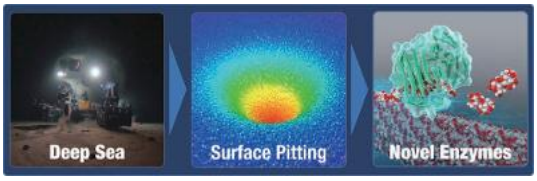
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Keywords: cellulases | deep-sea-inspired chemistry | microbial adaptation

Cellulolytic microorganisms and enzymes in the deep sea: diversity, molecular adaptation, and implications for deep-sea-inspired chemistry

Mikako Tachioka, Mikiko Tsudome, Akihiko Nakamura, and Shigeru Deguchi*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag107 doi:10.1093/bulcsj/uoag107

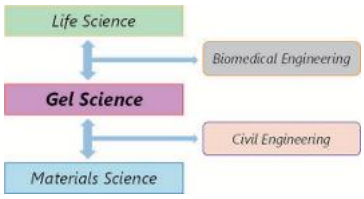


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Keywords: emergence | nonlinear phenomenon | soft and wet matter

Gel—soft and wet matter with spatiotemporal functions

Yoshihito Osada*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag092 doi:10.1093/bulcsj/uoag092

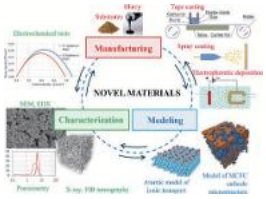


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Keywords: cathode | fuel cell | porous materials

Microstructural and chemical design of materials for molten carbonate fuel cells: recent progress and challenges

Gabriela Komorowska,* Samih Haj Ibrahim, and Tomasz Wejrzanowski
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag093 doi:10.1093/bulcsj/uoag093

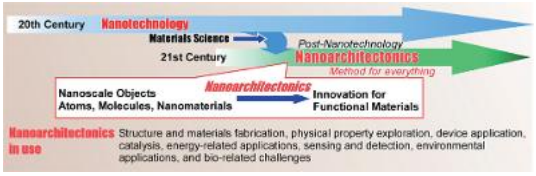


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Keywords: bio | energy | nanoarchitectonics

Nanoarchitectonics in use: the method for everything in materials science and application

Katsuhiko Ariga*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag101 doi:10.1093/bulcsj/uoag101

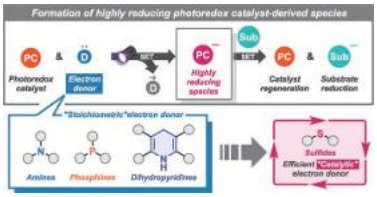


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Keywords: photoredox | reductive quenching | sulfide

From sacrificial to catalytic photogenerated reductant formation: a sulfide-mediated platform in photoredox catalysis

Masanori Tayu,* Kakeru Matsukuma, Sayaka Ohrui, and Nozomi Saito*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag103 doi:10.1093/bulcsj/uoag103

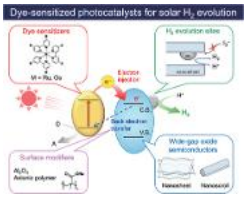


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Keywords: artificial photosynthesis | water splitting | z-scheme

Dye-sensitized oxide nanosheet photocatalysts for solar hydrogen evolution

Haruka Yamamoto, Kakeru Harada, Kelly M. Kopera, Megumi Okazaki, Thomas E. Mallouk, and Kazuhiko Maeda*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag102 doi:10.1093/bulcsj/uoag102

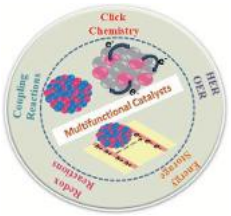


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Keywords: energy production and storage | functional nanomaterials | sustainable organic synthesis

Design principles of multifunctional nanocatalysts: from sustainable organic transformations to water splitting and energy storage

Soniya Agarwal, Pikumoni Boruah, Priyanka Gogoi, and Kalyanjyoti Deori*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag095 doi:10.1093/bulcsj/uoag095



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Keywords: carbon dioxide | formic acid | hydrogen spillover

Architectured metal catalysts for carbon-neutral hydrogen energy conversion

Kohsuke Mori*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag106 doi:10.1093/bulcsj/uoag106



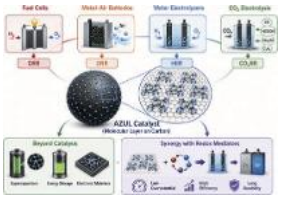
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Keywords: electrocatalysts | metal-Azapthalocyanine | PGM free

A molecular-adsorption concept of metal-azaphthalocyanines on carbons for realizing efficient electrochemical energy and material conversion

Hiroshi Yabu*

Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag097 doi:10.1093/bulcsj/uoag097



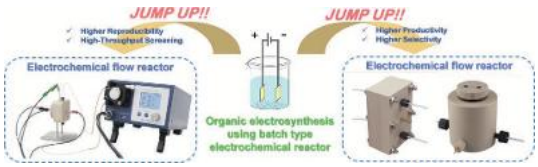
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Keywords: flow reactor | organic electrosynthesis | solid polymer electrolyzer

Development of electrochemical flow reactors as a platform for organic electrosynthesis

Mahito Atobe*

Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag094 doi:10.1093/bulcsj/uoag094



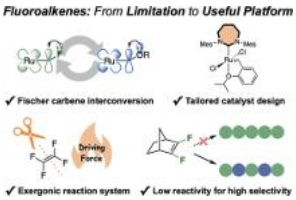
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Keywords: fluorinated compounds | olefin metathesis | ruthenium catalyst

From limitation to useful platform: fluoroalkenes in ruthenium-catalyzed olefin metathesis

Midori Akiyama*

Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag116 doi:10.1093/bulcsj/uoag116



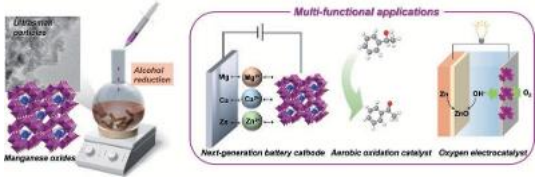
Award Accounts | BCSJ 100th Anniversary Collection
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Keywords: aerobic oxidation catalyst | electrocatalyst | rechargeable battery

Development of ultrasmall manganese oxides for multi-functional applications

Hiroaki Kobayashi*

Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag111 doi:10.1093/bulcsj/uoag111



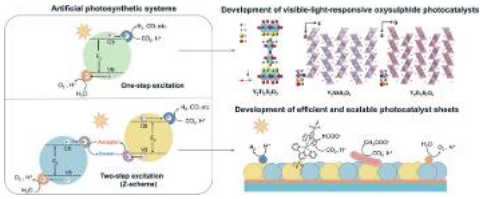
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The Chemical Society of Japan Award for Outstanding Young Women Chemists for 2025
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Keywords: CO_2 reduction | photocatalysis | water splitting

Toward practical artificial photosynthesis: engineering photocatalytic systems for efficient and scalable solar fuel production

Wen Zhao, Yuanshuo Peng, and Qian Wang*

Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag117 doi:10.1093/bulcsj/uoag117



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Keywords: nanowire | photochemistry | plasmonics

Synergistic integration of nanomaterials with functional molecules

Tomoko Inose* and Masahiko Yoshimura

Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag110 doi:10.1093/bulcsj/uoag110



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Keywords: Emerald (Beryl) synthesis | flux method | hydrothermal method

Emerald (Beryl) synthesis: 1848–2026

Daisuke Kozaki,* Shuji Oishi, and Kazumichi Yanagisawa

Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag115 doi:10.1093/bulcsj/uoag115



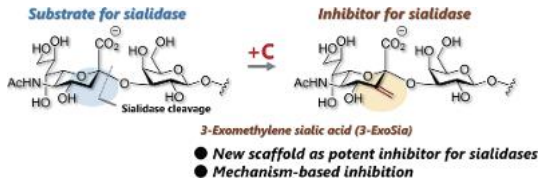
BCSJ Award Article | BCSJ 100th Anniversary Collection
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Keywords: inhibitors | sialidases | substrate analogs

3-Exomethylene sialic acid disaccharides as substrate-type sialidase inhibitors

Ryo Fukazawa, Kana Oonuma, Risa Maeda, Keiya Uezono, Marie Kato, Hiroyuki Koshino, Masaki Morita, Taeko Miyagi, Mikiko Sodeoka, and Go Hirai*

Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag109 doi:10.1093/bulcsj/uoag109



Keywords: electrolysis | NH_3 synthesis

NH_3 synthesis from 1.0 vol% nitric oxide gas via direct electrocatalytic reduction

Kaito Oya, Shoji Iguchi,* Shimpei Naniwa, and Kentaro Teramura*

Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag108 doi:10.1093/bulcsj/uoag108

Keywords: antibiotic wastewater treatment | MOF-derived catalyst | peroxymonosulfate activation

Metal-organic framework–derived porous Cu–Co bimetallic catalyst for efficient peroxymonosulfate activation toward tetracycline degradation

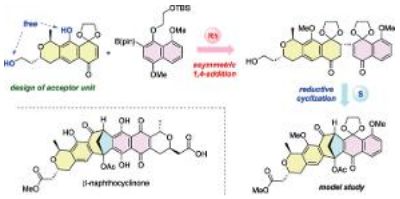
Tianhong Zhou, Han-gang Xie, Jie Wang,* Yue Tian, Shengchun Ma, and Yusuke Yamauchi*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag099 doi:10.1093/bulcsj/uoag099

Selected Paper Free Access

Keywords: dimer | natural product | stereoselective synthesis

Founding strategic bases for the total synthesis of naphthocyclinones: design and preparation of an acceptor unit and stereoselective construction of the bicyclic framework

Yoshio Ando,* Nozomi Tanaka, Mark M. Maturi, Ken Ohmori,* and Keisuke Suzuki
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag105 doi:10.1093/bulcsj/uoag105



Keywords: organozinc | palladium | transmetallation

Oxidative cross-coupling of *trans*-1,2-dizincioalkenes with alkylzincs through Pd/Zn ligand-scrambling

Haruka Yamaguchi, Takashi Kurogi, and Hideki Yorimitsu*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag104 doi:10.1093/bulcsj/uoag104

Open Access

Keywords: dual luminescence | isonicotinic acid | zeolite-like lanthanide MOFs

Minimal π-electronic system as photoantenna unlocking dual emission in zeolite-like MOFs with lanthanides

Shun Fujii, Nikita Madhukar, Kenta Goto, Shogo Kawaguchi, and Miki Hasegawa*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag100 doi:10.1093/bulcsj/uoag100

Keywords: $AgInS_2$ | hydrothermal synthesis | quantum dots

Microwave-assisted hydrothermal synthesis of water-soluble $AgInS_2$ quantum dots with enhanced photoluminescence

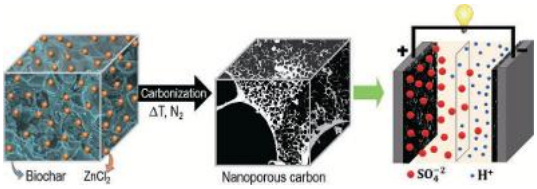
Kazuto Fukuda, Taisuke Nakatani, Yusuke Funakawa, and DaeGwi Kim*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag098 doi:10.1093/bulcsj/uoag098

Selected Paper

Keywords: biomass nanoarchitectonics | nitrogen-doped porous carbons | supercapacitors

Biomass nanoarchitectonics: nitrogen-doped hierarchical porous carbons as electrode materials for high-performance supercapacitors

Sabina Shahi, Sarita Manandhar, Rekha Goswami Shrestha, Chhabi Lal Gnawali, Mandira Pradhananga Adhikari, Katsuhiko Ariga, and Lok Kumar Shrestha*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag096 doi:10.1093/bulcsj/uoag096

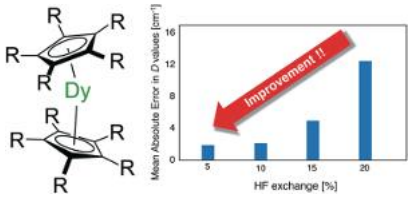


Selected Paper

Keywords: density functional theory (DFT) | Dy(III) metallocene single-ion magnets | magnetic anisotropy parameters (D)

Functional dependence of magnetic anisotropy parameters in Dy(III) metallocene single-ion magnets

Ren Inoue, Kaito Taka, Kohei Tada, Ryohei Kishi, and Yasutaka Kitagawa*
Bull. Chem. Soc. Jpn. 2026, 99, No. 8, uoag091 doi:10.1093/bulcsj/uoag091



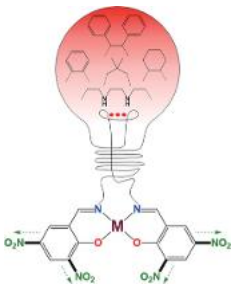
Chemistry Letters

Highlight Review Free Access

Keywords: complex | nitro group | salen

Coordination chemistry of metal complexes containing salen-type ligands bearing nitro groups

Ngoc Tram Anh Le and Kil Sik Min*
Chem. Lett. 2026, 55, No. 8, upag150 doi:10.1093/chemle/upag150

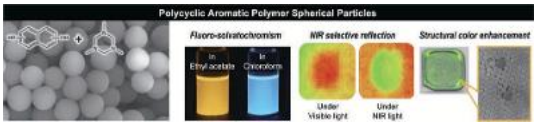


Highlight Review Open Access

Keywords: polyoxazine | spherical carbon particles | spherical polymer particles

Spherical thermosetting aromatic polymer particles: structure, function, and carbon conversion

Makoto Takafuji,* Nanami Hano, and Hirotaka Ihara
Chem. Lett. 2026, 55, No. 8, upag140 doi:10.1093/chemle/upag140



Open Access

Keywords: circular dichroism | optical activity | thalidomide

Circular dichroism and optical activity of thalidomide in polar aprotic acetonitrile

Komei Okano, Moeri Iwata, Mizuki Kira, Ayaka Matsumoto, Takuya Nakanishi, Norio Shibata, Toru Asahi,* and Kenta Nakagawa*
Chem. Lett. 2026, 55, No. 8, upag158 doi:10.1093/chemle/upag158

Open Access

Keywords: acid-catalyzed reaction | one-pot esterification | photosensitive polyimide

Facile and efficient incorporation of methacrylate groups into poly(amic acid) via an acid-catalyzed one-pot esterification

Akira Onoe, He Sun, Mitsuru Ueda, and Tomoya Higashihara*
Chem. Lett. 2026, 55, No. 8, upag156 doi:10.1093/chemle/upag156

Free Access

Keywords: antiaromaticity | coupling reaction | oxaporphyrin analogue

Peripheral functionalization of antiaromatic 5,15-dioxaporphyrin for the synthesis of oligomers

Kumari Anamika, Yukako Kawashige, Taiyou Tsutsumi, Shigeki Mori, Takanori Iwasaki, and Soji Shimizu*
Chem. Lett. 2026, 55, No. 8, upag160 doi:10.1093/chemle/upag160

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Keywords: marine macrolides | modular synthesis | stereoselective synthesis

Synthetic studies on leptolyngbyalides A–C: stereoselective synthesis of the C1–C15 fragment

Keisuke Murata and Haruhiko Fuwa*
Chem. Lett. 2026, 55, No. 8, upag153 doi:10.1093/chemle/upag153

Keywords: antiaromatic π-systems | peripheral substituent engineering | supramolecular polymer

Substituent effects on the supramolecular polymerization of 5,15-dioxaporphyrin

Ran Duan, Takanori Iwasaki, and Soji Shimizu*
Chem. Lett. 2026, 55, No. 8, upag155 doi:10.1093/chemle/upag155

Keywords: adhesive film | polyurethane | water-borne

Water-borne thermally reactive adhesive film formed from acrylic latex particles and blocked polyisocyanate nanoparticles

Takahiro Funatsu, Hiroaki Takanohashi, and Syuji Fujii*
Chem. Lett. 2026, 55, No. 8, upag151 doi:10.1093/chemle/upag151

Open Access

Keywords: aroyl chlorides | indene derivatives | methylenecyclopropanes

$AgSbF_6$-promoted divergent synthesis of highly substituted indene derivatives from methylenecyclopropane and aroyl chlorides

Xing Wang, Yun Wang, Junwen Ye, Yasuyuki Ura, and Yasushi Nishihara*
Chem. Lett. 2026, 55, No. 8, upag148 doi:10.1093/chemle/upag148

Keywords: ammonia decomposition | hydrogen production | osmium catalyst

Os/γ-Al_2O_3 outperforms Ru/γ-Al_2O_3 for catalytic ammonia decomposition

Jiawen Chen, Jie Zheng, Junyun Gao, and Bo Huang*
Chem. Lett. 2026, 55, No. 8, upag145 doi:10.1093/chemle/upag145

Open Access

Keywords: concentrated electrolyte | lithium-ion batteries | tetra-arm polymer

Gel polymer electrolyte comprising a highly concentrated lithium salt/sulfolane electrolyte and partially fluorinated tetra-arm polymer

Riko Sakakieda, Kazuki Miyagawa, Hisashi Kokubo, Ryoichi Tatara, and Kaoru Dokko*
Chem. Lett. 2026, 55, No. 8, upag147 doi:10.1093/chemle/upag147

Keywords: amyloid β | inhibition of amyloid fibril formation | PEGylation

Amphiphilic modification of human lysozyme enhances its ability to inhibit $A\beta_{42}$ aggregation

Tomonori Waku,* Rina Tokazu, Takaki Hori, Michiaki Okuda, Hachiro Sugimoto, Kazuya Matsuo, and Akio Kobori
Chem. Lett. 2026, 55, No. 8, upag146 doi:10.1093/chemle/upag146

Open Access

Keywords: dehydrogenative annulation | supported Pd catalysts | xanthone

Acceptorless dehydrogenative annulation of dihydroxybenzophenones to hydroxyxanthones by a CeO_2-supported Pd catalyst

Takehiro Matsuyama, Takafumi Yatabe,* Qing Yu, and Kazuya Yamaguchi*
Chem. Lett. 2026, 55, No. 8, upag144 doi:10.1093/chemle/upag144

Keywords: chloride solid electrolyte | mechanochemical synthesis | sodium ion conductor

Mechanochemical synthesis of fluorine-doped $NaTaCl_6$ electrolytes

Takuto Magome, Kota Motohashi,* Takehiro Nakao, Hirokazu Munakata, Atsushi Sakuda, and Akitoshi Hayashi*
Chem. Lett. 2026, 55, No. 8, upag143 doi:10.1093/chemle/upag143

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Keywords: artificial sweetener | cell membrane surface | non-lamellar lipids

Sucralose-induced stabilization of lamellar phases in hydrated monoolein and phosphatidylethanolamine systems revealed by X-ray diffraction

Yuki H. Osawa and Hiroshi Takahashi*
Chem. Lett. 2026, 55, No. 8, upag142 doi:10.1093/chemle/upag142

Keywords: Au-Ag bimetallic microstructures | MXene | SERS

Immersing MXene membranes into $AgNO_3$ and $HAuCl_4$ solution in sequence to fabricate SERS-active substrates

Hao Chen, Lei Chen, and Wenqin Wang*
Chem. Lett. 2026, 55, No. 8, upag141 doi:10.1093/chemle/upag141