

Chemistry Letters

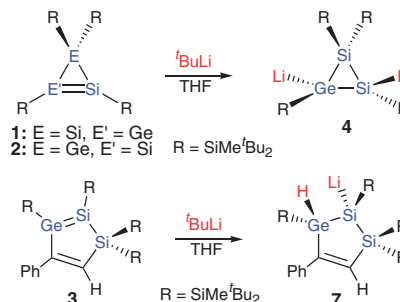
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Vol.33 No.2
February, 2004

CMLTAG
ISSN 0366-7022

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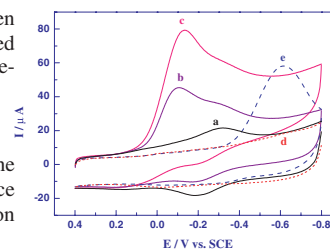
- 84 Unexpected Hydrolithiation of M=M' Double Bond (M, M' = Si, Ge) with ^tBuLi



Vladimir Ya. Lee and Akira Sekiguchi

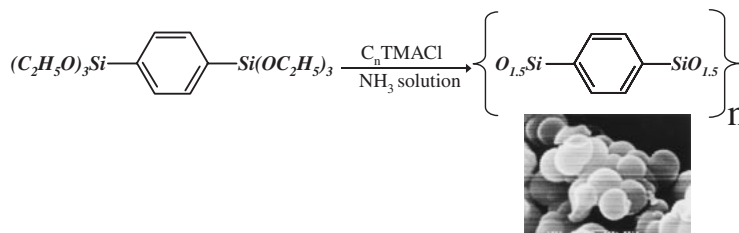
- 86 Electroreduction of Oxygen by Myoglobin on Multi-walled Carbon Nanotube-Modified Glassy Carbon Electrode

Direct electron transfer between myoglobin and electrode was achieved with a multi-walled carbon nanotube-modified glassy carbon electrode. Myoglobin adsorbed on multi-walled carbon nanotubes showed a strong electrocatalytic activity for the reduction of oxygen and could reduce the overpotential for O₂ reduction about 500 mV.



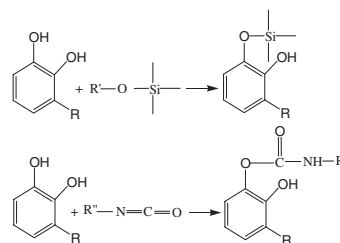
Li Zhang, Guang-Chao Zhao, Xian-Wen Wei, and Zhou-Sheng Yang

- 88 Synthesis of Phenylene Bridged Mesoporous Silsesquioxanes with Spherical Morphology in Ammonia Solution



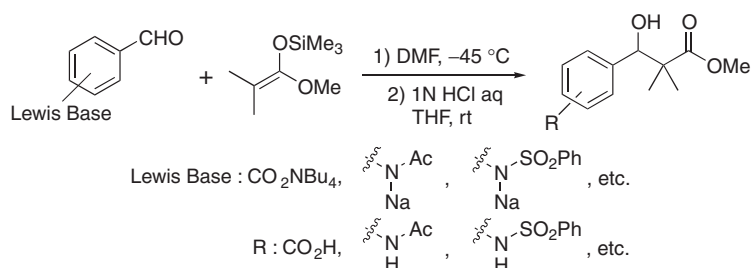
Mahendra P. Kapoor and Shinji Inagaki

- 90 Studies on the Fast Drying Hybrid Urushi in Low Humidity Environment



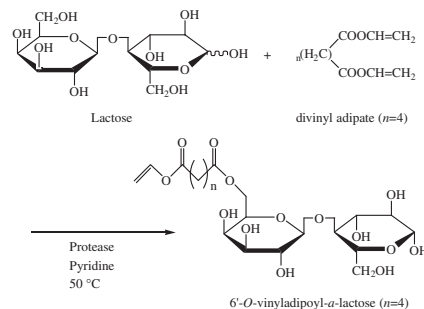
Kisuke Nagase, Rong Lu, and Tetsuo Miyakoshi

- 92 **Self-promoted Aldol Reaction between Aldehyde Having Lewis Base Moiety and Trimethylsilyl Enolate**



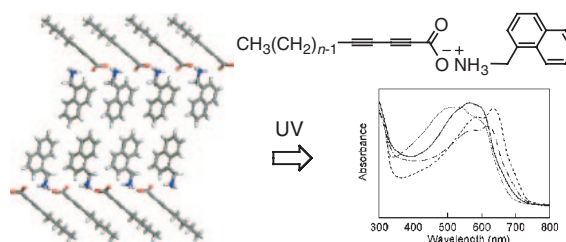
Takashi Nakagawa, Hidehiko Fujisawa, and Teruaki Mukaiyama

- 94 **Highly Anomer- and Regio-selective Transesterification Catalyzed by Alkaline Protease from *Bacillus subtilis* in Organic Media**



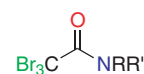
Qi Wu, Deshui Lu, Yongmei Xiao, Shiping Yao, and Xianfu Lin

- 96 **Solid-state Photopolymerization of Diacetylene-containing Carboxylates with Naphthylmethylammonium as the Counteranion in a Two-dimensional Array**



Akikazu Matsumoto, Akinori Matsumoto, Takafumi Kunisue, Akira Tanaka, Norimitsu Tohnai, Kazuki Sada, and Mikiji Miyata

- 98 **Isolation of Tribromoacetamide from an Okinawan Alga and Biological Activities of Its Analogs**



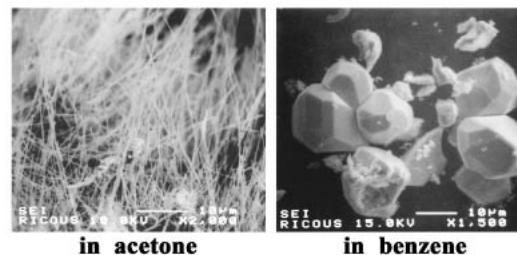
tribromoacetamides

Tribromoacetamide ($R = R' = \text{H}$) was isolated from the Okinawan alga *Wrangelia* sp., and the biological activities of its analogs were investigated.

Hideo Kigoshi, Takao Ichino, Noboru Takada, Kiyotake Suenaga, Akihiro Yamada, Kaoru Yamada, and Daisuke Uemura

- 100 **Unusual Crystallization Behavior of Selenium in the Presence of Organic Molecules at Room Temperature**

Amorphous Se →

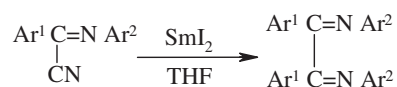


Tsukio Ohtani, Norihiro Takayama, Kazuaki Ikeda, and Masako Araki

102 **A Novel Decyanogenative Coupling of α -Cyanoimines Mediated by Samarium. A Facile Route to α -Diketimines**

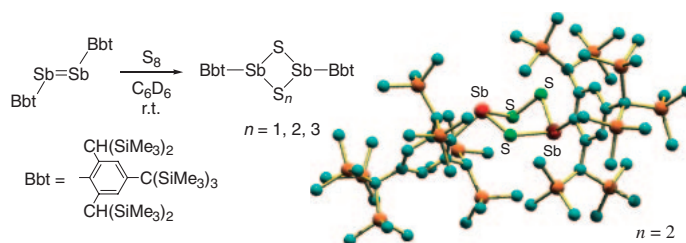
Ashim J. Thakur, Dipak Prajapati, and Jagir S. Sandhu

Conversion of α -cyanoimines into α -diketimines has been achieved successfully by using samarium diiodide in dry tetrahydrofuran in high yields without formation of any side products.



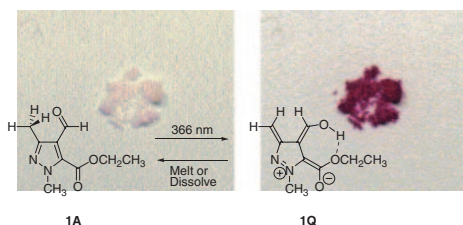
104 **Reaction of an Overcrowded Distibene with Elemental Sulfur and Crystallographic Analysis of the Sulfurization Products**

Takahiro Sasamori, Eiko Mieda, Nobuhiro Takeda, and Norihiro Tokitoh



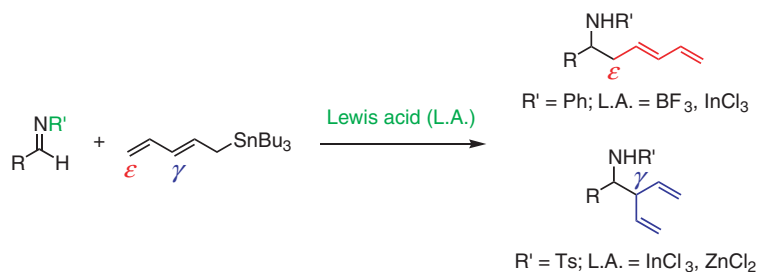
106 **Thermally Reversible Photochromism of Pyrazole Derivatives**

Yasushi Yokoyama, Yuko Kurimoto, Yasuyo Saito, Manabu Katsurada, Itaru Okada, Yasuko T. Osano, Chizuko Sasaki, Yayoi Yokoyama, Hideyuki Tukada, Masafumi Adachi, Shinichiro Nakamura, Tetsuo Murayama, Toshie Harazono, and Tetsuya Kodaira



108 **Binary Regiocontrol in the Reaction between Pentadienylnitrile and Imines by Lewis Acids and *N*-Substituents**

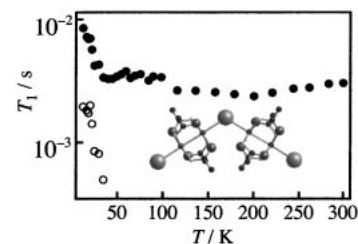
Yutaka Nishigaichi, Masahiko Ishihara, Shigeo Fushitani, Kenji Uenaga, and Akio Takuwa



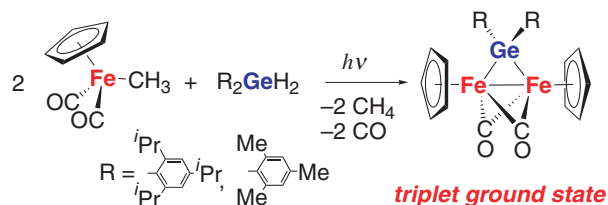
110 **A ^1H NMR Study on the Electronic State of a Chloride-bridged Tetrakis(acetamidato)dirhodium Complex**

Miho Yamauchi, Yasuaki Takazaki, Zhiyong Yang, Takashi Kawamura, and Ryuichi Ikeda

The spin structure of a chain of $[\text{Rh}_2(\text{acam})_4\text{Cl}]_n$ (Hacam = acetamide) was investigated in a temperature range 4–300 K by the solid-state ^1H NMR spin-lattice relaxation time (T_1) measurement. The observed ^1H relaxation was well explained by the fluctuation of the magnetic dipolar interaction between proton and paramagnetic electron spins on the Rh dimer.

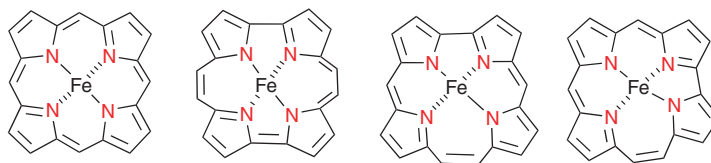


- 112 **Synthesis and Characterization of Triplet Gernylene-bridged Diiron Complexes and Singlet Stannylene-bridged Diiron Complexes**



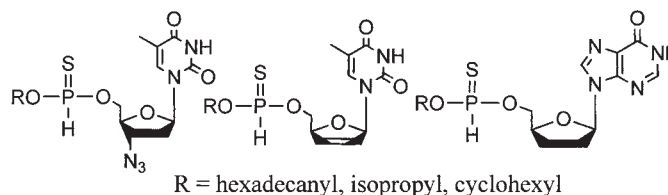
Bahaa A. S. Mohamed, Mami Kikuchi, Hisako Hashimoto, Keiji Ueno, Hiromi Tobita, and Hiroshi Ogino

- 114 **Influence of Metallo Core Variation on 1-Methylimidazole Ligation to the Iron(III) in Porphyrin, Porphycene, Corrophycene, and Hemiporphycene**



Saburo Neya, Tyuji Hoshino, Masayuki Hata, and Noriaki Funasaki

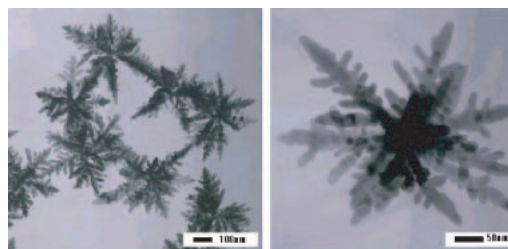
- 116 **Synthesis of Novel 5'-Hydrogenphosphonothioate Derivatives of AZT, d4T and ddI**



Ying Jin, Ming Sun, Hua Fu, and Yu-Fen Zhao

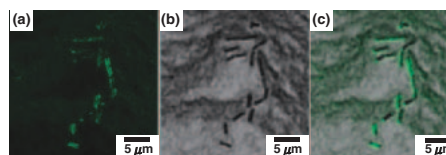
- 118 **Preparation of Silver Dendritic Nanoparticles Using Sodium Polyacrylate in Aqueous Solution**

Silver dendritic nanoparticles of uniform size and morphology have been prepared at room temperature using ascorbic acid as a reducing agent and sodium polyacrylate (PAA) as a protective agent in aqueous solution.



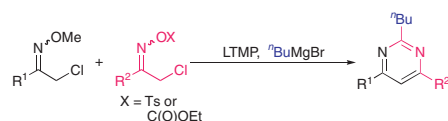
Gil-Jae Lee, Seung-II Shin, and Seong-Geun Oh

- 120 **Facile and Stable Dispersion of Carbon Nanotubes into a Hydrogel Composed of a Low Molecular-weight Gelator Bearing a Tautomeric Dye Group**



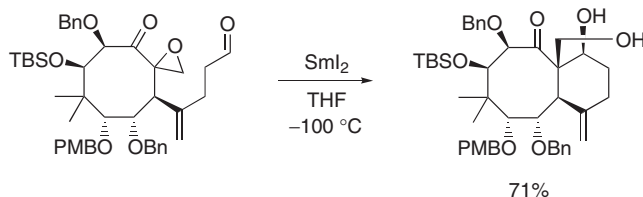
Masayoshi Asai, Kazunori Sugiyasu, Norifumi Fujita, and Seiji Shinkai

- 122 **Synthesis of Pyrimidines via Base-induced Condensation of α -Chloro Oxime Derivatives**



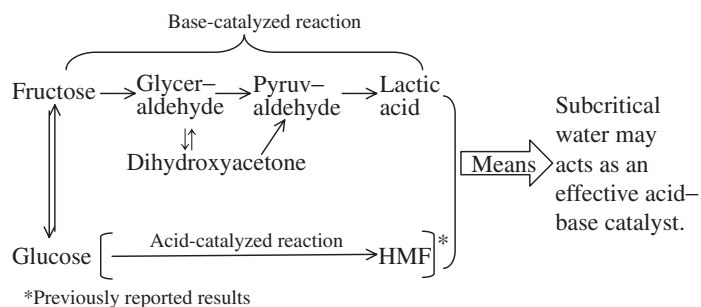
Takayuki Tsuritani, Hiroshi Shinokubo, and Koichiro Oshima

- 124 **Stereoselective Construction of BC-ring unit of 19-Hydroxytaxol by Samarium(II) Iodide-mediated Double Aldol Cyclization**



Jun-ichi Matsuo, Yasuyuki Ogawa, Khanitha Pudhom, and Teruaki Mukaiyama

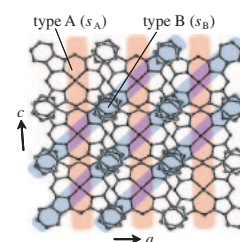
- 126 **Conversion Mechanism of Cellulosic Biomass to Lactic Acid in Subcritical Water and Acid-base Catalytic Effect of Subcritical Water**



Fangming Jin, Zhouyu Zhou, Heiji Enomoto, Takehiko Moriya, and Hisao Higashijima

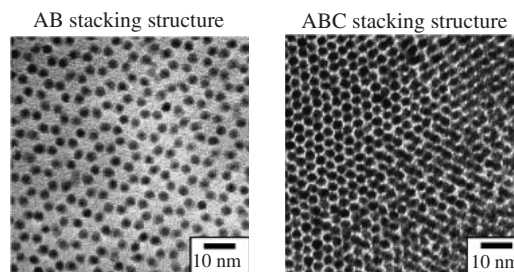
- 128 **Novel Phthalocyanine Conductor Containing Two-dimensional Pc Stacks, $[\text{PXX}]_2[\text{Co}(\text{Pc})(\text{CN})_2]$ (PXX = *peri*-Xanthenoxanthene, $\text{Co}(\text{Pc})(\text{CN})_2$ = Dicyano(phthalocyaninato)-cobalt(III))**

A novel phthalocyanine conductor containing 2-D π - π stacks of the partially oxidized $\text{Co}(\text{Pc})(\text{CN})_2$ units has been obtained by the electrochemical oxidation method with PXX.



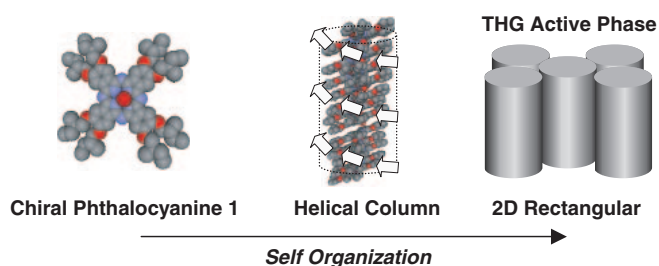
Takehiro Asari, Toshio Naito, Tamotsu Inabe, Masaki Matsuda, and Hiroyuki Tajima

- 130 **Novel Synthesis of FePt Nanoparticles and Magnetic Properties of Their Self-assembled Superlattices**



Masafumi Nakaya, Yuko Tsuchiya, Kenchi Ito, Yasunori Oumi, Tsuneji Sano, and Toshiharu Teranishi

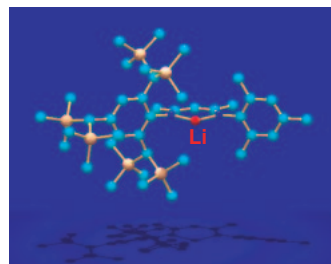
- 132 **Enhanced Third-order Optical Nonlinearity in Helical Assembly of a Chiral Vanadyl Phthalocyanine**



Tsuyoshi Muto, Takafumi Sassa, Tatsuo Wada, Mutsumi Kimura, and Hirofusa Shirai

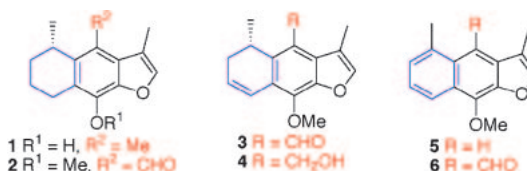
- 134 **A Monomeric, Donor-free Lithium Complex with a New Overcrowded β -Diketiminato Ligand**

A monomeric, donor-free complex of lithium with a new overcrowded β -diketiminato ligand was synthesized and isolated as colorless crystals, the unique structure of which was revealed by X-ray structural analysis.



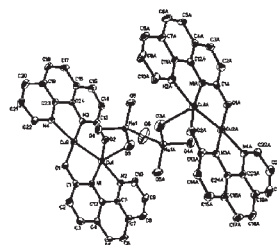
Nobuhiro Takeda, Hirofumi Hamaki, and Norihiro Tokitoh

- 136 **Total Synthesis of Five Cacalol Families at Different Oxidation Stages, Modified Furanorempholane Sesquiterpenes from *Cacalia* and *Senecio* Species**



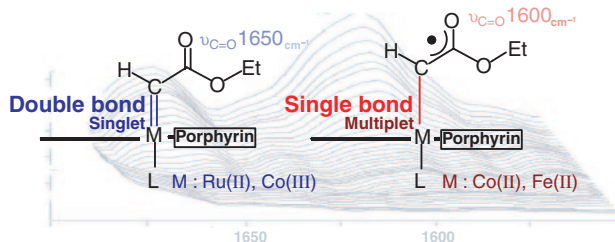
Yoshinori Hirai, Matsumi Doe, Takamasa Kinoshita, and Yoshiki Morimoto

- 138 **Synthesis and Characterization of a New Hybrid-metallic Complex Containing Mixed-valence Cu^I/Cu^{II} Units Generated by Hydrothermal Redox Reaction**



Qihua Zhao, Xiaofeng Wang, Yuqi Liu, and Ruibin Fang

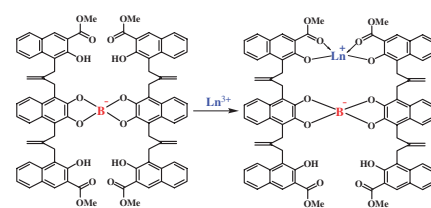
- 140 **FT-IR and Theoretical Analysis of the Characteristic Bonding Properties in the Multiplet Metal Porphyrin Carbene Complexes**



Izumi Iwakura, Hiroataka Tanaka, Taketo Ikeno, and Tohru Yamada

142 **Synthesis of the Boron Complex Composed of the Noncyclic Ligands Having Plural Hydroxy Groups and the Binding Ability Toward Lanthanoid Ions**

The boron complex composed of the noncyclic ligand having plural hydroxy groups behaves as a complex ligand and forms a hetero-binuclear complex with a lanthanoid ion.



Naohiro Kameta, Kazuhisa Hiratani, Hirohiko Houjou, and Masatoshi Kanesato

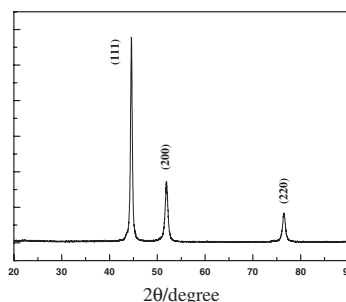
144 **A Low-temperature Coreduction Route to Boron Nitride Flakes and Hollow Spheres**



Boron nitride flakes and hollow spheres have been synthesized by coreduction of NH_4Cl and BBr_3 using metallic sodium as reductant.

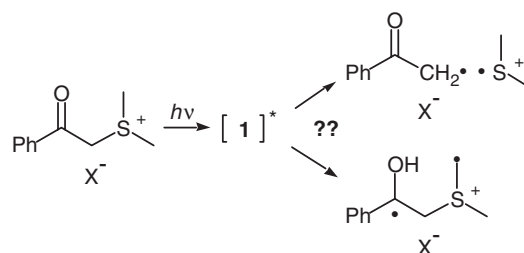
Luyang Chen, Yunle Gu, Liang Shi, Zeheng Yang, Jianhua Ma, and Yitai Qian

146 **Preparation of Nanosized Nickel Particles by Hydrothermal Method**



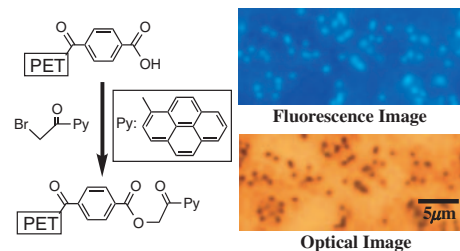
Feibao Zhang, Yuantao Chen, Jiazheng Zhao, and Hulin Li

148 **Laser Flash Photolysis Study of Dialkylphenacylsulfonium Salts**



Koichi Kawamura, Kunihiko Kodama, Katsuyuki Hirai, and Hideo Tomioka

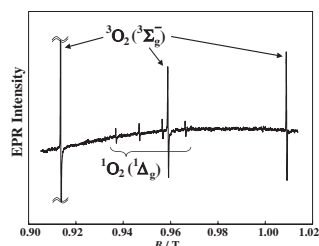
150 **Visualization of Chemical Modification of Pore Internal Surfaces Using Fluorescence Microscopy**



Yasunari Maekawa, Yasuyuki Suzuki, Katsuya Maeyama, Noriyuki Yonezawa, and Masaru Yoshida

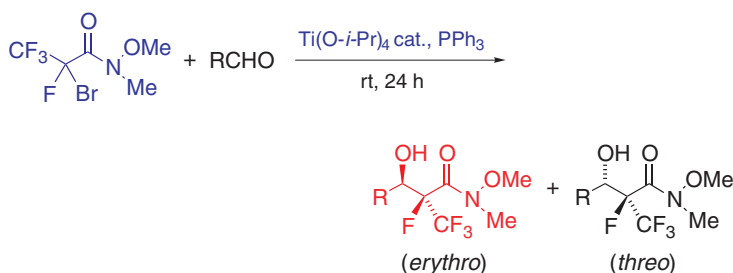
- 152 **Measurement of Concentration of Singlet Molecular Oxygen in the Gas Phase by Electron Paramagnetic Resonance**

Mikio Yagi, Syougo Takemoto, and Ryouji Sasase



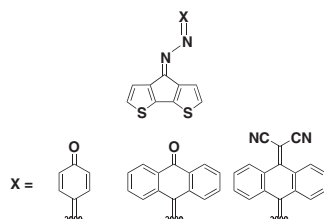
- 154 **Highly Stereoselective Aldol-type Reaction of 2-Bromo-2,3,3,3-tetrafluoropropanamide with Aldehydes Leading to erythro- α -Fluoro- α -(trifluoromethyl)- β -hydroxy Amides**

Kei Sato, Takashi Sekiguchi, Takashi Ishihara, Tsutomu Konno, and Hiroki Yamanaka



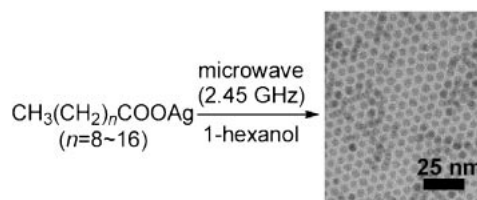
- 156 **Amphoteric Quinone-azine-cyclopentadienylthiophene System**

Masatoshi Kozaki, Hiroaki Igarashi, and Keiji Okada



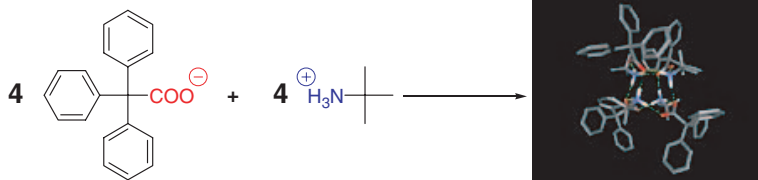
- 158 **Microwave-assisted Preparation of Silver Nanoparticles**

Tetsushi Yamamoto, Yuji Wada, Takao Sakata, Hirotarō Mori, Masaki Goto, Shingo Hibino, and Shozo Yanagida



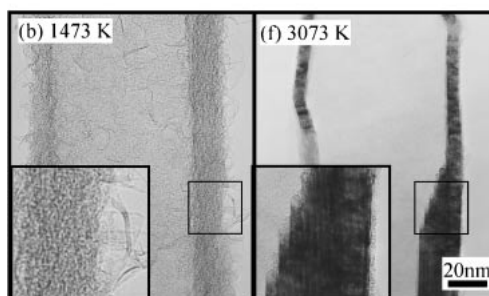
- 160 **Well-defined Ion-pair Clusters of Alkyl- and Dialkylammonium Salts of a Sterically-hindered Carboxylic Acid. Implication for Hydrogen-bonded Lys Salt Bridges**

Kazuki Sada, Tomomichi Watanabe, Jun Miyamoto, Takeyoshi Fukuda, Norimitsu Tohnai, Mikiji Miyata, Tatsuki Kitayama, Kunitaka Maehara, and Koichi Ute



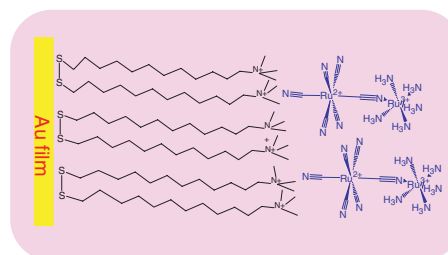
162 **Structural Change of α -Carbon Nanotube Through Annealing**

Hitoshi Nishino, Ryouichi Nishida, Katsuhide Okimi, Yasunori Yokomichi, Takeo Matsui, and Isao Mochida

164 **Fabrication and Characterization of Novel Mixed-valence Pentaamminechlororuthenium(III) Hexacyanoruthenate(II) Coordination Compound Self-assembled Film**

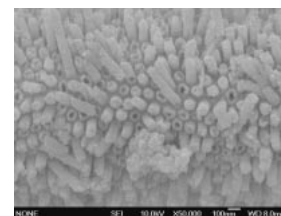
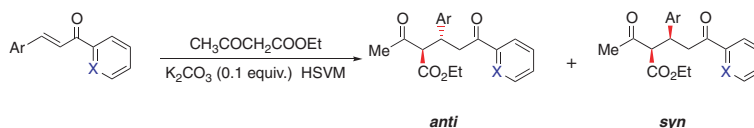
Tianxin Wei, Kaoru Tamada, Shinobu Yokokawa, Eisuke Ito, Kiyoshi Yase, and Masahiko Hara

A novel self-assembled film of mixed-valence pentaamminechlororuthenium (III) hexacyanoruthenate (II) coordination compound has been successfully fabricated and characterized by surface plasmon resonance, phase modulation infrared reflection absorption spectroscopy and X-ray photoelectron spectroscopy.

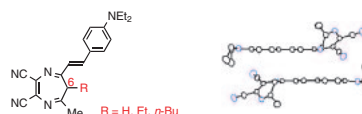
166 **A Simple Method for Synthesizing Copper Nanotube Arrays**

Yinhai Wang, Changhui Ye, Xiaosheng Fang, and Lide Zhang

Scanning electron microscopy image of the Cu nanotube arrays

168 **Mechanochemical Michael Reactions of Chalcones and Azachalcones with Ethyl Acetoacetate Catalyzed by K_2CO_3 under Solvent-Free Conditions**

Ze Zhang, Ya-Wei Dong, Guan-Wu Wang, and Koichi Komatsu

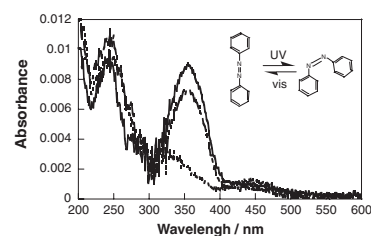
170 **Fluorescence Spectra of 6-Substituted 2,3-Dicyano-5-[4-(diethylamino)styryl]-7-methyl-6H-1,4-diazepines in Solid State**

The fluorescence intensity of non-planar title compounds in solid state could be increased by introducing a bulky alkyl substituent at the 6-position due to prevention of the cofacial molecular stacking between the chromophores shown above.

Emi Horiguchi, Shinya Matsumoto, Kazumasa Funabiki, and Masaki Matsui

172 **Fabrication and Efficient Photochromism of the Mixed Langmuir–Blodgett Films of a Water-miscible Azobenzene Amphiphile and Long-chain Alkylammoniums**

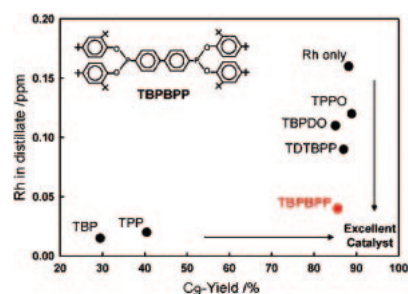
The fabrication and efficient photochromism of the mixed Langmuir–Blodgett films of a water-miscible azobenzene amphiphile and long-chain alkylammoniums are demonstrated. Long-chain alkylammonium can serve as a counterion to stabilize the anionic azobenzene amphiphile on the water surface, and also as a spacer around the azobenzene amphiphile to prevent the aggregation, enabling the efficient photoisomerization of azobenzene.



Reiko Azumi, Keiko Kakiuchi, and Mutsuyoshi Matsumoto

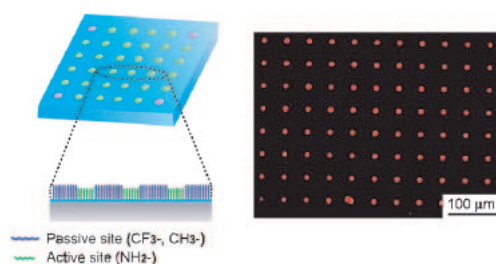
174 **Hydroformylation of Mixed Octenes Using Rhodium–Bulky Phosphonite Complexes with Excellent Catalytic Activity and Stability**

Jong-Ki Jeon, Young-Kwon Park, and Ji Man Kim



176 **Formation of Micro and Nanoscale Patterns of Monolayer Templates for Position Selective Immobilization of Oligonucleotide Using Ultraviolet and Electron Beam Lithography**

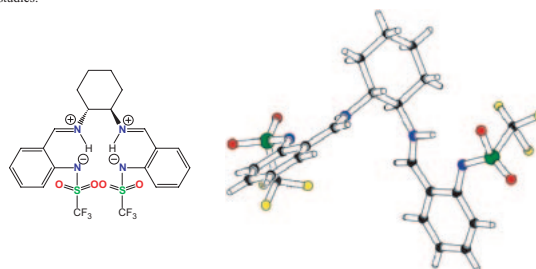
Daisuke Niwa, Kaoru Omichi, Norikazu Motohashi, Takayuki Homma, and Tetsuya Osaka



178 **Intramolecular Proton Transfer Inducing a Biszwitterion Structure in a N₄ Schiff Base**

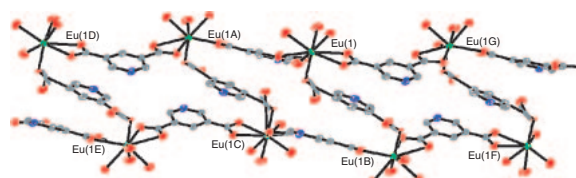
Iyad Karamé, M. Lorraine Tommasino, René Faure, Bernard Fenet, and Marc Lemaire

Proton transfer evidence leading to a zwitterion structure in a Schiff base pointed out by X-ray and NMR studies.



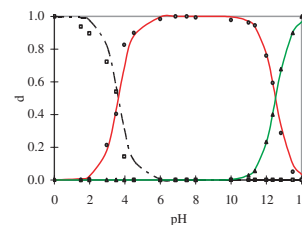
180 **A Novel 1-D Ladder-like Coordination Polymer [Eu(dipic)_{1.5}(H₂O)₄·3H₂O]_∞**

Zhiliang Liu, Deqing Zhang, Caiming Liu, and Daoben Zhu



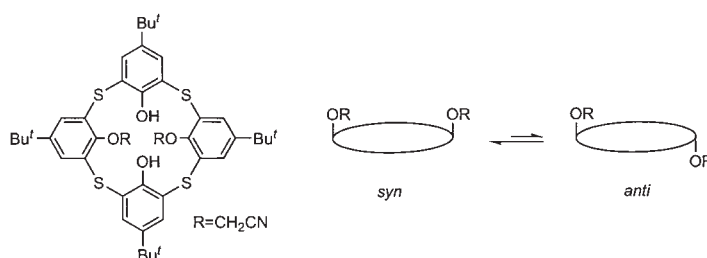
182 **Resolution of the Acid-base Fraction Curves of the Calixarene Derivatives with Chemometric Methods**

Resolving their acid-base fraction curves with chemometric methods, the pK_a of the calixarene derivatives were determined and the fraction curves and pure absorbing spectra of each absorbing component in the calixarene system were obtained.



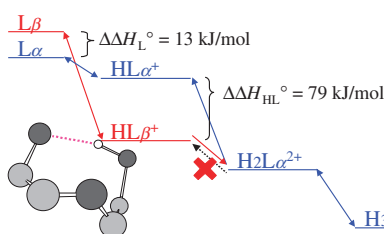
Li Wang, Zhong-Liang Zhu, and Xian-Fa Shi

184 **Interconversion between *syn* and *anti* Conformations of 1,3-Bis(*O*-cyanomethyl)-*p*-*tert*-butylthiacalix[4]arene**



Vandana Bhalla, Manoj Kumar, Chizuko Kabuto, Tetsutaro Hattori, and Sotaro Miyano

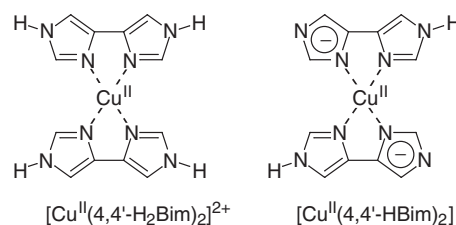
186 **Hysteretic Behavior on the Heat of Protonation of Diethylenetriamine in Aqueous Solution**



Enthalpy diagram of diethylenetriamine (dien or L) on protonation. The subscripts α and β denote the conformer of dien backbone. The HL_{β}^+ changes its conformation through protonation although H_2L^{2+} adopts α form solely to yield HL_{α}^+ through deprotonation.

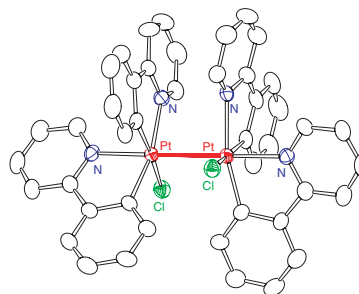
Tei Maki, Ryo Kanzaki, Yasuhiro Umebayashi, and Shin-ichi Ishiguro

188 **The First Metal Complexes of 4,4'-Biimidazole and 4,4'-Biimidazolate with Hydrogen-Bonding Networks on the Cu(II) Complexes: 1-D Structures by N-H...X...H-N Hydrogen-Bonding**



Yasushi Morita, Tsuyoshi Murata, Kozo Fukui, Makoto Tadokoro, Kazunobu Sato, Daisuke Shiomi, Takeji Takui, and Kazuhiro Nakasuji

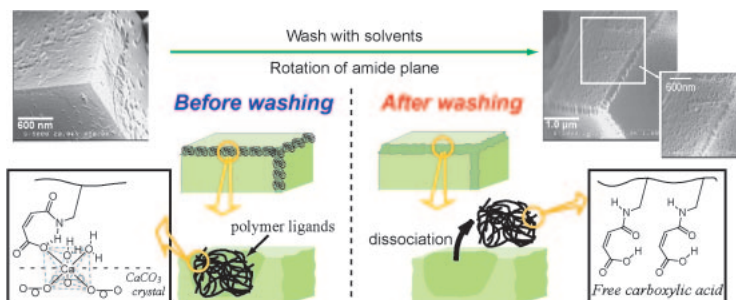
190 **An Unbridged Platinum(III) Dimer with Added Chloro Ligands in Equatorial Sites, [Pt₂Cl₂(hppy)₄] (Hppy = phenylpyridine), Synthesized by an Oxidation with Aurous Complex**



Tadashi Yamaguchi, Osamu Kubota, and Tasuku Ito

192 **Direct Observation of Polymer-Binding Site on Calcite Crystal by FE/SEM: Regulation of Binding Abilities by a Rotation of Amide Group in Poly(carboxylate) to CaCO₃ Crystals**

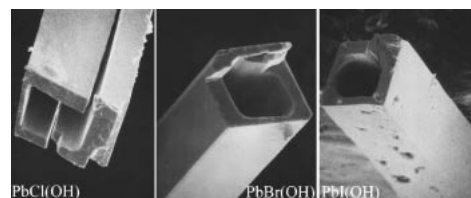
Kazuyuki Takahashi, Mototsugu Doi, Atsuko Kobayashi, Takahisa Taguchi, Akira Onoda, Taka-aki Okamura, Hitoshi Yamamoto, and Norikazu Ueyama



194 **Organic Additive-assisted Growth of Quaternary PbX(OH) (X = Cl, Br, I) Polygonal Tubular Crystals via Ethanol Thermal Process**

Xu Zhang, Yi Xie, Fen Xu, Di Xu, and Guien Zhou

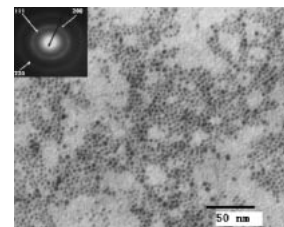
Millimeter-scaled polygonal tubular crystals of PbX(OH) (X = Cl, Br, I) are successfully grown in ethanol system with the aid of Triton X-100.



196 **Synthesis of Dialkyl Dithiophosphate Surface-Capped Copper Nanoclusters**

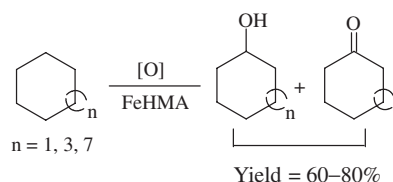
Xiaobo Wang, Weimin Liu, Fengyuan Yan, Zhijun Zhang, and Binshi Xu

Novel dialkyl dithiophosphate-capped lyophobic copper nanoclusters of a mean size of 4.0±1.1 nm were synthesized. The preparation method was characterized by the generation of small copper clusters through aqueous reduction and the extraction of the clusters into organic solvent using dialkyldithiophosphoric acid.



198 **Selective Oxidation of Cycloalkanes over Iron-substituted Hexagonal Mesoporous Aluminophosphate Molecular Sieves**

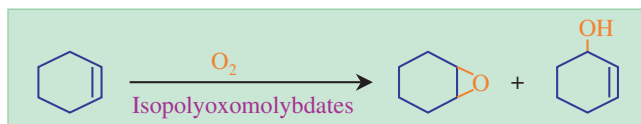
Susanta K. Mohapatra and Parasuraman Selvam



Iron-substituted hexagonal mesoporous aluminophosphate molecular sieve catalysts showed higher activity for the selective oxidation of cycloalkanes under mild reaction conditions with molecular oxygen or air as oxidant.

200 **Catalytic Oxidation of Cyclohexene by Molecular Oxygen over Isopolyoxometalates**

Yanyong Liu, Kazuhisa Murata, Megumu Inaba, Hitoshi Nakajima, Masahiko Koya, and Keizou Tomokuni



Isopolyoxometalates, especially (Bu₄N)₂Mo₆O₁₉, showed high selectivities for the industrially useful products (cyclohexene oxide and 2-cyclohexen-1-ol) from the oxidation of cyclohexene by molecular oxygen at 323 K.

202 **Synthesis of Microporous Silica Templated
by Gelatin**

Gelatin, a low cost biopolymer was successfully used as a porogen to form microporous silica in the presence of formic acid as a cosolvent.

Jianguang Jia, Xiaowen Zhou, Rachel A. Caruso, and Markus Antonietti

