1. Studies with 3-oxoalkanenitriles: novel rearrangements observed while exploring the utility of 3-(1-methyl-2-pyrrolyl)-3-oxopropanenitrile as a precursor to pyrrole-substituted heterocyclic compounds (12-6808SP)

Hamad M. Al-Matar, Aisha Y. Adam, Khaled D. Khalil and Mohamed H. Elnagdi

Full Text: PDF (672K)

pp. 1 - 15

$$\begin{array}{c} Ar \\ N \\ NH_2 \end{array} \begin{array}{c} Ar \\ NH_2 \\ Me \end{array} \begin{array}{c} CH_2CN \\ NH_4OAc \\ AcOH \end{array} \begin{array}{c} NH_4OAc \\ Me \\ Me \end{array}$$

received Aug 3 2011; accepted Nov 18 2011; published Jan 3 2012;

2. Et₃N-promoted sequential reactions for the synthesis of 6*H*-benzo[*c*]chromenes (12-6840UP)

Wan-Li Chen, Jiao Li, Ying-Hong Zhu, Wei Hu and Wei-Min Mo

Full Text: PDF (130K)

pp. 16 - 25

$$R^{2} \longrightarrow R^{3}$$

$$R^{3} \longrightarrow R^{3}$$

$$R^{3} \longrightarrow R^{3}$$

$$R^{2} \longrightarrow R^{3}$$

$$R^{2} \longrightarrow R^{3}$$

$$R^{3} \longrightarrow R^{3}$$

$$R^{2} \longrightarrow R^{3}$$

$$R^{3} \longrightarrow R^{3}$$

$$R^{2} \longrightarrow R^{3}$$

$$R^{3} \longrightarrow R^{3}$$

$$R^{3} \longrightarrow R^{3}$$

$$R^{4} = C_{4}H_{9}, \text{ TMS, Ph, CH}_{2}SPh$$

$$R^{2} = H, \text{ Cl, Me}$$

received Aug 15 2011; accepted Oct 8 2011; published Dec 18 2011;

3. Synthesis and acaricidal activity of cyenopyrafen and its geometric isomer (12-6851JP)

 $R^3 = H$. Me

Haibo Yu, Man Xu, Yan Chen, Hongfei Wu, Yanmei Luo and Bin Li

Full Text: PDF (353K)

pp. 26 - 34

received Aug 18 2011; accepted Nov 5 2011; published Jan 7 2012;

4. Mode of alkylation of alcohols with *O*-cyclopropylmethyl trichloroacetimidate and *O*-cyclobutyl trichloroacetimidate (12-7020HP)

Ibrahim A. I. Ali, Xiangming Zhu, Es Sayed H. El Ashry and Richard R. Schmidt

Full Text: PDF (112K)

pp. 35 - 44

received Oct 14 2011; accepted Nov 27 2011; published Jan 7 2012;

5. An expeditious construction of 3-aryl-5-(substituted methyl)-2-oxazolidinones: a short and efficient synthesis of Linezolid (12-6209RP)

Rajesh Tammana, Kiran K. Vemula, Ramadasu Guruvindapalli, Ramesh Yanamandra and Madhusudhan Gutta

Full Text: PDF (153K)

pp. 45 - 56

ON-NHAC NHAC NHAC NH2 +
$$X$$

3a: $X = -Cl$, $R = -N_3$

3b: $X = -Cl$, $R = -NPhth$

4: $X = -N^+Et_3$ Cl⁻, $R = -N_3$

received Dec 26 2010; accepted Dec 17 2011; published Jan 16 2012;

6. Synthesis of new pentaheterocyclic ring system as antiandrogene, anti HCV and anti H1N1 agents (12-6694KP)

Thoraya A. Farghaly, Ikhlass M. Abbas, Mohamed M. Abdalla and Raghda O. A. Mahgoub

Full Text: PDF (188K)

pp. 57 - 70

received Jun 20 2011; accepted Nov 27 2011; published Jan 22 2012;

7. Chemical derivatization of Phomosine A, a highly antifungal secondary metabolite from *Phonopsis* sp. (12-6594MP)

Karsten Krohn, Hidayat Hussain, Hans Egold, Barbara Schulz, Ivan Green

Full Text: PDF (499K)

pp. 71 - 89

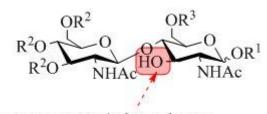
received May 11 2011; accepted Oct 1 2011; published Jan 24 2012;

8. Synthesis of 3-OH free N-acetyl glucosamine disaccharide (12-7003HP)

Ramu Enugala and Maria M. Marques

Full Text: PDF (177K)

pp. 90 - 100



lactate insertion / glycosylation

received Oct 10 2011; accepted Nov 27 2011; published Feb 5 2012;

9. Hydroxy-L-prolines as asymmetric catalysts for aldol, Michael addition and Mannich reactions (12-

6924UP)

Loay Ahmed Al-Momani Full Text: PDF (297K)

pp. 101 - 111

received Sep 17 2011; accepted Nov 19 2011; published Feb 11 2012;

10. Claisen rearrangement route to novel electron-rich perylene dyes (12-6835QP)

Djan Baffoe, Terrill D. Smith, Mark A. Penick, Mathew P. D. Mahindaratne, Lorenzo Brancaleon and George R. Negrete

Full Text: PDF (107K)

pp. 112 - 118

OR
$$\begin{array}{c} OR \\ \hline OR \\ \hline OH \\ \hline i \quad \textbf{1a} : R = H \\ \hline \textbf{1d} : R = \text{allyl} \\ \hline \textbf{3d} \\ OV \\ \hline \textbf{3d} \\ OV \\ \hline \textbf{5a} : R = H \\ \hline \textbf{5b} : R = COC_7H_{15} \\ \hline \textbf{5b} : R = COC_$$

received Aug 11 2011; accepted Dec 27 2011; published Feb 11 2012;

11. Formation of a benzothiazine via the reaction of ortho-halo sulfoximines with copper salts (12-6823IP)

Aswinkumar Garimallaprabhakaran, Xuechuan Hong and Michael Harmata

Full Text: PDF (167K)

pp. 119 - 128

received Aug 8 2011; accepted Jan 27 2012; published Feb 19 2012;

12. Copper-catalyzed one-pot synthesis of 2*H*-1,4-benzoxazin-3-(4*H*)-ones from 2-(*o*-haloaryloxy)acyl chlorides and primary amines (12-6879ZP)

Qunxian Hu, Ziming Xia, Ling Fan, Jiening Zheng, Xiaoxia Wang and Xin Lv

Full Text: PDF (253K)

pp. 129 - 142

received Aug 31 2011; accepted Nov 27 2011; published Feb 23 2012;

13. Some new derivatives of 5-aryl-, 2,5-diaryl- and 2-ethoxycarbonyl-5-aryl-indoles (12-6844UP)

Ioseb S. Chikvaidze, Nana N. Barbakadze, Shota A. Samsoniya

Full Text: PDF (370K)

pp. 143 - 154

 $3a R = H: 3b R = OCH_3; 3c R = NO_2; 3d R = (CH_2)_2C_6H_5$

received Aug 16 2011; accepted Jan 19 2012; published Feb 28 2012;

14. Synthesis and charge-transfer complexation studies on bis(aminomethyl) *m*-terphenyl based bisoxy cyclophanes with intra-annular amide functionality (12-6902QP)

Perumal Rajakumar and Ramar Padmanabhan

Full Text: PDF (101K)

Supplementary Material: PDF (39K)

pp. 155 - 163

$$R = \begin{cases} X = X \\ Y = X \\ Y = X \\ X = X \\ X = X \\ X = X \\ X = X \\ Y = X$$

received Sep 8 2011; accepted Dec 10 2011; published Mar 18 2012;

15. Highly regioselective Heck-Mizoroki reaction catalyzed by Pd/phosphine ligand in DMSO/[bmim][BF₄] under microwave irradiation (12-6951SP)

Zhonggao Zhou, Yongrong Xie, Ziyi Du, Qiaosheng Hu, Jun Xue and Jicheng Shi

Full Text: PDF (124K)

pp. 164 - 172

$$Ar = X$$
 $X = I,Br,CI$
 $Ar = I,Br,CI$

Highly Regioselective Yields: 78-99%

received Sep 27 2011; accepted Dec 10 2011; published Mar 18 2012;

16. Nitroaromatic bis(2-hydroxyethyl)dithioacetals and oxathioacetals using 2-mercaptoethanol in the presence of chlorosilanes (12-6539IP)

Lyubov Konstantinovna Papernaya, Alexandra Alexandrovna Shatrova, Alexander Ivanovich Albanov, Lyudmila Vasil'evna Klyba and Galina Grigor'ievna Levkovskaya

Full Text: PDF (176K)

pp. 173 - 184

 $R = 4-NO_2$ (a), $3-NO_2$ (b), $2-NO_2$ (c)

received Apr 22 2011; accepted Dec 10 2011; published Mar 18 2012;

17. Synthesis of esters derived from 2,3,4-tri-O-benzyl-alpha-D-methylglucoside (12-6433RP)

Tiago A.D. Pinto, Radim Hrdina, Gilbert Kirsch, Ana M.F. Oliveira-Campos, LÃgia M. Rodrigues and Ana P. Esteves

Full Text: PDF (127K)

pp. 185 - 193

received Mar 16 2011; accepted Dec 17 2011; published Mar 18 2012;

18. Five- and sixÂ-membered cyclic α -acylvinyl anionic synthons: synthesis of α -trimethylsilyl- α , θ -unsaturated cycloalkenones and their conversion into 2-(hydroxydimethylsilyl)cycloalk-2-enones through carbonÂ-silicon bond scission (12-6880JP)

Divya Jyothi and HariPrasad Suresh

Full Text: PDF (126K)

Supplementary Material: PDF (2,144K)

pp. 194 - 203

received Aug 31 2011; accepted Dec 3 2011; published Mar 18 2012;

19. First total synthesis of salvianolic acid C, tournefolic acid A, and tournefolal (12-6915NP)

Si-Da Shen, Gui-Ping Zhang, Min Lei and Li-Hong Hu

Full Text: PDF (365K)

Supplementary Material: PDF (1,507K)

pp. 204 - 213

received Sep 14 2011; accepted Mar 27 2012; published Apr 16 2012;

20. Highly efficient synthesis of 7-aryl-pyrano[3,4-c]pyrazolo [4,3-f]quinoline derivatives catalyzed by iodine (12-7126ZP)

Wei Wang, Yu-Ling Li and Xiang-Shan Wang

Full Text: PDF (189K)

pp. 214 - 221

received Nov 28 2011; accepted Feb 18 2012; published Apr 16 2012;

21. One-pot synthesis of 1,2,4,5-tetrasubstituted imidazoles by a tandem three-component reaction of hydroxylamines, aldehydes and 2-azido acrylates (12-7294VP)

Bao Hu, Ning Ai, Zhao Wang, Xiaoliang Xu and Xiaonian Li

Full Text: PDF (348K)

pp. 222 - 228

$$R^{3}NHOH$$
 + R^{3} $R^{3}NHOH$ R^{3} $R^{3}N_{3}$ $R^{3}N_{3}$ $R^{3}N_{4}$ $R^{3}N_{5}$ $R^{3}N_{7}$ $R^{3}N_{7}$

received Feb 7 2012; accepted Mar 28 2012; published Apr 16 2012;

22. Stereoselective annelation of 3-substituted imidazo[4,5-*b*]pyridines with cyanoacetylenic alcohols and domino rearrangement of the adducts (12-6932UP)

Boris A. Trofimov, Ludmila Andriyankova, Lina Nikitina, Kseniya Belyaeva, Anastasiya Mal'kina, Oleg Dyachenko, Olga Kazheva, Anatolii Chekhlov and Andrei Afonin

Full Text: PDF (263K)

pp. 229 - 244

$$R^{2}$$
 R^{3}
 R^{2}
 R^{3}
 R^{2}
 R^{3}
 R^{3}
 R^{2}
 R^{3}
 R^{3}
 R^{4}
 $R^{50-88\%}$
 R^{1}
 R^{1}
 R^{2}
 R^{3}
 R^{4}
 $R^{50-88\%}$

received Sep 21 2011; accepted Dec 27 2011; published Apr 16 2012;

23. DBU-mediated cleavage of aryl- and heteroaryl disulfides (12-7066QP)

Dubekile Nyoni, Kevin A. Lobb, Perry T. Kaye and Mino R. Cairab

Full Text: PDF (155K)

pp. 245 - 252

DBU-mediated cleavage reactions

received Nov 1 2011; accepted Dec 27 2011; published Apr 16 2012;

24. Synthesis of a coumarin/phenanthridine-fused heterocycle as a lockable colorimetric fluorescence molecular switch (12-7022VP)

Shih-Hsun Su and Ding-Yah Yang

Full Text: PDF (557K)

Supplementary Material: PDF (1,241K)

pp. 253 - 263

received Oct 16 2011; accepted Feb 18 2012; published Apr 22 2012;

25. Structure-reactivity study of *O*-tosyl *Cinchona* alkaloids in their new synthesis and in hydrolysis to 9-epibases. Unexpected formation of cinchonicine enol tosylate accelerated by microwave activation

(12-6864OP)

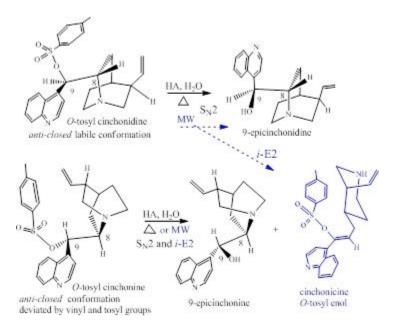
Teodozja M. Lipińska, Katarzyna Piechocka, Monika Denisiuk, Beata Chmiel and Agnieszka Sk $\tilde{\mathsf{A}}^3$ rska-

Stania

Full Text: PDF (922K)

Supplementary Material: PDF (1,122K)

pp. 264 - 280



received Aug 23 2011; accepted Mar 24 2012; published Apr 22 2012;

26. A comparative study of solution phase as well as solvent free microwave assisted syntheses of 3-benzothiazole/isoxazole substituted 2-styryl-4(3*H*)-quinazolinones (12-6821IP)

Chandresh L. Jagani, Satish F. Vanparia, Tarosh S. Patel, Ritu B. Dixit and Bharat C. Dixit

Full Text: PDF (254K)

Supplementary Material: PDF (819K)

pp. 281 - 294

received Aug 7 2011; accepted Feb 18 2012; published Apr 25 2012;

27. A facile and efficient one-pot three-step protocol for synthesis of 6-aryl-7-oxo-5-aryoxy/alkoxy-1-(p-tolyl)-6,7-dihydro-1*H*-pyrazolo[4,3-*d*]pyrimidine-3-carbonitrile (12-7144QP)

Ming-Hu Wu, Ji-Huan Hu, Hai-Bing Guo and Yan Li

Full Text: PDF (291K)

pp. 295 - 303

EtO₂C
$$\stackrel{CH_3}{\longrightarrow}$$
 $\stackrel{1, Ar-N=C=O, THF}{\longrightarrow}$ $\stackrel{O}{\longrightarrow}$ $\stackrel{Ar}{\longrightarrow}$ $\stackrel{N}{\longrightarrow}$ $\stackrel{N}{\longrightarrow}$

received Dec 6 2011; accepted Feb 18 2012; published May 9 2012;

28. Synthesis and characterization of novel *N*-acyl cyclic urea derivatives (12-6773HP)

Tingting Yang and Guohua Gao

Full Text: PDF (166K)

pp. 304 - 316

11 examples, up to 86% isolated yield

12 examples, up to 95% isolated yield

received Jul 17 2011; accepted Feb 11 2012; published May 10 2012;

29. N-alkylation of isatins utilizing KF/alumina (12-7191UP)

Charles M. Clay, Hagar M. Abdallah, Carly Jordan, Kyle Knisley and Daniel M. Ketcha

Full Text: PDF (118K)

pp. 317 - 325

received Dec 21 2011; accepted Feb 11 2012; published May 13 2012;

30. Synthesis of thieno- and benzocyclohepta[*b*]indoles: Gewald reaction and regioselective cycloaddition of acetylenic esters (12-7162IP)

Ezhumalai Yamuna, Matthias Zeller, Philip O. Adero and Karnam Jayaramapillai Rajendra Prasad.

Full Text: PDF (280K)

pp. 326 - 342

received Dec 12 2011; accepted Feb 18 2012; published May 21 2012;

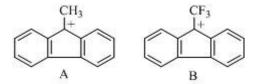
31. Direct observation of a doubly destabilized cation (12-7057QP)

Hanan Afifi, Alexandre Mikhailine, Gabriela Mladenova, Andrei Chtchemelinine, Israt Sultana, Tatiana Dyblenko, Evgeny Danilov, Rene Fournier and Edward Lee-Ruff

Full Text: PDF (379K)

Supplementary Material: PDF (54K)

pp. 343 - 354

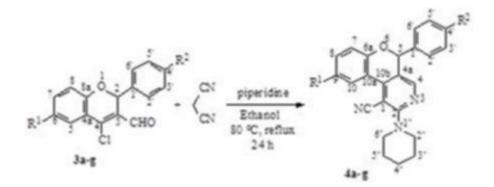


received Oct 28 2011; accepted Apr 14 2012; published May 23 2012;

32. Synthesis of 5-aryl-2-piperidino-5*H*-chromeno[3,4-*c*]pyridine-1-carbonitriles (12-7010IP)

M. Venkati, S. Satyanarayana Reddy, G. Y. S. K. Swamy, K. Ravikumar and G. L. David Krupadanam Full Text: PDF (229K)

pp. 355 - 364



received Oct 12 2011; accepted Feb 18 2012; published May 23 2012;

33. Synthesis and antitumour activity of varitriol and its analogues (12-7295YP)

Oľga CaletkovÃi, Angelika LÃisikovÃi, MariÃin Hajdúch, Petr DžubÃik and Tibor Gracza Full Text: PDF (531K)

pp. 365 - 383

new analogues of (+)-varitriol

received Feb 7 2012; accepted Apr 14 2012; published May 24 2012;

34. Nucleophilic substitution and ring transformation reactions with 4-chloro-6-ethyl-3-nitropyrano[3,2-c]quinoline-2,5(6H)-dione (12-7329DP)

Hany Mohamed Hassnin Full Text: PDF (160K)

pp. 384 - 397

received Feb 26 2012; accepted Apr 14 2012; published May 31 2012;

35. Competing transformations of 2-cyanoacetanilides in the reactions with derivatives of ethoxymethylenemalonic acid (12-6354IP)

Valeriya P. Tkachova, Nikolay Yu. Gorobets, Roman P. Tkachov, Vladimir I. Musatov and Vladimir D. Dyachenko

Full Text: PDF (576K)

pp. 398 - 411

36. Ferrocenyl and pyrenyl thioimidates bearing terminal acetylenic groups. Synthesis and "click" reaction with 3'-azido-3'-deoxythymidine affording novel redox-active and fluorescent thymidine conjugates (12-7332FP)

Anna Wrona-Piotrowicz, Damian Plażuk, Sławomir Domagała and Janusz Zakrzewski

Full Text: PDF (157K)

pp. 412 - 420

received Feb 27 2012; accepted Aug 2 2012; published Aug 24 2012;

37. Stereoselective synthesis of *N,O,O,O*-tetraacetyl-D-ribo-phytosphingosine, *N,O,O*-triacetyl-D-erythro-sphingosine and *N,O,O*-triacetyl sphingonine from a common chiral intermediate derived from D-mannitol (12-7378YP)

Ravinder Mettu, Narendar Reddy Thatikonda, Oladoye Sunday Olusegun, Ramesh Vishvakarm and Jayathirtha Rao Vaidya

Full Text: PDF (588K)

pp. 421 - 436

received Mar 23 2012; accepted Jul 25 2012; published Aug 24 2012;