

Georges M Pavlov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1867635/publications.pdf>

Version: 2024-02-01

124
papers

2,785
citations

201385

27
h-index

197535

49
g-index

128
all docs

128
docs citations

128
times ranked

2979
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of acetic acid concentration on the solubilization of chitosan. <i>Polymer</i> , 1999, 40, 7029-7032.	1.8	527
2	Solubilization of Chitosan in Strong Acid Medium. <i>International Journal of Polymer Analysis and Characterization</i> , 1999, 5, 267-276.	0.9	133
3	Partial specific volume and solvent interactions of amphipol A8-35. <i>Analytical Biochemistry</i> , 2004, 334, 318-334.	1.1	105
4	Conformation of heparin studied with macromolecular hydrodynamic methods and X-ray scattering. <i>European Biophysics Journal</i> , 2003, 32, 437-449.	1.2	99
5	Design and synthesis of new anionic α -polymeric ionic liquids with high charge delocalization. <i>Polymer Chemistry</i> , 2011, 2, 2609.	1.9	96
6	A Versatile Approach to Unimolecular Water-Soluble Carriers: ATRP of PEGMA with Hydrophobic Star-Shaped Polymeric Core Molecules as an Alternative for PEGylation. <i>Macromolecules</i> , 2009, 42, 1808-1816.	2.2	84
7	Polymeric Ionic Liquids: Comparison of Polycations and Polyanions. <i>Macromolecules</i> , 2011, 44, 9792-9803.	2.2	84
8	Bis(trifluoromethylsulfonyl)amide based α -polymeric ionic liquids: Synthesis, purification and peculiarities of structure-properties relationships. <i>Electrochimica Acta</i> , 2011, 57, 74-90.	2.6	84
9	Polyelectrolyte Complexes of DNA and Linear PEI: Formation, Composition and Properties. <i>Langmuir</i> , 2012, 28, 16167-16176.	1.6	67
10	Characterization of poly(methyl methacrylate) nanoparticles prepared by nanoprecipitation using analytical ultracentrifugation, dynamic light scattering, and scanning electron microscopy. <i>Journal of Polymer Science Part A</i> , 2010, 48, 3924-3931.	2.5	54
11	Hydrodynamic properties of poly(1-vinyl-2-pyrrolidone) molecules in dilute solution. <i>Die Makromolekulare Chemie</i> , 1990, 191, 2889-2899.	1.1	52
12	Size and average density spectra of macromolecules obtained from hydrodynamic data. <i>European Physical Journal E</i> , 2007, 22, 171-180.	0.7	47
13	Conformation parameters of linear macromolecules from velocity sedimentation and other hydrodynamic methods. <i>Methods</i> , 2011, 54, 124-135.	1.9	47
14	Conformation zoning of large molecules using the analytical ultracentrifuge. <i>TrAC - Trends in Analytical Chemistry</i> , 1997, 16, 401-405.	5.8	46
15	Hydrodynamic characteristics and equilibrium rigidity of pullulan molecules. <i>International Journal of Biological Macromolecules</i> , 1994, 16, 318-323.	3.6	41
16	α -Conjugated Donor and Donor-Acceptor Metallo-Polymers. <i>Macromolecular Rapid Communications</i> , 2010, 31, 868-874.	2.0	40
17	Strong Linear Polyelectrolytes in Solutions of Extreme Concentrations of One-Valent Salt. Hydrodynamic Study. <i>Macromolecules</i> , 2014, 47, 2748-2758.	2.2	40
18	Hydrodynamic properties of cyclodextrin molecules in dilute solutions. <i>European Biophysics Journal</i> , 2010, 39, 371-379.	1.2	39

#	ARTICLE	IF	CITATIONS
19	Molecular characteristics of poly(propylene imine) dendrimers as studied with translational diffusion and viscometry. <i>Colloid and Polymer Science</i> , 2002, 280, 416-423.	1.0	38
20	Hydrodynamic properties of carbohydrate-coated dendrimers. <i>Carbohydrate Polymers</i> , 1999, 38, 195-202.	5.1	35
21	Preparation, Cellular Internalization, and Biocompatibility of Highly Fluorescent PMMA Nanoparticles. <i>Macromolecular Rapid Communications</i> , 2012, 33, 1791-1797.	2.0	34
22	Nanoprecipitation of poly(methyl methacrylate)-based nanoparticles: Effect of the molar mass and polymer behavior. <i>Journal of Polymer Science Part A</i> , 2012, 50, 2906-2913.	2.5	33
23	Sedimentation parameter of linear polymers. , 1995, , 101-108.		32
24	Amphiphilic star-shaped block copolymers as unimolecular drug delivery systems: investigations using a novel fungicide. <i>Soft Matter</i> , 2013, 9, 715-726.	1.2	32
25	Hyperbranched Poly(ethylene glycol) Copolymers: Absolute Values of the Molar Mass, Properties in Dilute Solution, and Hydrodynamic Homology. <i>Macromolecules</i> , 2015, 48, 5887-5898.	2.2	32
26	The concentration dependence of sedimentation for polysaccharides. <i>European Biophysics Journal</i> , 1997, 25, 385-397.	1.2	31
27	Examination and optimization of the self-assembly of biocompatible, polymeric nanoparticles by high-throughput nanoprecipitation. <i>Soft Matter</i> , 2011, 7, 5030.	1.2	31
28	Dilute solution properties of carboxymethylchitins in high ionic-strength solvent. <i>Polymer</i> , 1998, 39, 6951-6961.	1.8	30
29	Ruthenium(II) Metallo-Supramolecular Polymers of Click-Derived Tridentate Ditopic Ligands. <i>Macromolecular Rapid Communications</i> , 2012, 33, 597-602.	2.0	29
30	Normalized scaling relations as a natural classification of linear macromolecules according to size. , 1999, , 76-80.		27
31	Size and shape of inulin in dimethyl sulphoxide solution. <i>Carbohydrate Polymers</i> , 1999, 38, 231-234.	5.1	27
32	Dilute solution properties of lactosylated polyamidoamine dendrimers and their structural characteristics. <i>Polymer</i> , 2001, 42, 3671-3678.	1.8	25
33	Conformational Parameters of Poly(<i>N</i> -methyl- <i>N</i> -vinylacetamide) Molecules Through the Hydrodynamic Characteristics Studies. <i>Macromolecular Bioscience</i> , 2010, 10, 790-797.	2.1	24
34	The sedimentation parameter of linear polymer molecules in absence of excluded volume effects. <i>Acta Polymerica</i> , 1988, 39, 107-111.	1.4	23
35	Determination of intrinsic viscosity of polyelectrolytes in salt-free solutions. <i>Russian Journal of Applied Chemistry</i> , 2006, 79, 1407-1412.	0.1	23
36	Water-soluble p-carboxybenzylated beechwood 4-O-methylglucuronoxylan: structural features and properties. <i>Carbohydrate Polymers</i> , 2000, 42, 123-131.	5.1	22

#	ARTICLE	IF	CITATIONS
37	Alternating terpyridine- π -conjugated copolymers of styrene and diphenylethylene via anionic polymerization techniques: A detailed characterization study. <i>Journal of Polymer Science Part A</i> , 2009, 47, 3691-3701.	2.5	22
38	Velocity Sedimentation and Intrinsic Viscosity Analysis of Polystyrene Standards with a Wide Range of Molar Masses. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 1298-1310.	1.1	21
39	Hydrodynamic and Optical Properties of Homologous Series of Styrene-Methyl Methacrylate Graft Copolymers. <i>Macromolecules</i> , 1978, 11, 294-300.	2.2	20
40	Organization of Human Interferon β -Heparin Complexes from Solution Properties and Hydrodynamics. <i>Biochemistry</i> , 2006, 45, 13227-13238.	1.2	18
41	Self-Assembly of 3,6-Bis(4-triazolyl)pyridazine Ligands with Copper(I) and Silver(I) Ions: Time-Dependent 2D-NOESY and Ultracentrifuge Measurements. <i>Chemistry - an Asian Journal</i> , 2011, 6, 873-880.	1.7	18
42	Linear poly(ethylene imine)s: true molar masses, solution properties and conformation. <i>Polymer Chemistry</i> , 2017, 8, 7169-7179.	1.9	18
43	Hydrodynamic Analysis of Well-Defined Flexible Linear Macromolecules of Low Molar Mass. <i>Macromolecules</i> , 2009, 42, 7447-7455.	2.2	17
44	Microwave-assisted synthesis of imidazolium ionenes and their application as humidity absorbers. <i>Journal of Materials Chemistry</i> , 2010, 20, 3583.	6.7	17
45	Hydrodynamic properties of the fractions of mannan formed by <i>Rhodotorula rubra</i> yeast. <i>Carbohydrate Polymers</i> , 1992, 19, 243-248.	5.1	15
46	Hydrodynamic, molecular, and conformational characteristics of macromolecules of a random copolymer of N-Methyl-N-vinylacetamide and N-Methyl-N-vinylamine Hydrochloride. <i>Russian Journal of Applied Chemistry</i> , 2012, 85, 1239-1246.	0.1	15
47	Synthesis and characterization of polymethacrylates containing conjugated oligo(phenylene) Tj ETQq1 1 0.784314,rgBT /Overlock 10	2.5	15
48	Self-sufficiency of velocity sedimentation for the determination of molecular characteristics of linear polymers. <i>Polymer</i> , 1995, 36, 2043-2048.	1.8	14
49	Flow birefringence of xanthan and other polysaccharide solutions. <i>International Journal of Biological Macromolecules</i> , 1999, 26, 295-301.	3.6	14
50	Evaluation of draining and volume effects in the interpretation of hydrodynamic data for linear macromolecules. , 2002, , 149-158.		14
51	Molecular orientation ordering in surface layers of polymer films. <i>Polymer Science - Series A</i> , 2007, 49, 828-836.	0.4	14
52	Synthesis, characterization, and micellization studies of coil-rod-coil and ABA ruthenium(II) terpyridine assemblies with π -conjugated electron acceptor systems. <i>Journal of Polymer Science Part A</i> , 2011, 49, 1396-1408.	2.5	13
53	Star-Brush-Shaped Macromolecules: Peculiar Properties in Dilute Solution. <i>Macromolecules</i> , 2013, 46, 8671-8679.	2.2	12
54	Dimensions and conformations of macromolecules of N-methyl-N-vinylacetamide and N-methyl-N-vinylamine hydrochloride in solutions in a wide interval of ionic strength. <i>Polymer Science - Series C</i> , 2017, 59, 125-132.	0.8	12

#	ARTICLE	IF	CITATIONS
55	Molecular Characteristics of Poly(methacrylamido¹-Glucose). Journal of Carbohydrate Chemistry, 1996, 15, 419-433.	0.4	11
56	Investigation of the formation and properties of water-soluble conjugates of polymer p-nitrophenyl esters with polymer primary amines. European Polymer Journal, 2000, 36, 1127-1135.	2.6	11
57	Conformations of sodium poly(styrene-4-sulfonate) macromolecules in solutions with different ionic strengths. Polymer Science - Series A, 2011, 53, 1003-1011.	0.4	11
58	Hydrodynamic and Molecular Study of Poly{4-(hexyloxy)phenyl}ethynylphenyl methacrylate} in Dilute Solutions and Conformational Peculiarities of Brush-Like Macromolecules. Macromolecular Chemistry and Physics, 2012, 213, 904-916.	1.1	11
59	Induced Charge Effect by Co(II) Complexation on the Conformation of a Copolymer Containing a Bidentate (1,2,3-Triazol-4-yl)pyridine Chelating Unit. Macromolecular Chemistry and Physics, 2012, 213, 1339-1348.	1.1	11
60	Polysaccharide Film Technologies: Interfacial Order and Chain Thermodynamic Rigidity. Biotechnology and Genetic Engineering Reviews, 1999, 16, 347-360.	2.4	10
61	Spectrum of hydrodynamic volumes and sizes of macromolecules of linear polyelectrolytes <i>versus</i> their charge density in salt-free aqueous solutions. Physical Chemistry Chemical Physics, 2018, 20, 9975-9983.	1.3	10
62	Optical properties of dextran in solution and in films. Carbohydrate Polymers, 1999, 38, 267-271.	5.1	9
63	Hydrodynamic and molecular characteristics of graft copolymers of chitosan with acrylamide. Polymer Science - Series B, 2007, 49, 232-235.	0.3	9
64	Conformation of sodium poly(4-styrenesulfonate) macromolecules in aqueous solutions. Doklady Chemistry, 2008, 419, 111-112.	0.2	9
65	Sizes and conformations of hydrophilic and hydrophobic polyelectrolytes in solutions of various ionic strengths. Polymer Science - Series A, 2013, 55, 699-705.	0.4	9
66	Molecular characteristics of poly(1-trimethylsilyl-1-propyne) in dilute solutions. Polymer, 2004, 45, 1159-1166.	1.8	8
67	Diffusion-viscometric analysis and conformational characteristics of sodium polystyrenesulfonate molecules. Russian Journal of Applied Chemistry, 2006, 79, 1490-1493.	0.1	8
68	Flow birefringence of pullulan molecules in solutions. Polymer, 1998, 39, 235-239.	1.8	7
69	Molecular Properties and Electrostatic Interactions of Linear Poly(allylamine hydrochloride) Chains. , 0, , 134-140.		7
70	Different Levels of Self-Sufficiency of the Velocity Sedimentation Method in the Study of Linear Macromolecules. , 2016, , 269-307.		7
71	Title is missing!. Russian Journal of Applied Chemistry, 2001, 74, 663-668.	0.1	6
72	Dendrimers Based on α -Amino Acids: Synthesis and Hydrodynamic Characteristics. Doklady Physical Chemistry, 2004, 399, 290-292.	0.2	6

#	ARTICLE	IF	CITATIONS
73	Molecular-hydrodynamic study of poly(N-methyl-N-vinylacetamide) macromolecules. Polymer Science - Series C, 2010, 52, 62-69.	0.8	6
74	Unimolecular micelles based on amphiphilic of N-methyl-N-vinylacetamide copolymers. Doklady Chemistry, 2015, 463, 181-184.	0.2	6
75	Title is missing!. Russian Journal of Applied Chemistry, 2002, 75, 1665-1672.	0.1	5
76	Conformational features of poly- l - and poly- d , l -lactides through molecular optics and hydrodynamics. European Polymer Journal, 2017, 89, 324-338.	2.6	5
77	Detection and evaluation of polymer-polymer interactions in dilute solutions of associating polymers. Polymer Chemistry, 2021, 12, 2325-2334.	1.9	5
78	Hydrodynamics of Macromolecules: Conformation Zoning for General Macromolecules. , 2013, , 1014-1024.		5
79	Orientational order in surface layers of gelatin films. European Polymer Journal, 2001, 37, 179-182.	2.6	4
80	Dynamo-optical properties of methylcellulose solutions and the optical anisotropy of glucopyranose ring. European Polymer Journal, 2001, 37, 1219-1225.	2.6	4
81	Spontaneous birefringence in films of some phenyl-containing polymers. Polymer Science - Series B, 2007, 49, 191-195.	0.3	4
82	Intra- and inter-supramolecular complexation of poly(butyl methacrylate)-co-(1,2,3-triazol-4-yl)pyridine copolymers induced by Coll, Fell, and EuIII ions monitored by molecular hydrodynamics methods. Journal of Polymer Science Part A, 2016, 54, 2632-2639.	2.5	4
83	Hydrodynamic, molecular, and conformational characteristics of poly[1,3-bis(3,4-dicarboxyphenoxy)benzene 4,4'-bis(4'-N-phenoxy)-diphenylsulfone]imide in solutions. Polymer Science - Series A, 2016, 58, 12-17.	0.4	4
84	Conformation and Equilibrium Rigidity of Molecules of Poly(phenylquinoxalines). Macromolecules, 1979, 12, 645-650.	2.2	3
85	Correlations of hydrodynamic characteristics of macromolecules and their retention volumes in GPC. Journal of Applied Polymer Science, 1992, 46, 2059-2061.	1.3	3
86	Hydrodynamic and Molecular Characteristics of Poly[1-(trimethylgermyl)propyne]. Russian Journal of Applied Chemistry, 2001, 74, 286-291.	0.1	3
87	Water-Soluble Starlike Fullerene C60 Derivatives Based on Polyvinylpyrrolidone. Doklady Physical Chemistry, 2003, 391, 177-179.	0.2	3
88	Title is missing!. Russian Journal of General Chemistry, 2003, 73, 344-349.	0.3	3
89	Grafting of poly-N-methacryloylaminodeoxyglucose on poly-N-vinylpyrrolidone. Russian Journal of Applied Chemistry, 2004, 77, 1341-1344.	0.1	3
90	Molecular Characteristics of Star-Like Polyvinylpyrrolidone with Fullerene C60 as the Branching Site in Dilute Solutions. Russian Journal of Applied Chemistry, 2005, 78, 130-136.	0.1	3

#	ARTICLE	IF	CITATIONS
91	Orientational ordering of polymer chains near the surface and asymmetry of the statistical segment of macromolecules. Russian Journal of Applied Chemistry, 2007, 80, 102-105.	0.1	3
92	Orientational Order in Nanolayers of Cast Polymer Films. Langmuir, 2009, 25, 9085-9093.	1.6	3
93	Characteristic features of the behavior of charged hydrophilic and hydrophobic macromolecules in solutions of different ionic strength. Doklady Chemistry, 2013, 448, 16-18.	0.2	3
94	Conformational differences of poly(L-lactic acid) and poly(D,L-lactic acid) in dilute solutions. Doklady Chemistry, 2015, 465, 261-264.	0.2	3
95	Amphiphilic star-shaped brushes based on block copolymers-molecular micelles for the delivery of drugs: Hydrodynamic studies. Polymer Science - Series A, 2015, 57, 115-122.	0.4	3
96	Analytical ultracentrifugation and combined molecular hydrodynamic approaches for polymer characterization. , 2021, , 223-259.		3
97	Modification of the Benoit model for \hat{I}^2 1-4 glucans. Carbohydrate Polymers, 1998, 37, 415-418.	5.1	2
98	Title is missing!. Russian Journal of Applied Chemistry, 2002, 75, 276-280.	0.1	2
99	Synthesis and hydrodynamic and molecular characteristics of N-methacryloylglucosamine N-vinylformamide copolymers. Russian Journal of Applied Chemistry, 2007, 80, 777-782.	0.1	2
100	The structure and spontaneous orientational order in surface layers of water-soluble methyl- and hydroxypropylmethyl cellulose films. Polymer Science - Series B, 2008, 50, 20-24.	0.3	2
101	Birefringence in solutions and films of poly(N-methyl-N-vinylacetamide) macromolecules. Polymer Science - Series A, 2015, 57, 261-265.	0.4	2
102	Birefringence in solutions and films of poly[4,4'-bis(4''-N-phenoxy)diphenylsulfon]imide of 1,3 bis(3',4-dicarboxyphenoxy)benzene. Polymer Science - Series A, 2017, 59, 193-197.	0.4	2
103	Sizes of Macromolecules of Copolymers of N-Methyl-N-Vinylacetamide and N-Methyl-N-Vinylamine Hydrochloride with Low Charge Linear Density. Polymer Science - Series A, 2018, 60, 172-178.	0.4	2
104	RAFT synthesized poly-N-vinylsuccinimide macromolecules: properties in dilute solutions. Colloid and Polymer Science, 2019, 297, 1213-1221.	1.0	2
105	Advances in Physicochemical Properties of Biopolymers (Part 1). , 2017, , .		2
106	Hydrodynamic and molecular homology of dendrimer molecules. Colloid and Polymer Science, 2001, 279, 714-715.	1.0	1
107	Behavior of polymeric stars with fullerene core in aqueous solution: structural investigation by neutron and light scattering. Physica B: Condensed Matter, 2004, 350, E419-E422.	1.3	1
108	Electrostatic long-range and short-range interactions in linear poly(allylamine hydrochloride) chains. Polymer Science - Series A, 2006, 48, 177-182.	0.4	1

#	ARTICLE	IF	CITATIONS
109	Dynamic birefringence of poly(styrene-4-sulfonate sodium) macromolecules in aqueous solutions at high ionic strengths. <i>Polymer Science - Series A</i> , 2010, 52, 115-118.	0.4	1
110	Size of linear polyelectrolytes with different charge density in salt-free aqueous solutions. <i>Doklady Chemistry</i> , 2014, 454, 13-16.	0.2	1
111	Influence of Electrostatic Long-Range and Short-Range Effects on the Conformations of Flexible-Chain Linear Polyelectrolyte Macromolecules with Different Charge Density in Salt-Free Aqueous Solutions. <i>Polymer Science - Series A</i> , 2019, 61, 805-814.	0.4	1
112	Electrostatic Long-Range Interactions in Macromolecules of Flexible-Chain Linear Polyelectrolytes with Low Charge Density in Aqueous Solutions of Different Ionic Strength. <i>Doklady Physical Chemistry</i> , 2019, 489, 164-167.	0.2	1
113	Detecting Hydrophobic Interactions in Star-Shaped Amphiphilic Copolymers by the Viscometric Method. <i>Polymer Science - Series A</i> , 2021, 63, 1-7.	0.4	1
114	Sizes Monitoring of Polyelectrolyte Flexible Chains over the Entire Range of Ionic Strength through Viscometry of Dilute Solutions. <i>Reviews and Advances in Chemistry</i> , 2021, 11, 134-144.	0.2	1
115	Neutron Star Atmospheres. , 2002, , 37-48.		0
116	Water-Soluble Polymeric Methanofullerene and Fulleropyrrolidine Derivatives. <i>Russian Journal of Applied Chemistry</i> , 2005, 78, 1981-1986.	0.1	0
117	Hierarchy of Structural Organization of Fullerene-Containing Polyvinylformamide in Solutions. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2006, 14, 321-326.	1.0	0
118	Hydrodynamic and molecular characteristics of cyclodextrin molecules in solutions. <i>Doklady Biochemistry and Biophysics</i> , 2009, 426, 164-166.	0.3	0
119	Analytical Ultracentrifugation in the Former USSR: The MOM Ultracentrifuges. <i>Macromolecular Bioscience</i> , 2010, 10, 700-702.	2.1	0
120	Correlation Functions and Optical Effects in Surface Layers of Polymer Films. <i>Ferroelectrics</i> , 2010, 397, 122-127.	0.3	0
121	Birefringence in triphenylamine-containing polyheteroarylene films. <i>Journal of Optical Technology (A)</i> Tj ETQq1 1 0.784314 rgBT /Over 0,2 0		
122	Conformations of polyelectrolyte macromolecules with different charge density in solutions of different ionic strengths. <i>Journal of Physics: Conference Series</i> , 2016, 769, 012017.	0.3	0
123	Orientational order in surface layers of pullulan films. <i>Biophysics (Russian Federation)</i> , 2017, 62, 53-57.	0.2	0
124	Influence of Side Chain Length on the Properties of Alkylated Copolymers Based on N-Methyl-N-Vinylacetamide. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 500, 012017.	0.3	0