Highlight Review

1188 Supercritical Hydrothermal Synthesis of Organic–Inorganic Hybrid Nanoparticles
Tadafumi Adschiri

This paper summarizes specific features of supercritical hydrothermal synthesis of nanoparticles: Nano single crystals of variety of metal or metal oxides can be synthesized. By introducing oxygen or hydrogen gas, oxidizing/reducing atmosphere can be easily controlled. Synthesis of organic–inorganic hybrid nanoparticles by introducing organic ligand is another unique character of this method. The synthesized hybrid nanoparticles can be perfectly dispersed in organic solvents, from which self-assembled super lattice structures can be formed.

Letter

1194 Fluorine-containing Diethynyl Aryl Derivatives for n-Channel Organic Field-effect Transistors
Kimiaki Kashiwagi, Takeshi Yasuda, and Tetsuo Tsutsui

Fluorine-containing diethynyl aryl derivatives (1–5) were synthesized for n-channel organic field-effect transistors.

1 \( m = 0, n = 1 \)
2 \( m = 1, n = 1 \)
3 \( m = 0, n = 2 \)
4 \( m = 1, n = 2 \)
5 \( m = 1, n = 0 \)

Electronic Supporting Information
1196  **Dual Polyrotaxane: One-pot Synthesis of Topological Polymer by Using Metathesis Reaction**

Kazuhiro Yamabuki, Yukio Isobe, Kenjiro Onimura, and Tsutomu Oishi

Electronic Supporting Information

The topological polyrotaxane was built from an ammonium salt as an axle component bearing one olefin and one bulky unit at the end of the chain and the derivative of dibenzo-24-crown-8 (DB24C8) as a wheel component having one terminal olefin. In this system, two kinds of reactions work at the same time as a driving force of the polymer construction. One is the inclusion reaction between the ammonium salt part of axle and the wheel, another is metathesis reaction of olefins of the axle and olefins of the guest.

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1198  **High-performance n-Type Organic Field-effect Transistors Based on Co-oligomers Containing a Trifluoromethylphenylthiazolyl Group and a Biphenylene Core**

Takahiro Kojima, Jun-ichi Nishida, Shizuo Tokito, and Yoshiro Yamashita

Electronic Supporting Information

A new limonoid isodictamdiol (1) and a known dictamdiol (2), the first 5S/9S-type degraded limonoids, were isolated from the EtOAc extracts of Dictamnus radicis Cortex. The structures of compounds 1 and 2 were respectively elucidated by means of the modern spectroscopic methods, including IR, MS, NMR, a single-crystal X-ray diffraction, as well as CD.

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1200  **Two Limonoids from the Root of Dictamnus radicis Cortex**

Pei-Hua Zhao, Li-Mei Sun, Mei-Ai Cao, and Cheng-Shan Yuan

Electronic Supporting Information

Viscoelastic behavior of thermoresponsive polymer hydrogel conjugated with quartz crystal microbalance was observed with high resolution as a function of temperature and concentration of organic adsorbate for the gel, especially in the shrinking phase of gel.

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1204  **Viscoelastic Behavior of Thermoresponsive Polymer Hydrogel with Organic Adsorbate Observed Using Quartz Crystal Microbalance**

Yuri Nakano, Itaru Sato, Yoshimi Seida, and Yoshio Nakano

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Synthesis and Luminescent Properties of Two Copolymers Containing Dithienothiophene and Fluorene

Yinyin Song, Wenyu Zhang, Wei Zhang, Jun Li, Suyue Li, Huiqiong Zhou, and Jingui Qin

Imaging of Aromatic Amide Molecules in Motion

Niclas Solin, Masanori Koshino, Takatsugu Tanaka, Shinya Takenaga, Hiromichi Kataura, Hiroyuki Isobe, and Eiichi Nakamura

Electronic Supporting Information

Surface Grafting of Polypyrrole onto Silicon Wafers

Daewon Sohn, Hyoseung Moon, Michael J. Fasolka, Naomi Eidelman, Sang-Mo Koo, Curt A. Richter, SeungEun Park, J. J. Kopanski, and Eric Amis

Electronic Supporting Information

Direct Observation of the Effect of Sodium Dodecyl Sulfate (SDS) on the HCFC-22 Hydrate Formation in a Static Mixer

Hideo Tajima, Yosuke Nakajima, Junichiro Otomo, Hidetoshi Nagamoto, Akihiro Yamasaki, and Fumio Kiyono

Photoinduced Sulfur Desorption from Platinum Nanoparticles Loaded on Titanium Dioxide

Satoshi Miyazaki, Tomokazu Kiyonaga, Tetsuro Kawahara, and Hiroaki Tada
1216 Construction of Highly Oriented Self-assembled Monolayer of Alkyldithiol with Ferrocene on Gold (111) Using Underpotentially Deposited Lead Submonolayer as a Template

Toshihiro Kondo, Saori Sato, and Wakana Maeda

1218 Fabrication of a Self-assembled Rotaxane Monolayer Consisting of a Viologen-functionalized Alkanethiol and α-Cyclodextrin Using Potential Sweep Method

Hiroto Murakami, Hiroko Chifu, and Takamasa Sagara

1220 Preparation of Novel Polymer Assemblies, “Lactosome”, Composed of Poly(l-lactic acid) and Poly(sarcosine)

Akira Makino, Ryo Yamahara, Eiichi Ozeki, and Shunsaku Kimura

Electronic Supporting Information

1222 A Novel Method for Fabrication of Unique Cobalt Nanostructures

Shiyong Sun, Jun Li, Ying Xiong, Huijie Yu, and Nan Tao

Electronic Supporting Information

1224 Photoinduced Surface Relief Structures Formed on Polymer Films Mixed with Diareylethenes

Takashi Ubukata, Shuro Yamaguchi, and Yasushi Yokoyama
1226 Reversible Thermochromic Change of Molecular Architecture for a Diacetylene Derivative 10,12-Pentacosadiynoic Acid Self-assembled Thin Films on Ag Surfaces

Jong Kuk Lim, Yunhee Lee, Kangtaek Lee, Myoungseon Gong, and Sang-Woo Joo

Electronic Supporting Information

1228 Electrophoretic Deposition of a Thick Film of Layered Manganese Oxide

Xiong Zhang and Wensheng Yang

Electronic Supporting Information

1230 Novel Effects of Twin-tailed Cationic Surfactants on the Formation of Gold Nanorods

Yutaka Kuwahara, Keishiro Yoshimori, Keisuke Tomita, Masako Sakai, Tsuyoshi Sawada, Yasuro Niidome, Sunao Yamada, and Hideto Shosenji

Electronic Supporting Information

1232 Photoswitching of Solvatochromism Using Diarylethenes with 2,5-Disubstituted 3-Thienyl Unit

Naoki Tanifuji, Masahiro Irie, and Kenji Matsuda

Electronic Supporting Information

1234 Regio-controlled Oxidative Polymerization of 2,5-Dimethylphenol by Using CuCl–TME-DA Complex

Yasuo Suzuki, Yuji Shibasaki, and Mitsuru Ueda

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http://www.csj.jp/journals/chem-lett/
1236 Oxidation of Alcohols with Hydrogen Peroxide Catalyzed by Molybdenum(VI)–Peroxo Complex under Solvent-free Conditions

A variety of alcohols were oxidized efficiently into the corresponding carbonyl compounds in excellent yields with hydrogen peroxide using a molybdenum(VI)-peroxo complex as a catalyst under solvent-free conditions.

Yi Luan, Ge Wang, Rudy L. Luck, Mu Yang, and Xiao Han

1238 Protein Adsorption is Dependent on Substrate Polymer Polymorphs

Protein adsorption was strongly dependent on substrate polymer polymorphs.

Hisao Matsuno, Yuya Nagasaka, Kimio Kurita, and Takeshi Serizawa

Electronic Supporting Information

1240 Dispersion of Layered Hexaniobate in Organic Solvents through Silylation and Liquid Crystalline Behavior of the Colloidal Suspension

Teruyuki Nakato and Sachika Hashimoto

Electronic Supporting Information

1242 Capillary-assembled Microchip for the Electrochemical Determination of Glucose

The designed microfluidic device

Shingo Inadumi, Hideaki Hisamoto, and Fumio Mizutani

1244 Diastereoselective Cyanomethylation of Chiral N-(tert-Butylsulfinyl)imines Promoted by Lewis Bases

94% yield

(Rs, R) / (Rs, S) = 98:2

Teruaki Mukaiyama and Makoto Michida
1246** Porphyrin/MgCl₂/Silica Gel Composite as a Cobalt-free Humidity Indicator**

Yoshiyuki Fueda, Jin Matsumoto, Tsutomu Shiragami, Kazunori Nobuhara, and Masahide Yasuda

Electronic Supporting Information

1248** A Novel Layered Silicate Having the Intercalated Potassium Cation: Synthesis, Characterizations, and Modification by Acid Treatment**

Kenichi Komura, Takuji Ikeda, Akiko Kawai, Fujio Mizukami, and Yoshihiro Sugi

Electronic Supporting Information

1250** Fabrication of Nanocomposites Composed of Carbon Nanotubes and Silica-coated Pt-based Alloy Nanoparticles**

Sakae Takenaka, Yoshiki Orita, Takafumi Arike, Hideki Matsune, Eishi Tanabe, and Masahiro Kishida

1252** Large Scale Fabrication of NiS Hollow Spheres with Controllable Diameter Sizes**

Xing Yin, Changzheng Wu, Chengle Wang, and Yi Xie

Electronic Supporting Information

1254** Recovery and Separation of Precious Metals Using Waste Paper**

Chaitanya Raj Adhikari, Durga Parajuli, Hidetaka Kawakita, Rumi Chand, Katsutoshi Inoue, and Keisuke Ohto

Adsonption gel prepared from waste paper holds high prospective for the recovery of precious metals.
1256  Absorption Spectra of Imidazolium Ionic Liquids

Ryuzi Katoh

1258  Preparation of Mesoporous Silica and Carbon Using Gelatin or Gelatin–Phenol–Formaldehyde Polymer Blend as Template

Yu-Chin Lin, Chun-Han Hsu, Hong-Ping Lin, Chih-Yuan Tang, and Ching-Yen Lin

Electronic Supporting Information

1260  Hypervalent Silicon and Phosphorus Atoms in Single Molecules: Synthesis and Properties of Phosphoranylalkoxysilicates and a Phosphoranyloxysilicate

Naokazu Kano, Hideaki Miyake, and Takayuki Kawashima

1262  Continuous Hydrothermal Preparation of Partially Substituted Perovskite Oxide Nanoparticles

Jinfeng Lu, Yukiya Hakuta, Hiromichi Hayashi, Tomotsugu Ohashi, Yasushi Hoshi, Koichi Sato, Masateru Nishioka, Tomoya Inoue, and Satoshi Hamakawa

1264  Fabrication of SmCo5 Nanoparticles as a Potential Candidate of Materials for Super-high-density Magnetic Memory: Use of Gold as the Third Element

Toru Matsushita, Junya Masuda, Takashi Iwamoto, and Naoki Toshima

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1266 **Patterning of Self-assembled Thin Films Using Vacuum Ultraviolet Irradiation Through Anodic Porous Alumina Mask**

Masahiro Harada, Sunao Murata, Takashi Yanagishita, Hiroyuki Sugimura, Kazuyuki Nishio, and Hideki Masuda

![Image](500 nm)

1268 **Zirconocene-mediated Preparation of Precursors for Estratriene Synthesis**

Pavel Herrmann, Miloš Buděšínský, and Martin Kotora

Electronic Supporting Information

1270 **Hypervalent Iodine-mediated Efficient Synthesis of Imidazoles**

Biswanath Das, Yallamalla Srinivas, Harish Holla, Maddeboina Krishnaiah, and Ravirala Narender

Electronic Supporting Information

1272 **Complexation of Some Phenol Hosts with Quinoline N-Oxide and the Structural Studies of Their Complexes by X-ray Crystallography**

Bunpei Hatano, Akiko Aikawa, Hiroshi Katagiri, Hideyuki Tagaya, and Hiroki Takahashi

Electronic Supporting Information

1274 **Effect of Base Additives on the Selective Hydrogenolysis of Glycerol over Ru/TiO₂ Catalyst**

Jian Feng, Jinbo Wang, Yafen Zhou, Haiyan Fu, Hua Chen, and Xianjun Li
Involvement of Electron Transfer in the Radical-scavenging Reaction of Resveratrol


First Principle Study of the Electron-transport Behavior of Porphyrin and Metalloporphyrin Wires

Zhong Xu, Ning Li, Xin Jin, Yanwei Li, Hongmei Liu, and Jianwei Zhao

Electronic Supporting Information

Preparation and Surface Properties of Poly(vinyl alcohol) Brush

Yuki Terayama, Motoyasu Kobayashi, and Atsushi Takahara

Electronic Supporting Information

Preparation of $^{99m}$Tc-Labeled Iron Oxide Nanoparticles for In Vivo Imaging in Hyperthermia

Sang Hyun Park, Hui Jeong Gwon, and Sang Mu Choi

Electronic Supporting Information

Spin States of Mono- and Dinuclear Iron(II) Complexes with Bis(imidazolylimine) Ligands

Kunihiro Fujita, Ryohei Kawamoto, Ryohei Tsubouchi, Yukinari Sunatsuki, Masaaki Kojima, Seiichiro Iijima, and Naohide Matsumoto

Electronic Supporting Information
1286 Template Fabrication of Novel Structure of Polypyrrole Nanotubules Inner-embedded with Gold Nanoparticles

A novel structure of polypyrrole nanotubules inner-embedded gold nanoparticles has been obtained by the in situ oxidative polymerization of the pyrrole monomer in a functionalized PAA template. The PPy nanotubules are homogeneous and straight, the diameter is about 55 nm which is close to the pore size of the PAA template (60 nm), and the gold clusters with diameter of 40 nm almost embedded at intervals in the pores of the nanotubules.

Ya-nan Zhang, Miao Chen, Yanchun Zhao, Zhilu Liu, and Xiang Liu

1288 Novel Micro/Nanostructures of Polyaniline in the Presence of Different Amino Acids via a Self-assembly Process

Novel micro/nanostructures of polyaniline were synthesized in the presence of different amino acids: (a) tryptophan; (b) lysine; (c) aspartic acid.

E Jin, Na Liu, Xiaofeng Lu, and Wanjin Zhang

Electronic Supporting Information

1290 Degradable Network Polymers Based on Di(meth)acrylates

Daisaku Matsukawa, Haruyuki Okamura, and Masamitsu Shirai

1292 Glycosylation and Malonylation of Quercetin, Epicatechin, and Catechin by Cultured Plant Cells

Cultured \textit{N. tabacum} cells catalyzed the regioselective glycosylation and malonylation of quercetin to give quercetin 3-O-(6-O-malonyl)-\beta-D-glucoside.

Kei Shimoda, Takanao Otsuka, Yoko Morimoto, Hatsuyuki Hamada, and Hiroki Hamada

Additions and Corrections

1294 Electroactive Nanowires Based on Simple 4,5-Bis(dodecylthio)- and 4,5-Bis(octadecylthio)-4',5'-bis(methoxycarbonyltetrathiafulvalenes

Yusuke Kobayashi, Masashi Hasegawa, Hideo Enozawa, and Masahiko Iyoda