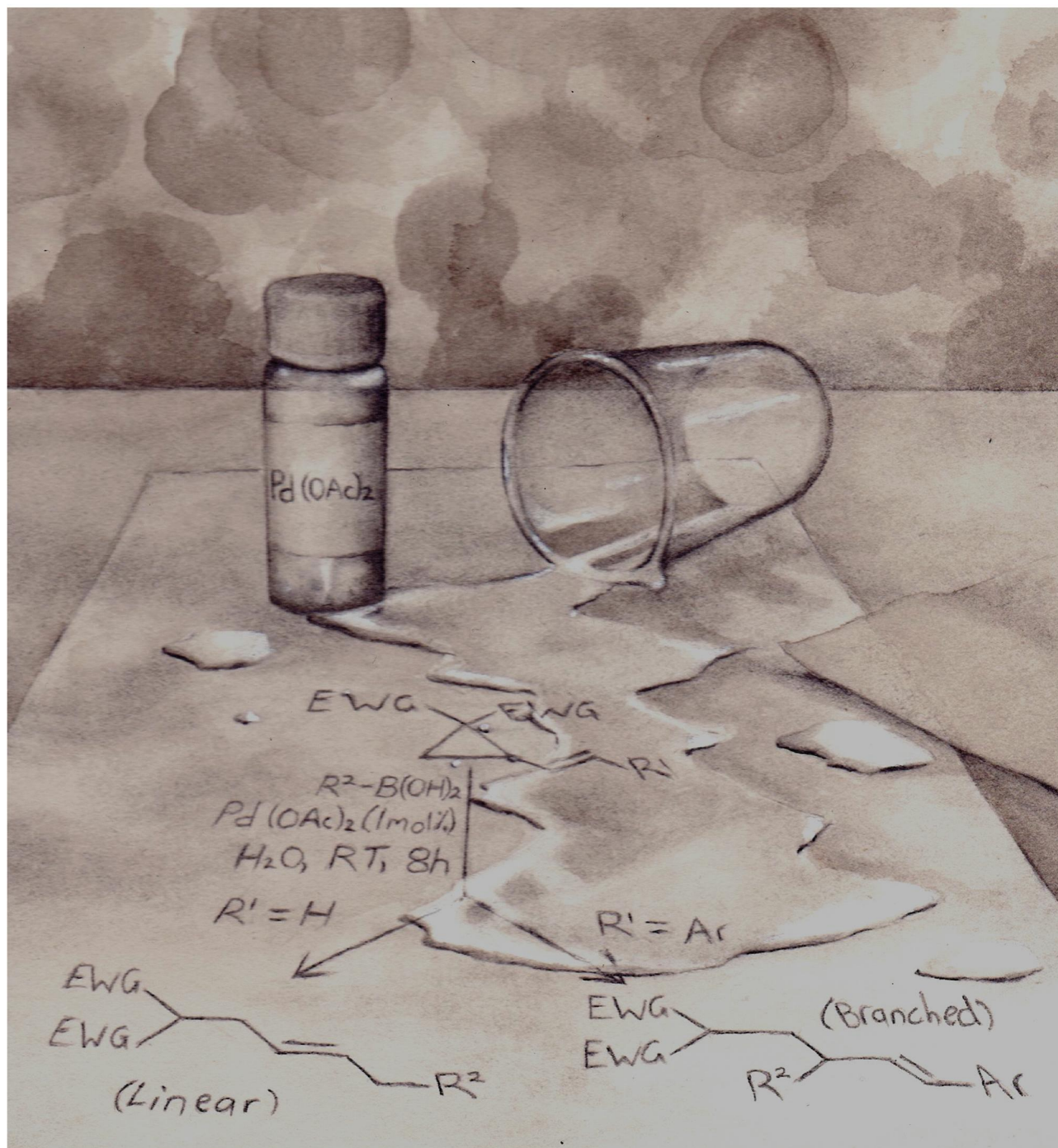


JOC

The Journal of Organic Chemistry

JULY 3, 2015 VOLUME 80, NUMBER 13 pubs.acs.org/joc



July 2, 2015: Vol. 80, Iss. 13

Content

- 1. Viability of a [2 + 2 + 1] Hetero-Pauson–Khand Cycloaddition Strategy toward Securinega Alkaloids: Synthesis of the BCD-Ring Core of Securinine and Related Alkaloids**
Egor Chirkin, Sylvie Michel, and François-Hugues Porée
The Journal of Organic Chemistry 2015 80 (13), 6525-6528
DOI: 10.1021/acs.joc.5b01118
- 2. Ring-Opening of Vinylcyclopropane-1,1-dicarboxylates by Boronic Acids under Ligandless Palladium Catalysis in Neat Water**
JieXiang Yin and Christopher J. T. Hyland
The Journal of Organic Chemistry 2015 80 (13), 6529-6536
DOI: 10.1021/acs.joc.5b00672
- 3. Palladium-Catalyzed Carbonylation of (Hetero)Aryl, Alkenyl and Allyl Halides by Means of N-Hydroxysuccinimidyl Formate as CO Surrogate**
Anaïs Barré, Mihaela-Liliana Țîntăș, Florent Alix, Vincent Gembus, Cyril Papamicaël, and Vincent Levacher
The Journal of Organic Chemistry 2015 80 (13), 6537-6544
DOI: 10.1021/acs.joc.5b01119
- 4. Stereocontrolled Synthesis of a Potential Transition-State Inhibitor of the Salicylate Synthase MbtI from Mycobacterium tuberculosis**
Zheng Liu, Feng Liu, and Courtney C. Aldrich
The Journal of Organic Chemistry 2015 80 (13), 6545-6552
DOI: 10.1021/acs.joc.5b00455
- 5. Mechanistic Insights into the Cu(I)- and Cu(II)-Catalyzed Cyclization of o-Alkynylbenzaldehydes: The Solvent DMF and Oxidation State of Copper Affect the Reaction Mechanism**
Binfang Yuan, Rongxing He, Wei Shen, Cheng Huang, and Ming Li
The Journal of Organic Chemistry 2015 80 (13), 6553-6563
DOI: 10.1021/acs.joc.5b00523
- 6. Metal Free Formation of Various 3-Iodo-1H-pyrrolo[3',2':4,5]imidazo-[1,2-a]pyridines and [1,2-b]Pyridazines and Their Further Functionalization**
Z. Tber, M.-A. Hiebel, A. El Hakmaoui, M. Akssira, G. Guillaumet, and S. Berteina-Raboin
The Journal of Organic Chemistry 2015 80 (13), 6564-6573
DOI: 10.1021/acs.joc.5b00555
- 7. Regioisomeric and Substituent Effects upon the Outcome of the Reaction of 1-Borodienes with Nitrosoarene Compounds**
Ludovic Eberlin, Bertrand Carboni, and Andrew Whiting
The Journal of Organic Chemistry 2015 80 (13), 6574-6583
DOI: 10.1021/acs.joc.5b00593
- 8. Base-Promoted β -C(sp³)-H Functionalization of Enaminones: An Approach to Polysubstituted Pyridines**
Jinhai Shen, Dingding Cai, Changsheng Kuai, Yunqi Liu, Ming'e Wei, Guolin Cheng, and Xiuling Cui
The Journal of Organic Chemistry 2015 80 (13), 6584-6589
DOI: 10.1021/acs.joc.5b00635
- 9. Synthesis of Dibenzofurans via C–H Activation of o-Iodo Diaryl Ethers**
Niranjan Panda, Irshad Mattan, and Dinesh Kumar Nayak

The Journal of Organic Chemistry 2015 80 (13), 6590-6597

DOI: 10.1021/acs.joc.5b00634

10. Heck–Suzuki Tandem Reaction for the Synthesis of 3-Benzazepines

Anatoly A. Peshkov, Vsevolod A. Peshkov, Olga P. Pereshivko, Kristof Van Hecke, Rakesh Kumar, and Erik V. Van der Eycken

The Journal of Organic Chemistry 2015 80 (13), 6598-6608

DOI: 10.1021/acs.joc.5b00670

11. Syntheses of Dihydroconduramines (±)-B-1, (±)-E-1, and (±)-F-1 via Diastereoselective Epoxidation of N-Protected 4-Aminocyclohex-2-en-1-ols

Méabh B. Brennan, Kristína Csatayová, Stephen G. Davies, Ai M. Fletcher, William D. Green, James A. Lee, Paul M. Roberts, Angela J. Russell, and James E. Thomson

The Journal of Organic Chemistry 2015 80 (13), 6609-6618

DOI: 10.1021/acs.joc.5b00716

12. Synthesis of 7-Deaza-cyclic Adenosine-5'-diphosphate-carbocyclic-ribose and Its 7-Bromo Derivative as Intracellular Ca²⁺-Mobilizing Agents

Satoshi Takano, Takayoshi Tsuzuki, Takashi Murayama, Takashi Sakurai, Hayato Fukuda, Mitsuhiro Arisawa, and Satoshi Shuto

The Journal of Organic Chemistry 2015 80 (13), 6619-6627

DOI: 10.1021/acs.joc.5b00723

13. Cyclic α -Alkoxyphosphonium Salts from (2-(Diphenylphosphino)phenyl)methanol and Aldehydes and Their Application in Synthesis of Vinyl Ethers and Ketones via Wittig Olefination

Wenhua Huang, Hong-Ying Rong, and Jie Xu

The Journal of Organic Chemistry 2015 80 (13), 6628-6638

DOI: 10.1021/acs.joc.5b01031

14. Manganese-Catalyzed Aerobic Oxytrifluoromethylation of Styrene Derivatives Using CF₃SO₂Na as the Trifluoromethyl Source

Yi Yang, Yingle Liu, Yan Jiang, Yu Zhang, and David A. Vicic

The Journal of Organic Chemistry 2015 80 (13), 6639-6648

DOI: 10.1021/acs.joc.5b00781

15. Ohmic Heating-Assisted Synthesis of 3-Arylquinolin-4(1H)-ones by a Reusable and Ligand-Free Suzuki–Miyaura Reaction in Water

Joana Pinto, Vera L. M. Silva, Ana M. G. Silva, Luís M. N. B. F. Santos, and Artur M. S. Silva

The Journal of Organic Chemistry 2015 80 (13), 6649-6659

DOI: 10.1021/acs.joc.5b00793

16. Regio- and Diastereoselective Synthesis of Highly Substituted, Oxygenated Piperidines from Tetrahydropyridines

Shuming Chen, Brandon Q. Mercado, Robert G. Bergman, and Jonathan A. Ellman

The Journal of Organic Chemistry 2015 80 (13), 6660-6668

DOI: 10.1021/acs.joc.5b00816

17. Biomimetic Approach toward the Total Synthesis of rac-2-(Acylmethylene)pyrrolidine Alkaloids

Yu-Chiao Shih, Pei-Hua Tsai, Chia-Chun Hsu, Chih-Wei Chang, Yuandong Jhong, Yun-Chung Chen, and Tun-Cheng Chien

The Journal of Organic Chemistry 2015 80 (13), 6669-6678

DOI: 10.1021/acs.joc.5b00836

18. Cyclooctatetraenophanes: A Computational Study

Steven M. Bachrach and Meghan W. Tang

The Journal of Organic Chemistry 2015 80 (13), 6679-6686

DOI: 10.1021/acs.joc.5b00842

19. Chiral Lewis Acid-Catalyzed Enantioselective Cycloadditions between Indoles and Cyclic Carbonyl Ylides Derived from Diazodiketone or Diazoketoester Derivatives

Hiroyuki Suga, Yurie Sekikawa, Shunta Misawa, Daito Kinugawa, Rinnosuke Oda, Kennosuke Itoh, Yasunori Toda, and Ryotaro Kiyono

The Journal of Organic Chemistry **2015** *80* (13), 6687-6696

DOI: 10.1021/acs.joc.5b00835

20. Macrocyclization of Peptide Side Chains by the Ugi Reaction: Achieving Peptide Folding and Exocyclic N-Functionalization in One Shot

Aldrin V. Vasco, Carlos S. Pérez, Fidel E. Morales, Hilda E. Garay, Dimitar Vasilev, José A. Gavín, Ludger A. Wessjohann, and Daniel G. Rivera

The Journal of Organic Chemistry **2015** *80* (13), 6697-6707

DOI: 10.1021/acs.joc.5b00858

21. The Total Synthesis of Retrojusticidin B, Justicidin E, and Helioxanthin

Tzu-Ting Kao, Chun-Cheng Lin, and Kak-Shan Shia

The Journal of Organic Chemistry **2015** *80* (13), 6708-6714

DOI: 10.1021/acs.joc.5b00866

22. Palladium-Catalyzed One-Pot Reaction of Hydrazones, Dihaloarenes, and Organoboron Reagents: Synthesis and Cytotoxic Activity of 1,1-Diarylethylene Derivatives

Maxime Roche, Salim Mmadi, Salim, Jérôme Bignon, Hélène Levaique, Jean-Daniel Brion, Mouad Alami, and Abdallah Hamze

The Journal of Organic Chemistry **2015** *80* (13), 6715-6727

DOI: 10.1021/acs.joc.5b00880

23. Synthesis of B,O,N-Doped Adamantanes and Diamantanes by Condensation of Oximes with Boronic Acids

Ivan S. Golovanov, Alexey Yu. Sukhorukov, Yulia V. Nelyubina, Yulia A. Khomutova, Sema L. Ioffe, and Vladimir A. Tartakovsky

The Journal of Organic Chemistry **2015** *80* (13), 6728-6736

DOI: 10.1021/acs.joc.5b00892

24. Step-by-Step Synthesis of Multimodule Assemblies Engineered from BODIPY, DPP, and Triphenylamine Moieties

Elodie Heyer and Raymond Ziessel

The Journal of Organic Chemistry **2015** *80* (13), 6737-6753

DOI: 10.1021/acs.joc.5b00917

25. Synthesis, Characterization, and Nanoencapsulation of Tetrathiatriarylmethyl and Tetrachlorotriarylmethyl (Trityl) Radical Derivatives—A Study To Advance Their Applicability as in Vivo EPR Oxygen Sensors

Juliane Frank, Marwa Elewa, Mohamed M. Said, Hosam A. El Shihawy, Mohamed El-Sadek, Diana Müller, Annette Meister, Gerd Hause, Simon Drescher, Hendrik Metz, Peter Imming, and Karsten Mäder

The Journal of Organic Chemistry **2015** *80* (13), 6754-6766

DOI: 10.1021/acs.joc.5b00918

26. Superextended Tetrathiafulvalene: Synthesis, Optoelectronic Properties, Fullerenes Complexation, and Photooxidation Study

Jean-Benoît Giguère and Jean-François Morin

The Journal of Organic Chemistry **2015** *80* (13), 6767-6775

DOI: 10.1021/acs.joc.5b00930

27. Iron(III)-Mediated Radical Nitration of Bisarylsulfonyl Hydrazones: Synthesis of Bisarylnitromethyl Sulfones

Dinabandhu Sar, Raghunath Bag, Debajyoti Bhattacharjee, Ramesh Chandra Deka, and Tharmalingam Punniyamurthy

The Journal of Organic Chemistry 2015 80 (13), 6776-6783

DOI: 10.1021/acs.joc.5b00820

28. Asymmetric Reduction of Electron-Rich Ketones with Tethered Ru(II)/TsDPEN Catalysts Using Formic Acid/Triethylamine or Aqueous Sodium Formate

Rina Soni, Thomas H. Hall, Benjamin P. Mitchell, Matthew R. Owen, and Martin Wills

The Journal of Organic Chemistry 2015 80 (13), 6784-6793

DOI: 10.1021/acs.joc.5b00990

29. Generating Active “L-Pd(0)” via Neutral or Cationic π -Allylpalladium Complexes Featuring Biaryl/Bipyrazolylphosphines: Synthetic, Mechanistic, and Structure–Activity Studies in Challenging Cross-Coupling Reactions

A. J. DeAngelis, Peter G. Gildner, Ruishan Chow, and Thomas J. Colacot

The Journal of Organic Chemistry 2015 80 (13), 6794-6813

DOI: 10.1021/acs.joc.5b01005

30. Acyloxylation of 1,4-Dioxanes and 1,4-Dithianes Catalyzed by a Copper–Iron Mixed Oxide

Ana Leticia García-Cabeza, Rubén Marín-Barrios, F. Javier Moreno-Dorado, María J. Ortega, Hilario Vidal, José M. Gatica, Guillermo M. Massanet, and Francisco M. Guerra

The Journal of Organic Chemistry 2015 80 (13), 6814-6821

DOI: 10.1021/acs.joc.5b01043

31. Regioselective Pd-Catalyzed Synthesis of 2,3,6-Trisubstituted Pyridines from Isoxazolinones

Stefan Rieckhoff, Tina Hellmuth, and René Peters

The Journal of Organic Chemistry 2015 80 (13), 6822-6830

DOI: 10.1021/acs.joc.5b01065

32. Gas Phase Studies of N-Heterocyclic Carbene-Catalyzed Condensation Reactions

Yuan Tian and Jeehiun K. Lee

The Journal of Organic Chemistry 2015 80 (13), 6831-6838

DOI: 10.1021/acs.joc.5b01069

33. A Synthesis of Dihydrofuran-3(2H)-ones

Rama Rao Tata and Michael Harmata

The Journal of Organic Chemistry 2015 80 (13), 6839-6845

DOI: 10.1021/acs.joc.5b01076

34. Synthesis of Indolizines through Oxidative Linkage of C–C and C–N Bonds from 2-Pyridylacetates

Darapaneni Chandra Mohan, Chitrakar Ravi, Venkatanarayana Pappula, and Subbarayappa Adimurthy

The Journal of Organic Chemistry 2015 80 (13), 6846-6855

DOI: 10.1021/acs.joc.5b00477

35. Selectfluor-Mediated Simultaneous Cleavage of C–O and C–C Bonds in α,β -Epoxy Ketones Under Transition-Metal-Free Conditions: A Route to 1,2-Diketones

Heng Wang, Shaobo Ren, Jian Zhang, Wei Zhang, and Yunkui Liu

The Journal of Organic Chemistry 2015 80 (13), 6856-6863

DOI: 10.1021/acs.joc.5b00857

36. Enantioselective Synthesis of α -Quaternary Amino Acids by Alkylation of Deprotonated α -Aminonitriles

Isabelle Netz, Murat Kucukdisli, and Till Opatz

The Journal of Organic Chemistry 2015 80 (13), 6864-6869

DOI: 10.1021/acs.joc.5b00868

- 37. Diastereoselective Synthesis of Biheterocyclic Tetrahydrothiophene Derivatives via Base-Catalyzed Cascade Michael-Aldol [3 + 2] Annulation of 1,4-Dithiane-2,5-diol with Maleimides**
Yuan Zhong, Shixiong Ma, Bai Li, Xianxing Jiang, and Rui Wang
The Journal of Organic Chemistry **2015** *80* (13), 6870-6874
DOI: 10.1021/acs.joc.5b00897
- 38. Iron-Catalyzed Intramolecular C(sp²)-N Cyclization of 1-(N-Arylpyrrol-2-yl)ethanone O-Acetyl Oximes toward Pyrrolo[1,2-a]quinoxaline Derivatives**
Zhiguo Zhang, Junlong Li, Guisheng Zhang, Nana Ma, Qingfeng Liu, and Tongxin Liu
The Journal of Organic Chemistry **2015** *80* (13), 6875-6884
DOI: 10.1021/acs.joc.5b00915
- 39. Carbon-Carbon Bond Cleavage Reaction: Synthesis of Multisubstituted Pyrazolo[1,5-a]pyrimidines**
Pallabi Saikia, Sanjib Gogoi, and Romesh C Boruah
The Journal of Organic Chemistry **2015** *80* (13), 6885-6889
DOI: 10.1021/acs.joc.5b00933
- 40. Development and Application of O-(Trimethylsilyl)aryl Fluorosulfates for the Synthesis of Arynes**
Qiao Chen, Hongmei Yu, Zhaoqing Xu, Li Lin, Xianxing Jiang, and Rui Wang
The Journal of Organic Chemistry **2015** *80* (13), 6890-6896
DOI: 10.1021/acs.joc.5b00923
- 41. Study of the Reactivity of [Hydroxy(tosyloxy)iodo]benzene Toward Enol Esters to Access α -Tosyloxy Ketones**
Benoit Basdevant and Claude Y. Legault
The Journal of Organic Chemistry **2015** *80* (13), 6897-6902
DOI: 10.1021/acs.joc.5b00948
- 42. α -Hydroxy and α -Oxo Selenoamides: Synthesis via Nucleophilic Selenocarbamoylation of Carbonyl Compounds and Characterization**
Toshiaki Murai, Tomohiko Mizutani, Masahiro Ebihara, and Toshifumi Maruyama
The Journal of Organic Chemistry **2015** *80* (13), 6903-6907
DOI: 10.1021/acs.joc.5b00969
- 43. Palladium-Catalyzed Domino Addition and Cyclization of Arylboronic Acids with 3-Hydroxyprop-1-yn-1-yl Phosphonates Leading to 1,2-Oxaphosphenes**
Ye Lv, Gaobo Hu, Dumei Ma, Liu Liu, Yuxing Gao, and Yufen Zhao
The Journal of Organic Chemistry **2015** *80* (13), 6908-6914
DOI: 10.1021/acs.joc.5b00999
- 44. Iodine Catalyzed Oxidative Synthesis of Quinazolin-4(3H)-ones and Pyrazolo[4,3-d]pyrimidin-7(6H)-ones via Amination of sp³ C-H Bond**
Shabber Mohammed, Ram A. Vishwakarma, and Sandip B. Bharate
The Journal of Organic Chemistry **2015** *80* (13), 6915-6921
DOI: 10.1021/acs.joc.5b00989
- 45. Ligand Control of E/Z Selectivity in Nickel-Catalyzed Transfer Hydrogenative Alkyne Semireduction**
Edward Richmond and Joseph Moran
The Journal of Organic Chemistry **2015** *80* (13), 6922-6929
DOI: 10.1021/acs.joc.5b01047
- 46. Synthesis of N-Vinyl Nitrones via 1,4-Conjugate Elimination**
Ryan E. Michael, Katelyn M. Chando, and Tarek Sammakia
The Journal of Organic Chemistry **2015** *80* (13), 6930-6935
DOI: 10.1021/acs.joc.5b01138

**47. Aza-[2,3]-Wittig Sigmatropic Rearrangement of Allylic Tertiary Amines:
A Successful Example with High Chirality Transfer**

B. Drouillat, K. Wright, P. Quinodoz, J. Marrot, and F. Couty

The Journal of Organic Chemistry 2015 80 (13), 6936-6940

DOI: 10.1021/acs.joc.5b01230

**48. Correction to “Palladium-Catalyzed Alkoxy carbonylation of
Conjugated Enyne Oxiranes: A Diastereoselective Method for the
Synthesis of 7-Hydroxy-2,3,5-trienoates”**

Melih Kuş, Levent Artok, and Muhittin Aygün

The Journal of Organic Chemistry 2015 80 (13), 6941-6941

DOI: 10.1021/acs.joc.5b01297