

# Igor A Sedov

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

66 papers	779 citations	16 h-index	24 g-index
70 ext. papers	908 ext. citations	3.5 avg, IF	4.52 L-index

#	Paper	IF	Citations
66	Solvation properties of protic ionic liquids 2-methoxyethylammonium nitrate, propylammonium hydrogen sulfate, and butylammonium hydrogen sulfate. <i>Journal of Chemical Thermodynamics</i> , <b>2022</b> , 170, 106779	2.9	1
65	Crystal Nucleation and Growth in Cross-Linked Poly(E-caprolactone) (PCL). <i>Polymers</i> , <b>2021</b> , 13,	4.5	2
64	Binding constants of drug-albumin complexes from DSC measurements. <i>Thermochimica Acta</i> , <b>2021</b> , 699, 178930	2.9	1
63	Response to "Comment on 'The Gibbs free energy of cavity formation in a diverse set of solvents'" [J. Chem. Phys. 154, 187101 (2021)]. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 187102	3.9	0
62	Thermodynamics of cavity formation in different solvents: Enthalpy, entropy, and the solvophobic effects. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 331, 115738	6	1
61	Interaction-induced structural transformation of lysozyme and kappa-carrageenan in binary complexes. <i>Carbohydrate Polymers</i> , <b>2021</b> , 252, 117181	10.3	5
60	Development of Abraham model correlations for enthalpies of solvation of solutes dissolved in N-methylformamide, 2-pyrrolidone and N-methylpyrrolidone. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 323, 114609	6	4
59	Calorimetric observation of lysozyme degradation at elevated temperature in water and DMSO-water mixtures. <i>Thermochimica Acta</i> , <b>2021</b> , 695, 178826	2.9	2
58	Binding Constants of Clinical Drugs and Other Organic Ligands with Human and Mammalian Serum Albumins. <i>Biophysica</i> , <b>2021</b> , 1, 344-358		1
57	The Gibbs free energy of cavity formation in a diverse set of solvents. <i>Journal of Chemical Physics</i> , <b>2020</b> , 153, 134501	3.9	6
56	Comparative study of the protein denaturing ability of different organic cosolvents. <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 160, 880-888	7.9	7
55	Binding Constants of Substituted Benzoic Acids with Bovine Serum Albumin. <i>Pharmaceuticals</i> , <b>2020</b> , 13,	5.2	6
54	Evaluation of the binding properties of drugs to albumin from DSC thermograms. <i>International Journal of Pharmaceutics</i> , <b>2020</b> , 583, 119362	6.5	12
53	Pressure, temperature, and solvent effects on the rates of reactions of 3,4-dihydro-2H-pyran with tetracyanoethylene and 4-phenyl-1,2,4-triazoline-3,5-dione. <i>Russian Chemical Bulletin</i> , <b>2019</b> , 68, 351-356 <sup>1.7</sup>		
52	Abraham model correlations for solute transfer into 2-methyl-2-butanol based on measured activity coefficient and solubility data at 298.15 K. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 293, 111454	6	8
51	Contrasting the solvation properties of protic ionic liquids with different nanoscale structure. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 290, 111361	6	4
50	The Effect of Dimethyl Sulfoxide on the Lysozyme Unfolding Kinetics, Thermodynamics, and Mechanism. <i>Biomolecules</i> , <b>2019</b> , 9,	5.9	6

49	Solvophobic Acceleration of a Diels-Alder Reaction in True Solutions in Organic Solvents. <i>International Journal of Chemical Kinetics</i> , <b>2018</b> , 50, 319-324	1.4	3
48	C-547, a 6-methyluracil derivative with long-lasting binding and rebinding on acetylcholinesterase: Pharmacokinetic and pharmacodynamic studies. <i>Neuropharmacology</i> , <b>2018</b> , 131, 304-315	5.5	7
47	Determination of Abraham Model Correlations for Solute Transfer into Propyl Acetate Based on Experimental Activity Coefficient and Solubility Data. <i>Journal of Solution Chemistry</i> , <b>2018</b> , 47, 634-653	1.8	15
46	Kinetics and thermochemistry of the unusual [2+2+2]-cycloaddition of quadricyclane with some dienophiles. <i>Journal of Physical Organic Chemistry</i> , <b>2018</b> , 31, e3737	2.1	3
45	Influence of the Cross-Link Density on the Rate of Crystallization of Poly( $\epsilon$ -Caprolactone). <i>Polymers</i> , <b>2018</b> , 10,	4.5	11
44	Abraham model correlations for describing the thermodynamic properties of solute transfer into pentyl acetate based on headspace chromatographic and solubility measurements. <i>Journal of Chemical Thermodynamics</i> , <b>2018</b> , 124, 133-140	2.9	18
43	Fast scanning calorimetry of lysozyme unfolding at scanning rates from 5 K/min to 500,000 K/min. <i>Biochimica Et Biophysica Acta - General Subjects</i> , <b>2018</b> , 1862, 2024-2030	4	6
42	Abraham Model Expressions for Describing Water-to-Diethylene Glycol and Gas-to-Diethylene Glycol Solute Transfer Processes at 298.15 K. <i>Journal of Solution Chemistry</i> , <b>2017</b> , 46, 331-351	1.8	25
41	Solvent Influence on the Diels-Alder Reaction Rates of 9-(Hydroxymethyl)anthracene and 9,10-Bis(hydroxymethyl)anthracene with Two Maleimides. <i>International Journal of Chemical Kinetics</i> , <b>2017</b> , 49, 61-68	1.4	6
40	Solvation of apolar compounds in protic ionic liquids: the non-synergistic effect of electrostatic interactions and hydrogen bonds. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 25352-25359	3.6	15
39	Molecular dynamics study of unfolding of lysozyme in water and its mixtures with dimethyl sulfoxide. <i>Journal of Molecular Graphics and Modelling</i> , <b>2017</b> , 76, 466-474	2.8	2
38	Corrigendum for Development of Abraham Model Correlations for Solute Transfer into Both 2-Propoxyethanol and 2-Isopropoxyethanol at 298.15 K[J. Mol. Liq. 2015, 212, 833B40]. <i>Journal of Molecular Liquids</i> , <b>2017</b> , 241, 730	6	
37	Abraham model linear free energy relationships for describing the partitioning and solubility behavior of nonelectrolyte organic solutes dissolved in pyridine at 298.15 K. <i>Fluid Phase Equilibria</i> , <b>2017</b> , 431, 66-74	2.5	21
36	[2+2]-Cycloaddition of biadamantylidene to 4-phenyl-3H-1,2,4-triazole-3,5(4H)-dione. Effects of temperature, high pressure, and solvent. <i>Russian Journal of Organic Chemistry</i> , <b>2017</b> , 53, 1864-1869	0.7	4
35	Abraham Model Correlations for Triethylene Glycol Solvent Derived from Infinite Dilution Activity Coefficient, Partition Coefficient and Solubility Data Measured at 298.15 K. <i>Journal of Solution Chemistry</i> , <b>2017</b> , 46, 2249-2267	1.8	10
34	New insights into the solubility of graphene oxide in water and alcohols. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 17000-17008	3.6	69
33	Solvation of hydrocarbons in aqueous-organic mixtures. <i>Journal of Chemical Thermodynamics</i> , <b>2016</b> , 96, 153-160	2.9	12
32	Standard molar Gibbs free energy and enthalpy of solvation of low polar solutes in formamide derivatives at 298 K. <i>Thermochimica Acta</i> , <b>2016</b> , 623, 9-14	2.9	16

31	Thermodynamic functions of solvation of benzene in various binary aqueous-organic solvents. <i>Journal of Molecular Liquids</i> , <b>2016</b> , 224, 1205-1209	6	4
30	Thermodynamic description of the solvophobic effect in ionic liquids. <i>Fluid Phase Equilibria</i> , <b>2016</b> , 425, 9-14	2.5	17
29	A procedure for calibration of differential scanning calorimeters. <i>Thermochimica Acta</i> , <b>2016</b> , 639, 10-13	2.9	5
28	Abraham model correlations for describing solute transfer into 2-butoxyethanol from both water and the gas phase at 298 K. <i>Journal of Molecular Liquids</i> , <b>2015</b> , 209, 196-202	6	35
27	Abraham model correlations for solute transfer into 2-methoxyethanol from water and from the gas phase. <i>Journal of Molecular Liquids</i> , <b>2015</b> , 209, 738-744	6	36
26	Thermodynamic Functions of Solvation of Hydrocarbons, Noble Gases, and Hard Spheres in Tetrahydrofuran-Water Mixtures. <i>Journal of Physical Chemistry B</i> , <b>2015</b> , 119, 8773-80	3.4	6
25	Abraham model correlations for solute transfer into 2-ethoxyethanol from water and from the gas phase. <i>Journal of Molecular Liquids</i> , <b>2015</b> , 208, 63-70	6	33
24	Atmospheric and high pressure ene reaction of norbornene with 4-phenyl-3H-1,2,4-triazole-3,5(4H)-dione. <i>Russian Journal of Organic Chemistry</i> , <b>2015</b> , 51, 387-391	0.7	7
23	Development of Abraham model correlations for solute transfer into both 2-propoxyethanol and 2-isopropoxyethanol at 298.15 K. <i>Journal of Molecular Liquids</i> , <b>2015</b> , 212, 833-840	6	36
22	Thermodynamics of solvation in propylene glycol and methyl cellosolve. <i>Journal of Chemical Thermodynamics</i> , <b>2014</b> , 78, 32-36	2.9	16
21	tert-Butyl chloride as a probe of the solvophobic effects. <i>Fluid Phase Equilibria</i> , <b>2014</b> , 382, 164-168	2.5	13
20	Calorimetric study of solvation of low polar solutes in propylene glycol and methyl cellosolve at 298 K. <i>Thermochimica Acta</i> , <b>2014</b> , 589, 247-251	2.9	6
19	Enthalpies and Gibbs free energies of solvation in ethylene glycol at 298K: Influence of the solvophobic effect. <i>Fluid Phase Equilibria</i> , <b>2013</b> , 354, 95-101	2.5	26
18	Thermodynamics of solvation and solvophobic effect in formamide. <i>Journal of Chemical Thermodynamics</i> , <b>2013</b> , 64, 120-125	2.9	22
17	Solvophobic effects: Qualitative determination and quantitative description. <i>Journal of Structural Chemistry</i> , <b>2013</b> , 54, 262-270	0.9	22
16	Hydrogen bonding in neat aliphatic alcohols: The Gibbs free energy of self-association and molar fraction of monomer. <i>Journal of Molecular Liquids</i> , <b>2012</b> , 167, 47-51	6	12
15	Distinctive thermodynamic properties of solute-solvent hydrogen bonds in self-associated solvents. <i>Journal of Physical Organic Chemistry</i> , <b>2012</b> , 25, 1144-1152	2.1	7
14	Gibbs free energy of hydrogen bonding of aliphatic alcohols with liquid water at 298 K. <i>Fluid Phase Equilibria</i> , <b>2012</b> , 315, 16-20	2.5	13

13	Determining the Gibbs Energies of Hydrogen-Bonding Interactions of Proton-Accepting Solutes in Aqueous Solutions from Thermodynamic Data at 298 K with Regard to the Hydrophobic Effect. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2011</b> , 56, 1438-1442	2.8	12
12	Evaluating the contribution of solvophobic effects to the Gibbs energy of solvation in methanol. <i>Russian Journal of Physical Chemistry A</i> , <b>2011</b> , 85, 621-626	0.7	4
11	Calculating the Gibbs energy of hydrogen bonding for proton acceptors with a solvent in methanol solutions. <i>Russian Journal of Physical Chemistry A</i> , <b>2011</b> , 85, 811-815	0.7	1
10	Solvophobic effects and relationships between the Gibbs energy and enthalpy for the solvation process. <i>Journal of Physical Organic Chemistry</i> , <b>2011</b> , 24, 1088-1094	2.1	38
9	Relation between the characteristic molecular volume and hydrophobicity of nonpolar molecules. <i>Journal of Chemical Thermodynamics</i> , <b>2010</b> , 42, 1126-1130	2.9	13
8	A method to determine the Gibbs energy of specific interactions in solutions. Hydrogen bonding of proton donating solutes in basic solvents. <i>Fluid Phase Equilibria</i> , <b>2009</b> , 276, 108-115	2.5	11
7	Gibbs energy of cooperative hydrogen-bonding interactions in aqueous solutions of amines and pyridines. <i>Journal of Physical Organic Chemistry</i> , <b>2009</b> , 22, 1142-1147	2.1	7
6	The hydrophobic effect Gibbs energy. <i>Journal of Molecular Liquids</i> , <b>2008</b> , 139, 89-97	6	15
5	A method for calculating the Gibbs energy of nonspecific solvation. <i>Russian Journal of Physical Chemistry A</i> , <b>2008</b> , 82, 704-708	0.7	10
4	A method for calculating the Gibbs energies of hydrophobic effects and specific interactions of nonelectrolytes in aqueous solutions. <i>Russian Journal of Physical Chemistry A</i> , <b>2008</b> , 82, 1110-1114	0.7	1
3	Quantitative description of the hydrophobic effect: the enthalpic contribution. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 9298-303	3.4	34
2	A method for calculating the enthalpy of hydrophobic effect. <i>Russian Journal of Physical Chemistry A</i> , <b>2006</b> , 80, 659-662	0.7	8
1	Development of Predictive Expressions for Infinite Dilution Activity Coefficients, Molar Solubilities and Partition Coefficients for Solutes Dissolved in 2-Pyrrolidone Based on the Abraham Solvation Parameter Model. <i>Journal of Solution Chemistry</i> , 1	1.8	