



Tetrahedron Vol. 67, Issue 36, 2011

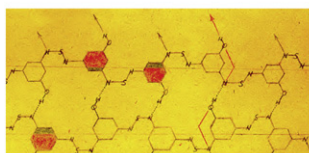
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PERSPECTIVES

R. B. Woodward's unfinished symphony: designing organic superconductors (1975–79)

Michael P. Cava, M.V. Lakshmikantham, Roald Hoffmann, Robert M. Williams*

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$$\begin{aligned} \text{volume of cube} &= (2r_{\text{Fe}})^3 \\ \text{portion taken up by Fe} &= \frac{1}{8} \times 8 \left(\frac{4}{3} \pi r^3 \right) \\ \text{portion taken up by M} &= \frac{4}{3} \pi (r_{\text{M}})^3 = \frac{4}{3} \pi (\sqrt{3}-1)^3 r_{\text{Fe}}^3 \\ \frac{\text{total space filled}}{\text{volume of cube}} &= \frac{\frac{4}{3} \pi r_{\text{Fe}}^3 + (\sqrt{3}-1)^3 r_{\text{Fe}}^3}{8 r_{\text{Fe}}^3} = \frac{4}{8} \pi \frac{1 + (\sqrt{3}-1)^3}{8} = .73 \end{aligned}$$

$\frac{\text{Ag Mn}}{\text{Au}^{+3}} = .95$
 $\frac{\text{Au Cr}}{\text{Au}^{+3}}$

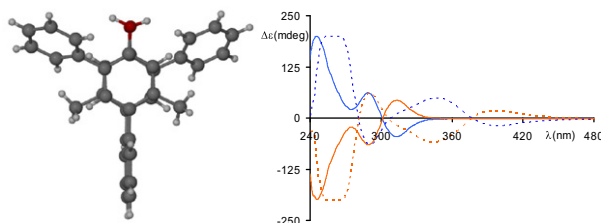


ARTICLES

Enantioselective recognition of amines with an atropisomeric 1,8-bisphenolphthalene

Marwan W. Ghosn, Christian Wolf*

pp 6799–6803



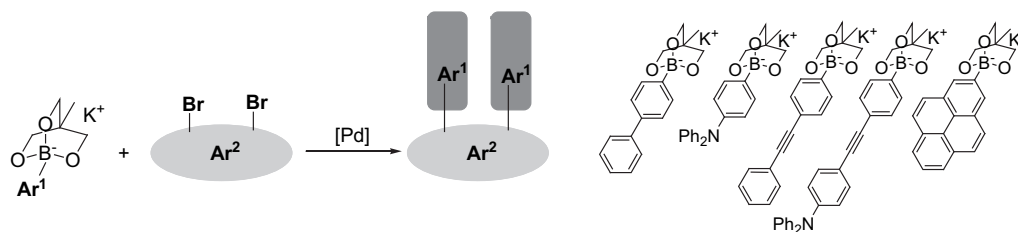
The synthesis of an axially chiral 1,8-bisphenolphthalene that is stable to racemization at room temperature, readily available in enantiopure form and utilized for enantioselective recognition of chiral amines is described.



Double-coupling of dibromo arenes with aryltriolborates for synthesis of diaryl-substituted planar frameworks

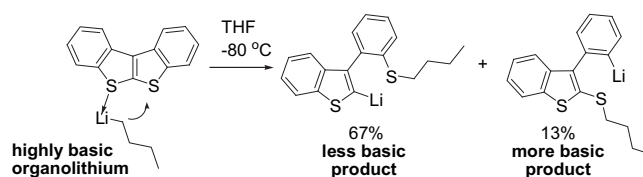
pp 6804–6811

Gao-Qiang Li, Yasunori Yamamoto*, Norio Miyaura

**Unusual thiophilic ring-opening of fused oligothiophenes with organolithium reagents**

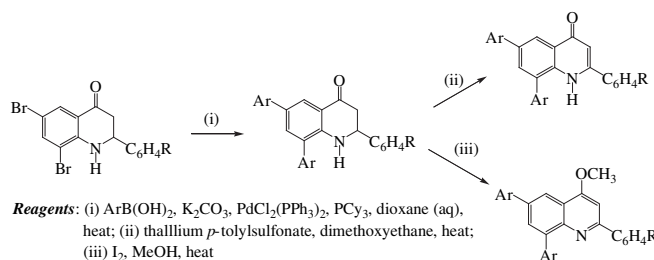
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Konstantin Chernichenko, Nikolai Emelyanov, Ilya Gridnev, Valentine G. Nenajdenko*

**Suzuki–Miyaura cross-coupling of 2-aryl-6,8-dibromo-1,2,3,4-tetrahydroquinolin-4-ones and subsequent dehydrogenation and oxidative aromatization of the resulting 2,6,8-triaryl-1,2,3,4-tetrahydroquinolin-4-ones**

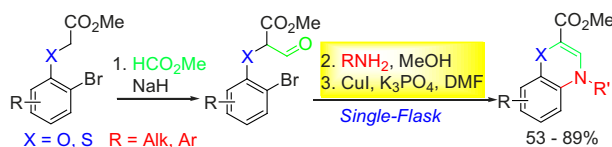
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Malose J. Mphahlele*, Felix A. Oyeyiola

**A general synthesis of *N*-substituted 1,4-benzoxazine- and 1,4-benzothiazine-2-carboxylates via copper-catalyzed intramolecular amination of arylbromides**

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Ferdinand Melkonyan, Artiom Topolyan, Alexander Karchava*, Marina Yurovskaya



InCl₃-assisted one-pot synthesis of 1-aminocarbazoles

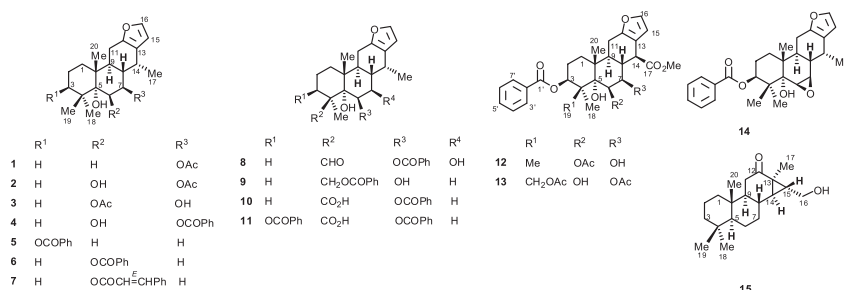
pp 6833–6837

Diego Facoetti, Giorgio Abbiati, Monica Dell'Acqua, Elisabetta Rossi*

**Pulcherrins D–R, potential anti-inflammatory diterpenoids from the roots of *Caesalpinia pulcherrima***

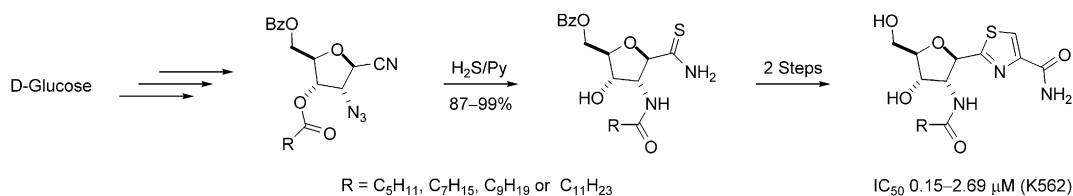
pp 6838–6846

Orapun Yodsaoue, Chatchanok Karalai*, Chanita Ponglimanont, Supinya Tewtrakul, Suchada Chantrapromma

Fifteen new cassane-type diterpenes, named pulcherrins D–R, as well as eight known NO inhibitors, were isolated from the roots of *Caesalpinia pulcherrima*.**Antitumour tiazofurin analogues embedded with an amide moiety at the C-2' position**

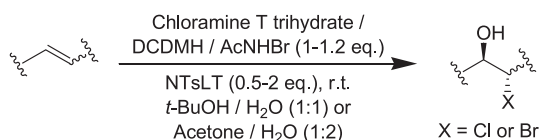
pp 6847–6858

Mirjana Popsavin*, Miloš Svirčev, Ljilja Torović, Gordana Bogdanović, Vesna Kojić, Dimitar Jakimov, Saša Spaić, Lidija Aleksić, Velimir Popsavin

**Highly regio- and diastereoselective halohydroxylation of olefins: a facile synthesis of vicinal halohydrins**

pp 6859–6867

Jinglei Zhang, Jie Wang, Zhuibai Qiu*, Yang Wang*

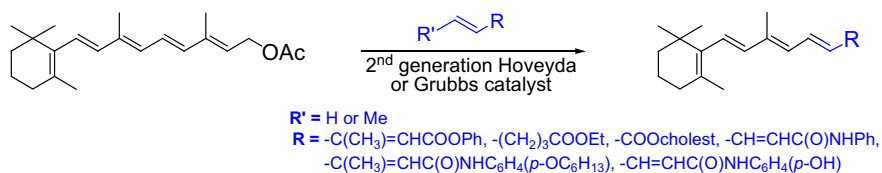


Direct halohydroxylation of olefins provided a facile synthesis of vic-halohydrins in excellent yield with high chemo-, regio- and stereoselectivity.

Cross metathesis approach to retinoids and other β -apocarotenoids

pp 6868–6875

Agnieszka Wojtkielewicz*, Jadwiga Maj, Agnieszka Dzieszkowska, Jacek Witold Morzycki

**Nucleophile-mediated ring expansion of 4-chloromethyl- and 4-mesyloxymethyl-5-tosyl-1,2,3,4-tetrahydropyrimidin-2-ones to 6-tosyl-2,3,4,5-tetrahydro-1H-1,3-diazepin-2-ones: effect of the leaving group and the substituent at C6**

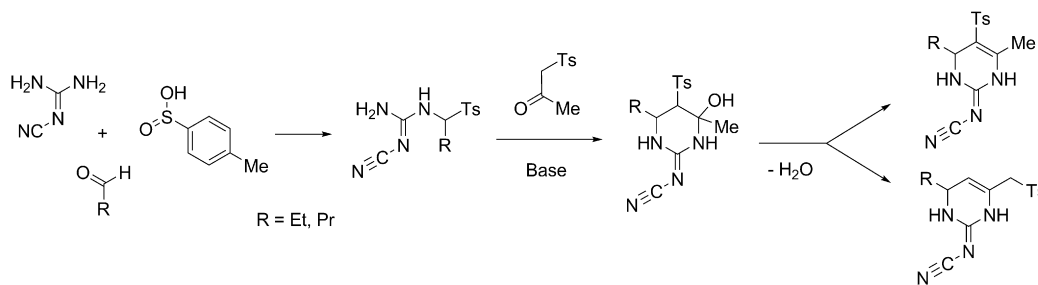
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Anastasia A. Fesenko, Anatoly D. Shutalev*

**4-Hydroxy-4-methyl-5-tosylhexahydropyrimidin-2-imines: synthesis and different dehydration pathways**

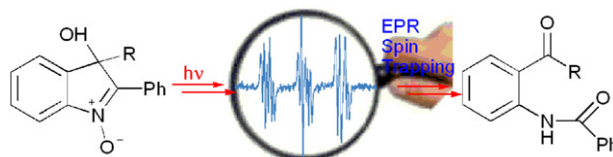
pp 6883–6888

Anatoly D. Shutalev*, Anastasia A. Fesenko

**Radical intermediates in the photorearrangement of 3-hydroxyindolic nitrones**

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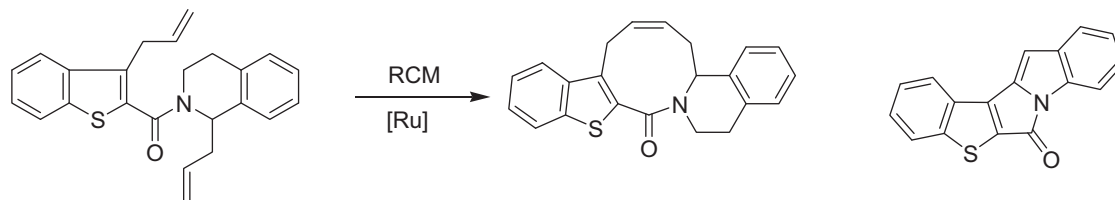
Angelo Alberti, Paola Astolfi, Patricia Carloni, Dietrich Döpp, Lucedio Greci*, Corrado Rizzoli, Pierluigi Stipa



Synthesis of new benzo[b]thieno fused ring systems via transition metal-mediated cyclisations

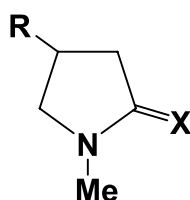
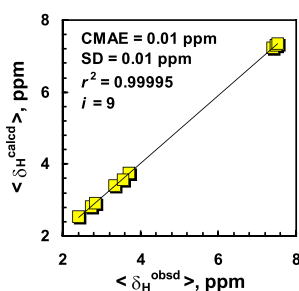
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Johana M. Mbere, John B. Bremner*, Brian W. Skelton, Allan H. White

**Three-component conformational equilibria of some flexible pyrrolidin-2-(thi)ones in solution by NMR data (δ_C , δ_H , and $^nJ_{HH}$) and their DFT predictions: a confrontation of different approaches**

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Ryszard B. Nazarski*, Beata Pasternak, Stanisław Leśniak

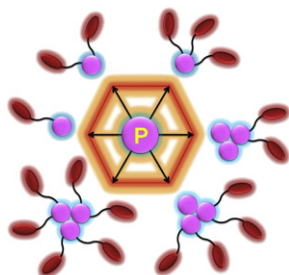


X = O or S
R = Ph or C(=O)Ph

**Synthesis, structure and photo-physical properties of phosphorus-supported fluorescent probes**

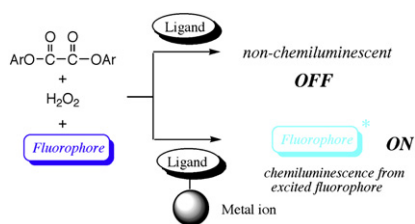
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Vadapalli Chandrasekhar, Mrituanjay D. Pandey, Biswanath Das, Bani Mahanti, Kandasamy Gopal, Ramachandran Azhakar

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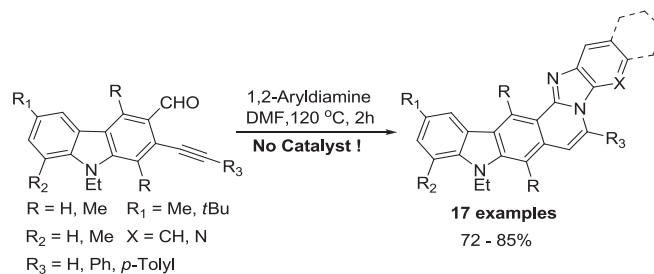
Takayuki Maruyama, Yasuyuki Fujie, Noriyuki Oya, Eisuke Hosaka, Aki Kanazawa, Daisuke Tanaka, Yoshiyuki Hattori, Jiro Motoyoshiya*



Metal-free synthesis of benzimidazo[2,1-*a*]ellipticines via tandem inter and intramolecular cyclization

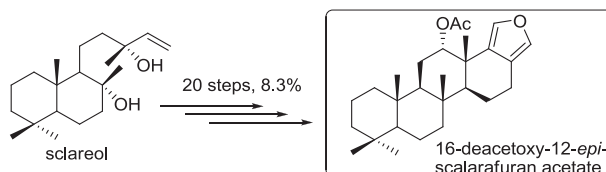
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T. Krishna Chaitanya, K.S. Prakash, Rajagopal Nagarajan*

**Concise stereoselective synthesis of marine sesterterpene, 16-deacetoxy-12-*epi*-scalarafuran acetate and its 14-epimer via intramolecular Diels–Alder addition**

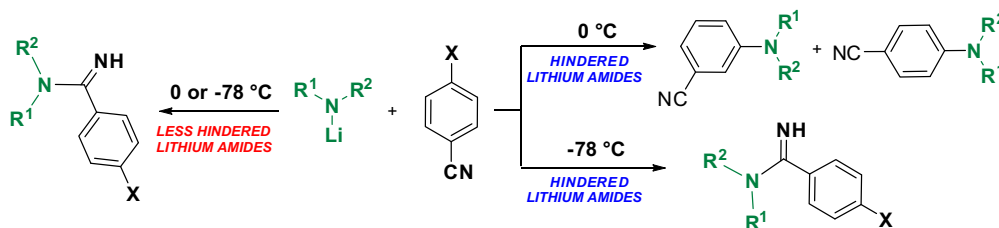
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Zheng-Lin Wang, Zi-Gang Zhang, Hong-Chang Li, Wei-Ping Deng*

**Synthesis of *N,N*-dialkylaminobenzonitriles and halo-(*N,N*-dialkyl)benzamidines by reaction of halobenzonitriles with lithium amides**

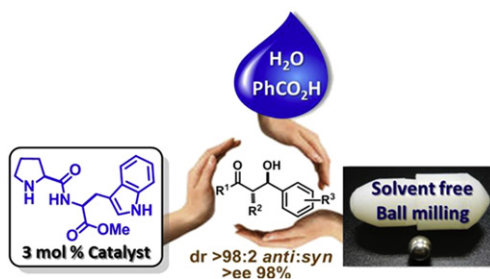
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Paola Vitale*, Leonardo Di Nunno, Antonio Scilimati


**Efficient ball-mill procedure in the 'green' asymmetric aldol reaction organocatalyzed by (*S*)-proline-containing dipeptides in the presence of water**

pp 6953–6959

José G. Hernández, Eusebio Juaristi*



*Corresponding author

 Supplementary data available via ScienceDirect

COVER

R. B. Woodward's Unfinished Symphony – Science and art in the design of potential organic superconductors.
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