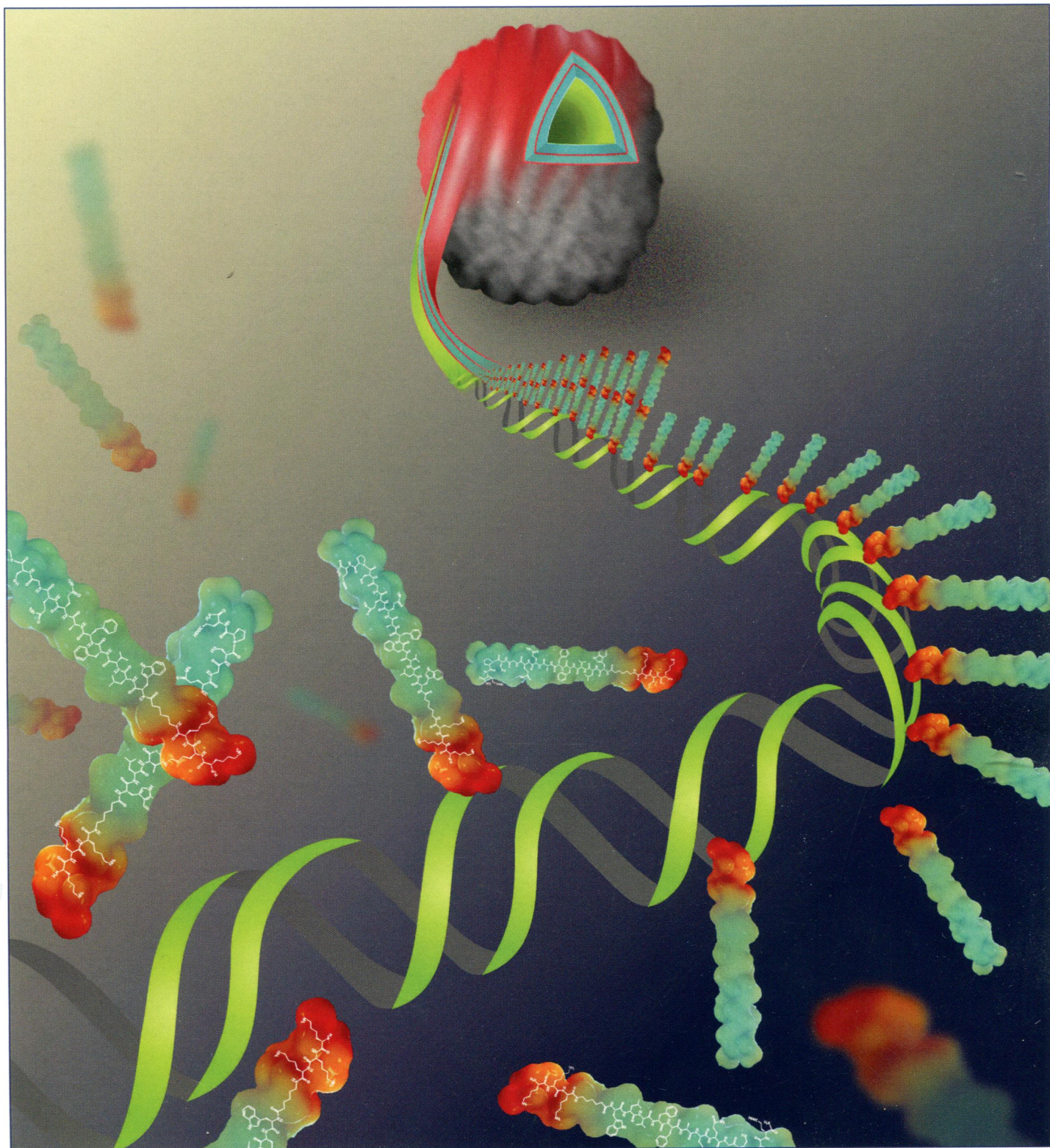


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ON THE COVER: The cover illustrates the co-assembly process of DNA and peptide into viral-like nanococoons. The electrostatic interaction initiates this process, followed by the assembly of bilayered peptide β -sheets along DNA backbone and lateral association of peptide nanoribbons into striped nanococoons with DNA wrapped inside. See Chau and Ni, p 17902.

Spotlights

17891

Spotlights on Recent JACS Publications
ACS Contributing Correspondents*

DOI: 10.1021/ja512889n

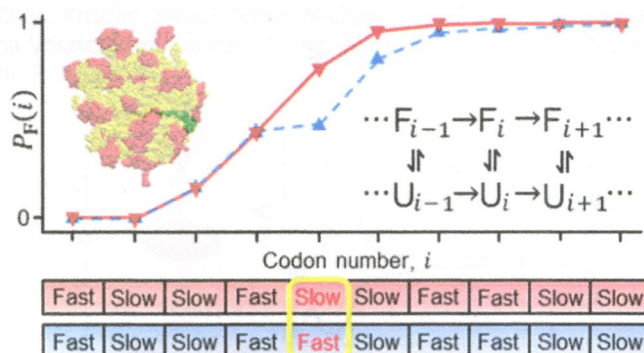


Perspectives

17892

Timing Is Everything: Unifying Codon Translation Rates and Nascent Proteome Behavior
Daniel A. Nissley and Edward P. O'Brien*

DOI: 10.1021/ja510082j

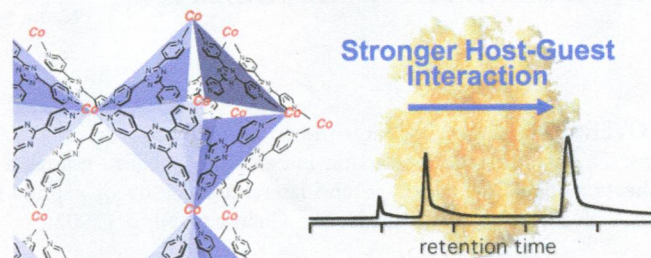


17899 **S**

DOI: 10.1021/ja5109535

Networked-Cage Microcrystals for Evaluation of Host–Guest Interactions

Shohei Matsuzaki, Tatsuhiko Arai, Koki Ikemoto, Yasuhide Inokuma, and Makoto Fujita*

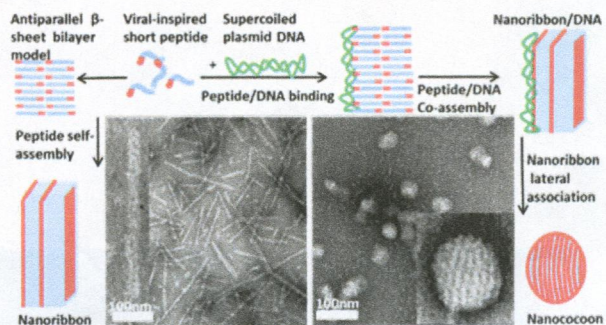


17902 **S**

DOI: 10.1021/ja507833x

Structural Mimics of Viruses Through Peptide/DNA Co-Assembly

Rong Ni and Ying Chau*

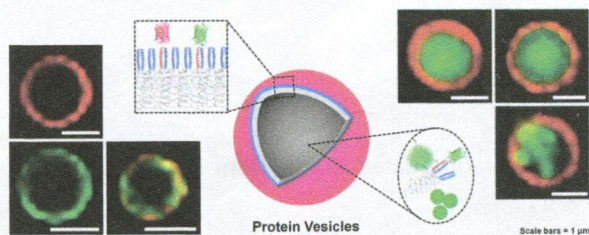


17906 **S**

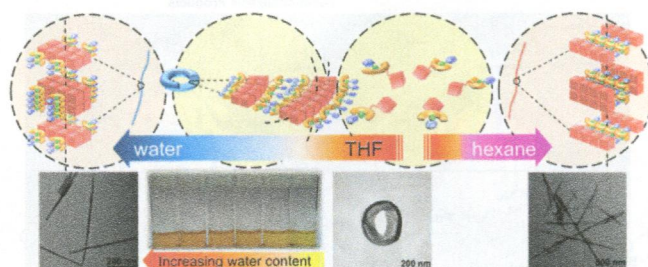
DOI: 10.1021/ja5090157

Thermally Triggered Self-Assembly of Folded Proteins into Vesicles

Won Min Park and Julie A. Champion*

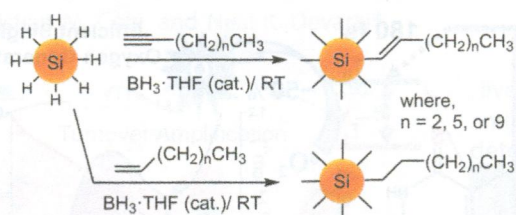


Transformable Nanostructures of Platinum-Containing Organosilane Hybrids: Non-covalent Self-Assembly of Polyhedral Oligomeric Silsesquioxanes Assisted by Pt \cdots Pt and π - π Stacking Interactions of Alkynylplatinum(II) Terpyridine Moieties
Ho-Leung Au-Yeung, Sammual Yu-Lut Leung, Anthony Yiu-Yan Tam, and Vivian Wing-Wah Yam*



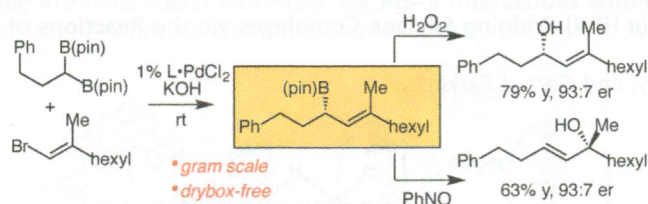
Borane-Catalyzed Room-Temperature Hydrosilylation of Alkenes/Alkynes on Silicon Nanocrystal Surfaces

Tapas K. Purkait, Muhammad Iqbal, Maike H. Wahl, Kerstin Gottschling, Christina M. Gonzalez, Muhammad Amirul Islam, and Jonathan G. C. Veinot*



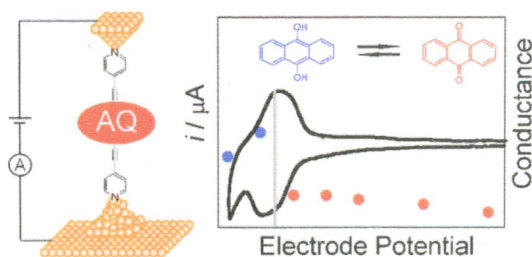
Nonracemic Allylic Boronates through Enantiotopic-Group-Selective Cross-Coupling of Geminal Bis(boronates) and Vinyl Halides

Bowman Potter, Adam A. Szymaniak, Emma K. Edelstein, and James P. Morken*



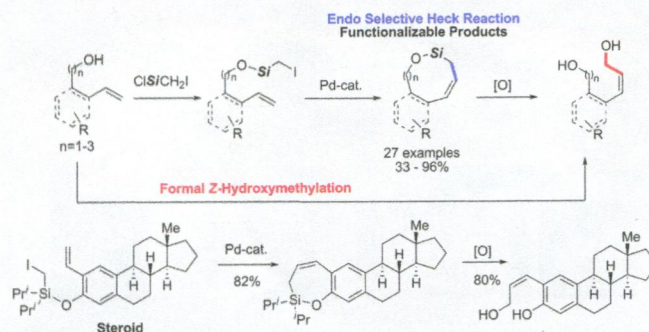
Electrochemical Control of Single-Molecule Conductance by Fermi-Level Tuning and Conjugation Switching

Masoud Baghernejad, Xiaotao Zhao, Kristian Baruël Ørnsø, Michael Füeg, Pavel Moreno-García, Alexander V. Rudnev, Veerabhadrarao Kaliginedi, Soma Vesztergom, Cancan Huang, Wenjing Hong,* Peter Broekmann, Thomas Wandlowski, Kristian S. Thygesen,* and Martin R. Bryce*



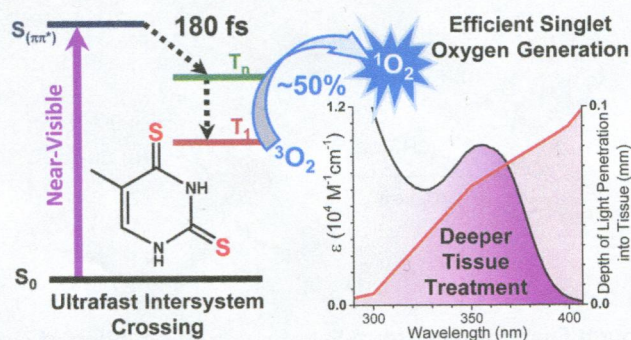
Endo-Selective Pd-Catalyzed Silyl Methyl Heck Reaction

Marvin Parasram, Viktor O. Iaroshenko, and Vladimir Gevorgyan*

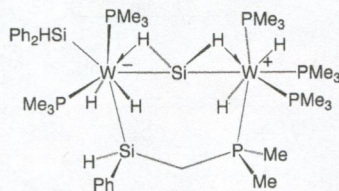


2,4-Dithiothymine as a Potent UVA Chemotherapeutic Agent

Marvin Pollum, Steffen Jockusch, and Carlos E. Crespo-Hernández*

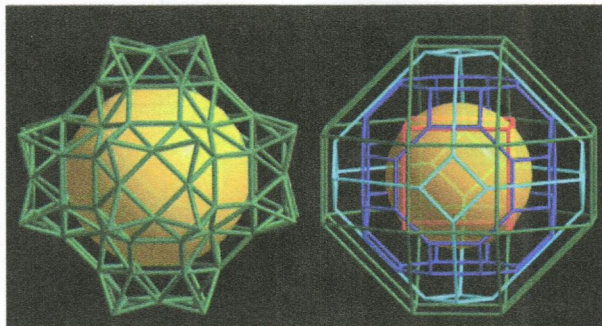
 σ -Silane, Disilanyl, and $[W(\mu-H)Si(\mu-H)W]$ Bridging Silylene Complexes via the Reactions of $W(PMe_3)_4(\eta^2-CH_2PMe_2)H$ with Phenylsilanes

Ashley A. Zuzek, Michelle C. Neary, and Gerard Parkin*

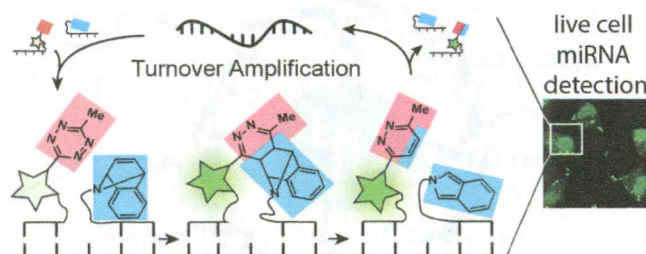


Beauty, Symmetry, and Magnetocaloric Effect—Four-Shell Keplerates with 104 Lanthanide Atoms

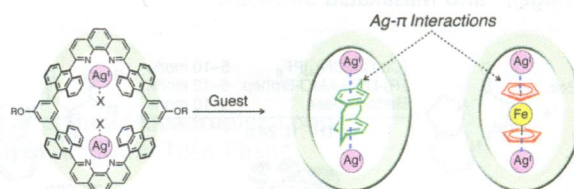
Jun-Bo Peng, Xiang-Jian Kong,* Qian-Chong Zhang, Martin Orendáč, Jan Prokleška, Yan-Ping Ren, La-Sheng Long,* Zhiping Zheng, and Lan-Sun Zheng

**Bioorthogonal Tetrazine-Mediated Transfer Reactions Facilitate Reaction Turnover in Nucleic Acid-Templated Detection of MicroRNA**

Haoxing Wu, Brandon T. Cisneros, Christian M. Cole, and Neal K. Devaraj*

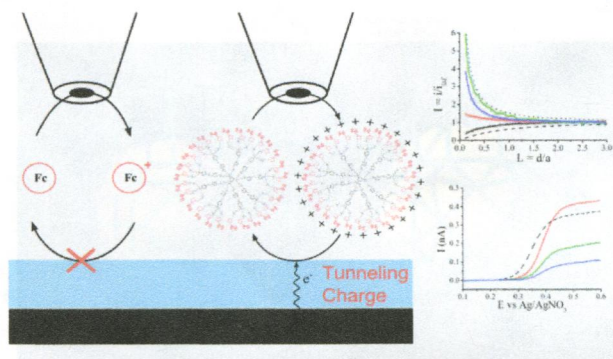
**Multipoint Recognition of Ditopic Aromatic Guest Molecules via Ag- π Interactions within a Dimetal Macrocyclic**

Kenichiro Omoto, Shohei Tashiro, Masumi Kuritani, and Mitsuhiro Shionoya*



Tunneling Dendrimers. Enhancing Charge Transport through Insulating Layer Using Redox Molecular Objects

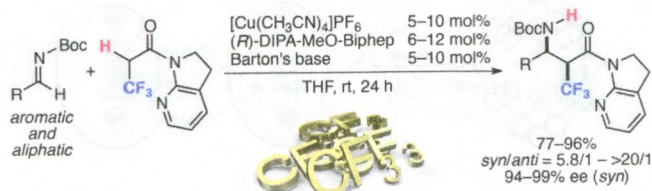
Sébastien Lhenry, Joanna Jalkh, Yann R. Leroux, Jaime Ruiz, Roberto Ciganda, Didier Astruc, and Philippe Hapiot*

**Lanthanide(III) Complexes with a Reinforced Cyclam Ligand Show Unprecedented Kinetic Inertness**

Aurora Rodríguez-Rodríguez, David Esteban-Gómez, Raphaël Tripier,* Gyula Tircsó, Zoltán Garda, Imre Tóth, Andrés de Blas, Teresa Rodríguez-Blas, and Carlos Platas-Iglesias*

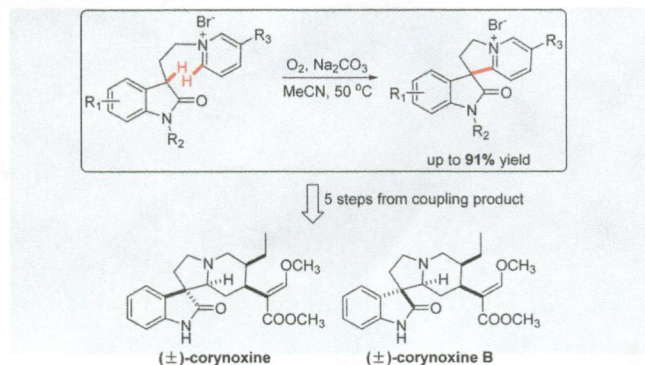
**Catalytic Generation of α -CF₃ Enolate: Direct Catalytic Asymmetric Mannich-Type Reaction of α -CF₃ Amide**

Liang Yin, Lennart Brewitz, Naoya Kumagai,* and Masakatsu Shibasaki*



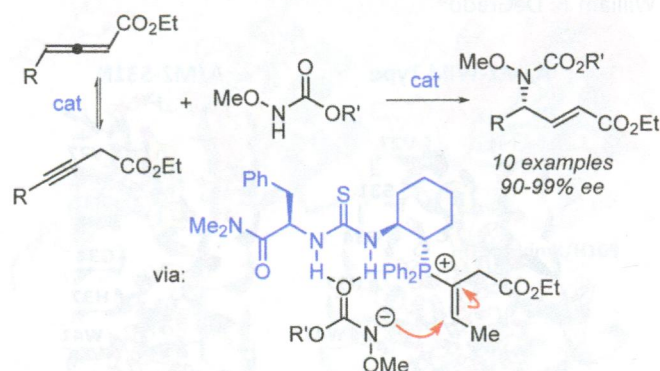
Construction of Tetracyclic 3-Spirooxindole through Cross-Dehydrogenation of Pyridinium: Applications in Facile Synthesis of (±)-Corynoxine and (±)-Corynoxine B

Jun Xu, Li-Dong Shao, Dashan Li, Xu Deng, Yu-Chen Liu, Qin-Shi Zhao,* and Chengfeng Xia*



Highly Enantioselective, Intermolecular Hydroamination of Allenyl Esters Catalyzed by Bifunctional Phosphinothioureas

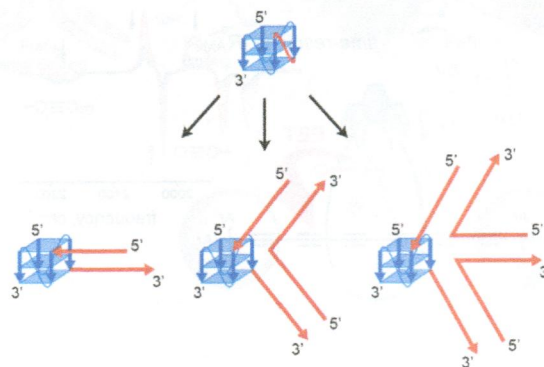
Yuan-Qing Fang, Pamela M. Tadross, and Eric N. Jacobsen*



Articles

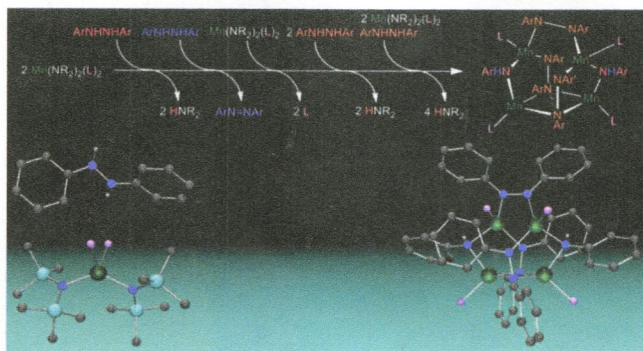
Joining of Multiple Duplex Stems at a Single Quadruplex Loop

Kah Wai Lim, Thi Quynh Ngoc Nguyen, and Anh Tuấn Phan*



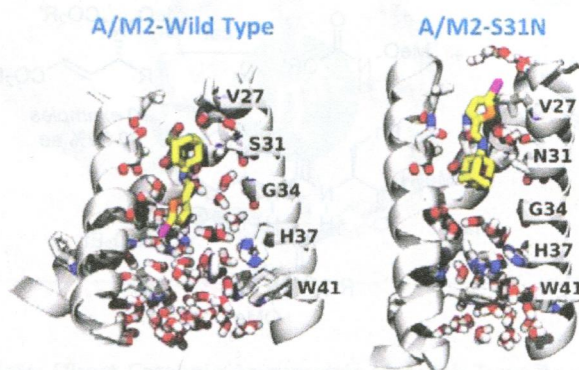
Mechanistic Elucidation of the Stepwise Formation of a Tetranuclear Manganese Pinned Butterfly Cluster via N–N Bond Cleavage, Hydrogen Atom Transfer, and Cluster Rearrangement

Clifton R. Hamilton, Michael R. Gau, Regina A. Baglia, Sean F. McWilliams, and Michael J. Zdilla*



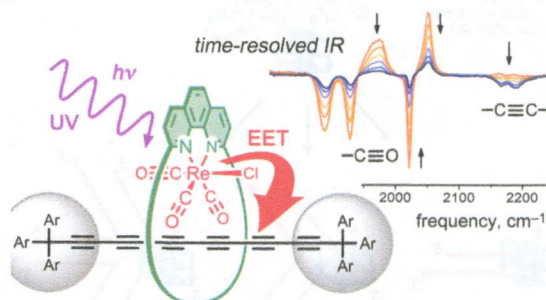
Flipping in the Pore: Discovery of Dual Inhibitors That Bind in Different Orientations to the Wild-Type versus the Amantadine-Resistant S31N Mutant of the Influenza A Virus M2 Proton Channel

Yibing Wu, Belgin Canturk, Hyunil Jo, Chunlong Ma, Eleonora Gianti, Michael L. Klein, Lawrence H. Pinto, Robert A. Lamb, Giacomo Fiorin, Jun Wang,* and William F. DeGrado*



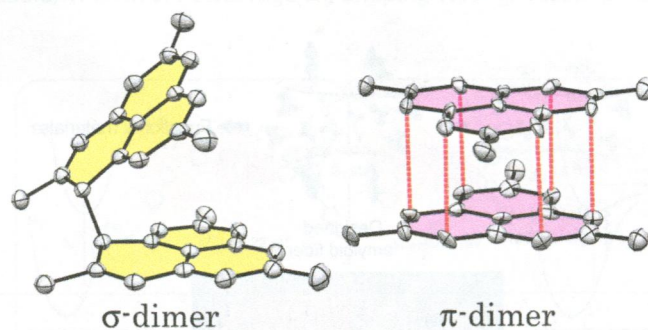
Photophysics of Threaded *sp*-Carbon Chains: The Polyynes are a Sink for Singlet and Triplet Excitation

Levon D. Movsisyan, Martin D. Peeks, Gregory M. Greetham, Michael Towrie, Amber L. Thompson, Anthony W. Parker,* and Harry L. Anderson*



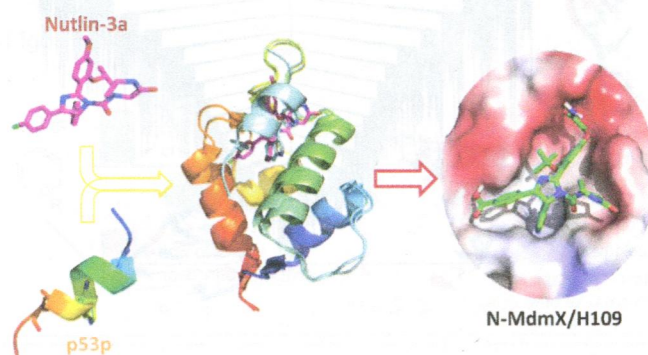
Evidence of σ - and π -Dimerization in a Series of Phenalenyls

Zhongyu Mou, Kazuyuki Uchida, Takashi Kubo,* and Miklos Kertesz*



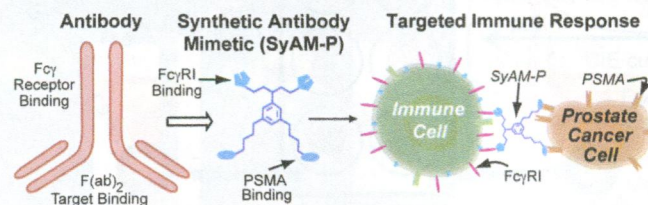
Efficient Reactivation of p53 in Cancer Cells by a Dual MdmX/Mdm2 Inhibitor

Lingyun Qin, Fei Yang, Cindy Zhou, Yao Chen, Huashan Zhang, and Zhengding Su*



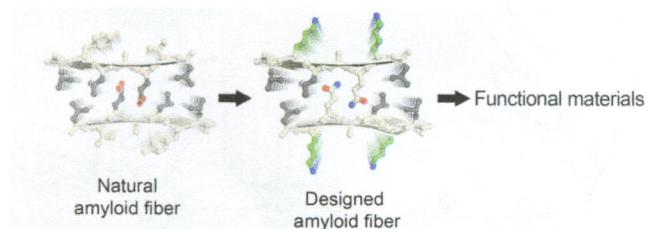
Chemically Synthesized Molecules with the Targeting and Effector Functions of Antibodies

Patrick J. McEnaney, Kelly J. Fitzgerald, Andrew X. Zhang, Eugene F. Douglass Jr., Weifang Shan, Aaron Balog, Mariya D. Kolesnikova, and David A. Spiegel*



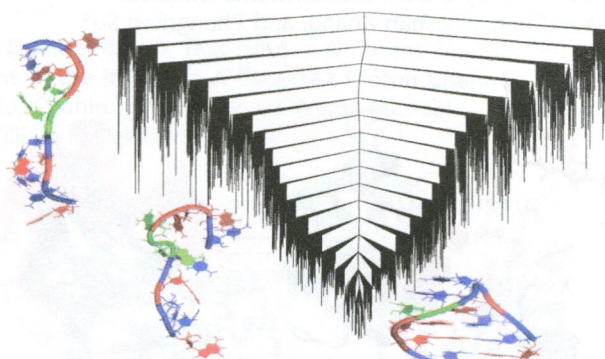
Structure-Based Design of Functional Amyloid Materials

Dan Li, Eric M. Jones, Michael R. Sawaya, Hiroyasu Furukawa, Fang Luo, Magdalena Ivanova, Stuart A. Sievers, Wenyuan Wang, Omar M. Yaghi, Cong Liu, and David S. Eisenberg*



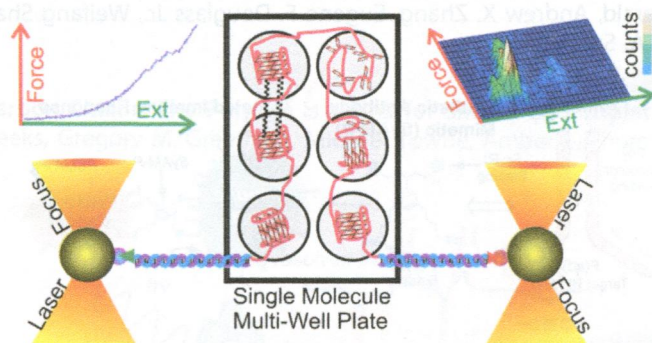
Energy Landscapes, Folding Mechanisms, and Kinetics of RNA Tetraloop Hairpins

Debayan Chakraborty, Rosana Collepardo-Guevara, and David J. Wales*



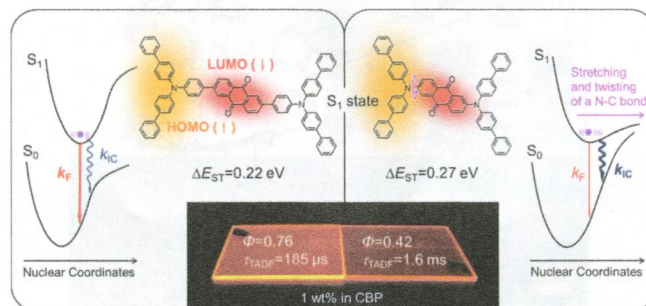
Interaction of G-Quadruplexes in the Full-Length 3' Human Telomeric Overhang

Jibin Abraham Punnoose, Yunxi Cui, Deepak Koirala, Philip M. Yangyuoru, Chiran Ghimire, Prakash Shrestha, and Hanbin Mao*



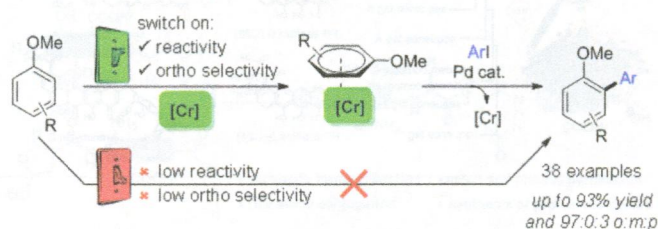
Anthraquinone-Based Intramolecular Charge-Transfer Compounds: Computational Molecular Design, Thermally Activated Delayed Fluorescence, and Highly Efficient Red Electroluminescence

Qisheng Zhang, Hirokazu Kuwabara, William J. Potscavage Jr., Shuping Huang, Yasuhiro Hatae, Takumi Shibata, and Chihaya Adachi*



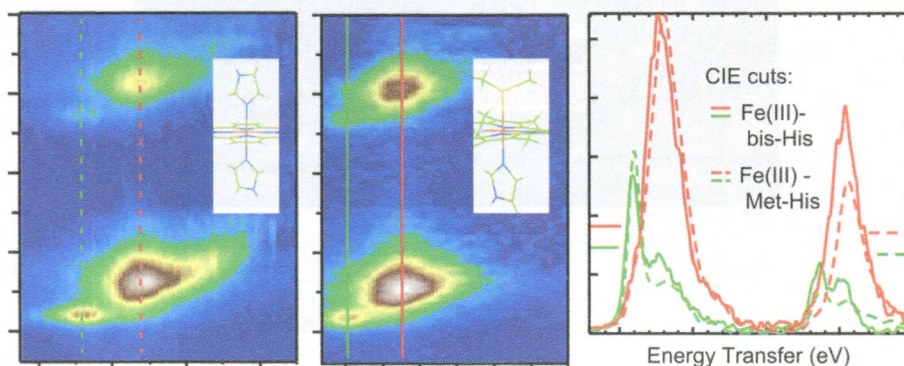
Tuning Reactivity and Site Selectivity of Simple Arenes in C–H Activation: Ortho-Arylation of Anisoles via Arene–Metal π -Complexation

Paolo Ricci, Katrina Krämer, and Igor Larrosa*



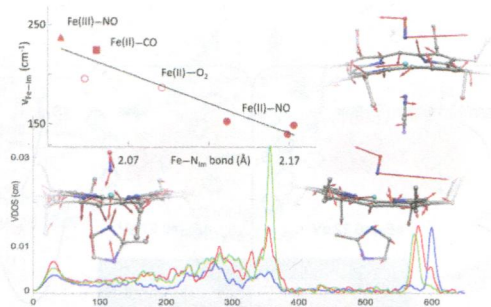
Resonant Inelastic X-ray Scattering on Ferrous and Ferric Bis-imidazole Porphyrin and Cytochrome c: Nature and Role of the Axial Methionine–Fe Bond

Thomas Kroll, Ryan G. Hadt, Samuel A. Wilson, Marcus Lundberg, James J. Yan, Tsu-Chien Weng, Dimosthenis Sokaras, Roberto Alonso-Mori, Diego Casa, Mary H. Upton, Britt Hedman,* Keith O. Hodgson,* and Edward I. Solomon*



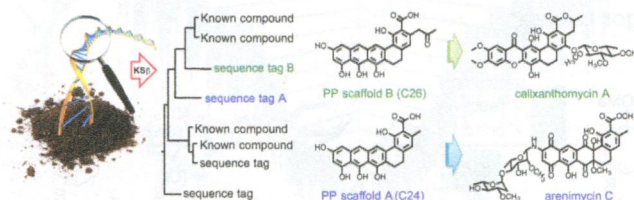
Comprehensive Fe–Ligand Vibration Identification in {FeNO}⁶ Hemes

Jianfeng Li,* Qian Peng, Allen G. Oliver, E. Ercan Alp, Michael Y. Hu, Jiyong Zhao, J. Timothy Sage,* and W. Robert Scheidt*

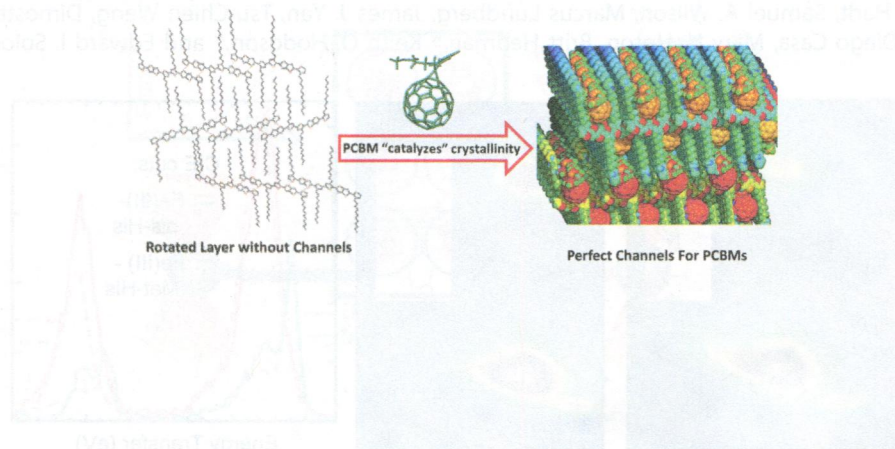


Mining Soil Metagenomes to Better Understand the Evolution of Natural Product Structural Diversity: Pentangular Polyphenols as a Case Study

Hahk-Soo Kang and Sean F. Brady*

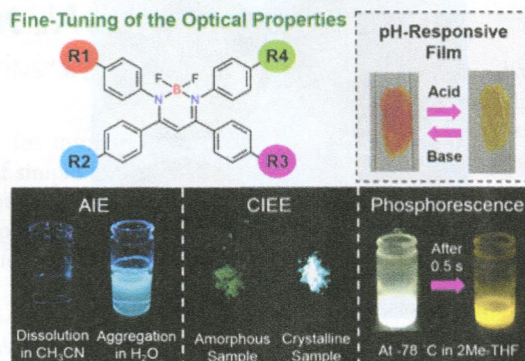
The Good Host: Formation of Discrete One-Dimensional Fullerene “Channels” in Well-Ordered Poly(2,5-bis(3-alkylthiophen-2-yl)thieno[3,2-*b*]thiophene) Oligomers

Lei Zhang, Feng Liu, Ying Diao, Hilary S. Marsh, Nicholas S. Colella, Arthi Jayaraman, Thomas P. Russell, Stefan C. B. Mannsfeld,* and Alejandro L. Briseno*



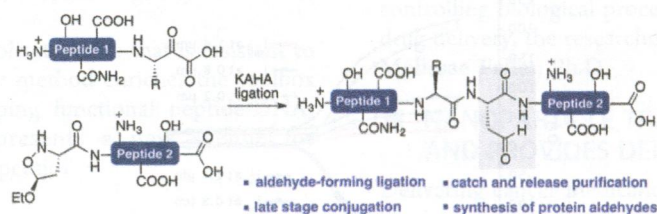
Functionalization of Boron Diiminates with Unique Optical Properties: Multicolor Tuning of Crystallization-Induced Emission and Introduction into the Main Chain of Conjugated Polymers

Ryousuke Yoshii, Amane Hirose, Kazuo Tanaka, and Yoshiki Chujo*



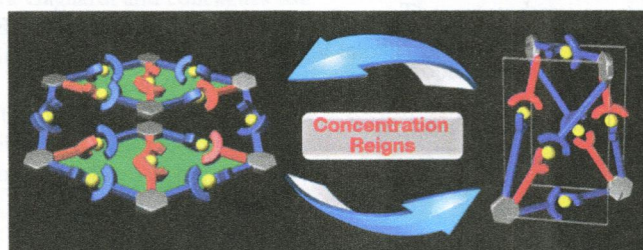
KAHA Ligations That Form Aspartyl Aldehyde Residues as Synthetic Handles for Protein Modification and Purification

Claudia E. Murar, Frédéric Thuaud, and Jeffrey W. Bode*



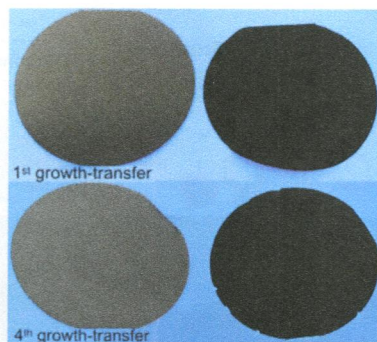
Probing a Hidden World of Molecular Self-Assembly: Concentration-Dependent, Three-Dimensional Supramolecular Interconversions

Xiaocun Lu, Xiaopeng Li, Kai Guo, Ting-Zheng Xie, Charles N. Moorefield, Chrys Wesdemiotis,* and George R. Newkome*

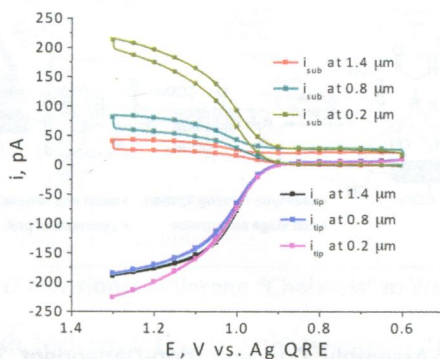


Wafer-Scale Transfer of Vertically Aligned Carbon Nanotube Arrays

Miao Wang, Taotao Li, Yagang Yao,* Huifen Lu, Qiang Li,* Minghai Chen, and Qingwen Li

**Detection of the Short-Lived Cation Radical Intermediate in the Electrochemical Oxidation of *N,N*-Dimethylaniline by Scanning Electrochemical Microscopy**

Fahe Cao, Jiyeon Kim, and Allen J. Bard*

**Proton-Transfer Mediated Enhancement of Nonlocal Electronic Relaxation Processes in X-ray Irradiated Liquid Water**

Petr Slavíček, Bernd Winter, Lorenz S. Cederbaum, and Nikolai V. Kryzhevoi*

