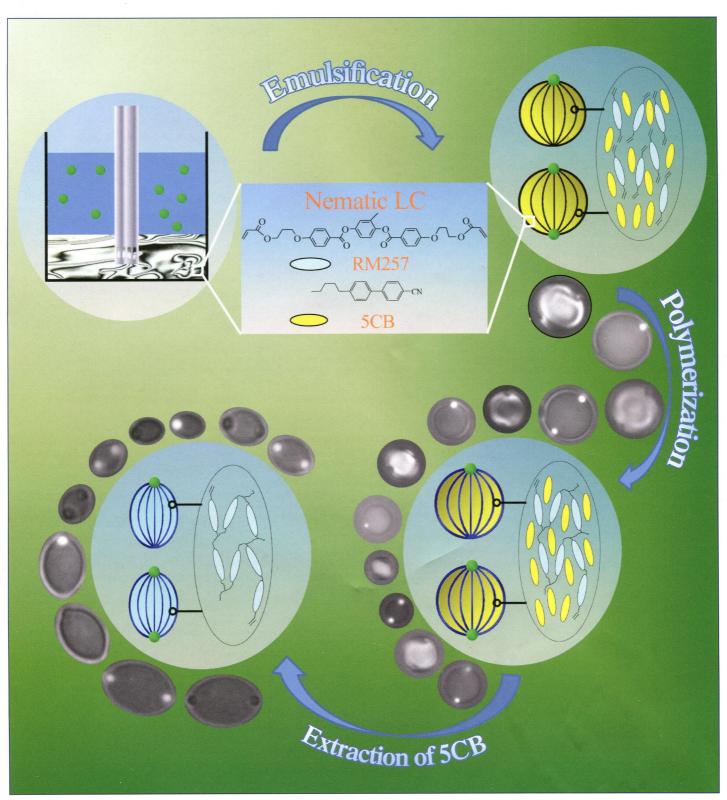
A 47/CS

July 10, 2013 Volume 135 Number 27 pubs.acs.org/JACS

# JACS JOURNAL OF THE AMERICAN CHEMICAL SOCIETY



## August 15 • 11am EDT



pubs.acs.org/toc/jacsat/135/27

### 01.08.13 Journal of the American Chemical Society. Volume 135, Issue 27 (ACS Publications) ☐ Crystal Engineering: From Molecule to Crystal Gautam R. Desiraju ACS ActiveView PDF pp 9952-9967 HI-Res Print, Annotate, Reference OulckView Publication Date (Web): June 10, 2013 (Perspective) PDF [2947K] DOI: 10.1021/ja403264c PDF w/ Links [554K] Section: Crystallography and Liquid Crystals Full Text HTML Add to ACS ChemWorx Figure 1 of 14 COMMUNICATIONS N,C-Capped Dipeptides with Selectivity for Mycobacterial Proteasome over Abstract | Supporting Info **Human Proteasomes: Role of S3 and S1 Binding Pockets** ACS ActiveView PDF Gang Lin, Tamutenda Chidawanyika, Christopher Tsu, Thulasi Warrier, Julien Vaubourgeix, Hi-Res Print, Annotate, Reference Quick Christopher Blackburn, Kenneth Gigstad, Michael Sintchak, Lawrence Dick, and Carl Nathan PDF [865K] Publication Date (Web): June 19, 2013 (Communication) PDF w/ Links [296K] DOI: 10.1021/ja400021x Full Text HTML Section: Microbial, Algal, and Fungal Add to ACS ChemWork **Biochemistry** Liquid Crystal-Based Emulsions for Synthesis of Spherical and Non-Spherical Abstract | Supporting Info **Particles with Chemical Patches** ACS ActiveView PDF Frédéric Mondiot, Xiaoguang Wang, Juan J. de Pablo, and Nicholas L. Abbott HI-Res Print, Annotate, Reference QuickView PDF [1830K] Publication Date (Web): April 5, 2013 (Communication) PDF w/ Links [281K] DOI: 10.1021/ja4022182 Full Text HTML Section: Physical Properties of Synthetic **High Polymers** Add to ACS ChemWorx Electrostatic Modulation of Aromatic Rings via Explicit Solvation of Abstract | Supporting Info Substituents ACS ActiveView PDF Kamila B. Muchowska, Catherine Adam, Ioulia K. Mati, and Scott L. Cockroft Hi-Res Print, Annotate, Res pp 9976-9979 PDF [1691K] Publication Date (Web): June 24, 2013 (Communication) DOI: 10.1021/ja402566w PDF w/ Links [287K] Full Text HTML Section: Physical Organic Chemistry Add to ACS ChemWork ■ Mutational Analysis of 48G7 Reveals that Somatic Hypermutation Affects Both Abstract | Supporting Info **Antibody Stability and Binding Affinity** ACS ActiveView PDF Sophie B. Sun, Shiladitya Sen, Nam-Jung Kim, Thomas J. Magliery, Peter G. Schultz, and Feng Wang Hi-Res Print, Annotate, Reference QuickView

LEARN MORE CELEBRATING Official sponsor of C&EN's 90th anniversary (I) SHIMADZU Excellence in Science C&EN Stronger bonds. Info for Advertisers

PDF [2457K]

PDF w/ Links [313K]

Full Text HTML

Add to ACS ChemWorx

pubs.acs.org/toc/jacsat/135/27

DOI: 10.1021/ja402927u

Publication Date (Web): June 24, 2013 (Communication)

Section: Biochemical Genetics

#### Design and Preparation of a Core-Shell Metal-Organic Framework for Abstract | Supporting Info Selective CO2 Capture ACS ActiveView PDF Tao Li, Jeanne E. Sullivan, and Nathaniel L. Rosi HI-Res Print, Annotate, Reference OulckView PDF [805K] Publication Date (Web): June 24, 2013 (Communication) PDF w/ Links [309K] DOI: 10.1021/ja403008j Full Text HTML Section: Surface Chemistry and Colloids Add to ACS ChemWorx Aluminum-Ligand Cooperative N-H Bond Activation and an Example of Abstract | Supporting Info **Dehydrogenative Coupling** ACS ActiveView PDF Thomas W. Myers and Louise A. Berben Hi-Res Print, Annotate, Refe pp 9988-9990 PDF [469K] Publication Date (Web): June 25, 2013 (Communication) DOI: 10.1021/ja4032874 PDF w/ Links [206K] Full Text HTML Section: Inorganic Chemicals and Reactions Add to ACS ChemWork ☐ Importance of Acid—Base Equilibrium in Electrocatalytic Oxidation of Formic Abstract | Supporting Info **Acid on Platinum** ACS ActiveView PDF Jiyong Joo, Taro Uchida, Angel Cuesta, Marc T. M. Koper, and Masatoshi Osawa Hi-Res Print, Annalate, Reference QuickView PDF [752K] Publication Date (Web): June 28, 2013 (Communication) DOI: 10.1021/ja403578s PDF w/ Links [271K] Full Text HTML Section: Electrochemistry Add to ACS ChemWorx ■ Large-Scale Synthesis of Transition-Metal-Doped TiO<sub>2</sub> Nanowires with Abstract | Supporting Info **Controllable Overpotential** ACS ActiveView PDF Bin Liu, Hao Ming Chen, Chong Liu, Sean C. Andrews, Chris Hahn, and Peidong Yang pp 9995-9998 PDF [2207K] Publication Date (Web): July 1, 2013 (Communication) DOI: 10.1021/ja403761s PDF w/ Links [304K] Full Text HTML Section: Electric Phenomena Add to ACS ChemWork Stereodirection of an α-Ketoester at Sub-molecular Sites on Chirally Modified Abstract | Supporting Info Pt(111): Heterogeneous Asymmetric Catalysis ACS ActiveView PDF Vincent Demers-Carpentier, Anton M. H. Rasmussen, Guillaume Goubert, Lara Ferrighi, Yi Dong, Hi-Res Print, Annotate, Reference QuickVie Jean-Christian Lemay, Federico Masini, Yang Zeng, Bjørk Hammer, and Peter H. McBreen PDF [2358K] Publication Date (Web): June 20, 2013 (Communication) PDF w/ Links [245K] DOI: 10.1021/ja403955k Full Text HTML Section: Physical Organic Chemistry Add to ACS ChemWorx Revisiting the Chemistry of the Actinocenes $[(\eta^8-C_8H_8)_2An]$ (An = U, Th) with Abstract | Supporting Info Neutral Lewis Bases. Access to the Bent Sandwich Complexes [(η8- $C_8H_8)_2An(L)$ with Thorium (L = py, 4,4'-bipy, tBuNC, $R_4$ phen) ACS ActiveView PDF HI-Res Print, Annotate, Reference QuickView Jean-Claude Berthet, Pierre Thuéry, Nicolas Garin, Jean-Pierre Dognon, Thibault Cantat, and PDF [983K] Michel Ephritikhine pp 10003-10006 PDF w/ Links [246K] Publication Date (Web): June 25, 2013 (Communication) Full Text HTML DOI: 10.1021/ja4036626 Add to ACS ChemWorx Section: Organometallic and Organometalloidal Compounds

pubs.acs.org/toc/jacsat/135/27 3/8

#### Dodecaamide Cages: Organic 12-Arm Building Blocks for Supramolecular Abstract | Supporting Info Chemistry ACS ActiveView PDF Jamie L. Culshaw, Ge Cheng, Marc Schmidtmann, Tom Hasell, Ming Liu, Dave J. Adams, and Andrew HI-Res Print, Annotate, Reference QuickView I. Cooper PDF [2088K] pp 10007-10010 PDF w/ Links [290K] Publication Date (Web): June 20, 2013 (Communication) DOI: 10.1021/ja403987j Full Text HTML Section: Plastics Fabrication and Uses Add to ACS ChemWorx Chiral Structure of Thiolate-Protected 28-Gold-Atom Nanocluster Determined Abstract | Supporting Info by X-ray Crystallography ACS ActiveView PDF Chenjie Zeng, Tao Li, Anindita Das, Nathaniel L. Rosi, and Rongchao Jin Hi-Res Print, Annotate, Refere pp 10011-10013 PDF [1475K] Publication Date (Web): July 1, 2013 (Communication) DOI: 10.1021/ja404058q PDF w/ Links [262K] Full Text HTML Section: Crystallography and Liquid Crystals Add to ACS ChemWork Development of a High-Throughput Screen and Its Use in the Discovery of Abstract | Supporting Info Streptococcus pneumoniae Immunoglobulin A1 Protease Inhibitors ACS ActiveView PDF Amanda L. Garner, Jessica L. Fullagar, Joshua A. Day, Seth M. Cohen, and Kim D. Janda Hi-Res Print, Annalate, Reference QuickView **PDF** [658K] Publication Date (Web): June 28, 2013 (Communication) DOI: 10.1021/ja404180x PDF w/ Links [253K] Full Text HTML Section: Enzymes Add to ACS ChemWorx Self-Assembled Containers Based on Extended Tetrathiafulvalene Abstract | Supporting Info Sébastien Bivaud, Sébastien Goeb, Vincent Croué, Paul I. Dron, Magali Allain, and Marc Sallé ACS ActiveView PDF Publication Date (Web): June 24, 2013 (Communication) PDF [1144K] DOI: 10.1021/ja404072w PDF w/ Links [281K] Section: Inorganic Chemicals and Reactions Full Text HTML Add to ACS ChemWork Catalytic Ketyl-Olefin Cyclizations Enabled by Proton-Coupled Electron Abstract | Supporting Info Transfer ACS ActiveView PDF Kyle T. Tarantino, Peng Liu, and Robert R. Knowles Hi-Res Print, Annotate, Reference QuickVie pp 10022-10025 PDF [948K] Publication Date (Web): June 24, 2013 (Communication) DOI: 10.1021/ja404342j PDF w/ Links [287K] Full Text HTML Section: Physical Organic Chemistry Add to ACS ChemWorx Organocatalytic Oxyamination of Azlactones: Kinetic Resolution of Abstract | Supporting Info Oxaziridines and Asymmetric Synthesis of Oxazolin-4-ones ACS ActiveView PDF Shunxi Dong, Xiaohua Liu, Yin Zhu, Peng He, Lili Lin, and Xiaoming Feng HI-Res Print, Annotate, Reference QuickView pp 10026-10029 PDF [449K] Publication Date (Web): June 17, 2013 (Communication) DOI: 10.1021/ja404379n PDF w/ Links [275K] Full Text HTML Section: Heterocyclic Compounds (More than One Hetero Atom) Add to ACS ChemWorx

pubs.acs.org/toc/jacsat/135/27 4/8

#### Self-Sufficient and Exclusive Oxygenation of Methane and Its Source Materials with Oxygen to Methanol via Metgas Using Oxidative Bi-reforming ACS ActiveView PDF George A. Olah, G. K. Surya Prakash, Alain Goeppert, Miklos Czaun, and Thomas Mathew HI-Res Print, Annotate, Reference OulckView **PDF** [216K] Publication Date (Web): June 24, 2013 (Communication) **PDF w/ Links [178K]** DOI: 10.1021/ja405439c Full Text HTML Section: Fossil Fuels, Derivatives, and **Related Products** Add to ACS ChemWorx Synthesis of Highly Cis, Syndiotactic Polymers via Ring-Opening Metathesis Abstract | Supporting Info **Polymerization Using Ruthenium Metathesis Catalysts** ACS ActiveView PDF Lauren E. Rosebrugh, Vanessa M. Marx, Benjamin K. Keitz, and Robert H. Grubbs Hi-Res Print, Annotate, Refer pp 10032-10035 PDF [431K] Publication Date (Web): June 19, 2013 (Communication) DOI: 10.1021/ja405559y PDF w/ Links [238K] Full Text HTML Section: **Chemistry of Synthetic High Polymers** Add to ACS ChemWork ☐ Catalytic Epoxidation Activity of Keplerate Polyoxomolybdate Nanoball toward Abstract | Supporting Info Aqueous Suspension of Olefins under Mild Aerobic Conditions ACS ActiveView PDF Abdolreza Rezaeifard, Reza Haddad, Maasoumeh Jafarpour, and Mohammad Hakimi Hi-Res Print, Annalate, Reference QuickView **PDF** [737K] Publication Date (Web): June 25, 2013 (Communication) DOI: 10.1021/ja405852s PDF w/ Links [273K] Full Text HTML Section: Heterocyclic Compounds (One Hetero Atom) Add to ACS ChemWorx ARTICLES ■ Molecular Crowding Enhanced ATPase Activity of the RNA Helicase eIF4A Abstract | Supporting Info Correlates with Compaction of Its Quaternary Structure and Association with ACS ActiveView PDF Hi-Res Print, Annotate, Reference QuickView Sabine R. Akabayov, Barak Akabayov, Charles C. Richardson, and Gerhard Wagner PDF [2272K] pp 10040-10047 PDF w/ Links [423K] Publication Date (Web): June 17, 2013 (Article) DOI: 10.1021/ja404404h Full Text HTML Section: General Biochemistry Add to ACS ChemWorx ■ Theoretical Prediction and Experimental Realization of New Stable Inorganic Abstract | Supporting Info Materials Using the Inverse Design Approach ACS ActiveView PDF Andriy Zakutayev, Xiuwen Zhang, Arpun Nagaraja, Liping Yu, Stephan Lany, Thomas O. Mason, Hi-Res Print, Annotate, Reference QuickView David S. Ginley, and Alex Zunger PDF [1009K] pp 10048-10054 Publication Date (Web): May 14, 2013 (Article) PDF w/ Links [357K] DOI: 10.1021/ja311599g Full Text HTML Section: Inorganic Chemicals and Reactions Add to ACS ChemWork Crowders Perturb the Entropy of RNA Energy Landscapes to Favor Folding Abstract | Supporting Info Duncan Kilburn, Joon Ho Roh, Reza Behrouzi, Robert M. Briber, and Sarah A. Woodson ACS ActiveView PDF pp 10055-10063 Hi-Res Print, Annotate, Reference QuickView Publication Date (Web): June 17, 2013 (Article) PDF [2819K] DOI: 10.1021/ja4030098 PDF w/ Links [545K] Section: General Biochemistry Full Text HTML Add to ACS ChemWorx

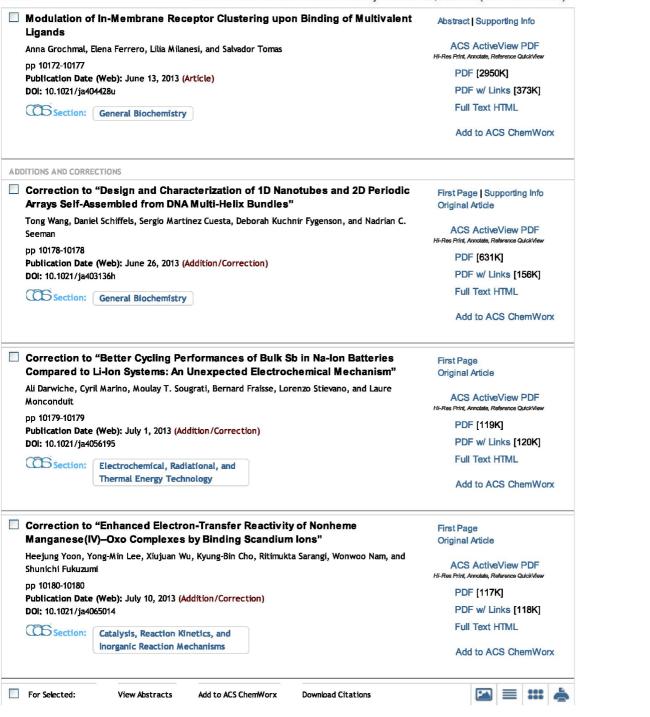
pubs.acs.org/toc/jacsat/135/27 5/8

#### ■ Energy-Level Matching of Fe(III) lons Grafted at Surface and Doped in Bulk for Abstract | Supporting Info **Efficient Visible-Light Photocatalysts** ACS ActiveView PDF Min Liu, Xiaoqing Qiu, Masahiro Miyauchi, and Kazuhito Hashimoto HI-Res Print, Annotate, Reference QuickView PDF [1552K] Publication Date (Web): June 17, 2013 (Article) PDF w/ Links [472K] DOI: 10.1021/ja401541k Full Text HTML Section: Radiation Chemistry, Photochemistry, and Photographic Add to ACS ChemWorx and Other Reprographic Processes ■ Graphene Nanoelectrodes: Fabrication and Size-Dependent Electrochemistry Abstract | Supporting Info Bo Zhang, Lixin Fan, Huawei Zhong, Yuwen Liu, and Shengli Chen ACS ActiveView PDF pp 10073-10080 Hi-Res Print, Annotate, Ref. Publication Date (Web): June 14, 2013 (Article) PDF [1123K] DOI: 10.1021/ja402456b PDF w/ Links [401K] Section: Electrochemistry **Full Text HTML** Add to ACS ChemWork ☐ Heck Coupling of Olefins to Mixed Methyl/Thienyl Monolayers on Si(111) Abstract | Supporting Info ACS ActiveView PDF Leslie E. O'Leary, Michael J. Rose, Tina X. Ding, Erik Johansson, Bruce S. Brunschwig, and Nathan Hi-Res Print, Annalate, Reference QuickView PDF [2018K] pp 10081-10090 Publication Date (Web): June 26, 2013 (Article) PDF w/ Links [512K] DOI: 10.1021/ja402495e Full Text HTML Section: Surface Chemistry and Colloids Add to ACS ChemWorx Insight into Magnetite's Redox Catalysis from Observing Surface Morphology Abstract | Supporting Info during Oxidation ACS ActiveView PDF Shu Nie, Elena Starodub, Matteo Monti, David A. Siegel, Lucía Vergara, Farid El Gabaly, Norman C. Bartelt, Juan de la Figuera, and Kevin F. McCarty PDF [1395K] Publication Date (Web): June 13, 2013 (Article) PDF w/ Links [483K] DOI: 10.1021/ja402599t Full Text HTML Section: Catalysis, Reaction Kinetics, and Add to ACS ChemWork **Inorganic Reaction Mechanisms** Screening for Enhanced Triacetic Acid Lactone Production by Recombinant Abstract | Supporting Info Escherichia coli Expressing a Designed Triacetic Acid Lactone Reporter ACS ActiveView PDF Shuang-Yan Tang, Shuai Qian, Olubolaji Akinterinwa, Christopher S. Frei, Joseph A. Gredell, and Hi-Res Print, Annotate, Reference QuickVie Patrick C. Cirino **PDF** [788K] pp 10099-10103 Publication Date (Web): June 20, 2013 (Article) PDF w/ Links [249K] DOI: 10.1021/ja402654z Full Text HTML Section: Fermentation and Bioindustrial Add to ACS ChemWorx Chemistry Solvent-Dependent Switch of Helical Main-Chain Chirality in Sergeants-and-Abstract | Supporting Info Soldiers-Type Poly(quinoxaline-2,3-diyl)s: Effect of the Position and Structures of the "Sergeant" Chiral Units on the Screw-Sense Induction ACS ActiveView PDF HI-Res Print, Annotate, Reference QuickView Yuuya Nagata, Tetsuya Yamada, Takumi Adachi, Yuto Akai, Takeshi Yamamoto, and Michinori PDF [1765K] Suginome PDF w/ Links [594K] pp 10104-10113 Publication Date (Web): June 17, 2013 (Article) Full Text HTML DOI: 10.1021/ja403391m Add to ACS ChemWorx Section: Chemistry of Synthetic High **Polymers**

pubs.acs.org/toc/jacsat/135/27 6/8

#### ☐ Single Sublattice Endotaxial Phase Separation Driven by Charge Frustration in Abstract | Supporting Info a Complex Oxide ACS ActiveView PDF Antoine Demont, Ruth Sayers, Maria A. Tsiamtsouri, Simon Romani, Philip A. Chater, Hongjun Niu, HI-Res Print, Annotate, Reference OulckView Carlos Martí-Gastaldo, Zhongling Xu, Zengqiang Deng, Yohann Bréard, Michael F. Thomas, John B. PDF [1784K] Claridge, and Matthew J. Rosseinsky PDF w/ Links [680K] pp 10114-10123 Publication Date (Web): June 10, 2013 (Article) Full Text HTML DOI: 10.1021/ja403611s Add to ACS ChemWorx Section: Electrochemical, Radiational, and Thermal Energy Technology Highly Stable, Anion Conductive, Comb-Shaped Copolymers for Alkaline Fuel Abstract ACS ActiveView PDF Nanwen Li, Yongjun Leng, Michael A. Hickner, and Chao-Yang Wang HI-Res Print, Annotate, Reference QuickView pp 10124-10133 PDF [1775K] Publication Date (Web): May 30, 2013 (Article) PDF w/ Links [566K] DOI: 10.1021/ja403671u Full Text HTML Section: Electrochemical, Radiational, and Thermal Energy Technology Add to ACS ChemWork Dispersion Forces and Counterintuitive Steric Effects in Main Group Abstract | Supporting Info Molecules: Heavier Group 14 (Si-Pb) Dichalcogenolate Carbene Analogues with Sub-90° Interligand Bond Angles ACS ActiveView PDF Brian D. Rekken, Thomas M. Brown, James C. Fettinger, Felicitas Lips, Heikki M. Tuononen, Rolfe PDF [2927K] H. Herber, and Philip P. Power PDF w/ Links [669K] Publication Date (Web): May 30, 2013 (Article) Full Text HTML DOI: 10.1021/ja403802a Add to ACS ChemWork Section: Organometallic and Organometalloidal Compounds ■ Monoclinic Sr<sub>1-x</sub>Na<sub>x</sub>SiO<sub>3-0.5x</sub>: New Superior Oxide Ion Electrolytes Abstract | Supporting Info Preetam Singh and John B. Goodenough ACS ActiveView PDF pp 10149-10154 Publication Date (Web): June 20, 2013 (Article) PDF [2536K] DOI: 10.1021/ja4042737 PDF w/ Links [464K] Section: Electrochemical, Radiational, and Full Text HTML Thermal Energy Technology Add to ACS ChemWork Modulation of the Intrinsic Helix Propensity of an Intrinsically Disordered Abstract | Supporting Info Protein Reveals Long-Range Helix-Helix Interactions ACS ActiveView PDF Vytautas lešmantavičius, Malene Ringkjøbing Jensen, Valéry Ozenne, Martin Blackledge, Flemming M. Poulsen, and Magnus Kjaergaard PDF [2046K] pp 10155-10163 Publication Date (Web): June 13, 2013 (Article) PDF w/ Links [544K] DOI: 10.1021/ja4045532 Full Text HTML Section: General Biochemistry Add to ACS ChemWork Isolation and First Total Synthesis of PM050489 and PM060184, Two New Abstract | Supporting Info **Marine Anticancer Compounds** ACS ActiveView PDF María Jesús Martín, Laura Coello, Rogelio Fernández, Fernando Reyes, Alberto Rodríguez, Carmen Murcia, María Garranzo, Cristina Mateo, Francisco Sánchez-Sancho, Santiago Bueno, Carlos de PDF [1723K] Eguilior, Andrés Francesch, Simon Munt, and Carmen Cuevas pp 10164-10171 PDF w/ Links [424K] Publication Date (Web): June 10, 2013 (Article) Full Text HTMI DOI: 10.1021/ja404578u Add to ACS ChemWorx Section: Pharmacology

pubs.acs.org/toc/jacsat/135/27 7/8





津ICP备10201100号-36 | Copyright © 2013 American Chemical Society

pubs.acs.org/toc/jacsat/135/27 8/8