

MINIREVIEWS

Total Synthesis

1

Synthetic Studies Inspired by Vinigrol

A. D. Hutters, N. K. Garg*

COMMUNICATIONS

Ylides

R. Appel, H. Mayr*

Reaction Mechanisms

B. Fuentes, M. García-Melchor,
A. Lledós, F. Maseras, J. A. Casares,*
G. Ujaque,* P. Espinet*

Imaging Agents

G. Shao, R. Han, Y. Ma, M. Tang,
F. Xue, Y. Sha, Y. Wang*

Nucleophilic Reactivities of Sulfur Ylides and Related Carbanions: Comparison with Structurally Related Organophosphorus Compounds

Palladium Round Trip in the Negishi Coupling of *trans*-[PdMeCl(PMePh₂)₂] with ZnMeCl: An Experimental and DFT Study of the Transmetalation Step

Bionanoprobes with Excellent Two-Photon-Sensitized Eu³⁺ Luminescence Properties for Live Cell Imaging

FULL PAPERS

Polymerization

2

S. Park, T. Okada, D. Takeuchi,
K. Osakada*

Radical Reactions

3

A. Mardyukov, R. Crespo-Otero,
E. Sanchez-Garcia, W. Sander*

Supramolecular Assembly

4

S. Yagai,* H. Aonuma, Y. Kikkawa,
S. Kubota, T. Karatsu, A. Kitamura,
S. Mahesh, A. Ajayaghosh*

Supramolecular Chemistry

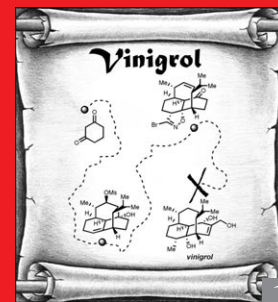
B. Ventura, L. Flamigni,* M. Beyler,
V. Heitz, J.-P. Sauvage

Cyclopolymerization and Copolymerization of Functionalized 1,6-Heptadienes Catalyzed by Pd Complexes: Mechanism and Application to Physico-Gel Formation (Cover picture)

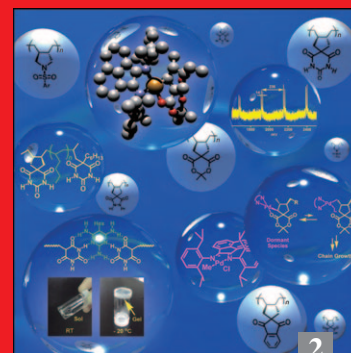
Photochemistry and Reactivity of the Phenyl Radical–Water System: A Matrix Isolation and Computational Study

Rational Design of Nanofibers and Nanorings through Complementary Hydrogen-Bonding Interactions of Functional π Systems

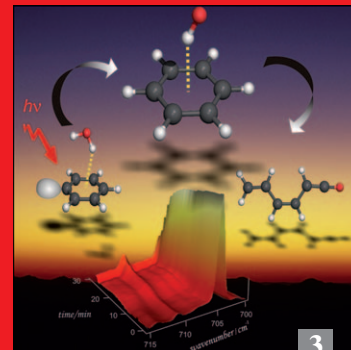
Unusual Photoinduced Electron Transfer from a Zinc Porphyrin to a Tetrapyrrolyl Free-Base Porphyrin in a Noncovalent Multiporphyrin Array



1



2



3



4