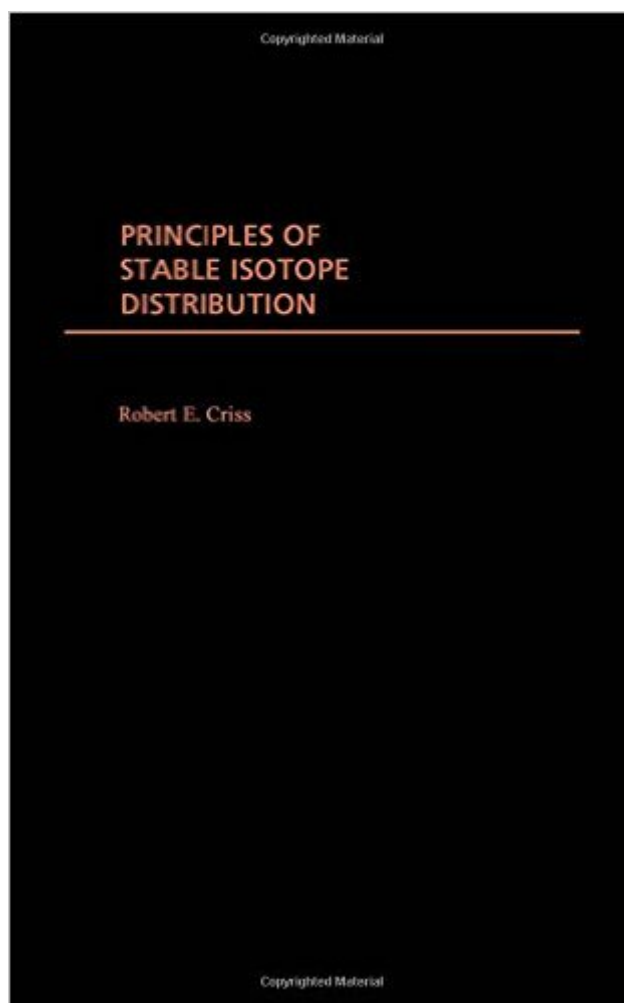


The book was found

Principles Of Stable Isotope Distribution



Synopsis

This book presents a quantitative treatment of the theory and natural variations of light stable isotopes. It discusses isotope distribution in the context of fractionation processes, thermodynamics, mass conservation, exchange kinetics, and diffusion theory, and includes more than 100 original equations. The theoretical principles are illustrated with natural examples that emphasize oxygen and hydrogen isotope variations in natural waters, terrestrial and extraterrestrial rocks, and hydrothermal systems. New data on meteoric precipitation, rivers, springs, formation fluids, and hydrothermal systems are included in relation to various natural phenomena. Essentially, this book seeks to reconnect the diverse phenomenological observations of isotope distribution to the quantitative theories of physical chemistry and the language of differential equations. It may serve as a textbook for advanced students, as a research reference, or as a quick source of information. The book is organized into five chapters, each followed by suggested quantitative problems and a short reference list. The three theoretical chapters progress from an elementary review of the physical chemistry of stable isotopes, to the thermodynamics of isotopic compounds, and finally to the calculation of isotope distribution in dynamic systems. The third and fifth chapters emphasize oxygen and hydrogen isotope variations in Earth's hydrosphere and lithosphere, constituting the most important examples of the theoretical principles. Appendices provide data on atomic weights of light elements, physical constants, mathematical relationships, and isotopic fractionation factors.

Book Information

Hardcover: 264 pages

Publisher: Oxford University Press; 1 edition (June 3, 1999)

Language: English

ISBN-10: 0195117751

ISBN-13: 978-0195117752

Product Dimensions: 9.3 x 0.8 x 6.1 inches

Shipping Weight: 15.2 ounces (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars [See all reviews](#) (1 customer review)

Best Sellers Rank: #1,577,666 in Books (See Top 100 in Books) #36 in [Books > Science & Math > Chemistry > Nuclear Chemistry](#) #186 in [Books > Science & Math > Chemistry > Geochemistry](#) #346 in [Books > Science & Math > Earth Sciences > Geophysics](#)

Customer Reviews

Great book! I refer to it often.

[Download to continue reading...](#)

Principles of Stable Isotope Distribution Principles of Stable Isotope Geochemistry Stable Isotope Geochemistry Magnetic Isotope Effect in Radical Reactions: An Introduction Stable Vices (Show Jumping Dreams ~ Book 21) L'enfance du Christ - Vocal Score Selections - The Stable at Bethlehem/The Shepherds' Farewell/Epilogue No Stable Too Small Foster Parenting: The Ultimate Guide To Foster Care - How To Create A Comfortable, Loving And Stable Home For A Foster Child (Adoption, Parenting, Child Care) Foster Parenting: A Basic Guide To Creating A Loving, Comforting And Stable Home (Foster Care, Child Care, Raising Children) Foster Parenting: A Basic Guide to Creating a Loving, Comforting and Stable Home Rational Design of Stable Protein Formulations: Theory and Practice (Pharmaceutical Biotechnology) Nilpotence and Periodicity in Stable Homotopy Theory. (AM-128) Distribution Planning and Control: Managing in the Era of Supply Chain Management (Chapman & Hall Materials Management/Logistics Series) Distribution of Labor: The Illuminators of the Hours of Catherine of Cleves and Their Workshop (Transactions of the American Philosophical Society, V. 69, Pt. 5.) Fedora Linux: A Complete Guide to Red Hat's Community Distribution Water Distribution Operator Training Handbook Guidance Manual to Maintain Distribution System Water Quality Water Distribution System Handbook Understanding Digital Television: An Introduction to DVB Systems with Satellite, Cable, Broadband and Terrestrial TV Distribution Satellite TV Distribution (Home Digital systems Book 9)

[Dmca](#)