B</i> , 2006, 110, 485-493.	2.6	21
40	Excess compressibility in binary liquid mixtures. <i>Journal of Chemical Physics</i> , 2007, 126, 224508.	3.0	21
41	Photophysical properties of betaxanthins: Vulgaxanthin I in aqueous and alcoholic solutions. <i>Journal of Luminescence</i> , 2015, 167, 289-295.	3.1	21
42	Uptake and controlled release of a dye from thermo-sensitive polymer P(NIPAM-co-Vim). <i>Reactive and Functional Polymers</i> , 2017, 115, 102-108.	4.1	21
43	Fast Light-Driven Motion of Polydopamine Nanomembranes. <i>Nano Letters</i> , 2022, 22, 578-585.	9.1	21
44	Dynamics of supercooled van der Waals liquid under pressure. A dynamic light scattering study. <i>Colloid and Polymer Science</i> , 2004, 282, 874-881.	2.1	19
45	Silver and ultrasmall iron oxides nanoparticles in hydrocolloids: effect of magnetic field and temperature on self-organization. <i>Scientific Reports</i> , 2018, 8, 4041.	3.3	19
46	Structural Relaxation Processes in Polyethylene Glycol/CCl <sub>4</sub> Solutions by Brillouin Scattering. <i>Journal of Physical Chemistry B</i> , 2005, 109, 4181-4188.	2.6	18
47	Physical nature of complex structural relaxation in polysiloxane $\alpha$ and $\beta$ relaxations. <i>Polymer</i> , 2006, 47, 7231-7240.	3.8	18
48	Freezing lines of colloidal Yukawa spheres. I. A Rogers-Young integral equation study. <i>Journal of Chemical Physics</i> , 2012, 136, 024507.	3.0	18
49	Porphyrazine with bulky 2-(1-adamantyl)-5-phenylpyrrol-1-yl periphery tuning its spectral and electrochemical properties. <i>Polyhedron</i> , 2015, 98, 217-223.	2.2	18
50	Self-diffusion in solutions of a 20 base pair oligonucleotide: Effects of concentration and ionic strength. <i>Journal of Chemical Physics</i> , 2004, 121, 10794-10802.	3.0	17
51	Structural properties of the intrinsically disordered, multiple calcium ion-binding otolith matrix macromolecule-64 (OMM-64). <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2017, 1865, 1358-1371.	2.3	17
52	Acetate-Induced Disassembly of Spherical Iron Oxide Nanoparticle Clusters into Monodispersed Core-Shell Structures upon Nanoemulsion Fusion. <i>Langmuir</i> , 2017, 33, 10351-10365.	3.5	16
53	Brillouin Scattering Study of Polyethylene Glycol/Water System below Crystallization Temperature. <i>Journal of Physical Chemistry B</i> , 2010, 114, 2644-2649.	2.6	15
54	Experimental evidence of high pressure decoupling between charge transport and structural dynamics in a protic ionic glass-former. <i>Scientific Reports</i> , 2017, 7, 7084.	3.3	15

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55	Dynamic light scattering from liquid crystal polymer brushes swollen in a nematic solvent. <i>Liquid Crystals</i> , 2001, 28, 1353-1360.	2.2	14
56	Size of Submicrometer Particles Measured by FCS: Correction of the Confocal Volume. <i>Langmuir</i> , 2015, 31, 6681-6687.	3.5	14
57	Synthesis, structure, EPR studies and up-conversion luminescence of ZnO:Er <sup>3+</sup> @Yb <sup>3+</sup> @Gd <sub>2</sub> O <sub>3</sub> nanostructures. <i>RSC Advances</i> , 2016, 6, 89305-89312.	3.6	13
58	Synthesis, characterization and in vitro cytotoxicity studies of poly-N-isopropyl acrylamide gel nanoparticles and films. <i>Materials Science and Engineering C</i> , 2021, 118, 111507.	7.3	13
59	Isotropic Brillouin spectra of liquids having an internal degree of freedom. <i>Journal of Chemical Physics</i> , 2007, 126, 014508.	3.0	12
60	Freezing lines of colloidal Yukawa spheres. II. Local structure and characteristic lengths. <i>Journal of Chemical Physics</i> , 2014, 141, 124505.	3.0	12
61	Cytotoxicity and imaging studies of $\text{Er}^{3+}$ -NaGdF <sub>4</sub> :Yb <sup>3+</sup> @PEG-Mo nanorods. <i>RSC Advances</i> , 2016, 6, 95633-95643.	3.6	12
62	Core-shell fluorinated methacrylate nanoparticles with Rhodamine-B for confocal microscopy and fluorescence correlation spectroscopy applications. <i>Journal of Fluorine Chemistry</i> , 2016, 183, 92-99.	1.7	12
63	Effect of acrylamide on aldolase structure. II. Characterization of aldolase unfolding intermediates. <i>BBA - Proteins and Proteomics</i> , 1999, 1431, 351-362.	2.1	11
64	Generic behavior of the hydrodynamic function of charged colloidal suspensions. <i>Journal of Chemical Physics</i> , 2010, 132, 054510.	3.0	11
65	Structure and Dimensions of Core-shell Nanoparticles Comparable to the Confocal Volume Studied by Means of Fluorescence Correlation Spectroscopy. <i>Langmuir</i> , 2016, 32, 2482-2491.	3.5	11
66	Release and cytotoxicity studies of magnetite/Ag/antibiotic nanoparticles: An interdependent relationship. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 152, 85-94.	5.0	11
67	Mechanical reinforcement of polymer colloidal crystals by supercritical fluids. <i>Journal of Colloid and Interface Science</i> , 2020, 579, 786-793.	9.4	11
68	Micellar Aggregation Behavior at Low Ionic Strength of Cyclic Acetal-Type Cationic Surfactants Containing the 1,3-Dioxolane Moiety. <i>Journal of Physical Chemistry B</i> , 1997, 101, 871-875.	2.6	10
69	Synthesis and encapsulation of fluorescein in zeolite Y. <i>Microporous and Mesoporous Materials</i> , 2016, 236, 79-84.	4.4	10
70	The effect of intramolecular relaxations on the damping of longitudinal and transverse phonons in polysiloxanes studied by Brillouin spectroscopy. <i>Journal of Chemical Physics</i> , 2008, 128, 014507.	3.0	9
71	Some Evidence of Scaling Behavior in the Relaxation Dynamics of Aqueous Polymer Solutions. <i>Journal of Physical Chemistry B</i> , 2010, 114, 1614-1620.	2.6	9
72	Fluorescein ether-ester dyes for labeling of fluorinated methacrylate nanoparticles. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 382, 111956.	3.9	9

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73	Up-conversion luminescence of RE3+ -doped polymer composites KGd(WO4)2&PMMA. <i>Optical Materials</i> , 2019, 88, 366-371.	3.6	9
74	In-situ thickness control of centimetre-scale 2D-Like polydopamine films with large scalability. <i>Materials Today Chemistry</i> , 2022, 24, 100935.	3.5	9
75	Unfolding and Refolding of Juvenile Hormone Binding Protein. <i>Biophysical Journal</i> , 2004, 86, 1138-1148.	0.5	8
76	Collective acoustic modes in liquids: A comparison between the generalized-hydrodynamics and memory-function approaches. <i>Physical Review E</i> , 2011, 84, 051202.	2.1	8
77	Stimuli-Responsive PNIPAM Based Copolymers: Modeling and Light Scattering Investigations. <i>Acta Physica Polonica A</i> , 2014, 125, 1236-1239.	0.5	8
78	EPR Oximetry Sensor – Developing a TAM Derivative for In Vivo Studies. <i>Cell Biochemistry and Biophysics</i> , 2018, 76, 19-28.	1.8	8
79	Structural similarity of E. coli 5S rRNA in solution and within the ribosome. <i>Biopolymers</i> , 2004, 73, 316-325.	2.4	6
80	Unexpected effect of internal degrees of freedom on transverse phonons in supercooled liquids. <i>Europhysics Letters</i> , 2006, 73, 607-613.	2.0	6
81	Second Harmonic Generation Response in Thermally reconstructed Multiferroic $\text{Gd}_2(\text{MoO}_4)_3$ Thin Films. <i>Scientific Reports</i> , 2017, 7, 11800.	3.3	6
82	Synthesis of fluorescein by a ship-in-a-bottle method in different zeolites. <i>New Journal of Chemistry</i> , 2017, 41, 9969-9976.	2.8	6
83	Evidence of fast diffusive process in a mixed polymeric glass. <i>Journal of Chemical Physics</i> , 1992, 96, 6311-6313.	3.0	5
84	Hidden Minima of the Gibbs Free Energy Revealed in a Phase Separation in Polymer/Surfactant/Water Mixture. <i>Journal of Physical Chemistry B</i> , 2005, 109, 8533-8537.	2.6	5
85	Simple way to analyze Brillouin spectra from turbid liquids. <i>Optics Letters</i> , 2015, 40, 1456.	3.3	5
86	Submicron sized fluorescent silica particles characterization. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2017, 411, 78-84.	1.4	5
87	Temperature dependent FCS studies using a long working distance objective: Viscosities of supercooled liquids and particle size. <i>Journal of Chemical Physics</i> , 2017, 146, 084506.	3.0	5
88	Nanomolar Nitric Oxide Concentrations in Living Cells Measured by Means of Fluorescence Correlation Spectroscopy. <i>Molecules</i> , 2022, 27, 1010.	3.8	5
89	Magneto-optics of Ferritin. <i>Journal of Colloid and Interface Science</i> , 2002, 253, 265-272.	9.4	4
90	Revealing Fast Proton Transport in Condensed Matter by Means of Density Scaling Concept. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15749-15756.	3.1	4

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91	High-Frequency Dynamical Behavior of Poly(ethylene glycol)+H <sub>2</sub> O Mixtures by Brillouin Spectroscopy. <i>Macromolecular Symposia</i> , 2007, 251, 47-53.	0.7	3
92	High-frequency propagating density fluctuations in deeply supercooled water: Evidence of a single viscous relaxation. <i>Physical Review E</i> , 2013, 87, 022303.	2.1	3
93	Encapsulation of fluorescein into nanozeolites L and Y. <i>Microporous and Mesoporous Materials</i> , 2018, 260, 70-75.	4.4	3
94	On the nature of uncoupled chlorophylls in the extremophilic photosystem I-light harvesting I supercomplex. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2020, 1861, 148136.	1.0	3
95	Chromatin and transcriptome changes in human myoblasts show spatio-temporal correlations and demonstrate DPP4 inhibition in differentiated myotubes. <i>Scientific Reports</i> , 2020, 10, 14336.	3.3	3
96	Microenvironment characteristics of microemulsions stabilized by cyclic acetal-type cationic surfactants. <i>Progress in Colloid and Polymer Science</i> , 1997, 105, 311-316.	0.5	3
97	Fluorescent Submicron-Sized Poly(heptafluoro-n-butyl methacrylate) Particles with Long-Term Stability. <i>Molecules</i> , 2020, 25, 2013.	3.8	2
98	Computer-controlled digital correlator and its application in experimental physics. <i>Microprocessors and Microsystems</i> , 1992, 16, 171-176.	2.8	1
99	Nano-viscosity of supercooled liquid measured by fluorescence correlation spectroscopy: Pressure and temperature dependence and the density scaling. <i>Journal of Chemical Physics</i> , 2018, 148, 094201.	3.0	1
100	Nature of intramolecular dynamics in protic ionic glass-former: insight from ambient and high pressure Brillouin spectroscopy. <i>Journal of Molecular Liquids</i> , 2019, 282, 51-56.	4.9	1
101	Structure and Dynamics of Colloidal Suspensions Studied by Means of XPCS. <i>Acta Physica Polonica A</i> , 2008, 114, 339-350.	0.5	1
102	Stimuli-Responsive PNIPAM Based Copolymers: Modeling and Light Scattering Investigations. <i>Acta Physica Polonica A</i> , 2014, 125, 1245-1248.	0.5	1
103	Brillouin spectroscopy. , 2022, , 45-72.		1
104	Study of the Rytov dip for liquido-terphenyl. <i>Philosophical Magazine</i> , 2004, 84, 1463-1469.	1.6	0
105	Scaling of the Structural Relaxation in Supercooled Fragile Liquids and Simulated Liquid Silica. <i>AIP Conference Proceedings</i> , 2008, , .	0.4	0
106	Relaxation dynamics and evidence of scaling behaviours in aqueous polymer solutions. <i>Journal of Molecular Liquids</i> , 2011, 159, 105-111.	4.9	0
107	Penetration of Light in Photosynthetic Membranes of Spherical Symmetry. , 1995, , 2361-2364.		0