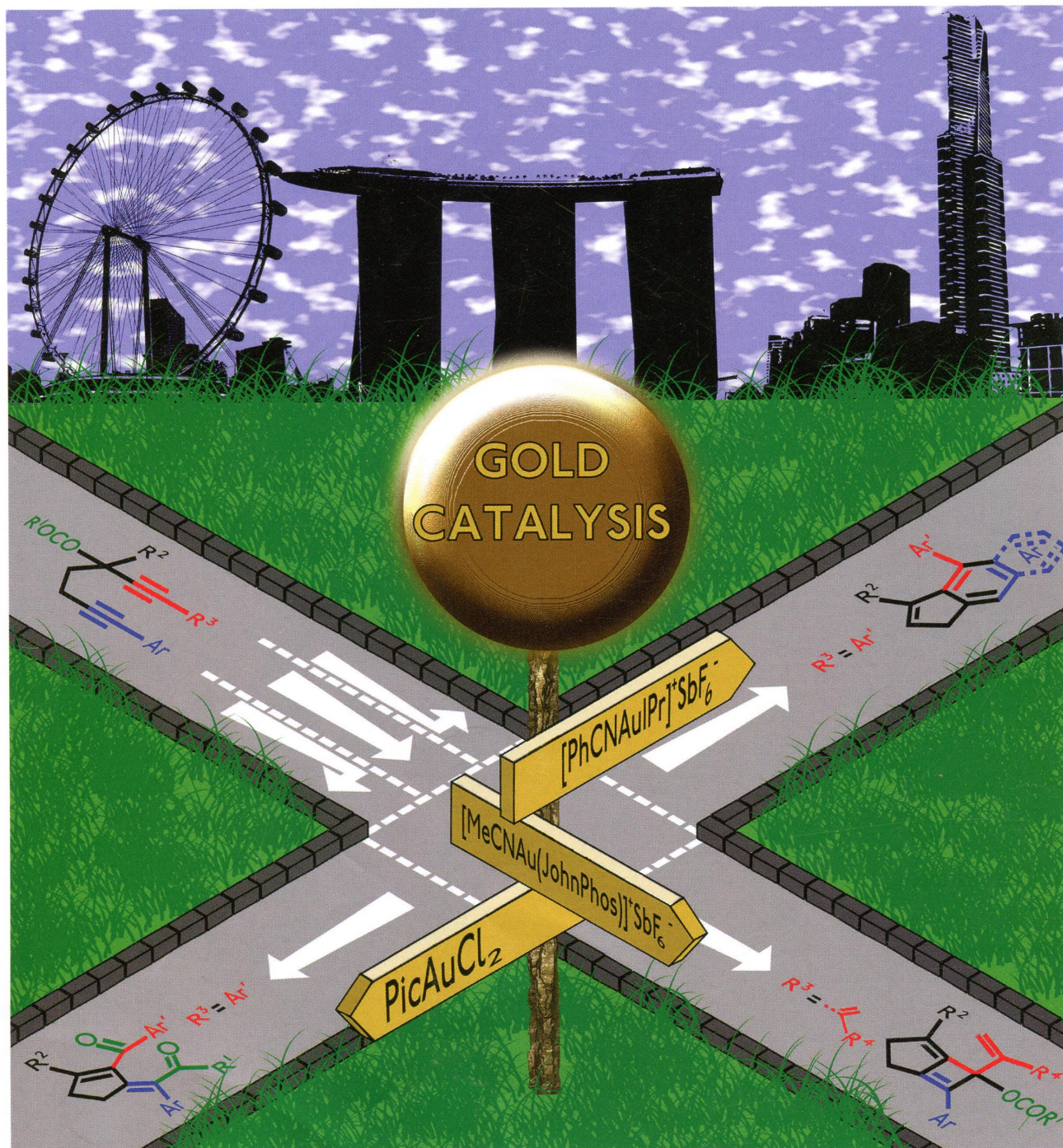


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ON THE COVER: Control of steric and electronic properties of both the gold catalyst and 1,6-diyne ester substrate dictating chemoselectivity in a divergent reaction pathway. See Chan and co-workers, p 11301.

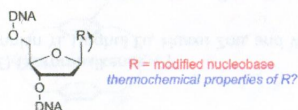
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11295

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Computational Studies of the Gas-Phase Thermochemical Properties of Modified Nucleobases

Mu Chen and Jeehiun K. Lee*



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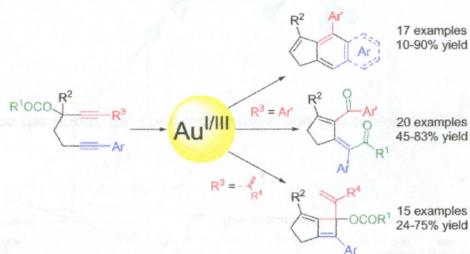
11301



DOI: 10.1021/jo5020195

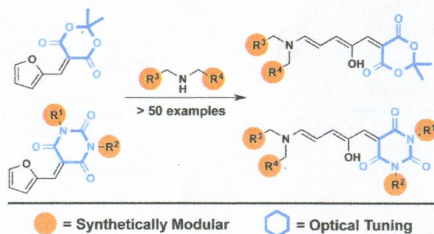
Gold-Catalyzed Cycloisomerization of 1,6-Diyne Esters to 1*H*-Cyclopenta[*b*]naphthalenes, *cis*-Cyclopenten-2-yl δ -Diketones, and Bicyclo[3.2.0]hepta-1,5-dienes

Dan Li, Weidong Rao, Guan Liang Tay, Benjamin James Ayers, and Philip Wai Hong Chan*



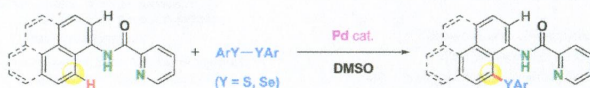
Design and Synthesis of Donor–Acceptor Stenhouse Adducts: A Visible Light Photoswitch Derived from Furfural

Sameh Helmy, Saemi Oh, Frank A. Leibfarth, Craig J. Hawker, and Javier Read de Alaniz*



Palladium-Catalyzed *peri*-Selective Chalcogenation of Naphthylamines with Diaryl Disulfides and Diselenides via C–H Bond Cleavage

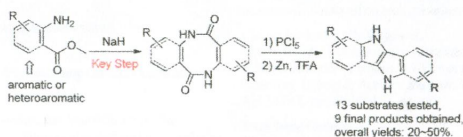
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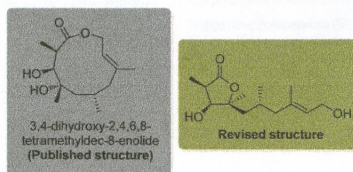
Reductive Ring Closure Methodology toward Heteroacenes Bearing a Dihydropyrrolo[3,2-*b*]pyrrole Core: Scope and Limitation

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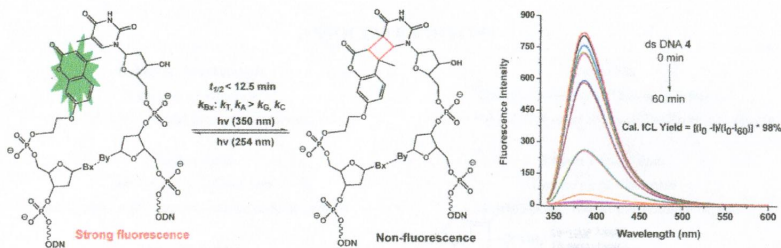
The Asymmetric Total Synthesis of Cinbotolide: A Revision of the Original Structure

José Manuel Botubol, María Jesús Durán-Peña, Antonio J. Macías-Sánchez, James R. Hanson, Isidro G. Collado, and Rosario Hernández-Galán*



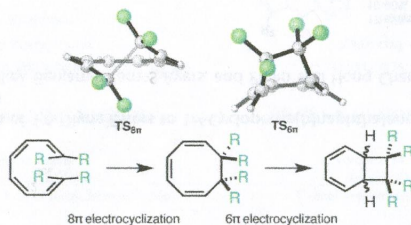
Quantitative DNA Interstrand Cross-Link Formation by Coumarin and Thymine: Structure Determination, Sequence Effect, and Fluorescence Detection

Huabing Sun, Heli Fan, and Xiaohua Peng*



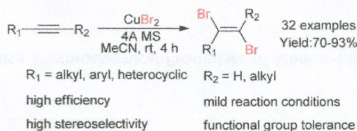
Terminal Substituent Effects on the Reactivity, Thermodynamics, and Stereoselectivity of the 8π - 6π Electrocyclization Cascades of 1,3,5,7-Tetraenes

Ashay Patel and K. N. Houk*



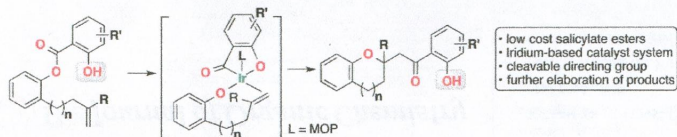
Method for Transforming Alkynes into (*E*)-Dibromoalkenes

Jiannan Xiang, Rui Yuan, Ruijia Wang, Niannian Yi, Linghui Lu, Huaxu Zou, and Weimin He*



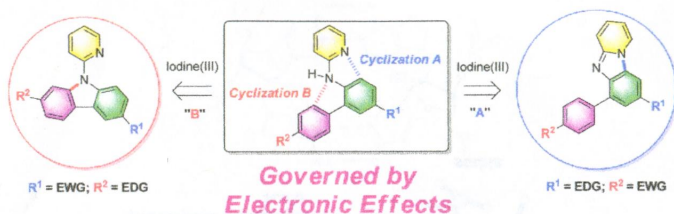
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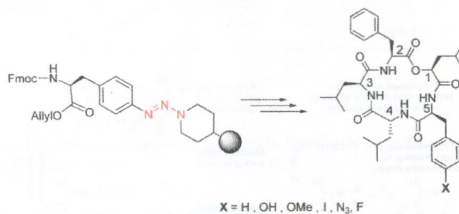
Substituent Electronic Effects Govern Direct Intramolecular C–N Cyclization of *N*-(Biphenyl)pyridin-2-amines Induced by Hypervalent Iodine(III) Reagents

Jean-Ho Chu,* Wen-Ting Hsu, Yi-Hua Wu, Meng-Fan Chiang, Nan-Hai Hsu, Hao-Ping Huang, and Ming-Jung Wu*



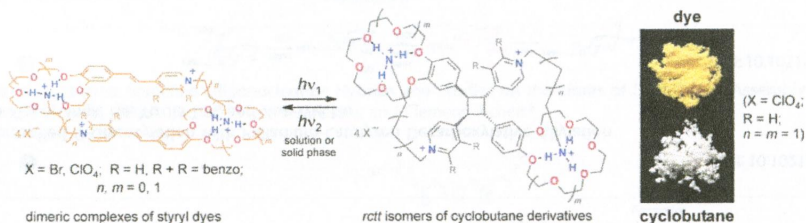
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Carolina Torres-García, Daniel Pulido, Fernando Albericio, Miriam Royo,* and Ernesto Nicolás*



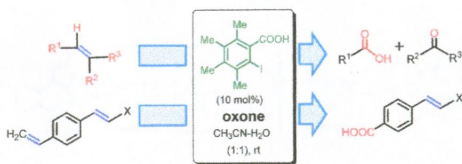
Synthesis, Structure, and Properties of Supramolecular Photoswitches Based on Ammonioalkyl Derivatives of Crown Ether Styryl Dyes

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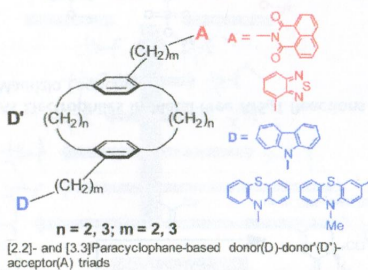
Oxidative Cleavage of Olefins by In Situ-Generated Catalytic 3,4,5,6-Tetramethyl-2-iodoxybenzoic Acid/Oxone

Jarugu Narasimha Moorthy* and Keshaba Nanda Parida



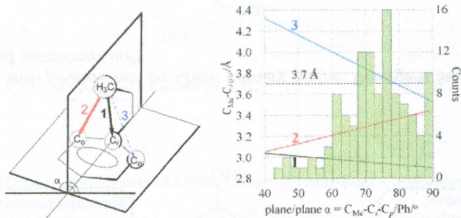
Synthesis and Electronic and Photophysical Properties of [2.2]- and [3.3]Paracyclophane-Based Donor–Donor'–Acceptor Triads

Takaaki Miyazaki, Masahiko Shibahara, Jun-ichi Fujishige, Motonori Watanabe, Kenta Goto, and Teruo Shimmyozu*



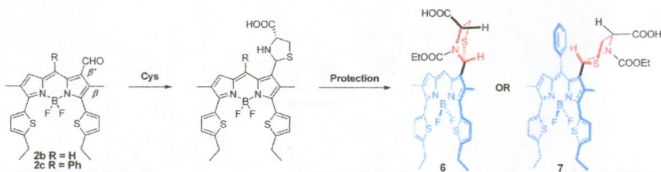
Methyl/Phenyl Attraction by CH/ π Interaction in 1,2-Substitution Patterns

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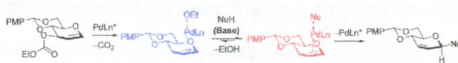
Thiazolidine Derivatives from Fluorescent Dithienyl-BODIPY-carboxaldehydes and Cysteine

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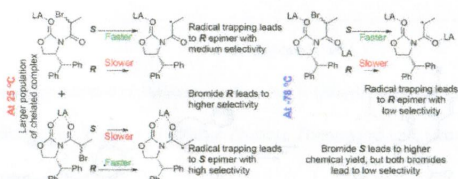
Stereocontrolled *O*-Glycosylation with Palladium-Catalyzed Decarboxylative Allylation

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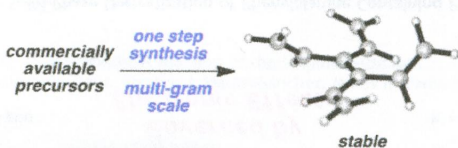
A Computational Study on Lewis Acid-Catalyzed Diastereoselective Acyclic Radical Allylation Reactions with Unusual Selectivity Dependence on Temperature and Epimer Precursor

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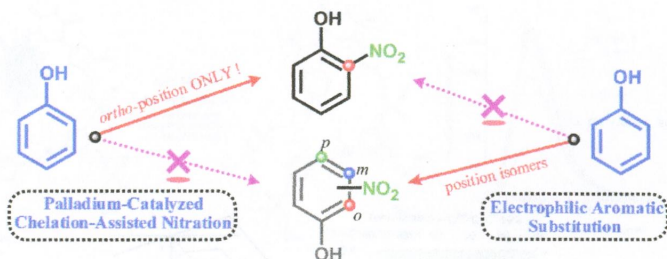
Computational and Synthetic Studies with Tetravinylethylenes

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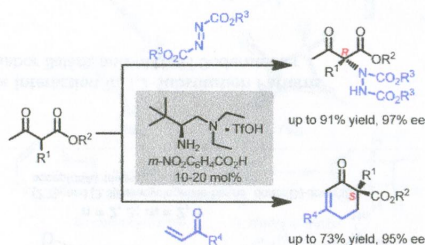
Palladium-Catalyzed Aromatic C–H Bond Nitration Using Removable Directing Groups: Regiospecific Synthesis of Substituted *o*-Nitrophenols from Related Phenols

Wei Zhang, Jian Zhang, Shaobo Ren, and Yunkui Liu*



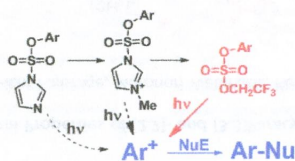
Asymmetric Enamine Catalysis with β -Ketoesters by Chiral Primary Amine: Divergent Stereocontrol Modes

Changming Xu, Long Zhang, and Sanzhong Luo*



Aryl Imidazolates and Aryl Sulfates As Electrophiles in Metal-Free ArS_N1 Reactions

Hisham Qrarefa, Stefano Protti, and Maurizio Fagnoni*

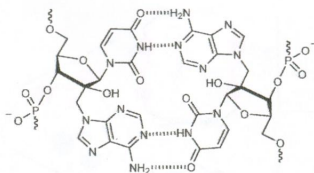


11534 **S**

DOI: 10.1021/jo502189h

Double-Headed Nucleotides with Arabino Configuration: Synthesis and Hybridization Properties

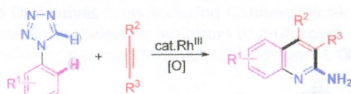
Pawan Kumar, Pawan K. Sharma, and Poul Nielsen*

11541 **S**

DOI: 10.1021/jo502192b

One-Pot Synthesis of Multisubstituted 2-Aminoquinolines from Annulation of 1-Aryl Tetrazoles with Internal Alkynes via Double C–H Activation and Denitrogenation

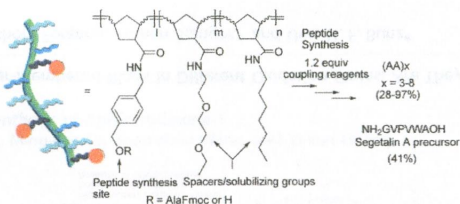
Lei Zhang, Liyao Zheng, Biao Guo, and Ruimao Hua*

11549 **S**

DOI: 10.1021/jo502197n

Soluble Non-Cross-Linked Poly(norbornene) Supports for Peptide Synthesis with Minimal Reagents

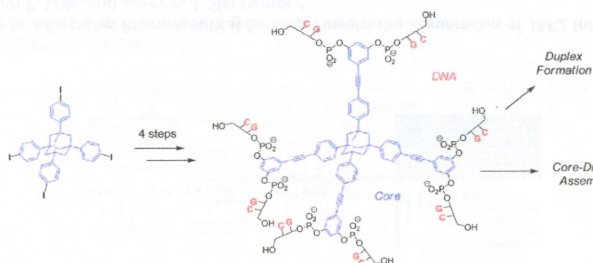
Nimmashetti Naganna and Nandita Madhavan*

11558 **S**

DOI: 10.1021/jo5022053

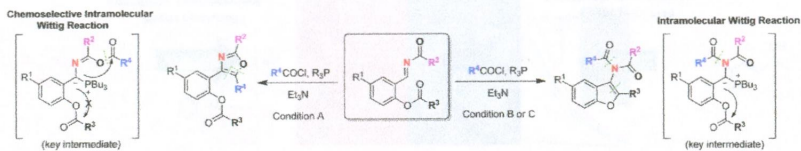
Synthesis of Eight-Arm, Branched Oligonucleotide Hybrids and Studies on the Limits of DNA-Driven Assembly

Alexander Schwenger, Claudia Gerlach, Helmut Griesser, and Clemens Richert*

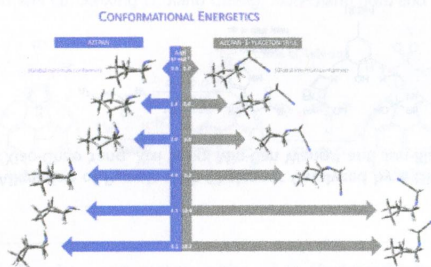


Chemoselective Intramolecular Wittig Reactions for the Synthesis of Oxazoles and Benzofurans

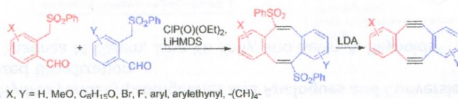
Yu-Shiou Fan, Utpal Das, Ming-Yu Hsiao, Meng-Hsien Liu, and Wenwei Lin*

**Thermochemical Insights on the Conformational Energetics of Azepan and Azepan-1-ylacetonitrile**

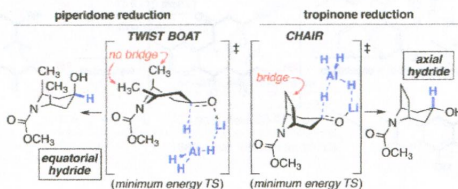
Vera L. S. Freitas, Sara Leirosa, Rafael Notario, and Maria D. M. C. Ribeiro da Silva*

**Substituted 5,6,11,12-Tetrahydrodibenzo[*a,e*]cyclooctenes: Syntheses, Properties, and DFT Studies of Substituted Sondheimer–Wong Dienes**

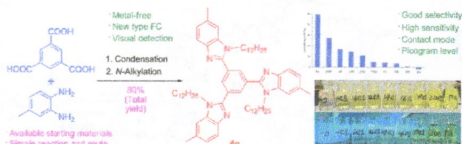
Feng Xu, Lifan Peng, Kenta Shinohara, Takamoto Morita, Suguru Yoshida, Takamitsu Hosoya, Akihiro Orita,* and Junzo Otera

**A Twist on Facial Selectivity of Hydride Reductions of Cyclic Ketones: Twist-Boat Conformers in Cyclohexanone, Piperidone, and Tropinone Reactions**

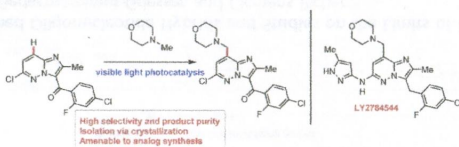
Sharon R. Neufeldt, Gonzalo Jiménez-Osés,* Daniel L. Comins,* and K. N. Houk*



Benzimidazole Derivatives: Selective Fluorescent Chemosensors for the Picogram Detection of Picric Acid
 Jin-Feng Xiong, Jian-Xiao Li, Guang-Zhen Mo, Jing-Pei Huo, Jin-Yan Liu, Xiao-Yun Chen,* and Zhao-Yang Wang*

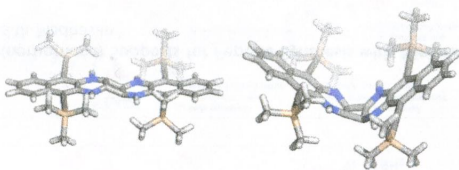


Photoredox Catalysis in a Complex Pharmaceutical Setting: Toward the Preparation of JAK2 Inhibitor LY2784544
 James J. Douglas, Kevin P. Cole, and Corey R. J. Stephenson*

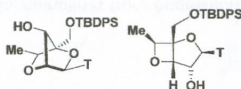


Tetraazaacenes Containing Four-Membered Rings in Different Oxidation States. Are They Aromatic? A Computational Study

Manuel Schaffroth, Renana Gershoni-Poranne, Amnon Stanger,* and Uwe H. F. Bunz*



Alternative Syntheses of (S)-cEt-BNA: A Key Constrained Nucleoside Component of Bioactive Antisense Gapmer Sequences
 Juan C. Salinas, Michael T. Migawa, Bradley L. Merner, and Stephen Hanessian*

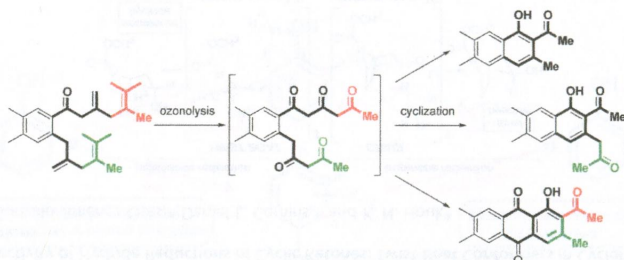


11661 **S**

DOI: 10.1021/jo502308d

Synthesis of Tri-, Tetra-, and Pentacarbonyl Derivatives via Ozonolysis of 1,4-Dienes and Cyclization to Polyaromatic Systems

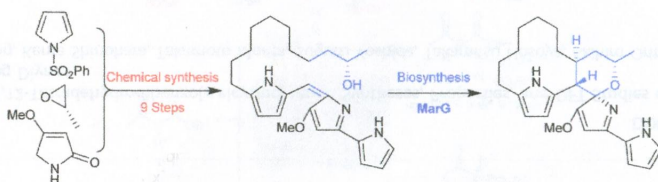
Laura Kersten, Klaus Harms, and Gerhard Hilt*

11674 **S**

DOI: 10.1021/jo5023553

Stereospecific Synthesis of 23-Hydroxyundecylprodiginines and Analogues and Conversion to Antimalarial Premarineosins via a Rieske Oxygenase Catalyzed Bicyclization

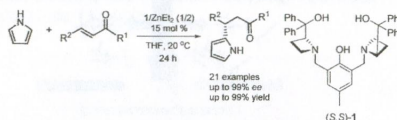
Papireddy Kancharla, Wanli Lu, Shaimaa M. Salem, Jane Xu Kelly, and Kevin A. Reynolds*

11690 **S**

DOI: 10.1021/jo5023712

Enantioselective Friedel-Crafts Alkylation of Pyrrole with Chalcones Catalyzed by a Dinuclear Zinc Catalyst

Yuan-Zhao Hua, Xing-Wang Han, Xiao-Chao Yang, Xixi Song, Min-Can Wang,* and Jun-Biao Chang*

11700 **S**

DOI: 10.1021/jo502026a

Synthesis of β - and γ -Hydroxy α -Amino Acids via Enzymatic Kinetic Resolution and Cyanate-to-Isocyanate Rearrangement

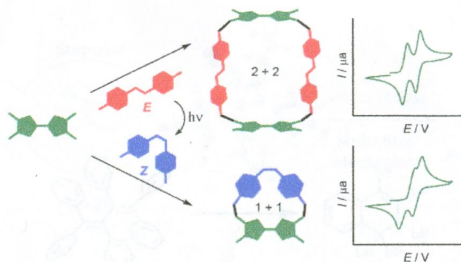
Piotr Szcześniak, Agnieszka Październiak-Holewa, Urszula Klimczak, and Sebastian Stecko*



11714 **S**

DOI: 10.1021/jo502469z

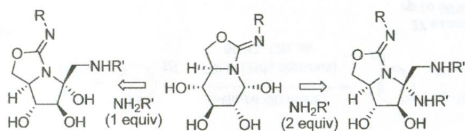
Light-Controlled Macrocyclization of Tetrathiafulvalene with Azobenzene: Designing an Optoelectronic Molecular Switch
 Vladimir A. Azov,* Jens Cordes, Dirk Schlüter, Thomas Dülcks, Marcus Böckmann,* and Nikos L. Doltsinis

11722 **S**

DOI: 10.1021/jo5025283

Synthesis of Multibranching Australine Derivatives from Reducing Castanospermine Analogues through the Amadori Rearrangement of *gem*-Diamine Intermediates: Selective Inhibitors of β -Glucosidase
 Elena M. Sánchez-Fernández, Eleuterio Álvarez, Carmen Ortiz Mellet,* and José M. García Fernández*

Castanospermine analogues: C1=CC=C(C=C1)C2=CC=C(C=C2)C3=CC=C(C=C3)C4=CC=C(C=C4)C5=CC=C(C=C5)C6=CC=C(C=C6)C7=CC=C(C=C7)C8=CC=C(C=C8)C9=CC=C(C=C9)C10=CC=C(C=C10)C11=CC=C(C=C11)C12=CC=C(C=C12)C13=CC=C(C=C13)C14=CC=C(C=C14)C15=CC=C(C=C15)C16=CC=C(C=C16)C17=CC=C(C=C17)C18=CC=C(C=C18)C19=CC=C(C=C19)C20=CC=C(C=C20)C21=CC=C(C=C21)C22=CC=C(C=C22)C23=CC=C(C=C23)C24=CC=C(C=C24)C25=CC=C(C=C25)C26=CC=C(C=C26)C27=CC=C(C=C27)C28=CC=C(C=C28)C29=CC=C(C=C29)C30=CC=C(C=C30)C31=CC=C(C=C31)C32=CC=C(C=C32)C33=CC=C(C=C33)C34=CC=C(C=C34)C35=CC=C(C=C35)C36=CC=C(C=C36)C37=CC=C(C=C37)C38=CC=C(C=C38)C39=CC=C(C=C39)C40=CC=C(C=C40)C41=CC=C(C=C41)C42=CC=C(C=C42)C43=CC=C(C=C43)C44=CC=C(C=C44)C45=CC=C(C=C45)C46=CC=C(C=C46)C47=CC=C(C=C47)C48=CC=C(C=C48)C49=CC=C(C=C49)C50=CC=C(C=C50)C51=CC=C(C=C51)C52=CC=C(C=C52)C53=CC=C(C=C53)C54=CC=C(C=C54)C55=CC=C(C=C55)C56=CC=C(C=C56)C57=CC=C(C=C57)C58=CC=C(C=C58)C59=CC=C(C=C59)C60=CC=C(C=C60)C61=CC=C(C=C61)C62=CC=C(C=C62)C63=CC=C(C=C63)C64=CC=C(C=C64)C65=CC=C(C=C65)C66=CC=C(C=C66)C67=CC=C(C=C67)C68=CC=C(C=C68)C69=CC=C(C=C69)C70=CC=C(C=C70)C71=CC=C(C=C71)C72=CC=C(C=C72)C73=CC=C(C=C73)C74=CC=C(C=C74)C75=CC=C(C=C75)C76=CC=C(C=C76)C77=CC=C(C=C77)C78=CC=C(C=C78)C79=CC=C(C=C79)C80=CC=C(C=C80)C81=CC=C(C=C81)C82=CC=C(C=C82)C83=CC=C(C=C83)C84=CC=C(C=C84)C85=CC=C(C=C85)C86=CC=C(C=C86)C87=CC=C(C=C87)C88=CC=C(C=C88)C89=CC=C(C=C89)C90=CC=C(C=C90)C91=CC=C(C=C91)C92=CC=C(C=C92)C93=CC=C(C=C93)C94=CC=C(C=C94)C95=CC=C(C=C95)C96=CC=C(C=C96)C97=CC=C(C=C97)C98=CC=C(C=C98)C99=CC=C(C=C99)C100=CC=C(C=C100)



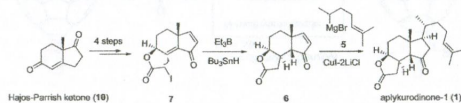
Notes

11729 **S**

DOI: 10.1021/jo501684k

Protecting-Group-Free Total Synthesis of Aplykurodinone-1

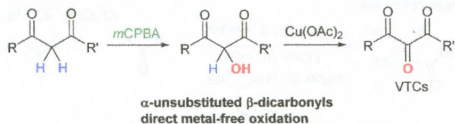
Yu Tang,* Ji-tian Liu, Ping Chen, Ming-can Lv, Zhen-zhen Wang, and Yi-kun Huang

11735 **S**

DOI: 10.1021/jo501985u

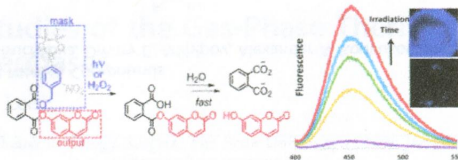
Metal-Free α -Hydroxylation of α -Unsubstituted β -Oxoesters and β -Oxoamides

Haruyasu Asahara and Nagatoshi Nishiwaki*

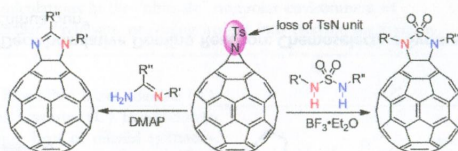


Self-Immolative Phthalate Esters Sensitive to Hydrogen Peroxide and Light

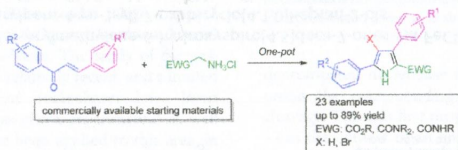
Kaitlyn M. Mahoney, Pratik P. Goswami, Aleem Syed, Patrick Kolker, Brian Shannan, Emily A. Smith, and Arthur H. Winter*

**BF₃·Et₂O- or DMAP-Catalyzed Double Nucleophilic Substitution Reaction of Aziridinofullerenes with Sulfamides or Amidines**

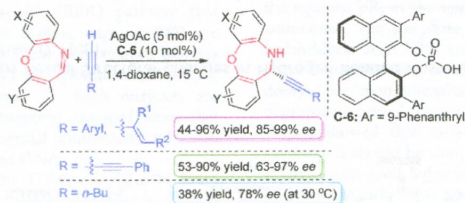
Hai-Tao Yang,* Meng-Lei Xing, Xin-Wei Lu, Jia-Xing Li, Jiang Cheng, Xiao-Qiang Sun, and Chun-Bao Miao

**One-Pot Synthesis of Pyrrole-2-carboxylates and -carboxamides via an Electrocyclization/Oxidation Sequence**

Dennis Imbri, Natalie Netz, Murat Kucukdjisi, Lisa Marie Kammer, Philipp Jung, Annika Kretzschmann, and Till Opatz*

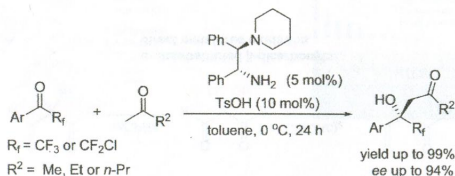
**Asymmetric Alkynylation of Seven-Membered Cyclic Imines by Combining Chiral Phosphoric Acids and Ag(I) Catalysts: Synthesis of 11-Substituted-10,11-dihydrodibenzo[*b,f*][1,4]oxazepine Derivatives**

Yuan-Yuan Ren, You-Qing Wang,* and Shuang Liu



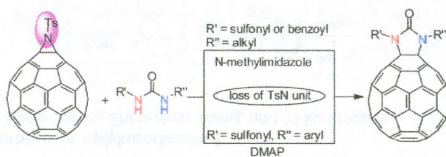
Fine-Tuning the Structures of Chiral Diamine Ligands in the Catalytic Asymmetric Aldol Reactions of Trifluoromethyl Aromatic Ketones with Linear Aliphatic Ketones

Hua Zong, Huayin Huang, Guangling Bian, and Ling Song*



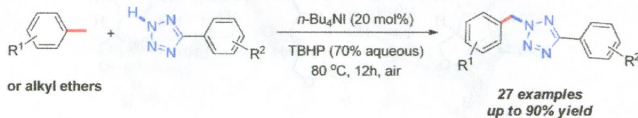
Lewis Base-Catalyzed Reaction of Aziridinofullerene with Ureas for the Preparation of Fulleroimidazolidinones

Meng-Lei Xing, Xin-Wei Lu, Chun-Bao Miao, Jia-Xing Li, Xiao-Qiang Sun, and Hai-Tao Yang*



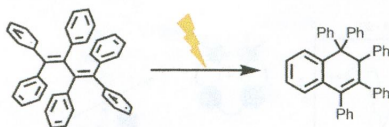
Transition-Metal-Free Direct Alkylation of Aryl Tetrazoles via Intermolecular Oxidative C–N Formation

Liang Wang,* Kaiqiang Zhu, Qun Chen, and Mingyang He*



Photolability of Per-Arylated Butadienes: En Route to Dihydonaphthalenes

Jan Freudenberg, Andrea C. Uptmoor, Frank Rominger, and Uwe H. F. Bunz*

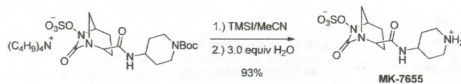


11792 5

DOI: 10.1021/jo502319z

N-Boc Deprotection and Isolation Method for Water-Soluble Zwitterionic Compounds

Zhijian Liu,* Nobuyoshi Yasuda, Michael Simeone, and Robert A. Reamer

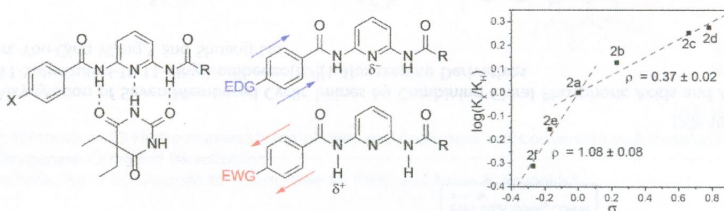


11797 5

DOI: 10.1021/jo502325w

Linear Free Energy Relationships Reveal Structural Changes in Hydrogen-Bonded Host–Guest Interactions

Jacqueline M. McGrath and Michael D. Pluth*

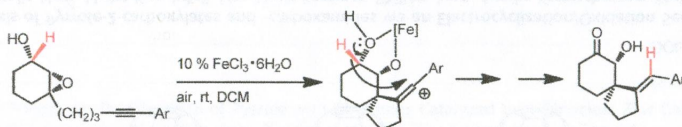


11802 5

DOI: 10.1021/jo5023266

Diastereoselective Synthesis of 2-Arylmethylene-6-hydroxySpiro[4.5]deca-7-ones via $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ -Catalyzed Spiroannulation/Hydride Transfer of 6-(5-Arylpent-4-yn-1-yl)-7-oxabicyclo[4.1.0]heptan-2-ols

Hsin-Hui Lin, Kuan-Yi Lee, Yin-An Chen, Chi-Fan Liu, and Ming-Chang P. Yeh*

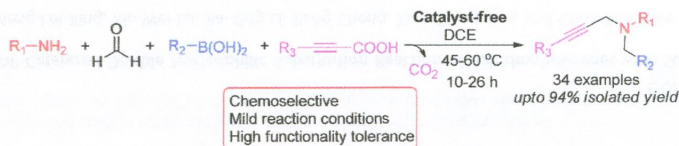


11812 5

DOI: 10.1021/jo502349a

Mild and Catalyst-Free Patis/Decarboxylative Domino Reaction: Chemoselective Synthesis of *N*-Benzyl Propargylamines

Huangdi Feng, Huihui Jia, and Zhihua Sun*

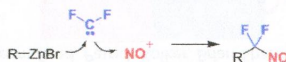


11819 5

DOI: 10.1021/jo5023537

Synthesis of *gem*-Difluorinated Nitroso Compounds

Vladimir O. Smimov, Marina I. Struchkova, Dmitry E. Arkhipov, Alexander A. Korlyukov, and Alexander D. Dilman*



Computational Assessment of Non-Heteroatom-Stabilized Carbene Complexes Reactivity: Formation of Oxazine Derivatives

Ignacio Funes-Ardoiz and Diego Sampedro*

