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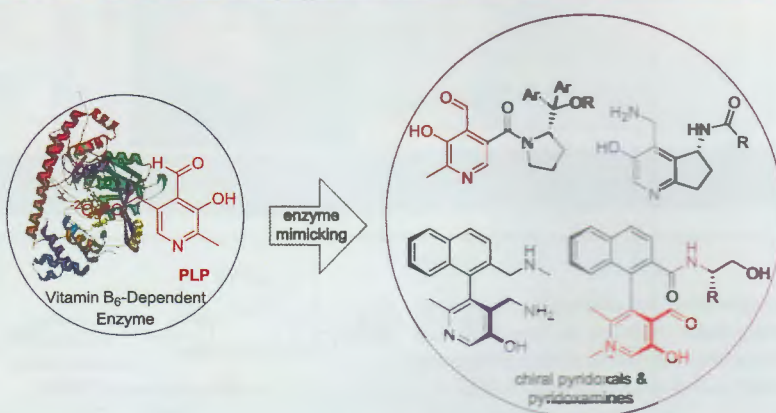


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Chemistry Authors Up Close

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Biomimetic Chiral Pyridoxal and Pyridoxamine
Catalysts

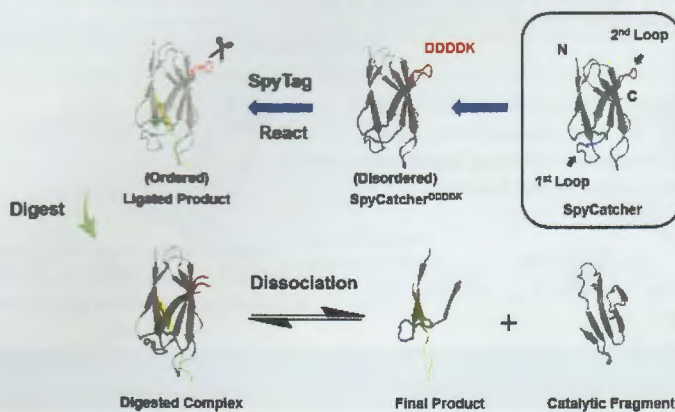


Jianfeng Chen, Yong Ethan Liu, Xing Gong, Limin Shi, Baoguo Zhao*

Bioinspired chiral pyridoxal/pyridoxamine catalysts for biomimetic asymmetric transamination of α -keto acids and Mannich reaction of glycinate

Concise Reports

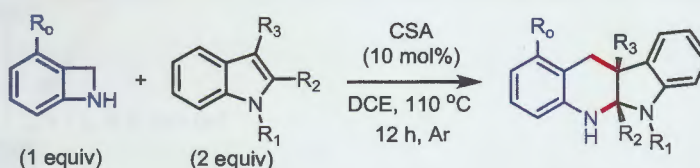
113
Engineering SpyCatcher Variants with Proteolytic Sites for Less-Trace Ligation



Xue-Jian Zhang, Xia-Ling Wu, Dong Liu, Xiao-Di Da, Xiao-Wei Wang, Shuguang Yang,* Wen-Bin Zhang*

SpyCatcher variant with engineered proteolytic site allows efficient reaction and facile cleavage of the catalytic fragment after coupling, enabling less-trace ligation.

119
Synthesis of 2,3-Fused Indoline Aminals via 4+2
Cycloaddition of NH-free Benzazetidines with
Indoles



Zibo Bai, Huarong Tong, Hao Wang, Gong Chen,* Gang He*

A new method for stereoselective synthesis of *cis*-2,3-fused indoline aminals was developed.

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Can Synthetic All-Metal Cluster Compound Support Multifold (π and σ) Aromaticity and d-Orbital Aromaticity?

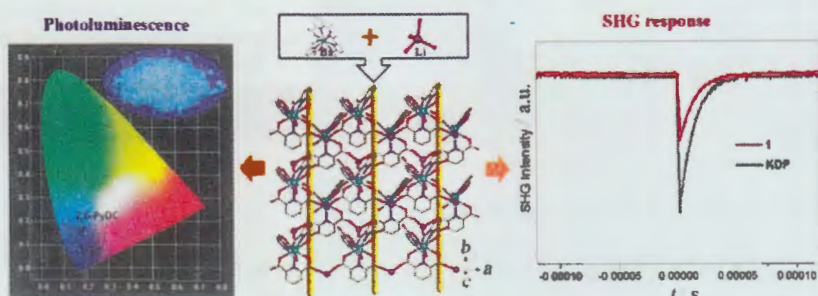


Five-fold aromaticity in a bottleable compound? Chemical bonding analyses reveal that core-shell D_{3h} [$\text{Pd}_3\text{Sn}_8\text{Bi}_6$] $^{4+}$ cluster possesses five-fold π/σ aromaticity, including d-orbital aromaticity.

Xue-Rui You, Hua-Jin Zhai*

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Construction of a Noncentrosymmetric Luminescent Coordination Polymer from [BaL_3] Unit (L = Pyridine-2,6-dicarboxylate Acid) and $\text{Li}(\text{I})$ Ion

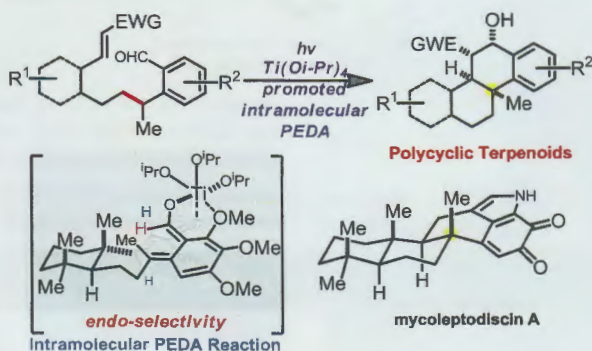


Ying Song, Zhaofeng Wu, Bing Hu,* Xiaoying Huang*

The structure, luminescent and SHG properties of a BaLi-based noncentrosymmetric coordination polymer constructed from 2,6-PyDC ligand have been studied.

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Titanium-promoted Intramolecular Photoenolization/Diels-Alder Reaction to Construct Polycyclic Terpenoids: Formal Synthesis of Mycoleptodiscin A

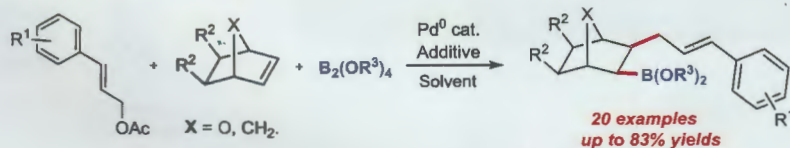


A titanium-promoted intramolecular photoenolization/Diels-Alder (PEDA) reaction was developed to construct the core skeleton of aromatic polycyclic terpenoids.

Dongsheng Xue, Mengmeng Xu, Chaoying Zheng, Baochao Yang, Min Hou, Haibing He, Shuanhu Gao*

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Palladium-Catalyzed Three-Component Coupling Reaction of Allyl Carboxylates, Norbornenes and Diboronates Involving Sequential Olefins Insertion and Borylation Reaction



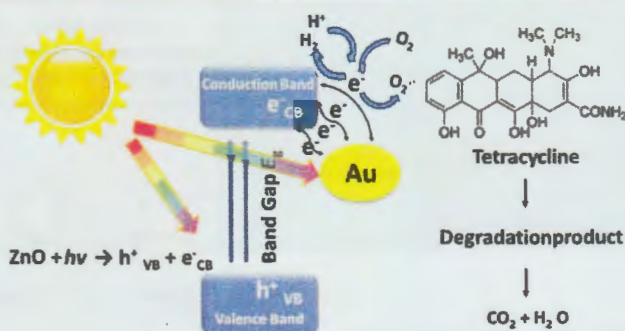
- ♦ Forming a stable σ -alkyl Pd^{II} -intermediate to couple with weak nucleophile – diboronates
- ♦ Efficient construction of $\text{C}(\text{sp}^3)\text{-C}(\text{sp}^3)$ bond and $\text{C}(\text{sp}^3)\text{-B}$ bond in a single reaction
- ♦ The coupling products of two components could be circumvented

Zun Li, Jia Zheng, Chunsheng Li, Wanqing Wu, Huanfeng Jiang*

Comprehensive Reports

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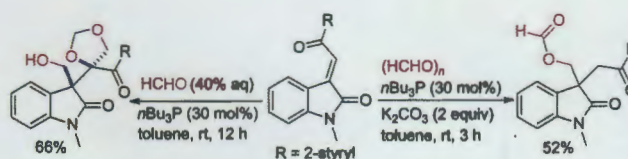
Zeolitic Imidazolate Framework 8-Derived $\text{Au}@\text{ZnO}$ for Efficient and Robust Photocatalytic Degradation of Tetracycline



Bijun Gao, Jin Zhou, Hongliang Wang, Guping Zhang, Jinghui He,* Qingfeng Xu, Najun Li, Dongyun Chen, Hua Li, Jianmei Lu*

Zeolitic imidazolate framework 8-derived $\text{Au}@\text{ZnO}$ for photocatalytic degradation of tetracycline.

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Phosphine-Catalyzed Interrupted Morita–Baylis–Hillman Reaction and Switchable Domino Reactions of α -Substituted Activated Olefins with Formaldehyde and Mechanism Elucidation

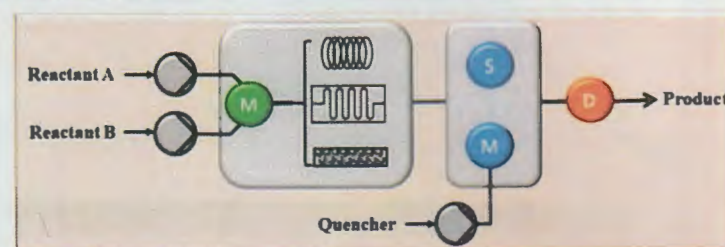
$n\text{Bu}_3\text{P}$ -catalyzed interrupted Morita–Baylis–Hillman reaction of α -olefinic olefins and formaldehyde has been investigated, and switchable domino process to produce unexpected 1,3-dioxolane derivatives or formates was furnished by employing formalin or paraformaldehyde as the substrate, respectively.

Jing Gu, Ben-Xian Xiao, Qin Ouyang,* Wei Du, Ying-Chun Chen*

Critical Review

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Microreaction Technology for Synthetic Chemistry

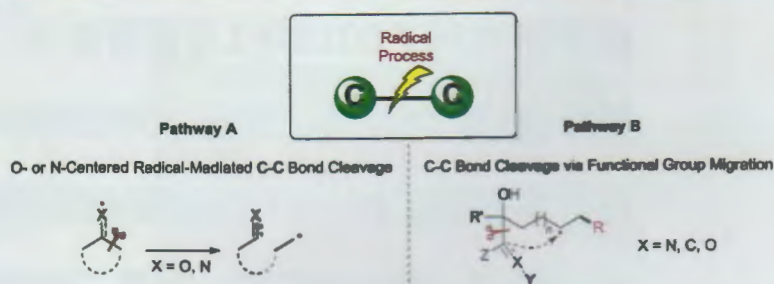


Jian Deng, Jisong Zhang, Kai Wang, Guangsheng Luo*

Recent Advances

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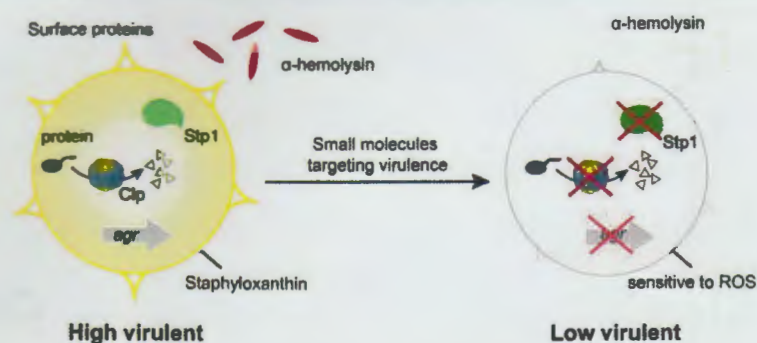
Recent Advances in Radical-Mediated C—C Bond Fragmentation of Non-Strained Molecules



The recent advances in radical-mediated C—C bond activation of non-strained molecules are summarized in this review. These transformations are mainly accomplished during the past three years, thus representing an emerging topic in organic chemistry. The alkoxy- and iminyl-radical triggered cleavage of non-strained C—C bonds and the C—C activation via the strategy of remote functional group migration are discussed in details.

Xinxin Wu, Chen Zhu*

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Chemical Intervention on *Staphylococcus aureus* Virulence

Virulence factors of *S. aureus* become a new approach to combat bacterial infections and circumvent the shortcomings of conventional antibiotics. In this review, we place emphasis on the chemical modulation of some major virulence factors in *S. aureus*.

Lin-Lin Zhou, Cai-Guang Yang*