Chemistry Letters

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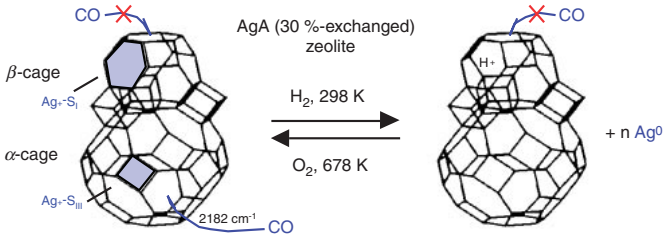
ISSN 0366-7022

792 **Probing the Locations of Ag^+ and Hydroxy Groups in AgA Zeolites by in situ FTIR Spectroscopy**

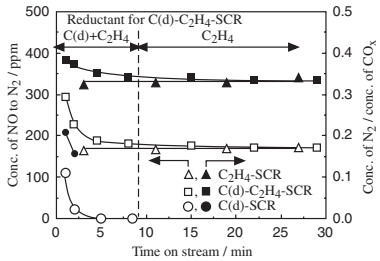
Ping Wang, Shuwu Yang, Junko N. Kondo, Kazunari Domen, and Toshihide Baba



794 **Carbonaceous Deposit as a Preferential Reductant in the Reduction of NO with C_2H_4 in Excess Oxygen over Alumina**

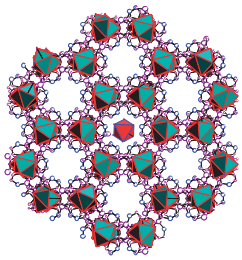
Ryuta Fujii, Sayaka Kitagawa, Kou Takahashi, Noriyasu Okazaki, and Akio Tada

Carbonaceous deposit (C(d)) which was formed on alumina by C_2H_4 pyrolysis at 550 °C reacted selectively and preferentially with a mixture of NO and O_2 in the presence of C_2H_4, suggesting that the C(d) acts as an effective intermediate during the selective reduction of NO with C_2H_4 too.



796 **$\{[In_3(pzdc)_6]^{3-}\}_\infty$: A Metal–Organic Framework of Distorted NbO-like Net (pzdc = Pyrazine-2,3-dicarboxylato)**

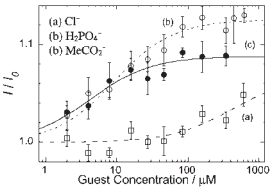
Yun-Qi Tian, Chen-Xin Cai, Xue-Jun Yuan, Yi-Zhi Li, Tian-Wei Wang, and Xiao-Zeng You



798 **Anion Recognition at the Solid/Liquid Interface as Studied by Second Harmonic Generation Spectroscopy**

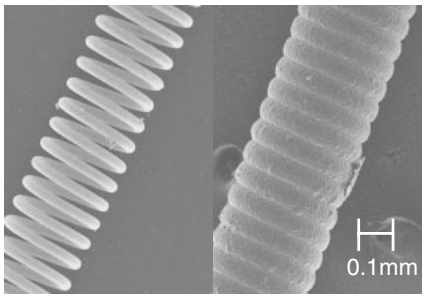
Akira Yamaguchi, Ryo Kato, Seiichi Nishizawa, and Norio Teramae

A self-assembled monolayer of thiourea-based anion receptor was formed at a gold surface, and its surface specific binding selectivity for monovalent inorganic anions was revealed by second harmonic generation spectroscopy.



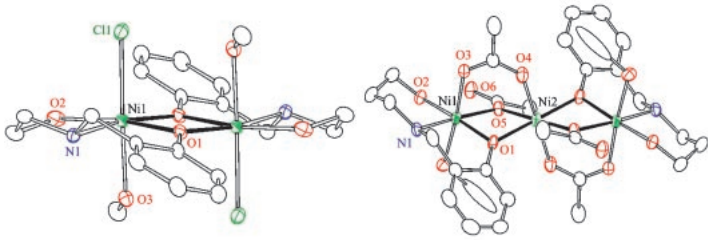
800 **Polypyrrole–metal Coil Composites as Fibrous Artificial Muscles**

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



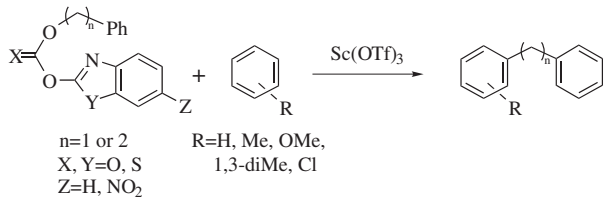
812 **Structures and Magnetic Properties of Di- and Trinuclear Nickel(II) Complexes with Phenoxo and Acetato Bridges**

Satoshi Koizumi, Masayuki Nihei, and Hiroki Oshio



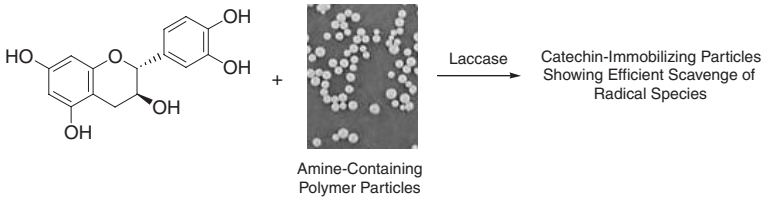
814 **Friedel–Crafts Benzylation and Phenethylation Reactions Using Benzyl and Phenethyl Benzothiazol-2-yl Carbonate Derivatives**

Teruaki Mukaiyama, Hiroaki Kamiyama, and Hiroyuki Yamanaka



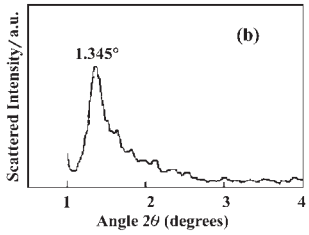
816 **Antioxidant Polymer Particles. Enzymatic Immobilization of Catechin on Polymer Particles**

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



818 **Composite Nano-structured Materials Consisting of CdS Clusters and Heteropolyanions $PW_{12}O_{40}^{3-}$**

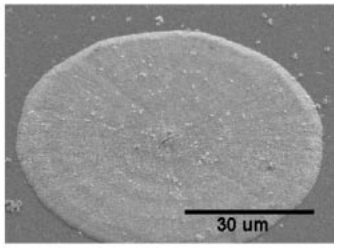
Degang Fu and Yu Zhang

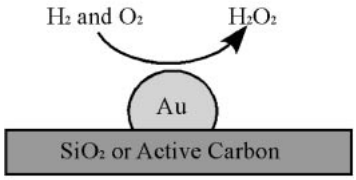


820 **Formation of Silicate-mediated $CaCO_3$ Films**

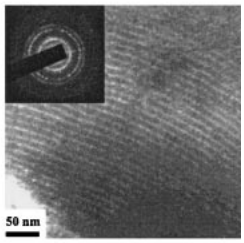
Akiko Kotachi, Takashi Miura, and Hiroaki Imai

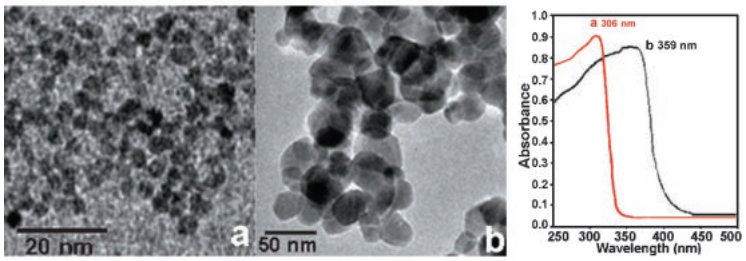
The presence of silicate anions miniaturized the crystal grains of $CaCO_3$ and mediated a film formation through a two-dimensional arrangement of the growth subunits on the specific surface as a mortar component.



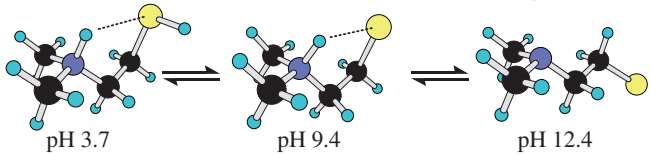


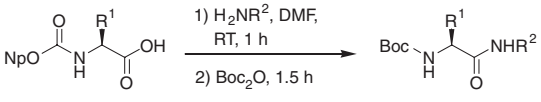
Well-patterned crystalline nanowire arrays of binary compound metal sulfides, CdS, ZnS and In_2S_3, were synthesized by a simple impregnation reaction procedure from two separate precursors (metal and sulfur precursors) using mesoporous SBA-15 as a hard template.





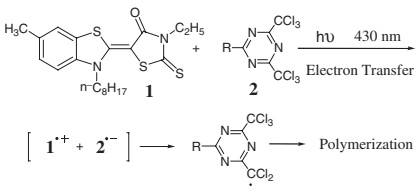
Interconversion, depending on pH, between strong N–H$^+$···S (N–H$^+$···S$^-$) hydrogen bonding and $(CH_3)_2$N···S$^-$ repulsion





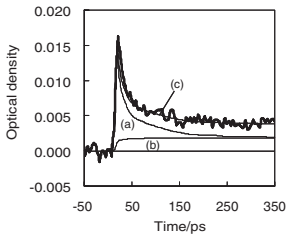
Npoc-AA-OH Np=4-nitrophenyl Boc=*tert*-butoxycarbonyl Boc-AA-NHR^2

832 **Mechanistic Studies of the Photo-decomposition of Substituted Bis(trichloromethyl)-1,3,5-triazine Sensitized by Merocyanine Dye**



Koichi Kawamura

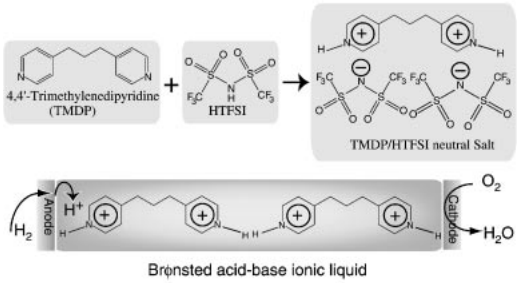
834 **Subpicosecond Pulse Radiolysis Study of Geminate Ion Recombination in Liquid Benzene**



Kinetic traces observed in the subpicosecond pulse radiolysis (bold line) and kinetic trace of the theoretical at 790 nm (solid line) in neat benzene. Curve (a) represents time dependent behavior of benzene dimer radical cation and (b) represents that of benzene excimer. Curve (c) is the sum of (a) and (b). Theoretical curves are convoluted by the instrumental function.

Kazumasa Okamoto, Akinori Saeki, Takahiro Kozawa, Yoichi Yoshida, and Seiichi Tagawa

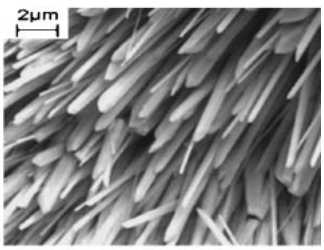
836 **A Novel Brønsted Acid–base System as Anhydrous Proton Conductors for Fuel Cell Electrolytes**



Md. A. B. H. Susan, Migyung Yoo, Hirofumi Nakamoto, and Masayoshi Watanabe

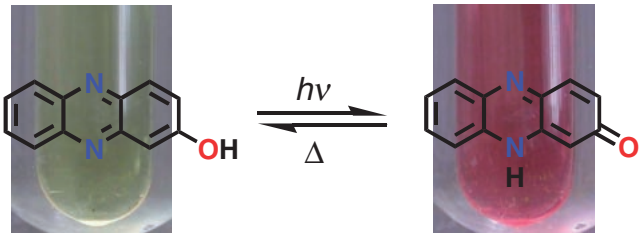
838 **Well-aligned ZnO Whiskers Prepared by Catalyst-assisted Flux Method**

Well-aligned ZnO whiskers was prepared on silicon substrate by a catalyst-assisted flux method using ZnS powders as starting materials at a temperature of 860 °C



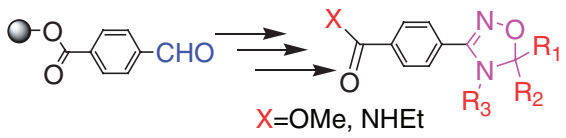
Xianghua Kong and Yadong Li

840 **Photochromism of Aza-aromatics with Hydroxy Group. Intermolecular Proton Transfer in Glassy Solution**



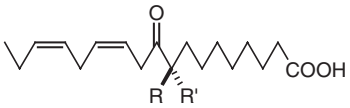
Keiichiro Ogawa, Masatoshi Miura, Toshio Nakayama, and Jun Harada

842 **Rapid One-pot Solid-phase Synthesis of 1,2,4-Oxadiazolines**



Xu-Feng Lin, Sun-Liang Cui, and Yan-Guang Wang

844 **Total Synthesis of α-Ketol Derivative of Linolenic Acid (KODA), a Flower-inducing Factor in *Lemna paucicostata***

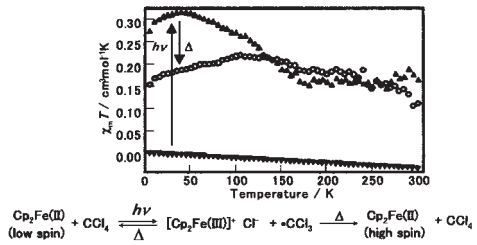


9*R*-KODA (**1a**) : R=OH, R'=H
9*S*-KODA (**1b**) : R=H, R'=OH

Both synthetic (±)- and 9*R*-KODA showed remarkable flower-inducing activity in *Pharbitis nil.*

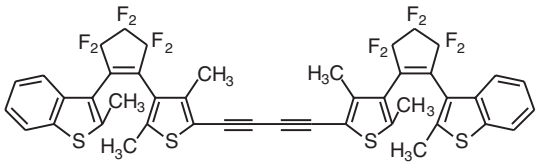
Yoshihiro Yokokawa, Kouji Kobayashi, Mineyuki Yokoyama, and Shosuke Yamamura

846 **^{57}Fe Mössbauer Study on Photoinduced Spin Transition of Ferrocene in Polymer Matrices**



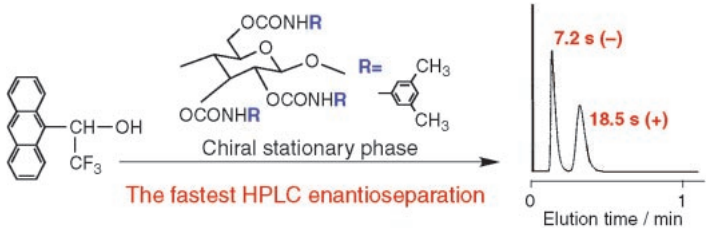
Yasuaki Einaga, Masahiro Kotake, Yasuhiro Yamada, and Osamu Sato

848 **Photochromic and Fluorescent Properties of a Diarylethene Dimer**



Kyoko Yagi and Masahiro Irie

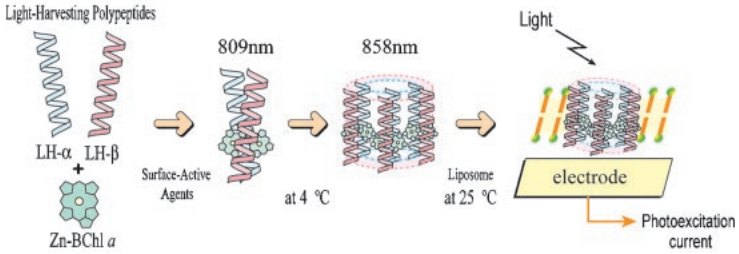
850 **Very Fast Enantioseparation in High-performance Liquid Chromatography Using Cellulose Tris(3,5-dimethylphenylcarbamate) Coated on Monolithic Silica Support**



Bezhan Chankvetadze, Chiyo Yamamoto, and Yoshio Okamoto

852 **Construction and Photocurrent of Light-harvesting Polypeptides/Zinc Bacteriochlorophyll *a* Complex in Lipid Bilayers**

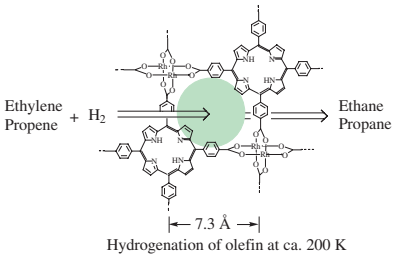
Morio Nagata, Yoshimi Yoshimura, Junichi Inagaki, Yoshiharu Suemori, Kouji Iida, Toshiaki Ohtsuka, and Mamoru Nango



854 **Microporous Rhodium(II) 4,4′,4″,4‴-(21*H*,23*H*-porphine-5,10,15,20-tetrayl)tetrakisbenzoate. Synthesis, Nitrogen Adsorption Properties, and Catalytic Performance for Hydrogenation of Olefin**

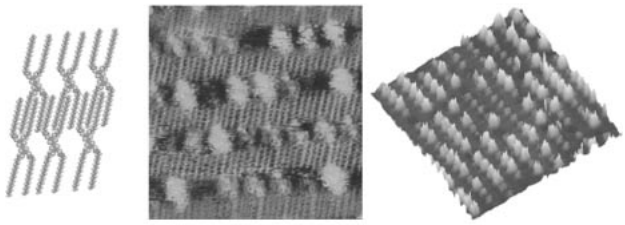
Tomohiko Sato, Wasuke Mori, Chika Nozaki Kato, Tetsushi Ohmura, Tsubasa Sato, Kayoko Yokoyama, Satoshi Takamizawa, and Shuichi Naito

A novel dinuclear rhodium(II) coordination polymer with porphyrin-containing carboxylate [$Rh_2(H_2TCPP)$] exhibited high nitrogen adsorption property and high catalytic activities for hydrogenation of ethylene and propene at ca. 200 K.



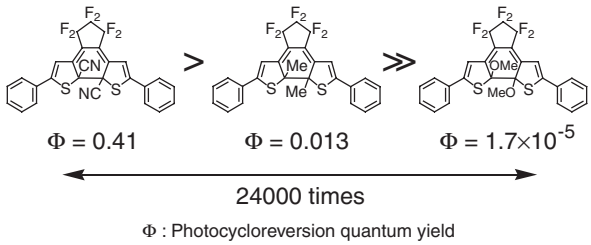
856 **Stacking Phenomenon of Self-assembled Monolayers and Bilayers of Thioalkyl-substituted Tetrathiafulvalene**

Jun Lu, Qing-dao Zeng, Chen Wang, Li-jun Wan, and Chun-li Bai



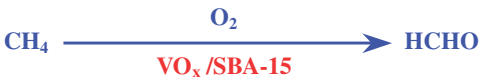
858 **Efficient Photocycloreversion Reaction of Diarylethenes by Introduction of Cyano Subsutituents to the Reactive Carbons**

Kentaro Morimitsu, Seiya Kobatake, Shinichiro Nakamura, and Masahiro Irie



860 **Excellent Catalytic Performances of SBA-15-supported Vanadium Oxide for Partial Oxidation of Methane to Formaldehyde**

Baomin Lin, Xiaoxing Wang, Qian Guo, Wei Yang, Qinghong Zhang, and Ye Wang



Monomeric vanadyl species highly dispersed in the mesoporous channels of SBA-15 exhibit a space-time yield of formaldehyde as high as 93 mol $kg_{cat.}^{-1}$ h^{-1} with a formaldehyde selectivity of 94%, significantly higher than those reported so far.

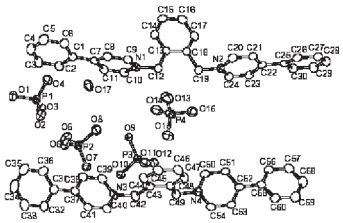
862 **Large-scale Synthesis of Luminescent Y_2O_3:Eu Nanobelts**

A two-step method was developed for the large-scale synthesis of the luminescent Y_2O_3:Eu nanobelts, and the as-prepared products have uniform appearance and special luminescent performance.

Yu He, Ye Tian, and Yongfa Zhu

864 **1,2-Bis[(4-phenylpyridinio)methyl]benzene Dication. Its Unprecedented Selective Complexation with $H_2PO_4^-$**

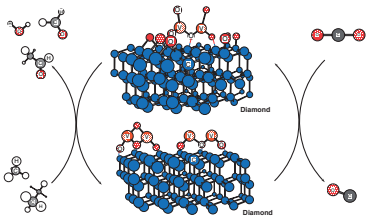
1,2-Bis[(4-phenylpyridinio) methyl]benzene dichloride selectivity produced the storong complex with $H_2PO_4^-$.



Hideyuki Gono and Seizo Tamagaki

866 **Novel Selective Oxidation of Light Alkanes Using Carbon Dioxide. Oxidized Diamond as a Novel Catalytic Medium**

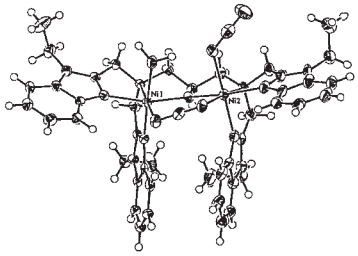
A novel selective oxidation of light alkanes using CO_2 as an oxidant over oxidized diamond-supported catalysts was developed. The oxidation capability of CO_2 to the selective oxidation of light alkanes to oxygenates were proposed.



Kiyoharu Nakagawa, Kimito Okumura, Takahiro Shimamura, Na-oki Ikenaga, Toshimitsu Suzuki, Tetsuhiko Kobayashi, Mikka Nishitani-Gamo, and Toshihiro Ando

868 **A Strongly Antiferromagnetically Coupled Dinickel(II) Center Bridged by One Azido and One Alkoxo**

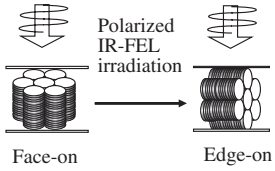
A strongly antiferromagnetically coupled dinuclear nickel(II) complex bridged by an azido and an alkoxo was synsthesized.



Mie Fujii, Shoko Goto, Yasuo Nakao, Motoo Shiro, Tomohiko Sato, and Wasuke Mori

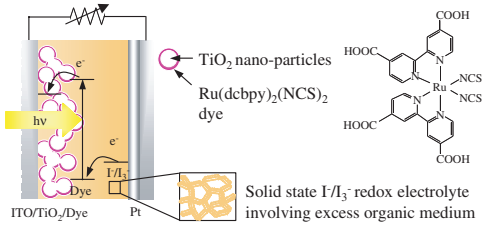
870 **Anisotropic Alignment Change of Columnar Liquid Crystal by Polarized Infrared Irradiation**

Infrared photoinduced alignment change of liquid crystal domains was investigated and a uniform and anisotropic change of domains was observed. The relation between the polarizing direction of the incident infrared light and the azimuthal direction of the columnar axis is parallel.



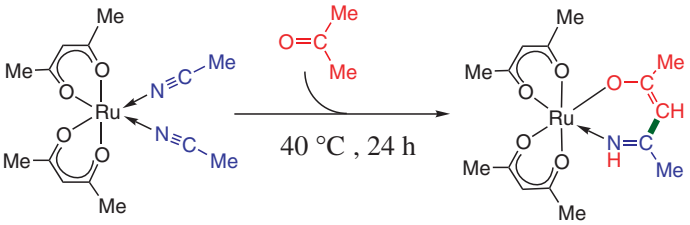
Hirosato Monobe, Kenji Kiyohara, Naohiro Terawasa, Manabu Heya, Kunia Awazu, and Yo Shimizu

872 **Dye-sensitized Solar Cell with Polysaccharide Solid Electrolyte**



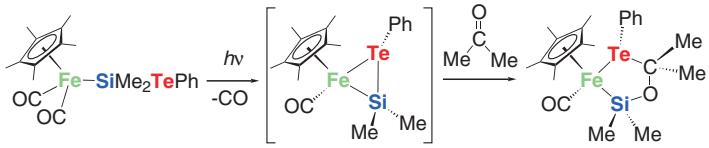
Masao Kaneko and Takayuki Hoshi

874 **Reaction of Acetone on Coodinated Nitrile in β-Diketonato Ruthenium Complex, $[Ru(acac)_2(CH_3CN)_2]$ with the formation of β-Ketiminate**



Takeshi Hashimoto, Shuhei Hara, Yumi Shiraishi, Karuppannan Natarajan, and Kunio Shimizu

876 **Photochemistry of a Tellurosilyl(carbonyl)-iron(II) Complex. Generation of a Novel Te–Si–Fe Three-membered Cyclic Intermediate**



Hiroshi Okada, Masaaki Okazaki, Hiromi Tobita, and Hiroshi Ogino

