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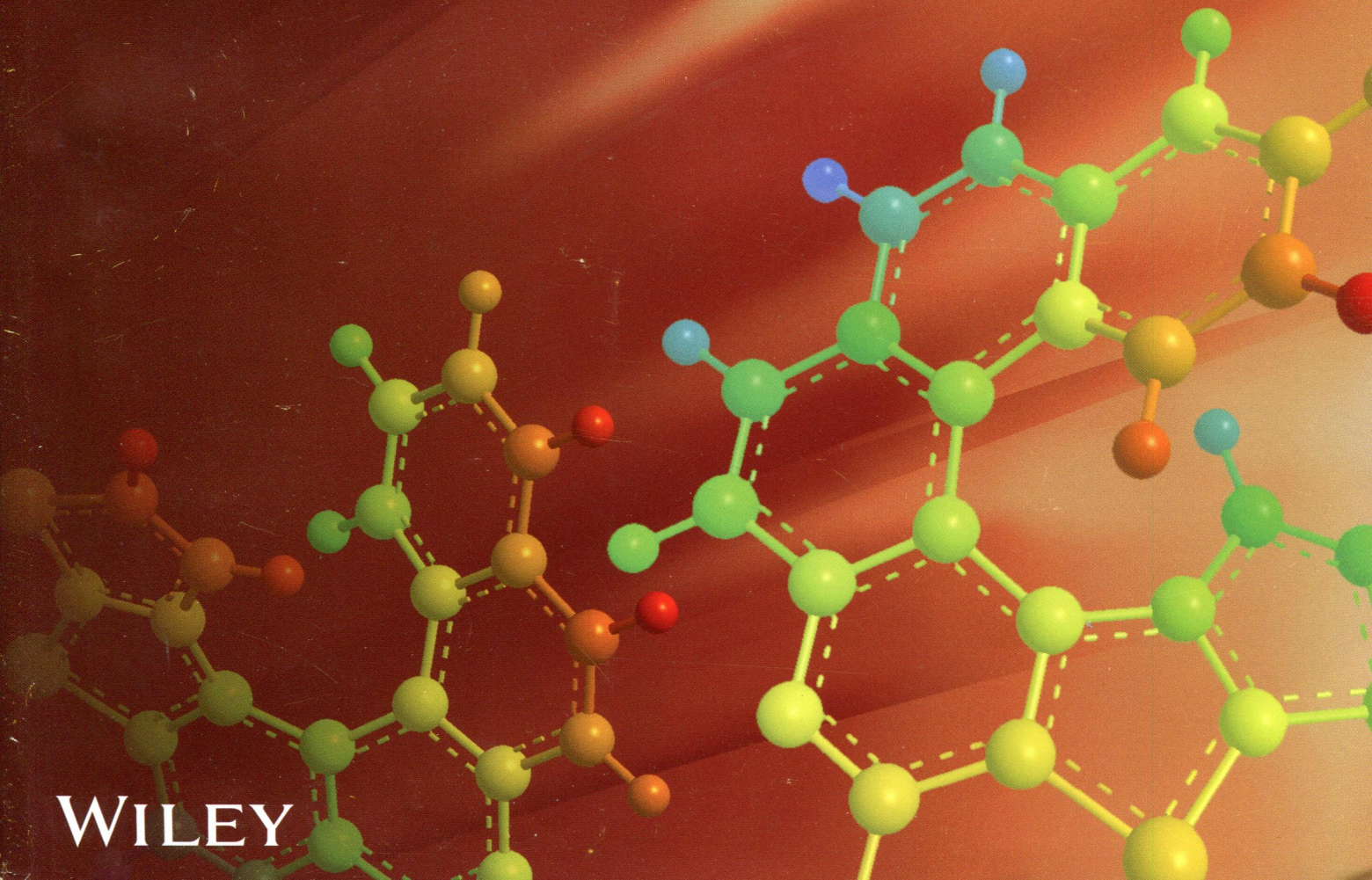
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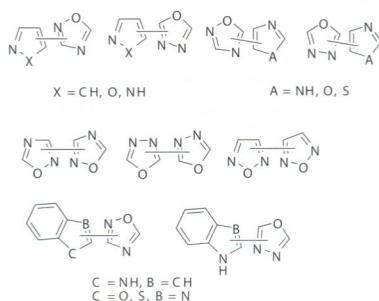
# JOURNAL OF HETEROCYCLIC CHEMISTRY

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VOLUME 51, ISSUE 5

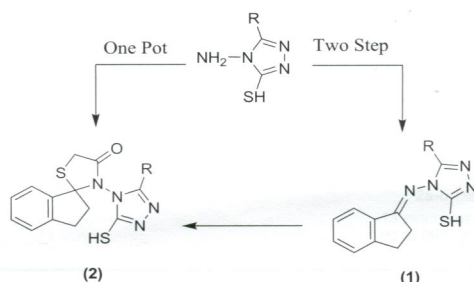
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*Published online 26 March 2014*

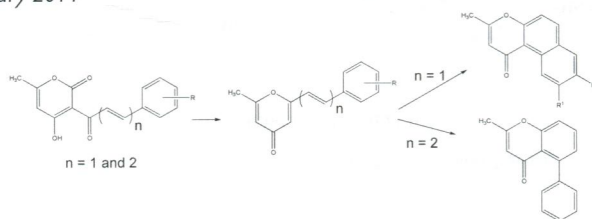


## ARTICLES

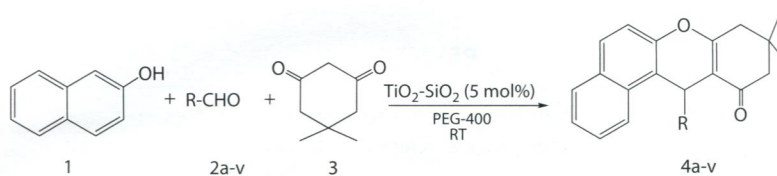
- 1233 Polyethylene Glycol Mediated, One-Pot, Three-Component Synthetic Protocol for Novel 3-[3-Substituted-5-mercapto-1,2,4-triazol-4-yl]-spiro(indan-1',2-thiazolidin)-4-ones as New Class of Potential Antimicrobial and Antitubercular Agents  
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*Published online 13 January 2014*



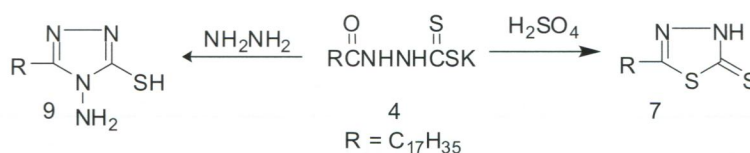
- 1240 A Novel and Efficient Synthetic Method of Benzo[*f*]chromen-1-ones and Phenyl-4*H*-chromen-4-one through Photooxidative Cyclization of 6-[(*E*)-2-Arylviny]-4*H*-pyran-4-ones and 6-[(1*E*,3*E*)-4-Phenylbuta-1,3-dien-1-yl]-4*H*-pyran-4-one  
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*Published online 30 January 2014*



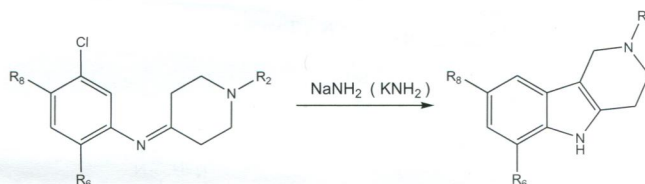
- 1246  $\text{TiO}_2\text{-SiO}_2$  in PEG: A Highly Efficient Green Catalytic System for One-Pot Synthesis of Benzo[a]xanthen-11-ones  
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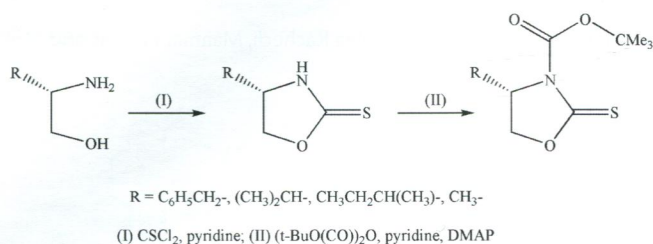
- 1251 Synthesis of Various Nitrogen Heterocycles as Antimicrobial Surface Agents  
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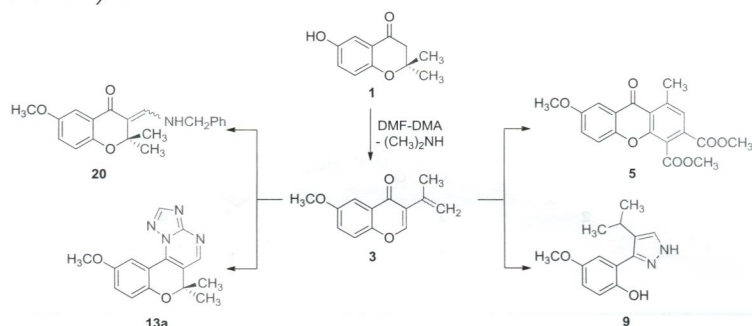
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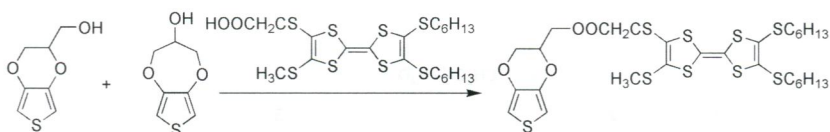
- 1264 Synthesis, X-ray Analysis, and Biological Activities of Novel Oxazolidinethiones  
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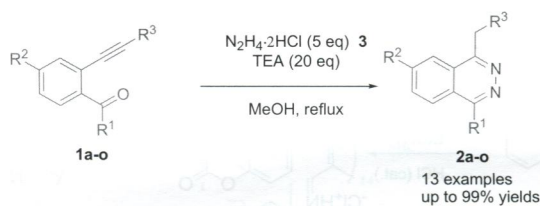
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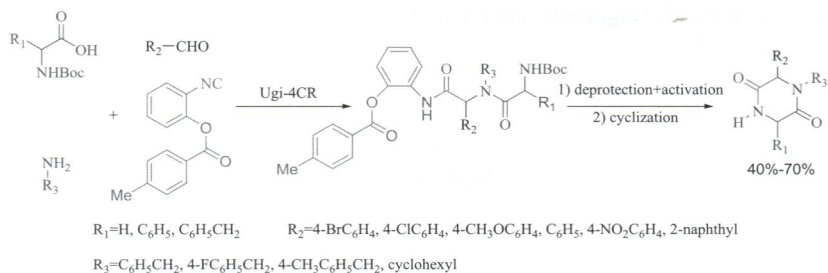
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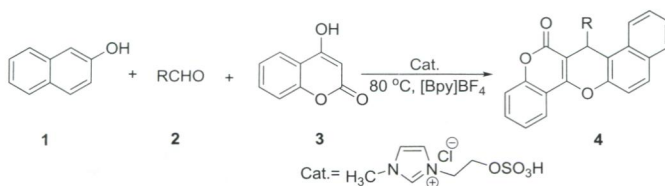
- 1282 A New Pathway for Phthalazine Derivatives via Metal-Free Cyclization of *ortho*-Alkynylphenyl Ketones and Hydrazine  
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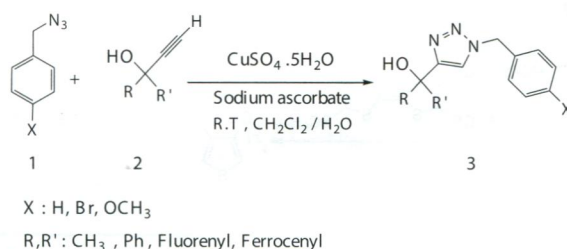
- 1287 Synthesis of 2,5-Diketopiperazine Derivatives Using 2-Isocyanophenyl 4-Methylbenzoate as a Fragrant Convertible Isocyanide  
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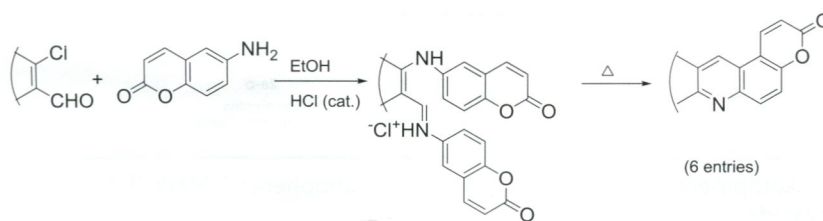
- 1293 Efficient One-Pot Syntheses of 7-Alkyl-6*H*,7*H*-naphtho[1,2:5,6]pyrano-[3,2-*c*]chromen-6-ones by 1-Methyl-3-(2-(sulfooxy)ethyl)-1*H*-imidazol-3-ium Chloride  
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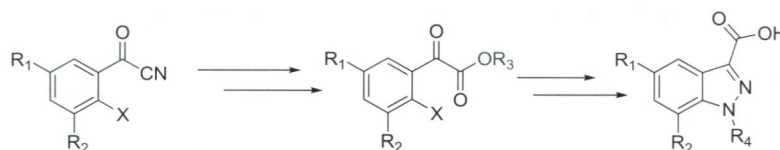
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- 1306 Thermolysis of *N*-Aryl Enaminoimine Hydrochloride Derivatives: A Short and General Method for the Synthesis of Pyranoquinolin-3-one and Pyranoacridin-3-one Derivatives  
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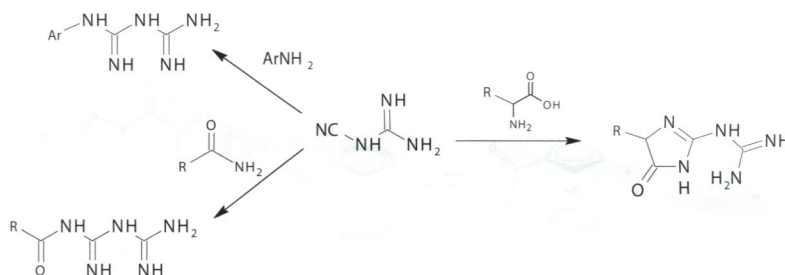


- 1311 Regioselective Synthesis of 1-Substituted Indazole-3-carboxylic Acids  
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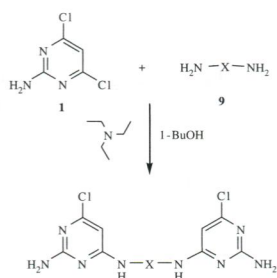
1322 Synthesis of Novel Modified Guanidines: Reaction of Dicyandiamide with Amino Acids, Amides, and Amines in Aqueous Medium

Ahmed M. Soliman, Shaaban K. Mohamed, Mahmoud. Abd El Aleem. Ali. Ali. El-Remaily, and H. Abdel-Ghany  
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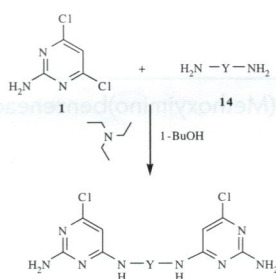


1327 Synthesis and *In Vitro* Evaluation of Bis-intercalators with Varied Linkers between Aminochloropyrimidine Rings

Y. Zhao, P.J. McCarthy, and C. Párkányi  
Published online 17 March 2014



10. X = (CH<sub>2</sub>)<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>  
 11. X = (CH<sub>2</sub>)<sub>3</sub>O(CH<sub>2</sub>)<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>  
 12. X = (CH<sub>2</sub>)<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>  
 13. X = (CH<sub>2</sub>)<sub>5</sub>O(CH<sub>2</sub>)<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>



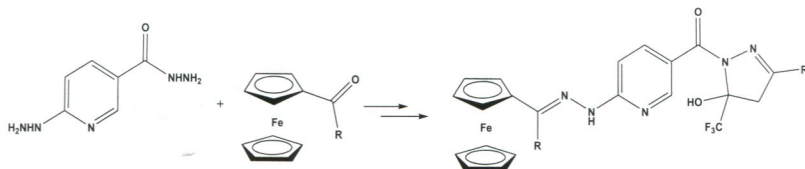
15. Y = CH<sub>2</sub>--CH<sub>2</sub>  
 16. Y = -CH<sub>2</sub>-  
 17. Y = -(CH<sub>2</sub>)<sub>2</sub>-  
 18. Y = -O-  
 19. Y = -S-



1333 Facile Synthesis and Structural Characterization by NMR, ESI-MS/MS and DFT Calculations of New (*E*)-6-[2-Ferrocenylalkylidenehydrazino]nicotinic Hydrazides and Their (*E*)-Ferrocenyl-pyrazolyl-pyridine Heterocyclic System

Liliane M. F. Porte, Gisele R. Paim, Thiago G. Schwanz, Alexandre R. Meyer, Helio G. Bonacorso, Marcos A. P. Martins, and Nilo Zanatta

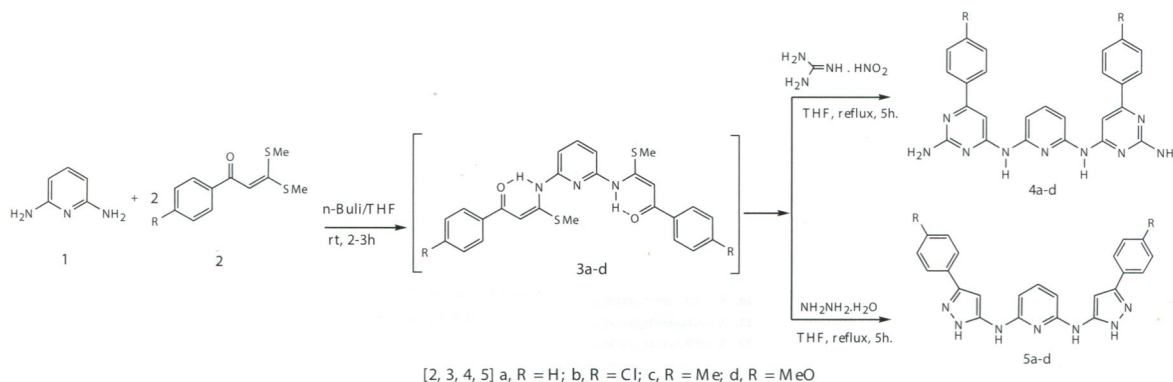
Published online 17 March 2014



1340 Regioselective Synthesis of Polyaza Pyrimidines and Polyaza Pyrazoles under One-Pot Multicomponent Reaction Conditions

Okram Mukherjee Singh, Laishram Ronibala Devi, Ki Bum Lim, and Sang-Gyeong Lee

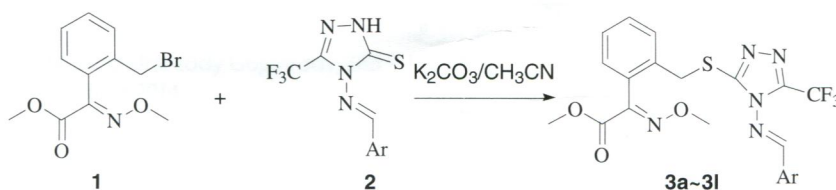
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1345 Synthesis and Fungicidal Activity of (*E*)- $\alpha$ -(Methoxyimino)benzeneacetate Derivatives Containing 1,2,4-Triazole Schiff Base Side Chain

Hong-Xing Song and De-Qing Shi

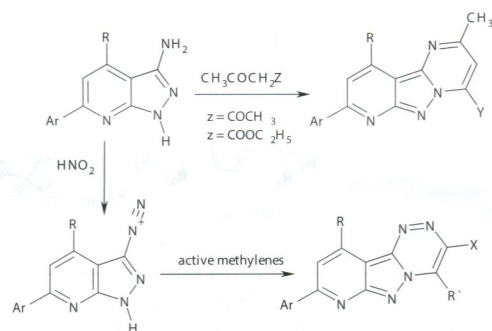
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1349 Synthesis of Pyrido[2',3':3,4]pyrazolo[1,5-*a*]pyrimidine, Pyrido[2',3':3,4]pyrazolo[5,1-*c*][1,2,4]triazine, and Pyrazolyl Oxadiazolylthieno[2,3-*b*]pyridine Derivatives

Nora M. Rateb

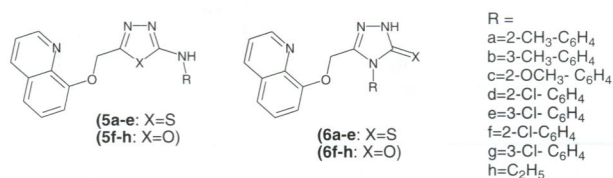
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1357 New *N*-(Aryl)-5-((quinolin-8-yloxy)methyl)-1,3,4-oxa/Thiadiazol-2-amines and 4-Aryl-5-((quinolin-8-yloxy)-methyl)-2*H*-1,2,4-triazole-3(4*H*)-thiones, Synthesis and Characterization

Aamer Saeed, Naem Abbas, Aliya Ibrar, and Michael Bolte

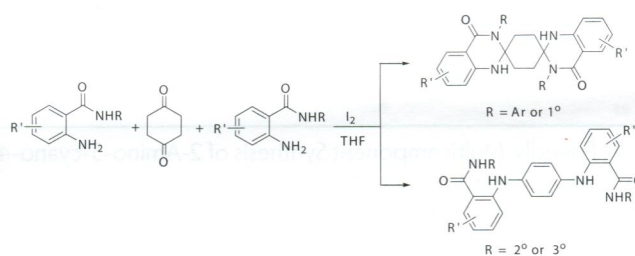
Published online 17 March 2014



1363 A Selective Method for the Synthesis of *N,N'*-diarylbenzene-1,4-diamine and Dispirocyclic Quinazolinone Derivatives Catalyzed by Iodine

Mei-Mei Zhang, Lian Lu, and Xiang-Shan Wang

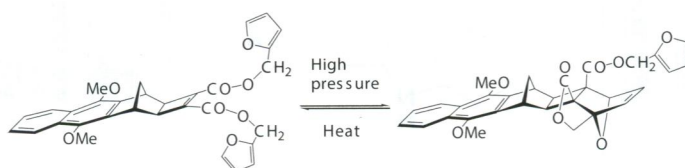
Published online 17 March 2014



1369 Container Systems II: An Experimental Study of the High-Pressure Intramolecular Cycloaddition of Tethered Furans and Anthracenes onto Norbornane Cyclobutene-1,2-diester

Davor Margetić and Ronald N. Warrener

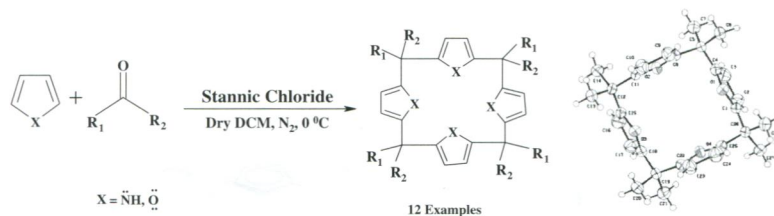
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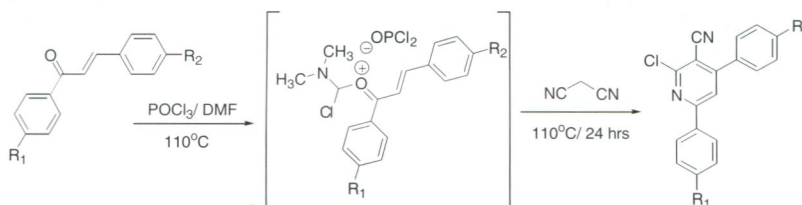
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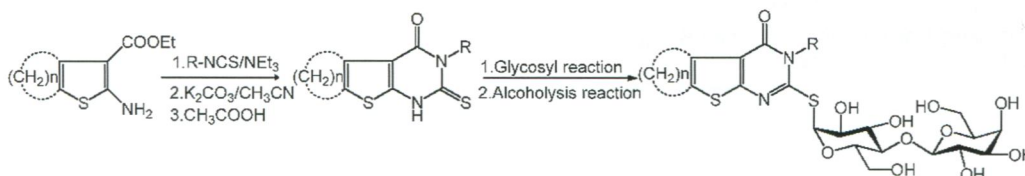
- 1380 An Expedient Synthesis of a New Calix Frame by Lewis Acid Catalyzed Cyclocondensations of Ketones with Different Heterocyclic Ring Systems  
Anupam Nayak and Julie Banerji  
Published online 25 March 2014



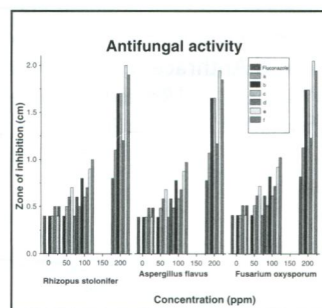
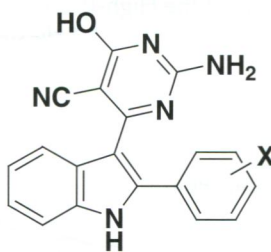
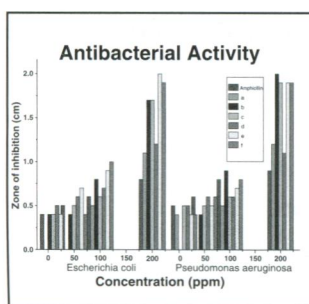
- 1385 A Facile One-Pot Synthesis of Chloropyridines from Chalcones  
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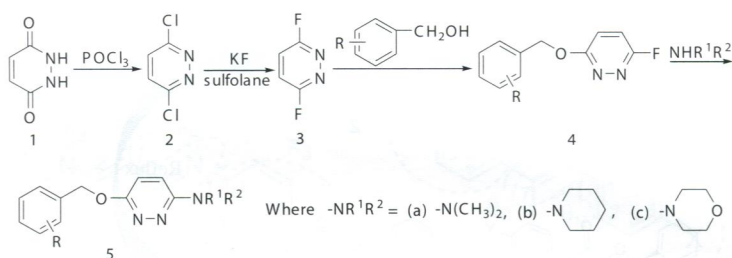
- 1390 Synthesis of Novel Substituted 2-Lactosylthiothieno[2,3-d]pyrimidin-4 (3H)-one Derivatives  
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Published online 25 March 2014



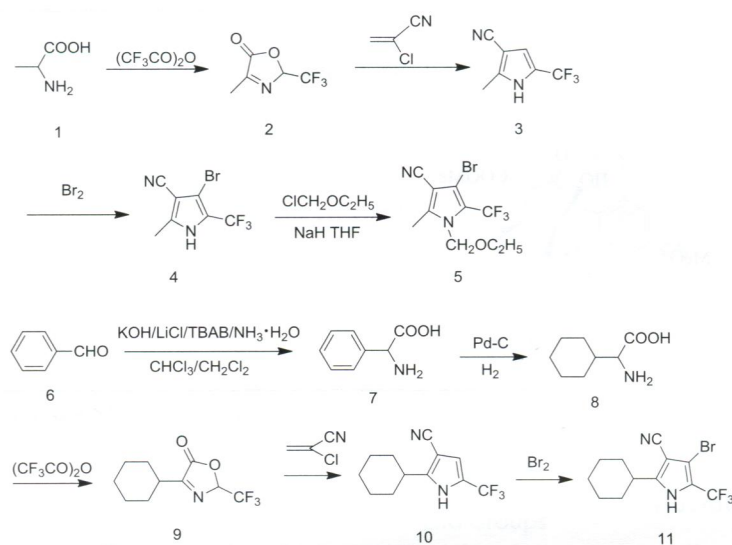
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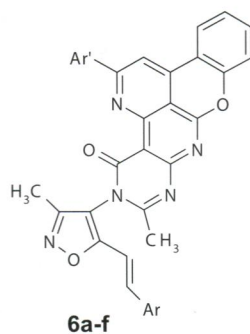
- 1404 Synthesis and Herbicidal Evaluation of 3-*N*-Substituted Amino-6-benzoyloxyridazine Derivatives  
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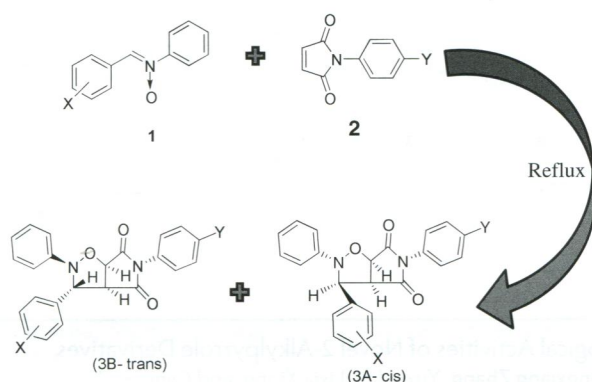
- 1410 Design, Synthesis, and Biological Activities of Novel 2-Alkylpyrrole Derivatives  
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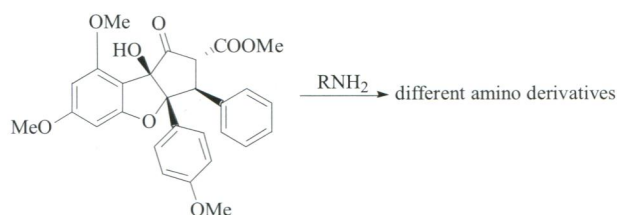
- 1415 A Convenient and Facile Synthesis of Isoxazolyl-chromeno[4,3,2-*de*]pyrimido[4,5-*h*][1,6]naphthyridinones  
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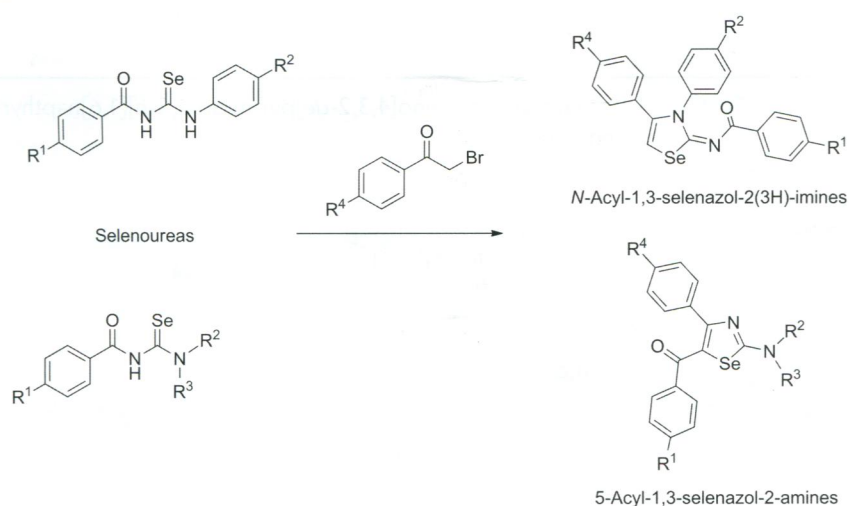
- 1421 1,3-Dipolar Cycloaddition Reactions Leading to the Synthesis of New 2,3,5-Triaryl-4*H*,2,3,3a,5,6,6a-hexahydropyrrolo[3,4-*d'*]isoxazole-4,6-diones  
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- 1430 Studies on Synthesis and Biological Activity of Oxidative Aglafolin Derivatives  
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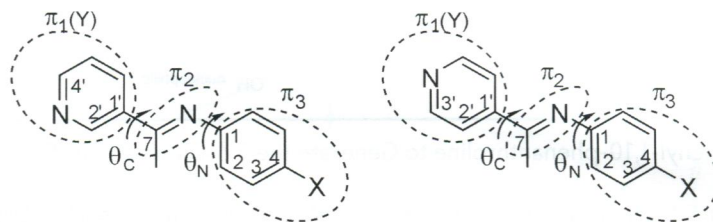


- 1435 Old Selenium Heterocycles Revisited: Synthesis, Spectroscopic, and Structural Characterization of *N*-Acyl-1,3-selenazol-2(3*H*)-imines and 5-Acyl-1,3-selenazol-2-amines from Acylselenourea Derivatives  
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Published online 25 March 2014



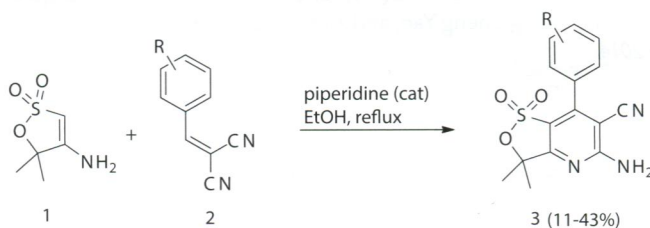


- 1442 Linear Free-Energy Relationships Applied to the  $^{13}\text{C}$  NMR Chemical Shifts in 4-Substituted *N*-[1-(Pyridine-3- and -4-yl)ethylidene]anilines  
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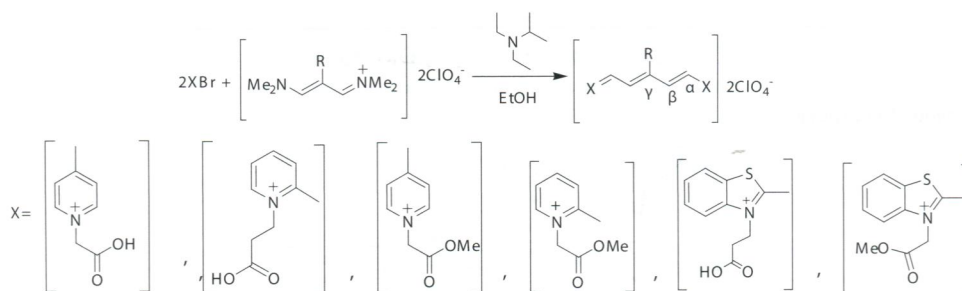


## NOTES

- 1452 Synthesis of 5-Amino-3,3-dimethyl-7-phenyl-3*H*-[1,2]oxathio[4,3-*b*]pyridine-6-carbonitrile 1,1-Dioxides  
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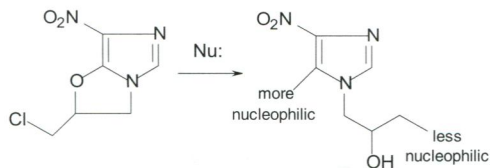


- 1457 Synthesis and Characterization of  $\gamma$ -Heteroaryl-substituted Pentamethine Cyanine Dyes with Carboxy or Methoxycarbonyl Substituents at the Two Heterocyclic End Groups  
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 Published online 30 January 2014

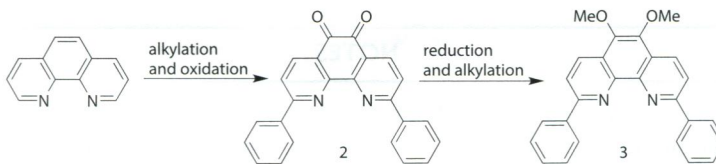


R = 3,5-dimethylpyridinium-1-yl, pyridinium-1-yl, and 1-quinolinium-1-yl

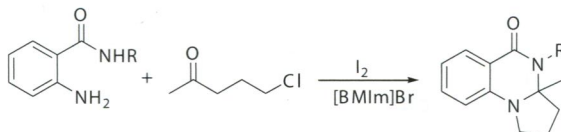
- 1463 Reactions of Nucleophilic Substitution in Bicyclic Nitroimidazodihydrooxazoles  
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 Published online 30 January 2014



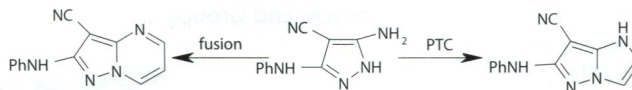
- 1468 Oxidation of 2,9-Diphenyl-1,10-phenanthroline to Generate the 5,6-Dione and Its Subsequent Alkylation Product  
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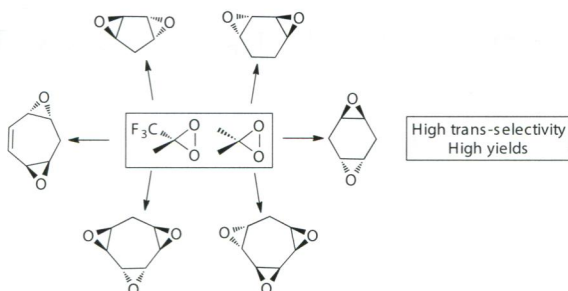
- 1472 A Green Synthesis of Pyrrolo[1,2-*a*]quinazolin-5(1*H*)-one Derivatives in Ionic Liquids Catalyzed by Iodine  
 Jie-Xing Zhou, Lian Lu, Tuan-Jie Li, Chang-Sheng Yao, and Xiang-Shan Wang  
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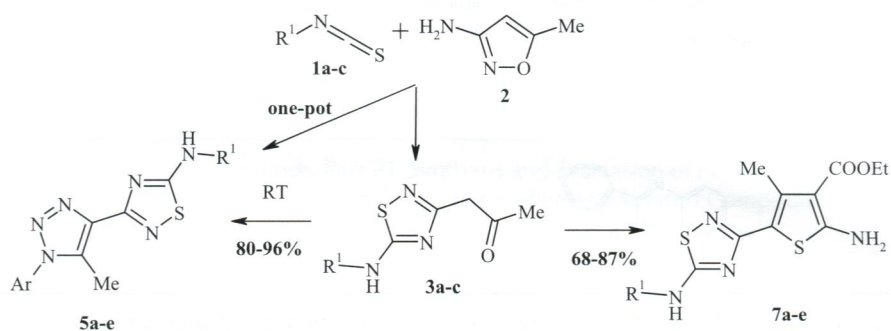
- 1476 Synthesis of Some Novel Imidazopyrazole and Pyrazolopyrimidine Derivatives  
 Ahmed M. M. Soliman, Mahmoud. Abd El-Aleem. Ali. Ali. El-Remaily, Adel. A. Sultan, and Hossam. Abdel-Ghany  
 Published online 4 February 2014



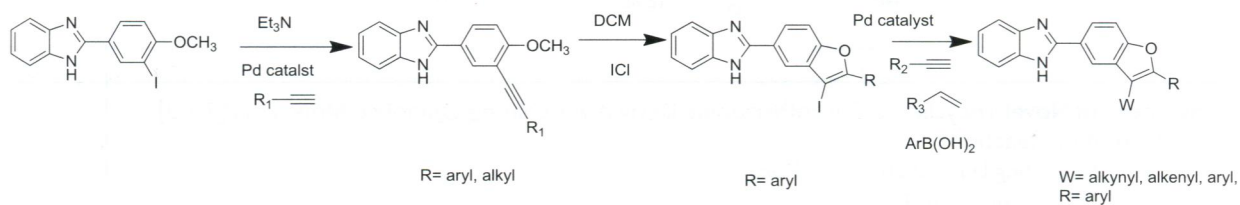
- 1482 Stereoselective Epoxidation of Cyclic Dienes and Trienes by Dioxiranes  
 Lucia D'Accolti, Cosimo Annese, Antonella Aresta, and Caterina Fusco  
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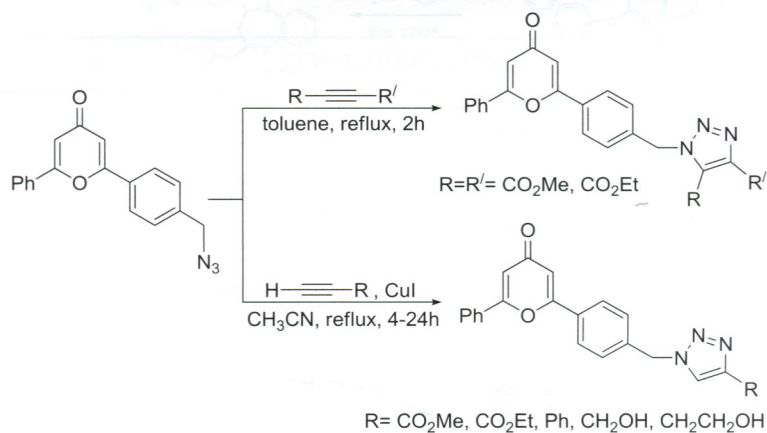
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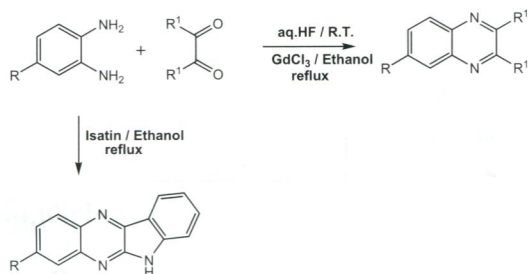


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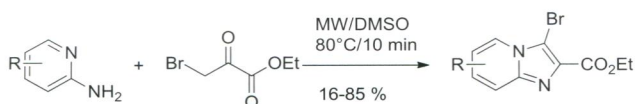




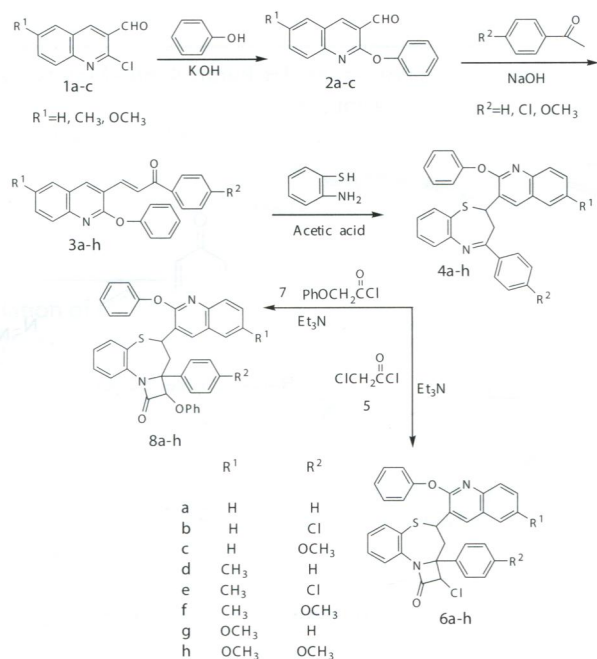
- 1504 Aqueous Hydrofluoric Acid Catalyzed Facile Synthesis of 2,3,6-Substituted Quinoxalines  
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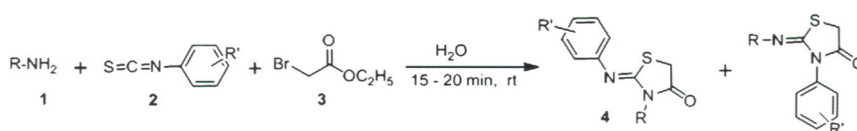
- 1509 Microwave-Assisted One-Pot Synthesis of Substituted 3-Bromoimidazo[1,2-*a*]pyridines and Imidazoheterocycles  
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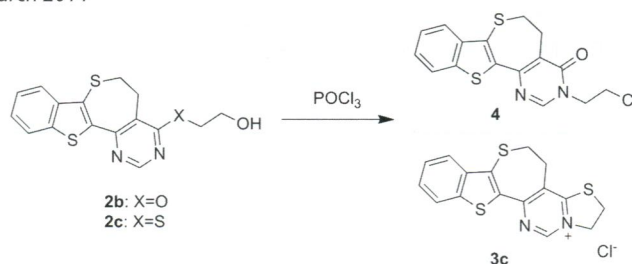
- 1516 Synthesis of Novel Tricyclic 1,5-Benzothiazepine Derivatives Bearing Quinoline Moiety via [2 + 2] Cycloaddition Reaction  
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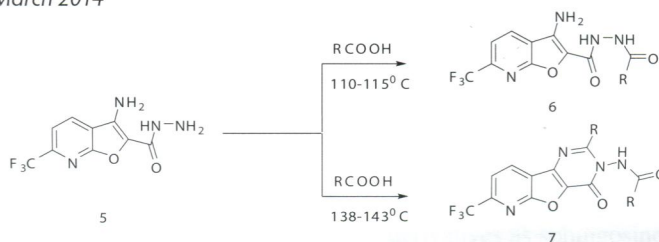
- 1522 An Environmentally Benign Water Promoted Catalyst Free Highly Efficient, One-pot Synthesis of 2-Imino-4-thiazolidinone  
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- 1528 Polycyclic *N*-Heterocyclic Compounds. Part 81: Synthesis and Evaluation of Pentacyclic 1,2,4,5-Tetrahydro[1]-benzothieno[2',3':6,7]thiepine[4,5-*e*]imidazo[1,2-*c*]pyrimidine and Related Compounds as Potential Antiplatelet Aggregators  
 Kensuke Okuda, Yutaka Itzujii, and Takashi Hirota  
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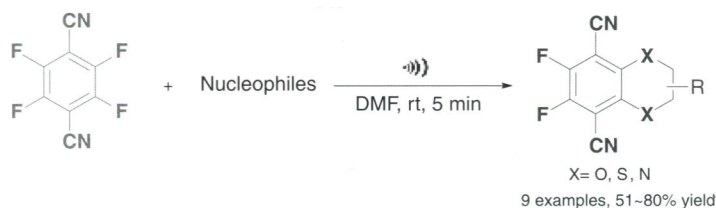


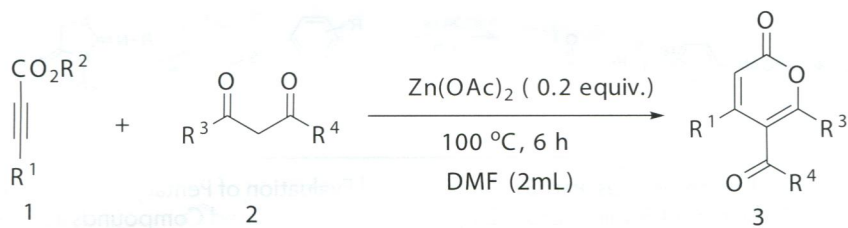
- 1531 Synthesis of Novel Pyrido[3',2':4,5]furo[3,2-*d*]pyrimidine Derivatives and Their Cytotoxic Activity  
 R. Naresh Kumar, G. Malla Reddy, P. Nagendar, C. Kurumurthy, P. Shanthan Rao, Santosh Karnewar, Srigrividhar Kotamraju, and B. Narsaiah  
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## COMMUNICATIONS

- 1536 Ultrasound Assisted Nucleophilic Cyclization of Tetrafluoroterephthalonitrile: An Efficient Way to Fluorine-Containing Heterocycles  
 Liang Wang, Ting Chen, Sheng-Chun Chen, Qun Chen, and Ming-Yang He  
 Published online 30 January 2014





- |  |   |
|--|---|
| 1a ( $\text{R}^1=\text{CO}_2\text{Et}$ ; $\text{R}^2=\text{Et}$ )      | 2a ( $\text{R}^3=\text{Ph}$ ; $\text{R}^4=\text{Ph}$ )  |
| 1b ( $\text{R}^1=\text{Ph}$ ; $\text{R}^2=\text{Et}$ )                 | 2b ( $\text{R}^3=\text{Ph}$ ; $\text{R}^4=\text{Me}$ )  |
| 1c ( $\text{R}^1=\text{n-C}_5\text{H}_{11}$ ; $\text{R}^2=\text{Me}$ ) | 2c ( $\text{R}^3=\text{Me}$ ; $\text{R}^4=\text{Me}$ )  |
| 1d ( $\text{R}^1=\text{CO}_2\text{Me}$ ; $\text{R}^2=\text{Me}$ )      | 2d ( $\text{R}^3=\text{Me}$ ; $\text{R}^4=\text{OEt}$ ) |