

# Organic & Biomolecular Chemistry

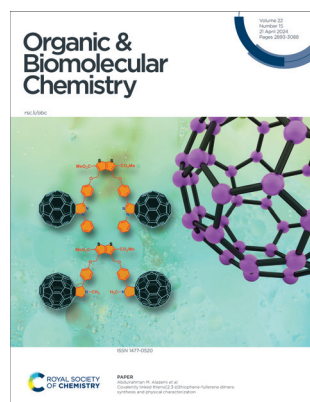
An international journal of synthetic, physical and biomolecular organic chemistry

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### Cover

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

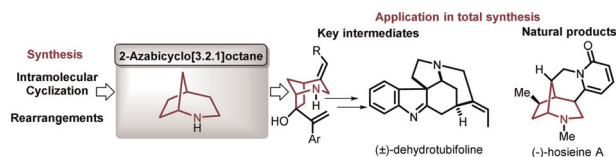
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Abdulrahman M. Alazemi  
from *Org. Biomol. Chem.*,  
2024, **22**, 2978.

## REVIEWS

2902

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

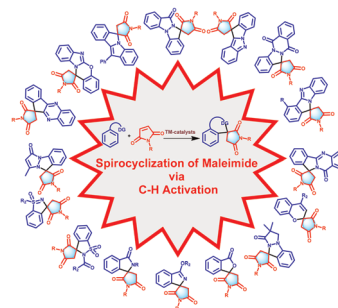
Mariana Crespo Monteiro, João Rafael Vale and  
Filipa Siopa\*



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### 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 Bhusan Parida\*



# Environmental Science: Atmospheres

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Fundamental questions  
Elemental answers



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

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



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



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

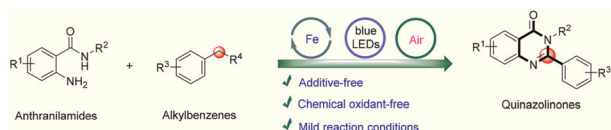


Jiong Meng, Qiaqia Guo, Xiaona Zhai, Song Yang,  
Shuai Wang, Pengcheng Wang and Debin Ji\*



## COMMUNICATIONS

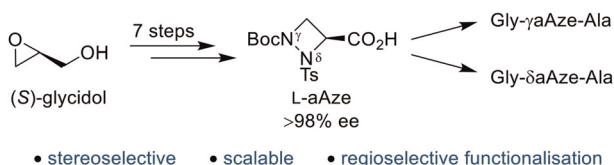
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### Photogenerated chlorine radicals activate C(sp<sup>3</sup>)–H bonds of alkylbenzenes to access quinazolinones

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

2974

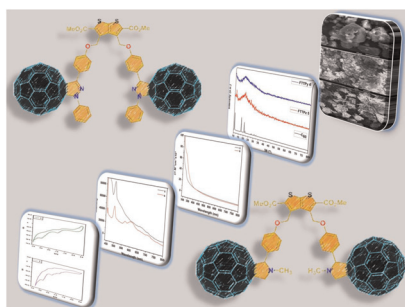


### Stereoselective synthesis of (*R*)- and (*S*)-1,2-diazetidine-3-carboxylic acid derivatives for peptidomimetics

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

## PAPERS

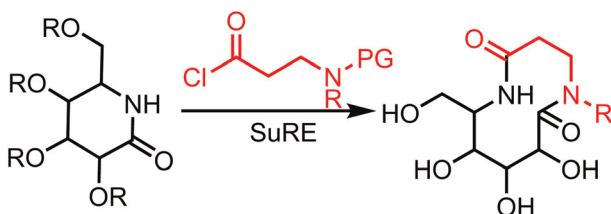
2978



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

Abdulrahman M. Alazemi,\* Mohammad H. BinSabt, 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\*

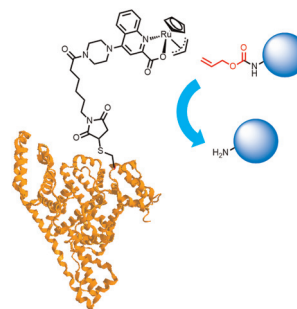


## PAPERS

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

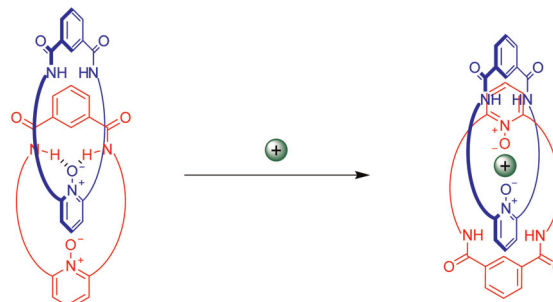
Kimberly S. Taylor, Madison M. McMonagle, Schaelee C. Guy, Ariana M. Human-McKinnon, Shumpei Asamizu, Heidi J. Fletcher, Bradley W. Davis and Takashi L. Suyama\*



3001

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

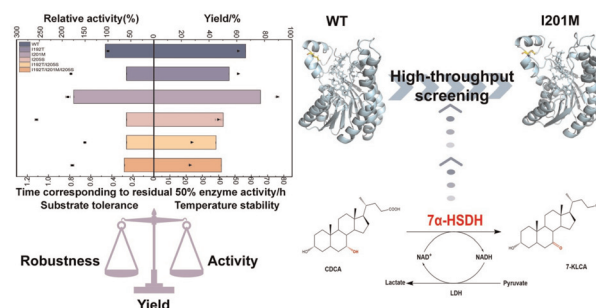
Sean R. Barlow, Nathan R. Halcovitch and Nicholas H. Evans\*



3009

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

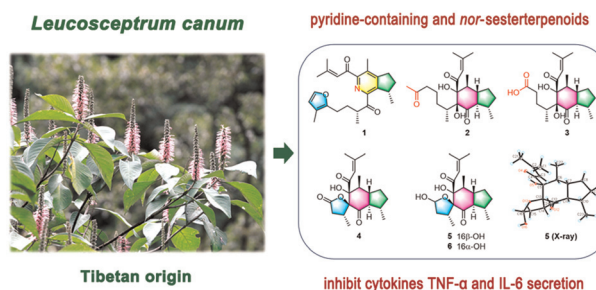
Yu-Ke Cen, Lin Zhang, Yue Jiang, Xiang-Fu Meng, Yuan Li, Chao Xiang, Ya-Ping Xue\* and Yu-Guo Zheng



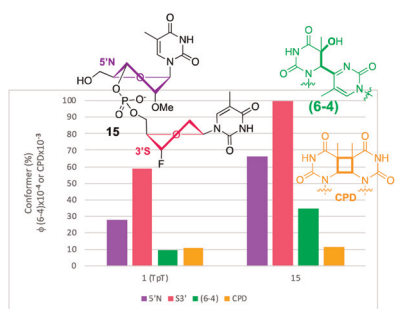
3019

### Unusual immunosuppressive pyridine-containing bisnor- (*c*<sub>23</sub>), tetranor- (*c*<sub>21</sub>) and pentanor- (*c*<sub>20</sub>) 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\*



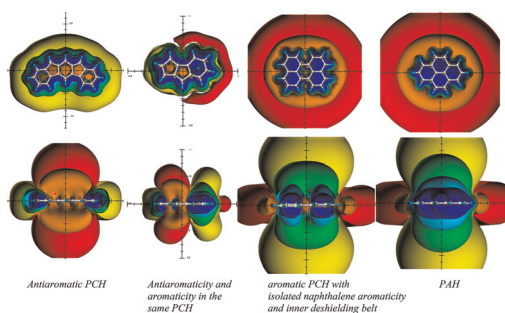
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### Selective enhancement of (6–4) photoproduct formation in dithymine dinucleotides driven by specific sugar puckering

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

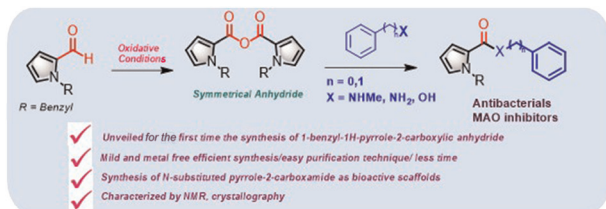
3035



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

Erich Kleinpeter\* and Andreas Koch

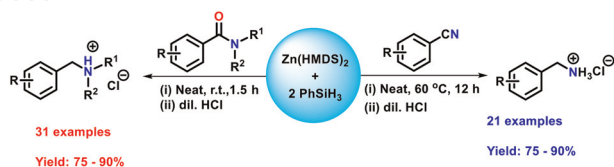
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### Direct access to pyrrole anhydrides via oxidative self-coupling of pyrrole carboxaldehydes

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\*

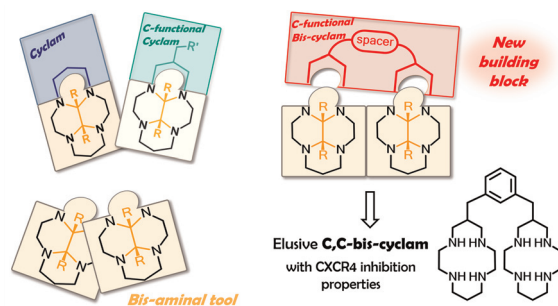


## PAPERS

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

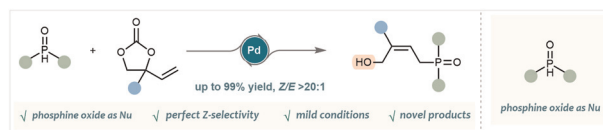
Marie M. Le Roy, Sandra Claes, Nathalie Saffon-Merceron, Dominique Schols,\* Thibault Troadec\* and Raphaël Tripiier



3068

### Palladium-catalyzed (Z)-selective allylation of phosphine oxides with vinyl ethylene carbonates to construct phosphorus allyl alcohols

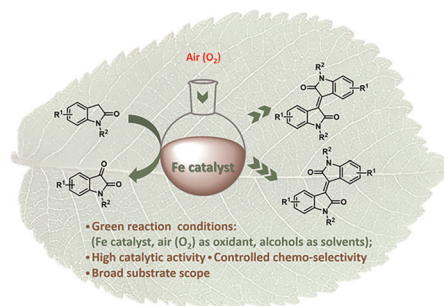
Hua Huang, Yi-Qi Wu, Lu-Yao Han, Lu Jiang, Zhuo-Zhuo Zhang, Xiang Zhang, Bo Han, Wei Huang\* and Jun-Long Li\*



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### 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\*

