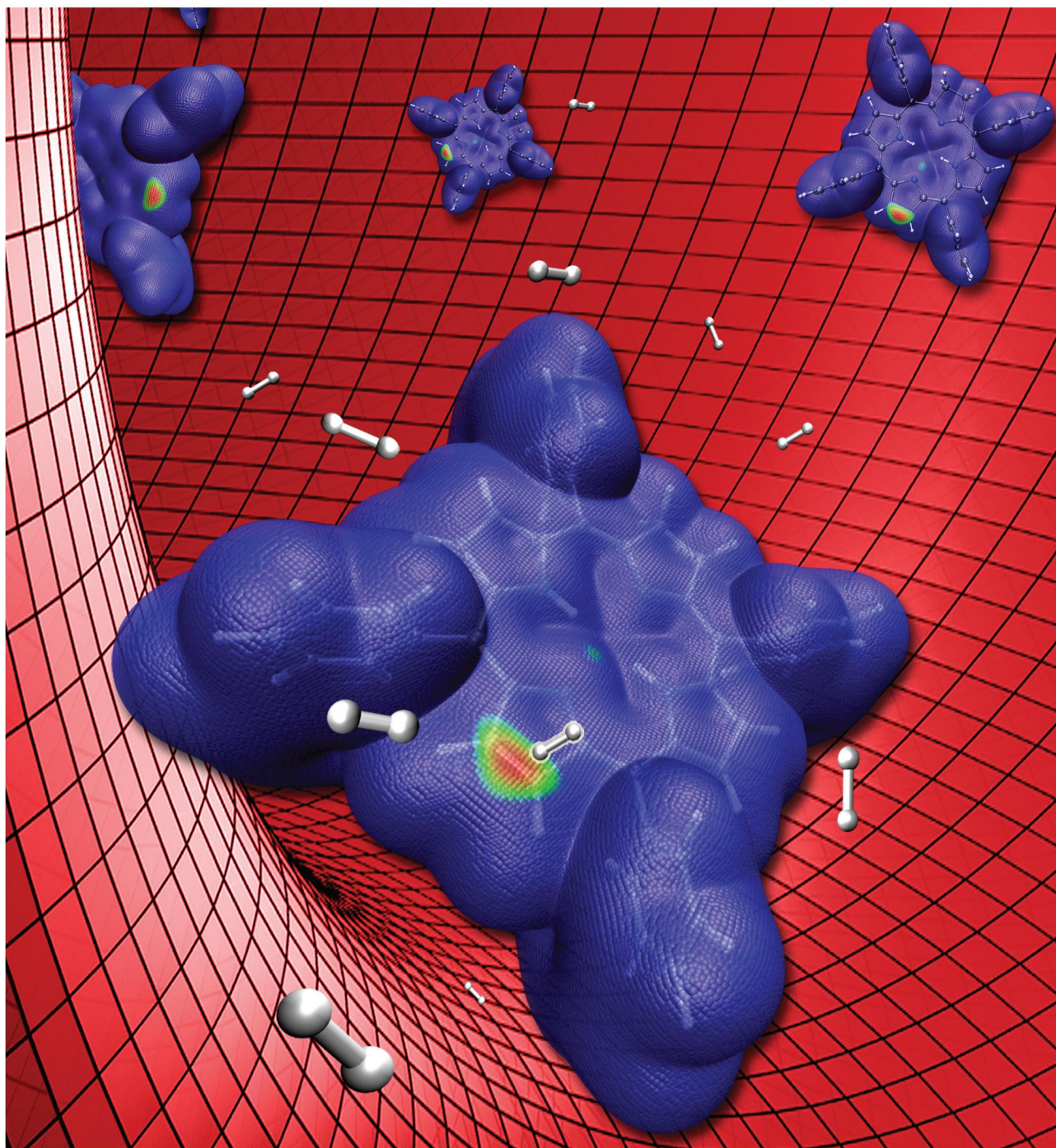


JOC

The Journal of Organic Chemistry

MAY 15, 2015 VOLUME 80, NUMBER 10 pubs.acs.org/joc



ACS Publications
Most Trusted. Most Cited. Most Read.

www.acs.org

Content

- 1. Investigation and Conformational Analysis of Fluorinated Nucleoside Antibiotics Targeting Siderophore Biosynthesis**
Surendra Dawadi, Kishore Viswanathan, Helena I. Boshoff, Clifton E. Barry, III, and Courtney C. Aldrich
The Journal of Organic Chemistry 2015 80 (10), 4835-4850
DOI: 10.1021/acs.joc.5b00550
- 2. Stereoselective Syntheses of the Conjugation-Ready, Downstream Disaccharide and Phosphorylated Upstream, Branched Trisaccharide Fragments of the O-PS of *Vibrio cholerae* O139**
Sameh E. Soliman and Pavol Kováč
The Journal of Organic Chemistry 2015 80 (10), 4851-4860
DOI: 10.1021/acs.joc.5b00562
- 3. Origin of the Regioselective Reduction of Chlorins**
Torsten Bruhn and Christian Brückner
The Journal of Organic Chemistry 2015 80 (10), 4861-4868
DOI: 10.1021/acs.joc.5b00137
- 4. One-Pot Synthesis of Glycosyl- β -azido Ester via Diazotransfer Reaction Toward Access of Glycosyl- β -triazolyl Ester**
Amrita Mishra and Vinod K. Tiwari
The Journal of Organic Chemistry 2015 80 (10), 4869-4881
DOI: 10.1021/acs.joc.5b00179
- 5. Synthesis of Macrocyclic Receptors with Intrinsic Fluorescence Featuring Quinizarin Moieties**
M. Bürger, F. Katzsch, E. Brendler, and T. Gruber
The Journal of Organic Chemistry 2015 80 (10), 4882-4892
DOI: 10.1021/acs.joc.5b00223
- 6. Modular Assembly of Furotropones and Benzofurotropones, and Study of Their Physicochemical Properties**
Rajendra P. Shirke and S. S. V. Ramasastry
The Journal of Organic Chemistry 2015 80 (10), 4893-4903
DOI: 10.1021/acs.joc.5b00226
- 7. Insight into Transannular Cyclization Reactions To Synthesize Azabicyclo[X.Y.Z]alkanone Amino Acid Derivatives from 8-, 9-, and 10-Membered Macrocyclic Dipeptide Lactams**
N. D. Prasad Atmuri and William D. Lubell
The Journal of Organic Chemistry 2015 80 (10), 4904-4918
DOI: 10.1021/acs.joc.5b00237
- 8. Silver-Catalyzed Direct Thiolation of Quinones by Activation of Aryl Disulfides to Synthesize Quinonyl Aryl Thioethers**
Cheng Zhang, Jesse McClure, and C. James Chou
The Journal of Organic Chemistry 2015 80 (10), 4919-4927
DOI: 10.1021/acs.joc.5b00247
- 9. Access to Spirocyclized Oxindoles and Indolenines via Palladium-Catalyzed Cascade Reactions of Propargyl Carbonates with 2-Oxotryptamines and Tryptamines**
Antoinette E. Nibbs, Thomas D. Montgomery, Ye Zhu, and Viresh H. Rawal

The Journal of Organic Chemistry 2015 80 (10), 4928-4941

DOI: 10.1021/acs.joc.5b00277

10. Dual Roles of β -Oxodithioesters in the Copper-Catalyzed Synthesis of Benzo[e]pyrazolo[1,5-c][1,3]thiazine Derivatives

Li-Rong Wen, Wen-Kui Yuan, and Ming Li

The Journal of Organic Chemistry 2015 80 (10), 4942-4949

DOI: 10.1021/acs.joc.5b00288

11. Catalytic Asymmetric Construction of Vicinal Tetrasubstituted Stereocenters by the Mannich Reaction of Linear α -Substituted Monothiomalonates with Isatin N-Boc Ketimines

Teng Liu, Weiwei Liu, Xiaonian Li, Fangzhi Peng, and Zihui Shao

The Journal of Organic Chemistry 2015 80 (10), 4950-4956

DOI: 10.1021/acs.joc.5b00302

12. Copper-Catalyzed [4 + 1] Annulation between α -Hydroxy Ketones and Nitriles: An Approach to Highly Substituted 3(2H)-Furanones

Haitao He, Chaorong Qi, Xiaohan Hu, Lu Ouyang, Wenfang Xiong, and Huanfeng Jiang

The Journal of Organic Chemistry 2015 80 (10), 4957-4965

DOI: 10.1021/acs.joc.5b00356

13. Metal-Free Oxidative Spirocyclization of Alkynes with Sulfonylhydrazides Leading to 3-Sulfonated Azaspiro[4,5]trienones

Jiangwei Wen, Wei Wei, Shengnan Xue, Daoshan Yang, Yu Lou, Chaoyang Gao, and Hua Wang

The Journal of Organic Chemistry 2015 80 (10), 4966-4972

DOI: 10.1021/acs.joc.5b00361

14. Light-Induced Regiospecific Bromination of meso-Tetra(3,5-di-tert-butylphenyl)Porphyrin on 2,12 β -Pyrrolic Positions

Gabriele Di Carlo, Alessio Orbelli Biroli, Francesca Tessore, Silvia Rizzato, Alessandra Forni, Giulia Magnano, and Maddalena Pizzotti

The Journal of Organic Chemistry 2015 80 (10), 4973-4980

DOI: 10.1021/acs.joc.5b00367

15. Regio- and Enantioselective Copper-Catalyzed Allylic Alkylation of Ortho-Substituted Cinnamyl Bromides with Grignard Reagents

Nathalie C. van der Molen, Theodora D. Tiemersma-Wegman, Martín Fañanás-Mastral, and Ben L. Feringa

The Journal of Organic Chemistry 2015 80 (10), 4981-4984

DOI: 10.1021/acs.joc.5b00371

16. Brønsted versus Lewis Acid Type Anion Recognition by Arylboronic Acids

Mayte A. Martínez-Aguirre and Anatoly K. Yatsimirsky

The Journal of Organic Chemistry 2015 80 (10), 4985-4993

DOI: 10.1021/acs.joc.5b00377

17. Development of a Diastereoselective Phosphorylation of a Complex Nucleoside via Dynamic Kinetic Resolution

Kristy Tran, Gregory L. Beutner, Michael Schmidt, Jacob Janey, Ke Chen, Victor Rosso, and Martin D. Eastgate

The Journal of Organic Chemistry 2015 80 (10), 4994-5003

DOI: 10.1021/acs.joc.5b00392

18. Aggregation of a Tetrasaccharide Acceptor Observed by NMR: Synthesis of Pentasaccharide Fragments of the LeaLex Tumor-Associated Hexasaccharide Antigen

Deng Kuir, Mickaël Guillemineau, and France-Isabelle Auzanneau

The Journal of Organic Chemistry 2015 80 (10), 5004-5013

DOI: 10.1021/acs.joc.5b00405

19. 1',5'-Anhydro-l-ribo-hexitol Adenine Nucleic Acids (α -l-HNA-A): Synthesis and Chiral Selection Properties in the Mirror Image World

Daniele D'Alonzo, Mathy Froeyen, Guy Schepers, Giovanni Di Fabio, Arthur Van Aerschot, Piet Herdewijn, Giovanni Palumbo, and Annalisa Guaragna
The Journal of Organic Chemistry **2015** *80* (10), 5014-5022
DOI: 10.1021/acs.joc.5b00406

20. Copper/Iron-Catalyzed Aerobic Oxyphosphorylation of Terminal Alkynes Leading to β -Ketophosphonates

Niannian Yi, Ruijia Wang, Huaxu Zou, Weibao He, Wenqiang Fu, and Weimin He
The Journal of Organic Chemistry **2015** *80* (10), 5023-5029
DOI: 10.1021/acs.joc.5b00408

21. Azulenylcarbene and Naphthylcarbene Isomerizations. Falling Solid Flash Vacuum Pyrolysis

David Kvaskoff, Jürgen Becker, and Curt Wentrup
The Journal of Organic Chemistry **2015** *80* (10), 5030-5034
DOI: 10.1021/acs.joc.5b00412

22. Aza-m-Xylylene Diradical with Increased Steric Protection of the Aminyl Radicals

Arnon Olankitwanit, Suchada Rajca, and Andrzej Rajca
The Journal of Organic Chemistry **2015** *80* (10), 5035-5044
DOI: 10.1021/acs.joc.5b00421

23. Effect of Fluorination of 2,1,3-Benzothiadiazole

Christian B. Nielsen, Andrew J. P. White, and Iain McCulloch
The Journal of Organic Chemistry **2015** *80* (10), 5045-5048
DOI: 10.1021/acs.joc.5b00430

24. Experimental and Computational Mechanistic Investigation of Chlorocarbene Additions to Bridgehead Carbene–Anti-Bredt Systems: Noradamantylcarbene–Adamantene and Adamantylcarbene–Homoadamantene

Stephanie R. Hare, Marina Orman, Faizunnahar Dewan, Elizabeth Dalchand, Camilla Buzard, Sadia Ahmed, Julia C. Tolentino, Ulweena Sethi, Kelly Terlizzi, Camille Houferak, Aliza M. Stein, Alexandra Stedronsky, Dasan M. Thamattoor, Dean J. Tantillo, and Dina C. Merrer
The Journal of Organic Chemistry **2015** *80* (10), 5049-5065
DOI: 10.1021/acs.joc.5b00456

25. Synthesis of Polyarylated Carbazoles: Discovery toward Soluble Phenanthro- and Tetraceno-Fused Carbazole Derivatives

Sushil Kumar and Yu-Tai Tao
The Journal of Organic Chemistry **2015** *80* (10), 5066-5076
DOI: 10.1021/acs.joc.5b00423

26. Model Studies on the Dimerization of 1,3-Diacetylenes

Gebhard Haberhauer, Rolf Gleiter, and Sven Fabig
The Journal of Organic Chemistry **2015** *80* (10), 5077-5083
DOI: 10.1021/acs.joc.5b00461

27. Supramolecular Assistance for the Selective Demethylation of Calixarene-Based Receptors

Pierre-Edouard Danjou, Gaël De Leener, Damien Cornut, Steven Moerkerke, Samir Mameri, Angélique Lascaux, Johan Wouters, Andrea Brugnara, Benoit Colasson, Olivia Reinaud, and Ivan Jabin
The Journal of Organic Chemistry **2015** *80* (10), 5084-5091
DOI: 10.1021/acs.joc.5b00464

28. Preparation of a Cyclic Polyphenylene Array for a Zigzag-Type Carbon Nanotube Segment

Ryuta Sekiguchi, Kei Takahashi, Jun Kawakami, Atsushi Sakai, Hiroshi Ikeda, Aya Ishikawa, Kazuchika Ohta, and Shunji Ito
The Journal of Organic Chemistry **2015** *80* (10), 5092-5110
DOI: 10.1021/acs.joc.5b00485

- 29. Synthesis of 2-Fluoro-1,4-benzoxazines and 2-Fluoro-1,4-benzoxazepin-5-ones by Exploring the Nucleophilic Vinylic Substitution (SNV) Reaction of gem-Difluoroenamides**
Tamara Meiresonne, Guido Verniest, Norbert De Kimpe, and Sven Mangelinckx
The Journal of Organic Chemistry **2015** *80* (10), 5111-5124
DOI: 10.1021/acs.joc.5b00507
- 30. Organocatalytic Enantioselective Pictet–Spengler Approach to Biologically Relevant 1-Benzyl-1,2,3,4-Tetrahydroisoquinoline Alkaloids**
Andrea Ruiz-Olalla, Martien A. Würdemann, Martin J. Wanner, Steen Ingemann, Jan H. van Maarseveen, and Henk Hiemstra
The Journal of Organic Chemistry **2015** *80* (10), 5125-5132
DOI: 10.1021/acs.joc.5b00509
- 31. Synthesis of SF₅-Substituted Tetrapyrroles, Metalloporphyrins, BODIPYs, and Their Dipyrrane Precursors**
Hartwig R. A. Golf, Hans-Ulrich Reissig, and Arno Wiehe
The Journal of Organic Chemistry **2015** *80* (10), 5133-5143
DOI: 10.1021/acs.joc.5b00528
- 32. Deuteration of Aromatic Rings under Very Mild Conditions through Keto-Enamine Tautomeric Amplification**
S. Hessam M. Mehr, Katsuya Fukuyama, Stephanie Bishop, Francesco Leij, and Mark J. MacLachlan
The Journal of Organic Chemistry **2015** *80* (10), 5144-5150
DOI: 10.1021/acs.joc.5b00539
- 33. Fluorinated and Conformationally Fixed Derivatives of I-HomoDMDP: Synthesis and Glycosidase Inhibition**
Yi-Xian Li, Yousuke Shimada, Isao Adachi, Atsushi Kato, Yue-Mei Jia, George W. J. Fleet, Min Xiao, and Chu-Yi Yu
The Journal of Organic Chemistry **2015** *80* (10), 5151-5158
DOI: 10.1021/acs.joc.5b00571
- 34. Amine Detection with Distyrylbenzenedialdehyde-Based Knoevenagel Adducts**
Jan Kumpf, S. Thimon Schwaebel, and Uwe H. F. Bunz
The Journal of Organic Chemistry **2015** *80* (10), 5159-5166
DOI: 10.1021/acs.joc.5b00577
- 35. Iodine-Mediated C–H Functionalization of sp, sp², and sp³ Carbon: A Unified Multisubstrate Domino Approach for Isatin Synthesis**
Gandhesiri Satish, Ashok Polu, Thangeswaran Ramar, and Andivelu Ilangovan
The Journal of Organic Chemistry **2015** *80* (10), 5167-5175
DOI: 10.1021/acs.joc.5b00581
- 36. Component Mobility by a Minute Quantity of the Appropriate Solvent as a Principal Motif in the Acceleration of Solid-Supported Reactions**
Gil Fridkin, Ishay Columbus, Sigal Saphier, Lea Yehezkel, Michael Goldvaser, Daniele Marciano, Nissan Ashkenazi, and Yossi Zafrani
The Journal of Organic Chemistry **2015** *80* (10), 5176-5188
DOI: 10.1021/acs.joc.5b00492
- 37. β -Selective C-Arylation of Diisobutylaluminum Hydride Modified 1,6-Anhydroglucose: Synthesis of Canagliflozin without Recourse to Conventional Protecting Groups**
Julian P. Henschke, Chen-Wei Lin, Ping-Yu Wu, Wen-Shing Tsao, Jyh-Hsiung Liao, and Pei-Chen Chiang
The Journal of Organic Chemistry **2015** *80* (10), 5189-5195
DOI: 10.1021/acs.joc.5b00601
- 38. Pt-Catalyzed Rearrangement of Oxaspirohexanes to 3-Methylenetetrahydrofurans: Scope and Mechanism**

Christian A. Malapit, Sampada M. Chitale, Meena S. Thakur, Rosa Taboada, and Amy R. Howell
The Journal of Organic Chemistry **2015** *80* (10), 5196-5209
DOI: 10.1021/acs.joc.5b00604

39. Benzobisimidazole Cruciform Fluorophores

Ha T. M. Le, Nadia S. El-Hamdi, and Ognjen Š. Miljanić
The Journal of Organic Chemistry **2015** *80* (10), 5210-5217
DOI: 10.1021/acs.joc.5b00616

40. Minimalist Relativistic Force Field: Prediction of Proton–Proton Coupling Constants in ¹H NMR Spectra Is Perfected with NBO Hybridization Parameters

Andrei G. Kutateladze and Olga A. Mukhina
The Journal of Organic Chemistry **2015** *80* (10), 5218-5225
DOI: 10.1021/acs.joc.5b00619

41. Effect of Extended π Conjugation on the Spectroscopic and Electrochemical Properties of Boron Difluoride Formazanate Complexes

Stephanie M. Barbon, Viktor N. Staroverov, and Joe B. Gilroy
The Journal of Organic Chemistry **2015** *80* (10), 5226-5235
DOI: 10.1021/acs.joc.5b00620

42. Stereoselective Syntheses of (+)-2-epi-Deoxoprosopinine, (-)-Deoxoprosophylline, (+)-cis-195A, and 2,5-Di-epi-cis-195A from a Common Chiral Nonracemic Building Block

Krishna Annadi and Andrew G. H. Wee
The Journal of Organic Chemistry **2015** *80* (10), 5236-5251
DOI: 10.1021/acs.joc.5b00621

43. Regiodivergent Addition of Phenols to Allylic Oxides

David N. Vaccarello, Matthew J. Moschitto, and Chad A. Lewis
The Journal of Organic Chemistry **2015** *80* (10), 5252-5259
DOI: 10.1021/acs.joc.5b00671

44. Domino Acylation/Diels–Alder Synthesis of N-Alkyl-octahydroisoquinolin-1-one-8-carboxylic Acids under Low-Solvent Conditions

Stephen R. Slauson, Ryan Pemberton, Partha Ghosh, Dean J. Tantillo, and Jeffrey Aubé
The Journal of Organic Chemistry **2015** *80* (10), 5260-5271
DOI: 10.1021/acs.joc.5b00804

45. Access to Substituted Dihydrothiopyrano[2,3-b]indoles via Sequential Rearrangements During S-Alkylation and Au-Catalyzed Hydroarylation on Indoline-2-thiones

Mukund Jha, Ganesh M. Shelke, T. Stanley Cameron, and Anil Kumar
The Journal of Organic Chemistry **2015** *80* (10), 5272-5278
DOI: 10.1021/jo5025943

46. Enantioselective Synthesis of Dihydropyran-Fused Indoles through [4+2] Cycloaddition between Allenates and 3-Olefinic Oxindoles

Feng Wang, Zhen Li, Jie Wang, Xin Li, and Jin-Pei Cheng
The Journal of Organic Chemistry **2015** *80* (10), 5279-5286
DOI: 10.1021/acs.joc.5b00212

47. Synthesis of 1,2,3-Substituted Pyrroles from Propargylamines via a One-Pot Tandem Enyne Cross Metathesis–Cyclization Reaction

Helene Chachignon, Nicolò Scalacci, Elena Petricci, and Daniele Castagnolo
The Journal of Organic Chemistry **2015** *80* (10), 5287-5295
DOI: 10.1021/acs.joc.5b00222

48. Total Synthesis of (+)-Iresin

Bian-Lin Wang, Hai-Tao Gao, and Wei-Dong Z. Li
The Journal of Organic Chemistry **2015** *80* (10), 5296-5301
DOI: 10.1021/acs.joc.5b00365

- 49. Phosphine-Free Palladium-Catalyzed Direct Bisarylation of Pyrroles with Aryl Iodides on Water**
Beom Shin Cho, Hyun Jung Bae, and Young Keun Chung
The Journal of Organic Chemistry **2015** *80* (10), 5302-5307
DOI: 10.1021/acs.joc.5b00451
- 50. Multidirectional Synthesis of Substituted Indazoles via Iridium-Catalyzed C–H Borylation**
Scott A. Sadler, Andrew C. Hones, Bryan Roberts, David Blakemore, Todd B. Marder, and Patrick G. Steel
The Journal of Organic Chemistry **2015** *80* (10), 5308-5314
DOI: 10.1021/acs.joc.5b00452
- 51. Preparation of a C70 Bis-heterocyclic Derivative with High Chemio- and Regioselectivity**
Hui-Lei Hou, Zong-Jun Li, Tao Sun, and Xiang Gao
The Journal of Organic Chemistry **2015** *80* (10), 5315-5319
DOI: 10.1021/acs.joc.5b00511
- 52. PhI(OCOCF₃)₂-Mediated Cyclization of o-(1-Alkynyl)benzamides: Metal-Free Synthesis of 3-Hydroxy-2,3-dihydroisoquinoline-1,4-dione**
Chao Yang, Xiang Zhang, Daisy Zhang-Negrerie, Yunfei Du, and Kang Zhao
The Journal of Organic Chemistry **2015** *80* (10), 5320-5328
DOI: 10.1021/acs.joc.5b00576
- 53. Preparation of Substituted Phenanthridines from the Coupling of Aryldiazonium Salts with Nitriles: A Metal Free Approach**
Mani Ramanathan and Shih-Tzung Liu
The Journal of Organic Chemistry **2015** *80* (10), 5329-5336
DOI: 10.1021/acs.joc.5b00579
- 54. Modular Synthesis of Constrained Ethyl (cEt) Purine and Pyrimidine Nucleosides**
Helen Blade, Derek Bradley, Louis Diorazio, Timothy Evans, Barry R. Hayter, and Gareth P. Howell
The Journal of Organic Chemistry **2015** *80* (10), 5337-5343
DOI: 10.1021/acs.joc.5b00607
- 55. Chemoenzymatic Synthesis of 36S Isotopologues of Methionine and S-Adenosyl-L-methionine**
Myles B. Poulin, Quan Du, and Vern L. Schramm
The Journal of Organic Chemistry **2015** *80* (10), 5344-5347
DOI: 10.1021/acs.joc.5b00608
- 56. Air Oxidative Radical Oxysulfurization of Alkynes Leading to α -Thioaldehydes**
Shao-Fang Zhou, Xiang-Qiang Pan, Zhi-Hao Zhou, Adedamola Shoberu, Pei-Zhi Zhang, and Jian-Ping Zou
The Journal of Organic Chemistry **2015** *80* (10), 5348-5354
DOI: 10.1021/acs.joc.5b00641
- 57. The Unexpected Formation of 9,9,10,10-Tetrafluoro-1,2,4,12-tetraphenyl[2.2]paracyclophan-1-ene**
Alex J. Roche, Khalil A. Abboud, and William R. Dolbier, Jr.
The Journal of Organic Chemistry **2015** *80* (10), 5355-5358
DOI: 10.1021/acs.joc.5b00657
- 58. Ring-Closing Enyne Metathesis of Terminal Alkynes with Propargylic Hindrance**
Benjamin Laroche, Morgane Detraz, Alain Blond, Lionel Dubost, Patrick Mailliet, and Bastien Nay
The Journal of Organic Chemistry **2015** *80* (10), 5359-5363
DOI: 10.1021/acs.joc.5b00659
- 59. Regioselective Synthesis of Multisubstituted Furans via Copper-Mediated Coupling between Ketones and β -Nitrostyrenes**
Monoranjan Ghosh, Subhajit Mishra, and Alakananda Hajra

The Journal of Organic Chemistry **2015** *80* (10), 5364-5368

DOI: 10.1021/acs.joc.5b00704

60. Transition-Metal-Free C-3 Arylation of Quinoline-4-ones with Arylhydrazines

Makthala Ravi, Parul Chauhan, Ruchir Kant, Sanjeev K. Shukla, and Prem. P. Yadav

The Journal of Organic Chemistry **2015** *80* (10), 5369-5376

DOI: 10.1021/acs.joc.5b00739