

NU
J80/0

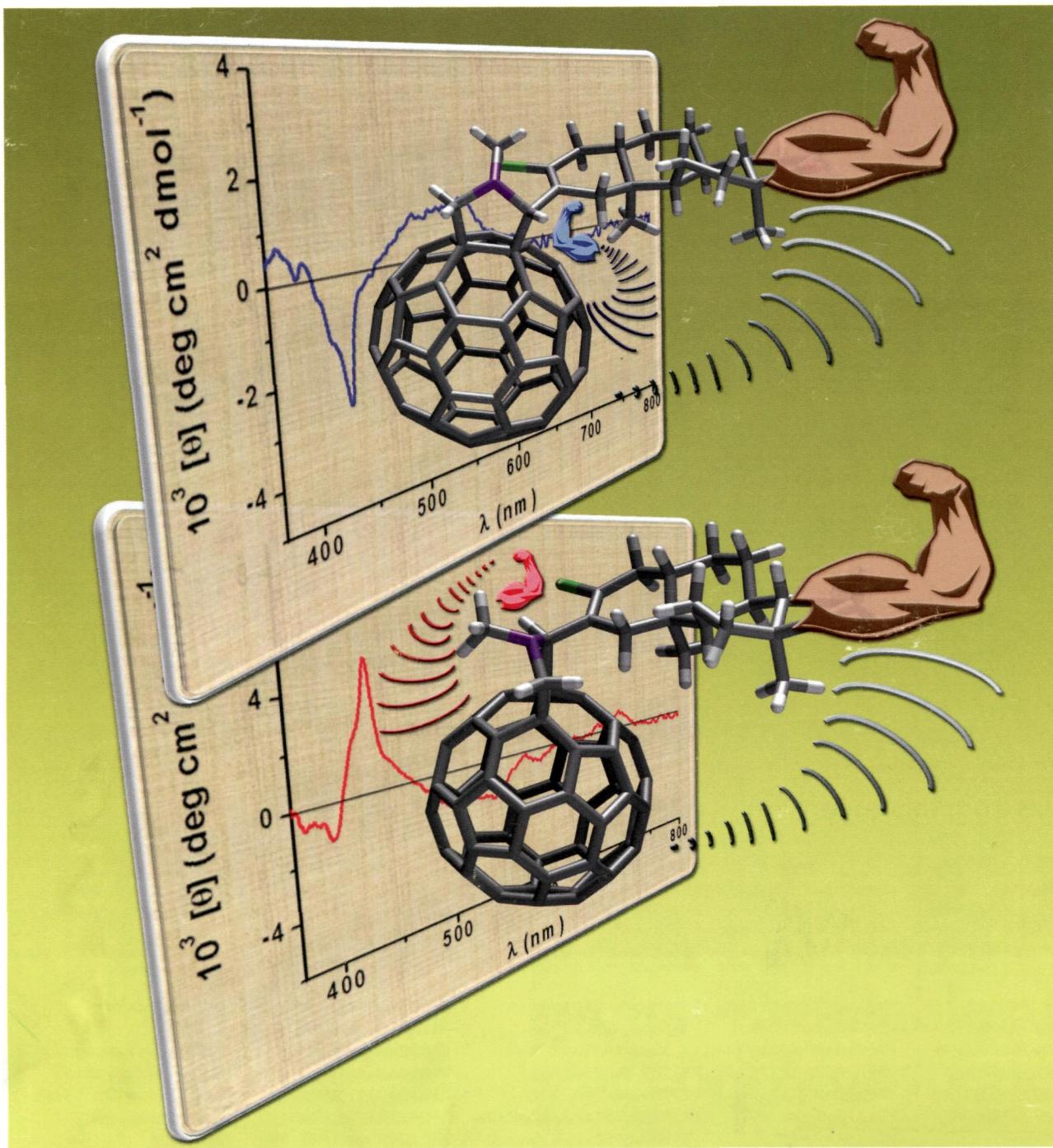
JOC

The Journal of Organic Chemistry

APRIL 5, 2013

VOLUME 78, NUMBER 7

pubs.acs.org/joc



ACS Publications

MOST TRUSTED. MOST CITED. MOST READ.

www.acs.org

April 5, 2013

Volume 78, Issue 7

Pages 2813–3510

JOCSynopsis
Using Physical Organic Parameters To Correlate Asymmetric Catalyst Performance

Kaid C. Harper and Matthew S. Sigman

pp 2813–2818

Publication Date (Web): March 19, 2013 (JOCSynopsis)

DOI: 10.1021/jo4002239

Section:

Physical Organic Chemistry

Featured Articles

Diastereoselective Synthesis of C₆₀/Steroid Conjugates

Alberto Ruiz, Julieta Coro, Luis Almagro, José A. Ruiz, Dolores Molero, Enrique E. Maroto, Salvatore Filippone, María Ángeles Herranz, Roberto Martínez-Álvarez, Juan Carlos Sancho-García, Florent Di Meo, Margarita Suárez, and Nazario Martín

pp 2819–2826

Publication Date (Web): January 25, 2013 (Featured Article)

DOI: 10.1021/jo302528t

Section:

Steroids

HiFSA Fingerprinting Applied to Isomers with Near-Identical NMR Spectra: The Silybin/Isosilybin Case

José G. Napolitano, David C. Lankin, Tyler N. Graf, J. Brent Friesen, Shao-Nong Chen, James B. McAlpine, Nicholas H. Oberlies, and Guido F. Pauli

pp 2827–2839

Publication Date (Web): March 5, 2013 (Featured Article)

DOI: 10.1021/jo302720h



Organic Analytical Chemistry

Oxazolochlorins. 9. meso-Tetraphenyl-2-oxabacteriochlorins and meso-Tetraphenyl-2,12/13-dioxabacteriochlorins

Junichi Ogikubo, Eileen Meehan, James T. Engle, Christopher J. Ziegler, and Christian Brückner

pp 2840–2852

Publication Date (Web): February 19, 2013 (Featured Article)

DOI: 10.1021/jo400031r



Biomolecules and Their Synthetic Analogs

Bis-thioether-Substituted Perylene Diimides: Structural, Electrochemical, and Spectroelectrochemical Properties

Anna G. Slater, E. Stephen Davies, Stephen P. Argent, William Lewis, Alexander J. Blake, Jonathan McMaster, and Neil R. Champness

pp 2853–2862

Publication Date (Web): March 18, 2013 (Featured Article)

DOI: 10.1021/jo400026r



Physical Organic Chemistry

Regioselective Polymethylation of α -(1 → 4)-Linked Mannopyranose Oligosaccharides

Li Xia and Todd L. Lowary

pp 2863–2880

Publication Date (Web): March 13, 2013 (Featured Article)

DOI: 10.1021/jo4001299



Carbohydrates

Articles

The Garuganin and Garugamblin Diarylether Heptanoids: Total Synthesis and Determination of Chiral Properties Using Dynamic NMR

Zhi-Qiang Zhu, M. Quamar Salih, Edward Fynn, Alex D. Bain, and Christopher M. Beaudry

pp 2881–2896

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

DOI: 10.1021/jo400157d

Section:

Biomolecules and Their Synthetic Analogs

Synthesis of Six-Membered Spirocyclic Oxindoles with Five Consecutive Stereocenters in an Asymmetric Organocatalytic One-Pot Michael/Michael/Aldol Addition Sequence

Bing Zhou, Yaxi Yang, Jingjing Shi, Zhi Luo, and Yuanchao Li

pp 2897–2907

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

DOI: 10.1021/jo302655u

Section:

Heterocyclic Compounds (One Hetero Atom)

The Bisketene Radical Cation and Its Formation by Oxidative Ring-Opening of Cyclobutenedione

Krzysztof Piech and Thomas Bally , Annette D. Allen and Thomas T. Tidwell

pp 2908–2913

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

DOI: 10.1021/jo3025708

Section:

Physical Organic Chemistry

Heteroatom Analogues of Hydrocodone: Synthesis and Biological Activity

Robert D. Giacometti, Jan Duchek, Lukas Werner, Afeef S. Husni, Christopher R. McCurdy, Stephen J. Cutler, D. Phillip Cox, and Tomas Hudlicky

pp 2914–2925

Publication Date (Web): February 11, 2013 (Article)

DOI: 10.1021/jo3026753

Section:

Alkaloids

Extended π-Conjugated Molecules Derived from Naphthalene Diimides toward Organic Emissive and Semiconducting Materials

Yonghai Li, Guanxin Zhang, Ge Yang, Yunlong Guo, Chong'an Di, Xin Chen, Zitong Liu, Huiying Liu, Zhenzhen Xu, Wei Xu, Hongbing Fu, and Deqing Zhang

pp 2926–2934

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

DOI: 10.1021/jo302677k

Section:

Physical Organic Chemistry

Study of the Endocyclic versus Exocyclic C–O Bond Cleavage Pathways of α - and β -Methyl Furanosides

Olivier St-Jean, Michel Prévost, and Yvan Guindon

pp 2935–2946

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

DOI: 10.1021/jo3027438

Section:

Carbohydrates

Meta–Para-Linked Octaaza[1₈]cyclophanes and Their Polycationic States

Daisuke Sakamaki, Akihiro Ito, Ko Furukawa, Tatsuhisa Kato, and Kazuyoshi Tanaka

pp 2947–2956

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

DOI: 10.1021/jo3026884

Section:

Physical Organic Chemistry

Palladium-Catalyzed Decarboxylative Cross-Coupling Reactions: A Route for Regioselective Functionalization of Coumarins

Farnaz Jafarpour, Samaneh Zarei, Mina Barzegar Amiri Olia, Nafiseh Jalalimanesh, and Soraya Rahiminejadian

pp 2957–2964

Publication Date (Web): February 27, 2013 (Article)

DOI: 10.1021/jo302778d

Section:

Heterocyclic Compounds (One Hetero Atom)

Regiocomplementary Cycloaddition Reactions of Boryl- and Silylbenzenes with 1,3-Dipoles: Selective Synthesis of Benzo-Fused Azole Derivatives

Takashi Ikawa, Akira Takagi, Masahiko Goto, Yuya Aoyama, Yoshinobu Ishikawa, Yuji Itoh, Satoshi Fujii, Hiroaki Tokiwa, and Shuji Akai

pp 2965–2983

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

DOI: 10.1021/jo302802b

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Method for the Preparation of Derivatives of Heptiptycene: Toward Dual-Cavity Baskets

Keith Hermann, Stephen Sardini, Yian Ruan, Ryan J. Yoder, Mrinal Chakraborty, Shubham Vyas, Christopher M. Hadad, and Jovica D. Badjić

pp 2984–2991

Publication Date (Web): February 27, 2013 (Article)

DOI: 10.1021/jo3027998

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Spiroketals of Pestalotiopsis fici Provide Evidence for a Biosynthetic Hypothesis Involving Diversified Diels-Alder Reaction Cascades

Ling Liu, Yan Li, Li Li, Ya Cao, Liangdong Guo, Gang Liu, and Yongsheng Che

pp 2992–3000

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

DOI: 10.1021/jo302804h

Section:

Microbial, Algal, and Fungal Biochemistry

Oligo(3,6-phenanthrene ethynlenes): Synthesis, Characterization, and Photoluminescence

Jichao Li, Gongfang Hu, Ningning Wang, Tao Hu, Qiaodong Wen, Ping Lu, and Yanguang Wang

pp 3001–3008

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

DOI: 10.1021/jo302825r



Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers

Synthesis of 2-Aminobenzoxazoles and 3-Aminobenzoxazines via Palladium-Catalyzed Aerobic Oxidation of o-Aminophenols with Isocyanides

Bifu Liu, Meizhou Yin, Hanling Gao, Wanqing Wu, and Huanfeng Jiang

pp 3009–3020

Publication Date (Web): March 11, 2013 (Article)

DOI: 10.1021/jo400002f



Heterocyclic Compounds (More than One Hetero Atom)

Chemical Syntheses of Oligodeoxyribonucleotides Containing Spore Photoproduct

Yajun Jian and Lei Li

pp 3021–3029

Publication Date (Web): March 18, 2013 (Article)

DOI: 10.1021/jo400013n



Carbohydrates

Palladium(II)-Catalyzed Regioselective Arylation of Naphthylamides with Aryl Iodides Utilizing a Quinolinamide Bidentate System

Lehao Huang, Qian Li, Chen Wang, and Chenze Qi

pp 3030–3038

Publication Date (Web): February 20, 2013 (Article)

DOI: 10.1021/jo400017v



Heterocyclic Compounds (One Hetero Atom)

DFT and Experimental Exploration of Intramolecular [2 + 2 + 2] Cycloaddition of Oxanorbornadienedicarboxylates and Analogues

Xinyao Li and Jiaxi Xu

pp 3039–3047

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

DOI: 10.1021/jo4000288

Section:

Physical Organic Chemistry

Highly Selective Macrocyclic Formations by Metathesis Catalysts Fixated in Nanopores

Joo-Eun Jee, Jian Liang Cheong, Jaehong Lim, Cheng Chen, Soon Hyeok Hong, and Su Seong Lee

pp 3048–3056

Publication Date (Web): February 22, 2013 (Article)

DOI: 10.1021/jo302823w

Section:

Organometallic and Organometalloidal Compounds

Factors Affecting Migration of Tertiary Alkyl Groups in Reactions of Alkylboronic Esters with Bromomethylolithium

Mark C. Elliott, Keith Smith, D. Heulyn Jones, Ajaz Hussain, and Basil A. Saleh

pp 3057–3064

Publication Date (Web): February 4, 2013 (Article)

DOI: 10.1021/jo4000459

Section:

Organometallic and Organometalloidal Compounds

Iron-Catalyzed Cycloaddition Reaction of Diynes and Cyanamides at Room Temperature

Chunxiang Wang, Dongping Wang, Fen Xu, Bin Pan, and Boshun Wan

pp 3065–3072

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

DOI: 10.1021/jo400057t

Section:

Heterocyclic Compounds (One Hetero Atom)

Cross- versus Homo-Photocyclodimerization of Anthracene and 2-Anthracenecarboxylic Acid Mediated by a Chiral Hydrogen-Bonding

Template. Factors Controlling the Cross-/Homo-Selectivity and Enantioselectivity

Yuko Kawanami, Hiroaki Umehara, Jun-ichi Mizoguchi, Masaki Nishijima, Gaku Fukuhara, Cheng Yang, Tadashi Mori, and Yoshihisa Inoue

pp 3073–3085

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

DOI: 10.1021/jo302818w

Section:

Physical Organic Chemistry

Regioselective Ring-Emitting Esterification on Azacyclohexane Quaternary Salts: A DFT and Synthetic Study for Covalent Fixation of Electrostatic Polymer Self-Assemblies

Akihiro Kimura, Shinnosuke Takahashi, Susumu Kawauchi, Takuya Yamamoto, and Yasuyuki Tezuka

pp 3086–3094

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

DOI: 10.1021/jo400058f

Section:

Chemistry of Synthetic High Polymers

Quantum Chemical Study of Diels-Alder Reactions Catalyzed by Lewis Acid Activated Oxazaborolidines

Ken Sakata and Hiroshi Fujimoto

pp 3095–3103

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

DOI: 10.1021/jo400066h

Section:

Physical Organic Chemistry

Manganese Dioxide-Methanesulfonic Acid Promoted Direct Dehydrogenative Alkylation of sp^3 C–H Bonds Adjacent to a Heteroatom

Xigong Liu, Bin Sun, Zhiyu Xie, Xiaojun Qin, Lei Liu, and Hongxiang Lou

pp 3104–3112

Publication Date (Web): March 18, 2013 (Article)

DOI: 10.1021/jo4000674

Section:

Heterocyclic Compounds (One Hetero Atom)

Biscembranoids Formed from an α,β -Unsaturated γ -Lactone Ring as a Dienophile: Structure Revision and Establishment of Their Absolute Configurations Using Theoretical Calculations of Electronic Circular Dichroism Spectra

Rui Jia, Tibor Kurtán, Attila Mándi, Xiao-Hong Yan, Wen Zhang, and Yue-Wei Guo

pp 3113–3119

Publication Date (Web): February 22, 2013 (Article)

DOI: 10.1021/jo400069n

Section:

Nonmammalian Biochemistry

Catalytic Ugi-Type Condensation of α -Isocyanoacetamide and Chiral Cyclic Imine: Access to Asymmetric Construction of Several Heterocycles

Liang Xia, Sheng Li, Ruijiao Chen, Kai Liu, and Xiaochuan Chen

pp 3120–3131

Publication Date (Web): February 26, 2013 (Article)

DOI: 10.1021/jo4000702

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Stereoselective Synthesis of 2,8-Dioxabicyclo[3.3.1]nonane Derivatives via a Sequential Michael Addition/Bicyclization Reaction

Guodong Yin, Tianbing Ren, Yin Rao, Yifan Zhou, Zhexian Li, Wenming Shu, and Anxin Wu

pp 3132–3141

Publication Date (Web): March 12, 2013 (Article)

DOI: 10.1021/jo400081q

Section:

Heterocyclic Compounds (One Hetero Atom)

Alkynylated Diazadioxaacenes: Syntheses and Properties

Manuel Schaffroth, Benjamin D. Lindner, Vladislav Vasilenko, Frank Rominger, and U. H. F. Bunz

pp 3142–3150

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

DOI: 10.1021/jo400092r

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Pushing the Boundaries of Intrinsically Stable Radicals: Inverse Design Using the Thiadiazinyl Radical as a Template

Freija De Vleeschouwer, Artiom Chankisjiev, Weitao Yang, Paul Geerlings, and Frank De Proft

pp 3151–3158

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

DOI: 10.1021/jo400101d

Section:

Physical Organic Chemistry

Effects of Electronics, Aromaticity, and Solvent Polarity on the Rate of Azaquinone-Methide-Mediated Depolymerization of Aromatic Carbamate Oligomers

Jessica S. Robbins, Kyle M. Schmid, and Scott T. Phillips

pp 3159–3169

Publication Date (Web): February 18, 2013 (Article)

DOI: 10.1021/jo400105m

Section:

Chemistry of Synthetic High Polymers

Palladium-Catalyzed Carbonylative Sonogashira Coupling of Aryl Bromides via tert-Butyl Isocyanide Insertion

Ting Tang, Xiang-Dong Fei, Zhi-Yuan Ge, Zhong Chen, Yong-Ming Zhu, and Shun-Jun Ji

pp 3170–3175

Publication Date (Web): February 25, 2013 (Article)

DOI: 10.1021/jo4001096

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Degradation of 2,5-Dihydroxy-1,4-benzoquinone by Hydrogen Peroxide: A Combined Kinetic and Theoretical Study

Takashi Hosoya and Thomas Rosenau

pp 3176–3182

Publication Date (Web): February 18, 2013 (Article)

DOI: 10.1021/jo4001178

Section:

Physical Organic Chemistry

Gold-Catalyzed Cycloisomerization of 1,7-Enyne Esters to Structurally Diverse cis-1,2,3,6-Tetrahydropyridin-4-yl Ketones

Weidong Rao, Sally, Ming Joo Koh, and Philip Wai Hong Chan

pp 3183–3195

Publication Date (Web): March 4, 2013 (Article)

DOI: 10.1021/jo400121j

Section:

Heterocyclic Compounds (One Hetero Atom)

Fluorescence Enhancement of Pyrene Chromophores Induced by Alkyl Groups through σ - π Conjugation: Systematic Synthesis of Primary, Secondary, and Tertiary Alkylated Pyrenes at the 1, 3, 6, and 8 Positions and Their Photophysical Properties

Yosuke Niko, Susumu Kawauchi, Shun Otsu, Katsumi Tokumaru, and Gen-ichi Konishi

pp 3196–3207

Publication Date (Web): February 20, 2013 (Article)

DOI: 10.1021/jo400128c

Section:

Physical Organic Chemistry

General Synthesis of Sugar-Derived Azepane Nitrones: Precursors of Azepane Iminosugars

Wen-Bo Zhao, Shinpei Nakagawa, Atsushi Kato, Isao Adachi, Yue-Mei Jia, Xiang-Guo Hu, George W. J. Fleet, Francis X. Wilson, Graeme Horne, Akihide Yoshihara, Ken Izumori, and Chu-Yi Yu

pp 3208–3221

Publication Date (Web): March 4, 2013 (Article)

DOI: 10.1021/jo400130p

Section:

Carbohydrates

Substituent Group Variations Directing the Molecular Packing, Electronic Structure, and Aggregation-Induced Emission Property of Isophorone Derivatives

Zheng Zheng, Zhipeng Yu, Mingdi Yang, Feng Jin, Qiong Zhang, Hongping Zhou, Jieying Wu, and Yupeng Tian

pp 3222–3234

Publication Date (Web): March 18, 2013 (Article)

DOI: 10.1021/jo400116j

Section:

Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers

Complexation of Triptycene-Derived Macrotricyclic Polyether with Paraquat Derivatives, Diquat, and a 2,7-Diazapyrenium Salt: Guest-Induced Conformational Changes of the Host

Ying Han, Jing Cao, Peng-Fei Li, Qian-Shou Zong, Jian-Min Zhao, Jia-Bin Guo, Jun-Feng Xiang, and Chuan-Feng Chen

pp 3235–3242

Publication Date (Web): February 26, 2013 (Article)

DOI: 10.1021/jo400148b

Section:

Physical Organic Chemistry

TMEDA-Assisted Effective Direct Ortho Arylation of Electron-Deficient N-Heteroarenes with Aromatic Grignard Reagents

Fang-Fang Zhuo, Wen-Wen Xie, Yong-Xin Yang, Lei Zhang, Pei Wang, Rui Yuan, and Chao-Shan Da

pp 3243–3249

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

DOI: 10.1021/jo400152f

Section:

Heterocyclic Compounds (One Hetero Atom)

Enantioselective Formal Synthesis of (−)-Podophyllotoxin from (2S,3R)-3-Arylaziridine-2-carboxylate

Masato Takahashi, Noriyuki Suzuki, and Tsutomu Ishikawa

pp 3250–3261

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

DOI: 10.1021/jo400147f

Section:

Biomolecules and Their Synthetic Analogs

Synthesis of Pyrazolo[1,5-c]quinazoline Derivatives through Copper-Catalyzed Tandem Reaction of 5-(2-Bromoaryl)-1H-pyrazoles with Carbonyl Compounds and Aqueous Ammonia

Shanghai Guo, Jiliang Wang, Xuesen Fan, Xinying Zhang, and Dongqiang Guo

pp 3262–3270

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

DOI: 10.1021/jo4001756

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Photoisomerization of Saccharin

L. Duarte, I. Reva, M. L. S. Cristiano, and R. Fausto

pp 3271–3275

Publication Date (Web): March 11, 2013 (Article)

DOI: 10.1021/jo400191p

Section:

Physical Organic Chemistry

Water and Organic Synthesis: A Focus on the In-Water and On-Water Border. Reversal of the In-Water Breslow Hydrophobic Enhancement of the Normal endo-Effect on Crossing to On-Water Conditions for Huisgen Cycloadditions with Increasingly Insoluble Organic Liquid and Solid 2 π -Dipolarophiles

Richard N. Butler, Anthony G. Coyne, William J. Cunningham, and Eamon M. Moloney

pp 3276–3291

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

DOI: 10.1021/jo400055g

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Gold-Catalyzed Oxidative Cyclization of Chiral Homopropargyl Amides: Synthesis of Enantioenriched γ -Lactams

Chao Shu, Meng-Qi Liu, Shan-Shan Wang, Long Li, and Long-Wu Ye

pp 3292–3299

Publication Date (Web): February 25, 2013 (Article)

DOI: 10.1021/jo400127x

Section:

Heterocyclic Compounds (One Hetero Atom)

Nucleophilic Trifluoromethylation of Carbonyl Compounds: Trifluoroacetaldehyde Hydrate as a Trifluoromethyl Source

G. K. Surya Prakash, Zhe Zhang, Fang Wang, Socrates Munoz, and George A. Olah

pp 3300–3305

Publication Date (Web): February 20, 2013 (Article)

DOI: 10.1021/jo400202w

Section:

Aliphatic Compounds

Cinchona-Based Primary Amine-Catalyzed Asymmetric Cascade Aza-Michael-Aldol Reactions of Enones with 2-(1H-Pyrrol-2-yl)-2-oxoacetates: Synthesis of Chiral Pyrrolizines with Multistereocenters

Hyo-Jun Lee and Chang-Woo Cho

pp 3306–3312

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

DOI: 10.1021/jo4001614

Section:

Heterocyclic Compounds (One Hetero Atom)

Total Synthesis and Determination of the Absolute Configuration of 5,6-Dihydro- α -pyrone Natural Product Synargentolide B

Kavirayani R. Prasad and Phaneendra Gutala

pp 3313–3322

Publication Date (Web): March 11, 2013 (Article)

DOI: 10.1021/jo400083v

Section:

Biomolecules and Their Synthetic Analogs

Hydrogen Bond-Assisted 6 π -Azaelectrocyclization of Penta-2,4-dienamides: Synthesis of Dihydropyridin-2(3H)-ones

Xu Liu, Ning Zhang, Jiming Yang, Yongjiu Liang, Rui Zhang, and Dewen Dong

pp 3323–3328

Publication Date (Web): February 27, 2013 (Article)

DOI: 10.1021/jo4001959

Section:

Heterocyclic Compounds (One Hetero Atom)

Synthesis of Dibenzoheteropines of Group 13–16 Elements via Ring-Closing Metathesis

Takanori Matsuda and Shinya Sato

pp 3329–3335

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

DOI: 10.1021/jo4001993

Section:

Organometallic and Organometalloidal Compounds

Notes

Structural Revision of Garuganin IV and 1,9'-Didesmethylgaruganin III through Total Synthesis

Zhi-Qiang Zhu and Christopher M. Beaudry

pp 3336–3341

Publication Date (Web): March 12, 2013 (Note)

DOI: 10.1021/jo302723n

Section:

Biomolecules and Their Synthetic Analogs

Chiral Cyclopropenyl Ketones: Reactive and Selective Diels–Alder Dienophiles

Laural A. Fisher, Natalee J. Smith, and Joseph M. Fox

pp 3342–3348

Publication Date (Web): February 25, 2013 (Note)

DOI: 10.1021/jo302683t

Section:

Alicyclic Compounds

Push-Pull Triazenes Derived from 1-(Benzylideneamino)- and 1-(Sulfonimido)-azolylidenes

Davit Jishkariani, C. Dennis Hall, Aydin Demircan, Blake J. Tomlin, Peter J. Steel, and Alan R. Katritzky

pp 3349–3354

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

DOI: 10.1021/jo302697q

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Total Synthesis of (−)-α-Kainic acid via Chirality Transfer through Ireland–Claisen Rearrangement

Naredla Kesava Reddy and Srivari Chandrasekhar

pp 3355–3360

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

DOI: 10.1021/jo400001t

Section:

Amino Acids, Peptides, and Proteins

Piper-Betle-Shaped Nano-S-Catalyzed Synthesis of 1-Amidoalkyl-2-naphthols under Solvent-Free Reaction Condition: A Greener “Nanoparticle-Catalyzed Organic Synthesis Enhancement” Approach

Vijay K. Das, Madhurjya Borah, and Ashim J. Thakur

pp 3361–3366

Publication Date (Web): March 11, 2013 (Note)

DOI: 10.1021/jo302682k

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Concise Approach to the Carbocyclic Core of the Naturally Occurring Sphingomyelinase Inhibitor Scyphostatin

Goverdhan Mehta and Nagi Reddy Modugu

pp 3367–3373

Publication Date (Web): February 26, 2013 (Note)

DOI: 10.1021/jo3028196

Section:

Biomolecules and Their Synthetic Analogs

Synthesis of 3-Cyanoindole Derivatives Mediated by Copper(I) Iodide Using Benzyl Cyanide

On Ying Yuen, Pui Ying Choy, Wing Kin Chow, Wing Tak Wong, and Fuk Yee Kwong

pp 3374–3378

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

DOI: 10.1021/jo3028278

Section:

Heterocyclic Compounds (One Hetero Atom)

Enantioselective Synthesis of Dihydro-1H-benzindoles

Gustavo P. Silveira and Joseph P. Marino

pp 3379–3383

Publication Date (Web): March 12, 2013 (Note)

DOI: 10.1021/jo302798j

Section:

Heterocyclic Compounds (One Hetero Atom)

Methylene Acetal Formation from 1,2- and 1,3-Diols Using an O,S-Acetal, 1,3-Dibromo-5,5-dimethylhydantoin, and BHT

Tomohiro Maegawa, Yasuyuki Koutani, Kazuki Otake, and Hiromichi Fujioka

pp 3384–3390

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

DOI: 10.1021/jo4000256

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Synthesis of Diphenylhexatriene by the Pd-Catalyzed Dimerization of Cinnamyl Acetate

Tehetena Mesganaw, G-Yoon J. Im, and Neil K. Garg

pp 3391–3393

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

DOI: 10.1021/jo400032j

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Stepwise Click Functionalization of DNA through a Bifunctional Azide with a Chelating and a Nonchelating Azido Group

Sachin A. Ingale and Frank Seela

pp 3394–3399

Publication Date (Web): February 26, 2013 (Note)

DOI: 10.1021/jo400059b

Section:

Carbohydrates

Assembly of Substituted 3-Aminoindazoles from 2-Bromobenzonitrile via a CuBr-Catalyzed Coupling/Condensation Cascade Process

Lanting Xu, Yinsheng Peng, Qiangbiao Pan, Yongwen Jiang, and Dawei Ma

pp 3400–3404

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

DOI: 10.1021/jo400071h

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Improving Carbene–Copper-Catalyzed Asymmetric Synthesis of α -Aminoboronic Esters Using Benzimidazole-Based Precursors

Kun Wen, Han Wang, Jinbo Chen, He Zhang, Xiaodan Cui, Chao Wei, Erkang Fan, and Zhihua Sun

pp 3405–3409

Publication Date (Web): March 5, 2013 (Note)

DOI: 10.1021/jo4000477

Section:

Organometallic and Organometalloidal Compounds

Double Reduction of Cyclic Aromatic Sulfonamides: Synthesis of (+)-Mesembrine and (+)-Mesembranol

Kimberly Geoghegan and Paul Evans

pp 3410–3415

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

DOI: 10.1021/jo4000306

Section:

Alkaloids

Ruthenium-Catalyzed Dimerization of 7-Oxabicyclo[2.2.1]hepta-2,5-diene-2,3-dicarboxylates

Kelsey Jack and William Tam

pp 3416–3420

Publication Date (Web): March 18, 2013 (Note)

DOI: 10.1021/jo400104q

Section:

Heterocyclic Compounds (One Hetero Atom)

Synthesis of 1,2-Bis(trimethylsilyl)benzene Derivatives from 1,2-Dichlorobenzenes Using a Hybrid Metal Mg/CuCl in the Presence of LiCl in 1,3-Dimethyl-2-imidazolidinone

Tsugio Kitamura, Keisuke Gondo, and Toshimasa Katagiri

pp 3421–3424

Publication Date (Web): March 18, 2013 (Note)

DOI: 10.1021/jo4000866

Section:

Organometallic and Organometalloidal Compounds

Isolation of an σ -Alkyl Iridium Hydride Complex, Formed in the (Semi)hydrogenation of an β -Enamido Ketone

Frauke Maurer and Uli Kazmaier

pp 3425–3428

Publication Date (Web): March 4, 2013 (Note)

DOI: 10.1021/jo4001349

Section:

Organometallic and Organometalloidal Compounds

Synthesis of Optically Pure 2-Trifluoromethyl Lactic Acid by Asymmetric Hydroformylation

Xiao Wang and Stephen L. Buchwald

pp 3429–3433

Publication Date (Web): February 11, 2013 (Note)

DOI: 10.1021/jo400115r

Section:

Aliphatic Compounds

[RuCl₂(p-cymene)]₂-Catalyzed Conjugate Addition of Arylboronic Acids to α,β-Unsaturated Ketones under Ligand-Free and Neutral Conditions

Lei Zhang, Xiaomin Xie, Lei Fu, and Zhaoguo Zhang

pp 3434–3437

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

DOI: 10.1021/jo4001367

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

A Direct and Mild Formylation Method for Substituted Benzenes Utilizing Dichloromethyl Methyl Ether–Silver Trifluoromethanesulfonate

Kosuke Ohsawa, Masahito Yoshida, and Takayuki Doi

pp 3438–3444

Publication Date (Web): March 11, 2013 (Note)

DOI: 10.1021/jo400056k

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

One-Step Synthesis of Isocoumarins and 3-Benzylidenephthalides via Ligandless Pd-Catalyzed Oxidative Coupling of Benzoic Acids and Vinylarenes

Debkumar Nandi, Debalina Ghosh, Shih-Ji Chen, Bing-Chiuan Kuo, Nancy M. Wang, and Hon Man Lee

pp 3445–3451

Publication Date (Web): March 18, 2013 (Note)

DOI: 10.1021/jo400174w

Section:

Heterocyclic Compounds (One Hetero Atom)

Synthesis of Alkyl Hydroperoxides via Alkylation of gem-Dihydroperoxides

ShivaKumar Kyasa, Benjamin W. Puffer, and Patrick H. Dussault

pp 3452–3456

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

DOI: 10.1021/jo4001564

Section:

General Organic Chemistry

Synthesis of Fully Substituted Pyrimidines

David Tejedor, Sara López-Tosco, and Fernando García-Tellado

pp 3457–3463

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

DOI: 10.1021/jo400090w

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Synthesis of 4-Vinylindoles Using Ruthenium-Catalyzed Ring-Closing Enyne Metathesis

Kazushi Hayashi, Kazuhiro Yoshida, and Akira Yanagisawa

pp 3464–3469

Publication Date (Web): February 19, 2013 (Note)

DOI: 10.1021/jo400099x

Section:

Heterocyclic Compounds (One Hetero Atom)

Copper-Catalyzed N-Arylation of 2-Imidazolines with Aryl Iodides

Owen A. Davis, Matthew Hughes, and James A. Bull

pp 3470–3475

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

DOI: 10.1021/jo400120r

Section:

Heterocyclic Compounds (More than One Hetero Atom)

An Asymmetric Synthesis of trans-Fused Butyrolactones from Endoperoxides

Joshua Priest, Mark. R. Longland, Mark R. J. Elsegood, and Marc C. Kimber

pp 3476–3481

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

DOI: 10.1021/jo400177j

Section:

Terpenes and Terpenoids

Synthesis of Withasomnines and Their Non-natural Analogues from Aldehydes and 4-Nitro-1-butanol in Three Steps

Deepti Verma, Rahul Kumar, and Irishi N. N. Namboothiri

pp 3482–3486

Publication Date (Web): February 25, 2013 (Note)

DOI: 10.1021/jo400207u

Section:

Alkaloids

Crystallization-Induced Dynamic Resolution of Fox Chiral Auxiliary and Application to the Diastereoselective Electrophilic Fluorination of Amide Enolates

Hodney Lubin, Christophe Dupuis, Julien Pytkowicz, and Thierry Brigaud

pp 3487–3492

Publication Date (Web): March 12, 2013 (Note)

DOI: 10.1021/jo400210j

Section:

General Organic Chemistry

Intramolecular Carbolithiation as a Route to a Sterically Congested Cyclopentene: Synthesis of the Longtailed Mealybug Pheromone

William F. Bailey and Johanna M. Bakonyi

pp 3493–3495

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

DOI: 10.1021/jo4002118

Section:

Biomolecules and Their Synthetic Analogs

Regioselective Electrophilic Access to Naphtho[1,2-b:8,7-b']- and -[1,2-b:5,6-b']dithiophenes

Caterina Viglianisi, Lucia Becucci, Cristina Faggi, Sara Piantini, Piero Procacci, and Stefano Menichetti

pp 3496–3502

Publication Date (Web): March 4, 2013 (Note)

DOI: 10.1021/jo400205j

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Highly trans-Stereoselective Synthesis of Bicyclic Isoxazolidines via Copper-Catalyzed Triple Cascade Catalysis

Hu Chen, Zhaofeng Wang, Yingnan Zhang, and Yong Huang

pp 3503–3509

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

DOI: 10.1021/jo400215e

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Additions and Corrections

Correction to Direct Displacement of Alkoxy Groups of Vinylogous Esters by Grignard Reagents

Anthony J. Brockway, Marcos González-López, James C. Fettinger, and Jared T. Shaw

pp 3510–3510

Publication Date (Web): March 11, 2013 (Addition/Correction)

DOI: 10.1021/jo400347w

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds