

Organic & Biomolecular Chemistry

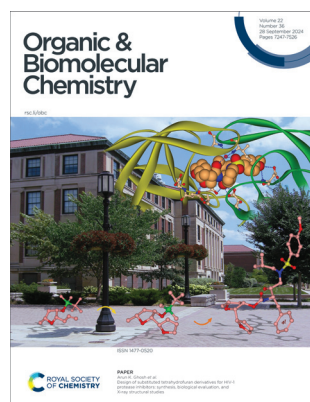
An international journal of synthetic, physical and biomolecular organic chemistry

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Cover

See Arun K. Ghosh et al.,
pp. 7354–7372.

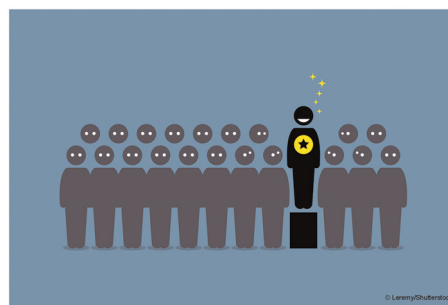
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Org. Biomol. Chem.,
2024, **22**, 7354.

EDITORIAL

7258

Outstanding Reviewers for *Organic & Biomolecular Chemistry* in 2023

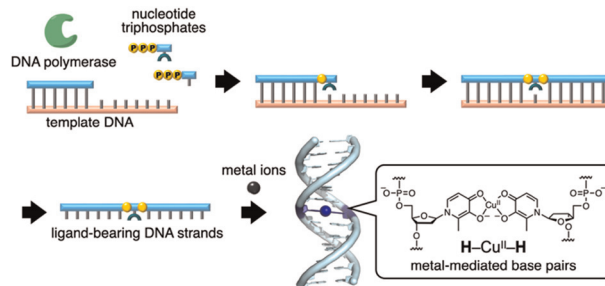


REVIEWS

7259

Enzymatic synthesis of ligand-bearing oligonucleotides for the development of metal-responsive DNA materials

Yusuke Takezawa* and Mitsuhiro Shionoya*



ChemComm

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with outstanding
preliminary research**

**Original discoveries, fuelling
every step of scientific progress**

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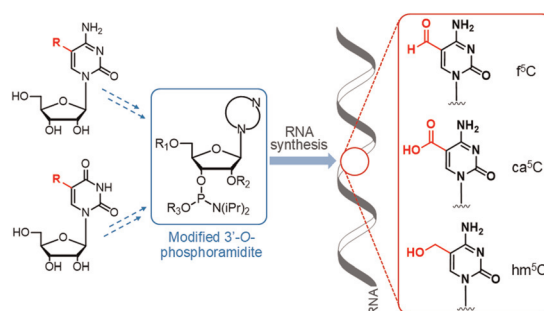
**Fundamental questions
Elemental answers**

REVIEWS

7271

Chemistry of installing epitranscriptomic 5-modified cytidines in RNA oligomers

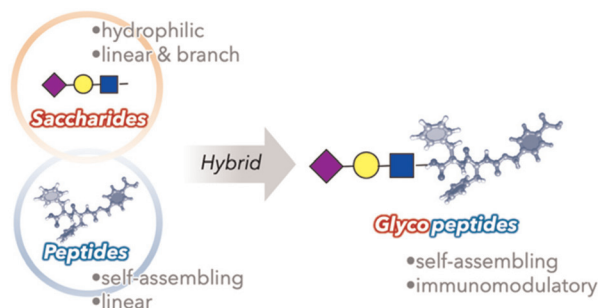
Anna Kuszczynska, Milena Bors, Karolina Podkoczyj and Grazyna Leszczynska*



7287

Supramolecular materials constructed from synthetic glycopeptides *via* aqueous self-assembly and their bioapplications in immunotherapy

Shintaro Sugiura and Masato Ikeda*

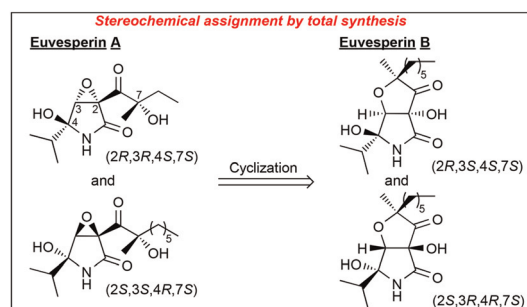


COMMUNICATIONS

7307

Toward the stereochemical assignment of euvesperins A and B: total synthesis of the possible structures of the natural products

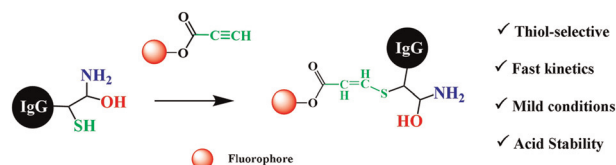
Kenichi Kobayashi,* Yusuke Honma, Kosaku Tanaka, III,* Momoko Suzuki, Kazuhiko Takatori and Hiroshi Kogen



7311

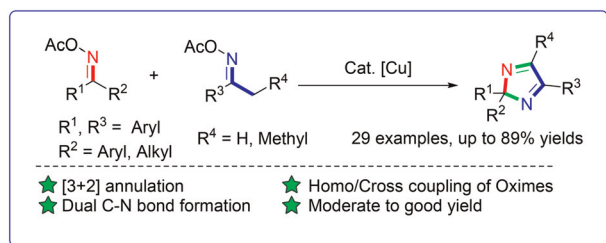
A thiol-selective and acid-stable protein modification strategy using an electron-deficient yne reagent

Zhi-liang Chen, Wen Chen, Fenglin Wang,* Jian-Hui Jiang and Wan-Rong Dong*



COMMUNICATIONS

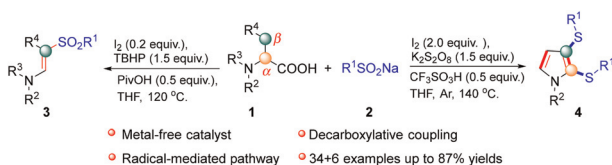
7316



Synthesis of 2*H*-imidazoles via copper-catalyzed homo/cross-coupling of oxime acetates

Min Liu, Bifu Liu,* Hongyan Chen, Qian Wang, Lixin Liu, Kejun Feng, Zijia Wang and Qiang Li

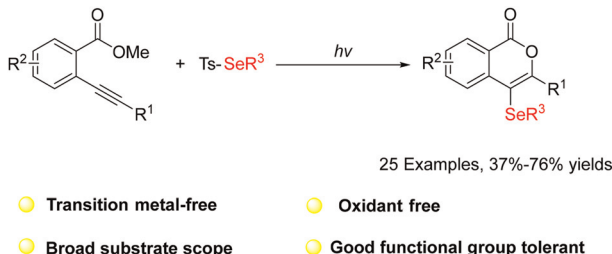
7321



Iodine-mediated decarboxylative coupling to synthesize β -sulfonyl-ene-amines/2,3-diarythio-pyrroles from α -amino acids and sodium sulfinates

Xiaodong Yang,* Feng Yang and Xiaoya Zhang

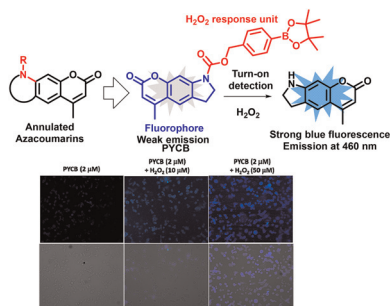
7327



Visible-light-promoted selenylation/cyclization of *o*-(1-alkynyl) benzoates to access seleno-substituted isocoumarins

Mei-Lin Ren, Xi-Rui Gong, Yan-Yan Chen* and Yan-Li Xu*

7332



Azacoumarin-based "turn-on" fluorescent probe for the detection and imaging of hydrogen peroxide in living cells

Samarpita Das, Aiswarya Chaudhuri, Harish K. Indurthi, Ashish K. Agrawal and Deepak K. Sharma*

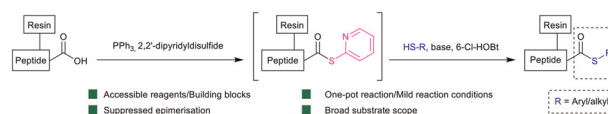


COMMUNICATIONS

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Leveraging the Mukaiyama oxidation–reduction condensation reaction for on-resin aryl thio-esterification for bio-conjugation

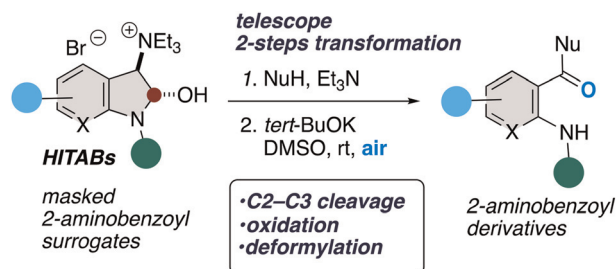
Andrew Siow and Paul W. R. Harris*



7343

Indoline hemiaminals: a platform for accessing anthranilic acid derivatives through oxidative deformylation

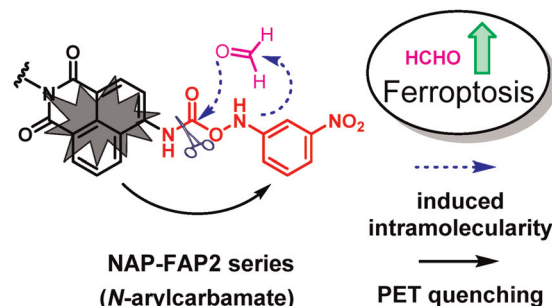
Keisuke Tokushige, Yuito Kobori, Shota Asai and Takumi Abe*



7349

Fluorescent probes for formaldehyde based on formaldehyde-promoted C–N cleavage of azanyl carbamates

Wanjin Xing, Yang Li, Yulin Que, Huan Xu,* Wei Wang* and Kaiyan Lou*

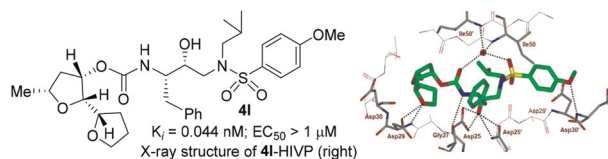


PAPERS

7354

Design of substituted tetrahydrofuran derivatives for HIV-1 protease inhibitors: synthesis, biological evaluation, and X-ray structural studies

Arun K. Ghosh,* Daniel Lee, Ashish Sharma, Megan E. Johnson, Ajay K. Ghosh, Yuan-Fang Wang, Johnson Agniswamy, Masayuki Amano, Shin-ichiro Hattori, Irene T. Weber and Hiroaki Mitsuya

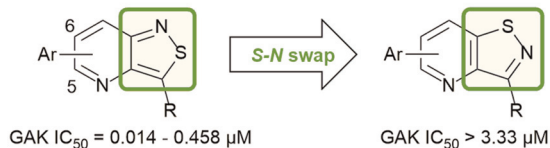


PAPERS

7373

Previous research
isothiazolo[4,3-*b*]pyridine

Current work
isothiazolo[4,5-*b*]pyridines

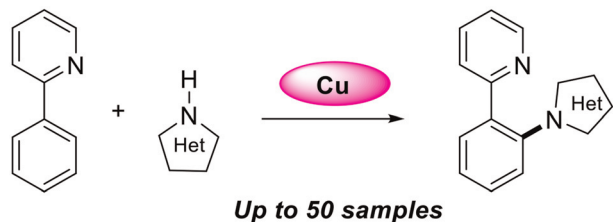


- Underexplored scaffold
- Easy procedure
- Late-stage functionalization
- Biological inactivity explained

Synthesis and evaluation of isothiazolo[4,5-*b*]pyridines as cyclin G-associated kinase (GAK) inhibitors

Yulia Ivanova, Sander Spittaels, Ling-Jie Gao, Dominique Schols, Luc Van Meervelt, Mathy Froeyen, Wim Dehaen and Steven De Jonghe*

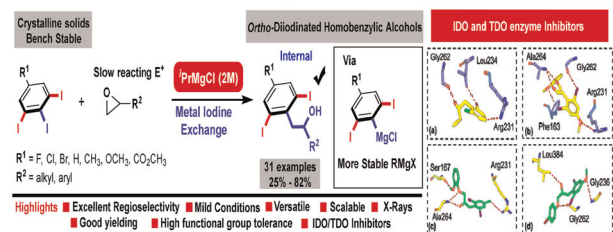
7390



Copper-promoted *ortho*-directed C–H amination of 2-arylpyridines with NH-heterocycles

Yang-Hao Zeng and Lin Dong*

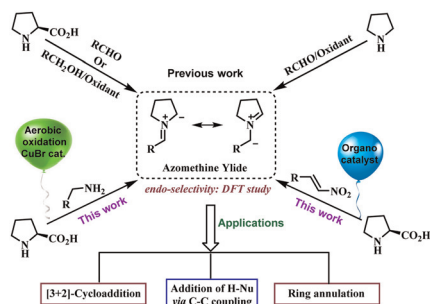
7395



Efficient and regioselective synthesis of *ortho*-diiodinated homobenzylic alcohol derivatives: *in silico* evaluation as potential anticancer IDO/TDO inhibitors

Raed M. Al-Zoubi,* Walid K. Al-Jammal, Mohanad Shkoor,* Abdulilah D. Bani-Yaseen, Abbas Khan, Abdelali Agouni and Robert McDonald

7411



New routes towards azomethine ylide generation from prolines to synthesize diverse *N*-heterocycles: a DFT supported *endo*-selective mechanism

Radha M. Laha, Shobhon Aich, Ankan Kumar Sarkar, Tanmoy Dutta, Narendra Nath Ghosh, Saikat Khamarui* and Dilip K. Maiti*

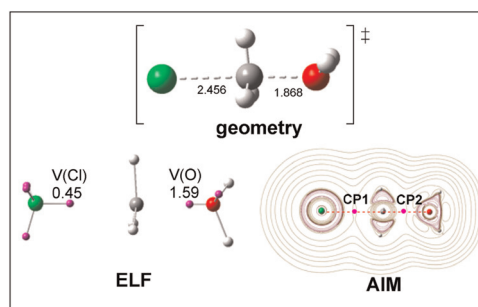


PAPERS

7425

A molecular electron density theory study of the bimolecular nucleophilic substitution reactions on monosubstituted methyl compounds

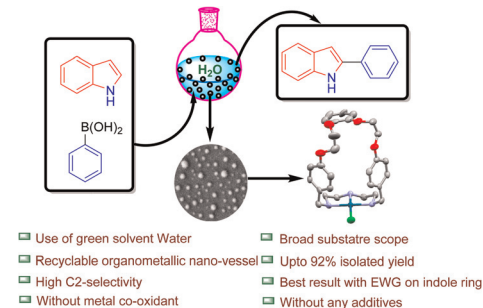
Luis R. Domingo,* Patricia Pérez, Mar Ríos-Gutiérrez and M. José Aurell



7438

A macrocycle-based new organometallic nano-vessel towards sustainable C2-selective arylation of free indole in water

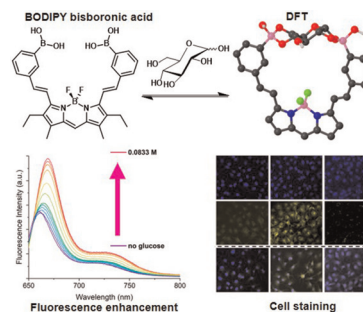
Subham Mandal, Piyali Sarkar and Pradyut Ghosh*



7448

BODIPYs α -appended with distyryl-linked aryl bisboronic acids: single-step cell staining and turn-on fluorescence binding with D-glucose

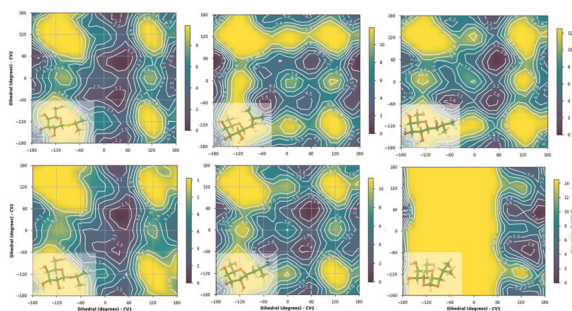
Adil Alkaş, Joshua M. Kofsky, Em C. Sullivan, Daisy Nebel, Katherine N. Robertson, Chantelle J. Capicciotti, David L. Jakeman, Erin R. Johnson and Alison Thompson*

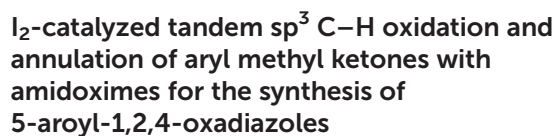


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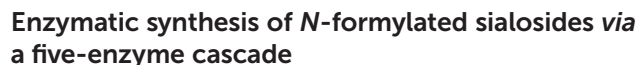
Synthesis of C-glycoside analogues of isopropyl β -D-1-thiogalactopyranoside (IPTG) and 1- β -D-galactopyranosyl-2-methylpropane. Conformational analysis and evaluation as inhibitors of the lac repressor in *E. coli* and as galactosidase inhibitors

Eoin Hever, Venkatesan Santhanam, Sherivan Alberi, Ashis Dhara, Mikael Bols, Heinz-Peter Nasheuer and Paul V. Murphy*





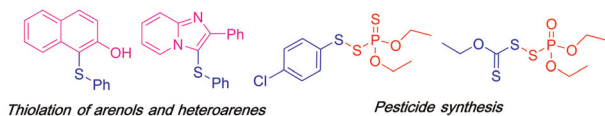
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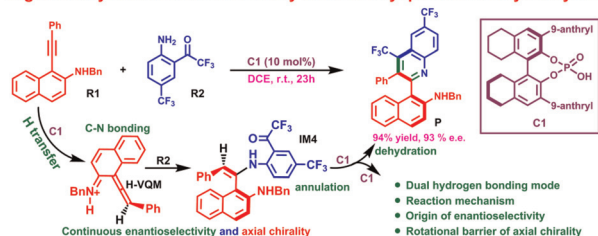


Selected Application



7500

Organocatalytic construction of axially chiral C2-arylquinoline catalyzed by CPA



Mechanism and origin of enantioselectivity for organocatalyzed asymmetric heteroannulation of alkynes in the construction of axially chiral C2-arylquinoline

Ge Gao, Peng-Yu Liang, Nengzhi Jin, Zi-Bo Zhao,
Xiao-Cheng Tian, Dong Xie, Chi-Zhou Tu,
Hai-Rong Zhang, Pan-Pan Zhou* and Zhaoyong Yang*

7518

NaIO₄/air-initiated phosphorylation of alcohols with H-phosphine oxides for the construction of P(O)–O bonds in water

Huabin Wang, Lianhua Xu, Xiongwei Liu, Yang Shi, Zhen Yao, Ying Zhou* and Qiang Huang*

