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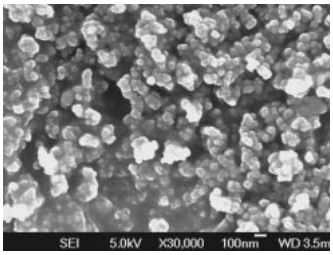
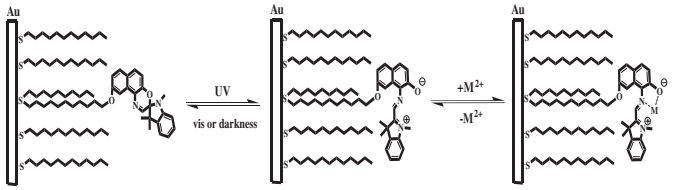
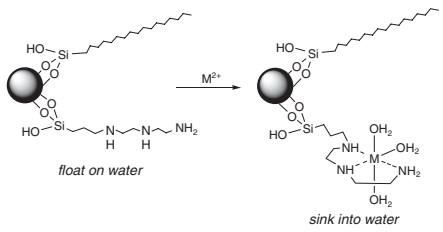
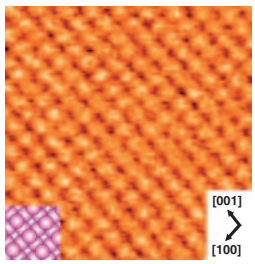
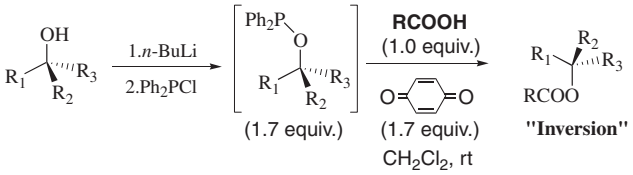


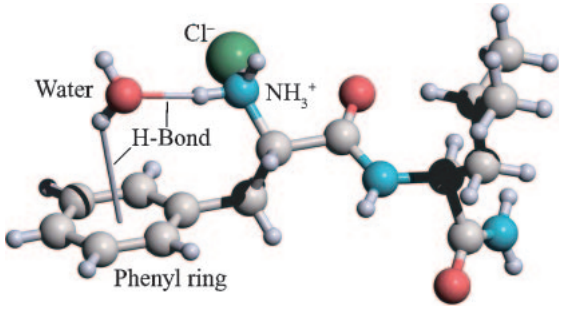


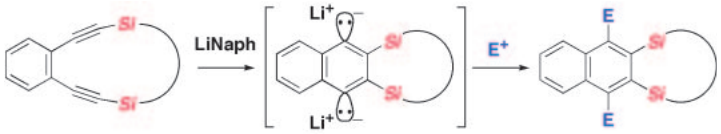
Self-assembled monolayer containing spironaphthoxazine-thioether (SNOTE) can detect metal ions based on the complexation property of the open ring form of spironaphthoxazine upon UV irradiation.

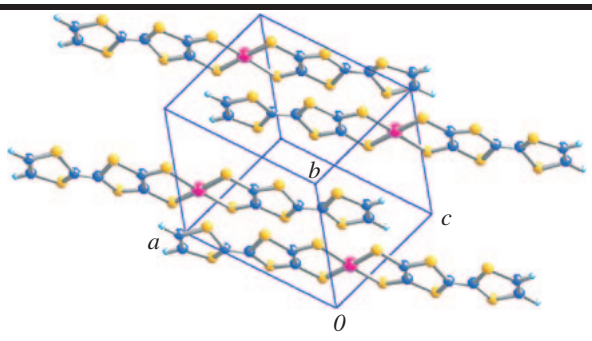


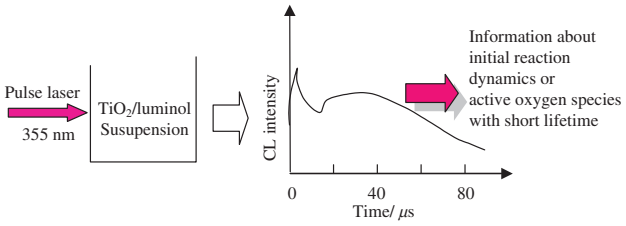


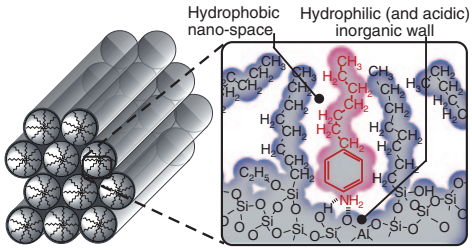


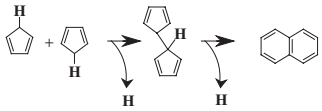




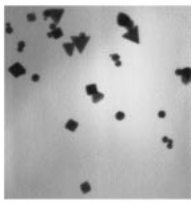


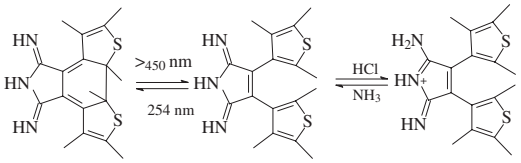






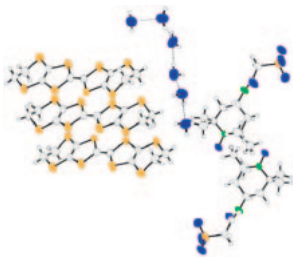
Triangular, square, and hexagonal gold nanoplates with diameters of 30–90 nm were rapidly produced by a microwave-polyol method.





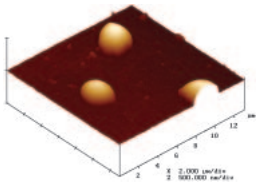
III DIN—BTE(II) IV

The title BEDT-TTF salt is a new organic magnetic conductor that includes the TEMPO radical as a part of the anion. It is a semiconductor (ρ_{RT} = 5.1 Ω·cm) and one-dimensional ferromagnetic material (J = +0.42 K).



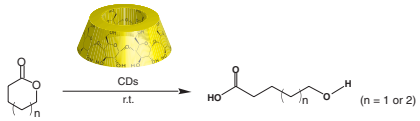
1120 **Synthesis and Formation of Supramolecular Spherical Aggregates from Poly(benzyl ether) Dendrimers Having 21-Oxoporphyrin Core**

The formation of spherical shaped micro-meter size self-assembly of poly(benzyl ether) dendrimers containing N_3O porphyrin core is reported.



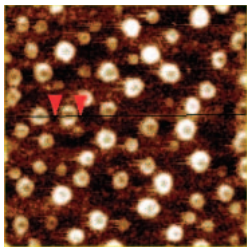
D. Kumaresan and M. Ravikanth

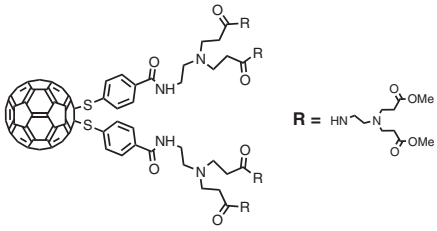
1122 **Inclusion Complex Formation and Hydrolysis of Lactones by Cyclodextrins**



Yoshinori Takashima, Yoshinori Kawaguchi, Shinya Nakagawa, and Akira Harada

1124 **Photoinduced Dithiolation of Fullerene[60] with Dendrimer Disulfide**





Yutaka Takaguchi, Yoshiaki Katayose, Yasushi Yanagimoto, Jiro Motoyoshiya, Hiromu Aoyama, Takatsugu Wakahara, Yutaka Maeda, and Takeshi Akasaka

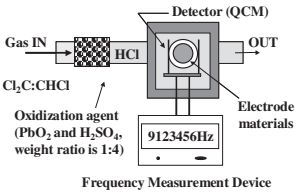
1126 **Synthesis and Characterization of $Ni(OH)_2$ Single-crystal Nanorods**

A template-free hydrothermal method to $Ni(OH)_2$ single-crystal nanorods were successfully established based on the 2-D layered structures of $Ni(OH)_2$. The obtained $Ni(OH)_2$ nanorods were 40–90 nm in diameters and 1–3 μm in lengths. It is expected that the current method may be developed to a general method to 1-D nanorods or nanotubes of hydroxides $M(OH)_2$ (M = Co, Fe, Cd, Mg, Ca) with CdI_2 type.

Jiahe Liang and Yadong Li

1128 **Sensitivity Improvement in the Detection of Trichloroethylene by Applying Oxidizing Agents to the Quartz Crystal Microbalance Method**

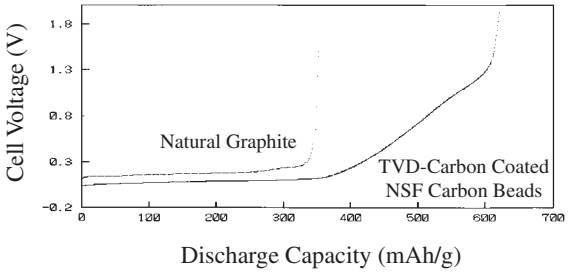
A new QCM method uses oxidizing agents such as PbO_2 and H_2SO_4, by which TCE is converted into HCl, which in turn reacts directly with a copper electrode placed on the quartz crystal surface.



Kazutoshi Noda, Ryuuichi Naganawa, Yasumasa Kanekiyo, and Hiroaki Tao

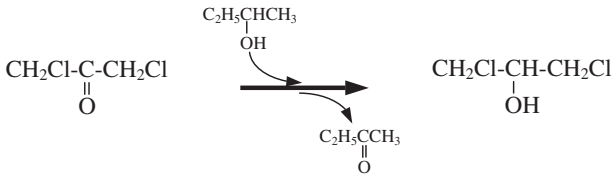
1130 **Soft Carbon-coated Hard Carbon Beads as a Lithium-ion Battery Anode Material**

Masaki Yoshio, Hongyu Wang, Kenji Fukuda, Takeshi Abe, and Zempachi Ogumi



1132 **Selective Reduction of α-Chloroketone to α-Chloroalcohol Using Hydrogen Transfer from Alcohol over Metal Oxide Catalysts**

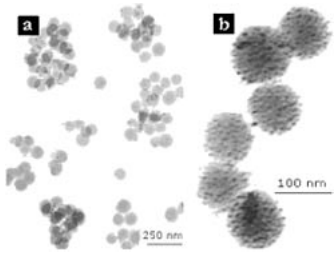
Kunihiro Gotoh, Jun Kubo, Wataru Ueda, Tohru Mori, and Yutaka Morikawa



The reaction is promoted by MgO, $SiO_2 \cdot Al_2O_3$, Al_2O_3, and ZrO_2.

1134 **Fabrication of Silica/Polystyrene Nanocomposite Microspheres by γ-Ray Irradiation**

Dazhen Wu, Xuewu Ge, Songnan Chu, and Zhicheng Zhang



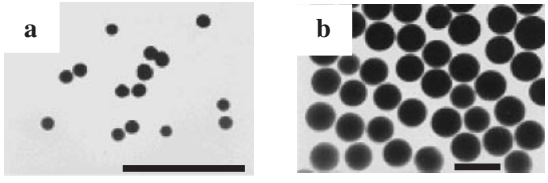
1136 **Isolation of a Novel Singly Oxo-bridged Low-spin Fe(II) Dimeric Complex: Synthesis, Crystal Structure, and Spectroscopic Study**

Manas Kumar Saha, Dilip Kumar Dey, Chirantan Roy Choudhury, Subrata Kumar Dey, Samiran Mitra, and Christian W. Lehmann

Redox reaction between $[(phen)_4Fe_2(Cl)_2(\mu\text{-}O)]Cl_2 \cdot 4.5H_2O$ (phen=1,10-phenanthroline) and $Mn(OH)_2 \cdot xH_2O$ in water methanol solution at refluxing temperature under inert atmosphere gives one novel low-spin iron(II)–oxo complex $[(phen)_4Fe_2(Cl)_2(\mu\text{-}O)] \cdot 4H_2O$ (**1**).

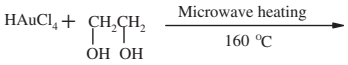
1138 **Preparation of Uniform Nanospheres with a Hydrophilic Core and a Hydrophobic Corona by the Macromonomer Method**

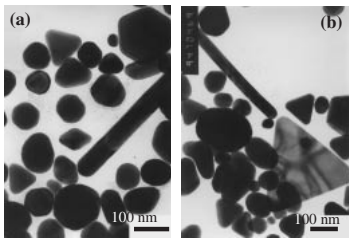
Ming-Qing Chen, Tatsuo Kaneko, Ming Zhang, Xiao-Ya Liu, Kang Wu, and Mitsuru Akashi



TEM images of Uniform Nanospheres Comprised of Hydrophilic Core and Hydrophobic Corona. (a) not cross-linked (b) cross-linked (Bar: 500 nm)

1140 **Microwave-polyol Preparation of Single-crystalline Gold Nanorods and Nanowires**

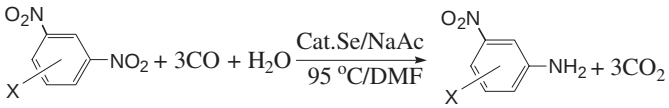




Ying-Jie Zhu and Xian-Luo Hu

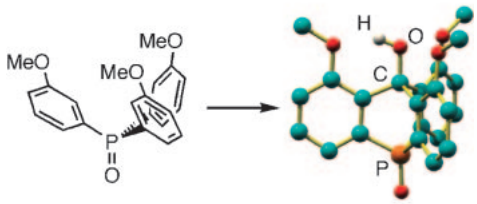
1142 **A Convenient, Efficient, and Environmentally Benign Method for Preparing Nitroanilines**

An efficient method for the catalytic monoreduction of aromatic dinitro compounds to nitroanilines is reported. In the presence of selenium as a catalyst, the dinitroaromatic compounds are selectively reduced by CO/H_2O to the corresponding nitroanilines under atmospheric pressure. The reduction occurs with high selectivity regardless of the substitution groups on the aromatic ring without affecting other reducible functionalities.



Xiao-zhi Liu and Shi-wei Lu

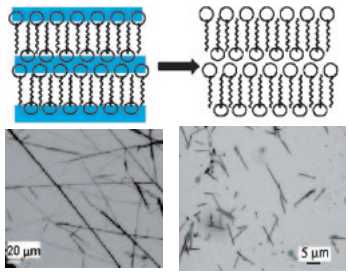
1144 **A Novel and Convenient Synthetic Route to a 9-Phosphatriptycene and Systematic Comparisons of 9-Phosphatriptycene Derivatives**



Junji Kobayashi, Tomohiro Agou, and Takayuki Kawashima

1146 **Effective Shortening in Length of Glycolipid Nanotubes with High Axial Ratios**

We reported a simple and general approach to shorten the high-axial-ratio lipid nanotubes (LNTs) using a mechanical stirring system, which depends on the hydrogen bond network feature.



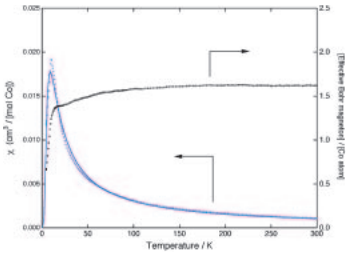
Bo Yang, Shoko Kamiya, Hiroharu Yui, Mitsutoshi Masuda, and Toshimi Shimizu

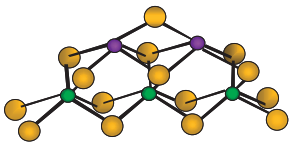
1148 **Sliding Mode Transition of Water Droplet on the Silicon Surface Coated with Octadecyltrichlorosilane**

Sliding behavior of a water droplet on the silicon wafer coated with octadecyltrichlorosilane

Akira Nakajima, Shunsuke Suzuki, Yoshikazu Kameshima, Naoya Yoshida, Toshiya Watanabe, and Kiyoshi Okada

1150 **A Novel Active Site Structure of Hydrodesulfurization Catalysts**

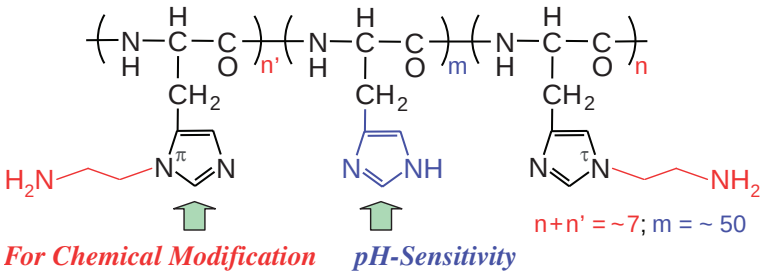




A novel Co dinuclear structure of the CoMoS phase is proposed for HDS catalysts.

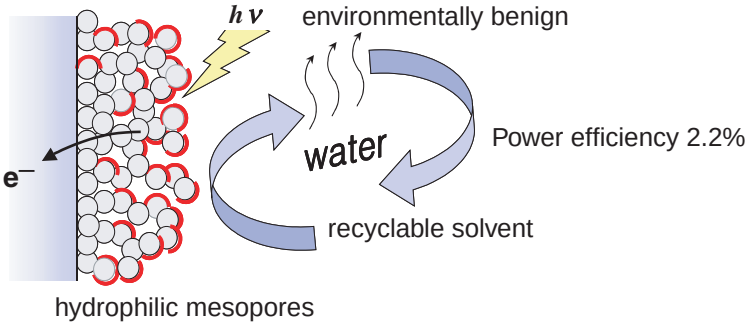
Yasuaki Okamoto, Takao Kawabata, Takeshi Kubota, and Ichiro Hiromitsu

1152 **Facile Chemical Modification of the Poly(L-histidine) for a New pH-Sensitive Polypeptide**



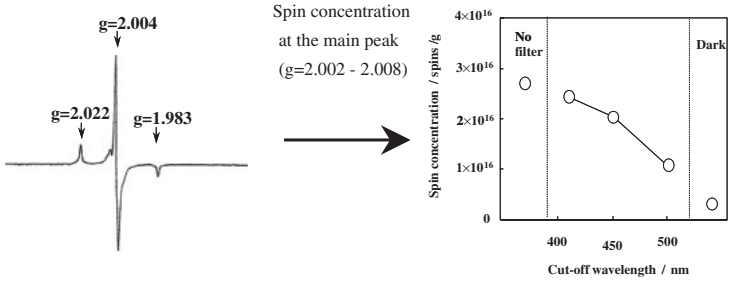
Shoichiro Asayama, Hiroyoshi Kawakami, and Shoji Nagaoka

1154 **Water-based Dye-sensitized Solar Cells: Interfacial Activation of TiO_2 Mesopores in Contact with Aqueous Electrolyte for Efficiency Development**



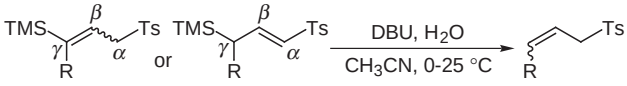
Takurou N. Murakami, Haruhisa Saito, Sadao Uegusa, Norimichi Kawashima, and Tsutomu Miyasaka

1156 **Photocatalytic Decomposition of Acetaldehyde under Visible Light Irradiation over La^{3+} and N Co-doped TiO_2**



Yoshiaki Sakatani, Jun Nunoshige, Hiroyuki Ando, Kensen Okusako, Hironobu Koike, Tsuyoshi Takata, Junko N. Kondo, Michikazu Hara, and Kazunari Domen

1158 **"*Syn-Effect*" in the Desilylation Reaction of γ-Silylated Allylic and Vinylic Sulfones**

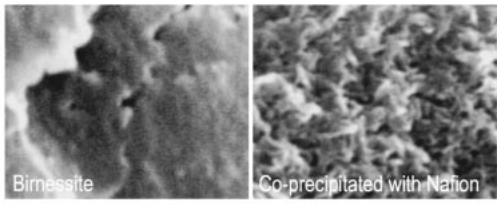


The relative degree of *"syn-effect"* depending on the γ-substituents R;
CH_3O- > CH_3- > CH_3CH_2- > $PhCH_2$- > PhS- > $(CH_3)_2CH$- > Ph- > $(CH_3)_3C$-

Samar Kumar Guha, Yutaka Ukaji, and Katsuhiko Inomata

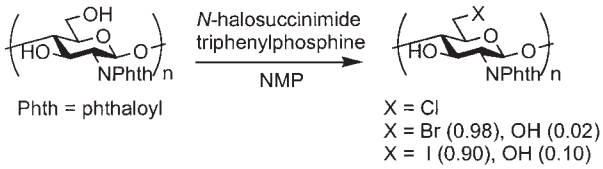
1160 **Improved Cycleability of Li-Birnessite by Coprecipitation with Nafion**

Li-birnessite manganese oxide coprecipitated with Nafion showed improved rechargeability as a cathode material.



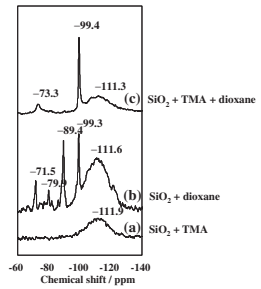
Xiaojing Yang, Weiping Tang, Zong-huai Liu, Kazuya Ikeda, and Kenta Ooi

1162 **Highly Regioselective Deoxyhalogenation at the C-6 Positions of *N*-Phthaloylchitosan with *N*-Halosuccinimide–Triphenylphosphine System**



Taku Satoh and Nobuo Sakairi

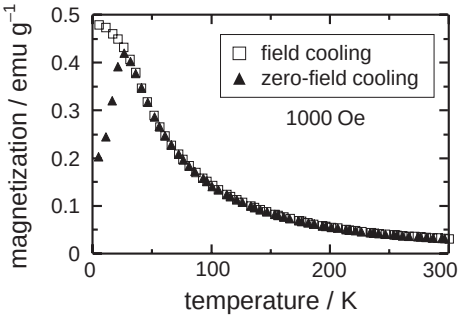
1164 **Promoting Effect of Cyclic Ethers in the Layered Silicate Synthesis**



Results of ^{29}Si-NMR

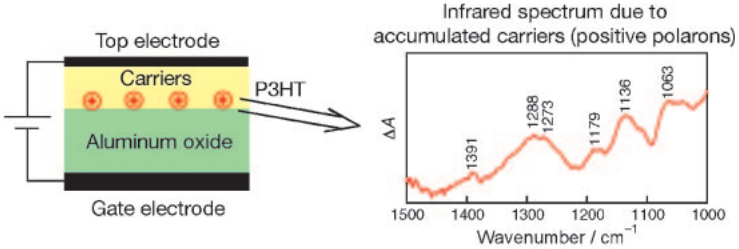
Akiko Kawai, Takuji Ikeda, Yoshimichi Kiyozumi, and Fujio Mizukami

1166 **Preparation of Iron Oxide Nanoparticles via Successive Reduction–Oxidation in Reverse Micelles**



Takuya Nakanishi, Hironori Iida, and Tetsuya Osaka

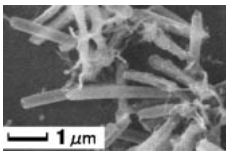
1168 **Infrared Absorption Induced by Field Effect from a Metal–Insulator–Semiconductor Diode Fabricated with Regioregular Poly(3-hexylthiophene)**

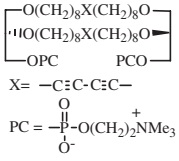


Hiroki Takao and Yukio Furukawa

1170 **Self-assembling Lipid Microtubules Based on Cyclobolaphile That Mimics Archaeal Membrane Lipid**

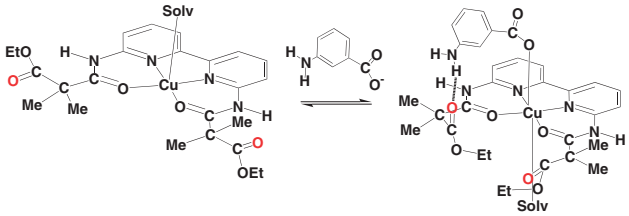
Cyclobolaphile **1** that contains a macrocyclic ring having diacetylenic alkyl chains in a hydrophobic segment and phosphatidylcholine as a hydrophilic head group self-assembles into elastic hollow tubules.





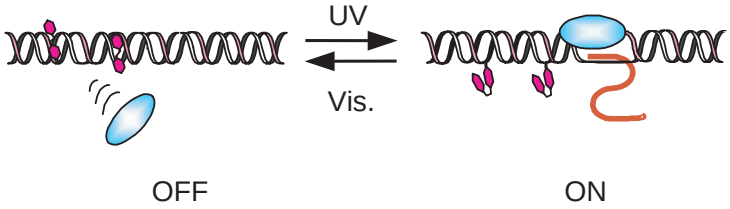
Kazuhiro Miyawaki, Rie Goto, and Motonari Shibakami

1172 **Molecular Recognition by a Cu(II)-2,2′-bipyridine Complex Involving Coordination and Hydrogen Bonding**



Takahiko Kojima, Hironori Kitaguchi, Yoshimitsu Tachi, Yoshinori Naruta, and Yoshihisa Matsuda

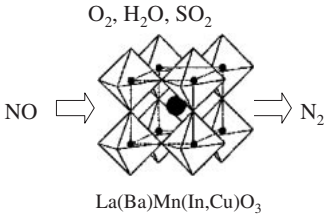
1174 **Synergistic Effect of the Two Azobenzenes in the Promoter on the Photo-regulation of Transcription Reaction with SP6 RNA Polymerase**



Mingzhe Liu, Daisuke Tamaru, Hiroyuki Asanuma, and Makoto Komiyama

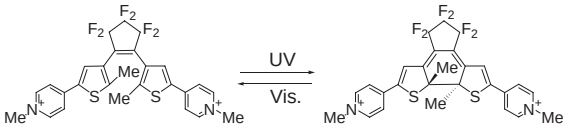
1176 **Direct Decomposition of NO on Cu-Doped La(Ba)Mn(In)O_3 Perovskite Oxide under Coexistence of O_2, H_2O, and SO_2**

NO direct decomposition into N_2 and O_2 proceeds on the perovskite oxide of $La_{0.7}Ba_{0.3}Mn_{0.6}In_{0.2}Cu_{0.2}O_3$ under coexistence of O_2, H_2O, and SO_2 at high temperature of 1123K.



Tatsumi Ishihara, Kazuhiro Anami, Keiko Takiishi, Hiroshi Yamada, Hiroyasu Nishiguchi, and Yusaku Takita

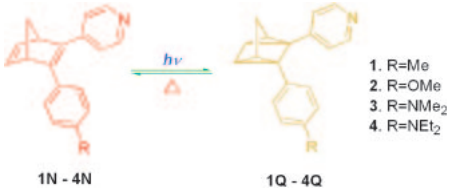
1178 **Very High Cyclization Quantum Yields of Diarylethene Having Two *N*-Methylpyridinium Ions**



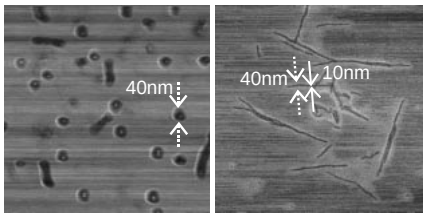
Very High cyclization quantum yield

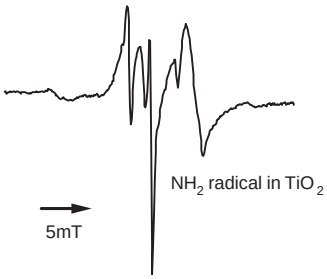
Kenji Matsuda, Yoshihiro Shinkai, Tadatsugu Yamaguchi, Kazuko Nomiyama, Munetoshi Isayama, and Masahiro Irie

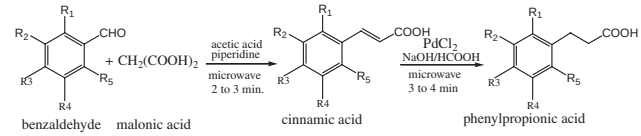
New donor-acceptor 2,3-diarylnorbornadienes (1N–4N) showing high quantum yields for the blue light induced valence isomerization from the norbornadienes into quadricyclanes are described.



AFM analyses suggested that a new diblock copolymer, polyethylene-*b*-poly(ethylene-*co*-propylene) (PE-*b*-EPR), in which the PE lamella is covered with the amorphous EPR segment, can exist on a mica surface without aggregation and possesses a propensity to assemble to one another to form a needle-like structure.







(a) R_2= R_3= OMe; R_1= R_2= R_5= H
(b) R_2= R_3= R_4= OMe; R_1= R_5= H
(c) R_2+ R_3= -OCH_2CH_2O-; R_1= R_2= R_5= H
(d) R_4= OMe; R_1= R_2 =R_3= R_5= H
(e) R_1= R_2=R_3=R_4= R_5= H
(f) R_2=OH; R_1=R_3=R_4= R_5= H

$$PCl_3 + NaBH_4 \xrightarrow{600\ ^\circ C} BP + NaCl + 2HCl + H_2$$

Nanocrystalline BP with the cubic cell has been successfully prepared by the convenient reaction of PCl_3 with $NaBH_4$ at 600 °C.

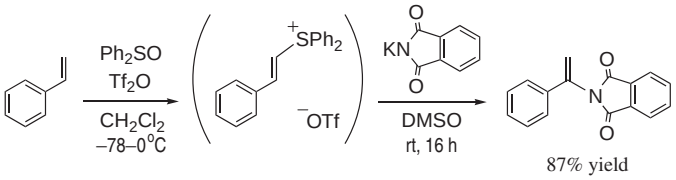
1190 **Combined Multiple Claisen Rearrangement and Ring-closing Metathesis as a Route to Naphthalene, Anthracene, and Anthracycline Ring Systems**

Shital K. Chattopadhyay, Benoy K. Pal, and Susama Maity

A new route involving tandem double Claisen rearrangement and ring-closing metathesis has been developed for the synthesis of naphthlane, anthracene and anthracycline ring systems.

1192 **A Convenient Method for the Synthesis of α-Imidostyrenes from Styrenes and Imides via Diphenylstyrylsulfonium Salts**

Hiroyuki Yamanaka and Teruaki Mukaiyama



1194 **Effects of Surface Passivation on Silicon Nanoparticle Photoluminescence**

David E. Harwell, John C. Croney, Wenjie Qin, John T. Thornton, Jason H. Day, Evan K. Hajime, and David M. Jameson