

Organic & Biomolecular Chemistry

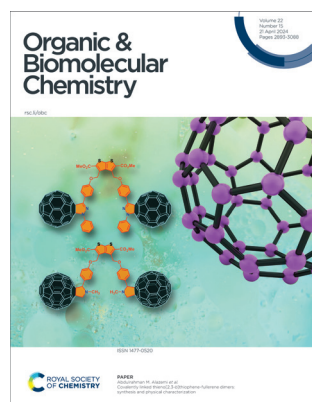
An international journal of synthetic, physical and biomolecular organic chemistry

rsc.li/obc

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

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



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

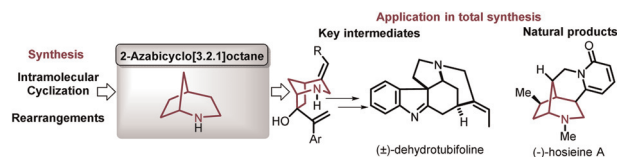
Image reproduced by
permission of
Abdulrahman M. Alazemi
from *Org. Biomol. Chem.*,
2024, **22**, 2978.

REVIEWS

2902

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

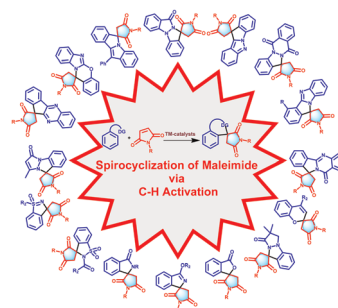
Mariana Crespo Monteiro, João Rafael Vale and Filipa Siopa*



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 Bhusan Parida*



Environmental Science: Atmospheres

GOLD
OPEN
ACCESS

Connecting communities
and inspiring new ideas

rsc.li/submittoEA

Fundamental questions
Elemental answers

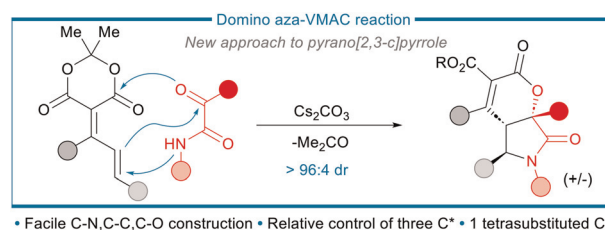


COMMUNICATIONS

2948

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

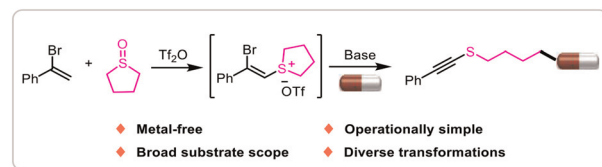
Mariia Savchuk, Giang Vo-Thanh, Sylvain Oudeyer, H el ene Beucher and Jean-Fran ois Bri ere*



2953

Synthesis of alkynyl sulfides *via* base-promoted nucleophilic ring-opening of α -bromostyrene sulfonium salt

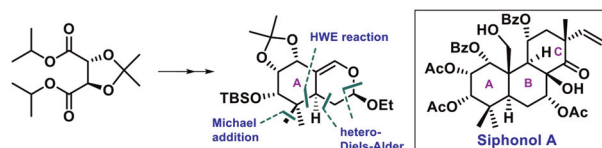
Junqi Zhou, Ziyu Wang, Hanmiao Xu, Mengke Su and Jian Wen*



2958

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

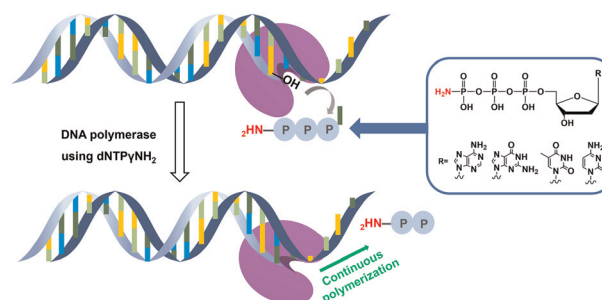
Ying Sun, Shaomin Fu* and Bo Liu*



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

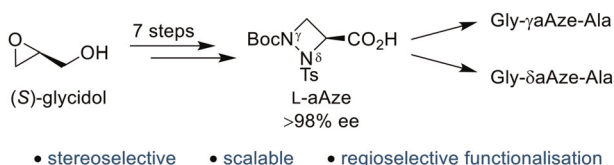
2968



Photogenerated chlorine radicals activate C(sp³)–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

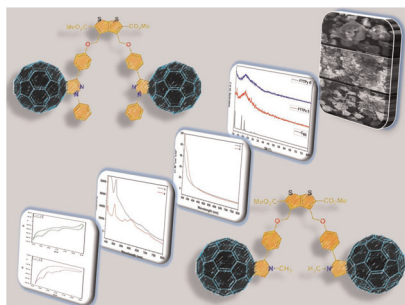


Stereoselective synthesis of (*R*)- and (*S*)-1,2-diazetidene-3-carboxylic acid derivatives for peptidomimetics

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

PAPERS

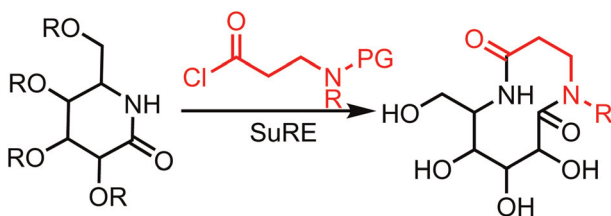
2978



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

2985



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*

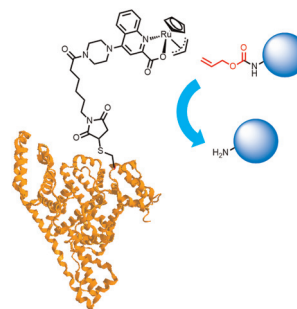


PAPERS

2992

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

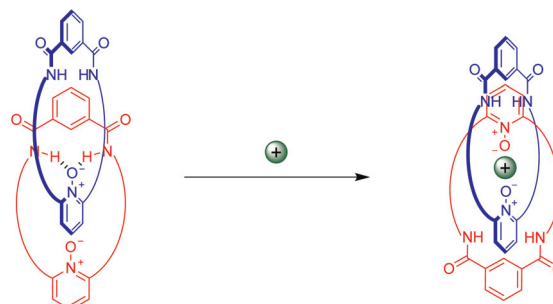
Kimberly S. Taylor, Madison M. McMonagle, Schaelee C. Guy, Ariana M. Human-McKinnon, Shumpei Asamizu, Heidi J. Fletcher, Bradley W. Davis and Takashi L. Suyama*



3001

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

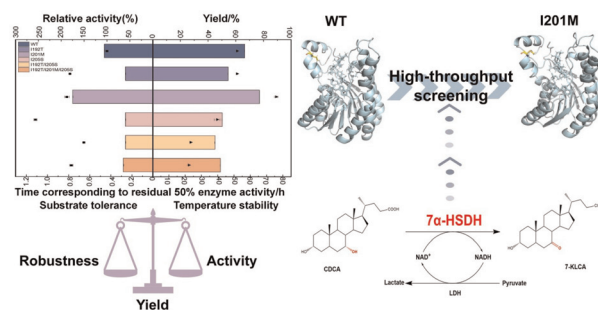
Sean R. Barlow, Nathan R. Halcovitch and Nicholas H. Evans*



3009

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

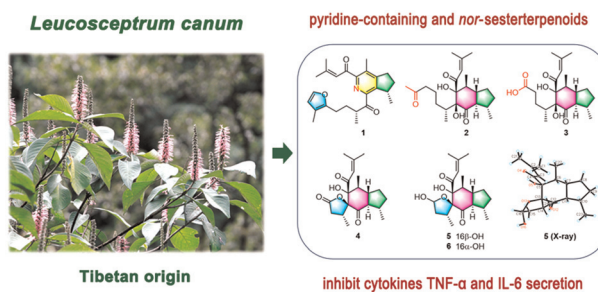
Yu-Ke Cen, Lin Zhang, Yue Jiang, Xiang-Fu Meng, Yuan Li, Chao Xiang, Ya-Ping Xue* and Yu-Guo Zheng



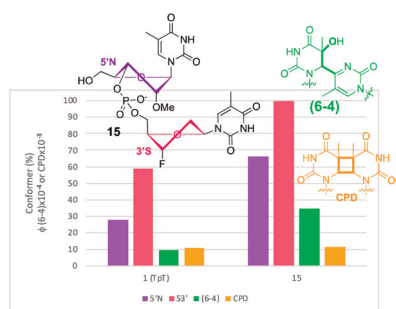
3019

Unusual immunosuppressive pyridine-containing bisnor- (C_{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*



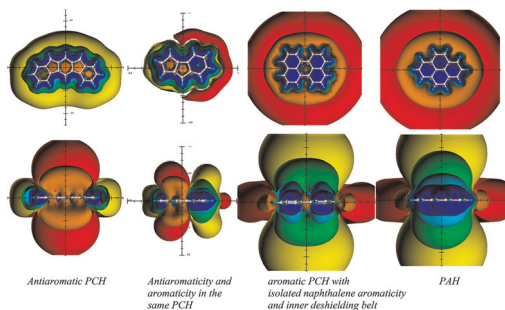
3025



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*

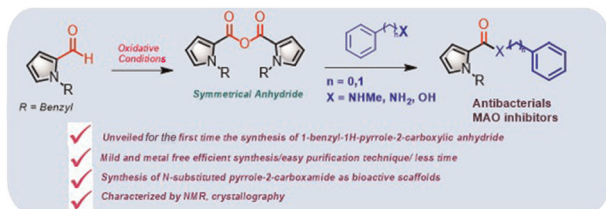
3035



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

Erich Kleinpeter* and Andreas Koch

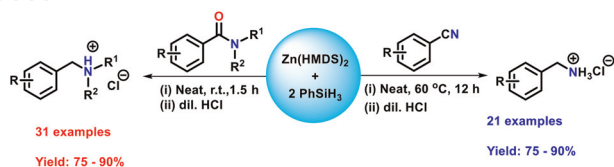
3045



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

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

3053



Hydrosilylation of nitriles and tertiary amides using a zinc precursor

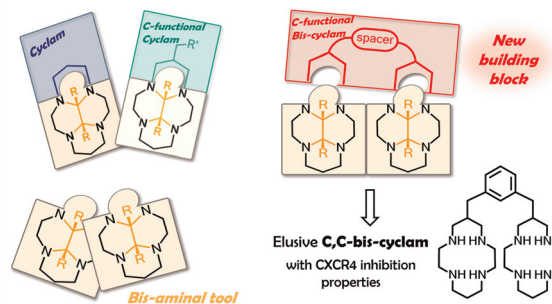
Ravi Kumar, Rohan Kumar Meher, Himadri Karmakar and Tarun K. Panda*



3059

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

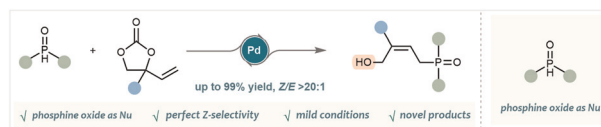
Marie M. Le Roy, Sandra Claes,
Nathalie Saffon-Merceron, Dominique Schols,*
Thibault Troadec* and Raphaël Tripiier



3068

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

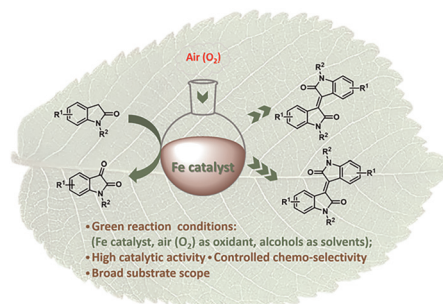
Hua Huang, Yi-Qi Wu, Lu-Yao Han, Lu Jiang,
Zhuo-Zhuo Zhang, Xiang Zhang, Bo Han, Wei Huang*
and Jun-Long Li*



3073

Iron-catalyzed selective construction of indole derivatives via oxidative C(sp³)-H functionalization of indolin-2-ones

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



3080

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*

