Nicolae Viorel Pavel

List of Publications by Year
in descending order

111 papers	3,606 citations	109137 35 h-index	155451 55 g-index
113 all docs	113 docs citations	113 times ranked	2780 citing authors

#	Article	IF	Citations
1	Hydrogen and Higher Shell Contributions in Zn2+, Ni2+, and Co2+Aqueous Solutions:Â An X-ray Absorption Fine Structure and Molecular Dynamics Study. Journal of the American Chemical Society, 2002, 124, 1958-1967.	6.6	175
2	Size and shape of sodium deoxycholate micellar aggregates. The Journal of Physical Chemistry, 1987, 91, 356-362.	2.9	141
3	An extended xâ€ray absorption fine structure study of aqueous solutions by employing molecular dynamics simulations. Journal of Chemical Physics, 1994, 100, 985-994.	1.2	133
4	Evidence of distorted fivefold coordination of theCu2+aqua ion from an x-ray-absorption spectroscopy quantitative analysis. Physical Review B, 2002, 65, .	1.1	131
5	Double-electron excitation channels at the BrKedge of HBr andBr2. Physical Review A, 1993, 47, 2055-2063.	1.0	101
6	Nuclear magnetic resonance and x-ray studies on micellar aggregates of sodium deoxycholate. The Journal of Physical Chemistry, 1984, 88, 5720-5724.	2.9	100
7	Development and Validation of an Integrated Computational Approach for the Study of Ionic Species in Solution by Means of Effective Two-Body Potentials. The Case of Zn2 +, Ni2 +, and Co2 +in Aqueous Solutions. Journal of the American Chemical Society, 2002, 124, 1968-1976.	6.6	92
8	Combined XANES and EXAFS analysis ofCo2+,Ni2+,andZn2+aqueous solutions. Physical Review B, 2002, 66, .	1.1	88
9	Bile salts and derivatives: Rigid unconventional amphiphiles as dispersants, carriers and superstructure building blocks. Current Opinion in Colloid and Interface Science, 2015, 20, 170-182.	3.4	87
10	Evidence for Sevenfold Coordination in the First Solvation Shell of Hg(II) Aqua Ion. Journal of the American Chemical Society, 2007, 129, 5430-5436.	6.6	78
11	Supramolecular Structures Generated by ap-tert-Butylphenyl-amide Derivative of Cholic Acid: From Vesicles to Molecular Tubes. Advanced Materials, 2007, 19, 1752-1756.	11.1	78
12	Multiple-scattering effects in theK-edge x-ray-absorption near-edge structure of crystalline and amorphous silicon. Physical Review B, 1987, 36, 6426-6433.	1.1	73
13	EXAFS: a new approach to the structure of micellar aggregates. The Journal of Physical Chemistry, 1988, 92, 2858-2862.	2.9	70
14	About the albumin structure in solution: cigar Expanded form versus heart Normal shape. Physical Chemistry Chemical Physics, 2008, 10, 6741.	1.3	70
15	Bile Salts: Natural Surfactants and Precursors of a Broad Family of Complex Amphiphiles. Langmuir, 2019, 35, 6803-6821.	1.6	64
16	Triplet correlations in the hydration shell of aquaions. Chemical Physics Letters, 1994, 225, 150-155.	1.2	59
17	Structural investigation of copper(II) chloride solutions using x-ray absorption spectroscopy. Journal of Chemical Physics, 1997, 107, 2807-2812.	1.2	59
18	Evidence for multielectron resonances at the SrKedge. Physical Review A, 1996, 53, 798-805.	1.0	57

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19	Catanionic Tubules with Tunable Charge. Angewandte Chemie - International Edition, 2010, 49, 6604-6607.	7.2	55
20	X-ray Absorption Study of Copper(II)â˘'Glycinate Complexes in Aqueous Solution. Journal of Physical Chemistry B, 1998, 102, 3114-3122.	1.2	49
21	From crystal to micelle: A new approach to the micellar structure. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 1989, 7, 391-400.	1.6	48
22	Multielectron excitations at theLedges of barium in aqueous solution. Physical Review B, 1996, 54, 12129-12138.	1.1	48
23	An extended xâ€ray absorption fine structure study by employing molecular dynamics simulations: Bromide ion in methanolic solution. Journal of Chemical Physics, 1996, 104, 1779-1790.	1.2	48
24	Synthesis and Characterization of a New Gemini Surfactant Derived from 3Î±,12Î±-Dihydroxy-5Î²-cholan-24-amine (Steroid Residue) and Ethylenediamintetraacetic Acid (Spacer). Langmuir, 2008, 24, 6060-6066.	1.6	47
25	Urea-Induced Denaturation Process on Defatted Human Serum Albumin and in the Presence of Palmitic Acid. Journal of Physical Chemistry B, 2009, 113, 12590-12602.	1.2	46
26	Kinetics of formation of supramolecular tubules of a sodium cholate derivative. Soft Matter, 2009, 5, 3018.	1.2	46
27	Multiple scattering x-ray absorption analysis of simple brominated hydrocarbon molecules. The Journal of Physical Chemistry, 1993, 97, 5486-5494.	2.9	44
28	New Lamellar Structure Formed by an Adamantyl Derivative of Cholic Acid. Journal of Physical Chemistry B, 2006, 110, 13679-13681.	1.2	43
29	An Integrated Study of Small-Angle X-ray Scattering and Dynamic Light Scattering on Cylindrical Micelles of Sodium Glycodeoxycholate. Journal of Physical Chemistry B, 2004, 108, 3078-3085.	1.2	41
30	Human serum albumin binding ibuprofen: A 3D description of the unfolding pathway in urea. Biophysical Chemistry, 2010, 147, 111-122.	1.5	40
31	Intermolecular interactions in sodium deoxycholate micelles: an NMR study involving a spin-labeled cholestane. The Journal of Physical Chemistry, 1987, 91, 83-89.	2.9	39
32	An x-ray and conformational study of Kapton H. Journal of Polymer Science, Polymer Physics Edition, 1976, 14, 1553-1560.	1.0	38
33	Structural Resolution of the Complex between a Fungal Polygalacturonase and a Plant Polygalacturonase-Inhibiting Protein by Small-Angle X-Ray Scattering Â. Plant Physiology, 2011, 157, 599-607.	2.3	38
34	Study of Intermicellar Interactions and Micellar Sizes in Ionic Micelle Solutions by Comparing Collective Diffusion and Self-Diffusion Coefficients. Journal of Physical Chemistry B, 2004, 108, 4799-4805.	1.2	37
35	pH sensitive tubules of a bile acid derivative: a tubule opening by release of wall leaves. Physical Chemistry Chemical Physics, 2013, 15, 7560.	1.3	37
36	Tailoring Supramolecular Nanotubes by Bile Salt Based Surfactant Mixtures. Angewandte Chemie - International Edition, 2015, 54, 7018-7021.	7.2	37

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37	Characterization of Carbon Nanotube Dispersions in Solutions of Bile Salts and Derivatives Containing Aromatic Substituents. Journal of Physical Chemistry B, 2014, 118, 1012-1021.	1.2	35
38	The crystal structure of the inclusion compound between cycloveratril, benzene and water. Acta Crystallographica Section B: Structural Crystallography and Crystal Chemistry, 1979, 35, 2605-2609.	0.4	34
39	Amino acidâ€“bile acid based molecules: extremely narrow surfactant nanotubes formed by a phenylalanine-substituted cholic acid. Chemical Communications, 2012, 48, 12011.	2.2	34
40	Nanoparticles with a Bicontinuous Cubic Internal Structure Formed by Cationic and Non-ionic Surfactants and an Anionic Polyelectrolyte. Langmuir, 2012, 28, 16536-16546.	1.6	34
41	Between Peptides and Bile Acids: Self-Assembly of Phenylalanine Substituted Cholic Acids. Journal of Physical Chemistry B, 2013, 117, 9248-9257.	1.2	33
42	Catanionic Gels Based on Cholic Acid Derivatives. Langmuir, 2013, 29, 12342-12351.	1.6	33
43	The molecular and crystal structure of an allylpalladium- (II) triazenido complex: [(1-3-Î·-C3H5)Pd(II)(p-CH3C6H4NNNC6H4CH3-p)]2. Journal of Organometallic Chemistry, 1976, 108, 409-421.	0.8	32
44	EXAFS study of probe molecules in micellar solutions. The Journal of Physical Chemistry, 1991, 95, 7880-7886.	2.9	32
45	Small-Angle X-ray Scattering and Light Scattering on Lysozyme and Sodium Glycocholate Micelles. Journal of Physical Chemistry B, 2005, 109, 23857-23869.	1.2	32
46	Human Serum Albumin Unfolding: A Small-Angle X-ray Scattering and Light Scattering Study. Journal of Physical Chemistry B, 2008, 112, 15460-15469.	1.2	32
47	Double-Electron Excitation Channels at the Ca2+ K-Edge of Hydrated Calcium Ion. Journal of Physical Chemistry B, 2004, 108, 11857-11865.	1.2	28
48	Sugarâ€“Bile Acid-Based Bolaamphiphiles: From Scrolls to Monodisperse Single-Walled Tubules. Langmuir, 2014, 30, 6358-6366.	1.6	27
49	Multi stimuli response of a single surfactant presenting a rich self-assembly behavior. RSC Advances, 2015, 5, 37800-37806.	1.7	27
50	EXAFS Study of Micellar Aggregates of Bile Acid Rubidium Salts. The Journal of Physical Chemistry, 1995, 99, 5471-5480.	2.9	26
51	<i>Arabidopsis</i> and <i>Chlamydomonas</i> phosphoribulokinase crystal structures complete the redox structural proteome of the Calvinâ€“Benson cycle. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8048-8053.	3.3	25
52	Evidence of three-body correlation functions in Rb+ and Sr2+ acetonitrile solutions. Journal of Chemical Physics, 1999, 111, 5107-5115.	1.2	24
53	Formation of tubules by p-tert-butylphenylamide derivatives of chenodeoxycholic and ursodeoxycholic acids in aqueous solution. Steroids, 2012, 77, 1205-1211.	0.8	23
54	A Single Amino-Acid Substitution Allows Endo-Polygalacturonase of Fusarium verticillioides to Acquire Recognition by PGIP2 from Phaseolus vulgaris. PLoS ONE, 2013, 8, e80610.	1.1	23

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55	Collective diffusion and self-diffusion coefficients comparison to separate interactions and micellar size effects on ionic micelle diffusivities: Cylindrical micelles of sodium taurodeoxycholate. Journal of Chemical Physics, 2003, 118, 2865.	1.2	22
56	Study on the Structure of Hostâ^'Guest Supramolecular Polymers. Macromolecules, 2007, 40, 5899-5906.	2.2	22
57	Structure of Sodium Glycodeoxycholate Micellar Aggregates from Small-Angle X-ray Scattering and Light-Scattering Techniques. Journal of Physical Chemistry B, 2006, 110, 12351-12359.	1.2	20
58	Supramolecular Structures Generated by a <i>p</i>-<i>tert</i>-Butylphenylamide Derivative of Deoxycholic Acid. From Planar Sheets to Tubular Structures through Helical Ribbons. Langmuir, 2010, 26, 7768-7773.	1.6	20
59	Time-Dependent pH Scanning of the Acid-Induced Unfolding of Human Serum Albumin Reveals Stabilization of the Native Form by Palmitic Acid Binding. Journal of Physical Chemistry B, 2017, 121, 4388-4399.	1.2	20
60	On the self-assembly of a tryptophan labeled deoxycholic acid. Physical Chemistry Chemical Physics, 2014, 16, 19492.	1.3	19
61	Interaction between bile salt sodium glycodeoxycholate and PEOâ€"PPOâ€"PEO triblock copolymers in aqueous solution. RSC Advances, 2016, 6, 69313-69325.	1.7	19
62	Wormlike reverse micelles in lecithin/bile salt/water mixtures in oil. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 532, 411-419.	2.3	19
63	Supramolecular assembly of a thermoresponsive steroidal surfactant with an oppositely charged thermoresponsive block copolymer. Physical Chemistry Chemical Physics, 2017, 19, 1504-1515.	1.3	19
64	Drug-loaded nanoparticles and supramolecular nanotubes formed from a volatile microemulsion with bile salt derivatives. Physical Chemistry Chemical Physics, 2013, 15, 6016.	1.3	18
65	Block copolymers as bile salt sequestrants: intriguing structures formed in a mixture of an oppositely charged amphiphilic block copolymer and bile salt. Physical Chemistry Chemical Physics, 2019, 21, 12518-12529.	1.3	18
66	K- andL-edge XAFS determination of the local structure of aqueous Nd(III) and Eu(III). Journal of Synchrotron Radiation, 2001, 8, 666-668.	1.0	17
67	Bile acid derivative-based catanionic mixtures: versatile tools for superficial charge modulation of supramolecular lamellae and nanotubes. Physical Chemistry Chemical Physics, 2018, 20, 18957-18968.	1.3	17
68	Sodium Taurodeoxycholate Structure from Solid to Liquid Phase. Langmuir, 2002, 18, 2812-2816.	1.6	16
69	Spherical wave exafs analysis of the silicon K-edge X-ray absorption spectrum. Solid State Communications, 1987, 61, 635-639.	0.9	15
70	Minimization programs for potential energy calculations in crystals and isolated molecules and macromolecules. Zeitschrift FÃ¼r Kristallographie, 1976, 144, 64-75.	1.1	14
71	Structure of the 4:1 inclusion compound between deoxycholic acid and (E)-p-dimethylaminoazobenzene. Acta Crystallographica Section B: Structural Crystallography and Crystal Chemistry, 1982, 38, 2615-2620.	0.4	14
72	Early Stages of Formation of Branched Hostâ^'Guest Supramolecular Polymers. Journal of Physical Chemistry B, 2008, 112, 8536-8541.	1.2	14

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73	Correlation between Small-Angle X-ray Scattering Spectra and Apparent Diffusion Coefficients in the Study of Structure and Interaction of Sodium Taurodeoxycholate Micelles. Journal of Physical Chemistry B, 2005, 109, 6111-6120.	1.2	13
74	Aggregation Behavior of Tetracarboxylic Surfactants Derived from Cholic and Deoxycholic Acids and Ethylenediaminetetraacetic Acid. Langmuir, 2009, 25, 9037-9044.	1.6	13
75	Unravelling the shape and structural assembly of the photosynthetic GAPDHâ€“CP12â€“PRK complex from<i>Arabidopsis thaliana</i>by small-angle X-ray scattering analysis. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 2372-2385.	2.5	13
76	Structural Response of Human Serum Albumin to Oxidation: Biological Buffer to Local Formation of Hypochlorite. Journal of Physical Chemistry B, 2016, 120, 12261-12271.	1.2	13
77	On the stability of lithocholate derivative supramolecular tubules. RSC Advances, 2017, 7, 512-517.	1.7	13
78	Potential energy calculations of ethyleneâ€“butadiene copolymers. Journal of Polymer Science: Polymer Chemistry Edition, 1975, 13, 125-131.	0.8	12
79	Crystal structure and van der Waals energy study of the 2:1 inclusion compound between deoxycholic acid and norbornadiene. Acta Crystallographica Section B: Structural Crystallography and Crystal Chemistry, 1981, 37, 368-372.	0.4	12
80	Diffusivity Study of Dihydroxyâˆ'Trihydroxy Bile Salt Systems. Langmuir, 2003, 19, 1319-1323.	1.6	12
81	Ibuprofen and Propofol Cobinding Effect on Human Serum Albumin Unfolding in Urea. Journal of Physical Chemistry B, 2014, 118, 10043-10051.	1.2	11
82	Twisted nanoribbons from a RGD-bearing cholic acid derivative. Colloids and Surfaces B: Biointerfaces, 2017, 159, 183-190.	2.5	11
83	A Stereochemically Driven Supramolecular Polymerisation. Chemistry - A European Journal, 2018, 24, 8195-8204.	1.7	11
84	Chain folding in crystalline syndiotactic poly(vinyl chloride). Journal of Polymer Science, Polymer Physics Edition, 1979, 17, 753-762.	1.0	10
85	XAS Study of Solubilization Loci of Brominated Molecules in Aqueous Micellar Solutions. The Journal of Physical Chemistry, 1994, 98, 2982-2990.	2.9	10
86	EXAFS and molecular dynamics studies of ionic solutions. Journal of Synchrotron Radiation, 2001, 8, 173-177.	1.0	10
87	Complete spectrum of multielectron excitations at the Br- K edge x-ray absorption spectra. Physical Review B, 2001, 64, .	1.1	10
88	QELS and X-ray study of two dihydroxy bile salt aqueous solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 248, 79-84.	2.3	10
89	Sodium Glycodeoxycholate and Glycocholate Mixed Aggregates in Gas and Solution Phases. Journal of Physical Chemistry B, 2009, 113, 7162-7169.	1.2	10
90	A tryptophan-substituted cholic acid: Expanding the family of labelled biomolecules. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 483, 142-149.	2.3	9

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91	Generation and best fitting of molecular models. Acta Crystallographica Section B: Structural Crystallography and Crystal Chemistry, 1972, 28, 1968-1969.	0.4	8
92	Crystal structure of the 2:1 inclusion compound between deoxycholic acid and quadricyclane. Journal of Inclusion Phenomena, 1984, 1, 329-337.	0.6	8
93	Measurement of x-ray multielectron photoexcitations at the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mtext>I</mml:mtext><mml:mo>â^’</mml:mo></mml:msup><mml:mtext>â€‰</mm Physical Review B, 2008, 78, .	1.1	8
94	Crystal structure of head-to-head dimers of cholic and deoxycholic acid derivatives with different symmetric bridges. Steroids, 2013, 78, 247-254.	0.8	8
95	Effect of temperature on the association behavior in aqueous mixtures of an oppositely charged amphiphilic block copolymer and bile salt. Polymer, 2020, 206, 122871.	1.8	8
96	Tailoring Supramolecular Nanotubes by Bile Salt Based Surfactant Mixtures. Angewandte Chemie, 2015, 127, 7124-7127.	1.6	7
97	Self-Assembly of Model Amphiphilic Peptides in Nonaqueous Solvents: Changing the Driving Force for Aggregation Does Not Change the Fibril Structure. Langmuir, 2020, 36, 8451-8460.	1.6	7
98	Polymorphic Self-Organization of Lauroyl Peptide in Response to pH and Concentration. Langmuir, 2020, 36, 3941-3951.	1.6	7
99	Comment on â€œTwo-Dimensional NMR Study on the Structures of Micelles of Sodium Taurocholateâ€• Journal of Physical Chemistry B, 2005, 109, 9849-9850.	1.2	6
100	Potential energy calculations about the chain folding of Î±(â^’)poly(L-alanine). Polymer, 1976, 17, 257-259.	1.8	5
101	Determination of two- and three-body correlation functions in ionic solutions by means of MD and EXAFS investigations. Journal of Synchrotron Radiation, 1999, 6, 281-283.	1.0	5
102	Formation of host-guest and sandwich complexes by a Î²-cyclodextrin derivative. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2011, 69, 245-253.	1.6	5
103	Physicochemical study of crystals of ethyleneâ€“butadiene copolymers. Journal of Polymer Science: Polymer Chemistry Edition, 1978, 16, 115-127.	0.8	4
104	Chain folding in single crystals of polytetrafluoroethylene. Journal of Polymer Science, Polymer Physics Edition, 1983, 21, 321-328.	1.0	4
105	The structure of the 2/1 'channel' inclusion compound between deoxycholic acid and pinacolone, 2C24H40O4.C6H12O. Acta Crystallographica Section C: Crystal Structure Communications, 1985, 41, 229-232.	0.4	4
106	Crystal structure of a lithium salt of a glucosyl derivative of lithocholic acid. Steroids, 2016, 113, 87-94.	0.8	4
107	Possible models for the polyethylene hexagonal phase. Polymer, 1980, 21, 973-974.	1.8	3
108	The effect of fatty acid binding in the acid isomerizations of albumin investigated with a continuous acidification method. Colloids and Surfaces B: Biointerfaces, 2018, 168, 109-116.	2.5	3

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109	SPHERICAL WAVES EXAFS AND MULTIPLE SCATTERING EFFECTS IN XANES OF THE K-EDGE SPECTRUM OF SILICON. Journal De Physique Colloque, 1986, 47, C8-71-C8-74.	0.2	3
110	Study of the 4:1 inclusion compound between deoxycholic acid and (E)-p-dimethylaminoazobenzene by vapour pressure measurements. Thermochimica Acta, 1985, 87, 231-238.	1.2	2
111	Differential anomalous scattering study of probe molecules. Nuclear Instruments & Methods in Physics Research B, 1995, 97, 539-542.	0.6	0