



Tetrahedron Vol. 65, No. 7, 2009

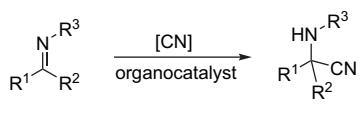
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REPORT

Organocatalyzed Strecker reactions

Pedro Merino*, Eugenia Marqués-López, Tomás Tejero, Raquel P. Herrera*

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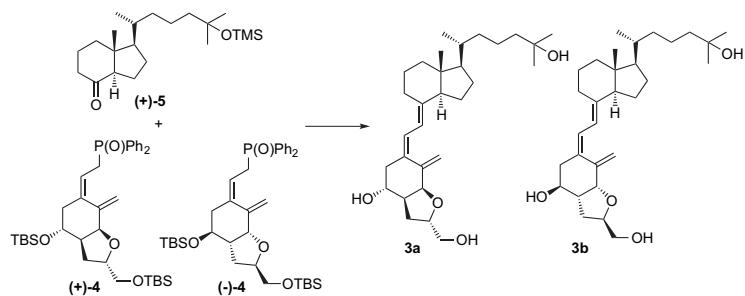
 $\text{R}^1, \text{R}^2, \text{R}^3$: alkyl, aryl, hetaryl

ARTICLES

New A-ring analogs of the hormone $1\alpha,25$ -dihydroxyvitamin D₃: (2'-hydroxymethyl)tetrahydrofuro-[1,2-*a*]-25-hydroxyvitamin D₃

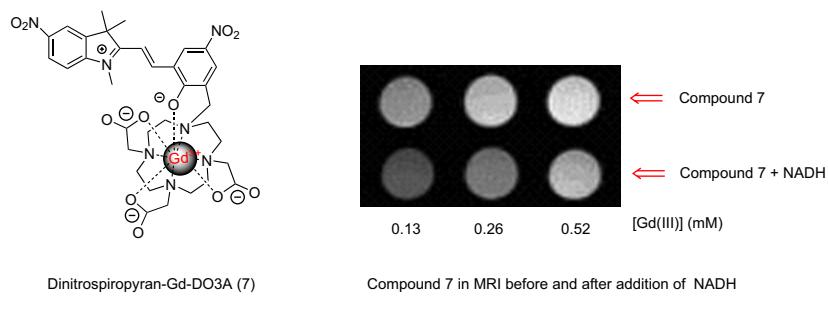
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Synthesis and characterization of a redox- and light-sensitive MRI contrast agent
Chuqiao Tu, Elizabeth A. Osborne, Angelique Y. Louie*

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Synthesis and optical properties of triphenylene-based conjugated dendrons

Mahuya Bagui, Joseph S. Melinger, Sanjiban Chakraborty, J. Andrew Keightley, Zhonghua Peng*

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The figure displays the absorption (black line) and emission (red line) spectra of a triphenylene-based conjugated dendron. The absorption peak is at approximately 320 nm, and the emission peak is at approximately 450 nm. To the right is the chemical structure of the dendron, which consists of a central triphenylene core with multiple ether-linked phenyl groups substituted with methoxy (OC₂H₅) and hydroxyl (OH) groups.

Synthesis, redox properties, and conformational analysis of vicinal disulfide ring mimics

Erik L. Ruggles, P. Bruce Deker, Robert J. Hondal*

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The reaction scheme shows the reversible reduction of a vicinal disulfide ring mimic. On the left is the oxidized form, VDR_{Ox}, which contains a vicinal disulfide ring (S-S) and two thioether groups (R'N-H and R³-C(=O)-CH₂-SR). It reacts with BDT_{red} (cyclic bis(2-mercaptoethyl) sulfide) under equilibrium conditions (K_{eq}) to form the reduced form, VDR_{red}, where the vicinal disulfide ring is reduced to a thioether (S-S) and the thioether groups are reduced to thiol groups (HS-).

Microwave-assisted zinc chloride-catalyzed synthesis of substituted pyrroles from homopropargyl azides

Przemysław Wyrębek, Adam Sniady, Nicholas Bewick, Yan Li, Agnieszka Mikus, Kraig A. Wheeler, Roman Dembinski*

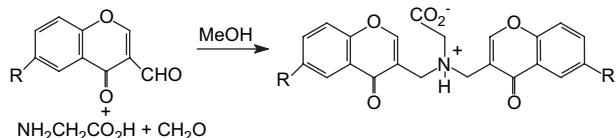
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The reaction scheme shows the microwave-assisted zinc chloride-catalyzed synthesis of substituted pyrroles. A homopropargyl azide (R-CH=CH-C≡N-N₃) reacts with ZnCl₂ in CH₂Cl₂ under microwave (μW) or heat (Δ) conditions to form a substituted pyrrole (R-CH=CH-C≡N-R''). The yield is 41–91% for 8 examples. The reaction conditions are indicated by a blue box around ZnCl₂.

Synthesis of bischromones by deformylative Mannich type reaction on chromone-3-carbaldehyde using α -aminoacid as the source of amine

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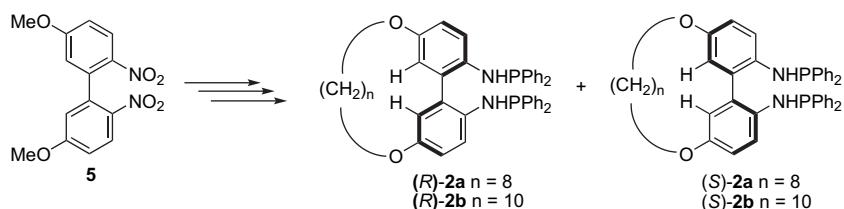
Suman Kalyan Panja, Sourav Maiti, Michael G.B. Drew, Chandrakanta Bandyopadhyay*



Synthesis of atropisomeric 5,5'-linked biphenyl bisaminophosphine ligands and their applications in asymmetric catalysis

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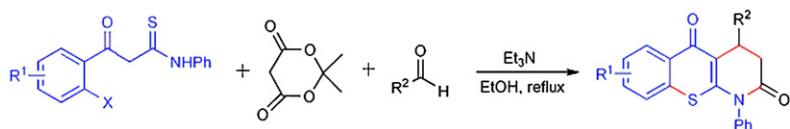
Yong Jian Zhang, Hao Wei, Wanbin Zhang*



Application of *ortho*-chloro- β -arylothioamides in synthesis(II): an efficient one-pot, three-component synthesis of tricyclic thiochromeno[2,3-*b*]pyridine derivatives

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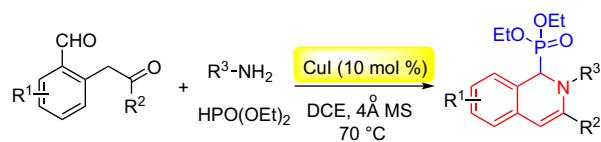
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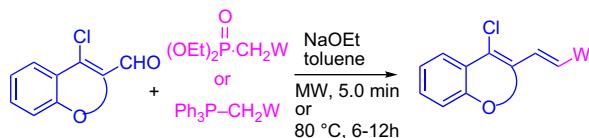
Shengqing Ye, Haibo Zhou, Jie Wu*



Microwave-accelerated Wittig olefination of β -chloroacroleins

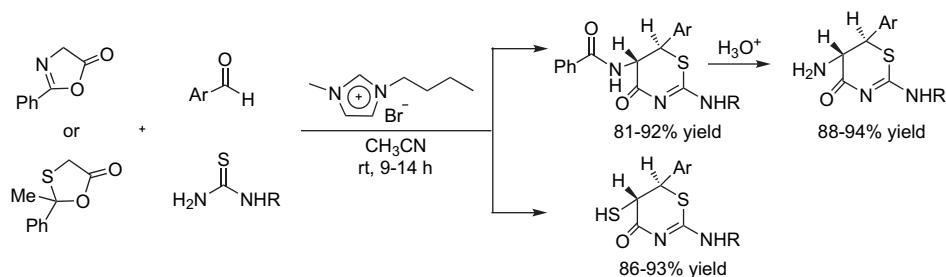
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**The first ionic liquid-promoted one-pot diastereoselective synthesis of 2,5-diamino-/2-amino-5-mercaptop-1,3-thiazin-4-ones using masked amino/mercapto acids**

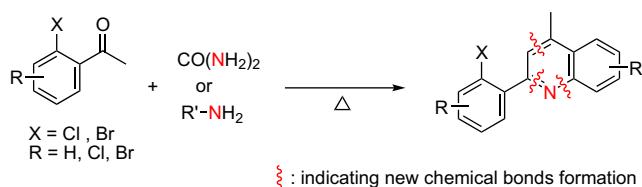
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**A domino three-component condensation of ortho-haloacetophenones with urea or amines: a novel one-pot synthesis of halogen-substituted quinolines**

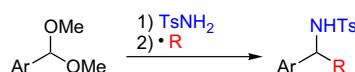
Chuanmei Qi, Qingwei Zheng, Ruimao Hua*

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**Carbon radical addition to N-sulfonylimines mediated by triethylborane or zinc**

Masafumi Ueda, Hideto Miyabe, Okiko Miyata, Takeaki Naito*

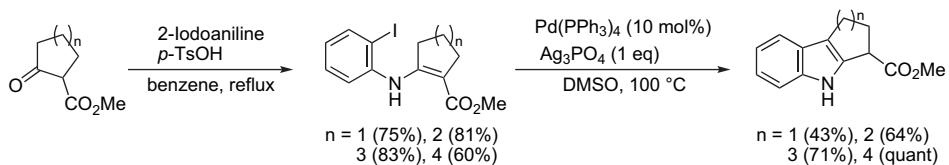
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Novel synthesis of fused indoles and 2-substituted indoles by the palladium-catalyzed cyclization of *N*-cycloalkenyl-*o*-haloanilines

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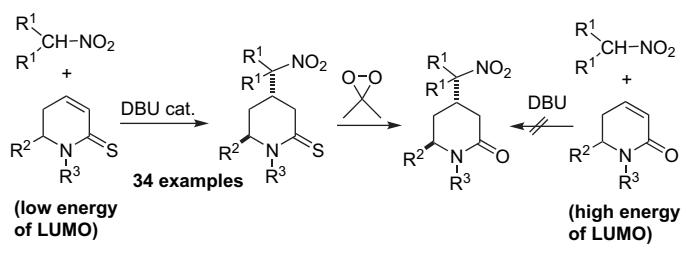
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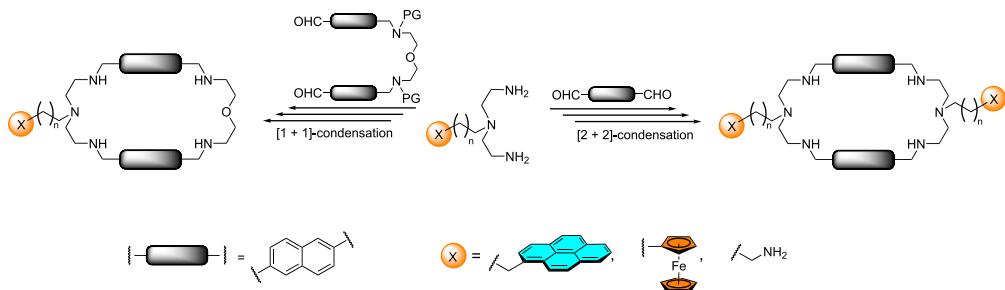
Jacek G. Sośnicki*



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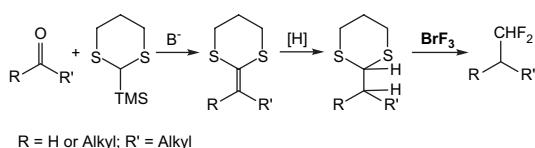
Anton Granzhan, Marie-Paule Teulade-Fichou*



Replacing the carbonyl's oxygen with the difluoromethyl group

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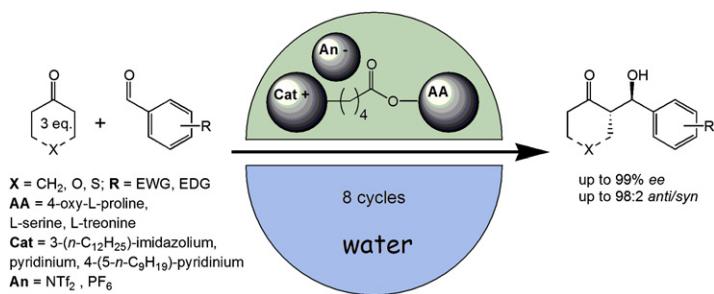
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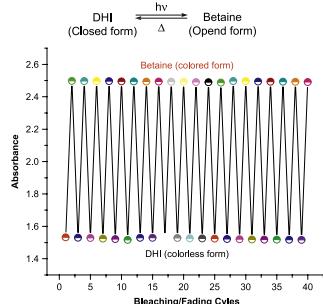
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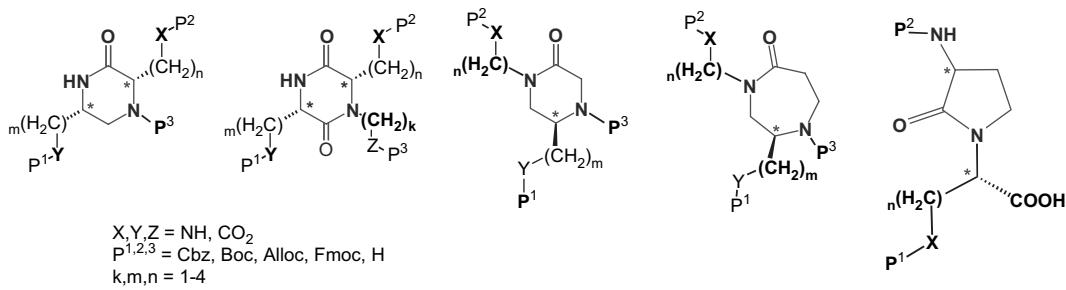
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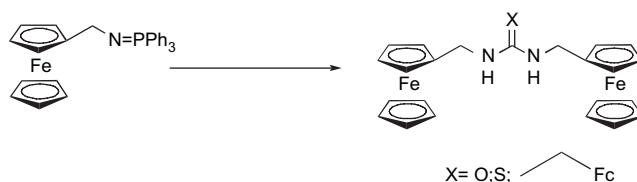
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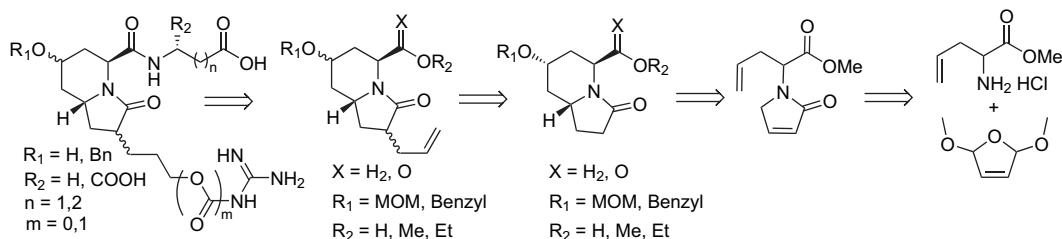
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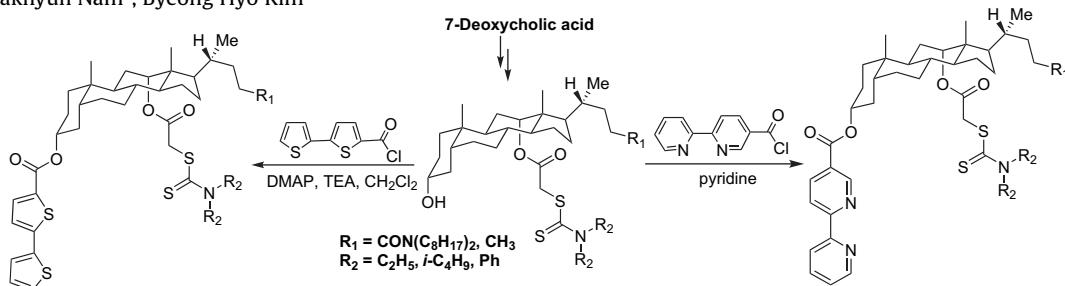
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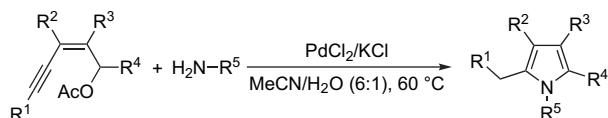
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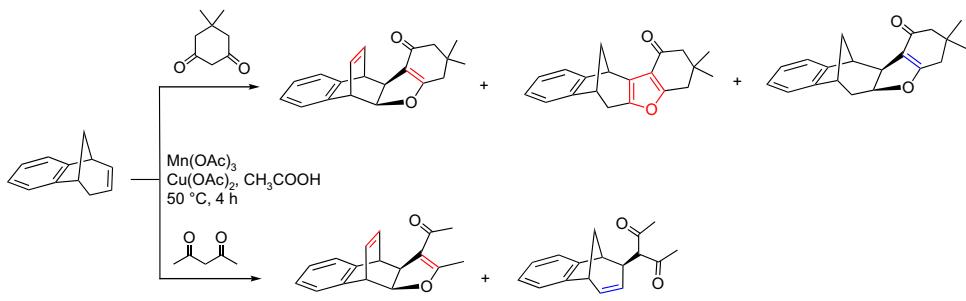
Yong-Jiang Bian, Xue-Yuan Liu*, Ke-Gong Ji, Xing-Zhong Shu, Li-Na Guo, Yong-Min Liang



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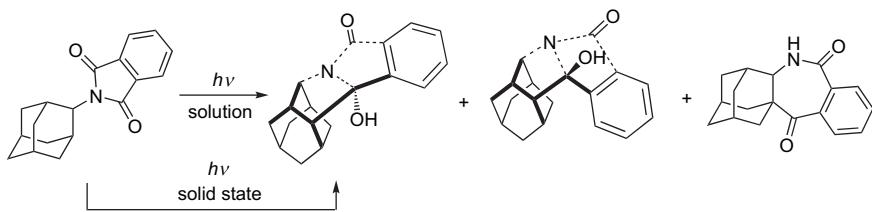
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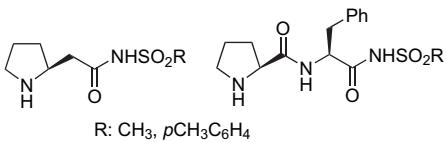
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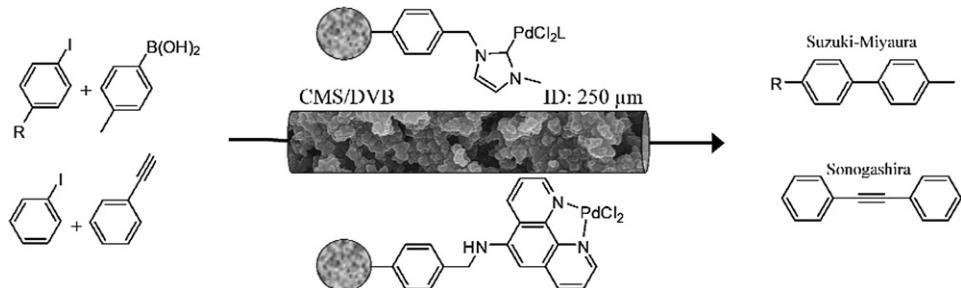
Evaggelia Tsandi, Christoforos G. Kokotos, Sofia Kousidou, Valentine Ragoussis, George Kokotos*



Palladium-mediated organic synthesis using porous polymer monolith formed in situ as a continuous catalyst support structure for application in microfluidic devices

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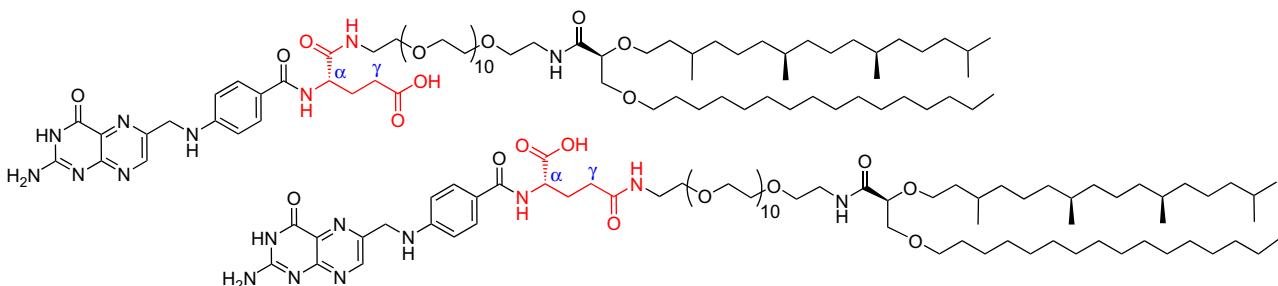
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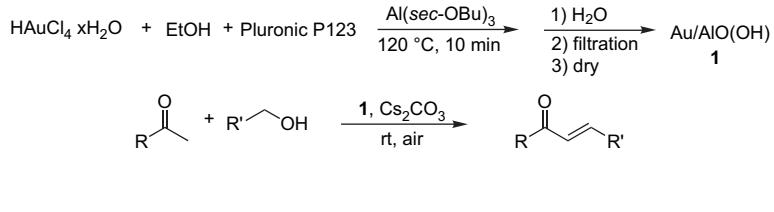
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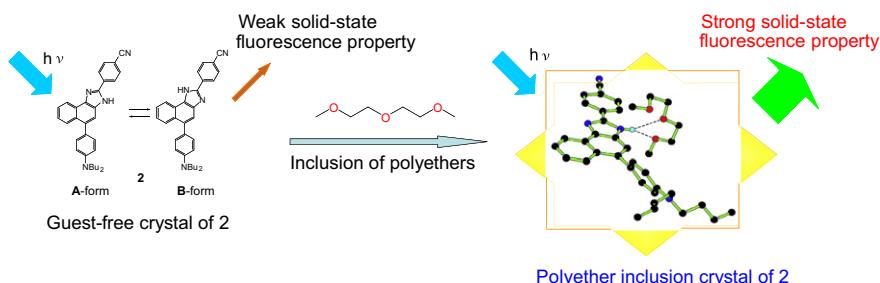
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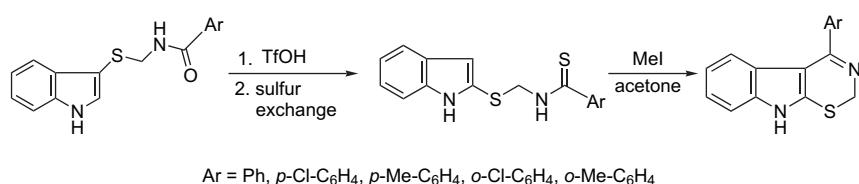
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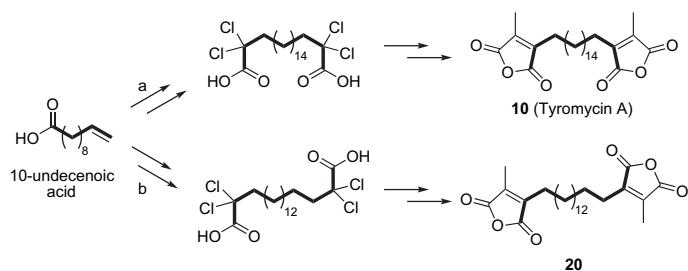
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An expeditious synthesis for γ -caroline analogue 4-aryl-1,3-thiazino[6,5-*b*]indole derivatives via the trifluoromethanesulfonic acid-promoted isomerization of 3-amidomethylthioindole intermediates to 2-indolyl sulfides pp 1475–1480
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A new synthetic route to tyromycin A and its analogue from renewable resources pp 1481–1487
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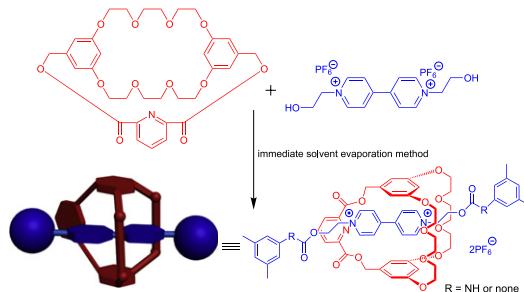


Efficient syntheses of bis(*m*-phenylene)-26-crown-8-based cryptand/paraquat derivative [2]rotaxanes by immediate solvent evaporation method

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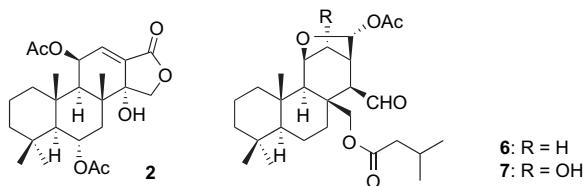
Feng Wang, Qizhong Zhou, Kelong Zhu, Shijun Li, Chong Wang, Ming Liu, Ning Li, Frank R. Fronczek, Feihe Huang*

A novel bis(*m*-phenylene)-26-crown-8-based cryptand has been synthesized. It has been used to prepare two 1:1 complexes with two paraquat derivatives with high association constants (6.5×10^5 and $4.0 \times 10^5 \text{ M}^{-1}$) in acetone. In the solid state the cryptand forms a 2:1 threaded structure with paraquat and an interesting supramolecular poly[2]pseudorotaxane threaded structure with a dihydroxethyl-substituted paraquat derivative, respectively. It has been further used to prepare cryptand/paraquat derivative [2]rotaxanes efficiently by the immediate solvent evaporation method (ISEM) using easily available 3,5-dimethylphenyl groups as the stoppers.


New cytotoxic spongian diterpenes from the sponge *Dysidea cf. arenaria*

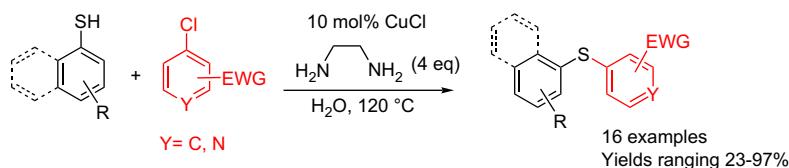
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Mika Agena, Chiaki Tanaka, Novriyandi Hanif, Mina Yasumoto-Hirose, Junichi Tanaka*


Copper(I)-catalyzed S-arylation of thiols with activated aryl chlorides on water

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María Teresa Herrero, Raul SanMartin*, Esther Domínguez*

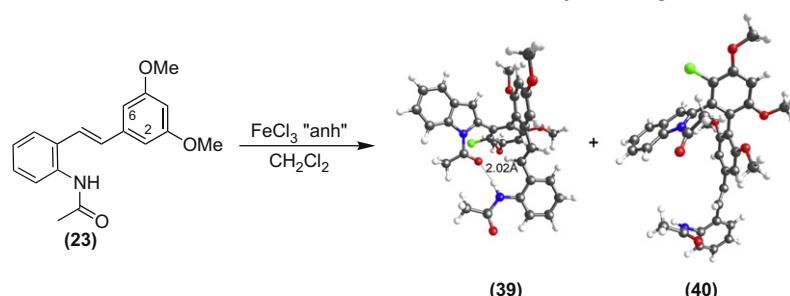


Copper chloride-catalyzed S-arylation of arenethiols is effected with activated aryl chlorides in water by using ethylenediamine as the pair ligand/base.

A FeCl_3 -promoted highly atropodiastereoselective cascade reaction: synthetic utility of radical cations in indolostilbene construction

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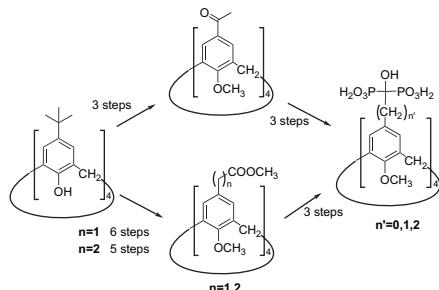
Kartini Ahmad, Noel F. Thomas*, Mat Ropi Mukhtar, Ibrahim Noorbachtha, Jean-Frederic Faizal Weber, Mohd Azlan Nafiah, Saraswati S. Velu, Koichi Takeya, Hiroshi Morita, Chuan-Gee Lim, A. Hamid A. Hadi, Khalijah Awang



Design and synthesis of new polyphosphorylated upper-rim modified calix[4]arenes as potential and selective chelating agents of uranyl ion

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Evelyne Migianu-Griffoni, Cyrille Mbemba, Ramon Burgada, Delphine Lecerclé, Frédéric Taran, Marc Lecouvey*



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*Corresponding author

(i)⁺ Supplementary data available via ScienceDirect



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