

1. Record Nr.	UNINA9910455582003321
Titolo	Heat capacities [[electronic resource]] : liquids, solutions and vapours / / edited by Emmerich Wilhelm, Trevor M. Letcher
Pubbl/distr/stampa	Cambridge, : Royal Society of Chemistry, c2010
ISBN	1-62198-160-6 1-84755-979-4
Descrizione fisica	1 online resource (531 p.)
Altri autori (Persone)	WilhelmEmmerich LetcherT. M (Trevor M.)
Disciplina	541.36
Soggetti	Thermochemistry Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Heat capacities: introduction, concepts and selected applications / Emmerich Wilhelm -- Calorimetric methods for measuring heat capacities of liquids and liquid solutions / Lee D. Hansen and Donald J. Russell -- An analysis of conductive heat losses in a flow calorimeter for heat capacity measurement / J. David Raal -- Heat capacities and related properties of liquid mixtures / Emmerich Wilhelm and Jean- Pierre E. Grolier -- Heat capacity of non-electrolyte solutions / Amr Henni -- Heat capacities and related properties of vapours and vapour mixtures / Christopher J. Wormald -- Heat capacity of electrolyte solutions / Andrew W. Hakin and Mohammad M.H. Bhuiyan -- Scanning transitiometry and its use to determine heat capacities of liquids at high pressures / Stanislaw L. Randzio -- Speed of sound measurements and heat capacities of gases / Anthony R.H. Goodwin and J.P. Martin Trusler -- Speed-of-sound measurements and heat capacities of liquid systems at high pressure / Toshiharu Takagi and Emmerich Wilhelm -- Heat capacities and Brillouin scattering in liquids / Emmerich Wilhelm and Augustinus Asenbaum -- Photothermal techniques for heat capacities / Jan Thoen and Christ Glorieux -- High resolution adiabatic scanning calorimetry and heat capacities / Jan Thoen -- Heat capacities in the critical region / Mikhail Anisimov and Jan Thoen -- Heat capacity of polymeric systems / Marek Pyda -- Protein heat capacity / Werner W.

Streicher and George I. Makhatadze -- Heat capacity in liquid crystals / M. Marinelli, F. Mercuri and U. Zammit -- Heat capacities and phase transitions for the dynamic chemical systems: conformers, tautomers, plastic crystals and ionic liquids / Gennady Kabo, Eugene Paulechka and Michael Frenkel -- The estimation of heat capacities of pure liquids / Milan Zabransky ... [et al.] -- Computer simulation studies of heat capacity effects associated with hydrophobic effects / Dietmar Paschek, Ralf Ludwig and Jorg Holzmann -- Partial molar heat capacity changes of gases dissolved in liquids / Emmerich Wilhelm and Rubin Battino -- Heat capacities of molten salts / Yizhak Marcus.

Sommario/riassunto

The book contains the very latest information on all aspects of heat capacities related to liquids and vapours, either pure or mixed. The chapters, all written by knowledgeable experts in their respective fields, cover theory, experimental methods, and techniques (including speed of sound, photothermal techniques, brillouin scattering, scanning transitiometry, high resolution adiabatic scanning calorimetry), results on solutions, liquids, vapours, mixtures, electrolytes, critical regions, proteins, liquid crystals, polymers, reactions, effects of high pressure and phase changes. Experimental m
