

# Organic & Biomolecular Chemistry

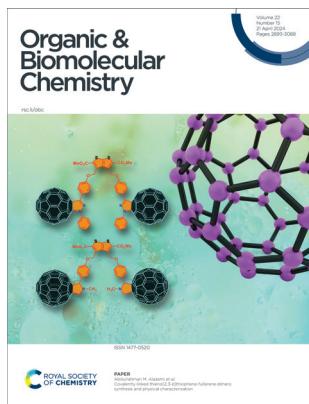
An international journal of synthetic, physical and biomolecular organic chemistry

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ISSN 1477-0520 CODEN OBCRAK 22(15) 2893–3088 (2024)



### Cover

See Abdulrahman M. Alazemi  
et al., pp. 2978–2984.

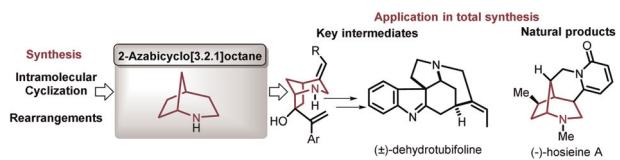
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Abdulrahman M. Alazemi  
from *Org. Biomol. Chem.*,  
2024, **22**, 2978.

## REVIEWS

2902

### 2-Azabicyclo[3.2.1]octane scaffold: synthesis and applications

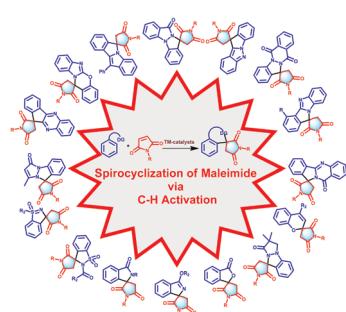
Mariana Crespo Monteiro, João Rafael Vale and  
Filipa Siopa\*



2916

### Recent advances in spirocyclization of maleimides via transition-metal catalyzed C–H activation

Swadhin Swaraj Acharya, Sagarika Patra,  
Rojalini Maharana, Manaswini Dash, Liza Mama Barad  
and Bibhuti Bhushan Parida\*



# Environmental Science: Atmospheres



GOLD  
OPEN  
ACCESS

## Connecting communities and inspiring new ideas

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Fundamental questions  
Elemental answers



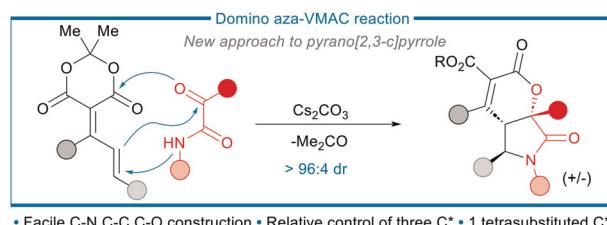
Registered charity number: 207890

## COMMUNICATIONS

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**Vinylogous and stereoselective domino synthesis of pyrano[2,3-*c*]pyrroles from alkylidene Meldrum's acids**

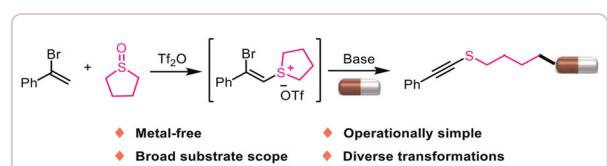
Mariia Savchuk, Giang Vo-Thanh, Sylvain Oudeyer, Hélène Beucher and Jean-François Brière\*



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**Synthesis of alkynyl sulfides via base-promoted nucleophilic ring-opening of  $\alpha$ -bromostyrene sulfonium salt**

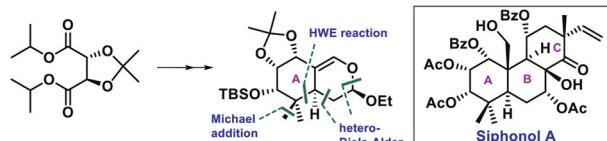
Junqi Zhou, Ziyu Wang, Hanmiao Xu, Mengke Su and Jian Wen\*



2958

**Asymmetric synthesis of the fully functionalized six-membered A-ring of siphonol A**

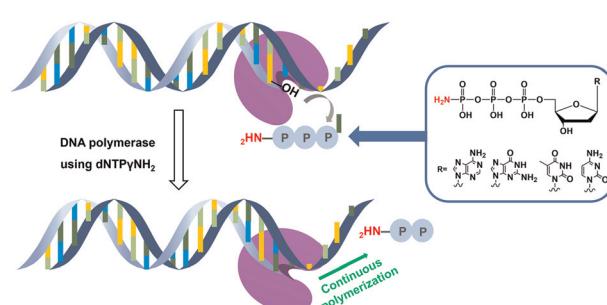
Ying Sun, Shaomin Fu\* and Bo Liu\*



2963

**A phosphamide nucleotide analog: a substrate for polymerase synthesis of DNA**

Jiong Meng, Qiaqia Guo, Xiaona Zhai, Song Yang, Shuai Wang, Pengcheng Wang and Debin Ji\*



## COMMUNICATIONS

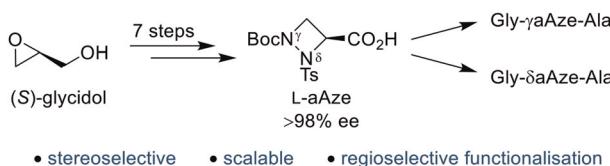
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### Photogenerated chlorine radicals activate C(sp<sup>3</sup>)–H bonds of alkylbenzenes to access quinazolinones

Xin-Yao Pan, Gui-Xia Sun, Fang-Ping Huang, Wen-Jian Qin, Qing-Hu Teng\* and Kai Wang\*

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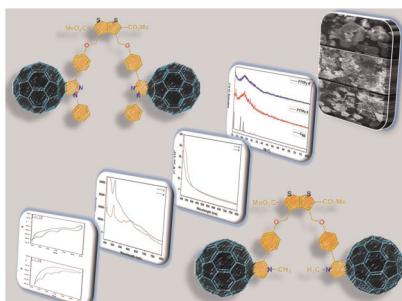


### Stereoselective synthesis of (*R*)- and (*S*)-1,2-diazetidine-3-carboxylic acid derivatives for peptidomimetics

Matthew Nutter, Henry Stone, Michael Shipman and Stefan Roesner\*

## PAPERS

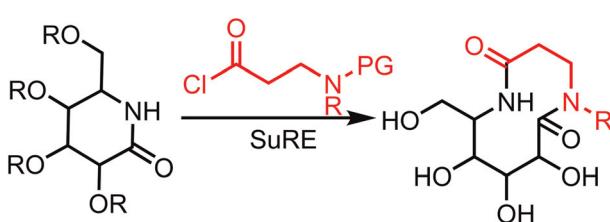
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### Covalently linked thieno[2,3-*b*]thiophene-fullerene dimers: synthesis and physical characterization

Abdulrahman M. Alazemi,\* Mohammad H. BinSabit, Hamad M. Al-Matar, Alan L. Balch and Mona A. Shalaby

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### Expanding the scope of the successive ring expansion strategy for macrocycle and medium-sized ring synthesis: unreactive and reactive lactams

Zhongzhen Yang, Marion Arnoux, Damien Hazelard, Owen R. Hughes, Joe Nabarro, Adrian C. Whitwood, Martin A. Fascione, Christopher D. Spicer, Philippe Compain\* and William P. Unsworth\*

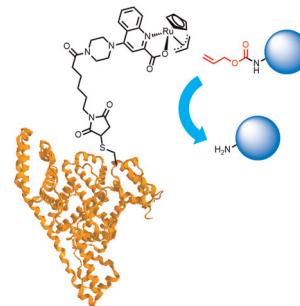


## PAPERS

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**Albumin–ruthenium catalyst conjugate for bio-orthogonal uncaging of alloc group**

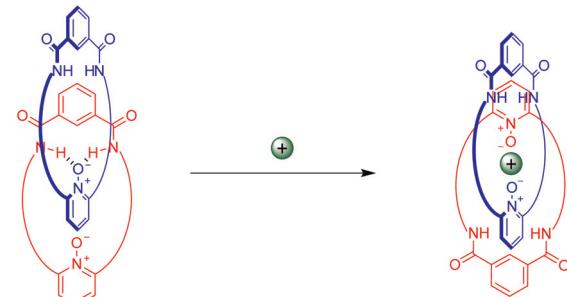
Kimberly S. Taylor, Madison M. McMonagle,  
Schaelee C. Guy, Ariana M. Human-McKinnon,  
Shumpei Asamizu, Heidi J. Fletcher, Bradley W. Davis  
and Takashi L. Suyama\*



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**A pyridine-*N*-oxide catenane for cation recognition**

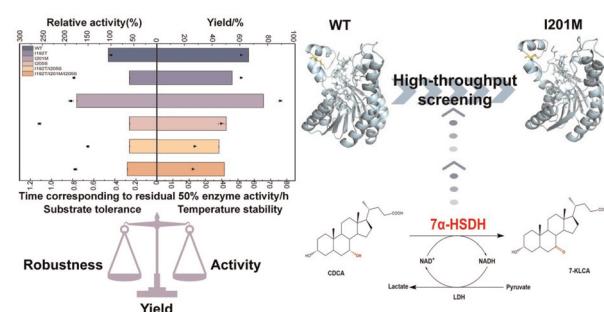
Sean R. Barlow, Nathan R. Halcovitch and  
Nicholas H. Evans\*



3009

**Not exclusively the activity, but the sweet spot: a dehydrogenase point mutation synergistically boosts activity, substrate tolerance, thermal stability and yield**

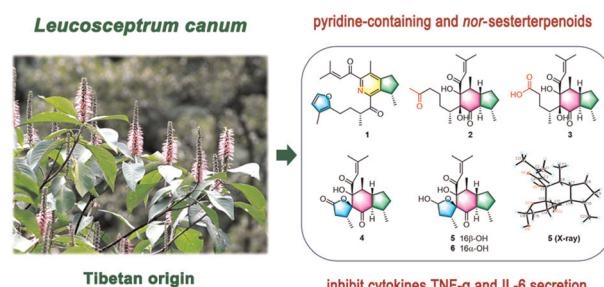
Yu-Ke Cen, Lin Zhang, Yue Jiang, Xiang-Fu Meng,  
Yuan Li, Chao Xiang, Ya-Ping Xue\* and Yu-Guo Zheng



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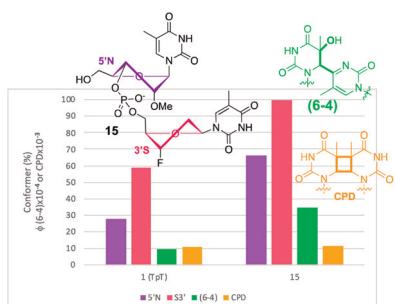
**Unusual immunosuppressive pyridine-containing bisnor- ( $c_{23}$ ), tetranor- ( $c_{21}$ ) and pentanor- ( $c_{20}$ ) sesterterpenoids from Tibetan *Leucosceptrum canum***

Man Li, Ling Feng, Han Zhang, Yan-Chun Liu,  
Ting-Ting Zhou, Yu Zheng, Kai Guo,\* Yan Liu and  
Sheng-Hong Li\*



## PAPERS

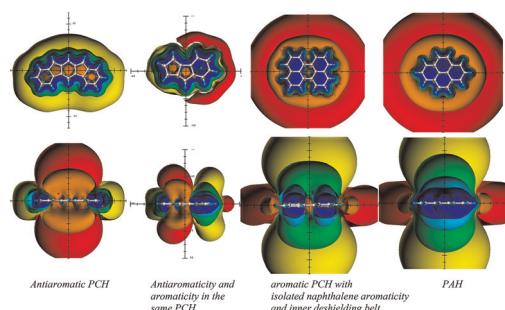
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### Selective enhancement of (6–4) photoproduct formation in dithymine dinucleotides driven by specific sugar puckering

Jouda Jakhlal, Clément Denhez, Stéphanie Coantic-Castex, Agathe Martinez, Dominique Harakat, Thierry Douki, Dominique Guillaume and Pascale Clivio\*

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### Identification and quantification of local antiaromaticity in polycyclic aromatic hydrocarbons (PAHs) based on the magnetic criterion

Erich Kleinpeter\* and Andreas Koch

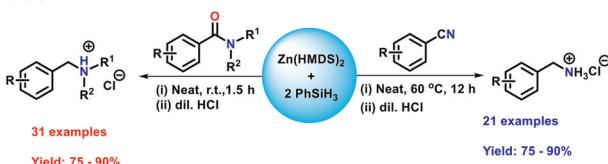
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### Direct access to pyrrole anhydrides via oxidative self-coupling of pyrrole carboxaldehydes

Surabhi Panday, Tapas Maity, Pratibha Bhatti and Joydev K. Laha\*

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### Hydrosilylation of nitriles and tertiary amides using a zinc precursor

Ravi Kumar, Rohan Kumar Meher, Himadri Karmakar and Tarun K. Panda\*

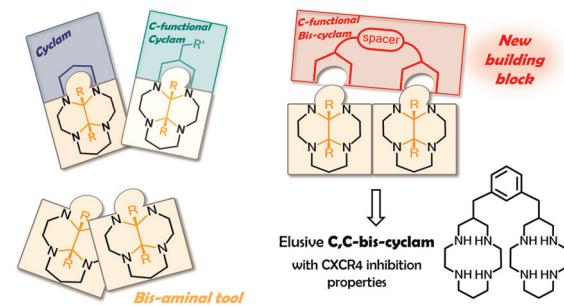


## PAPERS

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**Selective synthesis of an elusive C-functional bis-cyclam and study of its inhibition of the CXCR4 chemokine receptor**

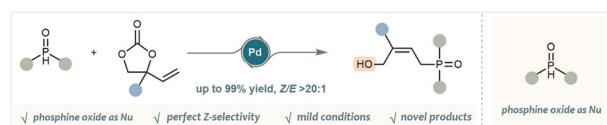
Marie M. Le Roy, Sandra Claes,  
Nathalie Saffon-Merceron, Dominique Schols,\*  
Thibault Troadec\* and Raphaël Tripier



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**Palladium-catalyzed (*Z*)-selective allylation of phosphine oxides with vinylethylene carbonates to construct phosphorus allyl alcohols**

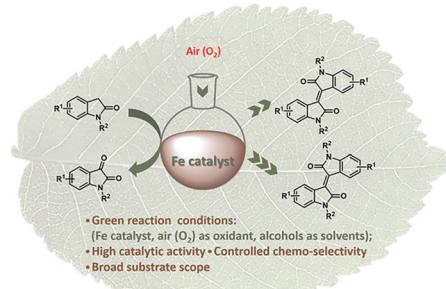
Hua Huang, Yi-Qi Wu, Lu-Yao Han, Lu Jiang,  
Zhuo-Zhuo Zhang, Xiang Zhang, Bo Han, Wei Huang\*  
and Jun-Long Li\*



3073

**Iron-catalyzed selective construction of indole derivatives via oxidative C(sp<sup>3</sup>)–H functionalization of indolin-2-ones**

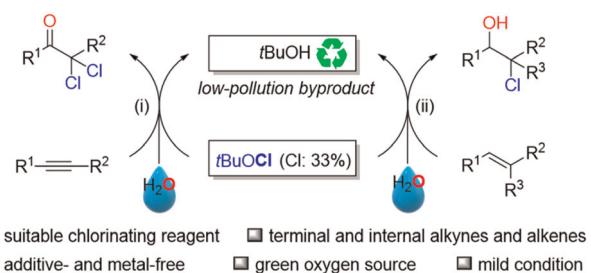
Wei Chen, Lang-Qi Wen, Xiao-Bing Lu and Hui Zhou\*



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**Additive-free oxychlorination of unsaturated C–C bonds with *tert*-butyl hypochlorite and water**

Duyi Shen,\* Chaoyue Sun, Yun Han, Zhen Luo,  
Ting Ren, Qin Zhang, Wenting Huang, Jianru Xie,  
Ying Jia and Mianran Chao\*



- suitable chlorinating reagent
- terminal and internal alkynes and alkenes
- additive- and metal-free
- green oxygen source
- mild condition

