

1. Record Nr.	UNINA9910298589903321
Autore	Hansen Lee D
Titolo	Titration Calorimetry : From Concept to Application / / by Lee D. Hansen, Mark K. Transtrum, Colette F. Quinn
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-78250-9
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (x, 57 pages) : illustrations
Collana	SpringerBriefs in Molecular Science, , 2191-5415
Disciplina	536.6
Soggetti	Physical chemistry Measurement Measuring instruments Medicine - Research Biology - Research Physical Chemistry Measurement Science and Instrumentation Biomedical Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter1: Introduction to Calorimetry -- Chapter2: Introduction to Titration Calorimetry -- Chapter3: Determination of Equilibrium Constants by Titration Calorimetry -- Chapter4: Determination of Reaction Kinetics by Calorimetry -- Chapter5: Statistics of Curve Fitting -- Chapter6: Related Topics in Calorimetry -- Chapter7: Self-test Questions -- Chapter8: Self-test Key.
Sommario/riassunto	This Brief describes the calibration of titration calorimeters (ITCs) and calculation of stoichiometry, equilibrium constants, enthalpy changes, and rate constants for reactions in solution. A framework/methodology for model development for analysis of ITC data is presented together with methods for assessing the uncertainties in determined parameters and test data sets. This book appeals to beginners, as well as to researchers and professionals in the field.