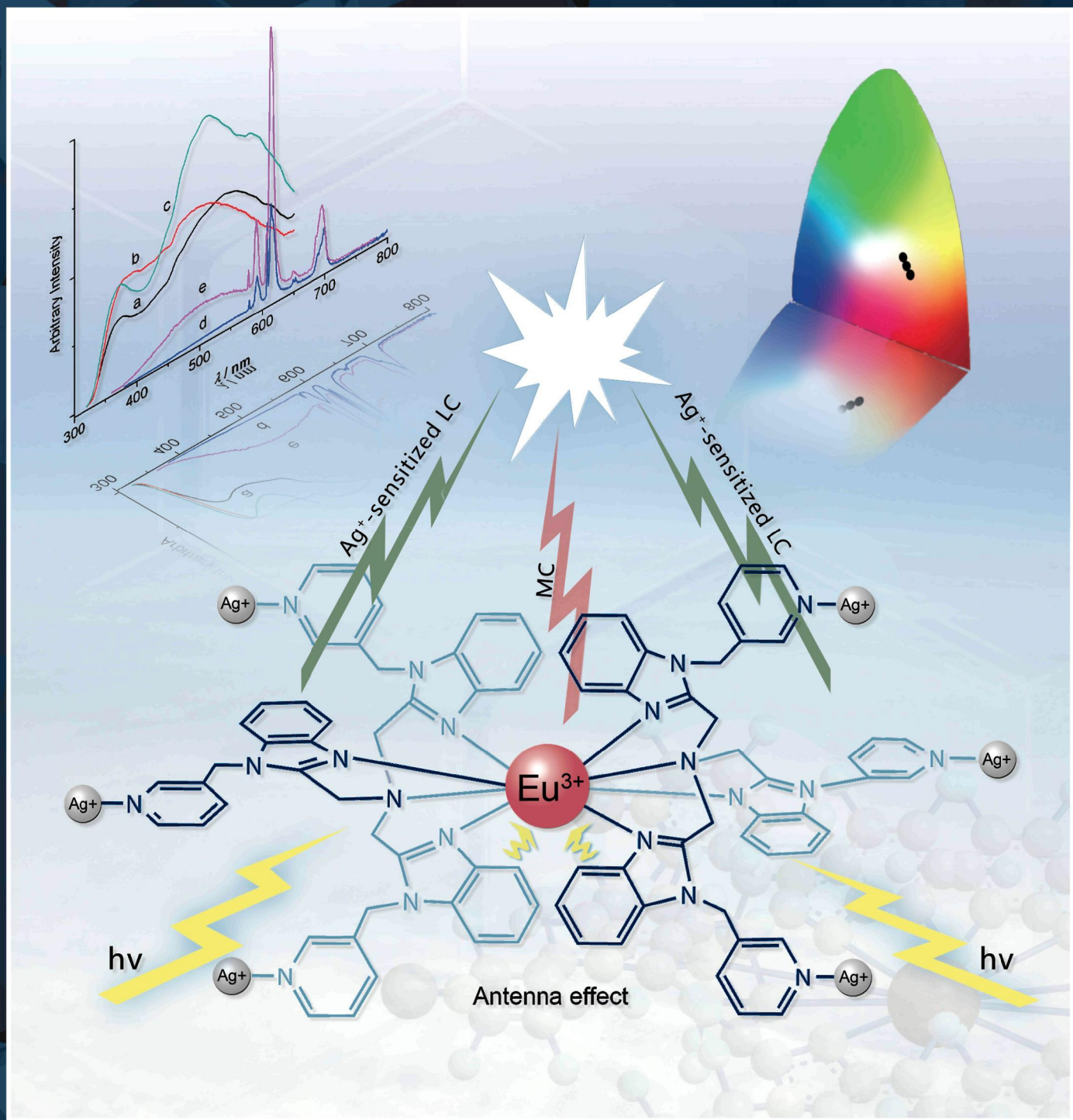


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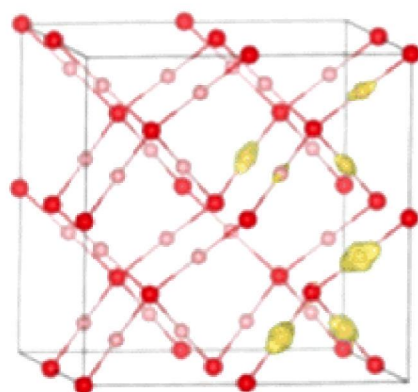
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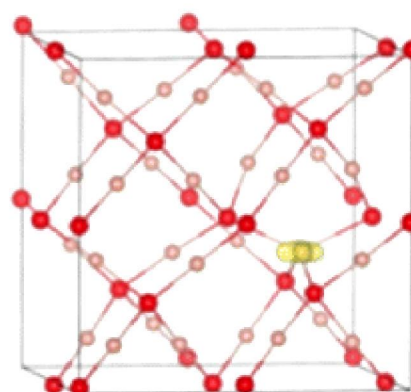
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Delocalized hole
in simple vacancy



Localized hole
in split vacancy

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Organotin Dithiocarbamates: Single-Source Precursors for Tin Sulfide Thin Films by Aerosol-Assisted Chemical Vapor Deposition (AACVD)

Karthik Ramasamy, Vladimir L. Kuznetsov, Kandasamy Gopal, Mohammad A. Malik, James Raftery, Peter P. Edwards, and Paul O'Brien

pp 266-276

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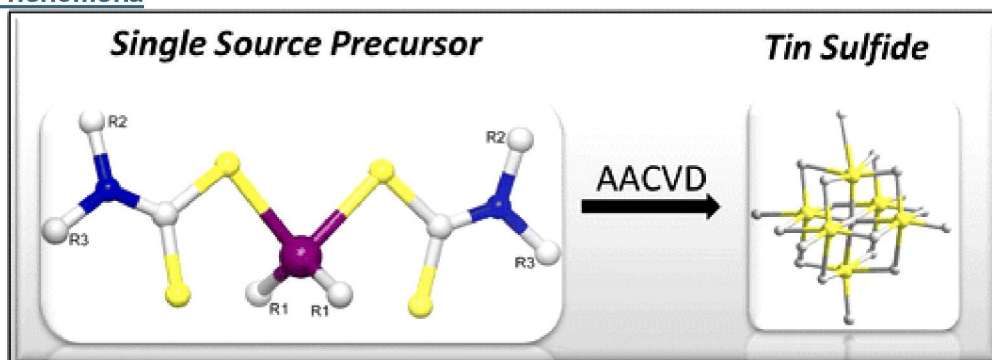


Figure 1 of 14

Effect of Fluorination on the Properties of a Donor-Acceptor Copolymer for Use in Photovoltaic Cells and Transistors

Hugo Bronstein, Jarvist M. Frost, Afshin Hadipour, Youngju Kim, Christian B. Nielsen, Raja Shahid Ashraf, Barry P. Rand, Scott Watkins, and Iain McCulloch

pp 277-285

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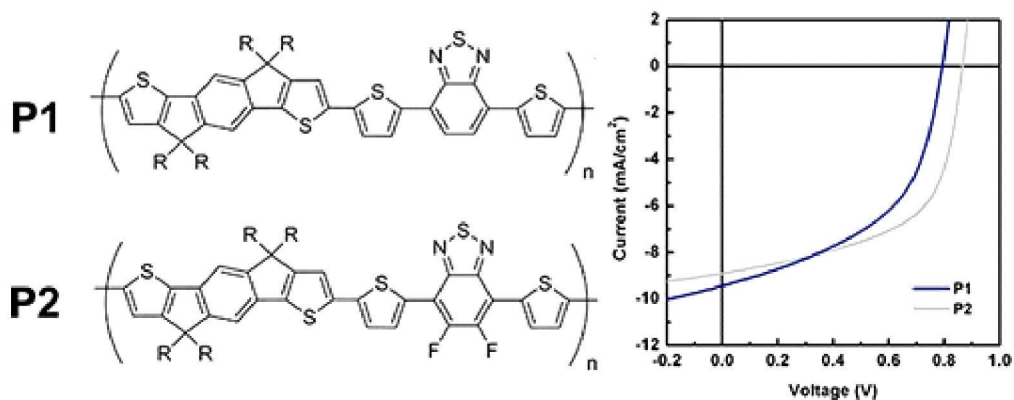


Figure 1 of 13

Janus-Type Dendromesogens: A Tool to Control the Nanosegregation and Polar Organization of Bent-Core Structures

Nélida Gimeno, Jorge Vergara, Miguel Cano, José Luis Serrano, M. Blanca Ros, Josu Ortega, César L. Folcia, Sofía Rodríguez-Conde, Gerardo Sanz-Enguita, and Jesús Etxebarria

pp 286-296

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Microreactor Chemical Bath Deposition of Laterally Graded Cd_{1-x}Zn_xS Thin Films: A Route to High-Throughput Optimization for Photovoltaic Buffer Layers

Kevin M. McPeak, Borirak Opananont, Tomohiro Shibata, Dong-Kyun Ko, Matthew A. Becker, Soma Chattopadhyay, Holt P. Bui, Thomas P. Beebe, Jr., Bruce A. Bunker, Christopher B. Murray, and Jason B. Baxter

pp 297-306

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DOI: 10.1021/cm3023506

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Electrochemical, Radiational, and Thermal Energy Technology



Preparation of Chiral Mesoporous Silica Nanotubes and Nanoribbons Using a Dual-Templating Approach

Yi Li, Baozong Li, Zhuojun Yan, Zeli Xiao, Zhibin Huang, Kai Hu, Sibing Wang, and Yonggang Yang

pp 307-312

Publication Date (Web): January 23, 2013 (Article)

DOI: 10.1021/cm3023715



Interfaces and Composition Profiles in Metal–Sulfide Nanolayers Synthesized by Atomic Layer Deposition

Elijah Thimsen, Sergey V. Baryshev, Alex B. F. Martinson, Jeffrey W. Elam, Igor V. Veryovkin, and Michael J. Pellin

pp 313-319

Publication Date (Web): January 16, 2013 (Article)

DOI: 10.1021/cm3027225



Behaviors of Fe, Zn, and Ga Substitution in CuInS₂ Nanoparticles Probed with Anomalous X-ray Diffraction

Stephen T. Connor, Benjamin D. Weil, Sumohan Misra, Yi Cui, and Michael F. Toney

pp 320-325

Publication Date (Web): January 4, 2013 (Article)

DOI: 10.1021/cm302794t



Thermal Variation of Structure and Electrical Conductivity in Bi₄YbO_{7.5}

Marzena Leszczynska, Xi Liu, Wojciech Wrobel, Marcin Malys, Marcin Krynski, Stefan T. Norberg, Stephen Hull, Franciszek Krok, and Isaac Abrahams

pp 326-336

Publication Date (Web): January 8, 2013 (Article)

DOI: 10.1021/cm302898m



Correlating Structural Changes and Gas Evolution during the Thermal Decomposition of Charged Li_xNi_{0.8}Co_{0.15}Al_{0.05}O₂ Cathode Materials

Seong-Min Bak, Kyung-Wan Nam, Wonyoung Chang, Xiqian Yu, Enyuan Hu, Sooyeon Hwang, Eric A. Stach, Kwang-Bum Kim, Kyung Yoon Chung, and Xiao-Qing Yang

pp 337-351

Publication Date (Web): January 3, 2013 (Article)

DOI: 10.1021/cm303096e



Compartmentalized Hollow Silica Nanospheres Templated from Nanoemulsions

Si-Han Wu, Yann Hung, and Chung-Yuan Mou

pp 352-364

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DOI: 10.1021/cm303116u

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Does Morphology of a Metal Nanoparticle Play a Role in Ostwald Ripening Processes?

Chein Lin Kuo and Kuo Chu Hwang

pp 365-371

Publication Date (Web): January 8, 2013 (Article)

DOI: 10.1021/cm3031279

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Oxygen Storage Capability of Brownmillerite-type $\text{Ca}_2\text{AlMnO}_{5+\delta}$ and Its Application to Oxygen Enrichment

Teruki Motohashi, Yuka Hirano, Yuji Masubuchi, Kazunori Oshima, Tohru Setoyama, and Shinichi Kikkawa

pp 372-377

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DOI: 10.1021/cm303156n

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SrTiO_3 Nanocuboids from a Lamellar Microemulsion

Linhua Hu, Chuandao Wang, Sungsik Lee, Randall E. Winans, Laurence D. Marks, and Kenneth R. Poeppelmeier

pp 378-384

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DOI: 10.1021/cm303303x

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[Crystallography and Liquid Crystals](#)



Protonated Titanate Nanotubes with Lewis and Brønsted Acidity: Relationship between Nanotube Structure and Catalytic Activity

Masaaki Kitano, Emiko Wada, Kiyotaka Nakajima, Shigenobu Hayashi, Souichi Miyazaki, Hisayoshi Kobayashi, and Michikazu Hara

pp 385-393

Publication Date (Web): January 21, 2013 (Article)

DOI: 10.1021/cm303324b

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Role of the LiPF_6 Salt for the Long-Term Stability of Silicon Electrodes in Li-Ion Batteries – A Photoelectron Spectroscopy Study

Bertrand Philippe, Rémi Dedryvère, Mihaela Gorgoi, Håkan Rensmo, Danielle Gonbeau, and Kristina Edström

pp 394-404

Publication Date (Web): January 16, 2013 (Article)

DOI: 10.1021/cm303399v

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Anatase TiO₂ Single Crystals Exposed with High-Reactive {111} Facets Toward Efficient H₂ Evolution

Hua Xu, Pakpoom Reunchan, Shuxin Ouyang, Hua Tong, Naoto Umezawa, Tetsuya Kako, and Jinhua Ye

pp 405-411

Publication Date (Web): January 4, 2013 (Article)

DOI: 10.1021/cm303502b

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The Zeolite Conundrum: Why Are There so Many Hypothetical Zeolites and so Few Observed? A Possible Answer from the Zeolite-Type Frameworks Perceived As Packings of Tiles

Vladislav A. Blatov, Gregory D. Ilyushin, and Davide M. Proserpio

pp 412-424

Publication Date (Web): January 11, 2013 (Article)

DOI: 10.1021/cm303528u

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Concerted Migration Mechanism in the Li Ion Dynamics of Garnet-Type Li₇La₃Zr₂O₁₂

Randy Jalem, Yoshihiro Yamamoto, Hiromasa Shiiba, Masanobu Nakayama, Hirokazu Munakata, Toshihiro Kasuga, and Kiyoshi Kanamura

pp 425-430

Publication Date (Web): January 9, 2013 (Article)

DOI: 10.1021/cm303542x

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Comparison of the Photovoltaic Characteristics and Nanostructure of Fullerenes Blended with Conjugated Polymers with Siloxane-Terminated and Branched Aliphatic Side Chains

Do Hwan Kim, Alexander L. Ayzner, Anthony L. Appleton, Kristin Schmidt, Jianguo Mei, Michael F. Toney, and Zhenan Bao

pp 431-440

Publication Date (Web): December 28, 2012 (Article)

DOI: 10.1021/cm303572d

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[Physical Properties of Synthetic High Polymers](#)



Charge Effects on the Structure and Composition of Porphyrin Binary Ionic Solids: ZnTPPS/SnTMePyP Nanomaterials

Kathleen E. Martin, Yongming Tian, Tito Busani, Craig J. Medforth, Ricardo Franco, Frank van Swol, and John A. Shelnutt

pp 441-447

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DOI: 10.1021/cm303595s

Section:
[Surface Chemistry and Colloids](#)



Structural and Conducting Features of Niobium-Doped Lanthanum Tungstate, $\text{La}_{27}(\text{W}_{1-x}\text{Nb}_x)\text{O}_{55.55-6}$

M. J. Zayas-Rey, L. dos Santos-Gómez, D. Marrero-López, L. León-Reina, J. Canales-Vázquez, M. A. G. Aranda, and E. R. Losilla

pp 448-456

Publication Date (Web): January 8, 2013 (Article)

DOI: 10.1021/cm304067d

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[Electric Phenomena](#)



Liquid-Phase Templateless Synthesis of Pt-on-Pd_{0.85}Bi_{0.15} Nanowires and PtPdBi Porous Nanoparticles with Superior Electrocatalytic Activity

Hanbin Liao and Yanglong Hou

pp 457-465

Publication Date (Web): January 16, 2013 (Article)

DOI: 10.1021/cm3037179

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[Electrochemistry](#)



Functional Polymer Brushes on Hydrogenated Graphene

Max Seifert, Amelie H. R. Koch, Frank Deubel, Tobias Simmet, Lucas H. Hess, Martin Stutzmann, Rainer Jordan, José A. Garrido, and Ian D. Sharp

pp 466-470

Publication Date (Web): January 18, 2013 (Article)

DOI: 10.1021/cm3036983

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[Chemistry of Synthetic High Polymers](#)



New Donor–Acceptor–Donor Molecules with Pechmann Dye as the Core Moiety for Solution-Processed Good-Performance Organic Field-Effect Transistors

Zhengxu Cai, Yunlong Guo, Sifen Yang, Qian Peng, Hwei Luo, Zitong Liu, Guanxin Zhang, Yunqi Liu, and Deqing Zhang

pp 471-478

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DOI: 10.1021/cm303793g

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Impact of the Flexible Character of MIL-88 Iron(III) Dicarboxylates on the Adsorption of *n*-Alkanes

Naseem A. Ramsahye, Thuy Khuong Trung, Lorna Scott, Farid Nouar, Thomas Devic, Patricia Horcajada, Emmanuel Magnier, Olivier David, Christian Serre, and Philippe Trems

pp 479-488

Publication Date (Web): January 17, 2013 (Article)

DOI: 10.1021/cm303830b

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Nanostructured Monolayers on Carbon Substrates Prepared by Electrografting of Protected Aryldiazonium Salts

Yann R. Leroux and Philippe Hapiot

pp 489-495

Publication Date (Web): January 18, 2013 (Article)

DOI: 10.1021/cm303844v

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Superstructure of Mullite-type KAl_9O_{14}

Biljana Lazic, Hannes Krüger, Reinhard Kaindl, Lukas Perfler, Aleksandar Kremenović, Vladica Cvetković, and Ray L. Withers

pp 496-502

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Electrochemical and Solid-State Lithiation of Graphitic C_3N_4

Gabriel M. Veith, Loïc Baggetto, Leslie A. Adamczyk, Bingkun Guo, Suree S. Brown, Xiao-Guang Sun, Austin A. Albert, James R. Humble, Craig E. Barnes, Michael J. Bojdys, Sheng Dai, and Nancy J. Dudney

pp 503-508

Publication Date (Web): January 23, 2013 (Article)

DOI: 10.1021/cm303870x

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Invisible Gates for Moving Water Droplets: Adhesive Force Gradients on a Biomimetic Superhydrophobic Surface

Daisuke Ishii and Masatsugu Shimomura

pp 509-513

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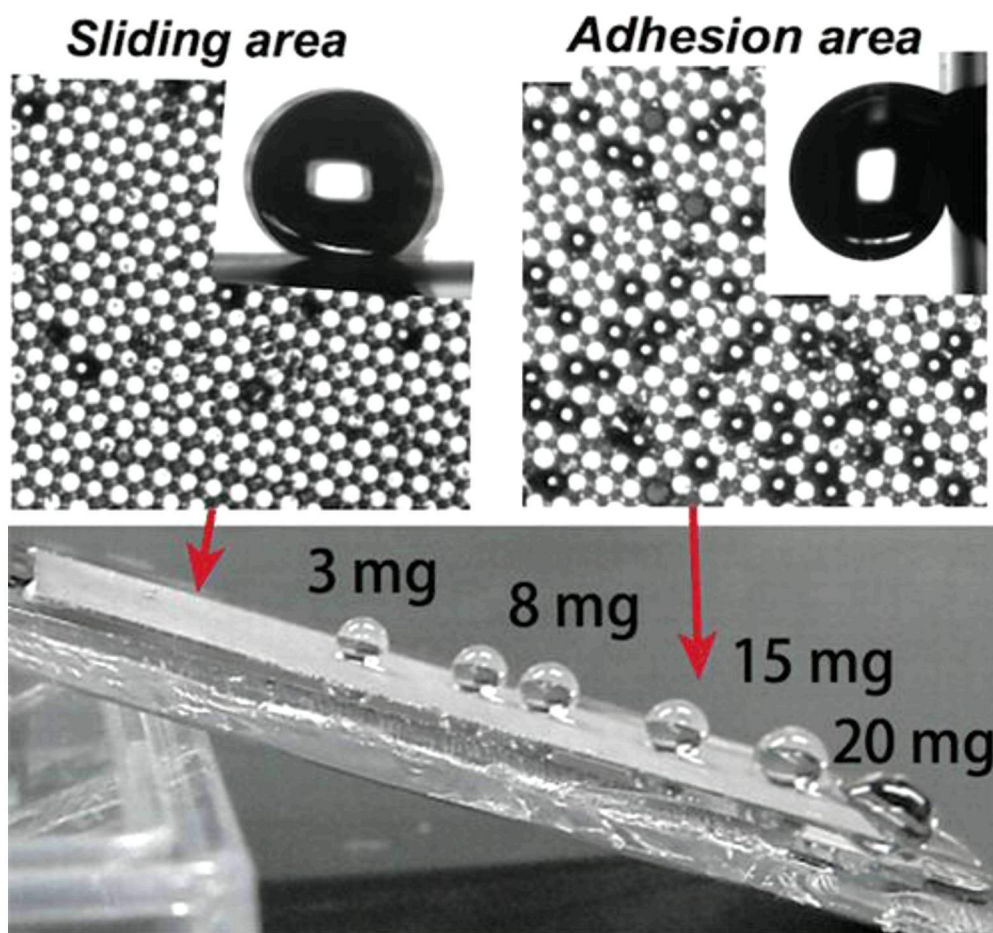


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Pulsatile Releasing Platform of Nanocontainers Equipped with Thermally Responsive Polymeric Nanovalves

Michał Szuwarzyński, Leszek Zaraska, Grzegorz D. Sulka, and Szczepan Zapotoczny

pp 514-520

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DOI: 10.1021/cm303930y

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