

Chemistry Letters

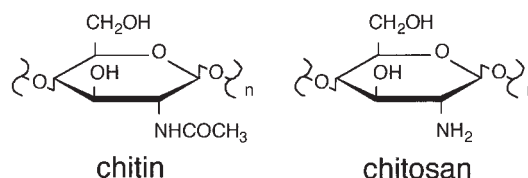
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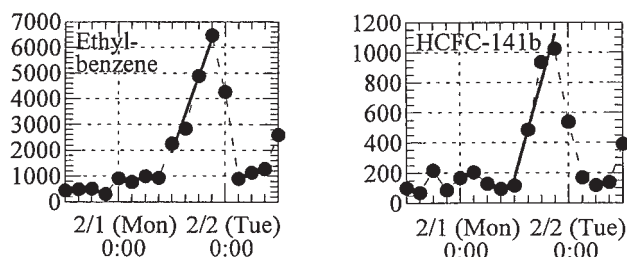
- 560 **Characterization of Eu(III) Adsorbed onto Chitin and Chitosan by Time-resolved Laser-induced Fluorescence Spectroscopy**



Coordination of Eu(III) with chitin and chitosan is characterized to be inner-spherical and outer-spherical ones, respectively.

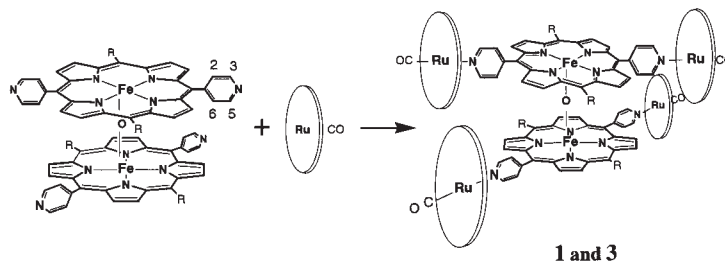
Takuo Ozaki, Takaumi Kimura, Zenko Yoshida, and Arokiasamy J. Francis

- 562 **Estimation of the Emission of Volatile Organic Compounds (VOCs) in Central Tokyo by the Dynamic Analysis of Their Temporally Increasing Atmospheric Concentrations in Calm Weather Afternoon Conditions**



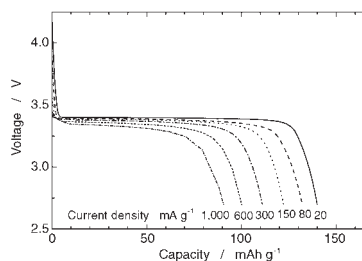
Takao Miyoshi and Yoshihiro Makide

- 564 **Assemblies of Mixed-metal Hexaporphyrins with an Oxo-bridged Iron(III) Porphyrin Dimer in the Center**



Masamitsu Suzuki, Kiyoshi Tsuge, Yoichi Sasaki, and Taira Imamura

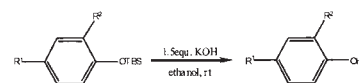
- 566 **Emulsion Drying Preparation of LiFePO₄/C Composite and Its Enhanced High-rate Performance at 50 °C**



Seung-Taek Myung, Shinichi Komaba, Ryohei Takagai, Naoaki Kumagai, and Yun-Sung Lee

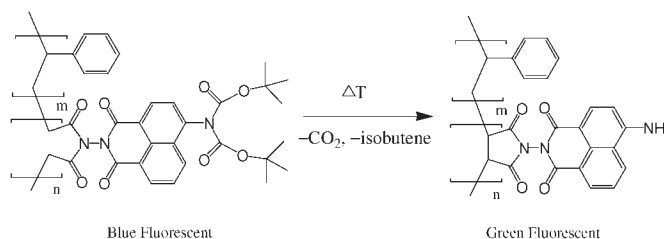
568 **A Mild, Efficient and Selective Cleavage of Aryl *tert*-Butyldimethylsilyl Ethers Using KOH in Ethanol**

An efficient and selective method for the deprotection of aryl *tert*-butyldimethylsilyl (TBS) ethers is described. The protecting group TBS could be cleaved from aryl silyl ethers in the presence of alkyl TBS ethers using KOH in ethanol at room temperature to give the corresponding phenols in excellent yields (87-99%).



Zhi-Yong Jiang and Yan-Guang Wang

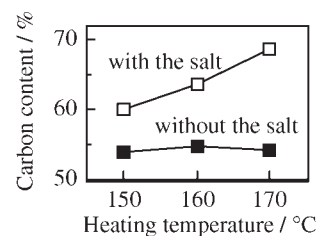
570 **Novel Thermochromic Copolymers with Two Luminescent Colors**



Chen Li, Pa Du, He Tian, and Peter Erk

572 **Promotion of Thermal Dehydration of Poly(vinyl alcohol) Film by Diphenyliodonium Salt**

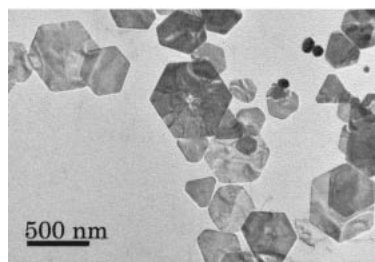
Thermal dehydration of a poly(vinyl alcohol) film was extremely promoted in the presence of a diphenyliodonium salt, which is known as a thermally stable photo acid generator.



Elemental analysis results for the PVA films heated for 2 h.

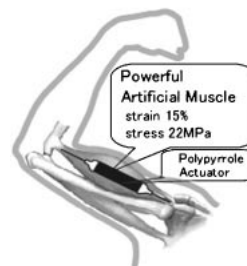
Yukio Yamamoto and Seiichi Tagawa

574 **Preparation of Gold Nanoplates Protected by an Anionic Phospholipid**

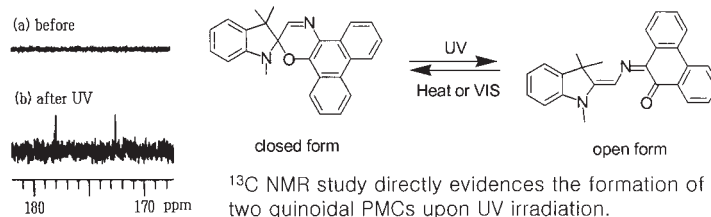


Daisuke Ibano, Yasuhiro Yokota, and Toshihiro Tominaga

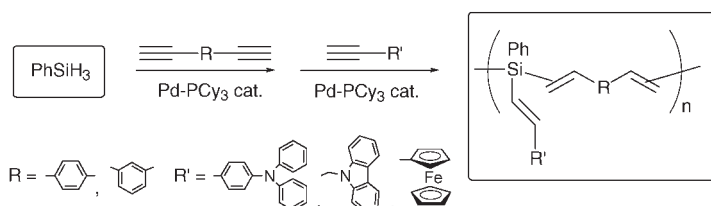
576 **Highly Stretchable and Powerful Polypyrrole Linear Actuators**



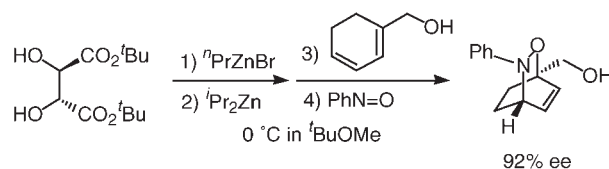
Susumu Hara, Tetsuji Zama, Shingo Sewa, Wataru Takashima, and Keiichi Kaneto

578 **Low-temperature NMR and IR Spectra of Photomerocyanine Form of Spirophenanthrooxazine**

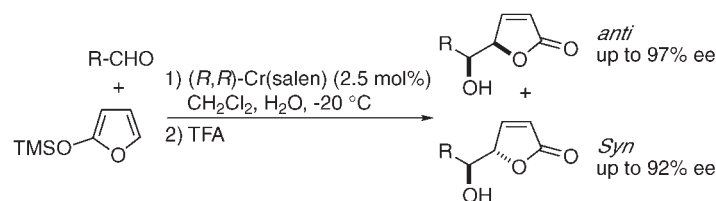
Duck-Hyung Lee, Myunghee Lee, Chinkap Chung, Weon-Hee Lee, and In-Ja Lee

580 **Convenient One-pot Synthesis of Functional Alkenyl Pendant-containing Silylene-divinylene Polymers**

Tumula Venkateshwar Rao, Hiroshi Yamashita, Yuko Uchimar, Michihiko Asai, and Kazuhiko Takeuchi

582 **The First Enantioselective Hetero Diels–Alder Reaction of Nitroso Compound Utilizing Tartaric Acid Ester as a Chiral Auxiliary**

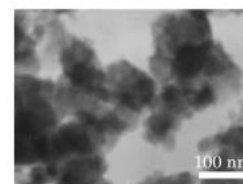
Xia Ding, Yutaka Ukaji, Shuhei Fujinami, and Katsuhiko Inomata

584 **Enantioselective Addition of 2-(Trimethylsilyloxy)furan to Aldehydes Using Cr(salen) as Catalyst. Effect of Water on Enantioselectivity**

Yuko Matsuoka, Ryo Irie, and Tsutomu Katsuki

586 **Synthesis of Nanosized A-type Zeolites from Sodium Silicates and Sodium Aluminates in the Presence of a Crystallization Inhibitor**

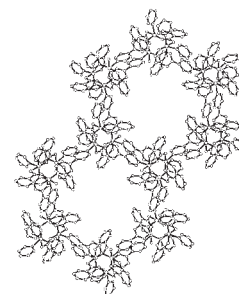
Nanosized A-type zeolites (primary particle size: 30–40 nm), which exhibit higher cationic exchange rate than commercially available A-type zeolites (primary particle size: 2 μm), have been synthesized from sodium silicates and sodium aluminates by using a crystallization inhibitor such as a nonionic surfactant and polyethylene glycol.



Hiroji Hosokawa and Kazuo Oki

588 **Crystal Engineering of 3D Porous Coordination Polymers through Hydrogen Bonding to Coordination from 1D Helical Chains**

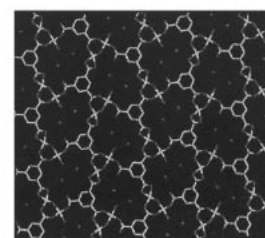
The combinations of salicylic acid with 4-aminopyridine and 4,4'-bipyridine result in two 3D architectural compounds through hydrogen bonding to coordination, respectively.



Long-Guan Zhu, Susumu Kitagawa, and Kenji Seki

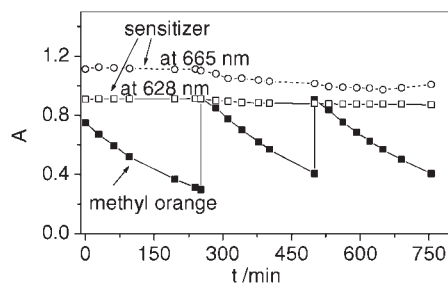
590 **Synthesis and Structure of a New 3D Porous Cu(II)-Benzene-1,3,5-tricarboxylate Coordination Polymer, $[\text{Cu}_2(\text{OH})(\text{BTC})(\text{H}_2\text{O})]_n \cdot 2n\text{H}_2\text{O}$**

A new three-dimensional porous coordination polymer, $\text{Cu}_2(\text{OH})(\text{BTC})(\text{H}_2\text{O})_n \cdot 2n\text{H}_2\text{O}$ which contains $5 \times 7 \text{ \AA}$ dimension lozenge shaped 1D open channels along the crystallographic a axis.



Jinxi Chen, Ting Yu, Zhenxia Chen, Huiping Xiao, Guoqiang Zhou, Linhong Weng, Bo Tu, and Dongyuan Zhao

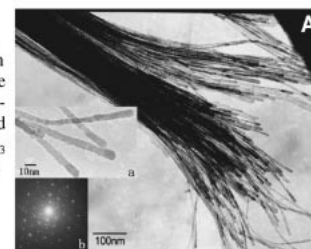
592 **Photo-oxidation of Chlorophenols and Methyl Orange with Visible Light in the Presence of Copper Phthalocyaninesulfonate**



Yiming Xu and Zuxu Chen

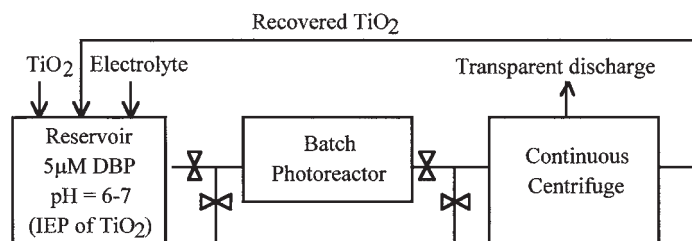
594 **An Easy Method to Prepare Nanowire**

SrCO_3 and BaCO_3 single crystal nanowires with aspect ratio of about 1000 were prepared by a simple reaction without template. Preferentially assembling-recrystallization of colloidal particles was supposed as the formation mechanism. Performances of SrCO_3 nanowires as oxidation catalyst of VOC and chemiluminescence sensor were also studied.



Li Wang and Yongfa Zhu

596 **Electrolyte-promoted Easy Separation of Suspended TiO_2 Particles with a Solids Retaining Type Centrifuge in Combination with Photoreactor to Degrade Dibutyl Phthalate**

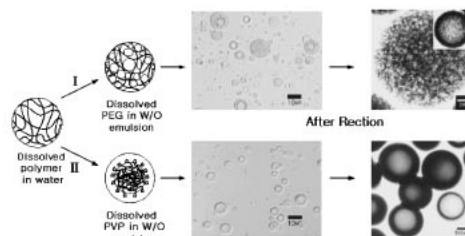


Kiyoshi Hasegawa, Tomonori Ito, Wakako Nakamura, Machi Nagai, and Shigehiro Kagaya

598 **Fabrication of Hollow Silica Microspheres through the Self-assembly Behavior of Polymers in W/O Emulsion**

Jae-Hyung Park, Seong-Youl Bae, and Seong-Geun Oh

This study is on understanding the mechanism of formation of the hollow silica microspheres through the self-assembly behavior of polymers (I. PEG and II. PVP) in W/O emulsion.



600 **Growth of Pure β - Si_3N_4 Nanorods from the Synergic Nitrogen Sources**

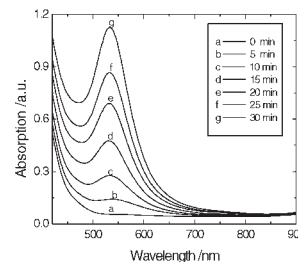
Pure β - Si_3N_4 nanorods with of 30–60 nm and length of 180–300 nm were synthesized from a mild benzene-thermal route at 450 °C, using SiCl_4 and the synergic nitrogen sources of NaNH_2 and NH_4Cl as the starting materials.



Fen Xu, Xu Zhang, Wang Xi, Jie Hong, and Yi Xie

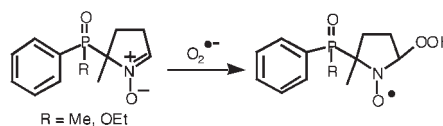
602 **Preparation of Colloidal Au by a Femtosecond Laser**

Colloidal Au was photoinduced from an irradiated HAuCl_4 solution with an focused infrared femtosecond laser at 800 nm. The Au colloid was characterized by absorption spectra, transmission electron spectroscopy (TEM) and X-ray diffraction (XRD) pattern analysis. The formation of Au nanoparticles was attributed to the electron and hot plasma caused by a multiphoton process of femtosecond laser.



Chongjun Zhao, Shiliang Qu, Jianrong Qiu, Congshan Zhu, and Kazuyuki Hirao

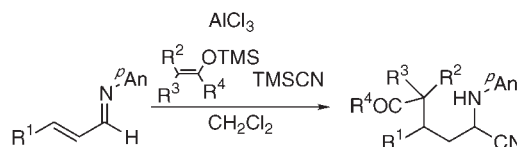
604 **Synthesis of 5-(Alkylphenylphosphoryl)-5-methyl-3,4-dihydro-2H-pyrroline N-Oxide as a New Spin Trapping Reagent**



Novel DMPO analogues attached to a phenyl group at the phosphorus atom were synthesized and examined for their ability in the spin trapping of oxygen-centered radicals.

Kosei Shioji, Shigeyuki Tsukimoto, Hidehiko Tanaka, and Kentaro Okuma

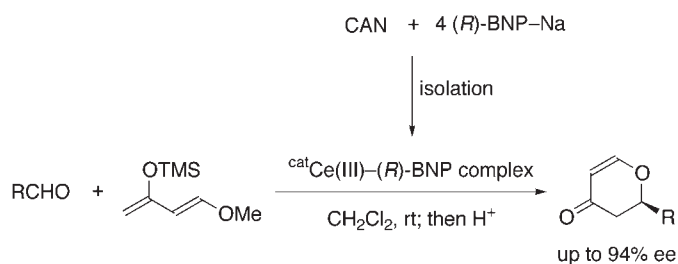
606 **Double Nucleophilic Addition of Ketene Silyl (Thio)acetals and Trimethylsilyl Cyanide to α,β -Unsaturated Aldimines Promoted by Aluminum Chloride**



Makoto Shimizu, Makiko Kamiya, and Iwao Hachiya

- 608 **Novel Cerium(III)-(R)-BNP Complex as a Storable Chiral Lewis Acid Catalyst for the Enantioselective Hetero-Diels-Alder Reaction**

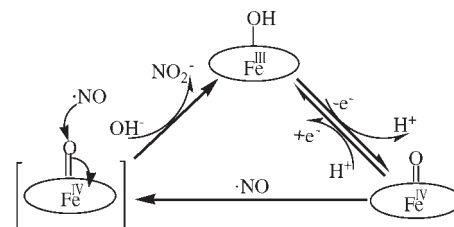
Tetsuji Hayano, Toshiaki Sakaguchi, Hiroshi Furuno, Masaaki Ohba, Hisashi Ōkawa, and Junji Inanaga



- 610 **Selective Oxidation of Nitric Oxide against Nitrite by Oxo-iron(IV) Porphyrin at an ITO Electrode**

Jianping Lei, Natalia S. Trofimova, and Osamu Ikeda

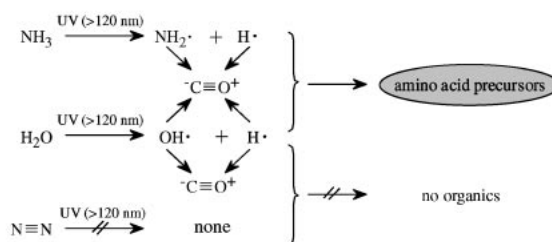
The electrogenerated $\text{O}=\text{Fe}^{\text{IV}}(4\text{-TMPyP})$ selectively reacted with NO to give NO_2^- as the final product through an electrocatalytic cycle at an ITO electrode.



- 612 **Amino Acid Precursors from Carbon Monoxide in Simulated Interstellar Dust Ice Mantle by UV Irradiation at 10 K**

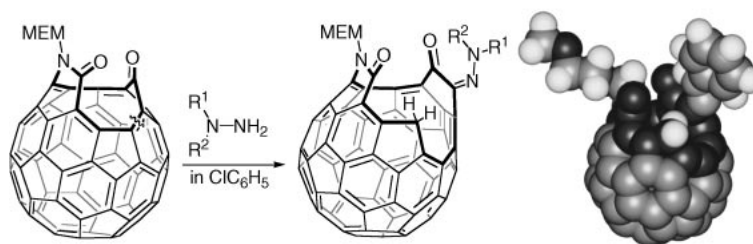
Yoshinori Takano, Kentaro Ushio, Takeo Kaneko, Kensei Kobayashi, and Hirofumi Hashimoto

Possible pathway for prebiotic formation of amino acid precursors by UV irradiation at 10 K.



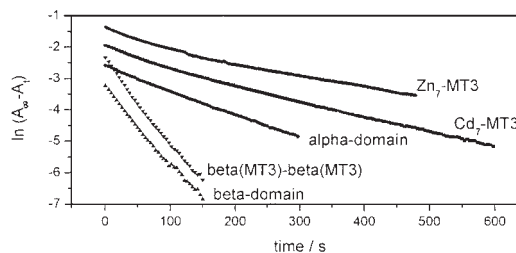
- 614 **A Novel Ring Expansion of the Holey Keto-lactam Derivative of C₆₀**

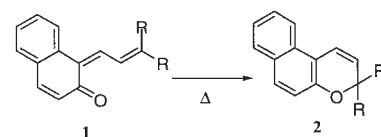
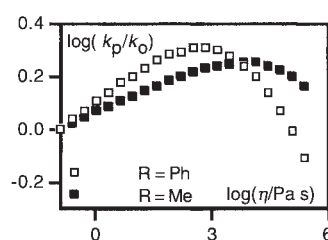
Sho-ichi Iwamatsu, Fumiaki Ono, and Shizuaki Murata



- 616 **The Reaction of Metallothionein-3 with DTNB**

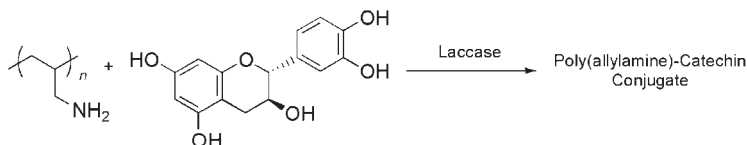
Qi Zheng, Bin Cai, Dong Chen, Wen-Hao Yu, Yun-Hua Wang, and Zhong-Xian Huang



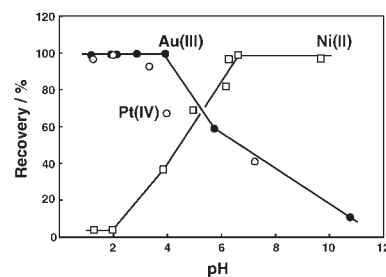
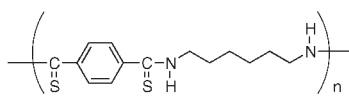
618 **An Experimental Attempt to Identify a Moving Molecular Moiety in a Solvent Matrix**

The viscosity effect shows that the vinyl moiety changes its position in a solvation shell in the activation step.

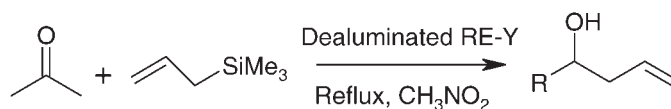
Yoshitaka Goto, Keiji Sugita, Toru Takahashi, Yasushi Ohga, and Tsutomu Asano

620 **Enzymatic Synthesis and Antioxidant Property of Poly(allylamine)-Catechin Conjugate**

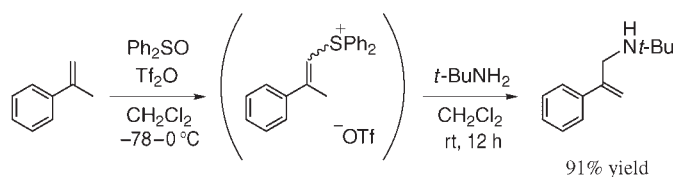
Joo Eun Chung, Motoichi Kurisawa, Yoichi Tachibana, Hiroshi Uyama, and Shiro Kobayashi

622 **Polythioamide as a Collector for Valuable Metals from Aqueous and Organic Solutions**

Shigehiro Kagaya, Emi Sato, Ikumi Masore, Kiyoshi Hasegawa, and Takaki Kanbara

624 **Allylation of Aldehydes Catalyzed by Zeolites under Liquid Phase**

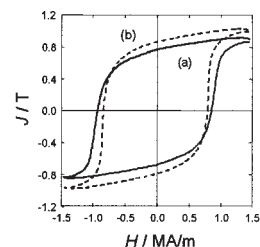
M. Sasidharan and Takashi Tatsumi

626 **A Convenient Method for the Synthesis of β,γ -Unsaturated Amines from Alkenes via α,β -Unsaturated Diphenylsulfonium Salts**

Hiroyuki Yamanaka, Jun-ichi Matsuo, Asahi Kawana, and Teruaki Mukaiyama

628 **Effective Recovery of Nd-Fe-B Sintered Magnet Scrap Powders as Isotropic Bonded Magnets**

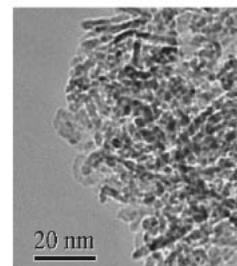
Magnetization hysteresis curves for (a) the recovered powder from the Nd-Fe-B sludge, and (b) commercially available Nd-Fe-B powder.



Ken-ichi Machida, Masahiro Masuda, Shunji Suzuki, Masahiro Itoh, and Takashi Horikawa

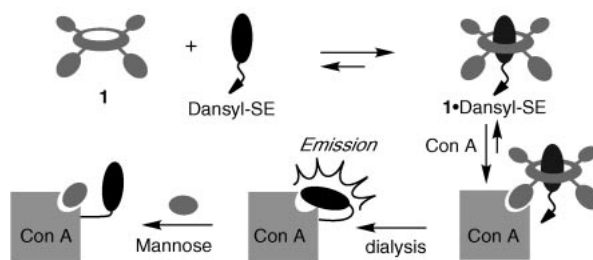
630 **Mesostructured Alumina Nanocomposites Synthesized via Reverse Microemulsion Route**

Rod-like Ba-doped alumina nanocomposite, prepared by reverse microemulsion route, shows mesopores with average pore size of around 10 nm, comparable with the size of nanoparticles.



Zhixiong You, Ioan Balint, and Ken-ichi Aika

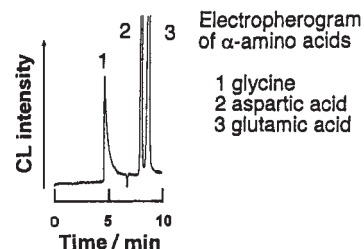
632 **New Supramolecular Approach for Saccharide-directed Chemical Modification of Concanavalin A**



Osamu Hayashida and Itaru Hamachi

634 **α -Amino Acids Analysis by Capillary Electrophoresis with Chemiluminescence Detector Using Luminol-Hydrogen Peroxide-Cu(II) System**

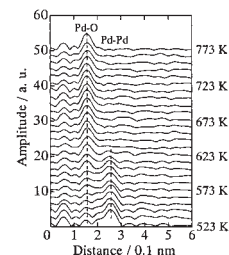
Twenty kinds of α -amino acids were directly detected without any labeling procedure by capillary electrophoresis with chemiluminescence detector using luminol-hydrogen peroxide-Cu(II) catalyst system.



Kazuhiko Tsukagoshi, Koji Nakahama, and Riichiro Nakajima

636 **Spontaneous Dispersion of PdO onto Acid Sites of Zeolites Studied by in situ DXAFS**

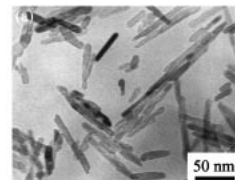
The generation of highly dispersed PdO over zeolite supports was studied using in situ energy-dispersive XAFS (DXAFS) technique. From the comparison with the Na-ZSM-5, it was found that the oxidation as well as the spontaneous dispersion of Pd was promoted through the interaction between PdO and acid sites of H-form zeolites.



Kazu Okumura, Tetsuji Kusakabe, Shigeru Yokota, Kazuo Kato, Hajime Tanida, Tomoya Uruga, and Miki Niwa

638 **A Simple Route for the Synthesis of Rutile TiO₂ Nanorods**

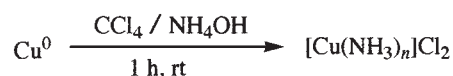
The monodispersed rutile TiO₂ nanorods in diameter 4–6 nm and in length up to 50–150 nm were prepared by the hydrolysis of TiCl₄ solution in the concentrated HNO₃ under ambient condition in air and required no complex apparatus.



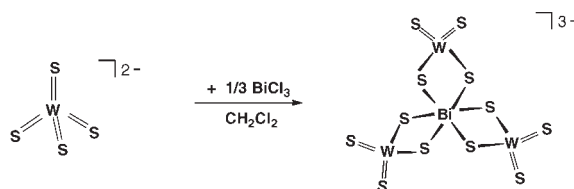
Qing Huang and Lian Gao

640 **A Potent Solvent for Dissolution of Metallic Copper**

NH₄OH – CCl₄ solvent system showed an excellent dissolution efficiency toward metallic copper.



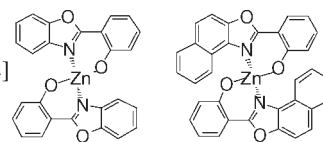
Naohisa Yanagihara, Masahiro Nakayama, and Hideo Tai

642 **Synthesis and Structure of a Novel Tetranuclear Tungsten–Bismuth–Sulfur Complex**

Hong-Xi Li, Qing-Feng Xu, Qi Shen, and Jian-Ping Lang

644 **Electron and Hole Mobility in Vacuum Deposited Organic Thin Films of Bis[2-(2-hydroxyphenyl)benzoxazolate]zinc and Its Derivatives**

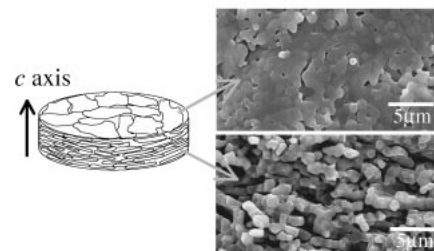
Electron and hole mobility in vacuum deposited organic thin films of bis[2-(2-hydroxyphenyl)benzoxazolate]zinc and its derivatives have been investigated by the time-of-flight technique.



Takeshi Yasuda, Yoshihisa Yamaguchi, Katsuhiko Fujita, and Tetsuo Tsutsui

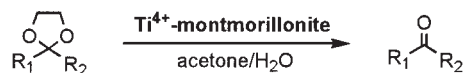
646 **Fabrication of Hydroxyapatite Sintered Bodies with *c* Axis Orientation**

Hydroxyapatite (HAp) sintered bodies with *c* axis orientation were fabricated using *c* axis oriented plate-like HAp aggregates. The *c* axis orientation of HAp crystals was maintained even after sintering.



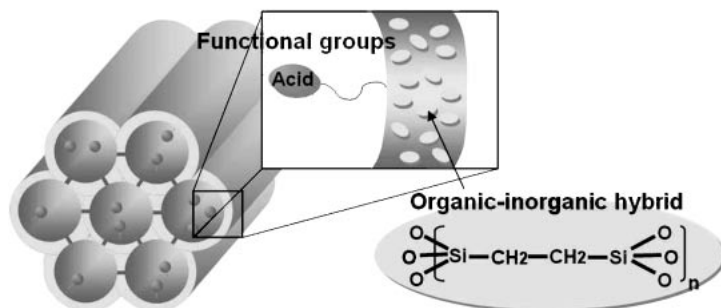
Kazushi Ohta, Masanori Kikuchi, and Junzo Tanaka

- 648 **Highly Efficient Deprotection of Acetals by Titanium Cation-exchanged Montmorillonite as a Strong Solid Acid Catalyst**



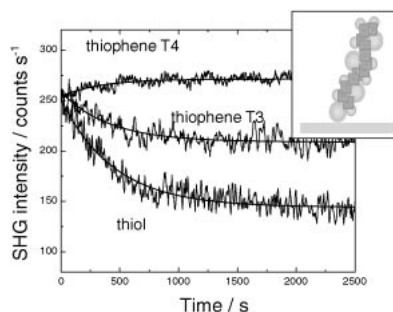
Tomonori Kawabata, Masaki Kato, Tomoo Mizugaki, Kohki Ebitani, and Kiyotomi Kaneda

- 650 **Periodic Mesoporous Organosilicas Functionalized with Sulfonic Acid Group. Synthesis and Alkylation of Phenol**



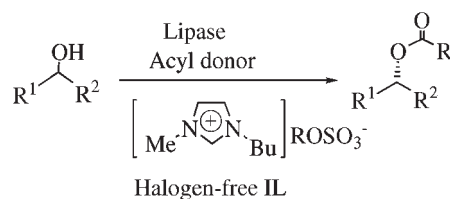
Xingdong Yuan, Hyung Ik Lee, Jin Won Kim, Jae Eui Yie, and Ji Man Kim

- 652 **Kinetics of Adsorption and Self-assembling of Thiophene and Dodecanethiol Studied by Optical Second Harmonic Generation**



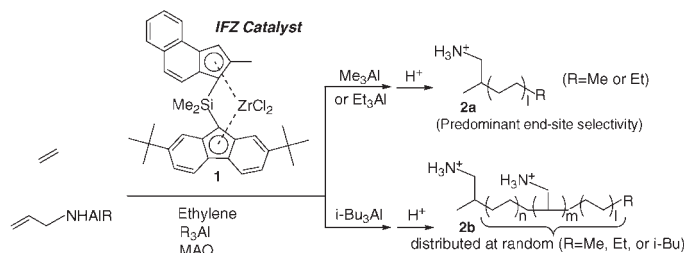
Elena Mishina, Takehisa Tamura, Hiroshi Sakaguchi, and Seiichiro Nakabayashi

- 654 **Lipase-catalyzed Enantioselective Acylation in a Halogen Free Ionic Liquid Solvent System**



Toshiyuki Itoh, Nozomi Ouchi, Shuichi Hayase, and Yoshihito Nishimura

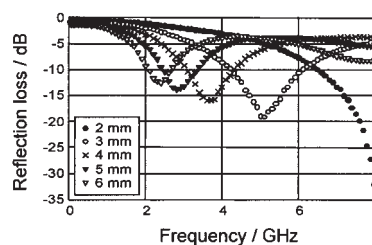
- 656 **Direct Introduction of Primary Amine into Nonpolar Polyolefins Mediated by a New Metallocene IFZ Catalyst. A New Synthetic Approach for One-pot Synthesis of Allyl Amine-capped Polyolefins**



Jun-ichi Imuta, Yoshihisa Toda, Tomoaki Matsugi, Hideyuki Kaneko, Shingo Matsuo, Shin-ichi Kojoh, and Norio Kashiwa

658 **Effective Recovery of Nd-Fe-B Sintered Magnet Scrap Powders as Microwave Absorbing Materials**

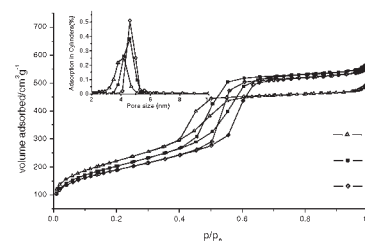
Reflection loss profiles for the resin-bonded sheet using the recovered Nd-Fe-B sludge powder.



Ken-ichi Machida, Masahiro Masuda, Masahiro Itoh, and Takashi Horikawa

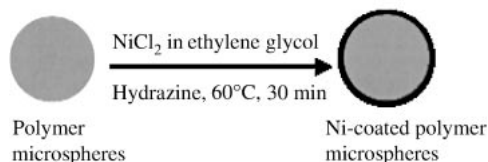
660 **The Upper Temperature Limit in Cooperative Assembly of Ordered Mesoporous Materials**

Several examples for high temperature (95°C, higher than the cloud point of the pure surfactant) synthesis of highly ordered hexagonal mesoporous silica structures by employing triblock copolymers such as P65 (EO₂₀PO₃₀EO₂₀) as structure-directing agents have been presented. Such understanding may increase the range of surfactants and the temperature regime under which ordered mesoporous materials can be cooperatively assembled.



Minjia Yuan, Jiawei Tang, Chengzhong Yu, Yinghua Chen, Bo Tu, and Dongyuan Zhao

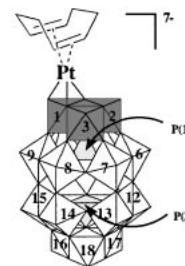
662 **A Simple Route for Formation of Continuous Ni Nanoshells on Polymer Microspheres**



Dong-Hwang Chen, Jia-Peng Lin, Szu-Han Wu, and Chun-Ting Wang

664 **Synthesis, Characterization, and Oxidation Catalysis of a Novel Dawson Polyoxometalate-supported Platinum(II) Complex, $[\{\text{Pt}(\text{cod})\}(\text{P}_2\text{W}_{15}\text{V}_3\text{O}_{62})]^{7-}$ (cod = 1,5-cyclooctadiene)**

The first example of a polyoxotungstate-based organometallic platinum(II) complex, $[\{\text{Pt}(\text{cod})\}(\text{P}_2\text{W}_{15}\text{V}_3\text{O}_{62})]^{7-}$, which shows effective catalytic activity for oxidation of cyclohexanol with 30% aqueous hydrogen peroxide, is reported.



Kenji Nomiya, Hideki Torii, Chika Nozaki Kato, and Yuh Sado