Nikolay O Mchedlov-Petrossyan

List of Publications by Year
in descending order

104 papers	2,138 citations	236925 25 h-index	276875 41 g-index
107 all docs	107 docs citations	107 times ranked	2017 citing authors

#	Article	IF	Citations
1	Fullerenes in Liquid Media: An Unsettling Intrusion into the Solution Chemistry. Chemical Reviews, 2013, 113, 5149-5193.	47.7	172
2	Colloidal dispersions of fullerene C60in water: some properties and regularities of coagulation by electrolytes. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 4343-4346.	1.7	132
3	Aggregation of Rhodamine B in Water. Russian Journal of Applied Chemistry, 2004, 77, 414-422.	0.5	88
4	Protolytic equilibrium in lyophilic nanosized dispersions: Differentiating influence of the pseudophase and salt effects. Pure and Applied Chemistry, 2008, 80, 1459-1510.	1.9	79
5	Dissociation, tautomerism and electroreduction of xanthene and sulfonephthalein dyes inN,N-dimethylformamide and other solvents. Journal of Physical Organic Chemistry, 2003, 16, 380-397.	1.9	77
6	Title is missing!. Journal of Fluorescence, 2003, 13, 235-248.	2.5	73
7	Influence of the cetyltrimethylammonium chloride micellar pseudophase on the protolytic equilibria of oxyxanthene dyes at high bulk phase ionic strength. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 629.	1.7	66
8	Extraordinary character of the solvent influence on protolytic equilibria: inversion of the fluorescein ionization constants in H2Oâ€“DMSO mixtures. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 3025-3032.	1.7	58
9	Interfacial properties of cetyltrimethylammonium-coated SiO2 nanoparticles in aqueous media as studied by using different indicator dyes. Journal of Colloid and Interface Science, 2007, 316, 712-722.	9.4	57
10	Fullerenes in molecular liquids. Solutions in â€œgoodâ€•solvents: Another view. Journal of Molecular Liquids, 2011, 161, 1-12.	4.9	51
11	Colloidal properties and behaviors of 3 nm primary particles of detonation nanodiamonds in aqueous media. Physical Chemistry Chemical Physics, 2015, 17, 16186-16203.	2.8	46
12	Spectroscopic study of acidâ€“base ionization and tautomerism of fluorescein dyes in direct microemulsions at high bulk ionic strength. Journal of Molecular Liquids, 2009, 145, 188-196.	4.9	38
13	Ionization and Tautomerism of Fluorescein, Rhodamine B, N,N-Diethylrhodol and Related Dyes in Mixed and Nonaqueous Solvents. Dyes and Pigments, 1994, 24, 11-35.	3.7	36
14	Ionic equilibria in microheterogeneous systems Protolytic behaviour of indicator dyes in mixed phosphatidylcholineâ€“diphosphatidylglycerol liposomes. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 2117-2125.	1.7	36
15	Ionization and Tautomerism of Chloro-Derivatives of Fluorescein in Water and Aqueous Acetone. Dyes and Pigments, 1992, 18, 179-198.	3.7	35
16	Interaction between colloidal particles of C60 hydrosol and cationic dyes. Chemical Physics Letters, 2001, 341, 237-244.	2.6	34
17	2,4,5,7-Tetranitrofluorescein in solutions: novel type of tautomerism in hydroxyxanthene series as detected by various spectral methods. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 61, 2747-2760.	3.9	33
18	Ionization and tautomerism of oxyxanthene dyes in aqueous butanol. Dyes and Pigments, 1999, 43, 33-46.	3.7	31

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19	Counterion-Induced Transformations of Cationic Surfactant Micelles Studied by Using the Displacing Effect of Solvatochromic PyridiniumN-Phenolate Betaine Dyes. Langmuir, 2005, 21, 7090-7096.	3.5	30
20	A novel probe for determination of electrical surface potential of surfactant micelles:N,N'-di-n-octadecylrhodamine. Journal of Physical Organic Chemistry, 2007, 20, 332-344.	1.9	29
21	Medium Effects on the Prototropic Equilibria of Fluorescein Fluoro Derivatives in True and Organized Solution. Journal of Physical Chemistry B, 2010, 114, 4551-4564.	2.6	29
22	Ionization and tautomerism of methyl fluorescein and related dyes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 150, 151-161.	3.9	28
23	Influence of non-ionic polymers on solvent properties of water as detected by studies of acidâ€“base equilibria of sulphonephthalein and fluorescein dyes. Journal of the Chemical Society, Faraday Transactions, 1991, 87, 931-938.	1.7	27
24	Unusual findings on studying surfactant solutions: displacing solvatochromic pyridinium N-phenolate towards outlying areas of rod-like micelles?. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 205, 215-229.	4.7	27
25	Nature of Cationic Poly(propylenimine) Dendrimers in Aqueous Solutions as Studied Using Versatile Indicator Dyes. Langmuir, 2008, 24, 5689-5699.	3.5	27
26	Modification of the properties of NaDS micellar solutions by adding electrolytes and non-electrolytes: investigations with decyl eosin as a pKa-probe. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 193, 207-219.	4.7	25
27	Character of Localization and Microenvironment of Solvatochromic Reichardtâ€™s Betaine Dye in Sodium n-Dodecyl Sulfate and Cetyltrimethylammonium Bromide Micelles: Molecular Dynamics Simulation Study. Langmuir, 2017, 33, 8342-8352.	3.5	25
28	The influence of Î²-cyclodextrin on acidâ€“base and tautomeric equilibrium of fluorescein dyes in aqueous solution. Carbohydrate Research, 2010, 345, 1882-1890.	2.3	24
29	The peculiar behavior of fullerene C 60 in mixtures of â€˜goodâ€™ and polar solvents: Colloidal particles in the tolueneâ€“methanol mixtures and some other systems. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 509, 631-637.	4.7	24
30	Molecular spectroscopy studies of solvent properties of dispersed â€˜water poolsâ€™: Fluorescein and 2,7-dichlorofluorescein in reversed AOT-based microemulsions. Journal of Molecular Liquids, 2010, 157, 105-112.	4.9	22
31	Protolytic Properties of Thiofluorescein and Its Derivatives. Russian Journal of General Chemistry, 2002, 72, 785-792.	0.8	19
32	Conthemporary methods for the experimental determination of dissociation constants of organic acids in solutions. Russian Journal of General Chemistry, 2009, 79, 1859-1889.	0.8	19
33	Protolytic properties of dyes embedded in gelatin films. Journal of the Brazilian Chemical Society, 2011, 22, 857-866.	0.6	19
34	Absorption, fluorescence, and acid-base equilibria of rhodamines in micellar media of sodium dodecyl sulfate. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 170, 138-144.	3.9	18
35	Fullerenes in Aqueous Media: A Review. Theoretical and Experimental Chemistry, 2020, 55, 361-391.	0.8	18
36	A dibasic acid with reversed order of the stepwise ionization constants: 2,7-dichlorofluorescein in the ternary solvent mixture benzene-ethanol-water. Journal of Physical Organic Chemistry, 2006, 19, 365-375.	1.9	17

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37	Protolytic equilibria of fluorescein halo derivatives in aqueous-organic systems. Russian Journal of General Chemistry, 2006, 76, 1607-1617.	0.8	17
38	The influence of cationic tetrapropoxycalix[4]arene choline on protolytic equilibria of acid-base indicators in aqueous solutions. Journal of Molecular Liquids, 2009, 145, 197-203.	4.9	17
39	Towards better understanding of C60organosols. Physical Chemistry Chemical Physics, 2016, 18, 2517-2526.	2.8	17
40	Binding of sulfonephthalein anions to the micelles of an anionic surfactant. Journal of Molecular Liquids, 2000, 87, 75-84.	4.9	16
41	Colloidal Nature of Cationic Calix[6]arene Aqueous Solutions. Journal of Physical Chemistry C, 2012, 116, 10245-10259.	3.1	16
42	the surfactant-induced formation of J- and H-aggregates in aqueous pseudoisocyanine solutions. Dyes and Pigments, 1992, 19, 33-40.	3.7	15
43	A new application of Rhodamine 200 B (Sulfo Rhodamine B). Dyes and Pigments, 1995, 28, 7-18.	3.7	15
44	Fluorescent dye N,Nâ€²-dioctadecylrhodamine as a new interfacial acidâ€“base indicator. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2008, 69, 1125-1129.	3.9	15
45	In search of an optimal acid-base indicator for examining surfactant micelles: Spectrophotometric studies and molecular dynamics simulations. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 565, 97-107.	4.7	15
46	Kinetics of alkaline fading of methyl violet in micellar solutions of surfactants: Comparing Piszkiewicz's, Berezin's, and pseudophase ionâ€exchange models. International Journal of Chemical Kinetics, 2019, 51, 83-94.	1.6	15
47	Effect of the solvent on the absorption spectra and protonation of fluorescein dye anions. Russian Journal of Physical Chemistry A, 2007, 81, 112-115.	0.6	14
48	A new application of solvatochromic pyridinium-N-phenolate betaine dyes: examining the electrophilicity of lanthanide shift reagents. Tetrahedron Letters, 2010, 51, 4347-4349.	1.4	14
49	Micellar rate effects in the alkaline fading of crystal violet in the presence of various surfactants. Journal of Molecular Liquids, 2015, 201, 77-82.	4.9	14
50	Micellar rate effects on the kinetics of nitrophenol violet anion reaction with HOâ€“ ion: Comparing Piszkiewicz's, Berezin's, and Pseudophase Ion-Exchange models. Journal of Molecular Liquids, 2019, 277, 70-77.	4.9	14
51	The difference between the aggregates of short-tailed and long-tailed cationic calix[4]arene in water as detected using fluorescein dyes. Journal of Molecular Liquids, 2014, 193, 232-238.	4.9	13
52	Aminofluoresceins Versus Fluorescein: Peculiarity of Fluorescence. Journal of Physical Chemistry A, 2019, 123, 8860-8870.	2.5	13
53	Solubility and fluorescence lifetime of 2,5-diphenyloxazole and 1,4-bis(5-phenyl-oxazolyl-2)benzene in waterâ€“ethanol and waterâ€“acetone solvent systems. Journal of Molecular Liquids, 2009, 145, 167-172.	4.9	12
54	In Search for the â€œPhenolateâ€•Monoanion of Fluorescein in Solution. Chemistry Letters, 2010, 39, 30-31.	1.3	12

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55	The influence of 1-butanol and electrolytic background on the properties of CTAB micelles as examined using a set of indicator dyes. Journal of Molecular Liquids, 2014, 199, 376-384.	4.9	12
56	The influence of the micellar pseudophase of the double-chained cationic surfactant di-n-tetradecyldimethylammonium bromide on the absorption spectra and protolytic equilibrium of indicator dyes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 476, 57-67.	4.7	12
57	Acid-base dissociation and tautomerism of two aminofluorescein dyes in solution. Journal of Molecular Liquids, 2017, 225, 696-705.	4.9	12
58	Probing of chemically modified silica surfaces by solvatochromic pyridinium N-phenolate betaine indicators. Colloid Journal, 2006, 68, 511-517.	1.3	11
59	Association of the picrate ion with cations of various nature in solvents of medium and low relative permittivity. An UV/Vis spectroscopic and conductometric study. Journal of Molecular Liquids, 2009, 145, 158-166.	4.9	11
60	Aminofluoresceins Versus Fluorescein: Ascertained New Unusual Features of Tautomerism and Dissociation of Hydroxyxanthene Dyes in Solution. Journal of Physical Chemistry A, 2019, 123, 8845-8859.	2.5	11
61	Differentiating impact of the AOT-stabilized droplets of water-in-octane microemulsions as examined using halogenated fluoresceins as molecular probes. Journal of Molecular Liquids, 2013, 187, 381-388.	4.9	10
62	Interactions of Nanosized Aggregates of Fullerene C60 with Electrolytes in Methanol: Coagulation and Overcharging of Particles. Langmuir, 2016, 32, 10065-10072.	3.5	10
63	Interaction of Polymethine Dyes with Detonation Nanodiamonds. ChemPhysChem, 2019, 20, 1028-1035.	2.1	10
64	Ionic equilibrium in mixtures of protophobic and protophilic polar nonâ€hydrogen bond donor solvents: acids, salts, and indicators in acetone containing 5â€‰mol% DMSO. Journal of Physical Organic Chemistry, 2010, 23, 418-430.	1.9	9
65	Fluorescence of aminofluoresceins as an indicative process allowing one to distinguish between micelles of cationic surfactants and micelle-like aggregates. Methods and Applications in Fluorescence, 2016, 4, 034002.	2.3	9
66	Protolytic Equilibria in Organized Solutions: Ionization and Tautomerism of Fluorescein Dyes and Related Indicators in Cetyltrimethylammonium Chloride Micellar Solutions at High Ionic Strength of the Bulk Phase. Liquids, 2021, 1, 1-24.	2.5	9
67	The Properties of 3 nm-Sized Detonation Diamond from the Point of View of Colloid Science. Ukrainian Journal of Physics, 2015, 60, 932-937.	0.2	9
68	Ionic Equilibria of Chromophoric Reagents in Microemulsions. Journal of Analytical Chemistry, 2003, 58, 1018-1030.	0.9	8
69	3,3â€²-Dinitrophenolsulphonephthalein: an acid-base indicator dye with unusual properties. Coloration Technology, 2017, 133, 135-144.	1.5	8
70	Examining surfactant micelles via acid-base indicators: Revisiting the pioneering Hartleyâ€“Roe 1940 study by molecular dynamics modeling. Journal of Molecular Liquids, 2018, 264, 683-690.	4.9	8
71	A new solvatochromic/acid-base indicator for surfactant micellar media: hydrophilic 3-pyridyl substituted pyridinium N-phenolate betaine dye. Journal of Molecular Liquids, 2003, 107, 221-234.	4.9	7
72	Association and transport properties in solvents of medium and low relative permittivity: Quaternary ammonium picrates in acetoneâ€“n-hexane mixed solvents. Journal of Molecular Liquids, 2011, 158, 33-37.	4.9	7

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73	Synthesis and crystal structure determination of 2,6-di-tert-butyl-4-(2,4,6-triphenylpyridinium-1-yl)phenolate and its corresponding perchlorate salt. Dyes and Pigments, 2012, 92, 1394-1399.	3.7	7
74	Solvatochromic betaine dyes of different hydrophobicity in ionic surfactant micelles: Molecular dynamics modeling of location character. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 538, 583-592.	4.7	7
75	Computing pK_a Shifts Using Traditional Molecular Dynamics: Example of Acidâ€“Base Indicator Dyes in Organized Solutions. Journal of Chemical Theory and Computation, 2020, 16, 5852-5865.	5.3	7
76	Diluted and concentrated organosols of fullerene C60 in the tolueneâ€“acetonitrile solvent system as studied by diverse experimental methods. Fullerenes Nanotubes and Carbon Nanostructures, 2021, 29, 315-330.	2.1	7
77	Conductivity and Dissociation Constants of Quaternary Ammonium Perchlorates and Picrates in 4-Methyl-pentan-2-one. Journal of Chemical & Engineering Data, 2010, 55, 1887-1892.	1.9	6
78	The properties and composition of the SDS â€“ 1-butanol mixed micelles as determined via acid-base indicators. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 507, 243-254.	4.7	6
79	The molecular structure of anionic species of 2,4,5,7â€tetranitrofluorescein as studied by electrospray ionisation, nuclear magnetic resonance and Xâ€ray techniques. Coloration Technology, 2018, 134, 390-399.	1.5	6
80	Nano-sized bubbles in solution of hydrophobic dyes and the properties of the water/air interface. Journal of Molecular Liquids, 2019, 275, 384-393.	4.9	6
81	Formation, Stability, and Coagulation of Fullerene Organosols: C₇₀ in Acetonitrileâ€“Toluene Solutions and Related Systems. Langmuir, 2021, 37, 7156-7166.	3.5	6
82	The distribution of the anion and zwitterion forms of methyl orange between the disperse microemulsion pseudophase and continuous water phase. Russian Journal of Physical Chemistry A, 2008, 82, 1434-1437.	0.6	5
83	Revisiting tetranitrophenolsulfonephthalein. Coloration Technology, 2015, 131, 236-244.	1.5	5
84	Effect of poly (sodium 4-styrenesulfonate) on the ionization constants of acid-base indicator dyes in aqueous solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 527, 132-144.	4.7	5
85	The interaction of the colloidal species in hydrosols of nanodiamond with inorganic and organic electrolytes. Journal of Molecular Liquids, 2019, 283, 849-859.	4.9	5
86	Cluster-cluster interaction in nanodiamond hydrosols by small-angle scattering. Journal of Molecular Liquids, 2022, 354, 118816.	4.9	5
87	Interaction between cationic dyes and colloidal particles in a C60 hydrosol. Mendeleev Communications, 1999, 9, 63-64.	1.6	4
88	Polymeric Langmuir-Blodgett films containing xanthene dyes. Russian Journal of Applied Chemistry, 2008, 81, 696-703.	0.5	4
89	Acid-base and tautomeric equilibria of fluorescein dyes in water micellar solutions of zwitterionic sulfobetaine surfactant. Russian Journal of General Chemistry, 2009, 79, 1437-1445.	0.8	4
90	Thermodynamics of solubility and solvation of N-cetylpyridinium perchlorate and related compounds in waterâ€“propanol-2 system. Journal of Molecular Liquids, 2013, 177, 237-242.	4.9	4

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91	Ionic equilibrium in mixtures of polar protophobic and protophilic non-hydrogen bond donor solvents: Acids, salts, and indicators in acetonitrile with 4 mass % dimethylsulfoxide. Journal of Molecular Liquids, 2021, 322, 114560.	4.9	4
92	CONTINUUM ELECTROSTATICS INVESTIGATION OF IONIC MICELLES USING ATOMISTIC MODELS. Ukrainian Chemistry Journal, 2021, 87, 55-69.	0.5	4
93	The influence of lead (II) ions introduced into the subphase on the stability of mixed "polyamic acid + surfactant" monolayers and manufacturing of dye-containing Langmuir-Blodgett polymeric films. Journal of the Brazilian Chemical Society, 2006, 17, 655-666.	0.6	3
94	Reaction rates in aqueous solutions of cationic colloidal surfactants and calixarenes: Acceleration and resolution of two steps of fluorescein diesters hydrolysis. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 606, 125479.	4.7	3
95	Nitrophenol Violet as a New Tool for Studying of Kinetics of Reactions in Solutions. Journal of Chemical Education, 2021, 98, 2964-2972.	2.3	3
96	POLYPROTIC ACIDS IN SOLUTION: IS THE INVERSION OF THE CONSTANTS OF STEPWISE DISSOCIATION POSSIBLE?. Ukrainian Chemical Journal, 2019, 85, 3-45.	0.3	3
97	Interaction of aqueous suspensions of single-walled oxidized carbon nanotubes with inorganic and organic electrolytes. Journal of Molecular Liquids, 2021, , 117948.	4.9	3
98	Stability of Rhodamine Lactone Cycle in Solutions: Chainâ€“Ring Tautomerism, Acidâ€“Base Equilibria, Interaction with Lewis Acids, and Fluorescence. Colorants, 2022, 1, 58-90.	1.5	3
99	HYDROSOL OF C70 FULLERENE: SYNTHESIS AND STABILITY IN ELECTROLYTIC SOLUTIONS. Ukrainian Chemistry Journal, 2021, 87, 63-73.	0.5	3
100	PROTOLYTIC EQUILIBRIUM OF TETRA- AND PENTANITROFLUORESCEINS IN A BINARY SOLVENT ACETONITRILE â€“ DIMETHYL SULFOXIDE (MASS RATIO 96 : 4). Ukrainian Chemistry Journal, 2021, 87, 25-37.	0.5	2
101	The thermodynamic characteristics of dissolution and solvation of cetyltrimethylammonium perchlorate in the water-propan-2-ol system. Russian Journal of Physical Chemistry A, 2008, 82, 1451-1455.	0.6	1
102	Peculiarities of the 4,5â€dinitrofluorescein esters synthesis: formation of reduced species. Coloration Technology, 0, , .	1.5	1
103	4,5â€Dinitrosulfonefluorescein and related dyes: Kinetics of reversible rupture of the pyran ring and their interaction with lysozyme. Coloration Technology, 0, , .	1.5	0
104	ÐÐ•Ð¦Ð•ÐÐ—Ð†Ð¯ ÐÐ•ÐœÐžÐÐžÐ“ÐÐÐ†Ð® Ð'.Ð“.ÐšÐÐœÐ§ÐÐ¢ÐÐžÐ“Ðž Â«ÐÐÐ£ÐšÐžÐ'Ðž-ÐžÐ¡Ð'Ð†Ð¢ÐÐ†Ð™ Ð"ÐžÐÐžÐ'ÐžÐš		