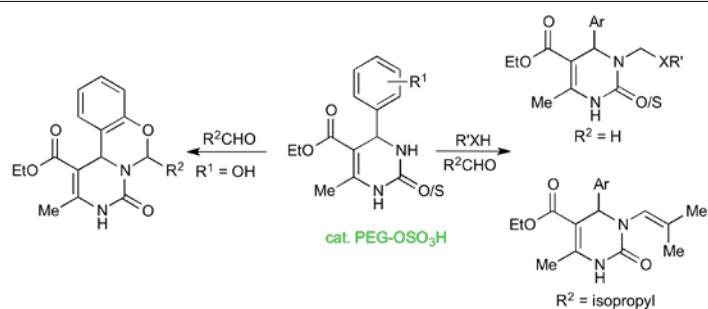


## ■ PAPERS

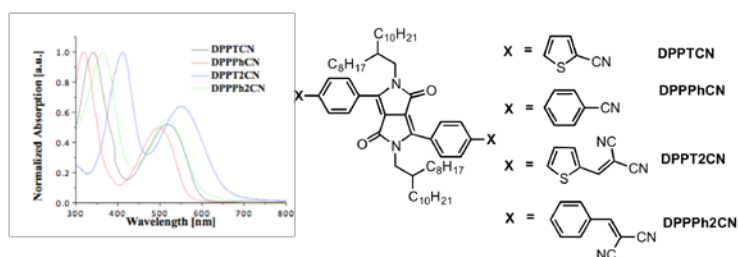
**1027 PEG-OSO<sub>3</sub>H as an Efficient Catalyst in the Synthesis of N3-Functionalized 3,4-Dihydropyrimidinone and Quinazolinone Derivatives**

Liang-Jie Yang, Jin-Ge Luo, and Xi-Cun Wang\*


 PEG-OSO<sub>3</sub>H    N3-Functionalized Dihydropyrimidinone    Quinazolinone Derivative    Benzo[e]pyrimido[1,6-c][1,3]oxazine    Three-Component Reaction

**1040 Effect of End Groups on the Band Gap of Donor-Acceptor Based Small Molecules Containing Diketopyrrolopyrrole**

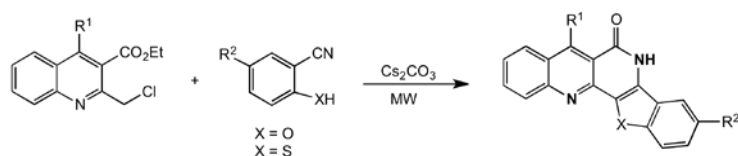
Jin-Hee Han, Hun-Min Kang, Dong Jin Song, Baji Shaik, Yu Mi Heo, Hye Jin Chung, and Seung-Mann Paek\*



Diketopyrrolopyrrole    Dicyanovinylene Derivative    Direct Arylation    Small Molecule    Low Band Gap

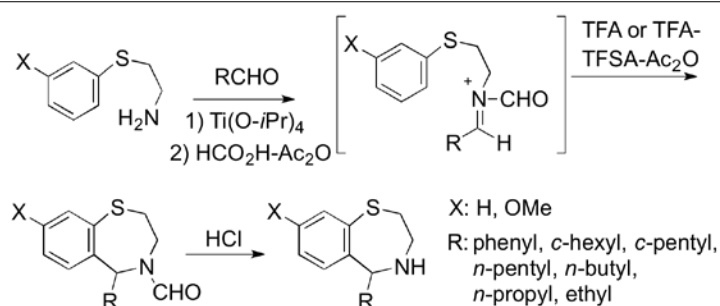
**1055 Microwave-Assisted Synthesis of Benzofuran/Benzothiophene-Fused Naphthyridines via Thorpe-Ziegler Type Heterocyclization**

Jiao Xu,\* Dao-Lin Wang, Zhen-Peng Liu, Kai-Xue Zhang, Wei Ma, and Bin Liu


 Ethyl 2-Chloromethylquinoline-3-carboxylate    Benzofuro- and Benzothieno- [3,2-*h*]benzo[*b*][1,6]naphthyridin-5(6*H*)-ones    Microwave Irradiation

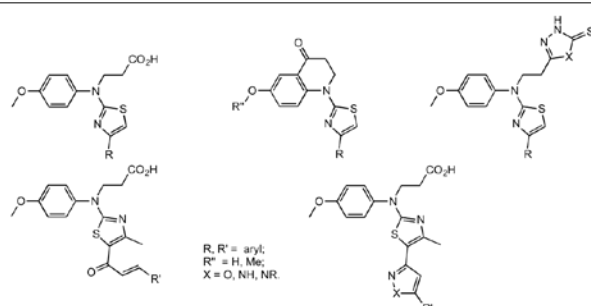
**1063 Short Synthesis of 5-Substituted-2,3,4,5-tetrahydrobenzo-*[f]*[1,4]thiazepines by Using a Modified Pictet-Spengler Reaction**

Toshiaki Saitoh, Michikazu Kitabatake, Yuuko Sugihara, Yuuki Ono, Yoshie Horiguchi, and Kunihiro Mohri\*


 Pictet-Spengler Reaction    5-Substituted-2,3,4,5-tetrahydrobenzo[*f*][1,4]oxazepine    *N*-Formyliminium Ion    Short Synthesis

**1074 Synthesis and Biological Evaluation of Novel Di- and Trisubstituted Thiazole Derivatives**

Irmantas Parašotas, Eglė Urbonavičiūtė, Kazimieras Anusevičius, Ingrida Tumosienė, Ilona Jonuškienė, Kristina Kantminienė,\* Rita Vaickelionienė, and Vytautas Mickevičius

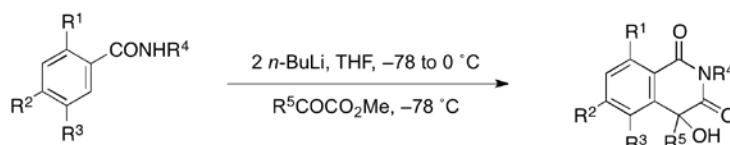


Quinolone    Pyrazole    Isoxazole    Antimicrobial Activity    Antioxidant Activity

## ■ SHORT PAPERS

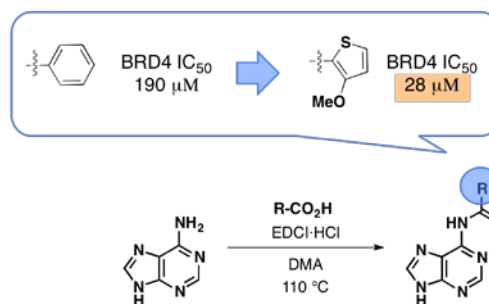
**1099 An Efficient One-Pot Synthesis of 4-Hydroxyisoquinoline-1,3(2*H*,4*H*)-diones from *N*-Alkylbenzamides and  $\alpha$ -Keto Esters**

Kazuhiro Kobayashi\* and Yuuya Honda


 Isoquinoline-1,3-(2*H*,4*H*)-dione    *N*-Alkyl-2,*N*-dithiobenzamide     $\alpha$ -Keto Ester    One-Pot Synthesis    Lithiation

**1107 Development of  $N^6$ -(Heteroarylcarbonyl)adenines as BRD4 Inhibitors**

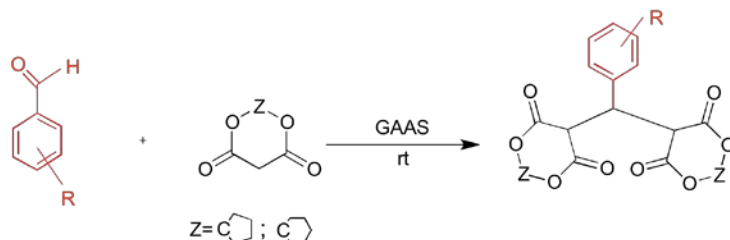
Seika Amemiya, Takao Yamaguchi, Yuichi Hashimoto, and Tomomi Noguchi-Yachide\*



Bromodomain    BRD4    BET    Adenine    Structure-Activity Relationship

**1115 A Green and Highly Efficient Synthesis of 5,5-(Phenylmethylene)bis(1,3-dioxane-4,6-dione) Derivatives In Biobased Gluconic Acid Aqueous Solution**

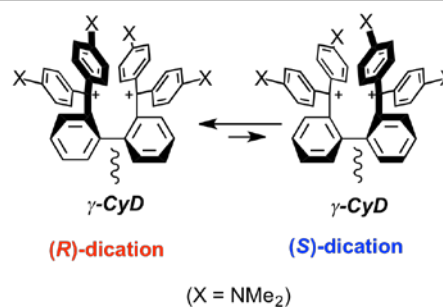
Zhaohui Xu,\* Peng Zhou, Yuanhong Tu, Deyong Liu, Weilin Liao, and Chuanwen Liao



5,5-(Phenylmethylene)bis(1,3-dioxane-4,6-dione) Derivative    Aromatic Aldehyde    1,3-Dioxane-4,6-dione    Gluconic Acid Aqueous Solution

**1123 Stereoselective Encapsulation for a Triarylmethylum *o,o*-Dimer by Natural  $\gamma$ -Cyclodextrin: Origin of Chiral Recognition for the Axially Chiral Dicationic Guest**

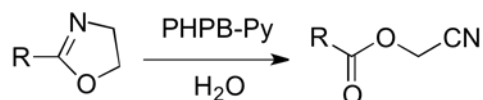
Takanori Suzuki,\* José P. Cerón-Carrasco, Hitomi Tamaoki, Yusuke Ishigaki, Ryo Katoono, Takanori Fukushima, and Horacio Pérez-Sánchez\*



Axial Chirality    Dication    Chiral Recognition    Cyclodextrin    Docking Model

**1133 Conversion of Oxazolines to Cyanomethyl Esters with Pyridinium Hydrobromide Perbromide in Water**

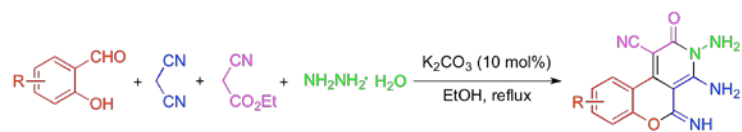
Shinsei Sayama\*


 R= Hetaryl or Aryl  
 PHPB: pyridinium hydrobromide perbromide  
 Py: pyridine

Oxazoline    Pyridinium Hydrobromide Perbromide    Pyridine    Water    Cyanomethyl Ester

**1143 An Efficient and Multi-Component Synthesis of 5-Imino-3,5-dihydro-2H-chromeno[3,4-c]pyridin-2-one Derivatives**

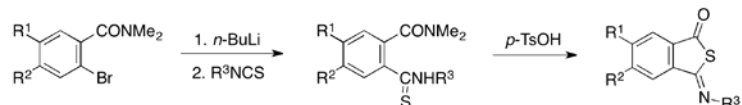
Juxian Wang, Yang Gao, Juanjuan Zhang, Guoning Zhang, Jinfeng Ren, Yue Zhao, Yucheng Wang,\* and Daqing Shi\*



Chromeno[3,4-c]pyridine    Multi-Component Reaction    Synthesis

**1152 Synthesis of 3-Imino-2-thiophen-1(3H)-one Derivatives Based on the Reaction of 2-Lithio-*N,N*-dimethylbenzamides with Isothiocyanates**

Kazuhiro Kobayashi,\* Yuuho Shigemura, and Daiki Fujiwara



R<sup>1</sup> = H, Cl, OMe; R<sup>2</sup> = H, OMe; R<sup>3</sup> = aryl, alkyl

3-Imino-2-thiophen-1(3H)-one    2-Lithio-*N,N*-dimethylbenzamide    2-Bromo-*N,N*-dimethylbenzamide    Bromine/Lithium Exchange

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 1159 Polyketides
- 1163 Aromatics
- 1167 Terpenes
- 1169 Steroids
- 1171 Alkaloids
- 1177 Miscellaneous

■ BRUSH UP YOUR HETEROCYCLES

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1181 Brush Up Your Heterocycles

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