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| Nota di contenuto | Organosilanes in Radical Chemistry; CONTENTS; Preface; Acknowledgements; 1 Formation and Structures of Silyl Radicals; 1.1 Methods of Generation of Silyl Radicals; 1.2 Structural Properties of Silyl Radicals; 1.2.1 Chemical Studies; 1.2.2 Electron Paramagnetic Resonance (EPR) Spectra; 1.2.3 Crystal Structures; 1.2.4 UV-Visible Spectra; 1.2.5 Theoretical Studies; 1.3 References; 2 Thermochemistry; 2.1 General Considerations; 2.2 Bond Dissociation Enthalpies; 2.2.1 Radical Kinetics; 2.2.2 Photoacoustic Calorimetry; 2.2.3 Theoretical Data; 2.2.4 Derived Bond Dissociation Energies 2.3 Ion Thermochemistry2.3.1 Negative-ion Cycles; 2.3.2 Hydride- affinity Cycles; 2.4 References; 3 Hydrogen Donor Abilities of Silicon Hydrides; 3.1 Carbon-centred Radicals; 3.1.1 Primary Alkyl Radicals and Free-Radical Clock Methodology; 3.1.2 Other Types of Carbon- centred Radicals; 3.2 Nitrogen-centred Radicals; 3.3 Oxygen-centred Radicals; 3.3.1 Alkoxyl Radicals; 3.3.2 Peroxyl Radicals; 3.3.3 Aryloxyl and Aroyloxyl Radicals; 3.4 Sulfur-centred Radicals; 3.5 Ketone Triplets; 3.6 Hydrogen Atom: An Example of Gas-phase Kinetics; 3.7 |

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| | 7.4 Formation of Carbon-Heteroatom Bonds |
| Sommario/riassunto | In recent years silicon-centered radicals have played an important role in organic synthesis, polymer chemistry and material sciences. The aim of this book is to offer for the first time a description of silyl radicals within an interdisciplinary context, connecting structural characteristics and chemical properties to their application in different areas of chemistry. The first time different aspects of silyl radicals have been brought togetherExcellent reference tool for experienced practitioners of radical and/or silicon chemistryPresents various aspects of the |