Graphical Abstract

Heterocycl. Commun.6(2009) 397-400

Synthesis of a novel conformational restricted amino acid for potential use in peptide chemistry

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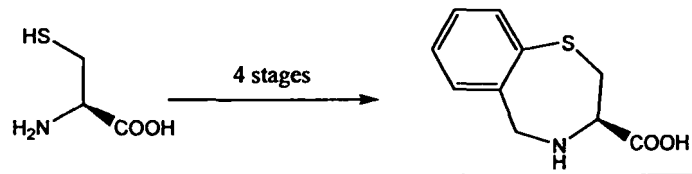
A novel amino acid, (R)-2,3,4,5-tetrahydro-benzo-[1,4]-thiazepine-3-carboxylic acid, was synthesized using L-Cysteine and 2-fluoro-benzaldehyde as starting materials to undergo five-step reactions. The desired compound may be used in peptide chemistry as a potent conformational restricted amino acid.



Heterocycl. Commun.6(2009) 401-405

Synthesis of novel 4-(diarylmethylene)piperidines

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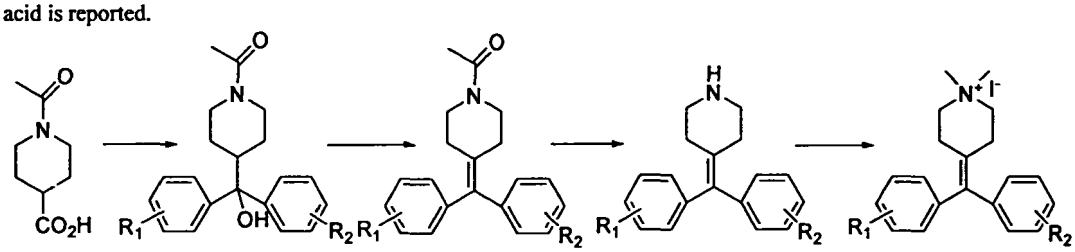
An efficient sequence to the seven novel 4-(diarylmethylene)piperidines starting from the commercially available 1-acetylpiperidine-4-carboxylic acid is reported.

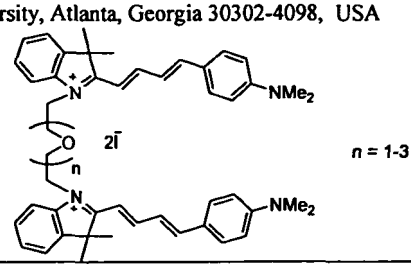


Heterocycl. Commun.6 (2009) 407-409

Visible bis(indolium tetramethine hemicyanine) dyes with a spacer derived from oligo(ethylene glycol)

Ewa Wolinska and Lucjan Strekowski*

Department of Chemistry, Georgia State University, Atlanta, Georgia 30302-4098, USA



Heterocycl. Commun.6 (2009) 411-416

Synthesis Of Novel Substituted Pyrazolines And Isoxazolines Containing Indole And Coumarines

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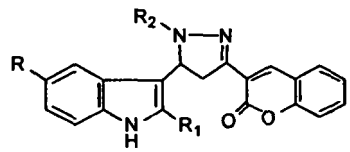
A novel 5-(2', 5'-disubstituted 1'H-indol-3'-yl)-3-(2"H-Chromen-2"-one-3"-yl) 4,5-dihydro-1H-pyrazoles **2a-d**, 1-acetyl 5-(2', 5'-disubstituted 1'H-indol-3'-yl)-3-(2"H-Chromen-2"-one-3"-yl) 4,5-dihydro-1H-pyrazoles **3a-d**, 1-phenyl-5-(2', 5'-disubstituted 1'H-indol-3'-yl)-3-(2"H-Chromen-2"-one-3"-yl) 4,5-dihydro-1H-pyrazoles **4a-d** and 5-(2', 5'-disubstituted 1'H-indol-3'-yl)-3-(2"H-Chromen-2"-one-3"-yl) 4,5-dihydroisoxazoles **5a-d** have been prepared by the cyclocondensation of Chalcones with hydroxylaminehydrochloride, hydrazinehydrate and phenylhydrazine respectively.

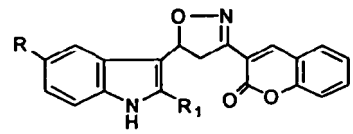


(2a-d) (3a-d) (4a-d)

R= Cl, CH_3, H, H

R_1= Ph, Ph, Ph, H

R_2= H, $COCH_3$, Ph,



(5a-d)

R= Cl, CH_3, H, H

R_1= Ph, Ph, Ph, H

Heterocycl. Commun6 (2009) 417-421

Microwave-Induced One-Pot Facile Synthesis Of Thiazolo-Pyrimidines Using Silica Gel As Solid Support

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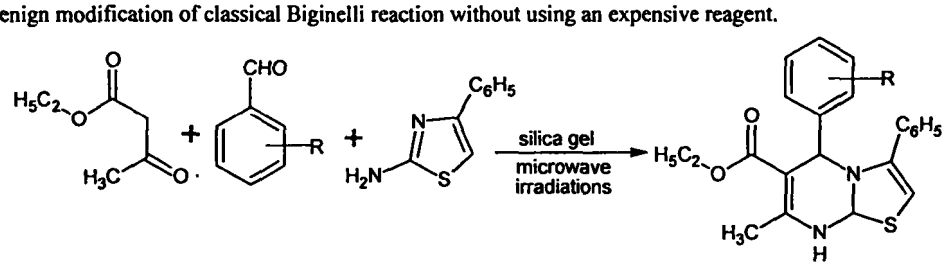
An efficient one-pot rapid synthesis of thiazolo-pyrimidines was carried out via Biginelli three component condensation reaction under microwave irradiations in a solvent-free media using Silica gel as solid support. The present method provides a high speed, efficient, environmentally benign modification of classical Biginelli reaction without using an expensive reagent.



R = 2-OH; 3-OH; 4-OH; 2-NO_2;
3-NO_2; 4-NO_2; 4-Br; 2,4-(Cl),
4-OCH_3; 2,3-(O-CH_2-O);
4-OH,3-OCH_3, 4-N(CH_3); H

Heterocycl. Commun.6 (2009) 423-427

Microwave Assisted Synthesis Of Substituted 1,2,3,4-Tetrahydro-2-Pyrimidinones And 1,2,3,4-Tetrahydro-2-Pyrimidinethiones From Quinoline Chalcones

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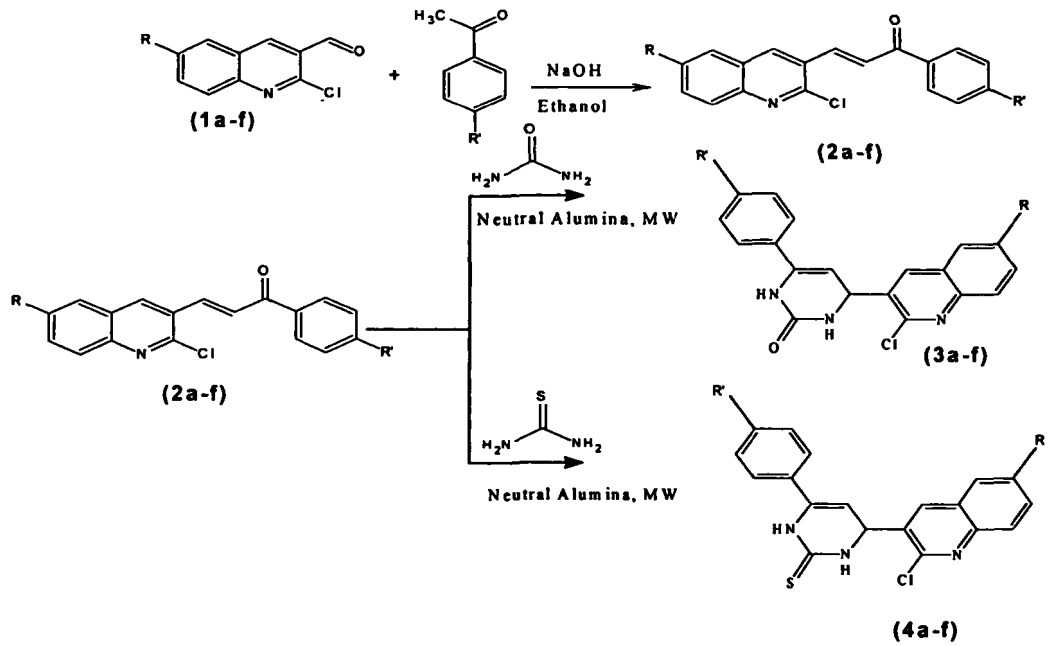
The synthesis of heterocyclic compounds 1,2,3,4-tetrahydro-2-pyrimidinones **(3a-f)** and 1,2,3,4-tetrahydro-2-pyrimidinethiones **(4a-f)** from quinoline chalcones under solvent free conditions using microwaves and by conventional methods are described.

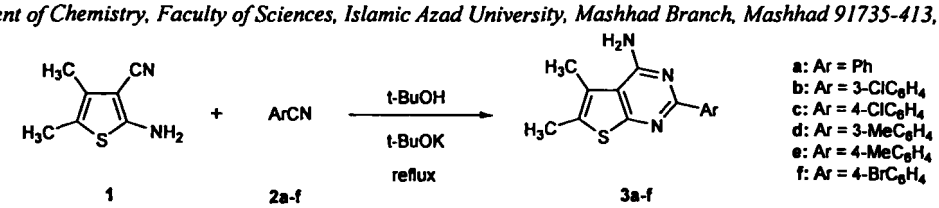


a) R=H & R′= H b) R=H & R′= Cl c) R=H & R′= Br d) R=H & R′= CH_3
e) R=H & R′= OCH_3 f) R= OCH_3 & R′=H

Heterocycl. Commun.6 (2009) 429-432

Synthesis Of Some New Thieno[2,3-D]Pyrimidin-4-Amine Derivatives

Abolghasem Davoodnia*, Mehdi Bakavoli, Mohammad-Reza Asadi and Niloofar Tavakoli-Hoseini
Department of Chemistry, Faculty of Sciences, Islamic Azad University, Mashhad Branch, Mashhad 91735-413, Iran.



Some new thieno[2,3-d]pyrimidin-4-amines have been prepared through base-catalyzed cyclocondensation reaction of 2-amino-4,5-dimethylthiophene-3-carbonitrile with aryl nitriles.

Heterocycl. Commun 6 (2009) 433-442

Synthesis and antimicrobial activitiy of novel barbituric acid and thiohydantoin derivatives of imidazo [2, 1-b][1, 3, 4]thiadiazoles.

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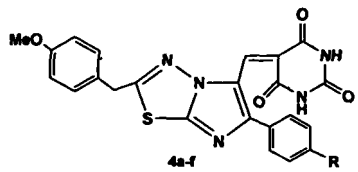
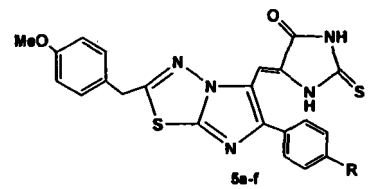
A series 5-[6-aryl-2-(4-methoxybenzyl)imidazo[2,1-b][1,3,4]thiadiazol-5-yl-methylene]-pyrimidine-2,4,6-triones **(4a-f)** and 5-[6-aryl-2-(4-methoxybenzyl)imidazo[2,1-b][1,3,4] thiadiazol-5-yl]methylene-2-thioxoimidazolidin-4-one **(5a-f)** were synthesized from 5-formyl derivatives of 2-(4-methoxybenzyl)-6-arylimidazo[2,1-b][1,3,4]thiadiazole (3a-f) by the knoevenagel condensation with barbituric acid & thiohydantoin. These newly synthesized compounds were screened for their antibacterial and antifungal activities.



4a-f



5a-f

Heterocycl. Commun.6(2009) 443-449

Synthesis of novel mannich bases containing Pyrazolones and indole systems

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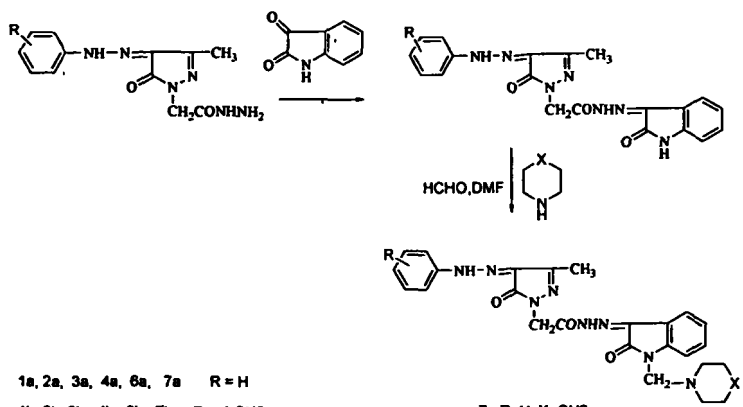
Professor in Chemistry S.K.University Anantapur, Andrapradesh, India
Author to whom correspondence should be addressed -lkravindranath@gmail.com



1a, 2a, 3a, 4a, 6a, 7a R = H
1b, 2b, 3b, 4b, 6b, 7b R = 4-CH3
1c, 2c, 3c, 4c, 6c, 7c R = 4-OCH3
1d, 2d, 3d, 4d, 6d, 7d R = 4-OC2H5
1e, 2e, 3e, 4e, 6e, 7e R =4- Cl
1f, 2f, 3f, 4f, 6f, 7f, R=4-Br

7a R=H, X=CH2
7g R=H, X=O
7h R=H, X=N-CH3

Heterocycl. Commun.6 (2009) 451-458

An Efficient Synthesis of Some Novel Bicyclic Thiazolopyrimidine Derivatives

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Department of Chemistry, Faculty of Sciences, Arak University, Arak, Iran.
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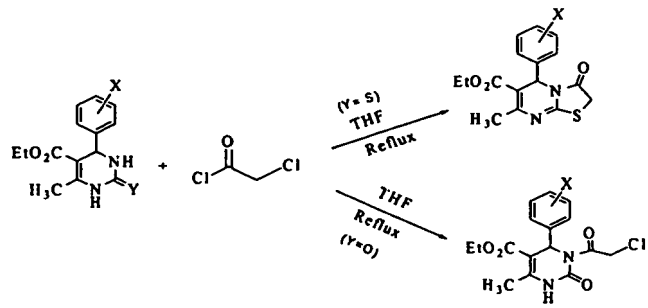

Heterocycl. Commun.6 (2009) 459-465

Efficient Synthesis Of 2-Amino-6-Aryl-5,6-Dihydro -3*h*-Pyrimidin-4-One Building Blocks Via Domino Reaction

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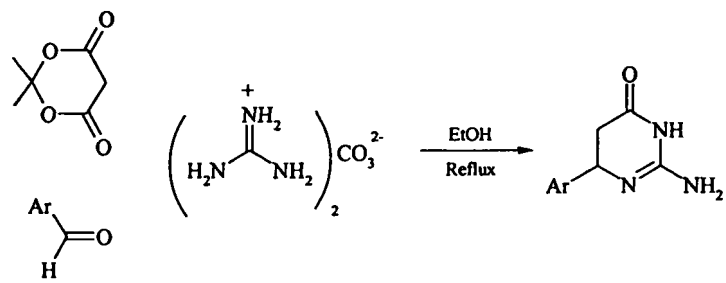
[2]Marine Chemistry Laboratory, Iranian National Center for Oceanography (INCO), P.O.Box 14155-4781 Tehran, Iran



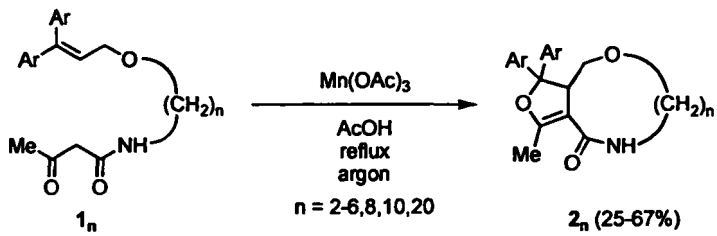
Heterocycl. Commun.6(2009) 467-471

Synthesis of Macrocyclic Amides Using Manganese(III)-Based Intramolecular cyclization of *N*-(ω-Alkenyl)-3-oxobutanamides

Yosuke Ito and Hiroshi Nishino*

Department of Chemistry, Graduate School of Science and Technology, Kumamoto University, Kurokami 2-39-1, Kumamoto 860-8555, Japan

The reaction of *N*-(ω-Alkenyl)-3-oxobutanamides with manganese(III) acetate in glacial acetic acid at reflux temperature under an argon atmosphere resulted in the oxidative intramolecular radical cyclization that produced bicyclomacrocyclic amides in moderate to good yields.



1_n 2_n (25-67%)