



Tetrahedron Vol. 66, Issue 30, 2010

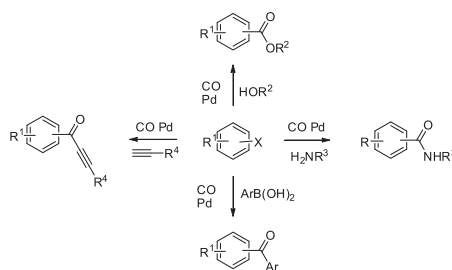
Contents

REPORT

Pd-catalysed carbonylations: versatile technology for discovery and process chemists

Ronald Grigg*, Simon P. Mutton

pp 5515–5548

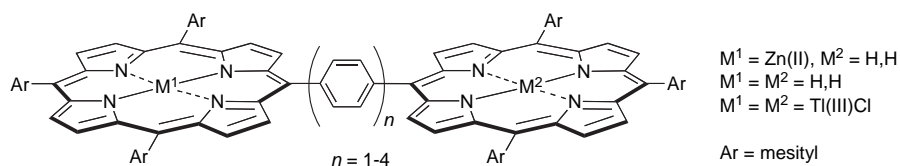


ARTICLES

Synthesis of oligo(*p*-phenylene)-linked dyads containing free base, zinc(II) or thallium(III) porphyrins for studies in artificial photosynthesis

Masahiko Taniguchi, Jonathan S. Lindsey*

pp 5549–5565



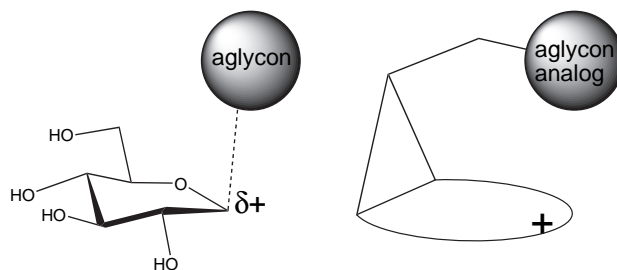
Porphyrin dyads incorporating rigid linkers of different lengths have been prepared for comparative studies of excited-state energy-transfer and ground-state hole-transfer processes.



Synthesis of 3,5-diazabicyclo [5.1.0] octenes. A new platform to mimic glycosidase transition states

pp 5566–5572

Fedra M. Leonik, Ion Ghiviriga, Nicole A. Horenstein*

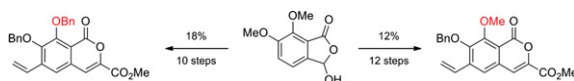


3,5-Diazabicyclo [5.1.0] octenes have been synthesized as charge and shape mimics of glycosyl transfer transition states.

**Syntheses of differentially protected isocoumarins**

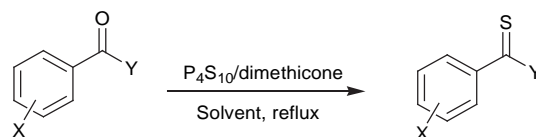
pp 5573–5582

Andrew N. Lowell, Philip D. Wall, Stephen P. Waters, Marisa C. Kozlowski*

**P₄S₁₀/dimethicone tandem: efficient reagent for thionation of various aromatic amides and esters**

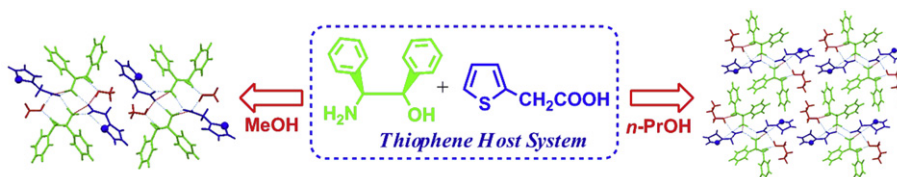
pp 5583–5588

Dongho Cho, Jiyoung Ahn, Kathlia A. De Castro, Hyunseok Ahn, Hakjune Rhee*

X: Various substituents
Y: NH₂, NHR, OCH₃, OR**Tuning mechanism in helical columnar thiophene host system with 2-thienylacetic acid by using (1*R*,2*S*)-2-amino-1,2-diphenylethanol**

pp 5589–5593

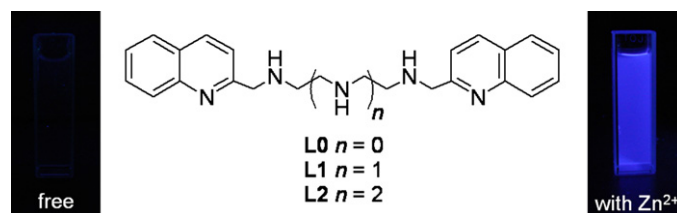
Naoki Shiota, Takafumi Kinuta, Tomohiro Sato, Reiko Kuroda, Yoshio Matsubara*, Yoshitane Imai*



Fluorescence properties of polyamines bearing two terminal quinoline fragments in water

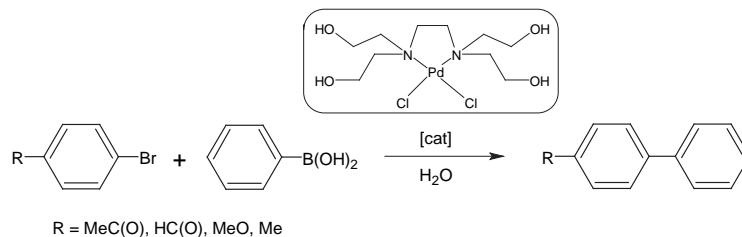
pp 5594–5601

Chizuru Ichimura, Yasuhiro Shiraishi*, Takayuki Hirai

***N,N,N',N'*-Tetrakis(2-hydroxyethyl)ethylenediamine palladium(II) complex as efficient catalyst for the Suzuki/Miyaura reaction in water**

pp 5602–5606

Süleyman Gülcemal*, İbrahim Kani, Filiz Yılmaz, Bekir Çetinkaya

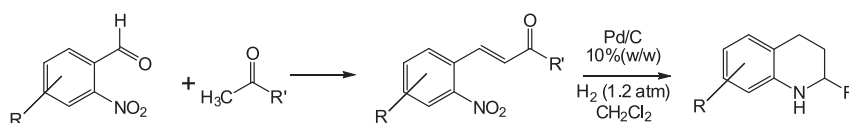


A novel water soluble [PdCl₂(edteH₄)] complex has been successfully used for the Suzuki/Miyaura reaction in water. Up to 1,00,000 turnover numbers (TON) were achieved for aryl bromides.

**Hydrogenation of *ortho*-nitrochalcones over Pd/C as a simple access to 2-substituted 1,2,3,4-tetrahydroquinolines**

pp 5607–5611

Angela Patti*, Sonia Pedotti

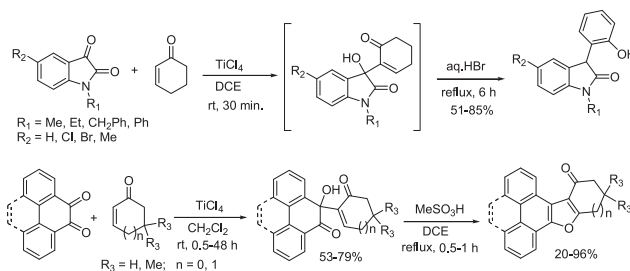


One-pot reductive intramolecular cyclization of 2-nitrochalcones with gaseous hydrogen in the presence of Pd/C catalyst and CH₂Cl₂ as reaction solvent selectively gave 2-substituted 1,2,3,4-tetrahydroquinolines.

**Toward understanding the scope of Baylis–Hillman reaction: synthesis of 3-(2-hydroxyphenyl)indolin-2-ones and polycyclic fused furans**

pp 5612–5622

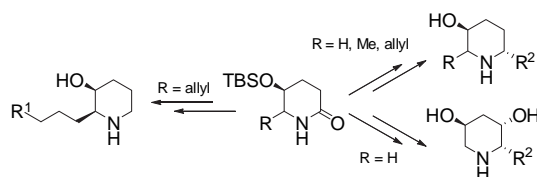
Deevi Basavaiah*, Suparna Roy, Utpal Das



Synthesis of functionalized 3-hydroxypiperidines

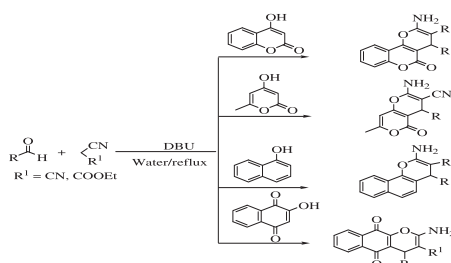
Marloes A. Wijdeven, Floris L. van Delft, Floris P.J.T. Rutjes*

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**DBU: a Highly efficient catalyst for one-pot synthesis of substituted 3,4-dihydropyrano[3,2-c]chromenes, dihydropyrano-[4,3-b]pyranes, 2-amino-4H-benzo[h]chromenes and 2-amino-4H benzo[g]chromenes in aqueous medium**

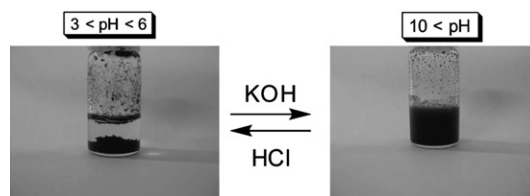
Jitender M. Khurana*, Bhaskara Nand, Pooja Saluja

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**Polyion complex stabilized palladium nanoparticles for Suzuki and Heck reaction in water**

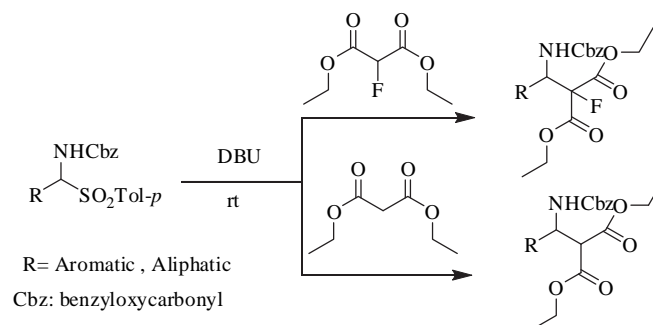
Atsushi Ohtaka*, Yuji Tamaki, Yuta Igawa, Koji Egami, Osamu Shimomura, Ryôki Nomura

pp 5642–5646

**Solventless DBU-promoted Mannich-type reactions of α -amido *p*-tolylsulfones with diethyl fluoromalonates and diethyl malonates**

Santosh T. Kadam, Sung Soo Kim*

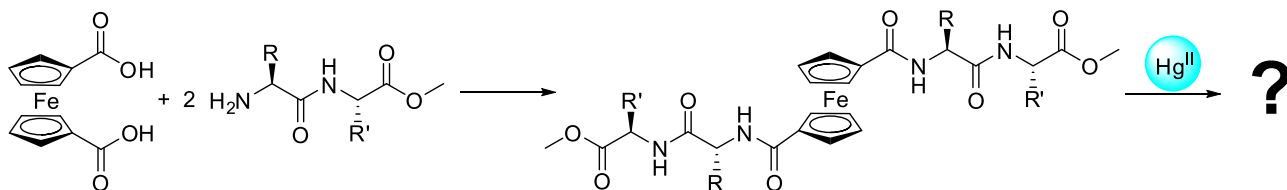
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Synthesis and electrochemical studies of disubstituted ferrocene/dipeptide conjugates with sulfur-containing side chains

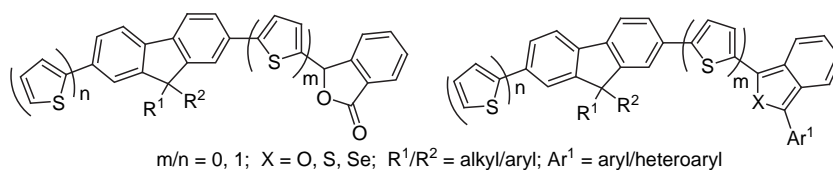
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Conor C.G. Scully, Peter J. Rutledge*

i⁺**Synthesis and characterization of fluorene tethered benzo[*c*]thiophene/benzo[*c*]selenophene analogs**

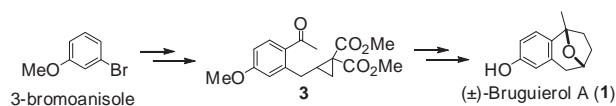
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Natarajan Senthil Kumar, Arasambattu K. Mohanakrishnan*

**Total synthesis of (±)-bruguierol A via an intramolecular [3+2] cycloaddition of cyclopropane 1,1-diester**

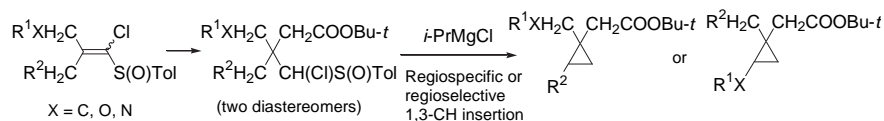
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Bao Hu, Siyang Xing, Jun Ren, Zhongwen Wang*

i⁺**A method for the synthesis of cyclopropanes by regiospecific and regioselective magnesium carbenoid 1,3-CH insertion as the key reactions**

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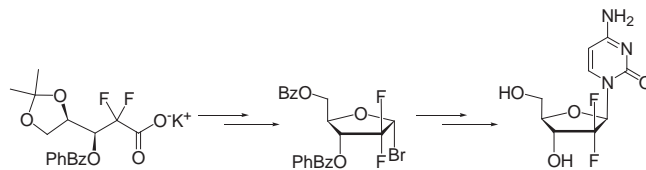
Hiroyuki Watanabe, Shingo Ogata, Tsuyoshi Satoh*



An efficient large-scale synthesis of gemcitabine employing a crystalline 2,2-difluoro- α -ribofuranosyl bromide

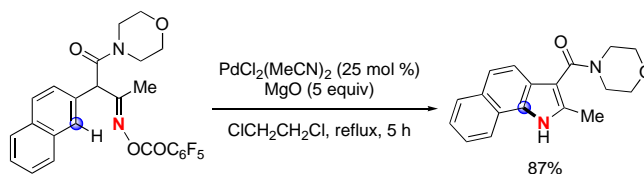
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Young-Kil Chang, Jaeheon Lee, Gha-Seung Park, Moonsub Lee, Chul Hyun Park, Han Kyong Kim, Gwansun Lee, Bo-Young Lee, Ju Yuel Baek, Kwan Soo Kim*

**Pd(II)-catalyzed synthesis of indoles from α -aryloxime O-pentafluorobenzoates via intramolecular aromatic C–H amination**

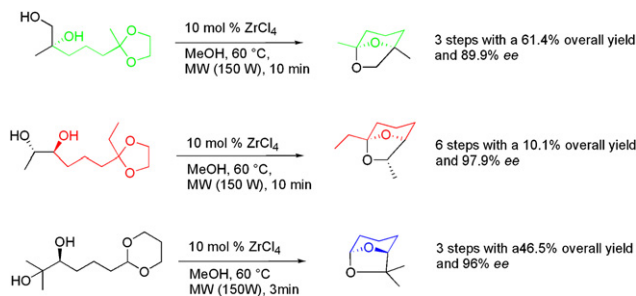
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Shunsuke Chiba*, Line Zhang, Stephen Sanjaya, Gim Yean Ang

**A short and efficient asymmetric synthesis of (–)-frontalin, (–)-*exo*-isobrevicomin and a volatile contributor of beer-aroma**

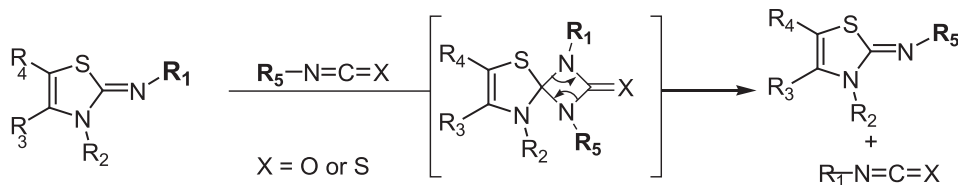
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Surendra Singh, Patrick J. Guiry*

**Intermolecular alkyl/aryl exchange of 2-iminothiazoles with isothiocyanates and isocyanates: scopes and limitations**

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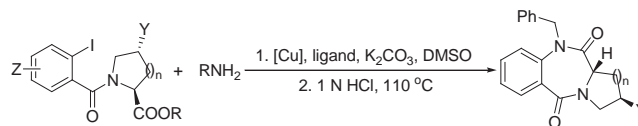
Dongyun Shin*, Jihoon Lee, Hoh-Gyu Hahn



Assembly of *N*-substituted pyrrolo[2,1-*c*][1,4]benzodiazepine-5,11-diones via copper catalyzed aryl amination

pp 5714–5718

Xu Lu, Liu Shi, Hui Zhang*, Yongwen Jiang, Dawei Ma*

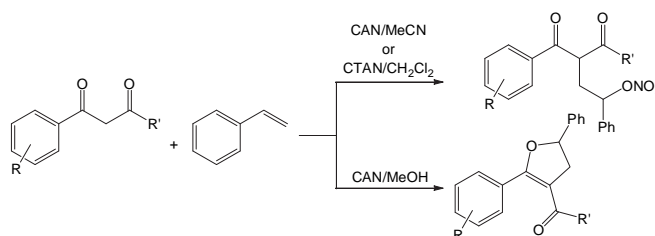
**OTHER CONTENT****Corrigendum**

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Corrigendum to solvent-dependent oxidative coupling of 1-aryl-1,3-dicarbonyls and styrene

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Brian M. Casey, Cynthia A. Eakin, Jingliang Jiao, Dhandapani V. Sadasivam, Robert A. Flowers, II*



*Corresponding author

Supplementary data available via ScienceDirect

COVER

Pd-Catalysed carbonylations: versatile technology for discovery and process chemists.

Details can be found in Tetrahedron, **2010**, 66, 5515–5548.

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