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Nota di contenuto	Modern Cyclophane Chemistry; Contents; Preface; List of Contributors; 1 Cyclophynes; 1.1 Introduction; 1.2 Orthocyclophynes and Related Systems; 1.2.1 Planar Dehydrobenzoannulenes; 1.2.2 Nonplanar Orthocyclophynes; 1.3 Metacyclophynes and Related Systems; 1.4 Paracyclophynes and 1,3,5-Bridged Cyclophynes; 1.5 Concluding Remarks; 1.6 Acknowledgement; 1.7 References; 2 Hetera (Cyclo-)phanes; 2.1 Introduction; 2.1.1 Selection of Topics Presented; 2.1.2 Definitions; 2.1.3 Why Conduct a Survey on Heteraphanes?; 2.2 Heteraphanes; 2.2.1 Planar Chiral and Helical Chiral Phanes 2.2.1.1 Design of Phanes with Planar and Helical Chirality 2.2.1.2 Hetera [2.2]Metacyclophanes; 2.2.1.3 Planar Chiral [2.2]Metacyclophanes; 2.2.1.4 Planar Chiral Hetera [n]Para- and Hetera [n]Metacyclophanes; 2.2.1.5 Dioxa [2.2]Phanes and Oxaza [2.2]Phanes; 2.2.1.6 Enantiomer Separations; 2.2.1.7 Strongly Helical Heteraphanes; 2.2.2 Catenanes, Rotaxanes, and Knotanes of the Heteraphane Type; 2.2.2.1 Template Synthesis of Rotaxanes Using Cyclophane Wheels; 2.2.2.2 Higher Order

[n]Rotaxanes via Non-ionic Template Effect; 2.2.2.3 Combination of Anionic and Non-ionic Template
2.2.2.4 Molecular Knots and Similar Macrocycles of the Heteraphane Type
2.2.3 Further Heteraphanes, Metallaphanes and Supramolecular Phanes; 2.3 Conclusions; 2.4 Acknowledgement; 2.5 References; 3 Highly Strained Cyclophanes; 3.1 Introduction; 3.2 [n]Metacyclophanes; 3.2.1 Synthesis; 3.2.2 Structures and Physical Properties; 3.2.3 Reactions of Strained [n]Metacyclophanes; 3.2.3.1 Thermal and Photochemical Reactions; 3.2.3.2 Addition Reactions; 3.2.3.3 Reactions with Electrophiles; 3.2.3.4 Reactions with Nucleophiles; 3.3 [n]Paracyclophanes; 3.3.1 Synthesis
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3.3.3 Reactions of Strained [n]Paracyclophanes; 3.3.3.1 Thermal and Photochemical Reactions; 3.3.3.2 Reactions with Electrophiles; 3.3.3.3 Diels-Alder and Other Reactions; 3.3.3.4 Kinetic Stabilization of [4]Paracyclophane Systems; 3.4 Aromaticity of Bent Benzene Rings; 3.5 Cyclophanes containing Polycyclic Aromatic Rings: (2,7)Pyrenophanes; 3.6 [1.1] Paracyclophanes; 3.6.1 Synthesis; 3.6.2 Kinetic Stabilization of [1.1] Paracyclophane Systems; 3.6.3 Structures and Physical Properties; 3.7 References and Notes; 4 Superphanes; 4.1 Introduction
4.2 [n(2)]Cyclopropenonophanes
4.2.1 Synthesis; 4.3 Superbridged Cyclopropenyliophanes; 4.4 C(4)-Superphanes; 4.4.1 Properties of Cyclobutadieno Superphanes; 4.4.2 Oxidative Demetallations; 4.5 C(5)-Superphanes; 4.6 Superbridged Benzene Rings; 4.7 Concluding Remarks; 4.8 Acknowledgement; 4.9 References; 5 Carbon-Bridged Ferrocenophanes; 5.1 Introduction; 5.2 Nomenclature; 5.3 Mononuclear Carbon-Bridged Ferrocenophanes; 5.3.1 [1]Ferrocenophanes; 5.3.2 [2] Ferrocenophanes; 5.3.3 [3]Ferrocenophanes; 5.3.4 [4]Ferrocenophanes; 5.3.5 [5]Ferrocenophanes; 5.3.6 [m]Ferrocenophanes ($m > 5$)
5.3.7 Multiply-Bridged Mononuclear Ferrocenophanes ([m](n) Ferrocenophanes)

Sommario/riassunto

Here, the editors Rolf Gleiter and Henning Hopf present an excellent overview of all the important aspects and latest results in cyclophane chemistry. Clearly structured and covering the entire range, the book introduces readers to the most recent research in the field. Twenty chapters, written by well-known scientists, cover in particular:- synthesis of carbo- and heterocyclic cyclophanes and metallocenophanes,- structural and spectroscopic properties of cyclophanes,- current and future applications in synthesis and material science,- novel reactions of cyclophanes,- use o
