

May 5, 2010 Volume 132, Issue 17 Pages 5923-6274

1. Synthesis of (+)-Complanadine A, an Inducer of Neurotrophic Factor Excretion

Changxia Yuan, Chih-Tsung Chang, Abram Axelrod, Dionicio Siegel

Journal of the American Chemical Society 2010 132 (17), 5924-5925

2. Total Synthesis of (+)-Complanadine A Using an Iridium-Catalyzed Pyridine C–H Functionalization

Daniel F. Fischer, Richmond Sarpong

Journal of the American Chemical Society 2010 132 (17), 5926-5927

3. One-Pot Enantioselective Extraction of Chiral Fullerene C76 Using a Cyclic Host Carrying an Asymmetrically Distorted, Highly π-Basic Porphyrin Module

Yoshiaki Shoji, Kentaro Tashiro, Takuzo Aida

Journal of the American Chemical Society 2010 132 (17), 5928-5929

4. Use of a Robust Dehydrogenase from an Archael Hyperthermophile in Asymmetric Catalysis-Dynamic Reductive Kinetic Resolution Entry into (S)-Profens

Jacob A. Friest, Yukari Maezato, Sylvain Broussy, Paul Blum, David B. Berkowitz

Journal of the American Chemical Society 2010 132 (17), 5930-5931

5. Native Laser Lithography of His-Tagged Proteins by Uncaging of Multivalent Chelators

Maniraj Bhagawati, Suman Lata, Robert Tampe, Jacob Piehler

Journal of the American Chemical Society 2010 132 (17), 5932-5933

6. Modulation of T2 Relaxation Time by Light-Induced, Reversible Aggregation of Magnetic Nanoparticles

Elizabeth A. Osborne, Benjamin R. Jarrett, Chuqiao Tu, Angelique Y. Louie

Journal of the American Chemical Society 2010 132 (17), 5934-5935

7. A Xenon-Based Molecular Sensor Assembled on an MS2 Viral Capsid Scaffold

Tyler Meldrum, Kristen L. Seim, Vikram S. Bajaj, Krishnan K. Palaniappan, Wesley Wu, Matthew B. Francis, David E. Wemmer, Alexander Pines

Journal of the American Chemical Society 2010 132 (17), 5936-5937

8. Development of Highly Sensitive Fluorescent Probes for Detection of Intracellular Copper(I) in Living Systems

Masayasu Taki, Shohei Iyoshi, Akio Ojida, Itaru Hamachi, Yukio Yamamoto

Journal of the American Chemical Society 2010 132 (17), 5938-5939

9. Solid-State NMR Spectroscopy of Oriented Membrane Polypeptides at 100 K with Signal Enhancement by Dynamic Nuclear Polarization

Evgeniy Salnikov, Melanie Rosay, Shane Pawsey, Olivier Ouari, Paul Tordo, Burkhard Bechinger

Journal of the American Chemical Society 2010 132 (17), 5940-5941

HYSCORE Evidence That Endogenous Mena- and Ubisemiquinone Bind at the Same
Q Site (QD) of Escherichia coli Nitrate Reductase A

Rodrigo Arias-Cartin, Sevdalina Lyubenova, Pierre Ceccaldi, Thomas Prisner, Axel Magalon, Bruno Guigliarelli, St≅phane Grimaldi

Journal of the American Chemical Society 2010 132 (17), 5942-5943

11. Synthesis of Large, Stable Colloidal Graphene Quantum Dots with Tunable Size

Xin Yan, Xiao Cui, Liang-shi Li

Journal of the American Chemical Society 2010 132 (17), 5944-5945

12. Synthesis and Optical Properties of Monolayer Organosilicon Nanosheets

Yusuke Sugiyama, Hirotaka Okamoto, Takuya Mitsuoka, Takeshi Morikawa, Koji Nakanishi, Toshiaki Ohta, Hideyuki Nakano

Journal of the American Chemical Society 2010 132 (17), 5946-5947

13. Liposomes Remain Intact When Complexed with Polycationic Brushes

Alexander A. Yaroslavov, Andrei V. Sybachin, Marc Schrinner, Matthias Ballauff, Larisa Tsarkova, Ellina Kesselman, Judith Schmidt, Yeshayahu Talmon, Fredric M. Menger

Journal of the American Chemical Society 2010 132 (17), 5948-5949

14. Cationic Silane σ -Complexes of Ruthenium with Relevance to Catalysis

Dmitry V. Gutsulyak, Sergei F. Vyboishchikov, Georgii I. Nikonov

Journal of the American Chemical Society 2010 132 (17), 5950-5951

15. Ambient-Processed Colloidal Quantum Dot Solar Cells via Individual Pre-Encapsulation of Nanoparticles

Ratan Debnath, Jiang Tang, D. Aaron Barkhouse, Xihua Wang, Andras G. Pattantyus-Abraham, Lukasz Brzozowski, Larissa Levina, Edward H. Sargent

Journal of the American Chemical Society 2010 132 (17), 5952-5953

16. RNA-Binding to Archaeal RNA Polymerase Subunits F/E: A DEER and FRET Study

Dina Grohmann, Daniel Klose, Johann P. Klare, Christopher W. M. Kay, Heinz-Jürgen Steinhoff, Finn Werner

Journal of the American Chemical Society 2010 132 (17), 5954-5955

17. Polyoxometalatocyclophanes: Controlled Assembly of Polyoxometalate-Based Chiral Metallamacrocycles from Achiral Building Blocks

Fengping Xiao, Jian Hao, Jin Zhang, Chunlin Lv, Panchao Yin, Longsheng Wang, Yongge Wei

Journal of the American Chemical Society 2010 132 (17), 5956-5957

18. An "End-On" Chromium(III)-Superoxo Complex: Crystallographic and Spectroscopic Characterization and Reactivity in C-H Bond Activation of Hydrocarbons

Jaeheung Cho, Jaeyoung Woo, Wonwoo Nam

Journal of the American Chemical Society 2010 132 (17), 5958-5959

19. High-Yield Synthesis of Monodisperse Dumbbell-Shaped Polymer Nanoparticles

Jin-Gyu Park, Jason D. Forster, Eric R. Dufresne

Journal of the American Chemical Society 2010 132 (17), 5960-5961

20. Regio- and Stereocontrol in Rhenium-Catalyzed Transposition of Allylic Alcohols

Aaron T. Herrmann, Tatsuo Saito, Craig E. Stivala, Janine Tom, Armen Zakarian

Journal of the American Chemical Society 2010 132 (17), 5962-5963

21. Epitaxial CdTe Rods on Au/Si Islands from a Molecular Compound

Kibriya Ahmad, Mohammad Afzaal, Jamie S. Ritch, Tristram Chivers, Paul O'Brien

Journal of the American Chemical Society 2010 132 (17), 5964-5965

22. Total Synthesis of (–)-Anominine

Ben Bradshaw, Gorka Etxebarria-Jard¹, Josep Bonjoch

Journal of the American Chemical Society 2010 132 (17), 5966-5967

23. An Alternative Approach to Aldol Reactions: Gold-Catalyzed Formation of Boron Enolates from Alkynes

Cindy Kürner, Pavel Starkov, Tom D. Sheppard

Journal of the American Chemical Society 2010 132 (17), 5968-5969

24. N-Heterocyclic Carbene-Catalyzed Cascade Reaction Involving the Hydroacylation of Unactivated Alkynes

Akkattu T. Biju, Nathalie E. Wurz, Frank Glorius

Journal of the American Chemical Society 2010 132 (17), 5970-5971

25. Phosphopantetheinyl Transferase-Catalyzed Formation of Bioactive Hydrogels for Tissue Engineering

Katarzyna A. Mosiewicz, Kai Johnsson, Matthias P. Lutolf

Journal of the American Chemical Society 2010 132 (17), 5972-5974

26. Intracellular Bioconjugation of Targeted Proteins with Semiconductor Quantum Dots

Kelly Boeneman, James B. Delehanty, Kimihiro Susumu, Michael H. Stewart, Igor L. Medintz

Journal of the American Chemical Society 2010 132 (17), 5975-5977

27. Intramolecular π -Stacking in a Phenylpyrazole-Based Iridium Complex and Its Use in Light-Emitting Electrochemical Cells

Rubén D. Costa, Enrique Ortí, Henk J. Bolink, Stefan Graber, Catherine E. Housecroft, Edwin C. Constable

Journal of the American Chemical Society 2010 132 (17), 5978-5980

28. Charge Separation in Type II Tunneling Multilayered Structures of CdTe and CdSe Nanocrystals Directly Proven by Surface Photovoltage Spectroscopy

Dieter Gross, Ivan Mora-Serd, Thomas Dittrich, Abdelhak Belaidi, Christian Mauser, Arjan J. Houtepen, Enrico Da Como, Andrey L. Rogach, Jochen Feldmann

Journal of the American Chemical Society 2010 132 (17), 5981-5983

- 29. The Impact of the Size of Dynamic Combinatorial Libraries on the Detectability of Molecular Recognition Induced Amplification
 - R. Frederick Ludlow, Sijbren Otto

Journal of the American Chemical Society 2010 132 (17), 5984-5986

30. Direct Use of 15N Relaxation Rates as Experimental Restraints on Molecular Shape and Orientation for Docking of Protein–Protein Complexes

Yaroslav Ryabov, G. Marius Clore, Charles D. Schwieters

Journal of the American Chemical Society 2010 132 (17), 5987-5989

31. Stereospecific Synthesis of Cyclobutylboronates through Copper(I)-Catalyzed Reaction of Homoallylic Sulfonates and a Diboron Derivative

Hajime Ito, Takashi Toyoda, Masaya Sawamura

Journal of the American Chemical Society 2010 132 (17), 5990-5992

32. Time Averaging of NMR Chemical Shifts in the MLF Peptide in the Solid State

Itzam De Gortari, Guillem Portella, Xavier Salvatella, Vikram S. Bajaj, Patrick C. A. van der Wel, Jonathan R. Yates, Matthew D. Segall, Chris J. Pickard, Mike C. Payne, Michele Vendruscolo

Journal of the American Chemical Society 2010 132 (17), 5993-6000

33. Nature of Intermediates in Organo-SOMO Catalysis of α-Arylation of Aldehydes

Joann M. Um, Osvaldo Gutierrez, Franziska Schoenebeck, K. N. Houk, David W. C. MacMillan

Journal of the American Chemical Society 2010 132 (17), 6001-6005

34. Similar Topological Origin of Chiral Centers in Organic and Nanoscale Inorganic Structures: Effect of Stabilizer Chirality on Optical Isomerism and Growth of CdTe Nanocrystals

Yunlong Zhou, Ming Yang, Kai Sun, Zhiyong Tang, Nicholas A. Kotov

Journal of the American Chemical Society 2010 132 (17), 6006-6013

35. Ab Inito Modeling of Ethylbenzene Dehydrogenase Reaction Mechanism

Maciej Szaleniec, Tomasz Borowski, Karola Schühle, Malgorzata Witko, Johann Heider

Journal of the American Chemical Society 2010 132 (17), 6014-6024

36. A Synthetic Coiled-Coil Interactome Provides Heterospecific Modules for Molecular Engineering

Aaron W. Reinke, Robert A. Grant, Amy E. Keating

Journal of the American Chemical Society 2010 132 (17), 6025-6031

37. Oxidation State, Aggregation, and Heterolytic Dissociation of Allyl Indium Reagents

Konrad Koszinowski

Journal of the American Chemical Society 2010 132 (17), 6032-6040

38. Tuning Supramolecular Rigidity of Peptide Fibers through Molecular Structure

E. Thomas Pashuck, Honggang Cui, Samuel I. Stupp

Journal of the American Chemical Society 2010 132 (17), 6041-6046

39. Enhanced Ion Anisotropy by Nonconventional Coordination Geometry: Single-Chain Magnet Behavior for a [{FeIIL}2{NbIV(CN)8}] Helical Chain Compound Designed with Heptacoordinate FeII

Thengarai S. Venkatakrishnan, Shaon Sahoo, Nicolas Bréfuel, Carine Duhayon, Carley Paulsen, Anne-Laure Barra, S. Ramasesha, Jean-Pascal Sutter

Journal of the American Chemical Society 2010 132 (17), 6047-6056

40. Systematic Perturbation of the Trinuclear Copper Cluster in the Multicopper Oxidases: The Role of Active Site Asymmetry in Its Reduction of O2 to H2O

Anthony J. Augustine, Christian Kjaergaard, Munzarin Qayyum, Lynn Ziegler, Daniel J. Kosman, Keith O. Hodgson, Britt Hedman, Edward I. Solomon

Journal of the American Chemical Society 2010 132 (17), 6057-6067

41. Impact of Assembly State on the Defect Tolerance of TMV-Based Light Harvesting Arrays

Rebekah A. Miller, Nicholas Stephanopoulos, Jesse M. McFarland, Andrew S. Rosko, Phillip L. Geissler, Matthew B. Francis

Journal of the American Chemical Society 2010 132 (17), 6068-6074

42. Suborganelle Sensing of Mitochondrial cAMP-Dependent Protein Kinase Activity

Richard S. Agnes, Finith Jernigan, Jennifer R. Shell, Vyas Sharma, David S. Lawrence

Journal of the American Chemical Society 2010 132 (17), 6075-6080

43. High-Resolution Spectral Analysis of Individual SERS-Active Nanoparticles in Flow

Gregory Goddard, Leif O. Brown, Robb Habbersett, Christina I. Brady, John C. Martin, Steven W. Graves, James P. Freyer, Stephen K. Doorn

Journal of the American Chemical Society 2010 132 (17), 6081-6090

44. Effect of Heme Modification on Oxygen Affinity of Myoglobin and Equilibrium of the Acid-Alkaline Transition in Metmyoglobin

Tomokazu Shibata, Satoshi Nagao, Masashi Fukaya, Hulin Tai, Shigenori Nagatomo, Kenji Morihashi, Takashi Matsuo, Shun Hirota, Akihiro Suzuki, Kiyohiro Imai, Yasuhiko Yamamoto

Journal of the American Chemical Society 2010 132 (17), 6091-6098

45. Turning on Resonant SERRS Using the Chromophore–Plasmon Coupling Created by Host–Guest Complexation at a Plasmonic Nanoarray

Edward H. Witlicki, Sissel S. Andersen, Stinne W. Hansen, Jan O. Jeppesen, Eric W. Wong, Lasse Jensen, Amar H. Flood

Journal of the American Chemical Society 2010 132 (17), 6099-6107

46. Solution-Processable Low-Molecular Weight Extended Arylacetylenes: Versatile p-Type Semiconductors for Field-Effect Transistors and Bulk Heterojunction Solar Cells

Fabio Silvestri, Assunta Marrocchi, Mirko Seri, Choongik Kim, Tobin J. Marks, Antonio Facchetti, Aldo Taticchi

Journal of the American Chemical Society 2010 132 (17), 6108-6123

47. Constructing Hierarchical Spheres from Large Ultrathin Anatase TiO2 Nanosheets with Nearly 100% Exposed (001) Facets for Fast Reversible Lithium Storage

Jun Song Chen, Yi Ling Tan, Chang Ming Li, Yan Ling Cheah, Deyan Luan, Srinivasan Madhavi, Freddy Yin Chiang Boey, Lynden A. Archer, Xiong Wen Lou

Journal of the American Chemical Society 2010 132 (17), 6124-6130

48. Synthesis, Self-Assembly, Disassembly, and Reassembly of Two Types of Cu2O Nanocrystals Unifaceted with {001} or {110} Planes

Ke Xin Yao, Xiao Ming Yin, Tai Hong Wang, Hua Chun Zeng

Journal of the American Chemical Society 2010 132 (17), 6131-6144

49. Quantification of the 2-Deoxyribonolactone and Nucleoside 5'-Aldehyde Products of
2-Deoxyribose Oxidation in DNA and Cells by Isotope-Dilution Gas Chromatography
Mass Spectrometry: Differential Effects of γ-Radiation and Fe2+-EDTA

Wan Chan, Bingzi Chen, Lianrong Wang, Koli Taghizadeh, Michael S. Demott, Peter C. Dedon

Journal of the American Chemical Society 2010 132 (17), 6145-6153

50. Charge Generation and Recombination Dynamics in Poly(3-hexylthiophene)/Fullerene Blend Films with Different Regioregularities and Morphologies

Jiamo Guo, Hideo Ohkita, Hiroaki Benten, Shinzaburo Ito

Journal of the American Chemical Society 2010 132 (17), 6154-6164

51. Photoinitiated Singlet and Triplet Electron Transfer across a Redesigned [Myoglobin, Cytochrome b5] Interface

Judith M. Nocek, Amanda K. Knutson, Peng Xiong, Nadia Petlakh Co, Brian M. Hoffman

Journal of the American Chemical Society 2010 132 (17), 6165-6175

52. Solution and Solid-State Studies of Doubly Trimethylene-Bridged Tetraalkyl p-Phenylenediamine Diradical Dication Conformations Almaz S. Jalilov, Gaoquan Li, Stephen F. Nelsen, Ilia A. Guzei, Qin Wu

Journal of the American Chemical Society 2010 132 (17), 6176-6182

53. Activation and Deactivation of DNAzyme and Antisense Function with Light for the Photochemical Regulation of Gene Expression in Mammalian Cells

Douglas D. Young, Mark O. Lively, Alexander Deiters

Journal of the American Chemical Society 2010 132 (17), 6183-6193

54. Effect of a Strong Interfacial Electric Field on the Orientation of the Dipole Moment of Thiolated Aib-Oligopeptides Tethered to Mercury on Either the N- or C-Terminus

Lucia Becucci, Ivan Guryanov, Flavio Maran, Rolando Guidelli

Journal of the American Chemical Society 2010 132 (17), 6194-6204

55. Computational Explorations of Mechanisms and Ligand-Directed Selectivities of Copper-Catalyzed Ullmann-Type Reactions

Gavin O. Jones, Peng Liu, K. N. Houk, Stephen L. Buchwald

Journal of the American Chemical Society 2010 132 (17), 6205-6213

56. Analyzing Protein Folding Cooperativity by Differential Scanning Calorimetry and NMR Spectroscopy

Patrick Farber, Hariyanto Darmawan, Tara Sprules, Anthony Mittermaier

Journal of the American Chemical Society 2010 132 (17), 6214-6222

57. Accumulation of Fluorophores into DNA Duplexes To Mimic the Properties of Quantum Dots

Hiromu Kashida, Koji Sekiguchi, Xingguo Liang, Hiroyuki Asanuma

Journal of the American Chemical Society 2010 132 (17), 6223-6230

58. Do [all]-S,S'-Dioxide Oligothiophenes Show Electronic and Optical Properties of Oligoenes and/or of Oligothiophenes?

Mar¹a Moreno Oliva, Juan Casado, Juan T. L⁴pez Navarrete, Serguei Patchkovskii, Theodore Goodson III, Michael R. Harpham, J. S⁴rgio Seixas de Melo, Elizabeta Amir, Shlomo Rozen

Journal of the American Chemical Society 2010 132 (17), 6231-6242

59. An Unusual Nickel–Copper-Mediated Alkyne Homocoupling Reaction for the Active-Template Synthesis of [2]Rotaxanes

James D. Crowley, Stephen M. Goldup, Nicholas D. Gowans, David A. Leigh, Vicki E. Ronaldson, Alexandra M. Z. Slawin

Journal of the American Chemical Society 2010 132 (17), 6243-6248

60. Carbene-Metal Hydrides Can Be Much Less Acidic Than Phosphine-Metal Hydrides: Significance in Hydrogenations

Ye Zhu, Yubo Fan, Kevin Burgess

Journal of the American Chemical Society 2010 132 (17), 6249-6253

61. Detection of the Sulfhydryl Groups in Proteins with Slow Hydrogen Exchange Rates and Determination of Their Proton/Deuteron Fractionation Factors Using the Deuterium-Induced Effects on the 13Cβ NMR Signals

Mitsuhiro Takeda, JunGoo Jee, Tsutomu Terauchi, Masatsune Kainosho

Journal of the American Chemical Society 2010 132 (17), 6254-6260

62. Goldilocks Effect in Magnetic Bistability: Remote Substituent Modulation and Lattice Control of Photoinduced Valence Tautomerism and Light-Induced Thermal Hysteresis

R. D. Schmidt, D. A. Shultz, J. D. Martin, P. D. Boyle

Journal of the American Chemical Society 2010 132 (17), 6261-6273

63. Chemically Modified Electrodes. Advances in Electrochemical Science and Engineering, Vol. 11

Waldemar Gorski

Journal of the American Chemical Society 2010 132 (17), 6274-6274

64. Nanoscience and Nanotechnology for Chemical and Biological Defense

Journal of the American Chemical Society 2010 132 (17), 6274-6274

65. Handbook of Transition Metal Polymerization Catalysts

Journal of the American Chemical Society 2010 132 (17), 6274-6274