

CONCEPTS

Reaction Mechanisms

1

Kinetic Isotope Effects in Asymmetric Reactions

T. Giagou, M. P. Meyer*

COMMUNICATIONS

Nanostructures

2

G. Zhang, S. Sun, R. Li, X. Sun*

New Insight into the Conventional Replacement Reaction for the Large-Scale Synthesis of Various Metal Nanostructures and their Formation Mechanism (Cover picture)

Borylene Complexes

H. Braunschweig,* K. Kraft,
S. Östreicher, K. Radacki, F. Seeler

Neutral and Anionic Transition-Metal-Base-Stabilized Metalloborylene Complexes

Carbon Nanotubes

L. Qiu, X. Yang, X. Gou, W. Yang,
Z.-F. Ma, G. G. Wallace, D. Li*

Dispersing Carbon Nanotubes with Graphene Oxide in Water and Synergistic Effects between Graphene Derivatives

FULL PAPERS

Quantum Dots

3

X. Liu, L. Cheng, J.-P. Lei, H. Liu,
H.-X. Ju*

Formation of Surface Traps on Quantum Dots by Bidentate Chelation and Their Application in Low-Potential Electrochemiluminescent Biosensing

Metal–Organic Frameworks

4

T. D. Bennett, J.-C. Tan,
S. A. Moggach, R. Galvelis,
C. Mellot-Draznieks, B. A. Reisner,
A. Thirumurugan, D. R. Allan,
A. K. Cheetham*

Mechanical Properties of Dense Zeolitic Imidazolate Frameworks (ZIFs): A High Pressure X-ray Diffraction, Nanoindentation and Computational Study of the Zinc Framework $\text{Zn}(\text{Im})_2$, and its Lithium–Boron Analogue, $\text{LiB}(\text{Im})_4$

Synthetic Methods

Y. Onizawa, M. Hara, T. Hashimoto,
H. Kusama, N. Iwasawa*

Synthetic Studies on and Mechanistic Insight into $[\text{W}(\text{CO})_5(\text{L})]$ -Catalyzed Stereoselective Construction of Functionalized Bicyclo[5.3.0]decane Frameworks

Explosives

Y. Zhang, Y. Guo, Y.-H. Joo,
D. A. Parrish, J. M. Shreeve*

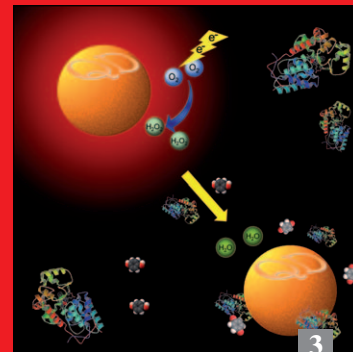
3,4,5-Trinitropyrazole-Based Energetic Salts



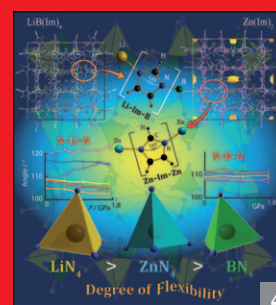
1



2



3



4