

1. Record Nr.	UNINA9910144133203321
Titolo	Organosilicon chemistry . III : from molecules to materials // edited by Norbert Auner and Johann Weis
Pubbl/distr/stampa	Weinheim, [Germany] : , : Wiley-VCH, , 1998 ©1998
ISBN	1-281-76470-1 9786611764708 3-527-61990-9 3-527-62074-5
Descrizione fisica	1 online resource (744 p.)
Disciplina	547.08
Soggetti	Organosilicon compounds Electronic books.
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Organosilicon Chemistry III, from Molecules to Materials; Contents; I. Fascinating Organosilicon Compounds; Introduction; More Compelling Evidence that Silicon is Better Than Carbon: The Thermal Isomerization of Olefins to Carbenes; NMR and Quantum Chemical Characterization of Silicon-Substituted Carbocations; Matrix Isolation Studies of the Reactions of Silicon Atoms; Cycloaddition Reactions of Dimethylaminomethylsilylene with Dienes and Heterodienes; Do Unsubstituted Silacyclobutadienes Exist?; A Thermally Stable Silylene: Reactivity of the Bis(amino)silylene Si[{N(CH ₂ tBu)} ₂ C ₆ H ₄ -1,2] Pyrido[b]- 1 ,3,22-diazasilole: The First Stable Unsymmetrical SilyleneA New Route to Silaheterocycles: Heterobutadiene Cycloaddition; Base Coordination: A Way to Nucleophilic Silylenes?; Isoelectronic Replacement of Si by P+: A Comparative Study of the Structures of the Spirocyclic EII Compounds E[C(PMe ₂) ₂ (X)] ₂ (E = Si, Ge, Sn; X = PMe ₂ , SiMe ₃) and a Novel Spirocyclic 10 e-Phosphorus Cation (Pm) P[C(PPh ₂) ₂ (SiMe ₃) ₂] ²⁺ ; The Main Group Carbonyls mi-CO and R ₂ Si-CO: An Ab Initio Study

Unprecedented Multistep Reactions of Decamethylsilicocene, (Me₅Cs)
 zSi:, with CO₂, CS₂, COS, RNCS (R = Me, Ph), with CF₃CCCF₃, and with
 HMn(CO)₅ Rearrangement of Bis(hypersilyl)silylene and Related
 Compounds - An Unusual Way to Three-Membered Rings; Oxidation of
 Silenes and Silylenes: Matrix Isolation of Unusual Silicon Species; New
 Silaheterocycles: Formation and Properties; Cycloaddition Reactions of
 1,1-Dichloro-2-neopentylsilene with Monoterpenes; Silaspirocycles as
 Precursors for a 2-Silaallene; Catalytic Carbon-Carbon Hydrogenation
 of Silicon-Functionalized Olefins
 Dieno- and Enophilicity of Sila-, Germa-, and
 Stannaethenes Iminosilanes and Silaamidides: Synthesis and Reactions;
 Metastable Compounds Containing Silicon-Phosphorus and Silicon-
 Arsenic Multiple Bonds: Syntheses, Structures and Reactivity; Silole and
 Germole Dianions and their Dilithium Derivatives - Are they Aromatic?;
 Supersilylmetal Compounds; Trialkylsilyl Substituted Homobimetallic
 Phosphanides of the Alkaline Earth Metals as well as Zinc; The Tris
 (trimethylsilyl)silyl Substituent: An Old Hat With A New Feather
 Functionalized Trisilylmethanes and Trisilylsilanes as Precursors of a
 New Class of Tripodal Amido Ligands Methoxy-bis[tris(trimethylsilyl)
 silyl]methane: The First Geminal Di(hypersilyl) Compound; The Use of
 the Tris(trimethylsilyl)silyl Group in Stabilization of Low Valent Gallium
 Compounds; Synthesis, Structure, and Reactions of Tris(trimethylsilyl)
 silyl Gallanes and Gallates; Novel Pathways in the Reactions of
 Vinylsilanes with Lithium Metal; New Organosilicon Reagents :
 Synthesis, Structure, and Reactivity of (Lithiomethyl)(aminomethyl)
 silanes
 (Phenylthiomethyl)silanes as New Bifunctional Assembling Ligands for
 the Construction of Heterometallic Complexes

Sommario/riassunto

Organosilicon Chemistry at its best ...((kursiv)) Like its two hugely
 successful predecessors, the third volume again presents the latest
 developments in a rapidly developing field of industrial and academic
 research. The contributions from approx. 80 internationally renowned
 experts and researchers in this fascinating part of the rapidly growing
 field of main group chemistry describe current trends in organosilicon
 chemistry and provide summaries of the latest (1997!) knowledge in
 this area. To facilitate access to the ongoing research this volume is
 split into two parts