See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/45099613

Highly Tunable Photoluminescent Properties of Amphiphilic Conjugated Block Copolymers

ARTICLE in JOURNAL OF THE AMERICAN CHEMICAL SOCIETY · JULY 2010

Impact Factor: 12.11 \cdot DOI: 10.1021/ja1004569 \cdot Source: PubMed

| CITATIONS | READS |
|-----------|-------|
| 66 | 35 |

5 AUTHORS, INCLUDING:



Seung-Gu Kang

IBM TJ Watson Research, Yorktown Heights...

30 PUBLICATIONS **442** CITATIONS

SEE PROFILE

Jeffer Unive

Jeffery G Saven

University of Pennsylvania

91 PUBLICATIONS 3,097 CITATIONS

SEE PROFILE



July 28, 2010 Volume 132, Issue 29 Pages 9931-10208

1. Highly Tunable Photoluminescent Properties of Amphiphilic Conjugated Block Copolymers

Sang-Jae Park, Seung-Gu Kang, Michael Fryd, Jeffery G. Saven, So-Jung Park Journal of the American Chemical Society **2010** 132 (29), 9931-9933

2. Electronic Structure of Four-Coordinate Iron(I) Complex Supported by a Bis(phosphaethenyl)pyridine Ligand

Yumiko Nakajima, Yoshihide Nakao, Shigeyoshi Sakaki, Yoshinori Tamada, Teruo Ono, Fumiyuki Ozawa

Journal of the American Chemical Society 2010 132 (29), 9934-9936

3. Discrete and Active Enzyme Nanoarrays on DNA Origami Scaffolds Purified by Affinity Tag Separation

Kentaro Numajiri, Takahiro Yamazaki, Mayumi Kimura, Akinori Kuzuya, Makoto Komiyama *Journal of the American Chemical Society* **2010** *132* (29), 9937-9939

4. Selective 2'-Hydroxyl Acylation Analyzed by Protection from Exoribonuclease Kady-Ann Steen, Arun Malhotra, Kevin M. Weeks Journal of the American Chemical Society 2010 132 (29), 9940-9943

5. INEPT-Based Separated-Local-Field NMR Spectroscopy: A Unique Approach To Elucidate Side-Chain Dynamics of Membrane-Associated Proteins

Jiadi Xu, Ronald Soong, Sang-Choul Im, Lucy Waskell, Ayyalusamy Ramamoorthy *Journal of the American Chemical Society* **2010** *132* (29), 9944-9947

6. Kinetics of Amyloid β Monomer-to-Oligomer Exchange by NMR Relaxation Nicolas L. Fawzi, Jinfa Ying, Dennis A. Torchia, G. Marius Clore *Journal of the American Chemical Society* **2010** *132* (29), 9948-9951

7. Validation of a Lanthanide Tag for the Analysis of Protein Dynamics by Paramagnetic NMR Spectroscopy

Mathias A. S. Hass, Peter H. J. Keizers, Anneloes Blok, Yoshitaka Hiruma, Marcellus Ubbink *Journal of the American Chemical Society* **2010** *132* (29), 9952-9953

8. Palladium Catalysts for Dehydrogenation of Ammonia Borane with Preferential B-H Activation

Sung-Kwan Kim, Won-Sik Han, Tae-Jin Kim, Tae-Young Kim, Suk Woo Nam, Mariusz Mitoraj, Łukasz Pieko[§], Artur Michalak, Son-Jong Hwang, Sang Ook Kang *Journal of the American Chemical Society* **2010** *132* (29), 9954-9955

9. Solid-State 13C NMR Assignment of Carbon Resonances on Metallic and Semiconducting Single-Walled Carbon Nanotubes

Chaiwat Engtrakul, Mark F. Davis, Kevin Mistry, Brian A. Larsen, Anne C. Dillon, Michael J. Heben, Jeffrey L. Blackburn

Journal of the American Chemical Society 2010 132 (29), 9956-9957

10. Holographically Defined Nanoparticle Placement in 3D Colloidal Crystals

Yoonho Jun, Dongguk Yu, Matthew C. George, Paul V. Braun *Journal of the American Chemical Society* **2010** *132* (29), 9958-9959

11. Infrared-Active Heterostructured Nanocrystals with Ultralong Carrier Lifetimes

Doh C. Lee, Istvan Robel, Jeffrey M. Pietryga, Victor I. Klimov Journal of the American Chemical Society **2010** 132 (29), 9960-9962

12. Synthesis of Glycopolymers for Microarray Applications via Ligation of Reducing Sugars to a Poly(acryloyl hydrazide) Scaffold

Kamil Godula, Carolyn R. Bertozzi

Journal of the American Chemical Society 2010 132 (29), 9963-9965

13. Straightforward Self-Assembly of Porphyrin Nanowires in Water: Harnessing

Adamantane/β-Cyclodextrin Interactions

Maher Fathalla, Amelia Neuberger, Shao-Chun Li, Russell Schmehl, Ulrike Diebold, Janarthanan Jayawickramarajah

Journal of the American Chemical Society 2010 132 (29), 9966-9967

14. A Biomimetic Approach to C-nor-D-homo-Steroids

Philipp Heretsch, Sebastian Rabe, Athanassios Giannis Journal of the American Chemical Society **2010** 132 (29), 9968-9969

15. Introducing a 2-His-1-Glu Nonheme Iron Center into Myoglobin Confers Nitric Oxide Reductase Activity

Ying-Wu Lin, Natasha Yeung, Yi-Gui Gao, Kyle D. Miner, Lanyu Lei, Howard Robinson, Yi Lu *Journal of the American Chemical Society* **2010** *132* (29), 9970-9972

16. Light-Triggered Crystallization of a Molecular Host-Guest Complex

Guido H. Clever, Shohei Tashiro, Mitsuhiko Shionoya Journal of the American Chemical Society **2010** 132 (29), 9973-9975

17. Modifying the Size and Shape of Monodisperse Bifunctional Alkaline-Earth Fluoride Nanocrystals through Lanthanide Doping

Daqin Chen, Yunlong Yu, Feng Huang, Ping Huang, Anping Yang, Yuansheng Wang *Journal of the American Chemical Society* **2010** *13*2 (29), 9976-9978

18. Probing Slow Protein Dynamics by Adiabatic R1p and R2p NMR Experiments

Silvia Mangia, Nathaniel J. Traaseth, Gianluigi Veglia, Michael Garwood, Shalom Michaeli *Journal of the American Chemical Society* **2010** *132* (29), 9979-9981

19. Rh Catalyzed Olefination and Vinylation of Unactivated Acetanilides

Frederic W. Patureau, Frank Glorius

Journal of the American Chemical Society 2010 132 (29), 9982-9983

20. Supramolecular Control of Fluorescence through Reversible Encapsulation

Henry Dube, Mark R. Ams, Julius Rebek Jr.

Journal of the American Chemical Society 2010 132 (29), 9984-9985

21. Site-Specific Introduction of an Acetyl-Lysine Mimic into Peptides and Proteins by Cysteine Alkylation

Rong Huang, Marc A. Holbert, Mary Katherine Tarrant, Sandrine Curtet, David R. Colquhoun, Beverley M. Dancy, Blair C. Dancy, Yousang Hwang, Yong Tang, Katrina Meeth, Ronen Marmorstein, Robert N. Cole, Saadi Khochbin, Philip A. Cole *Journal of the American Chemical Society* **2010** *132* (29), 9986-9987

22. Insertion of Carboryne into Aromatic Rings: Formation of Cyclooctatetraenocarboranes Sunewang R. Wang, Zaozao Qiu, Zuowei Xie

Journal of the American Chemical Society 2010 132 (29), 9988-9989

23. Pd-Catalyzed O-Arylation of Ethyl Acetohydroximate: Synthesis of O-Arylhydroxylamines and Substituted Benzofurans

Thomas J. Maimone, Stephen L. Buchwald

Journal of the American Chemical Society 2010 132 (29), 9990-9991

24. η 2-Porphyrin Ru(II) π Complexes

Shigeru Yamaguchi, Hiroshi Shinokubo, Atsuhiro Osuka Journal of the American Chemical Society **2010** 132 (29), 9992-9993

25. Linear Free Energy Relationships Demonstrate a Catalytic Role for the Flavin Mononucleotide Coenzyme of the Type II Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase

Christopher J. Thibodeaux, Wei-chen Chang, Hung-wen Liu *Journal of the American Chemical Society* **2010** *132* (29), 9994-9996

26. Nanoheterostructure Cation Exchange: Anionic Framework Conservation

Prashant K. Jain, Lilac Amirav, Shaul Aloni, A. Paul Alivisatos Journal of the American Chemical Society **2010** 132 (29), 9997-9999

27. Polarization-Bound Quasi-Continuum States Are Responsible for the "Blue Tail" in the Optical Absorption Spectrum of the Aqueous Electron

Leif D. Jacobson, John M. Herbert Journal of the American Chemical Society **2010** 132 (29), 10000-10002

28. AAB-Sequence Living Radical Chain Copolymerization of Naturally Occurring Limonene with Maleimide: An End-to-End Sequence-Regulated Copolymer

Kotaro Satoh, Masaru Matsuda, Kanji Nagai, Masami Kamigaito Journal of the American Chemical Society 2010 132 (29), 10003-10005

29. Iodine as an Oxidant in the Topotactic Deintercalation of Interstitial Iron in Fe1+xTe Efrain E. Rodriguez, Peter Zavalij, Ping-Yen Hsieh, Mark A. Green Journal of the American Chemical Society 2010 132 (29), 10006-10008

30. "On-Off" Au(I)---Cu(I) Interactions in a Au(NHC)2 Luminescent Vapochromic Sensor Christoph E. Strasser, Vincent J. Catalano Journal of the American Chemical Society 2010 132 (29), 10009-10011

31. Concerning the Mechanism of the FeCl3-Catalyzed $\alpha\textsc{-Oxyamination}$ of Aldehydes:

Evidence for a Non-SOMO Activation Pathway

Jeffrey F. Van Humbeck, Scott P. Simonovich, Robert R. Knowles, David W. C. MacMillan *Journal of the American Chemical Society* **2010** *132* (29), 10012-10014

32. Enantioselective Organo-SOMO Cascade Cycloadditions: A Rapid Approach to Molecular Complexity from Simple Aldehydes and Olefins

Nathan T. Jui, Esther C. Y. Lee, David W. C. MacMillan Journal of the American Chemical Society 2010 132 (29), 10015-10017

33. A Facile Route to Functionalized N-Heterocyclic Carbenes (NHCs) with NHC Base-Stabilized Dichlorosilylene

Rajendra S. Ghadwal, Herbert W. Roesky, Markus Granitzka, Dietmar Stalke *Journal of the American Chemical Society* **2010** *132* (29), 10018-10020

34. Carbon Dioxide Reduction by Terminal Tantalum Hydrides: Formation and Isolation of Bridging Methylene Diolate Complexes

Matthew A. Rankin, Christopher C. Cummins Journal of the American Chemical Society **2010** 132 (29), 10021-10023

35. Heteroatom-Directed Alkylcyanation of Alkynes

Yoshiaki Nakao, Akira Yada, Tamejiro Hiyama Journal of the American Chemical Society **2010** 132 (29), 10024-10026

36. Rapid Covalent Ligation of Fluorescent Peptides to Water Solubilized Quantum Dots Juan B. Blanco-Canosa, Igor L. Medintz, Dorothy Farrell, Hedi Mattoussi, Philip E. Dawson *Journal of the American Chemical Society* **2010** *132* (29), 10027-10033

37. Cutting of Oxidized Graphene into Nanosized Pieces

Shintaro Fujii, Toshiaki Enoki

Journal of the American Chemical Society 2010 132 (29), 10034-10041

38. Modification of the Optoelectronic Properties of Membranes via Insertion of Amphiphilic Phenylenevinylene Oligoelectrolytes

Logan E. Garner, Juhyun Park, Scott M. Dyar, Arkadiusz Chworos, James J. Sumner, Guillermo C. Bazan

Journal of the American Chemical Society 2010 132 (29), 10042-10052

39. Highly Selective and Sensitive DNA Assay Based on Electrocatalytic Oxidation of Ferrocene Bearing Zinc(II)-Cyclen Complexes with Diethylamine

Muhammad J. A. Shiddiky, Angel A. J. Torriero, Zhanghua Zeng, Leone Spiccia, Alan M. Bond *Journal of the American Chemical Society* **2010** *13*2 (29), 10053-10063

40. Hydrogels with Cylindrically Symmetric Structure at Macroscopic Scale by Self-Assembly of Semi-rigid Polyion Complex

Zi Liang Wu, Takayuki Kurokawa, Songmiao Liang, Hidemitsu Furukawa, Jian Ping Gong *Journal of the American Chemical Society* **2010** *132* (29), 10064-10069

41. Nickel/Lewis Acid-Catalyzed Cyanoesterification and Cyanocarbamoylation of Alkynes

Yasuhiro Hirata, Akira Yada, Eiji Morita, Yoshiaki Nakao, Tamejiro Hiyama, Masato Ohashi, Sensuke Ogoshi

Journal of the American Chemical Society 2010 132 (29), 10070-10077

42. Controlled Incorporation of Particles into the Central Portion of Vesicle Walls

Yiyong Mai, Adi Eisenberg

Journal of the American Chemical Society 2010 132 (29), 10078-10084

43. Expanding the Chemical Versatility of Colloidal Nanocrystals Capped with Molecular Metal Chalcogenide Ligands

Maksym V. Kovalenko, Maryna I. Bodnarchuk, Jana Zaumseil, Jong-Soo Lee, Dmitri V. Talapin *Journal of the American Chemical Society* **2010** *132* (29), 10085-10092

44. Transforming a Blue Copper into a Red Copper Protein: Engineering Cysteine and Homocysteine into the Axial Position of Azurin Using Site-Directed Mutagenesis and Expressed Protein Ligation

Kevin M. Clark, Yang Yu, Nicholas M. Marshall, Nathan A. Sieracki, Mark J. Nilges, Ninian J. Blackburn, Wilfred A. van der Donk, Yi Lu

Journal of the American Chemical Society 2010 132 (29), 10093-10101

45. Dual-Channel Microreactor for Gas-Liquid Syntheses

Chan Pil Park, Dong-Pyo Kim

Journal of the American Chemical Society 2010 132 (29), 10102-10106

46. Flexibility of Shape-Persistent Molecular Building Blocks Composed of p-Phenylene and Ethynylene Units

Gunnar Jeschke, Muhammad Sajid, Miriam Schulte, Navid Ramezanian, Aleksei Volkov, Herbert Zimmermann, Adelheid Godt

Journal of the American Chemical Society 2010 132 (29), 10107-10117

47. Simultaneous Noncontact Topography and Electrochemical Imaging by SECM/SICM Featuring Ion Current Feedback Regulation

Yasufumi Takahashi, Andrew I. Shevchuk, Pavel Novak, Yumi Murakami, Hitoshi Shiku, Yuri E. Korchev, Tomokazu Matsue

Journal of the American Chemical Society 2010 132 (29), 10118-10126

48. Electronic and Steric Control of Regioselectivities in Rh(I)-Catalyzed (5 + 2)

Cycloadditions: Experiment and Theory

Peng Liu, Lauren E. Sirois, Paul Ha-Yeon Cheong, Zhi-Xiang Yu, Ingo V. Hartung, Heiko Rieck, Paul A. Wender, K. N. Houk

Journal of the American Chemical Society 2010 132 (29), 10127-10135

49. Transannular Disulfide Formation in Gliotoxin Biosynthesis and Its Role in Self-

Resistance of the Human Pathogen Aspergillus fumigatus

Daniel H. Scharf, Nicole Remme, Thorsten Heinekamp, Peter Hortschansky, Axel A. Brakhage, Christian Hertweck

Journal of the American Chemical Society **2010** 132 (29), 10136-10141

50. Effect of Base Pairing on the Electrochemical Oxidation of Guanine

Cyrille Costentin, Viviane Hajj, Marc Robert, Jean-Michel Sav fant, C fdric Tard Journal of the American Chemical Society **2010** 132 (29), 10142-10147

51. Multistage Collapse of a Bacterial Ribozyme Observed by Time-Resolved Small-Angle X-ray Scattering

Joon Ho Roh, Liang Guo, J. Duncan Kilburn, Robert M. Briber, Thomas Irving, Sarah A. Woodson

Journal of the American Chemical Society 2010 132 (29), 10148-10154

52. Structure and Photoinduced Electron Transfer Dynamics of a Series of Hydrogen-Bonded Supramolecular Complexes Composed of Electron Donors and a Saddle-Distorted Diprotonated Porphyrin

Tatsuhiko Honda, Tatsuaki Nakanishi, Kei Ohkubo, Takahiko Kojima, Shunichi Fukuzumi *Journal of the American Chemical Society* **2010** *132* (29), 10155-10163

53. Selective Aromatic C-F and C-H Bond Activation with Silylenes of Different Coordinate Silicon

Anukul Jana, Prinson P. Samuel, Ga § per Tav car, Herbert W. Roesky, Carola Schulzke Journal of the American Chemical Society **2010** 132 (29), 10164-10170

54. Nano Building Blocks via Iodination of [PhSiO1.5]n, Forming [p-I-C6H4SiO1.5]n (n = 8, 10, 12), and a New Route to High-Surface-Area, Thermally Stable, Microporous Materials via Thermal Elimination of I2

M. F. Roll, J. W. Kampf, Y. Kim, E. Yi, R. M. Laine Journal of the American Chemical Society **2010** *132* (29), 10171-10183

55. Design, Synthesis, and Study of Main Chain Poly(N-Heterocyclic Carbene) Complexes:

Applications in Electrochromic Devices

Adam B. Powell, Christopher W. Bielawski, Alan H. Cowley Journal of the American Chemical Society 2010 132 (29), 10184-10194

56. Utilizing Self-Exchange To Address the Binding of Carboxylic Acid Ligands to CdSe Quantum Dots

Bernd Fritzinger, Richard K. Capek, Karel Lambert, Jos ⁶ C. Martins, Zeger Hens *Journal of the American Chemical Society* **2010** *132* (29), 10195-10201

57. Ruthenium-Catalyzed Hydroxylation of Unactivated Tertiary C-H Bonds

Eric McNeill, J. Du Bois

Journal of the American Chemical Society 2010 132 (29), 10202-10204

58. Ruthenium(0) Nanoclusters Stabilized by Nanozeolite Framework: Isolable, Reusable, and Green Catalyst for the Hydrogenation of Neat Aromatics under Mild Conditions with the Unprecedented Catalytic Activity and Lifetime

Mehmet Zahmakıran, Yal sın Tonbul, Saim Özkar Journal of the American Chemical Society **2010** 132 (29), 10205-10205

59. A New Mechanism for Chemically Induced Dynamic Nuclear Polarization in the Solid State
Gunnar Jeschke

Journal of the American Chemical Society 2010 132 (29), 10205-10205

60. Chiral Ferrocenes in Asymmetric Catalysis: Synthesis and Applications Kevin Burgess

Journal of the American Chemical Society 2010 132 (29), 10206-10206

61. Controlled and Living Polymerizations: From Mechanisms to ApplicationsJennifer O'Donnell

Journal of the American Chemical Society 2010 132 (29), 10206-10207

62. Molecular Nano Dynamics, Volume 1: Spectroscopy Methods and Nanostructures, and Volume 2: Active Surfaces, Single Crystals and Single Biocells
Wei David Wei

Journal of the American Chemical Society 2010 132 (29), 10207-10208

63. Practical Methods for Biocatalysis and Biotransformations *Journal of the American Chemical Society* **2010** *132* (29), 10208-10208