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Autore	Alberty Robert A
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Nota di contenuto	Biochemical Thermodynamics: Applications of Mathernatica; Contents; Preface; Chapter 1 Thermodynamics of the Dissociation of Weak Acids; Chapter 2 Introduction to Apparent Equilibrium Constants; Chapter 3 Biochemical Reactions at Specified Temperature and Various pHs; Chapter 4 Biochemical Reactions at Various pHs and Various Temperatures; Chapter 5 Biochemical Reactions at Various pHs, pMgs, and Various Temperatures; Chapter 6 Development of a Database on Species; Chapter 7 Uses of Matrices in Biochemical Thermodynamics; Chapter 8 Oxidoreductase Reactions (Class 1) at 298.15 K Chapter 9 Transferase Reactions (Class 2) at 298.15 KChapter 10 Hydrolase Reactions (Class 3) at 298.15 K; Chapter 11 Lyase Reactions (Class 4), Isomerase Reactions (Class 5), and Ligase Reactions (Class 6) at 298.15 K; Chapter 12 Survey of Reactions at 298.15 K; Chapter 13 Survey of Reactions at Various Temperatures; Chapter 14

	Thermodynamics of th Binding of Ligands by Proteins; Chapter 15 Calorimetry of Biochemical Reactions; Appendix; 1. BasicBiochemData3. nb; 2. Tables of Transformed Thermodynamic Properties; 3. Glossary of Names of Reactants 4. Glossary of Symbols for Thermodynamic Properties5. List of Mathematica Programs; 6. Sources of Biochemical Thermodynamic Information on the Web; Index
Sommario/riassunto	Navigate the complexities of biochemical thermodynamics with Mathematica(r)Chemical reactions are studied under the constraints of constant temperature and constant pressure; biochemical reactions are studied under the additional constraints of pH and, perhaps, pMg or free concentrations of other metal ions. As more intensive variables are specified, more thermodynamic properties of a system are defined, and the equations that represent thermodynamic properties as a function of independent variables become more complicated.This sequel to Robert Alberty's popular Thermodynamics