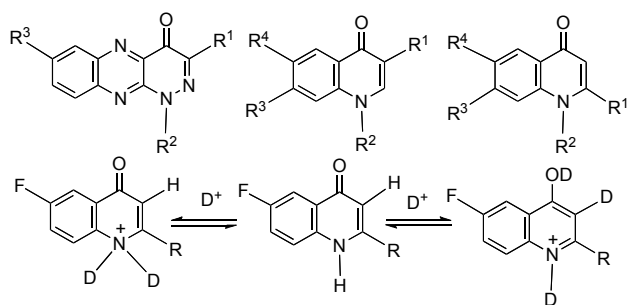


■ REVIEW

1 Synthesis, Biological Activities, and Tautomerism of 4-Quinolones and Related Compounds

Yoshihisa Kurasawa* and Kenji Sasaki

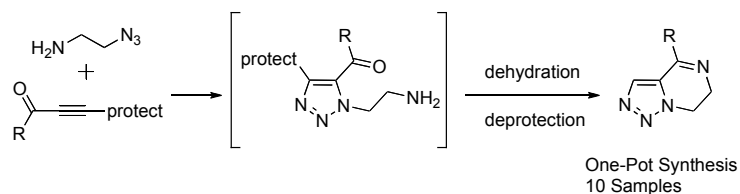


Synthesis Biological Activity Tautomerism 4-Quinolone 4-Hydroxyquinoline

■ COMMUNICATION

41 One-Pot Synthesis of [1,2,3]Triazolo[1,5-*a*]pyrazine Derivatives from Ynones and Amino Azide

Shinichi Koguchi,* Azusa Sakurai, and Kosuke Niwa

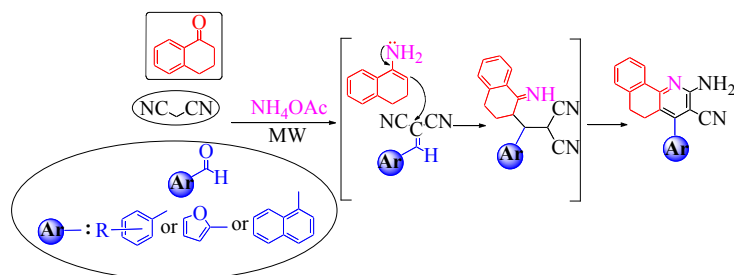


Heterocyclic Compound Triazole One-Pot Synthesis Ring-Closure Reaction

■ PAPERS

49 Cyclohexane-Fused Pyridine Derivatives with Photophysical Properties: Synthesis by “Three-Component” Domino Reaction and Structural Optimization by DFT Calculations

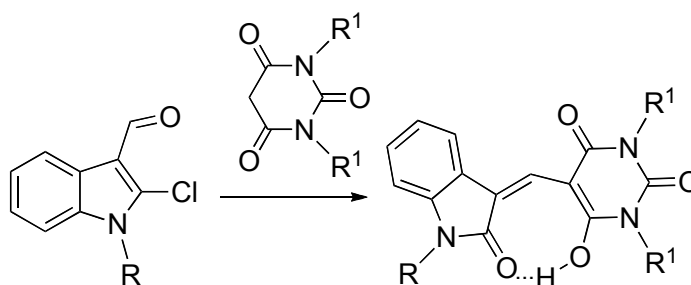
Jianqiang Wang, Ziping Li, Xinzhi Wang, Yixin Zhou, and Cheng Guo*



Quinoline Derivate “Three-Component” Domino Reaction DFT Photophysical Property Microwave Irradiation

- 64 **Reaction of 2-Chloro-1-alkyl-1*H*-Indol-3-carbaldehydes with Barbituric Acids and 5-Methyl-2-phenyl-2,4-dihydropyrazol-3-one. Formation of Compound with Extremely Short Intramolecular Hydrogen Bond in Eight-Membered Pseudocycle**

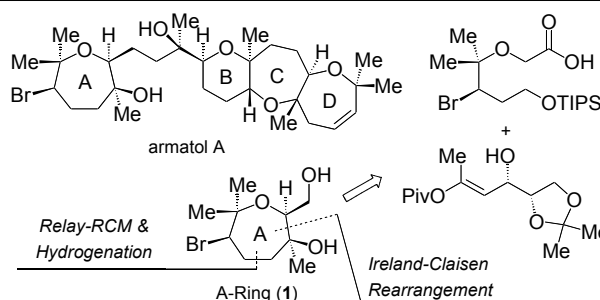
Konstantin F. Suzdalev,* Maria N. Babakova, Victor G. Kartsev, and Konstantin A. Krasnov



Indole Barbituric Acid Intramolecular Hydrogen Bond OHO Bridge 2-Chloro-1*H*-indole-3-carbaldehyde

- 76 **Stereoselective Synthesis of the A-Ring of Armatol A from a Bromo-Substituted Chiral Building Block Based on Ireland-Claisen Rearrangement and Ring-Closing Olefin Metathesis**

Yuta Hirose, Kenshu Fujiwara,* Takafumi Saito, Ryo Katoono, and Takanori Suzuki

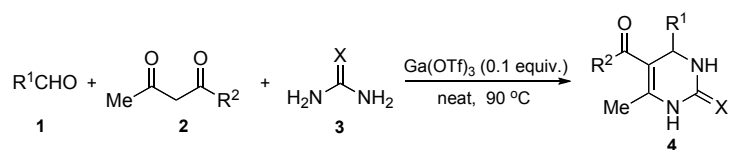


Natural Product Synthesis Oxepane Polyether Triterpene Ireland-Claisen Rearrangement Stereoselective Synthesis

SHORT PAPERS

- 105 **Ga(OTf)₃ Catalyzed Synthesis of 3,4-Dihydropyrimidin-2(1*H*)-ones**

Jingjing Xia* and Kehua Zhang

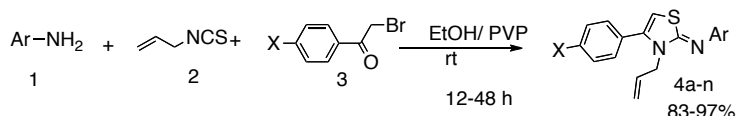


R¹ = C₆H₅, 4-MeO-C₆H₄, 4-F-C₆H₄, 4-Cl-C₆H₄, 4-NO₂-C₆H₄, 2-furanyl, Me, n-C₆H₁₃;
R² = OMe or OEt;
X = O or S.

Biginelli Reaction Gallium(III) Triflate Solvent-Free Reaction Dihydropyrimidinone

- 113 **One-Pot, Three Component Synthesis of Thiazol-2(3*H*)-imines Using Poly(4-vinylpyridine) as an Efficient Reusable Heterogeneous Basic Catalyst**

Jafar Abbasi Shiran, Asieh Yahyazadeh,* Manouchehr Mamaghani, Bohari M. Yamin, and Farhad Shirini

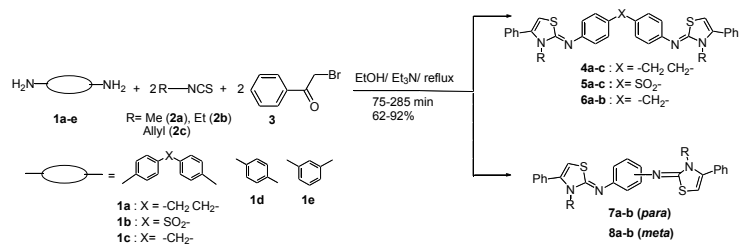


Ar = 3-MeOC₆H₄, 4-MeOC₆H₄, 3,4-di-MeOC₆H₃, 4-EtOC₆H₄, 4-EtC₆H₄, 1-naphthyl, 2-MeOC₆H₄, 3-OHC₆H₄, 4-MeC₆H₄, 3-ClC₆H₄, 4-ClC₆H₄, 4-IC₆H₄
X = H, OMe, Br

One-Pot Three Component Synthesis 3*H*-Thiazole Poly(4-vinylpyridine) Heterogenous Base Catalysis Crystal Structure

123 Three-Component Synthesis of New Substituted Bis[2-imino-3-(substituted)-4-phenyl-3H-thiazole] Derivatives and Evaluation of Their Antibacterial Activity

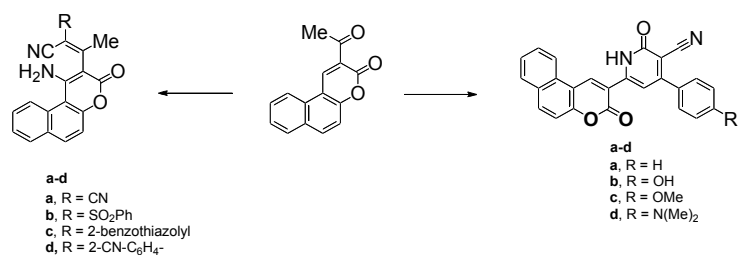
Jafar Abbasi Shiran, Asieh Yahyazadeh,* Bohari M. Yamin, Manouchehr Mamaghani, and Hamzeh Kiyani



Three-Component Reaction Bis-3H-thiazole X-Ray Crystallography Antibacterial Activity

134 Synthesis, Characterization and Biological Activity of Some Novel Coumarin Derivatives Containing Pyridine Moiety

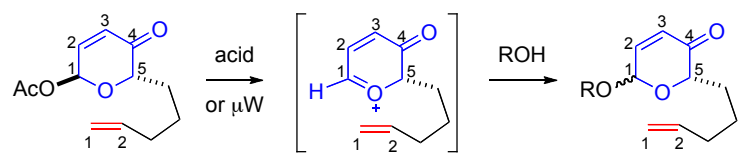
Ahmed A. Fadda,* Khaled S. Mohamed, Hala M. Refat, and Engy E. El-Bialy



Pyridine Chromene Malononitrile

149 Further Investigation of Pyranone Activation

Justin A. Simanis, Christian R. Zwick, Erica L. Woodall, John R. Goodell, and T. Andrew Mitchell*



Pyranone Oxocarbenium Oxidopyrylium [5+2] Cycloaddition Reaction Microwave Irradiation

NEW HETEROCYCLIC NATURAL PRODUCTS

- 157 Polyketides
- 161 Aromatics
- 170 Terpenes
- 183 Steroids
- 186 Alkaloids
- 198 Miscellaneous

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 201 Polyketides
 - 205 Aromatics
 - 209 Terpenes
 - 211 Alkaloids
 - 218 Miscellaneous
-

■ BRUSH UP YOUR HETEROCYCLES

- 219 Brush Up Your Heterocycles
-

Contributors To This Issue

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- 76 Hirose, Yuta
- 64 Kartsev, Victor G.
- 76 Katoono, Ryo
- 123 Kiyani, Hamzeh
- 41 Koguchi, Shinichi
- 64 Krasnov, Konstantin A.
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- 49 Li, Ziping
- 113, 123 Mamaghani, Manouchehr
- 149 Mitchell, T. Andrew
- 134 Mohamed, Khaled S.
- 41 Niwa, Kosuke
- 134 Refat, Hala M.
- 76 Saito, Takafumi
- 41 Sakurai, Azusa
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- 113 Shirini, Farhad
- 149 Simanis, Justin A.
- 64 Suzdalev, Konstantin F.
- 76 Suzuki, Takanori
- 49 Wang, Jianqiang
- 49 Wang, Xinzhi
- 149 Woodall, Erica L.
- 105 Xia, Jingjing
- 113, 123 Yahyazadeh, Asieh
- 113, 123 Yamin, Bohari M.
- 105 Zhang, Kehua
- 49 Zhou, Yixin
- 149 Zwick, Christian R.