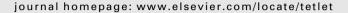


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Tetrahedron Letters





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Electrostatically immobilised BOX and PYBOX metal catalysts: application to ene reactions Chiara McDonagh, Patrick O'Leary *

pp 979-982

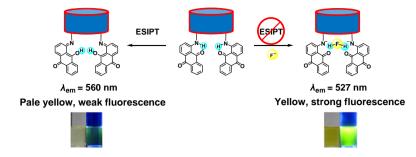
$$H = Cu(I), Cu(II), Sc(III)$$

Immobilised BOX and PYBOX metal catalysts have proved active through several cycles in the ene reaction. In some cases, a significant increase in enantioselectivity is observed with the PYBOX catalysts on immobilisation.

A new fluorescent chemosensor for F⁻ based on inhibition of excited-state intramolecular proton transfer

pp 983-987

Hyo Sung Jung, Hyun Jung Kim, Jacques Vicens, Jong Seung Kim *



Synthesis of betulinic acid acyl glucuronide for application in anticancer prodrug monotherapy

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The effect of ionic liquids on the outcome of nitrile oxide cycloadditions

pp 992-994

Camille E. Rosella, Jason B. Harper

lonic liquids change the regioselectivity of nitrile oxide cycloadditions in favour of the less sterically hindered isomer and increase the rate of the cycloaddition.

Novel dimethoxy(aminoalkoxy)borate derived from (S)-diphenylprolinol as highly efficient catalyst for the enantioselective boron-mediated reduction of prochiral ketones

pp 995-998

Viatcheslav Stepanenko, Margarita Ortiz-Marciales *, Charles L. Barnes, Carmelo Garcia

Synthesis of a simple chiral auxiliary derived from levoglucosenone and its application in a Diels–Alder reaction María M. Zanardi, Alejandra G. Suárez *

pp 999-1002

$$R^*O$$
 + CO_2R^* $R^*OH = OH$

Aerobic ligand-free Suzuki coupling catalyzed by in situ-generated palladium nanoparticles in water

pp 1003-1006

Debasree Saha, Kalicharan Chattopadhyay, Brindaban C. Ranu *

$$R^{1}-X + R^{2}-B(OH)_{2} \xrightarrow{SDS, Na_{2}PdCl_{4} \atop K_{3}PO_{4}, H_{2}O} R^{1}-R^{2}$$

$$100 \text{ °C} \atop 5 \text{ min, 84-96 \%}$$

$$R^{1} = \text{aryl, heteroaryl; } R^{2} = \text{aryl, alkyl}$$

$$X = I, Br$$



An efficient, rapid, and regioselective bromination of anilines and phenols with 1-butyl-3-methylpyridinium tribromide as a new reagent/solvent under mild conditions

pp 1007-1009

Sanjay P. Borikar, Thomas Daniel, Vincent Paul *

1-Butyl-3-methylpyridinium tribromide, [BMPy]Br₃, proves to be a highly efficient, regioselective reagent/solvent for nuclear bromination of various anilines and phenols. The synthesis and characterization of the room temperature ionic liquid [BMPy]Br₃ (2) are described. The bromination was carried out in the absence of organic solvents, and in most cases the only extraction solvent needed was water. The spent 1-butyl-3-methylpyridinium bromide (1) was easily recycled.

Practical cleavage of trifluoroacetamides with p-toluensulfonic acid

pp 1010-1012

Cierra Spencer, Jaume Balsells, Hongmei Li

$$\begin{array}{c} R^1 \\ R^2 \cdot \stackrel{\textstyle N}{\stackrel{\textstyle N}{\stackrel{\textstyle \cap}{\stackrel{\textstyle \cap}{\stackrel \textstyle \cap}{\stackrel \textstyle {\bigcap}}}}}{\stackrel{\textstyle \cap}{\stackrel{\textstyle \cap}{\stackrel{\textstyle \cap}{\stackrel \textstyle {\bigcap}}}}}}}}} R^2 \oplus R^2 \oplus$$

A practical and efficient method to cleave trifluoroacetamides under acidic non-aqueous condition with p-TsOH·H₂O was described.

Microwave-assisted Sonogashira-type cross couplings of various heterocyclic methylthioethers

pp 1013-1015

Brian C. Shook *, Devraj Chakravarty, Paul F. Jackson

$$\begin{array}{c} \text{R-} \begin{array}{c} \text{R-} \\ \text{CuI (0.2 eq),} \\ \text{Pd (dppf)Cl}_2 \text{ (0.1 eq)} \\ \hline \text{Et}_3\text{N, THF, μW 100 °C} \end{array} \\ \end{array} \\ \begin{array}{c} \text{HetAr-} \\ \text{E} \end{array} \\ \text{HetAr-} \\ \text{R} \end{array}$$

Reversal of enantioselectivity using tethered bisguanidine catalysts in the aza-Henry reaction

pp 1016-1019

Helena M. Lovick, Forrest E. Michael

A series of chiral guanidines were synthesized and shown to efficiently catalyze the aza-Henry reaction. Modifications of the catalyst structure revealed important selectivity trends including an intriguing reversal of stereoselectivity with bisguanidine variants.



Cross-metathesis of α -methylene- β -lactams: the first tetrasubstituted alkenes by CM

pp 1020-1022

Yanke Liang, Ravinder Raju, Tri Le, Christopher D. Taylor, Amy R. Howell *

$$R_1$$
 NR
 R_2
 R_3
 R_4
 R_4
 R_5
 R_4
 R_5
 R_7
 R_8
 R_9
 R_9
 R_9

 α -Alkylidene- β -lactams have been prepared in good to excellent yields by olefin cross metathesis. Electron poor α -methylene- β -lactams undergo cross metathesis more rapidly and efficiently than more electron rich analogs. Significantly, tetrasubstituted alkenes have for the first time been accessed by CM reactions.



Synthetic studies directed toward guianolides: an organoiron route to the 5,7,5 tricyclic ring system

pp 1023-1025

Jayapal Reddy Gone, Nathaniel J. Wallock, Sergey Lindeman, William A. Donaldson *

OBPS
$$MeO_2C \xrightarrow{Fe^+} Me$$

$$(CO)_3 \xrightarrow{12 \text{ steps}} O \xrightarrow{H} Me$$

Hydrogenation of olefins using Hantzsch ester catalyzed by palladium on carbon

Qiang Liu*, Jing Li, Xiao-Xia Shen, Rui-Guang Xing, Jie Yang, Zhengang Liu, Bo Zhou

pp 1026-1028

An efficient base-mediated intramolecular condensation of 2-(disubstituted amino)-benzonitriles to 3-aminoindoles pp 1029–1031 Churl Min Seong *, Churl Min Park, Jinil Choi, No Sang Park

R = Me, Et, n-Pro, Ph, Bn

Redox interaction of sulfonated polyaniline with vanadium(IV) in water

pp 1032-1034

Toru Amaya, Shogo Koga, Toshikazu Hirao

The redox interaction between poly(2-methoxyaniline-5-sulfonic acid) (PMAS, emeraldine form) and V(IV) readily occurred to produce the PMAS(red) and V(V) species in aqueous solutions. Notably, molecular oxygen was able to reoxidize PMAS(red) to form the catalytic redox cycle.

A concise route to the C2-symmetric tricyclic skeleton of ryanodine

pp 1035-1037

Koji Hagiwara, Masafumi Himuro, Masahiro Hirama, Masayuki Inoue *

Axially 4.4'-di-tert-butyl TunePhos-type chiral diphosphine ligand: synthesis and applications in asymmetric hydrogenation

pp 1038-1040

Chun-Jiang Wang *, Chu-Bei Wang, Dong Chen, Guangfu Yang, Zhengshun Wu, Xumu Zhang *

Axially 4,4'-di-tert-butyl TunePhos-type chiral diphosphine ligand was designed and synthesized by means of central-to-axial chirality transfer, and its applications in asymmetric hydrogenation were explored. Up to 99% ee was achieved for the highly efficient Ru-catalyzed hydrogenation of β -keto esters.

Low energy light-triggered oxidative cleavage of olefins

pp 1041-1044

Rajesh S. Murthy, Moses Bio, Youngjae You *

hv (visible/near IR)

PS

$$^{3}PS$$
 $^{1}O_{2}$

PS: photosensitizer

$$R_{1} \stackrel{R_{3}}{\longrightarrow} R_{2}$$
 $R_{2} \stackrel{R_{3}}{\longrightarrow} R_{4}$

$$R_{2} \stackrel{O-O}{\longrightarrow} R_{3}$$

$$R_{1} \stackrel{Q}{\longrightarrow} R_{2}$$

A series of substituted olefins were tested for their reactivity with singlet oxygen as a singlet oxygen-mediated cleavable linker.



Triflic anhydride-mediated synthesis of oxazoles

pp 1045-1047

Armin Thalhammer, Jasmin Mecinović, Christopher J. Schofield *

$$R^1$$
 OMe CH_2Cl_2 , RT, 2 - 4 h R^2 OMe

N-Acyl amino acid esters undergo triflic anhydride-mediated cyclodehydration to form oxazoles and bisoxazoles in a simple one-pot transformation.



Acyclic and cyclic thioenamino peptides: solution- and solid-phase synthesis

pp 1048-1050

Lee Goren, Doron Pappo, Israel Goldberg, Yoel Kashman *



Indium/copper-mediated conjugate addition of unactivated alkyl iodides to α,β -unsaturated carbonyl compounds in pp 1051–1054 water

Zhi-Liang Shen, Hao-Lun Cheong, Teck-Peng Loh *

$$R'' = alkyl$$
 $R'' = alkyl$
 $R'' = alkyl$

An efficient method for the conjugate addition of unactivated alkyl iodides to α , β -unsaturated carbonyl compounds using indium/copper in water is described. The reactions proceed more efficiently in water than in organic solvents. In, CuI and InCl₃ are all essential for efficient reaction. Formation of a symmetrical *vic*-diarylalkane is observed when an aryl-substituted alkene is used as substrate.



Poly(N-bromo-N-ethylbenzene-1,3-disulfonamide) and N,N,N'-tetrabromobenzene-1,3-disulfonamide as efficient reagents for synthesis of quinolines

pp 1055-1058

Ramin Ghorbani-Vaghei *, Somayeh Akbari-Dadamahaleh

Leucolusine, a tetracyclic alkaloid with a novel ring system incorporating an oxindole moiety and fused piperidinetetrahydrofuran rings pp 1059–1061

Chew-Yan Gan, Toh-Seok Kam *

leucolusine

A tetracyclic ring-opened oxindole alkaloid, possessing an unprecedented ring system incorporating fused piperidine-tetrahydrofuran rings, has been isolated from the Malayan species, *Leuconotis griffithii*. The structure was established by analysis of the spectroscopic data, and a possible biogenetic pathway from an *Aspidosperma* precursor is presented.

Stereoselective Mannich reactions catalyzed by Tröger's base derivatives in aqueous media

pp 1062-1065

Hui Wu *, Xiu-mei Chen, Yu Wan, Ling Ye, Hai-qiang Xin, Hua-hong Xu, Cai-hui Yue, Li-ling Pang, Rui Ma, Da-qing Shi



$Solvent-free\ copper-catalyzed\ oxidative\ S-arylation\ of\ 1, 2-diaryld is ulfides\ with\ aryltrimethoxy silane$

pp 1066-1070

Pei-Song Luo, Ming Yu, Ri-Yuan Tang *, Ping Zhong, Jin-Heng Li *

$$Ar - S = Ar + Ar'Si(OMe)_3 = \frac{Cul, L5, air}{TBAF, 100 °C} = Ar - S Ar'$$
1
2
$$P^tBu_2$$
L5



Microwave-assisted N-Boc deprotection under mild basic conditions using K₃PO₄·H₂O in MeOH

pp 1071-1074

Srinivasa Reddy Dandepally, Alfred L. Williams

Synthesis of novel furo-pyran derivatives via reaction between an isocyanide and alkylidene-substituted Meldrum's acid

pp 1075-1078

Azizollah Habibi *, Enayatollah Seikhhosseini Lori, Abbas Shockravi

$$\bigoplus_{N} \bigoplus_{C} + 0 \longrightarrow_{R} 0 \xrightarrow{CH_{2}Cl_{2}} 1$$

$$(8 \text{ Examples})$$

A four-component (3+1) reaction of alkyl isocyanides with alkylidene-substituted Meldrum's acid produces new imino-furopyranone derivatives. The products are structurally similar to 2*H*-furo[2,3-*c*]pyran-2-one natural products.

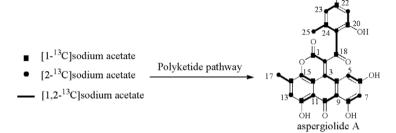
Chiral N-phosphonyl imine chemistry: asymmetric additions of malonate-derived enolates to chiral N-phosphonyl imines for the synthesis of β -aminomalonates

pp 1079-1081

Zhong-Xiu Chen, Teng Ai, Parminder Kaur, Guigen Li *

Biosynthesis of aspergiolide A, a novel antitumor compound by a marine-derived fungus *Aspergillus glaucus* via the pp 1082–1085 polyketide pathway

Kejing Tao, Lin Du, Xueqian Sun, Menghao Cai, Tianjiao Zhu, Xiangshan Zhou *, Qianqun Gu, Yuanxing Zhang





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*Corresponding author

** Supplementary data available via ScienceDirect

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