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	<ul> <li>Sporomusa ovata; 11 Spectroscopic and Molecular Genetic</li> <li>Characterization of the Two Mammalian B12-Dependent Enzymes; IV</li> <li>B12-Proteins: Enzymatic Rearrangements</li> <li>12 A Mechanistic Overview of B12 Dependent Processes13 Insights on the Reaction Mechanism of Methylmalonyl-CoA Mutase from the Crystal Structure; 14. Tritium Isotope Effects and Site-Directed Mutagenesis as</li> <li>Probes of the Reaction Catalyzed by Methylmalonyl-CoA Mutase; 15</li> <li>Mechanism of Coenzyme B12-Dependent Carbon-Carbon and Carbon-Oxygen Rearrangements; 16. Glutamate Mutase; 17. Isobutyryl-CoA</li> <li>Mutase from Streptomycetes; 18. Coenzyme B12-Dependent Enzymes and Their Models; 19. Model Studies for the Methylmalonyl-Succinyl Rearrangements</li> <li>20. Recent Structure-Function Studies of B12 Coenzymes in Diol Dehydrase21 Adenosylcobalamin-Dependent Ribonucleotide</li> <li>Reductases: Still Amazing but no Longer Confusing; V BI2 : Structure and Reactivity; 22. High-Resolution Crystal Structures of Cobalamins;</li> <li>23. New NMR Structural and Dynamical Probes of Organometallic B12 Derivatives; 24 FT-Raman Spectroscopy of Methyl-B12 and of Imidazolate Methylcobinamide Derivatives; 25 Coenzyme B12-Based Chemical Precedent for Co-C Bond Homolysis and Other Key Elementary Steps</li> <li>26. Insight into the Mechanism of B12-Dependent Enzymes: Magnetic Field Effects as a Probe of Reaction Mechanism and the Role of the Ribofuranose Ring Oxygen27. Cage Effects and Diastereomeric Control in the Breaking and Making of Carbon-Cobalt Bonds in Organocobalt Corrinoids; VI Without B12 and With B12 ?; 28. The Role of S-Adenosylmethionine As a Poor Man's Adenosylcobalamin in the Reaction of Lysine 2,3- Aminomutase; 29. New Structural and Biosynthetic Aspects; 30. Cobalamin Binding Proteins</li> </ul>
Sommario/riassunto	This timely and topical book reviews the important for Vitamin B12 Nutrition This timely and topical book reviews the important developments in the 'B12-field' with regard to biological, chemical, pharmaceutical and medicinal aspects. In over 30 chapters the approx. 100 internationally renowned authors give deeper insight into the prospering research activites around B12. This book is a must for everybody who works with or on vitamins and porphyrine (-like) ring systems.Topics of particular interest include: Biosynthesis of Vitamin B12; B12-catalyzed enzymatic reactions and their mechanisms; structural B12-chemistry; reactivity of B12 and B12-models; structure