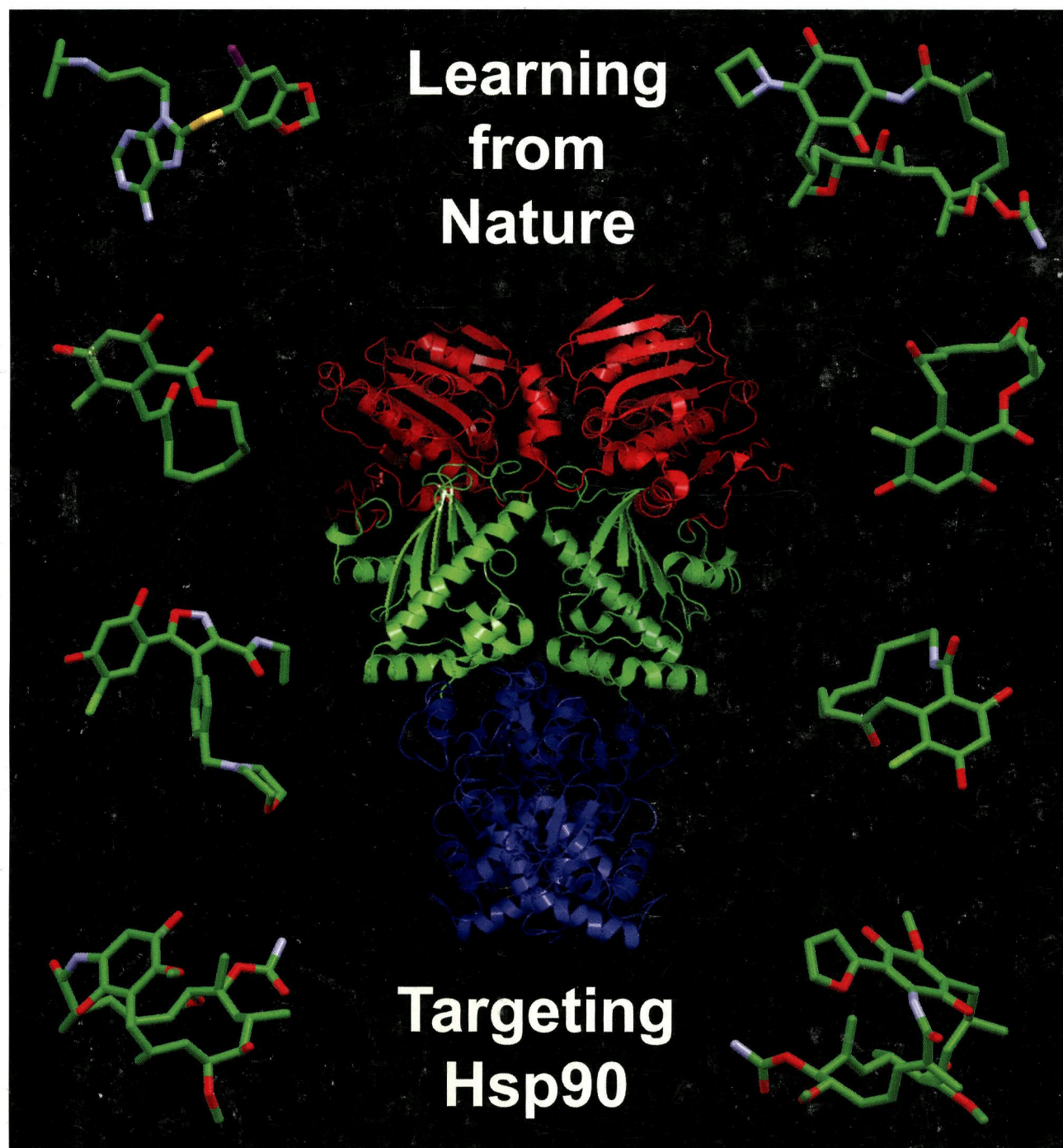


NU
J80/0
JOC

The Journal of Organic Chemistry

JUNE 7, 2013 VOLUME 78, NUMBER 11 pubs.acs.org/joc



ACS Publications

MOST TRUSTED. MOST CITED. MOST READ.

www.acs.org

June 7, 2013

Volume 78, Issue 11

Pages 5117-5816

Perspective

Learning from Nature: Advances in Geldanamycin- and Radicol-Based Inhibitors of Hsp90

Russell R. A. Kitson and Christopher J. Moody

pp 5117–5141

Publication Date (Web): March 15, 2013 (Perspective)

DOI: 10.1021/jo4002849

 Section:

Pharmacology

Articles

Isotope Effects and Mechanism of the Asymmetric BORO_X Brønsted Acid Catalyzed Aziridination Reaction

Mathew J. Vetticatt, Aman A. Desai, and William D. Wulff

pp 5142–5152

Publication Date (Web): May 21, 2013 (Article)

DOI: 10.1021/jo302783d

 Section:

Physical Organic Chemistry

Synthesis of Fluorine-Labeled Peptide Nucleic Acid Building Blocks as Sensors for the ¹⁹F NMR Spectroscopic Detection of Different Hybridization Modes

Anu Kiviniemi, Merita Murtola, Petri Ingman, and Pasi Virta

pp 5153–5159

Publication Date (Web): May 2, 2013 (Article)

DOI: 10.1021/jo400014y

Section:

Biochemical Methods

Synthesis of Stereochemically and Skeletally Diverse Fused Ring Systems from Functionalized C-Glycosides

Baudouin Gerard, Maurice D. Lee, IV, Sivaraman Dandapani, Jeremy R. Duvall, Mark E. Fitzgerald, Sarathy Kesavan, Jason T. Lowe, Jean-Charles Marié, Bhaumik A. Pandya, Byung-Chul Suh, Morgan Welzel O'Shea, Michael Dombrowski, Diane Hamann, Berenice Lemercier, Tiffanie Murillo, Lakshmi B. Akella, Michael A. Foley, and Lisa A. Marcaurelle

pp 5160–5171

Publication Date (Web): May 21, 2013 (Article)

DOI: 10.1021/jo4000916

Section:

Carbohydrates

Synthesis of a Structural Analogue of the Repeating Unit from Streptococcus pneumoniae 19F Capsular Polysaccharide Based on the Cross-Metathesis–Selenocyclization Reaction Sequence

Paolo Ronchi, Catalina Scarponi, Matteo Salvi, Silvia Fallarini, Laura Polito, Enrico Caneva, Luana Bagnoli, and Luigi Lay

pp 5172–5183

Publication Date (Web): May 8, 2013 (Article)

DOI: 10.1021/jo4001146

Section:

Carbohydrates

Design and Synthesis of Pyrrolotriazepine Derivatives: An Experimental and Computational Study

Nurettin Menges, Ozlem Sari, Yusif Abdullayev, Safiye Sağ Erdem, and Metin Balci

pp 5184–5195

Publication Date (Web): May 6, 2013 (Article)

DOI: 10.1021/jo4001228

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Exploring the Native Chemical Ligation Concept for Highly Stereospecific Glycosylation Reactions

Kim Le Mai Hoang, Yaguang Bai, Xin Ge, and Xue-Wei Liu

pp 5196–5204

Publication Date (Web): May 2, 2013 (Article)

DOI: 10.1021/jo400020q

 Section:

Carbohydrates

Selective Synthesis of [2]- and [3]Catenane Tuned by Ring Size and Concentration

Hajime Iwamoto, Wataru Takizawa, Koji Itoh, Tatsuya Hagiwara, Eiji Tayama, Eietsu Hasegawa, and Takeharu Haino

pp 5205–5217

Publication Date (Web): May 6, 2013 (Article)

DOI: 10.1021/jo400239h

 Section:

Physical Organic Chemistry

Synthesis of Benzidine Derivatives via FeCl₃·6H₂O-Promoted Oxidative Coupling of Anilines

Xuege Ling, Yan Xiong, Ruofeng Huang, Xiaohui Zhang, Shuting Zhang, and Changguo Chen

pp 5218–5226

Publication Date (Web): May 15, 2013 (Article)

DOI: 10.1021/jo4002504

 Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Regioselectivity in Sequential Nucleophilic Substitution of Tetrabromonaphthalene Diimides

Sabin-Lucian Suraru and Frank Würthner

pp 5227–5238

Publication Date (Web): April 30, 2013 (Article)

DOI: 10.1021/jo400320a

 Section:

Physical Organic Chemistry

Epi-, Epoxy-, and C2-Modified Bengamides: Synthesis and Biological Evaluation

Francisco Sarabia, Francisca Martín-Gálvez, Cristina García-Ruiz, Antonio Sánchez-Ruiz, and Carlos Vivar-García

pp 5239–5253

Publication Date (Web): May 6, 2013 (Article)

DOI: 10.1021/jo4003272

 Section:

Biomolecules and Their Synthetic Analogs

Primary Amines as Directing Groups in the Ru-Catalyzed Synthesis of Isoquinolines, Benzoisoquinolines, and Thienopyridines

Pedro Villuendas and Esteban P. Urriolabeitia

pp 5254–5263

Publication Date (Web): May 7, 2013 (Article)

DOI: 10.1021/jo400344m

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

The Dimethoxyphenylbenzyl Protecting Group: An Alternative to the p-Methoxybenzyl Group for Protection of Carbohydrates

Gregory M. Rankin, Isobel Maxwell-Cameron, Gavin F. Painter, and David S. Larsen

pp 5264–5272

Publication Date (Web): May 7, 2013 (Article)

DOI: 10.1021/jo4004184

 Section:

Carbohydrates

Palladium-Catalyzed Addition of Potassium Aryltrifluoroborates to Aliphatic Nitriles: Synthesis of Alkyl Aryl Ketones, Diketone Compounds, and 2-Arylbenzo[b]furans

Xingyong Wang, Miaochang Liu, Long Xu, Qingzong Wang, Jiuxi Chen, Jinchang Ding, and Huayue Wu

pp 5273–5281

Publication Date (Web): May 13, 2013 (Article)

DOI: 10.1021/jo400433m

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

An Enantioselective Approach to Furanoeremophilanes: (+)-9-Oxoeryopsin

Ana L. Silva, Rubén A. Toscano, and Luis A. Maldonado

pp 5282–5292

Publication Date (Web): May 6, 2013 (Article)

DOI: 10.1021/jo400399q

Section:

Terpenes and Terpenoids

Synthesis, Rotational Dynamics, and Photophysical Characterization of a Crystalline Linearly Conjugated Phenyleneethynylene Molecular Dirotor

Melissa Hughs, Miguel Jimenez, Saeed Khan, and Miguel A. Garcia-Garibay

pp 5293–5302

Publication Date (Web): May 7, 2013 (Article)

DOI: 10.1021/jo4004053

Section:

Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers

Comprehensive Experimental Study of N-Heterocyclic π -Stacking Interactions of Neutral and Cationic Pyridines

Ping Li, Chen Zhao, Mark D. Smith, and Ken D. Shimizu

pp 5303–5313

Publication Date (Web): May 15, 2013 (Article)

DOI: 10.1021/jo400370e

Section:

Physical Organic Chemistry

Asymmetric Synthesis of Nonracemic Primary Amines via Spiroborate-Catalyzed Reduction of Pure (E)- and (Z)-O-Benzoyloximes: Applications toward the Synthesis of Calcimimetic Agents

Wenhua Ou, Sandraliz Espinosa, Héctor J. Meléndez, Silvia M. Farré, Jaime L. Alvarez, Valerie Torres, Ileanne Martínez, Kiara M. Santiago, and Margarita Ortiz-Marciales

pp 5314–5327

Publication Date (Web): May 2, 2013 (Article)

DOI: 10.1021/jo400371x

 Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

α -Monoacylated and α,α' - and α,β' -Diacylated Dipyrrins as Highly Sensitive Fluorescence “Turn-on” Zn^{2+} Probes

Yubin Ding, Xin Li, Tong Li, Weihong Zhu, and Yongshu Xie

pp 5328–5338

Publication Date (Web): May 13, 2013 (Article)

DOI: 10.1021/jo400454e

 Section:

Inorganic Analytical Chemistry

Synthesis, Enantiomer Separation, and Absolute Configuration of 2,6-Oxygenated 9-Azabicyclo[3.3.1]nonanes

Vidmantas Bieliunas, Dovilė Račkauskaitė, Edvinas Orentas, and Sigitas Stončius

pp 5339–5348

Publication Date (Web): May 1, 2013 (Article)

DOI: 10.1021/jo400506h

 Section:

Heterocyclic Compounds (One Hetero Atom)

Solvent-Free Enantioselective Friedländer Condensation with Wet 1,1'-Binaphthalene-2,2'-diamine-Derived Prolinamides as Organocatalysts

Abraham Bañón-Caballero, Gabriela Guillena, and Carmen Nájera

pp 5349–5356

Publication Date (Web): May 10, 2013 (Article)

DOI: 10.1021/jo400522m

 Section:

Alkaloids

Molecular Binding Behaviors of Pyromellitic and Naphthalene Diimide Derivatives by Tetrasulfonated 1,5-Dinaphtho-(3n+8)-crown-n (n = 8, 10) in Aqueous Solution

Ling Chen, Ying-Ming Zhang, Li-Hua Wang, and Yu Liu

pp 5357–5363

Publication Date (Web): May 2, 2013 (Article)

DOI: 10.1021/jo400519z

 Section:

Physical Organic Chemistry

Bimolecular Catalysis and Turnover from a Macromolecular Host System

Adam Ellis, David Gooch, and Lance J Twyman

pp 5364–5371

Publication Date (Web): April 30, 2013 (Article)

DOI: 10.1021/jo400532r

 Section:

Industrial Organic Chemicals, Leather, Fats, and Waxes

Tandem Synthesis of Pyrroloacridones via [3 + 2] Alkyne Annulation/Ring-Opening with Concomitant Intramolecular Aldol Condensation

Akhilesh K. Verma, Siva K. Reddy Kotla, Trapti Aggarwal, Sonu Kumar, Hemlata Nimesh, and Rakesh K. Tiwari

pp 5372–5384

Publication Date (Web): May 3, 2013 (Article)

DOI: 10.1021/jo400539x

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

One-Pot Synthesis of 3-Hydroxyquinolin-2(1H)-ones from N-Phenylacetamide via $\text{PhI}(\text{OCOCF}_3)_2$ -Mediated α -Hydroxylation and H_2SO_4 -Promoted Intramolecular Cyclization

Yucheng Yuan, Rui Yang, Daisy Zhang-Negrerie, Junwei Wang, Yunfei Du, and Kang Zhao

pp 5385–5392

Publication Date (Web): May 8, 2013 (Article)

DOI: 10.1021/jo400541s

 Section:

Heterocyclic Compounds (One Hetero Atom)

cis-2,3-Disubstituted Cyclopropane 1,1-Diesters in [3 + 2] Annulations with Aldehydes: Highly Diastereoselective Construction of Densely Substituted Tetrahydrofurans

Gaosheng Yang, Yongxian Sun, Yue Shen, Zhuo Chai, Shuangliu Zhou, Jiang Chu, and Jun Chai

pp 5393–5400

Publication Date (Web): May 1, 2013 (Article)

DOI: 10.1021/jo400554a

 Section:

Heterocyclic Compounds (One Hetero Atom)

Synthesis of Orthogonally Protected (2S)-2-Amino-adipic Acid (α -AAA) and (2S,4R)-2-Amino-4-hydroxyadipic Acid (Ahad)

Saroj Yadav and Carol M. Taylor

pp 5401–5409

Publication Date (Web): May 1, 2013 (Article)

DOI: 10.1021/jo400558t

 Section:

Amino Acids, Peptides, and Proteins

Roxbin B is Cuspinin: Structural Revision and Total Synthesis

Sayuri Yamaguchi, Tsukasa Hirokane, Takashi Yoshida, Takashi Tanaka, Tsutomu Hatano, Hideyuki Ito, Gen-ichiro Nonaka, and Hidetoshi Yamada

pp 5410–5417

Publication Date (Web): May 8, 2013 (Article)

DOI: 10.1021/jo400562k

 Section:

Carbohydrates

Synthesis of Tetrasubstituted Unsymmetrical 1,4-Enediones via Copper-Promoted Autotandem Catalysis and Air As the Oxidant

Yan Yang, Fan Ni, Wen-Ming Shu, Shang-Bo Yu, Meng Gao, and An-Xin Wu

pp 5418–5426

Publication Date (Web): May 6, 2013 (Article)

DOI: 10.1021/jo400564f

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Assisted Tandem Catalytic Cross Metathesis–Oxidation: In One Flask from Styrenes to 1,2-Diketones and Further to Quinoxalines

Bernd Schmidt, Stefan Krehl, and Sylvia Hauke

pp 5427–5435

Publication Date (Web): May 3, 2013 (Article)

DOI: 10.1021/jo4005684

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Computational Investigations on Base-Catalyzed Diaryl Ether Formation

Gavin O. Jones, Ali Al Soma, Jeannette M. O'Brien, Hassan Albishi, Hamid A. Al-Megren, Abdullah M. Alabdulrahman, Fares D. Alsewailem, James L. Hedrick, Julia E. Rice, and Hans W. Horn

pp 5436–5443

Publication Date (Web): May 5, 2013 (Article)

DOI: 10.1021/jo400550c

Section:

Physical Organic Chemistry

Rhodium(III)-Catalyzed Azacycle-Directed Intermolecular Insertion of Arene C–H Bonds into α -Diazocarbonyl Compounds

Xinzhang Yu, Songjie Yu, Jian Xiao, Boshun Wan, and Xingwei Li

pp 5444–5452

Publication Date (Web): May 10, 2013 (Article)

DOI: 10.1021/jo400572h

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Synthesis and Characterization of Thieno[3,4-b]pyrazine-Based Terthienyls: Tunable Precursors for Low Band Gap Conjugated Materials

Ryan L. Schwiderski and Seth C. Rasmussen

pp 5453–5462

Publication Date (Web): May 21, 2013 (Article)

DOI: 10.1021/jo400577q

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

Synthesis, Guest-Binding, and Reduction-Responsive Degradation Properties of Water-Soluble Cyclophanes Having Disulfide Moieties

Osamu Hayashida, Kazuaki Ichimura, Daisuke Sato, and Terutaka Yasunaga

pp 5463–5469

Publication Date (Web): May 16, 2013 (Article)

DOI: 10.1021/jo400591w

 Section:

Pharmaceuticals

Deprotonation Equilibrium of 5-Tropolonediazonium Salt Strongly Favors 1,2,5-Tropoquinone-5-diazide Structure in Certain Solvents

Ai Ito, Hideaki Muratake, and Koichi Shudo

pp 5470–5475

Publication Date (Web): May 24, 2013 (Article)

DOI: 10.1021/jo400593r

 Section:

Physical Organic Chemistry

Computational Studies of Ion Pairing. 8. Ion Pairing of Tetraalkylammonium Ions to Nitrosobenzene and Benzaldehyde Redox Species. A General Binding Motif for the Interaction of Tetraalkylammonium Ions with Benzenoid Species

Albert J. Fry

pp 5476–5481

Publication Date (Web): April 30, 2013 (Article)

DOI: 10.1021/jo4005958

 Section:

Physical Organic Chemistry

Total Synthesis of Entecavir

Javier Velasco, Xavier Ariza, Laura Badía, Martí Bartra, Ramon Berenguer, Jaume Farràs, Joan Gallardo, Jordi Garcia, and Yolanda Gasanz

pp 5482–5491

Publication Date (Web): May 16, 2013 (Article)

DOI: 10.1021/jo400607v

 Section:

Carbohydrates

Asymmetric Total Synthesis of Caribenol A via an Intramolecular Diels–Alder Reaction

Jing-Chun Han, Lian-Zhu Liu, Yuan-Yuan Chang, Guo-Zong Yue, Jie Guo, Li-Yan Zhou, Chuang-Chuang Li, and Zhen Yang

pp 5492–5504

Publication Date (Web): May 14, 2013 (Article)

DOI: 10.1021/jo4006156

 Section:

Terpenes and Terpenoids

Reactions of o-Quinone Methides with Pyridinium Methylides: A Diastereoselective Synthesis of 1,2-Dihydronaphtho[2,1-b]furans and 2,3-Dihydrobenzofurans

Vitaly A. Osyanin, Dmitry V. Osipov, and Yuri N. Klimochkin

pp 5505–5520

Publication Date (Web): May 13, 2013 (Article)

DOI: 10.1021/jo400621r

 Section:

Heterocyclic Compounds (One Hetero Atom)

Transition-Metal-Free Carbofluorination of TBS-Protected Nitrogen-Containing Cyclic Enynols: Synthesis of Fluorinated Azabicycles

Ming-Chang P. Yeh, Chia-Jung Liang, Tzu-Lin Huang, Hsiao-Ju Hsu, and Yu-Shuo Tsau

pp 5521–5529

Publication Date (Web): May 13, 2013 (Article)

DOI: 10.1021/jo400634c

 Section:

Heterocyclic Compounds (One Hetero Atom)

Brønsted Acid-Controlled [3 + 2] Coupling Reaction of Quinone Monoacetals with Alkene Nucleophiles: A Catalytic System of Perfluorinated Acids and Hydrogen Bond Donor for the Construction of Benzofurans

Yinjun Hu, Tohru Kamitanaka, Yusuke Mishima, Toshifumi Dohi, and Yasuyuki Kita

pp 5530–5543

Publication Date (Web): May 14, 2013 (Article)

DOI: 10.1021/jo400613z

 Section:

Heterocyclic Compounds (One Hetero Atom)

Regioselective Photocyclization To Prepare Multifunctional Blocks for Ladder-Conjugated Materials

Zhenbo Zhao, Youdi Zhang, and Yi Xiao

pp 5544–5549

Publication Date (Web): May 7, 2013 (Article)

DOI: 10.1021/jo400619u

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

Thioacids Mediated Selective and Mild N-Acylation of Amines

Sachitanand M. Mali, Rupal D. Bhaire, and Hosahudya N. Gopi

pp 5550–5555

Publication Date (Web): May 14, 2013 (Article)

DOI: 10.1021/jo400701v

 Section:

General Organic Chemistry

Stereodivergent Strategy for Neurofuran Synthesis via Palladium-Catalyzed Asymmetric Allylic Cyclization: Total Synthesis of 7-epi-ST- Δ^8 -10-Neurofuran

Matteo Valli, Paolo Bruno, Davide Sbarbada, Alessio Porta, Giovanni Vidari, and Giuseppe Zanoni

pp 5556–5567

Publication Date (Web): May 3, 2013 (Article)

DOI: 10.1021/jo4004647

Section:

Biomolecules and Their Synthetic Analogs

Self-Assembled Benzophenone Bis-urea Macrocycles Facilitate Selective Oxidations by Singlet Oxygen

Michael F. Geer, Michael D. Walla, Kyril M. Solntsev, Cristian A. Strassert, and Linda S. Shimizu

pp 5568–5578

Publication Date (Web): May 14, 2013 (Article)

DOI: 10.1021/jo400685u

Section:

Physical Organic Chemistry

Synthesis of Thiophene-Based TAK-779 Analogues by C–H Arylation

Anna Junker, Junichiro Yamaguchi, Kenichiro Itami, and Bernhard Wünsch

pp 5579–5586

Publication Date (Web): May 3, 2013 (Article)

DOI: 10.1021/jo400692p

Section:

Heterocyclic Compounds (One Hetero Atom)

Two Approaches to the Aromatic Core of the Aminonaphthoquinone Antibiotics

Christopher C. Nawrat, Leoni I. Palmer, Alexander J. Blake, and Christopher J. Moody

pp 5587–5603

Publication Date (Web): May 9, 2013 (Article)

DOI: 10.1021/jo400737f

Section:

Biomolecules and Their Synthetic Analogs

Kinetic Study on Michael-Type Reactions of β -Nitrostyrenes with Cyclic Secondary Amines in Acetonitrile: Transition-State Structures and Reaction Mechanism Deduced from Negative Enthalpy of Activation and Analyses of LFERs

Ik-Hwan Um, Ji-Sun Kang, and Jong-Yoon Park

pp 5604–5610

Publication Date (Web): May 8, 2013 (Article)

DOI: 10.1021/jo4007442

 Section:

Physical Organic Chemistry

Cu(OTf)₂-Catalyzed Asymmetric Friedel–Crafts Alkylation Reaction of Indoles with Arylidene Malonates Using Bis(sulfonamide)-Diamine Ligands

Jing Wu, Dongping Wang, Fan Wu, and Boshun Wan

pp 5611–5617

Publication Date (Web): May 3, 2013 (Article)

DOI: 10.1021/jo400747d

 Section:

Heterocyclic Compounds (One Hetero Atom)

Successive Regioselective Metalations of Fused Heterocycles: Synthesis of Polyfunctionalized Furo[3,2-*b*]pyridines

Adeline Jasselin-Hinschberger, Corinne Comoy, Anthony Chartoire, and Yves Fort

pp 5618–5626

Publication Date (Web): May 15, 2013 (Article)

DOI: 10.1021/jo400748n

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

Bodipy Derivatives as Organic Triplet Photosensitizers for Aerobic Photoorganocatalytic Oxidative Coupling of Amines and Photooxidation of Dihydroxynaphthalenes

Ling Huang, Jianzhang Zhao, Song Guo, Caishun Zhang, and Jie Ma

pp 5627–5637

Publication Date (Web): May 13, 2013 (Article)

DOI: 10.1021/jo400769u

 Section:

Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes

Amide Bond Formation through Iron-Catalyzed Oxidative Amidation of Tertiary Amines with Anhydrides

Yuanming Li, Lina Ma, Fan Jia, and Zhiping Li

pp 5638–5646

Publication Date (Web): May 13, 2013 (Article)

DOI: 10.1021/jo400804p

 Section:

General Organic Chemistry

Syntheses of (+)-Complanadine A and Lycodine Derivatives by Regioselective [2 + 2 + 2] Cycloadditions

Changxia Yuan, Chih-Tsung Chang, and Dionicio Siegel

pp 5647–5668

Publication Date (Web): May 1, 2013 (Article)

DOI: 10.1021/jo400695c

 Section:

Alkaloids

Noyori Hydrogenation: Aromaticity, Synchronicity, and Activation Strain Analysis

Olalla Nieto Faza, Carlos Silva López, and Israel Fernández

pp 5669–5676

Publication Date (Web): May 17, 2013 (Article)

DOI: 10.1021/jo400837n

 Section:

Physical Organic Chemistry

Water-Assisted Self-Photoredox of 3-(Hydroxymethyl)benzophenone: An Unusual Photochemistry Reaction in Aqueous Solution

Xuebo Chen, Qiangqiang Zhang, Yanchang Xu, Weihai Fang, and David Lee Phillips

pp 5677–5684

Publication Date (Web): May 14, 2013 (Article)

DOI: 10.1021/jo4008783

 Section:

Notes

Gold(I)-Catalyzed Formation of Bicyclo[4.2.0]oct-1-enes

Ryan J. Felix, Osvaldo Gutierrez, Dean J. Tantillo, and Michel R. Gagné

pp 5685–5690

Publication Date (Web): April 17, 2013 (Note)

DOI: 10.1021/jo400139g

 Section:

Physical Organic Chemistry

Oxidative Rearrangement of Internal Alkynes To Give One-Carbon-Shorter Ketones via Manganese Porphyrins Catalysis

Wen-Bing Sheng, Qing Jiang, Wei-Ping Luo, and Can-Cheng Guo

pp 5691–5693

Publication Date (Web): May 16, 2013 (Note)

DOI: 10.1021/jo400209p

 Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Access to 2'-Substituted Binaphthyl Monoalcohols via Complementary Nickel-Catalyzed Kumada Coupling Reactions under Mild Conditions: Key Role of a P,O Ligand

Sachin Handa, Yohan L. N. Mathota Arachchige, and LeGrande M. Slaughter

pp 5694–5699

Publication Date (Web): May 14, 2013 (Note)

DOI: 10.1021/jo400349r

 Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Copper(I)-Catalyzed Synthesis of 5-Arylindazolo[3,2-b]quinazolin-7(5H)-one via Ullmann-Type Reaction

Dong-Sheng Chen, Guo-Lan Dou, Yu-Ling Li, Yun Liu, and Xiang-Shan Wang

pp 5700–5704

Publication Date (Web): May 15, 2013 (Note)

DOI: 10.1021/jo400420b

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

Rearrangement of 4-Amino-3-halo-pyridines by Nucleophilic Aromatic Substitution

Matthäus Getlik, Brian J. Wilson, M. Monzur Morshed, Iain D. G. Watson, Doris Tang, Pandiaraju Subramanian, and Rima Al-awar

pp 5705–5710

Publication Date (Web): May 9, 2013 (Note)

DOI: 10.1021/jo4003773

 Section:

Heterocyclic Compounds (One Hetero Atom)

Gold-Catalyzed Reactions between Alkenyldiazo Carbonyl Species and Acetals

Vinayak Vishnu Pagar, Appaso M. Jadhav, and Rai-Shung Liu

pp 5711–5716

Publication Date (Web): May 6, 2013 (Note)

DOI: 10.1021/jo400419d

 Section:

General Organic Chemistry

Dynamic Kinetic Asymmetric Ring-Opening/Reductive Amination Sequence of Racemic Nitroepoxides with Chiral Amines: Enantioselective Synthesis of Chiral Vicinal Diamines

Juan Agut, Andreu Vidal, Santiago Rodríguez, and Florenci V. González

pp 5717–5722

Publication Date (Web): May 3, 2013 (Note)

DOI: 10.1021/jo400501k

 Section:

General Organic Chemistry

Copper-Catalyzed Direct Aryl Quaternization of N-Substituted Imidazoles to Form Imidazolium Salts

Taiyong Lv, Zhi Wang, Jingsong You, Jingbo Lan, and Ge Gao

pp 5723–5730

Publication Date (Web): May 3, 2013 (Note)

DOI: 10.1021/jo400527r

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

Lewis Acid-Catalyzed Cyclization of Enaminones with Propargylic Alcohols: Regioselective Synthesis of Multisubstituted 1,2-Dihydropyridines

Yushang Shao, Kai Zhu, Zhengchen Qin, Ende Li, and Yanzhong Li

pp 5731–5736

Publication Date (Web): May 7, 2013 (Note)

DOI: 10.1021/jo4005553

 Section:

Heterocyclic Compounds (One Hetero Atom)

Synthesis of Differentially Substituted 2-Aminoimidazolidines via a Microwave-Assisted Tandem Staudinger/Aza-Wittig Cyclization

Rakesh Kumar, Denis S. Ermolat'ev, and Erik V. Van der Eycken

pp 5737–5743

Publication Date (Web): May 3, 2013 (Note)

DOI: 10.1021/jo400481b

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

Highly Regioselective Syntheses of Substituted Triphenylenes from 1,2,4-Trisubstituted Arenes via a Co-Catalyzed Intermolecular Alkyne Cyclotrimerization

Lingmin Xu, Ruocheng Yu, Yuefan Wang, Jiahua Chen, and Zhen Yang

pp 5744–5750

Publication Date (Web): May 1, 2013 (Note)

DOI: 10.1021/jo400570b

 Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Sc(OTf)₃-Catalyzed Three-Component Cyclization of Arylamines, β,γ -Unsaturated α -Ketoesters, and 1,3-Dicarbonyl Compounds for the Synthesis of Highly Substituted 1,4-Dihydropyridines and Tetrahydropyridines

Lu Liu, Ryan Sarkisian, Yongming Deng, and Hong Wang

pp 5751–5755

Publication Date (Web): April 24, 2013 (Note)

DOI: 10.1021/jo400578m

 Section:

Heterocyclic Compounds (One Hetero Atom)

Route to Pyrazolo[5,1-a]isoquinolines via a Copper-Catalyzed Tandem Reaction of 2-Alkynylbromobenzene with Pyrazole

Xiaolin Pan, Yong Luo, and Jie Wu

pp 5756–5760

Publication Date (Web): May 20, 2013 (Note)

DOI: 10.1021/jo400523v

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

Hydrogermylation of 5-Ethynyluracil Nucleosides: Formation of 5-(2-Germylvinyl)uracil and 5-(2-Germylacetyl)uracil Nucleosides

Yong Liang, Jean-Philippe Pitteloud, and Stanislaw F. Wnuk

pp 5761–5767

Publication Date (Web): April 30, 2013 (Note)

DOI: 10.1021/jo400590z

 Section:

Carbohydrates

Additives Promote Noyori-type Reductions of a β -Keto- γ -lactam: Asymmetric Syntheses of Serotonin Norepinephrine Reuptake Inhibitors

Nicholas A. Magnus, Bret A. Astleford, Dana L. T. Laird, Todd D. Maloney, Adam D. McFarland, John R. Rizzo, J. Craig Ruble, Gregory A. Stephenson, and James P. Wepsiec

pp 5768–5774

Publication Date (Web): May 7, 2013 (Note)

DOI: 10.1021/jo400589j

 Section:

Heterocyclic Compounds (One Hetero Atom)

Solvent-Free Methallylboration of Ketones Accelerated by tert-Alcohols

Yongda Zhang, Ning Li, Navneet Goyal, Guisheng Li, Heewon Lee, Bruce Z. Lu, and Chris H. Senanayake

pp 5775–5781

Publication Date (Web): May 1, 2013 (Note)

DOI: 10.1021/jo4006574

 Section:

General Organic Chemistry

Solvent-manipulated Guest Binding and Signaling of a Fluorescent Resorcin[4]arene Cavitand with 1,3,2-Benzodiazaboryl D- π -A Conjugation Flaps

Kaoru Otsuka, Takuya Kondo, Ryuhei Nishiyabu, and Yuji Kubo

pp 5782–5787

Publication Date (Web): May 13, 2013 (Note)

DOI: 10.1021/jo4006238

 Section:

Physical Organic Chemistry

Enantioselective Synthesis of (Thiolan-2-yl)diphenylmethanol and Its Application in Asymmetric, Catalytic Sulfur Ylide-Mediated Epoxidation

Hsin-Yi Wu, Chih-Wei Chang, and Rong-Jie Chein

pp 5788–5793

Publication Date (Web): May 2, 2013 (Note)

DOI: 10.1021/jo400648f

 Section:

Heterocyclic Compounds (One Hetero Atom)

A Sonogashira Cross-Coupling/5-exo-dig Cyclization/Ionic Hydrogenation Sequence: Synthesis of 4-Substituted 3-Azabicyclo[3.1.0]hexan-2-ones from 2-Iodocyclopropanecarboxamides

Benoît de Carné-Caravalet, Christophe Meyer, Janine Cossy, Benoît Folléas, Jean-Louis Brayer, and Jean-Pierre Demoute

pp 5794–5799

Publication Date (Web): May 3, 2013 (Note)

DOI: 10.1021/jo400713u

 Section:

Heterocyclic Compounds (One Hetero Atom)

One-Pot Synthesis of 2,5-Disubstituted Pyrimidines from Nitriles

Rogelio P. Frutos, Xudong Wei, Nitinchandra D. Patel, Thomas G. Tampone, Jason A. Mulder, Carl A. Busacca, and Chris H. Senanayake

pp 5800–5803

Publication Date (Web): May 8, 2013 (Note)

DOI: 10.1021/jo400720p

 Section:

Heterocyclic Compounds (More than One Hetero Atom)

Copper(II)-Catalyzed Hydroxylation of Aryl Halides Using Glycolic acid as a Ligand

Yan Xiao, Yongnan Xu, Hwan-Sung Cheon, and Junghyun Chae

pp 5804–5809

Publication Date (Web): May 28, 2013 (Note)

DOI: 10.1021/jo400702z

 Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Total Synthesis of Dictyodendrins B and E

Jingjing Liang, Weimin Hu, Pengyu Tao, and Yanxing Jia

pp 5810–5815

Publication Date (Web): May 13, 2013 (Note)

DOI: 10.1021/jo400841d

 Section:

Alkaloids

Additions and Corrections

Correction to Synthesis of Large [2]Rotaxanes. The Relationship between the Size of the Blocking Group and the Stability of the Rotaxane

Shinichi Saito, Eiko Takahashi, Kouta Wakatsuki, Kazuhiko Inoue, Tomoko Orikasa, Kenta Sakai, Ryu Yamasaki, Yuichiro Mutoh, and Takeshi Kasama

pp 5816–5816

Publication Date (Web): May 21, 2013 (Addition/Correction)

DOI: 10.1021/jo4010052

 Section:

Heterocyclic Compounds (More than One Hetero Atom)