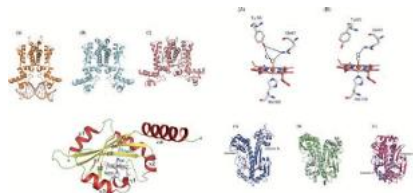


Accounts and Reviews BCSJ 100th Anniversary Collection

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Keywords: heme | heme-based sensors | signal transduction
The heme prosthetic group: a versatile tool for environmental sensing

Shigetoshi Aono*
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag056 doi:10.1093/bulcsj/uoag056

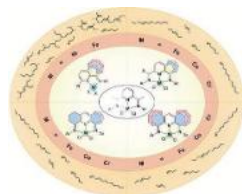


Accounts and Reviews BCSJ 100th Anniversary Collection

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Keywords: carbocyclic-fused (imino)pyridine | ethylene polymerization | late-transition-metal catalysts
Design and polymerization behavior of carbocyclic-fused (imino)pyridine-ligated late-transition-metal catalysts

Qaiser Mahmood* and Wen-Hua Sun*
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag054 doi:10.1093/bulcsj/uoag054



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Keywords: antitumor marine macrolide | protein-protein interaction modulator | synergistic antimitotic activity
Aplyronines and mycalolides: marine macrolides with diverse mechanisms for modulating cytoskeletal protein-protein interactions

Masaki Kita* and Hideo Kigoshi*
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag053 doi:10.1093/bulcsj/uoag053

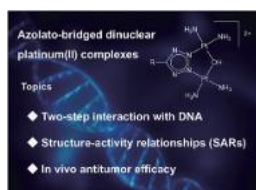


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Keywords: anticancer agent | DNA | platinum-based drugs
Azolato-bridged dinuclear platinum(II) complexes exhibit remarkable antitumor efficacy in vivo

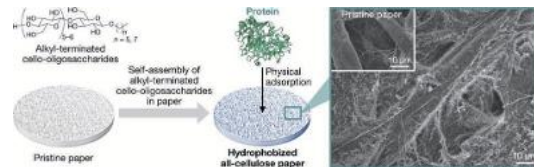
Seiji Komeda* and Masako Uemura
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag051 doi:10.1093/bulcsj/uoag051



BCSJ Award Article Free Access

Keywords: cellulose | hydrophobization | self-assembly
Aqueous one-step fiber-surface modification of paper with alkyl-terminated low-molecular-weight cellulose for hydrophobized all-cellulose biointerfaces

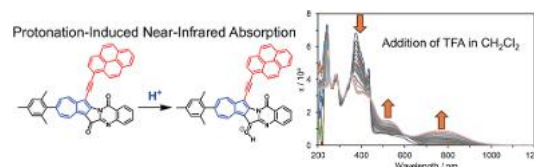
Moe Amitani, Kai Sugiura, Toshiki Sawada, and Takeshi Serizawa*
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag059 doi:10.1093/bulcsj/uoag059



Selected Paper Open Access

Keywords: azulene-fused heterocycles | halochromic behavior | tryptanthrin analogs
Synthesis and halochromic behavior of π -extended azuleno[1',2':4,5]pyrrolo[2,1-b]quinazoline-6,14-diones solubilized by mesityl substituent

Ryuta Sekiguchi,* Yuya Endo, Yo Ishikawa, Taku Shoji, Jun Kawakami, and Shunji Ito*
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag061 doi:10.1093/bulcsj/uoag061



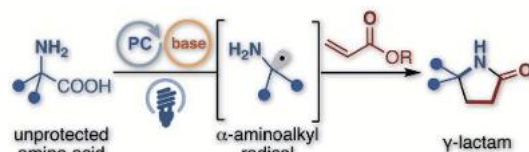
Keywords: cavity | dielectric continuum | multipole
Electrostatic interaction between two point charges in spherical cavities embedded in dielectric continuum revisited: role of high-order multipole interactions

Hiroki Uratani,* Yuji Takabayashi, and Hirofumi Sato
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag060 doi:10.1093/bulcsj/uoag060

Selected Paper

Keywords: chemistry | measurement | synthesis
Direct decarboxylative Giese addition of unprotected amino acids: a cascade access to γ -lactams

Tomotoki Matsuo, Yuto Sumida,* and Hirohisa Ohmiya*
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag058 doi:10.1093/bulcsj/uoag058



Keywords: colorimetry | sensors | SERS
Detection and determination of iodide in dual mode through thiosulfate-sensitized silver nanoparticles: UV-visible and SERS approach

Shalini Kashyap, Saumya Singh, Prachi Patel, Neetu Meena, Aman Dixit, and Kaushal Kumar Upadhyay*
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag052 doi:10.1093/bulcsj/uoag052

Keywords: cation-exchange membrane | electrical signal propagation | *Mimosa pudica*
Responding to cold stimuli and spatial propagation of electrical signals in *Mimosa pudica*

Yuecong Yuan, Sotaro Kodama, Yuki Kitazumi, Keisei Sowa, and Osamu Shirai*
Bull. Chem. Soc. Jpn. 2026, 99, No. 5, uoag055 doi:10.1093/bulcsj/uoag055

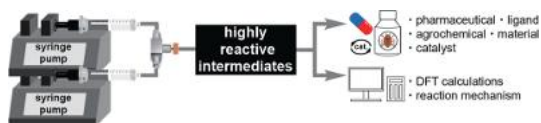
Highlight Review Free Access

Keywords: calculation | microflow | organophosphorus compounds
Microflow synthesis of organophosphorus compounds

Yuma Tanaka and Shinichiro Fuse*

Chem. Lett. 2026, 55, No. 5, upag080

doi:10.1093/chemle/upag080



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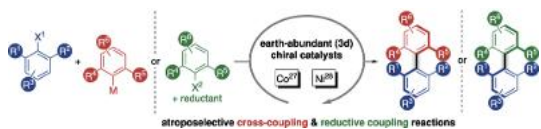
Keywords: asymmetric transition metal catalysis |
 atroposelective coupling reactions |
 organometallic reagents

Asymmetric coupling reactions of aryl electrophiles towards atropisomeric biaryls employing chiral Co and Ni-catalysts

Kristin Olbricht and Dino Berthold*

Chem. Lett. 2026, 55, No. 5, upag070

doi:10.1093/chemle/upag070



Highlight Review Open Access

Keywords: crop productivity | receptor modulator | strigolactones
Strigolactones in chemistry: chemical tools to visualize and manipulate receptor function

Masahiko Yoshimura*

Chem. Lett. 2026, 55, No. 5, upag069

doi:10.1093/chemle/upag069



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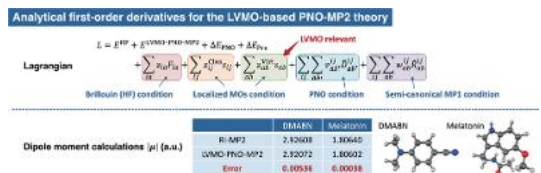
Keywords: analytical gradient theory | electronic dipole moments |
 local electron correlation theory

Analytical first-order derivatives for second-order Møller–Plesset perturbation theory with pair-natural orbitals using localized virtual molecular orbitals: electronic response properties

Manami Hayashi,* Masaaki Saitow,* and Takeshi Yanai*

Chem. Lett. 2026, 55, No. 5, upag064

doi:10.1093/chemle/upag064



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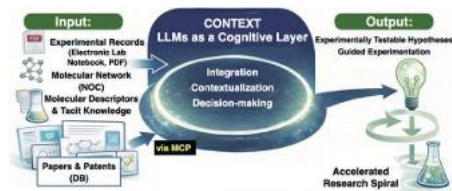
Keywords: digital organic synthesis | large language models |
 materials informatics

Organic reaction development guided by large language models: the next stage of AI-driven chemistry

Hiyori Takebe and Seijiro Matsubara*

Chem. Lett. 2026, 55, No. 5, upag051

doi:10.1093/chemle/upag051



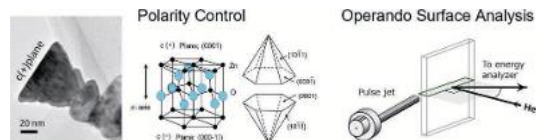
Highlight Review Free Access

Keywords: crystal facet | gas sensor | ZnO
Crystal facet engineering and polarity control in ZnO gas sensors: advancements in sensing performance and operando surface analysis—secondary publication

Noriko Saito,* Yutaka Adachi, and Taku T Suzuki

Chem. Lett. 2026, 55, No. 5, upag045

doi:10.1093/chemle/upag045



Keywords: chirality recognition | density functional theory |
 hydrogen bond

Chirality recognition of a minimal alcohol–ether system: a theoretical study on the 3-butyn-2-ol–propylene oxide dimer

Tomoyo Hara and Yoshiteru Matsumoto*

Chem. Lett. 2026, 55, No. 5, upag088

doi:10.1093/chemle/upag088

Open Access

Keywords: hydrogen carrier | silicon | two-dimensional material
Atmosphere-dependent hydrogen release from layered hydrogen silicane under visible-light irradiation

Mio Nakai, Kazushi Kiyohara, Hiroyuki Asakura, Masahiro Miyauchi,* and Hideyuki Nakano*

Chem. Lett. 2026, 55, No. 5, upag085

doi:10.1093/chemle/upag085

Keywords: aza-BODIPY | far-red fluorescence |
 intramolecular charge transfer

Asymmetric pyrrolopyrrole aza-BODIPYs: intramolecular charge transfer and redshifts of the optical properties

Yuna Miyoshi, Hideaki Karasaki, and Soji Shimizu*

Chem. Lett. 2026, 55, No. 5, upag072

doi:10.1093/chemle/upag072

Keywords: boron complexes | fluorescence | imidazo[1,2-a]pyridines
Synthesis and photophysical properties of N,N-chelated boron complexes based on imidazo[1,2-a]pyridines

Itsuki Ogawa, Sota Abe, Atsushi Tabata, Yasushi Yoshida, Shoko Ueta,

Shunta Nakamura, Yukihiro Arakawa, Keiji Minagawa, and Fumitoshi Yagishita*

Chem. Lett. 2026, 55, No. 5, upag078

doi:10.1093/chemle/upag078

Keywords: AEM electrolyzer | NiFe LDH | OER

Fabrication of NiFe LDH catalyst by in situ deposition and topological transformation for high-performance anion exchange membrane water electrolysis

Qin Li, Chao Lv,* Siyi Liu, Zezheng Zhang, Ning Zeng, Liuxin Yang, Xingbo Ge,* and Jinguang Cai*

Chem. Lett. 2026, 55, No. 5, upag077

doi:10.1093/chemle/upag077

Open Access

Keywords: 1,3-propanediol | 3-hydroxypropionic acid | electrooxidation | Ni/C catalysts

Electrooxidation of 1,3-propanediol to 3-hydroxypropionic acid over Ni/C catalysts

Saharu Tsunoda, Hideki Kurokawa, and Hitoshi Ogihara*

Chem. Lett. 2026, 55, No. 5, upag075 doi:10.1093/chemle/upag075

Editor's Choice Open Access

Keywords: ammonia | fluorinated cyanine dye | vapochromism
Dual-mode visual detection of ammonia based on the vapochromism of a fluorinated pentamethine cyanine dye doped in silicone films

Haruna Komai, Shota Mizuno, Yasuhiro Kubota, Toshiyasu Inuzuka, Yohei Miwa, and Kazumasa Funabiki*

Chem. Lett. 2026, 55, No. 5, upag076 doi:10.1093/chemle/upag076



Keywords: machine learning interatomic potential | Na-ion battery | p2-type layered oxides

Machine learning interatomic potential calculations for designing layered oxides in sodium-ion battery systems with low environmental impacts

Kohei Tada* and Riki Kataoka

Chem. Lett. 2026, 55, No. 5, upag074 doi:10.1093/chemle/upag074

Keywords: cinnamic acid | cyclodextrin | molecular assemble
Formation of photoresponsive vesicular molecular assemblies from a complexes of cinnamic acid derivative and cyclodextrin

Masaaki Akamatsu,* Reona Tsubaki, Koji Tsuchiya, Kyosuke Arakawa, Kenichi Sakai, and Hideki Sakai*

Chem. Lett. 2026, 55, No. 5, upag073 doi:10.1093/chemle/upag073

Keywords: diradical | fluorenyl | through-space interaction
Covalently connected yet electronically decoupled fluorenyl diradical

Masaya Kishimoto and Takashi Kubo*

Chem. Lett. 2026, 55, No. 5, upag071 doi:10.1093/chemle/upag071

Keywords: aluminum | frustrated Lewis pair | metathesis reaction
Al/P frustrated Lewis pair-catalyzed metathesis of carbon-heteroatom double bonds between aldehydes and isocyanates

Hirota Okamoto, Yoshihiro Nishimoto,* and Makoto Yasuda*

Chem. Lett. 2026, 55, No. 5, upag063 doi:10.1093/chemle/upag063

Keywords: machine learning | materials informatics | organic semiconductors

Machine learning-based prediction of molecular packing in organic semiconductors

Takuya Seki, Yudai Shinozaki, Shota Inoue, Shunsuke Sato, Jun Takeya,

Toshihiro Okamoto, and Go Watanabe*

Chem. Lett. 2026, 55, No. 5, upag066 doi:10.1093/chemle/upag066

Keywords: astrocyte | live-cell imaging | poloxamer 188
Visualizing astrocytic uptake of TAMRA-labeled poloxamer 188 via live-cell imaging

Mingkun Wang, Li Zhang, Guohong Chai,* and Bo Chen*

Chem. Lett. 2026, 55, No. 5, upag062 doi:10.1093/chemle/upag062

Open Access

Keywords: neural network potential | quantum chemistry | reaction enthalpy

Accuracy of advanced neural network potential for reaction thermodynamics of small biomass molecules

Mikito Fujinami and Hiromi Nakai*

Chem. Lett. 2026, 55, No. 5, upag061 doi:10.1093/chemle/upag061

Keywords: NIR dye | radical cation | redox system
Conjugation-driven stabilization of a dibenzo[a,*j*]perylene radical cation exhibiting NIR electrochromism

Tomoki Tadokoro, Takanori Suzuki,* and Yusuke Ishigaki*

Chem. Lett. 2026, 55, No. 5, upag056 doi:10.1093/chemle/upag056

Keywords: hydrogel nanoparticle | hydrogen generation | waste heat recovery

Thermally driven electrolysis triggered via pK_a shift of temperature-responsive hydrogel nanoparticles

Yuki Namba and Yu Hoshino*

Chem. Lett. 2026, 55, No. 5, upag054 doi:10.1093/chemle/upag054

Keywords: open cavity | polariton | strong coupling
Design and fabrication of open-cavity electrodes for studies of electrified interfaces

Masaki Itatani, Sennosuke Torii, Tomohiro Fukushima, and Kei Murakoshi*

Chem. Lett. 2026, 55, No. 5, upag058 doi:10.1093/chemle/upag058

Keywords: enantioselective aldol reaction | isocyanoacetic acid | silver catalysis

Silver-catalyzed enantioselective aldol reaction of isocyanoacetic acid derivatives with prolinol-phosphine-sec-amine chiral ligand

Satoshi Sakai, Kakeru Maeda, Yohei Shimizu,* and Masaya Sawamura*

Chem. Lett. 2026, 55, No. 5, upag060 doi:10.1093/chemle/upag060

Open Access

Keywords: 90° geometry photoexcitation | circularly polarized luminescence (CPL) | reflection-mode excitation

Circularly polarized luminescence measurement under reflection-mode excitation for solid-state films

Daiya Suzuki, Haruka Nakajima, Satoko Suzuki, Akio Kaneta, Yoshiro Kondo, Koushi Nagamori, and Yoshitane Imai*

Chem. Lett. 2026, 55, No. 5, upag052 doi:10.1093/chemle/upag052

Keywords: bioceramics | octacalcium phosphate | rare earth elements
Substitution and antibacterial ability of rare earth elements on octacalcium phosphate

Yuki Sugiura* and Masanori Horie

Chem. Lett. 2026, 55, No. 5, upag049 doi:10.1093/chemle/upag049

Keywords: aragonite | calcite | XAFS
Mg K-edge XAFS analysis of biogenic aragonite

Yuta Ijichi,* Kohei Sakata, Teruhiko Kashiwabara, Yoshio Takahashi, and Takeshi Ohno

Chem. Lett. 2026, 55, No. 5, upag048 doi:10.1093/chemle/upag048

Keywords: azapyrene | solvatochromism | zwitterion
Azapyrenes with pyridinium-phenolate-type zwitterionic skeletons

Yuto Nishihata, Yoshimitsu Tachi, and Masatoshi Kozaki*

Chem. Lett. 2026, 55, No. 5, upag044 doi:10.1093/chemle/upag044

Keywords: organoselenium chemistry | selenoamide | x-ray diffraction

Synthesis of a selenoformamide bearing both a hydroxy group and a bulky aryl substituent

Kyo Kikunami, Hiroyuki Kusama,* and Ryosuke Masuda*

Chem. Lett. 2026, 55, No. 5, upag059 doi:10.1093/chemle/upag059