

Jean-Pierre E Grolier

List of Publications by Year in descending order

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117
papers

3,486
citations

117453

34
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182168

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119
all docs

119
docs citations

119
times ranked

1482
citing authors

#	ARTICLE	IF	CITATIONS
1	Jumping transition in the liquid's heat capacity revealed by the scanning transitiometry. AICHE Journal, 2021, 67, e17172.	1.8	2
2	Viscosity at the Nanoscale: Confined Liquid Dynamics and Thermal Effects in Self-Recovering Nanobumpers. Journal of Physical Chemistry C, 2018, 122, 14248-14256.	1.5	15
3	Mechanical, Thermal, and Electrical Energy Storage in a Single Working Body: Electrification and Thermal Effects upon Pressure-Induced Water Intrusionâ€“Extrusion in Nanoporous Solids. ACS Applied Materials & Interfaces, 2017, 9, 7044-7049.	4.0	35
4	Reversible Wetting in Nanopores for Thermal Expansivity Control: From Extreme Dilatation to Unprecedented Negative Thermal Expansion. Journal of Physical Chemistry C, 2017, 121, 11499-11507.	1.5	7
5	A Highly Stable Nonhysteretic {Cu₂(tebpz) MOF+water} Molecular Spring. ChemPhysChem, 2016, 17, 3359-3364.	1.0	42
6	Exceptionally Large and Controlled Effect of Negative Thermal Expansion in Porous Heterogeneous Lyophobic Systems. Journal of Physical Chemistry C, 2015, 119, 10266-10272.	1.5	18
7	Isothermal Titration Calorimetry: Application of the Gibbsâ€“Duhem Equation to the Study of the Relationship Between Forward and Reverse Titrations. Journal of Solution Chemistry, 2015, 44, 987-1003.	0.6	5
8	From Solutions to Polymers: A High Temperatureâ€“High Pressure Journey in Experimental Thermodynamics. Journal of Solution Chemistry, 2015, 44, 1090-1120.	0.6	2
9	Synergetic effect of temperature and pressure on energetic and structural characteristics of {ZIF-8 + water} molecular spring. Nanoscale, 2015, 7, 8803-8810.	2.8	42
10	Stability of zeolitic imidazolate frameworks: effect of forced water intrusion and framework flexibility dynamics. RSC Advances, 2015, 5, 89498-89502.	1.7	38
11	A new working mode for molecular springs: water intrusion induced by cooling and associated isobaric heat capacity change of a {ZIF-8 + water} system. Physical Chemistry Chemical Physics, 2015, 17, 1572-1574.	1.3	25
12	Water intrusion/extrusion in hydrophobized mesoporous silica gel in a wide temperature range: Capillarity, bubble nucleation and line tension effects. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 441, 549-555.	2.3	41
13	Determination of the Asphaltene Precipitation Envelope and Bubble Point Pressure for a Mexican Crude Oil by Scanning Transitiometry. Energy & Fuels, 2013, 27, 1212-1222.	2.5	9
14	Evolution of the energetic characteristics of {silicalite-1 + water} repulsive clathrates in a wide temperature range. Physical Chemistry Chemical Physics, 2013, 15, 4451.	1.3	29
15	Thermophysical properties of Normafluid (ISO 4113) over wide pressure and temperature ranges. Fuel, 2013, 105, 440-450.	3.4	51
16	Isothermal titration calorimetry: A thermodynamic interpretation of measurements. Journal of Chemical Thermodynamics, 2012, 55, 193-202.	1.0	50
17	Simple gases to replace non-environmentally friendly polymer foaming agents. A thermodynamic investigation. Journal of Chemical Thermodynamics, 2012, 46, 42-56.	1.0	16
18	Scanning Transitiometry and Its Application in Petroleum Industry and in Polymer and Food Science. Hot Topics in Thermal Analysis and Calorimetry, 2011, , 271-290.	0.5	0

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19	Heat Capacities and Related Properties of Liquid Mixtures. , 2010, , 54-85.		7
20	Transitiometric Determination of the Phase Diagram of KNO ₃ between (350 and 650) K and at Pressures up to 100 MPa. Journal of Chemical & Engineering Data, 2010, 55, 5497-5503.	1.0	6
21	Isobaric Thermal Expansivities of Toluene Measured by Scanning Transitiometry at Temperatures from (243 to 423) K and Pressures up to 200 MPa. Journal of Chemical & Engineering Data, 2010, 55, 5489-5496.	1.0	27
22	Thermodynamic and Acoustic Properties of Mixtures of 1,6-Dichlorohexane with Heptane from (293 to) Tj ETQq0 0,0rgBT /Oyerlock 10	1.0	
23	Gas-Polymer Interactions: Key Thermodynamic Data and Thermophysical Properties. Advances in Polymer Science, 2010, , 137-177.	0.4	5
24	On the Physical Meaning of the Isothermal Titration Calorimetry Measurements in Calorimeters with Full Cells. International Journal of Molecular Sciences, 2009, 10, 5296-5325.	1.8	14
25	Modification of molecular organization of polymers by gas sorption: Thermodynamic aspects and industrial applications. Pure and Applied Chemistry, 2009, 81, 1603-1614.	0.9	2
26	Phase transitions of polymers over T and P ranges under various hydraulic fluids: Polymer/supercritical gas systems and liquid to solid polymer transitions. Journal of Molecular Liquids, 2009, 147, 24-29.	2.3	9
27	Effect of ball milling time on the hydrogen storage properties of TiF ₃ -doped LiAlH ₄ . International Journal of Hydrogen Energy, 2009, 34, 8079-8085.	3.8	87
28	Study of the binding between lysozyme and C10-TAB: Determination and interpretation of the partial properties of protein and surfactant at infinite dilution. Biophysical Chemistry, 2008, 135, 51-58.	1.5	6
29	Polymer Microstructures: Modification and Characterization by Fluid Sorption. International Journal of Thermophysics, 2008, 29, 1907-1920.	1.0	4
30	Diffusion in mesoporous materials and polymers swelling: a transient calorimetric approach. Physical Chemistry Chemical Physics, 2008, 10, 5099.	1.3	4
31	Advanced Calorimetric Techniques in Polymer Engineering. Macromolecular Symposia, 2007, 259, 371-380.	0.4	1
32	Isothermal crystallization kinetics of in situ photo and thermo aged poly(ethylene oxide) using photoDSC. Physical Chemistry Chemical Physics, 2007, 9, 2137-2141.	1.3	6
33	Crystallization of carbon tetrachloride in confined geometries. Faraday Discussions, 2007, 136, 383.	1.6	5
34	Supercritical gas-polymer interactions with applications in the petroleum industry. Determination of thermophysical properties. Journal of Applied Polymer Science, 2007, 103, 1706-1722.	1.3	32
35	Effect of interface on thermodynamic behavior of liquid crystalline type amphiphilic di-block copolymers. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 1354-1364.	2.4	14
36	Thermal expansion of polymers submitted to supercritical CO ₂ as a function of pressure. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 185-194.	2.4	18

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37	Construction of solid-liquid phase diagrams in ternary systems by titration calorimetry. <i>Thermochimica Acta</i> , 2006, 445, 70-74.	1.2	9
38	The use of advanced calorimetric techniques in polymer synthesis and characterization. <i>Thermochimica Acta</i> , 2006, 450, 47-55.	1.2	9
39	Thermoporosimetry: A powerful tool to study the cross-linking in gels networks. <i>Journal of Sol-Gel Science and Technology</i> , 2006, 40, 191-200.	1.1	42
40	Simultaneous measurement of the concentration of a supercritical gas absorbed in a polymer and of the concomitant change in volume of the polymer. The coupled ΔV -pVT technique revisited. <i>Polymer</i> , 2005, 46, 3737-3747.	1.8	22
41	Thermomechanics of the variation of interfaces in heterogeneous lyophobic systems. <i>AIChE Journal</i> , 2005, 51, 1246-1257.	1.8	58
42	Advanced experimental techniques in polymer thermodynamics. <i>Journal of Chemical Thermodynamics</i> , 2005, 37, 1226-1238.	1.0	5
43	Advanced experimental techniques in polymer thermodynamics. <i>Pure and Applied Chemistry</i> , 2005, 77, 1297-1315.	0.9	7
44	Modification of the glass transitions of polymers by high-pressure gas solubility. <i>Pure and Applied Chemistry</i> , 2005, 77, 593-603.	0.9	28
45	Effect of n-Alkanes on Asphaltene Structuring in Petroleum Oils. <i>Langmuir</i> , 2005, 21, 4824-4829.	1.6	64
46	Excess enthalpy for $\{x$ 1-hexanol $+(1-x)$ hexane $\}$ at temperatures from 323 to 513 K, and pressures from 3.5 to 15 MPa. <i>Fluid Phase Equilibria</i> , 2004, 226, 141-148.	1.4	6
47	Transitiometric determination of the three-phase curve in asymmetric binary systems. <i>Journal of Chemical Thermodynamics</i> , 2003, 35, 639-648.	1.0	31
48	Influence of Fiber on the Phase Transformations in the Starch-Water System. <i>Biomacromolecules</i> , 2003, 4, 937-943.	2.6	12
49	Reexamination of Phase Transformations in the Starch-Water System. <i>Macromolecules</i> , 2002, 35, 8852-8859.	2.2	56
50	Determination of Henry's law constants for aqueous solutions of tetradeuteriomethane between 285 and 325 K and calculation of the H/D isotope effect. <i>Physical Chemistry Chemical Physics</i> , 2001, 3, 1047-1052.	1.3	23
51	Simultaneous measurement of the solubility of nitrogen and carbon dioxide in polystyrene and of the associated polymer swelling. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 2063-2070.	2.4	79
52	Thermodynamic properties of binary mixtures $\{x$ (2-alkoxyethanol) $+(1-x)$ n-octane $\}$: densities at 298.15 and 303.15 K and speeds of sound at 298.15 K. <i>Fluid Phase Equilibria</i> , 2000, 173, 285-296.	1.4	39
53	Simultaneous measurement of the solubility of gases in polymers and of the associated volume change. <i>Review of Scientific Instruments</i> , 2000, 71, 4236.	0.6	20
54	Excess volumes and excess thermal expansivities for binary mixtures of 2-ethoxyethanol with non-polar solvents at temperatures between 283.15 K and 328.15 K. <i>Fluid Phase Equilibria</i> , 1999, 156, 101-114.	1.4	19

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55	Thermodynamic properties of binary mixtures {an alkoxyethanol+n-octane}. Excess molar enthalpies and excess molar heat capacities at 298.15 K. Fluid Phase Equilibria, 1999, 156, 137-147.	1.4	26
56	Title is missing!. Journal of Solution Chemistry, 1999, 28, 631-666.	0.6	14
57	Pressure and Temperature Dependence of Excess Enthalpies of Methanol + Tetraethylene Glycol Dimethyl Ether and Methanol + Polyethylene Glycol Dimethyl Ether 250. Journal of Chemical & Engineering Data, 1999, 44, 1409-1413.	1.0	12
58	Thermodynamics of liquid mixtures consisting of a very polar and a non-polar aromatic: (benzonitrile) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.0	46
59	Supercritical Transitiometry of Polymers. Analytical Chemistry, 1998, 70, 2327-2330.	3.2	28
60	Volumetric behavior of aqueous NaF and KF solutions up to 350°C and 30 MPa. Journal of Solution Chemistry, 1997, 26, 847-875.	0.6	15
61	Fluid-phase calorimetry and more: A longtime relationship with chemical thermodynamics. Thermochimica Acta, 1997, 300, 149-157.	1.2	4
62	Volumetric properties of, and ion-pairing in, aqueous solutions of alkali-metal sulfates under superambient conditions. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 4445-4451.	1.7	27
63	Infinite-dilution activity coefficients by comparative ebulliometry: Measurements and group contribution calculations for some binary mixtures ether + n-alkane and ether + alcohol. Chemical Engineering Science, 1995, 50, 2957-2962.	1.9	17
64	Molar heat capacities and volumes of transfer of cytosine, thymine, caffeine and 1,3-diethylthymine to aqueous solutions of glycyl-glycine and L-alanyl-L-alanine at 25°C. Journal of Solution Chemistry, 1995, 24, 623-632.	0.6	26
65	DISQUAC calculation of thermodynamic properties of ether + 1-alkanol systems. Comparison with UNIFAC calculation. Fluid Phase Equilibria, 1995, 113, 1-19.	1.4	43
66	Isobaric heat capacities of carbon dioxide and argon between 323 and 423 K and at pressures up to 25 MPa. Journal of Supercritical Fluids, 1995, 8, 228-235.	1.6	20
67	Excess Volumes of Binary Mixtures of 1,4-Dioxane with Heptane, Tetradecane, and Cyclohexane at 323, 350, and 364 K and at Pressures around 7, 17, and 22 MPa. Journal of Chemical & Engineering Data, 1995, 40, 1257-1261.	1.0	13
68	Heat capacities and concentration fluctuations in mixtures of 1,2-dibromoethane with alkanes. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 1941-1947.	1.7	16
69	An isothermal scanning calorimeter controlled by linear pressure variations from 0.1 to 400 MPa. Calibration and comparison with the piezothermal technique. Review of Scientific Instruments, 1994, 65, 960-965.	0.6	73
70	Maria Inmaculada Paz Andrade and her scientific career. Journal of Chemical Thermodynamics, 1994, 26, 785-786.	1.0	0
71	Excess heat capacities and excess volumes of (an n-alkylalkanoate + heptane or decane or toluene). Journal of Chemical Thermodynamics, 1994, 26, 817-827.	1.0	31
72	Excess molar heat capacities $C_{E,p,m}$ and excess molar volumes $V_{E,m}$ of $\{x_1\text{CH}_3(\text{CH}_2)_5\text{CH}_3 + x_2\text{CH}_3\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}_3 + x_3\text{CH}_3\text{C}(\text{CH}_3)_2\text{OC}_2\text{H}_5 + (1 - x_1 - x_2 - x_3)\text{C}_2\text{H}_5\text{OH}\}$ (l) II. Ternary mixtures and prediction of quaternary values. Journal of Chemical Thermodynamics, 1994, 26, 1335-1348.	1.0	8

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73	Excess molar heat capacities and enthalpies for 1-alkanol + N-alkane binary mixtures. New measurements and recommended data. <i>Fluid Phase Equilibria</i> , 1993, 89, 57-88.	1.4	26
74	Apparent molar heat capacities and volumes, van der Waals volumes and accessible surface areas of alkylated derivatives of cytosine and uracil in aqueous solutions at 25°C. <i>Journal of Solution Chemistry</i> , 1993, 22, 907-918.	0.6	19
75	Apparent molar heat capacities and volumes of some alkylated derivatives of uracil and adenine in aqueous solution at 25°C. <i>Journal of Solution Chemistry</i> , 1992, 21, 1-13.	0.6	23
76	Excess molar enthalpies of (tetrachloromethane + an n-alkyl ester) at the temperature 298.15 K. <i>Journal of Chemical Thermodynamics</i> , 1992, 24, 1233-1236.	1.0	5
77	Calorimetry, densitometry and ultrasonics: recent contributions to the thermodynamics of fluids. <i>Pure and Applied Chemistry</i> , 1991, 63, 1427-1434.	0.9	9
78	Thermochemistry of aqueous solutions of alkylated nucleic acid bases. <i>Thermochimica Acta</i> , 1991, 176, 141-148.	1.2	20
79	Proximity effects in binary mixtures containing 1-chloro-, 1,1-dichloro- or 1,1,1-trichloroalkanes, or tetrachloromethane. <i>Fluid Phase Equilibria</i> , 1991, 69, 67-79.	1.4	9
80	Excess heat capacities of 1-butanol + toluene from 298 to 368 K. <i>Fluid Phase Equilibria</i> , 1991, 69, 223-233.	1.4	32
81	Solution calorimetry at high temperatures and elevated pressures. <i>Pure and Applied Chemistry</i> , 1990, 62, 2115-2120.	0.9	5
82	Excess properties of mixtures of some n-alkoxyethanols with organic solvents. <i>Thermochimica Acta</i> , 1989, 137, 241-246.	1.2	33
83	Excess volumes and excess heat capacities of some mixtures with trans,trans,cis-1,5,9-cyclododecatriene at 298.15 K. <i>Journal of Chemical & Engineering Data</i> , 1989, 34, 332-335.	1.0	33
84	Excess properties of mixtures of some n-alkoxyethanols with organic solvents. <i>Thermochimica Acta</i> , 1988, 131, 73-78.	1.2	53
85	Thermodynamics of alkanolate+alkane binary mixtures. Concentration dependence of excess heat capacities and volumes. <i>Canadian Journal of Chemistry</i> , 1988, 66, 1179-1186.	0.6	84
86	Thermal and volumetric properties of chloroform+benzene mixtures and the ideal associated solution model of complex formation. <i>Journal of Solution Chemistry</i> , 1987, 16, 745-752.	0.6	21
87	Role of alcohol in microemulsions. III. Volumes and heat capacities in the continuous phase water-n-butanol-toluene of reverse micelles. <i>Fluid Phase Equilibria</i> , 1986, 25, 209-230.	1.4	16
88	Thermodynamics of complex aqueous systems. <i>Fluid Phase Equilibria</i> , 1986, 30, 157-172.	1.4	8
89	Densities and heat capacities of 1-butanol + n-decane from 298 K to 400 K. <i>Fluid Phase Equilibria</i> , 1986, 27, 137-151.	1.4	65
90	Molar excess heat capacities and volumes for mixtures of alkanoates with cyclohexane at 25°C. <i>Journal of Solution Chemistry</i> , 1986, 15, 879-890.	0.6	51

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91	Thermal and volumetric properties of chloroform + triethylamine mixtures and the ideal associated solution model of complex formation. <i>Journal of Solution Chemistry</i> , 1985, 14, 579-594.	0.6	37
92	Freezing temperatures and enthalpies of dilution of aqueous solutions of amides. Gibbs energies and enthalpies of interaction of the N,N-dimethylamide group in aqueous solutions. <i>Journal of Solution Chemistry</i> , 1985, 14, 393-405.	0.6	16
93	Densities of toluene, of butanol and of their binary mixtures from 298 K to 400 K, and from 0.5 to 20.0 MPa. <i>Fluid Phase Equilibria</i> , 1985, 20, 321-330.	1.4	43
94	Thermodynamic properties of binary mixtures containing esters. I. Analysis of the properties of n-alkanoate + n-alkane and n-alkanoate + n-alkanoate mixtures in terms of a quasichemical group-contribution model. <i>Fluid Phase Equilibria</i> , 1984, 17, 187-216.	1.4	40
95	Thermodynamic properties of binary mixtures containing ketones. VIII. Heat capacities and volumes of some n-alkanone + n-alkane mixtures at 298.15 K. <i>Canadian Journal of Chemistry</i> , 1984, 62, 949-953.	0.6	79
96	Excess volumes of mixtures of oxolane, oxane, 1,3-dioxolane, and 1,4-dioxane with n-alkanes at 298.15, 308.15, and 318.15 K. <i>Journal of Chemical & Engineering Data</i> , 1983, 28, 124-127.	1.0	114
97	Calorimetric effects of short-range orientational order in solutions of benzene or n-alkylbenzenes in n-alkanes. <i>Thermochimica Acta</i> , 1982, 53, 157-162.	1.2	25
98	Thermochemical behaviour of mixtures of n-alcohol + aliphatic ether: heat capacities and volumes at 298.15 K. <i>Thermochimica Acta</i> , 1982, 52, 279-283.	1.2	59
99	Thermodynamic properties of binary mixtures containing ketones. VI. Analysis of the properties of 2-propanone + n-alkane mixtures in terms of a quasi-chemical group contribution model. <i>Fluid Phase Equilibria</i> , 1981, 5, 159-189.	1.4	40
100	Thermodynamic properties of binary mixtures containing ketones. VII. Analysis of the properties of n-alkanone + n-alkane, and n-alkanone + n-alkanone mixtures in terms of a quasi-chemical group contribution model. <i>Fluid Phase Equilibria</i> , 1981, 7, 95-120.	1.4	44
101	Heat capacities of toluene in the microemulsion: Water-sodium dodecylsulfate-n-butanol-toluene at 25°C. <i>Journal of Colloid and Interface Science</i> , 1981, 84, 536-545.	5.0	22
102	Apparent molal volumes in microemulsions: An insight into the structures of these systems. <i>Journal of Colloid and Interface Science</i> , 1981, 84, 250-262.	5.0	22
103	Thermodynamics of a charged hard sphere in a compressible dielectric fluid. A modification of the Born equation to include the compressibility of the solvent. <i>The Journal of Physical Chemistry</i> , 1981, 85, 3944-3949.	2.9	57
104	Thermodynamics of binary mixtures containing cyclic ethers I. Excess enthalpies of oxolane, 1,3-dioxolane, oxane, 1,3-dioxane, and 1,4-dioxane with n-alkanes. <i>Journal of Chemical Thermodynamics</i> , 1980, 12, 217-222.	1.0	76
105	Excess heat capacities of binary mixtures of carbon tetrachloride with n-alkanes at 298.15 K. <i>Thermochimica Acta</i> , 1979, 31, 79-84.	1.2	30
106	Enthalpies de mélange des 1-chloroalcane avec les alcanes normaux et le tétrachlorure de carbone. <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , 1979, 76, 51-56.	0.2	13
107	Enthalpies de mélange d'alcane et d'alcane-2 en séries homologues avec un alcane linéaire. <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , 1979, 76, 433-437.	0.2	23
108	Thermodynamics of binary mixtures containing alkynes. II. <i>Monatshefte für Chemie</i> , 1978, 109, 435-442.	0.9	13

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109	Thermodynamics of organic mixtures. A generalized quasichemical theory in terms of group surface interactions. <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , 1978, 75, 1031-1048.	0.2	301
110	Liquid mixtures involving complex formation : Extensions of the ideal associated solution theory. <i>Australian Journal of Chemistry</i> , 1977, 30, 1401.	0.5	18
111	Thermodynamic properties of binary mixtures containing ketones I. Excess enthalpies of some aliphatic ketones + n-hexane, + benzene, and + tetrachloromethane. <i>Journal of Chemical Thermodynamics</i> , 1977, 9, 315-323.	1.0	64
112	Thermodynamic properties of binary mixtures containing ketones II. Excess enthalpies of some aromatic ketones + n-hexane, + benzene, and + tetrachloromethane. <i>Journal of Chemical Thermodynamics</i> , 1977, 9, 697-703.	1.0	41
113	Enthalpies de mélange du tétrachlorure de carbone avec des hydrocarbures à l'aide d'un microcalorimètre Picker à coulement continu, équipé de séparateurs. <i>Canadian Journal of Chemistry</i> , 1976, 54, 1952-1957.	0.6	19
114	Simultaneous measurements of heat capacities and densities of organic liquid mixtures. Systems containing ketones. <i>Journal of Chemical & Engineering Data</i> , 1975, 20, 243-246.	1.0	80
115	Enthalpies de mélange des chlorures organiques avec des hydrocarbures. <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , 1973, 70, 367-373.	0.2	32
116	Enthalpies de mélange des 1,2-dichloroalcanes avec des hydrocarbures. <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , 1973, 70, 807-810.	0.2	21
117	Determination of Thermodynamic Partial Properties in Multicomponent Systems by Titration Techniques. , 0, , .		0