

Original papers

- (23) "Polymorphism of [6]Cycloparaphenylene for Packing Structure-dependent Host-guest Interaction"
Tomohiro Fukushima, Hirotoshi Sakamoto, Kohei Tanaka, Yuh Hijikata, Stephane Irle, and Kenichiro Itami
Chem Lett., 2017, *in press*
Selected as Editor's choice
- (22) "Catalytic Dehydrogenerative C-H Imidation of Arenes Enabled by Photo-generated Hole Donation to Sulfonimide"
Eri Ito, Tomohiro Fukushima, Takahiro Kawakami, Kei Murakami and Kenichiro Itami
Chem, 2017, **2**, 383-392.
Selected as Cover picture
Highlighted in Chem-station
- (21) "Synthesis, Structure, and Electrochemical Property of a Bimetallic Bis-2-pyridylidene Palladium Acetate Complex"
Tetsushi Yoshidomi, Tomohiro Fukushima, Kenichiro Itami, and Yasutomo Segawa
Chem Lett., 2017, **46**, 587-590.
- (20) "Minor Impact of Ligand Shell Steric Profile on Colloidal Nanocarbon Catalysis"
Sterling B. Chu, Tomohiro Fukushima and Yogesh Surendranath
Chem. Mater., 2017, **29**, 495-498.
- (19) "Electrochemical Oxygen Reduction Catalyzed by Ni₃(hexaiminotriphenylene)₂"
Elise M. Miner, Tomohiro Fukushima, Dennis Sheberla, Lei Sun, Yogesh Surendranath, and Mircea Dincă
Nature Commun. 2016, **7**, 10942 (1-7).
Highlighted in News and Views in Nature Energy
- (18) "Control of Molecular Rotor Rotational Frequencies in Porous Coordination Polymers Using a Solid-Solution Approach"
Munehiro Inukai, Tomohiro Fukushima, Yuh Hijikata, Naoki Ogiwara, Satoshi Horike, and Susumu Kitagawa
J. Am. Chem. Soc., 2015, **137**, 12183-12186.
- (17) "Graphite-Conjugated Pyrazines as Molecularly Tunable Heterogeneous Electrocatalysts"
Tomohiro Fukushima, Walter Drisdell, Junko Yano, and Yogesh Surendranath
J. Am. Chem. Soc., 2015, **137**, 10926-10929.
Selected as JACS Spotlight

Highlighted in MIT News, Phys.Org, World Industrial Reporter, and AZO materials

- (16) "Synthesis and Porous Properties of Chromium Azolate Porous Coordination Polymers"
Kanokwan Kongpatpanich, Satoshi Horike, Masayuki Sugimoto, **Tomohiro Fukushima**, Daiki Umeyama, Yosuke Tsutsumi, and Susumu Kitagawa
***Inorg. Chem.*, 2014, 53, 9870-9875.**
- (15) "Programmed Crystallization via Epitaxial Growth and Ligand Replacement towards Hybridizing Porous Coordination Polymer Crystals"
Kenji Hirai, Kebi Chen, **Tomohiro Fukushima**, Satoshi Horike, Mio Kondo, Mikhail Meilikov, Nicolas Louvain, Chiwon Kim, Yoko Sataka, Osami Sakata, Susumu Kitagawa, and Shuhei Furukawa
***Dalton Trans.*, 2013, 42, 15868-15872.**
- (14) "Postsynthesis Modification of a Porous Coordination Polymer by LiCl to Enhance the H⁺ Transport"
Satoshi Horike, Yusuke Kamitsubo, Munehiro Inukai, **Tomohiro Fukushima**, Daiki Umeyama and Susumu Kitagawa
***J. Am. Chem. Soc.*, 2013, 135, 4612-4615.**
- (13) "Pore Design of Two-dimensional Coordination Polymers toward Selective Adsorption"
Yuh Hijikata, Satoshi Horike, Masayuki Sugimoto, Munehiro Inukai, **Tomohiro Fukushima**, and Susumu Kitagawa
***Inorg. Chem.*, 2013, 52, 3634-3642.**
- (12) "High CO₂/CH₄ and C₂ Hydrocarbon/CH₄ Selectivity in a Chemically Robust Porous Coordination Polymer"
Jingui Duan, Masakazu Higuchi, Satoshi Horike, Maw Lin Foo, Koya Prabhakara Rao, Yasutaka Inubushi, **Tomohiro Fukushima**, and Susumu Kitagawa
***Adv. Func. Mater.*, 2013, 23, 3525-3530.**
- Selected as Front Cover Picture**
- (11) "Highly Selective CO₂ Adsorption Accompanied with Low-Energy Regeneration in a Two-Dimensional Cu(II) Porous Coordination Polymer with Inorganic Fluorinated PF₆⁻ Anions"
Shin-ichiro Noro, Yuh Hijikata, Munehiro Inukai, **Tomohiro Fukushima**, Satoshi Horike, Masakazu Higuchi, Susumu Kitagawa, Tomoyuki Akutagawa, and Takayoshi Nakamura
***Inorg. Chem.*, 2013, 52, 280-285.**
- (10) "Modular Design of Domain Assembly in Porous Coordination Polymer Crystals via Reactivity-Directed Crystallization Process"

Tomohiro Fukushima, Satoshi Horike, Hirokazu Kobayashi, Masahiko Tsujimoto, Seiji Isoda, Maw Lin Foo, Yoshiki Kubota, Masaki Takata and Susumu Kitagawa

***J. Am. Chem. Soc.*, 2012, 134, 13341-13347.**

- (9) "A Soft Copper (II) Porous Coordination Polymer with Unprecedented Aqua Bridge and Selective Adsorption Properties"

Elsa Quartapelle Procopio, **Tomohiro Fukushima**, Elisa Barea, Jorge A. R. Navarro, Satoshi Horike, and Susumu Kitagawa

***Chem.-Eur. J.*, 2012, 18, 13117-13125.**

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- (8) "Ligand-based Solid Solution Approach to Stabilisation of Sulphonic Acid Groups in Porous Coordination Polymer $\text{Zr}_6\text{O}_4(\text{OH})_4(\text{BDC})_6$ (UiO-66)"

Maw Lin Foo, Satoshi Horike, **Tomohiro Fukushima**, Yuh Hijikata, Yoshiki Kubota, Masaki Takata, and Susumu Kitagawa

***Dalton Trans.*, 2012, 41, 13791-13794.**

Selected as HOT article and highlighted in Dalton Transactions Blog

- (7) "Dense Coordination Network Capable of Selective CO_2 Capture from C1 and C2 Hydrocarbons"

Satoshi Horike, Keisuke Kishida, Yoshihiro Watanabe, Yasutaka Inubushi, Daiki Umeyama, Masayuki Sugimoto, **Tomohiro Fukushima**, Munehiro Inukai, and Susumu Kitagawa

***J. Am. Chem. Soc.*, 2012, 134, 9852-9855.**

- (6) "Design of Flexible Lewis Acidic Sites in Porous Coordination Polymers by Using the Viologen Moiety"

Masakazu Higuchi, Kohei Nakamura, Satoshi Horike, Yuh Hijikata, Nobuhiro Yanai, **Tomohiro Fukushima**, Jungeun Kim, Kenichi Kato, Masaki Takata, Daisuke Watanabe, Shinji Ohshima and Susumu Kitagawa

***Angew. Chem. Int. Ed.*, 2012, 51, 8369-8372**

- (5) "Guest-to-Host Transmission of Structural Changes for Stimuli-Responsive Adsorption Property"

Nobuhiro Yanai, Takashi Uemura, Masafumi Inoue, Ryotaro Matsuda, **Tomohiro Fukushima**, Masahiko Tsujimoto, Seiji Isoda, and Susumu Kitagawa

***J. Am. Chem. Soc.*, 2012, 134, 4501-4504.**

- (4) "A Solid Solution Approach to 2D Coordination Polymers for CH_4/CO_2 and $\text{CH}_4/\text{C}_2\text{H}_6$ Gas Separation: Equilibrium and Kinetic Studies"

Satoshi Horike, Yasutaka Inubushi, Takashi Hori, **Tomohiro Fukushima**, and Susumu Kitagawa
***Chem. Sci.*, 2012, 3, 116-120.**

- (3) “Incarceration of Nanosized Silica into Porous Coordination Polymers: Preparation, Characterization, and Adsorption Property”
Takashi Uemura, Yu Kadowaki, Cho Rong Kim, **Tomohiro Fukushima**, Daisuke Hiramatsu, and Susumu Kitagawa
***Chem. Mater.*, 2011, 23, 1736-1741.**
- (2) “Modification of Flexible Part in Cu²⁺ Interdigitated Framework for CH₄/CO₂ Separation”
Yasutaka Inubushi, Satoshi Horike, **Tomohiro Fukushima**, George Akiyama, Ryotaro Matsuda, and Susumu Kitagawa
***Chem. Commun.*, 2010, 46, 9229-9231.**
- (1) “Solid Solutions of Soft Porous Coordination Polymers: Fine-Tuning of Gas Adsorption Properties”
Tomohiro Fukushima, Satoshi Horike, Yasutaka Inubushi, Keiji Nakagawa, Yoshiki Kubota, Masaki Takata, and Susumu Kitagawa
***Angew. Chem. Int. Ed.*, 2010, 49, 4820-4824.**
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Proceedings

- (3) 多孔性配位高分子(PCP)/金属有機構造体(MOF)の基礎
堀毛悟史、坂本裕俊、杉本雅行、**福島知宏**、岸田圭輔、梅山大樹、北川進
材料科学の基礎 Sigma-Aldrich, 2012.
- (2) 柔軟性錯体の固溶体を用いたガス吸着能の系統的制御
福島知宏
Bull. Jpn. Soc. Coord. Chem., **2011**, 57, 132-134.
- (1) 多孔性錯体による混合気体中からの二酸化炭素分離
福島知宏、堀毛悟史、北川進
配管技術 日本工業出版, **2011**, 7 月, 53(9), 27-31.

Patents

- (4) スルホンイミド化芳香族化合物の製造方法
伊丹 健一郎、村上 慧、伊藤 江里、川上 貴大、**福島 知宏**
C20160427JP#P01
- (3) Molecularly Tunable Heterogeneous Catalysts by Edge Functionalization of Graphitic Carbons
Yogesh Surendranath, **Tomohiro Fukushima**, Matthew O'Reilly, Seokjoon Oh, Alexander T. Murray, Corey J. Kaminsky, Sterling B. Chu, Megan N. Jackson

Patent No. 20170047592

(2) 金属錯体及びその製造方法

犬伏 康貴、三津家 由子、岸田 圭輔、西口 靖子、北川 進、堀毛 悟史、福島 知宏

特許公開 2012-017268

(1) 金属錯体及びそれからなる分離材

犬伏 康貴、北川 進、堀毛 悟史、福島 知宏

特許公開 2011-68631