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Nota di contenuto	Frontmatter -- Foreword -- Preface I -- Preface II -- Contents -- 1. The international background of the origin of life -- 2. Why nature chose -amino acids? -- 3. N-Phosphoryl amino acids - models for P-N bonds in prebiotic chemical evolution -- 4. Nucleoside-protein coevolution and the origin of genetic code -- 5. The phosphoryl transfer reactions of phosphoryl amino acids -- 6. The research progress of chiral pentacoordinate spirophosphoranes with bis--amino acid bonds -- 7. A new theoretical model for the origin of amino acid homochirality -- 8. N-Phosphoryl amino acids and the origin of cell membranes -- 9. The potential evolution prototype of modern enzyme: Discovery of seryl-histidine dipeptide and its function -- 10. The interaction between ATP and amino acids -- 11. Marine and the origin of life
Sommario/riassunto	The book is the first thorough study of the role of phosphorus chemistry in the origin of life. This book starts with depiction of the phosphorus role in life creation and evolution. Then it outlines in vital processes how different phosphorus-containing compounds participate as biomarker in life evolution. Written by renowned scientists, it is suitable for researchers and students in organic phosphorus chemistry and biochemistry.