Nikolay A Charykov

List of Publications by Year in Descending Order

129 papers	1,097 citations	17 h-index	27 g-index
136 ext. papers	1,195 ext. citations	2 avg, IF	4.23 L-index

#	Paper	IF	Citations
129	A cytostatic drug from the class of triazine derivatives: Its properties in aqueous solutions, cytotoxicity, and therapeutic activity. *Journal of Molecular Liquids*, **2022**, 356, 119043	6	0
128	Physicochemical investigation of water-soluble C60(C2NH4O2)4H4 (C60-Gly) adduct. *Journal of Molecular Liquids*, **2021**, 344, 117658	6	1
127	Computer System of Visual Modeling in Design and Research of Processes of Carbon Nanocluster Compounds Synthesis. *Studies in Systems, Decision and Control*, **2021**, 181-193	0.8	1
126	Solubility of Rare Earth Chlorides in Ternary Water-Salt Systems in the Presence of a Fullerenol□60(OH)24 Nanoclusters at 25 □C. Models of Nonelectrolyte Solubility in Electrolyte Solutions. *Processes*, **2021**, 9, 349	2.9	1
125	Physicochemical study of water-soluble C60(OH)24 fullerenol. *Journal of Molecular Liquids*, **2020**, 311, 113360	6	8
124	Fullerene derivatives with amino acids, peptides and proteins: From synthesis to biomedical application. *Progress in Solid State Chemistry*, **2020**, 57, 100255	8	32
123	Polythermal density and viscosity, nanoparticle size distribution, binding with human serum albumin and radical scavenging activity of the C60-l-arginine (C60(C6H13N4O2)8H8) aqueous solutions. *Journal of Molecular Liquids*, **2020**, 297, 111915	6	6
122	Thermodynamic properties of the C70(OH)12 fullerenol in the temperature range T = 9.2 K to 304.5 K. *Journal of Chemical Thermodynamics*, **2020**, 144, 106029	2.9	4
121	Thermodynamic and quantum chemical investigation of the monocarboxylated fullerene C60CHCOOH. *Journal of Chemical Thermodynamics*, **2020**, 140, 105898	2.9	4
120	MWCNT in PEG-400 nanofluids for thermal applications: A chemical, physical and thermal approach. *Journal of Molecular Liquids*, **2019**, 294, 111616	6	23
119	Multiphase Open Phase Processes Differential Equations. *Processes*, **2019**, 7, 148	2.9	4
118	Thermodynamic Properties from Calorimetry and Density Functional Theory and the Thermogravimetric Analysis of the Fullerene Derivative C60(OH)40. *Journal of Chemical & Engineering Data*, **2019**, 64, 1480-1487	2.8	10
117	Bioactivity Study of the C60-L-Threonine Derivative for Potential Application in Agriculture. *Journal of Nanomaterials*, **2019**, 2019, 1-13	3.2	6
116	Physico-chemical properties of C70-l-threonine bisadduct (C70(C4H9NO2)2) aqueous solutions. *Journal of Molecular Liquids*, **2019**, 279, 687-699	6	12
115	Density, speed of sound, viscosity, refractive index, surface tension and solubility of C60[C(COOH)2]3. *Journal of Molecular Liquids*, **2019**, 291, 111256	6	9
114	Physico-chemical properties of C60(OH)22□24 water solutions: Density, viscosity, refraction index, isobaric heat capacity and antioxidant activity. *Journal of Molecular Liquids*, **2019**, 278, 342-355	6	22
113	Excess thermodynamic functions in aqueous systems containing soluble fullerene derivatives. *Journal of Molecular Liquids*, **2018**, 256, 305-311	6	14

112	Physico-chemical properties of the C70-l-lysine aqueous solutions. *Journal of Molecular Liquids*, **2018**, 256, 507-518	6	12
111	Pressure and temperature dependence of light fullerenes solubility in n-heptane. *Journal of Molecular Liquids*, **2018**, 268, 569-577	6	1
110	Thermodynamic and thermal properties of the C60-l-Arg derivative. *Journal of Chemical Thermodynamics*, **2018**, 127, 39-44	2.9	10
109	Pressure dependence of the solubility of light fullerenes in n -nonane. *Journal of Chemical Thermodynamics*, **2017**, 112, 259-266	2.9	3
108	Physico-chemical and biological properties of C60-L-hydroxyproline water solutions. *RSC Advances*, **2017**, 7, 15189-15200	3.7	24
107	Thermodynamic and thermal properties of the C 60 - l -lysine derivative. *Journal of Chemical Thermodynamics*, **2017**, 115, 7-11	2.9	14
106	Physico-chemical properties of the C 60 - l -threonine water solutions. *Journal of Molecular Liquids*, **2017**, 242, 940-950	6	12
105	Physico-chemical properties of the C 60 - l -lysine water solutions. *Journal of Molecular Liquids*, **2017** , 225, 767-777	6	17
104	Impact of polyhydroxy fullerene (fullerol or fullerenol) on growth and biophysical characteristics of barley seedlings in favourable and stressful conditions. *Plant Growth Regulation*, **2016**, 79, 309-317	3.2	35
103	Phase equilibria in fullerene-containing systems as a basis for development of manufacture and application processes for nanocarbon materials. *Russian Chemical Reviews*, **2016**, 85, 38-59	6.8	19
102	Physico-chemical properties of the C60-arginine water solutions. *Journal of Molecular Liquids*, **2015**, 211, 301-307	6	26
101	Physico-chemical properties of the water-soluble C70-tris-malonic solutions. *Journal of Molecular Liquids*, **2015**, 211, 487-493	6	19
100	Temperature dependence of the solubility of fullerenes C60 derivatives with piperidine, pyrrolidine, and morpholine and fullerenes C70 with pyrrolidine in benzene, toluene, and o-xylene at 20–80°C. *Russian Journal of Physical Chemistry A*, **2015**, 89, 1206-1210	0.7	3
99	Dissociation of fullerenol-70-d in aqueous solutions and their electric conductivity. *Russian Journal of Physical Chemistry A*, **2015**, 89, 771-775	0.7	4
98	Physico-chemical properties of the fullerenol-70 water solutions. *Journal of Molecular Liquids*, **2015**, 202, 1-8	6	26
97	Physico-chemical properties of the C60-tris-malonic derivative water solutions. *Journal of Molecular Liquids*, **2015**, 201, 50-58	6	27
96	Synthesis, Identification, and Solubility of Adducts of Aldonitrones to Light Fullerenes in Toluene and O-xylene. *Fullerenes Nanotubes and Carbon Nanostructures*, **2015**, 23, 355-360	1.8	0
95	Pressure dependence of the solubility of light fullerenes in 1-hexanol from 298.15K to 363.15K. *Journal of Molecular Liquids*, **2015**, 209, 71-76	6	2

94	Solubility of [C60(=C(COOH)2)3] in the [C60(=C(COOH)2)3]-SmCl3-H2O ternary system at 25°C. *Russian Journal of Physical Chemistry A*, **2015**, 89, 998-1000	0.7	4
93	Solid-liquid phase equilibria in the fullerenol-d-CuCl2-H2O system at 25°C. *Russian Journal of Physical Chemistry A*, **2014**, 88, 1073-1075	0.7	7
92	Solubility in the ternary system fullerenol-d-uranyl sulfate-water at 25°C. *Radiochemistry*, **2014**, 56, 493-495	0.9	6
91	Synthesis, identification, and benzene solubility of the piperidine, pyrrolidine, and morpholine derivatives of fullerene C60. *Russian Journal of Physical Chemistry A*, **2013**, 87, 54-57	0.7	1
90	Synthesis and identification of bromofullerenes C70Br8 and C70Br10 and their solubility in some aromatic solvents. *Russian Journal of General Chemistry*, **2013**, 83, 670-673	0.7	1
89	Synthesis of fullerenol-70-d by direct oxidation and its identification. *Russian Journal of General Chemistry*, **2013**, 83, 674-678	0.7	7
88	Fullerene Bromides C70Brn (n = 8, 10, 14) Synthesis and Identification and Phase Equilibria in the C70Brn (n = 8, 10, 14)/Solvent Systems. *Journal of Chemical & Engineering Data*, **2013**, 58, 570-575	2.8	1
87	Impact Resistance of Cement and Gypsum Plaster Nanomodified by Water-Soluble Fullerenols. *Industrial & Engineering Chemistry Research*, **2013**, 52, 14583-14591	3.9	26
86	Fullerenol-d Solubility in Fullerenol-d–Inorganic Salt–Water Ternary Systems at 25 °C. *Industrial & Engineering Chemistry Research*, **2013**, 52, 16095-16100	3.9	17
85	Evaporation of carbon atoms from the open surface of silicon carbide and through graphene cells: Semiempirical quantum-chemical modeling. *Russian Journal of Physical Chemistry A*, **2013**, 87, 1830-1837	0.7	4
84	Epitaxial assembly of graphene on face (0001) of silicon carbide: Modeling by semiempirical methods. *Russian Journal of Physical Chemistry A*, **2013**, 87, 1739-1748	0.7	2
83	Initial stage of the epitaxial assembly of graphene from silicon carbide and its simulation by semiemprical quantum chemical methods: Carbon face. *Russian Journal of Physical Chemistry A*, **2013**, 87, 1709-1720	0.7	3
82	Simulating the conditions for the formation of graphene and graphene nanowalls by semiempirical quantum chemical methods. *Russian Journal of Physical Chemistry A*, **2013**, 87, 1721-1730	0.7	1
81	Synthesis and protection effect of fullerenol-d. II. Modification of water-soluble priming enamel with fullerenol-d. *Protection of Metals and Physical Chemistry of Surfaces*, **2012**, 48, 334-339	0.9	7
80	Conductivity of aqueous solutions of fullerol synthesized by direct oxidation. *Russian Journal of Physical Chemistry A*, **2012**, 86, 1808-1815	0.7	3
79	Solubility Diagram of a Fullerenol-d-NaCl-H2O System at 25°C. *Russian Journal of Physical Chemistry A*, **2012**, 86, 1636-1638	0.7	9
78	Quantum-chemical models of the annealing of open shell carbon clusters during the synthesis of fullerenes. *Russian Journal of Physical Chemistry A*, **2012**, 86, 106-113	0.7	2
77	Gas dynamics in an arc discharge chamber as a factor governing the isolation of C60 and other "magic" fullerenes. *Russian Journal of Physical Chemistry A*, **2012**, 86, 268-276	0.7	

76	Heavy Fullerene for Semi-Conducting Infrared Photo Diodes (1.5–5.0 μm). *Fullerenes Nanotubes and Carbon Nanostructures*, **2012**, 20, 648-655	1.8	
75	Fullerenol Synthesis and Identification. Properties of the Fullerenol Water Solutions. *Journal of Chemical & Engineering Data*, **2011**, 56, 230-239	2.8	86
74	Solubility of light fullerenes in oleic, linoleic, and linolenic acids at 20–80°C. *Russian Journal of General Chemistry*, **2011**, 81, 569-572	0.7	2
73	Extraction of fullerene mixture from fullerene soot with organic solvents. *Russian Journal of General Chemistry*, **2011**, 81, 920-926	0.7	7
72	Solubility and some properties of aqueous solutions of fullerenol-d and composition of crystal hydrates. *Russian Journal of Applied Chemistry*, **2011**, 84, 44-49	0.8	9
71	Study of aqueous solutions of fullerenol-d by the dynamic light scattering method. *Russian Journal of Applied Chemistry*, **2011**, 84, 50-53	0.8	5
70	Electrochemical properties of aqueous solutions of fullerenol-d. *Russian Journal of Applied Chemistry*, **2011**, 84, 79-83	0.8	7
69	Synthesis and protection effect of fullerenol-d. *Protection of Metals and Physical Chemistry of Surfaces*, **2011**, 47, 307-312	0.9	5
68	Solubility of bromine derivatives of C60Br n fullerene in α-chloro- and α-bromonaphthalene in the temperature range 10–80°C. *Russian Journal of Physical Chemistry A*, **2011**, 85, 62-67	0.7	1
67	The synthesis and identification of mixed fullerenol prepared by the direct one-stage oxidation of fullerene black. *Russian Journal of Physical Chemistry A*, **2011**, 85, 1009-1015	0.7	10
66	Heavy fullerenes for semiconducting photodiodes operating at 1.5–5.0 μm wavelengths. *Russian Journal of Physical Chemistry A*, **2011**, 85, 1016-1020	0.7	
65	Fullerenes as passivating agents of the surfaces of semiconductor photo- and light-emitting diodes. *Russian Journal of Physical Chemistry A*, **2011**, 85, 1411-1415	0.7	1
64	Nonlinear optical properties of solutions of heavy fullerenes in the near-ultraviolet region. *Russian Journal of Physical Chemistry A*, **2011**, 85, 1603-1608	0.7	1
63	Temperature Dependence of Solubility of Light Fullerenes in Some Essential Oils. *Fullerenes Nanotubes and Carbon Nanostructures*, **2011**, 19, 225-236	1.8	4
62	Temperature Dependence of Light Fullerenes Solubility in Oleic, Linoleic and Linolenic Acids. *Fullerenes Nanotubes and Carbon Nanostructures*, **2011**, 19, 300-308	1.8	3
61	The mechanism of unification of carbon nanotubes with small numbers of walls into bundles. Calculation of the domains of existence of different types of nanotubes at different temperatures and catalytic particle sizes. *Russian Journal of Physical Chemistry A*, **2010**, 84, 835-842	0.7	
60	Theoretical basis for producing overlength carbon nanotubes. *Russian Journal of Physical Chemistry A*, **2010**, 84, 843-849	0.7	
59	Physicochemical and mathematical modeling of phase separation processes in decane-(R4N)2[Nd(NO3)5]-aliphatic alcohol ternary liquid systems. *Theoretical Foundations of Chemical Engineering*, **2010**, 44, 574-579	0.9	

58	Calculation of the sizes of individual few-walled carbon nanotubes and their bundles. *Physics of the Solid State*, **2010**, 52, 662-670	0.8	1
57	Isothermal solubility of individual light fullerenes in the homologous series of n-alkanes, n-alkanols, n-alkylcarboxylic acids, and arenes. *Russian Journal of General Chemistry*, **2010**, 80, 2443-2449	0.7	1
56	Solubility of bromofullerenes C60Br n (n = 6, 8, 24) in aqueous-ethanolic mixtures at 25℃. *Russian Journal of Applied Chemistry*, **2010**, 83, 997-1000	0.8	2
55	Synthesis and identification of fullerenol prepared by the direct oxidation route. *Russian Journal of Applied Chemistry*, **2010**, 83, 2076-2080	0.8	15
54	Solubility of Light Fullerenes in Organic Solvents. *Journal of Chemical & Engineering Data*, **2010**, 55, 13-36	2.8	165
53	Solubility of Bromoderivatives C60Brn (n = 6, 8, 24) in 1-Chloronaphthalene and 1-Bromonaphthalene in the Temperature Range (10 to 60) ℃. *Journal of Chemical & Engineering Data*, **2010**, 55, 3662-3666	2.8	4
52	Temperature Dependence of Solubility of Individual Light Fullerenes and Industrial Fullerene Mixture in 1-Chloronaphthalene and 1-Bromonaphthalene. *Journal of Chemical & Engineering Data*, **2010**, 55, 2373-2378	2.8	20
51	Solubility of Light Fullerenes in Styrene. *Journal of Chemical & Engineering Data*, **2009**, 54, 756-761	2.8	11
50	Temperature Dependence of the Light Fullerenes Solubility in Natural Oils and Animal Fats. *Fullerenes Nanotubes and Carbon Nanostructures*, **2009**, 17, 230-248	1.8	15
49	Solubility of light fullerenes in vegetable oils. *Russian Journal of General Chemistry*, **2009**, 79, 1683-1690	0.7	2
48	Phase diagram for the hexane-[Y(NO3)3(TBP)3]-acetonitrile liquid ternary. *Russian Journal of Inorganic Chemistry*, **2009**, 54, 305-311	1.5	
47	Phase diagram for the hexane-acetonitrile-tri-n-butyl phosphate-solvated neodymium(III) nitrate ternary liquid system. *Russian Journal of Inorganic Chemistry*, **2009**, 54, 644-647	1.5	
46	Phase diagrams of (R4N)2[Nd(NO3)5]-decane-n-octanol (n-butanol, n-decanol) liquid ternary systems. *Russian Journal of Inorganic Chemistry*, **2009**, 54, 1323-1328	1.5	
45	The solubility of fullerene C60-fullerene C70 mixtures in styrene at 25℃. *Russian Journal of Physical Chemistry A*, **2009**, 83, 59-62	0.7	3
44	The characteristic size of carbon nanotube bundles. *Russian Journal of Physical Chemistry A*, **2009**, 83, 1176-1181	0.7	0
43	The solubility of C60Br n (n = 6, 8, 24) in organic solvents. *Russian Journal of Physical Chemistry A*, **2009**, 83, 1935-1939	0.7	6
42	Phase diagram of the liquid ternary system hexane-dimethylformamide-solvate of thorium(IV) nitrate with tri-n-butyl phosphate at various temperatures. *Radiochemistry*, **2008**, 50, 378-380	0.9	
41	Physicochemcial analysis of the phase diagram of the ternary liquid system [Y(NO3)3(TBP)3]-tetradecane-[UO2(NO3)2(TBP)2]. *Radiochemistry*, **2008**, 50, 470-473	0.9	

40	Phase diagram for the hexane-dimethylformamide-neodymium(III) nitrate tri-n-butyl phosphate solvate liquid ternary system at various temperatures. *Russian Journal of Inorganic Chemistry*, **2008**, 53, 1505-1508	1.5	
39	Phase diagram for the hexane-acetonitrile-tri-n-butyl phosphate-solvated thorium(IV) nitrate ternary liquid system. *Russian Journal of Inorganic Chemistry*, **2008**, 53, 1934-1938	1.5	
38	Phase diagrams for the [Th(NO3)4(TBP)2]-decane-[UO2(NO3)2(TBP)2] liquid ternary system. *Russian Journal of Inorganic Chemistry*, **2008**, 53, 1939-1942	1.5	
37	The solubility of fullerenes in butyric and enanthic acids at 20–80 °C. *Russian Journal of Physical Chemistry A*, **2008**, 82, 728-731	0.7	8
36	The solubility of C70 in n-alkanols-1 C1-C11 over the temperature range 20–80°C. *Russian Journal of Physical Chemistry A*, **2008**, 82, 753-757	0.7	9
35	The optimization of the procedure for the preparation of nanotubes under self-propagating high-temperature synthesis conditions: The influence of catalysts and reagents. *Russian Journal of Physical Chemistry A*, **2008**, 82, 807-811	0.7	1
34	The solubility of fullerene C70 in monocarboxylic acids C n −1H2n −1COOH (n = 1–9) over the temperature range 20–80°C. *Russian Journal of Physical Chemistry A*, **2008**, 82, 1045-1047	0.7	8
33	The solubility of fullerenes in n-alkanols-1. *Russian Journal of Physical Chemistry A*, **2008**, 82, 1318-1326	0.7	14
32	The solubility of light fullerenes in styrene over the temperature range 20–80°C. *Russian Journal of Physical Chemistry A*, **2008**, 82, 1975-1978	0.7	5
31	Mechanism of selection of perfect fullerenes in arc synthesis. *Russian Journal of Physical Chemistry A*, **2008**, 82, 2182-2190	0.7	1
30	Nucleation of carbon nanotubes and their bundles at the surface of catalyst melt. *Russian Journal of Physical Chemistry A*, **2008**, 82, 2191-2201	0.7	5
29	Prediction of optimum catalysts and cocatalysts for chemical growth of carbon nanotubes. *Physics of the Solid State*, **2008**, 50, 986-995	0.8	
28	Thermodynamic model of natural brines accounting for the presence of trace components: II. System Na+, K+, Mg2+ ? Cl–Br–H2O. *Geochemistry International*, **2007**, 45, 1040-1049	0.8	2
27	An analytic model of formation of carbon nanotubes by the vapor-liquid-drop mechanism and the possibility of optimizing catalysts of nanotube growth on the basis of this model. *Russian Journal of Physical Chemistry A*, **2007**, 81, 1104-1112	0.7	2
26	Polythermal solubility of fullerenes in higher isomeric carboxylic acids. *Russian Journal of Applied Chemistry*, **2007**, 80, 38-41	0.8	6
25	A possible mechanism of formation of fullerene nanoparticles in shungites. *Russian Journal of Applied Chemistry*, **2007**, 80, 139-146	0.8	
24	Phase equilibria in the system fullerene C60-hexane-o-xylene-dimethylformamide. *Russian Journal of Applied Chemistry*, **2007**, 80, 206-208	0.8	1
23	Solubility of fullerenes in n-alkanoic acids C2–9. *Russian Journal of Applied Chemistry*, **2007**, 80, 456-460	0.8	12

22	Polythermal study of the solubility of fullerenes in pelargonic and caprylic acids. *Russian Journal of Applied Chemistry*, **2007**, 80, 557-561	0.8	10
21	Single-stage plasma-arc synthesis of metallo-endofullerences. *Russian Journal of Applied Chemistry*, **2007**, 80, 1888-1893	0.8	1
20	Chemical composition of extracts from shungite and shungite water. *Russian Journal of Applied Chemistry*, **2006**, 79, 29-33	0.8	3
19	Distribution of C60 and C70 fullerenes in the extraction system (C60 + C70)-pinene-ethanol-H2O. *Russian Journal of Applied Chemistry*, **2006**, 79, 166-168	0.8	3
18	Extraction equilibria in the fullerene-containing system C60-C70-1,2,4-trichlorobenzene-ethanol-H2O. *Russian Journal of Applied Chemistry*, **2006**, 79, 201-204	0.8	11
17	Caprolons modified with fullerenes and fulleroid materials. *Russian Journal of Applied Chemistry*, **2006**, 79, 306-309	0.8	8
16	Activation of the carbon component of shungite-III and the sorption capacity of the material for hydrogen. *Russian Journal of Applied Chemistry*, **2006**, 79, 1423-1427	0.8	3
15	Production of carbon nanotubes by self-propagating high-temperature synthesis. *Technical Physics*, **2006**, 51, 231-235	0.5	2
14	Carbon nanostructures in the industrial production of alkali metals by electrolysis. *Technical Physics* , **2006**, 51, 278-280	0.5	4
13	On the mechanism of carbon nanotube formation in electrochemical processes. *Technical Physics*, **2006**, 51, 349-355	0.5	2
12	Sorption of Light Fullerenes (C60 and C70) on Materials Prepared by Sublimation of Graphite Rods. *Russian Journal of Applied Chemistry*, **2005**, 78, 340-341	0.8	2
11	Modification of Natural Shungites To Obtain a Mixed Nanocarbon Material (MNS). *Russian Journal of Applied Chemistry*, **2005**, 78, 865-869	0.8	5
10	Formation of Carbon Nanostructures in Electrolytic Production of Alkali Metals. *Russian Journal of Applied Chemistry*, **2005**, 78, 1944-1947	0.8	4
9	Methods for Purification of Carbon Nanotubes Obtained from Fullerene Production Deposits. *Russian Journal of Applied Chemistry*, **2005**, 78, 2019-2021	0.8	
8	Phase Equilibria in the Systems Na+, K+||Cl--H2O and Na+, K+||Cl-, H2PO- 4-H2O at Temperatures of 0-100C. *Russian Journal of Applied Chemistry*, **2004**, 77, 881-886	0.8	
7	Sorption of light fullerenes C60 and C70 on NORIT-AZO carbon. *Russian Journal of Applied Chemistry*, **2004**, 77, 1627-1630	0.8	4
6	Solubility in the Fullerene C6 0-Fullerene C7 0-o-C6H1 4(CH3)2 System. *Russian Journal of Applied Chemistry*, **2003**, 76, 33-36	0.8	7
5	Extraction Equilibria in the Fullerene C60-Fullerene C70-Solvent Systems. *Russian Journal of Applied Chemistry*, **2003**, 76, 37-43	0.8	

4	Extraction equilibria in a fullerene-containing C60-C70-o-Xylene-i-butylamine-water system. *Technical Physics Letters*, **2003**, 29, 119-121	0.7	2
3	General theory of multi-phase melt crystallization. *Journal of Crystal Growth*, **2002**, 234, 762-772	1.6	8
2	Some features of analysis of solutions of fullerenes C60 and C70 by their absorption spectra. *Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)*, **2000**, 88, 195-196	0.7	41
1	Growth of Ga1-xInxAsySb1-y solid solutions from the five-component Ga-In-As-Sb-Pb melt by liquid phase epitaxy. *Applied Surface Science*, **1999**, 142, 371-374	6.7	4