

## CURRICULUM VITAE (ver. 4 Feb. 2019)

### PERSONAL INFORMATION

**Name, Family name:** CHANG (JANG)

**Forenames:** HO-CHOL

**Sex:** Male

**Place of Birth:** Kyoto, Kyoto Prefecture, JAPAN

**Date of Birth:** 1 March 1973 (45 years old)

**Nationality:** Korea

**Marital Status:** Married

**Address (home):** 501, 2-3-40, Tsurumi, Tsurumiku, Yokohama, Kanagawa, Japan, 230-0032

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### PRESENT ADDRESS

**Position:** Professor, Chemistry

**Address:** Department of Applied Chemistry, Faculty of Science and Engineering,  
Chuo University

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### EDUCATION

**Ph. D. in Chemistry:** Kyoto University, Kyoto, Japan, 2001

Concentrations; Inorganic Chemistry, Coordination Chemistry

Dissertation; Studies on Synthesis and Properties of Molecular Assemblies of  
Ligand-based Mixed-valence Metal Complexes (Advised by Prof. Susumu Kitagawa)

**M. Sc. in Chemistry:** Tokyo Metropolitan University, Hachioji, Tokyo, Japan, 1998

Concentrations; Inorganic Chemistry, Coordination Chemistry

Thesis; Synthesis and Characterization of Novel Charge-Transfer Complexes of  
 $\text{Cr}(\text{C}_6\text{O}_2\text{X}_4)_3$  (Advised by Prof. Susumu Kitagawa)

**B. Sc. in Chemistry:** Korea University, Kodaira, Tokyo, Japan, 1995

### ACADEMIC POSITIONS

**Nov. 2013-present:** Professor, Department of Applied Chemistry, Faculty of Science  
and Engineering, Chuo University

**Nov. 2008-2013:** Associate Professor, Division of Chemistry, Faculty of Science,  
Hokkaido University

**Nov. 2002 – March 2006:** Researcher (concurrent position) of Precursory  
Research for Embryonic Science and Technology (PRESTO), Japan Science and  
Technology Agency

**Apr. 2001-Oct. 2008:** Assistant Professor, Dept. of Synthetic Chemistry and  
Biological Chemistry, Graduate School of Eng., Kyoto University

**MAJOR FIELD(S) of SCHOLARLY or PROFESSIONAL INTEREST**

**Coordination Chemistry:** synthesis, characterization, and function of redox-active metal complexes

**Electrochemistry:** Redox properties of complexes in solid, liquid, and liquid crystals

**Metal-containing Liquid Crystals (Metallomesogen):** Design, synthesis, and properties (especially function of discotic liquid crystals)

**Catalyst:** Hydrogen storage, photocatalyst, oxidation and reduction catalysts

**EXPERIENCES**

**1999 – 2000** Teaching Assistant, Kyoto University

**1995 – 1996** Teaching Assistant, Tokyo Metropolitan University

**LANGUAGES ABILITIES**

**English:** Working Knowledge, **Korean:** Mother Language, **Japanese:** Native Language

**MEMBERSHIPS**

The Chemical Society of Japan, Japan Society of Coordination Chemistry, Catalysis Society of Japan, Japan Zeolite Association

**AWARDS**

The Hokkaido Branch of the Chemical Society of Japan, Encouragement Award, 2013

The Japan Society of Coordination Chemistry (JSCC) Award for Young Chemists, 2008

The Chemical Society of Japan Presentation Award, 2006

Science and Technology Encouragement Award, Kim Manyu Fundation, 2001

## PUBLICATIONS

87. Direct Photochemical C–H Carboxylation of Aromatic Diamines with CO<sub>2</sub> under Electron-Donor- and Base-free Conditions  
Takeshi Matsumoto, Daiki Uchijyo, Takuji Koike, Ryoya Namiki, **Ho-Chol Chang\***  
*Sci. Rep.*, **2018**, 8, 14623.
86. Tuning Electron Acceptability of the [Mo<sub>6</sub>S<sub>8</sub>] Core by Decorating with Methyl Groups on Face-Bridging  $\mu^3$ -Sulfides  
Takeshi Matsumoto,\* Ryoya Namiki, **Ho-Chol Chang\***  
*Eur. J. Inorg. Chem.*, **2018**, 3900–3904 (*Front Cover*).
85. Tuning the Mesomorphism and Redox-Response of Anionic Ligand-Based Mixed-Valent Ni(II) Complexes via Alkyl-Substituted Quaternary Ammonium Cations  
Yuichi Nakamura, Takeshi Matsumoto, Yasutaka Sakazume, Junnosuke Murata, **Ho-Chol Chang\***  
*Chem. Eur. J.*, **2018**, 24, 7398-7409 (*Inside Cover*). .
84. Coordination Behavior of *N,N'*-Bis(diisopropylphosphinoacetyl)-*o*-phenylenediamide with Ni(II) and Cu(I) Ions  
Takahiro Ito, Takeshi Matsumoto, Masanori Wakizaka, **Ho-Chol Chang\***  
*Eur. J. Inorg. Chem.*, **2017**, 3498-3507.
83. A Coordination Network with Ligand-centered Redox Activity Based on *facial*-[Cr<sup>III</sup>(2-mercaptophenolato)<sub>3</sub>]<sup>3-</sup> Metalloligands  
Masanori Wakizaka, Takeshi Matsumoto, Atsushi Kobayashi, Masako Kato, **Ho-Chol Chang\***  
*Chem. Eur. J.*, **2017**, 23, 9919-9924.
82. Structural and Spectroscopic Studies on the Interactions between ortho-Phenylenediamine and Li<sup>+</sup>, Na<sup>+</sup>, Mg<sup>2+</sup>, or Ca<sup>2+</sup> Ions  
Takeshi Matsumoto, Junki Ishii, Masanori Wakizaka, **Ho-Chol Chang\***  
*Chem. Lett.*, **2017**, 46, 232-235.
81. Dehydrogenation of Anhydrous Methanol at Room Temperature by *o*-Aminophenol-based Photocatalysts  
Masanori Wakizaka, Takeshi Matsumoto, Ryota Tanaka, **Ho-Chol Chang\***  
*Nature Commun.*, **2016**, 7, 12333-12344.
80. Highly Polar Solvent-induced Disproportionation of a Cationic Pt(II)-Diimine Complex Containing an *o*-Semiquinonato  
Shota Yamada, Takeshi Matsumoto, Masanori Wakizaka, **Ho-Chol Chang\***  
*Dalton Trans.*, **2016**, 45, 4974-4977.
79. Shape-memory Platinum(II) Complexes: Intelligent Vapor-History Sensor with ON-OFF Switching Function  
Yasuhiro Shigeta, Atsushi Kobayashi,\* Tadashi Ohba, Masaki Yoshida, Takeshi Matsumoto, **Ho-Chol Chang**, Masako Kato\*  
*Chem. Eur. J.*, **2016**, 22, 2682-2690.
78. Vapochromic Luminescence and Flexibility Control of Porous Coordination Polymers by Substitution of Luminescent Multinuclear Cu(I)-cluster Nodes  
Takahiro Hayashi, Atsushi Kobayashi, Hiroki Ohara, Masaki Yoshida, Takeshi Matsumoto, **Ho-Chol Chang**, Masako Kato  
*Inorg. Chem.*, **2015**, 54, 8905-8913.

77. Interactions Between the Trianionic Ligand-centred Redox-active Metalloligand  $[\text{Cr}^{\text{III}}(\text{perfluorocatecholato})_3]^{3-}$  and Guest Metal Ions  
Masanori Wakizaka, Takeshi Matsumoto, Atsushi Kobayashi, Masako Kato, **Ho-Chol Chang\***  
*Dalton Trans.*, **2015**, *44*, 14304-14314.
76. Systematic Syntheses and Metalloligand-Doping of Flexible Porous Coordination Polymers Composed of a Co(III)-metalloligand  
Atsushi Kobayashi, Yui Suzuki, Tadashi Ohba, Tomohiro Ogawa, Takeshi Matsumoto, Shin-ichiro Noro, **Ho-Chol Chang**, Masako Kato  
*Inorg. Chem.*, **2015**, *54*, 2522-2535.
75. Syntheses and Structures of Molybdenum-oxo Complexes Prepared by the Reactions of  $[\text{Mo}^{\text{II}}_2(\text{OAc})_4]$  with *tert*-Butyl- or Bromo-substituted Catechols  
Takeshi Matsumoto, Hirokazu Yano, Masanori Wakizaka, Atsushi Kobayashi, Masako Kato, **Ho-Chol Chang\***  
*Bull. Chem. Soc. Jpn.*, **2015**, *88*, 74-83.
74. Spontaneous Construction of Nanoneedles Using Ruthenium Complex-conjugated Porphyrins on Substrates  
Takanari Togashi, Atsushi Izumi, Hiroki Kon, Katsuhiko Kanaizuka,\* Manabu Ishizaki, Ryosuke Miyake, **Ho-Chol Chang**, Masa-aki Haga, Masatomi Sakamoto, Masato Kurihara\*  
*Chem. Lett. (Coordination Programming Virtual Issue)*, **2014**, *43*, 1201-1203.
73. Immobilization of a Redox-active Catecholato Pt(II) Complex on an Indium-doped Tin Oxide Electrode via Phosphonate Anchors via Phosphonate Anchors  
Hirotaka Honda, Takeshi Matsumoto, Ryo Tamura, Katsuhiko Kanaizuka, Atsushi Kobayashi, Masako Kato, Masa-aki Haga, **Ho-Chol Chang\***  
*Chem. Lett. (Coordination Programming Virtual Issue)*, **2014**, *43*, 1189-1191.
72. Synthesis and Vapor-adsorption Behavior of a Flexible Porous Coordination Polymer Built from a Cu(I)-Diimine Metalloligand  
Atsushi Kobayashi,\* Akira Sugiyama, Tadashi Ohba, Yui Suzuki, **Ho-Chol Chang**, Masako Kato\*  
*Chem. Lett. (Coordination Programming Virtual Issue)*, **2014**, *43*, 1070-1072.
71. Hysteretic Vapour Response of a Heterodinuclear Platinum(II)-copper(II) Complex Derived from the Dimer-of-dimer Motif and Guest-absorbing Site  
Tadashi Ohba, Atsushi Kobayashi, **Ho-Chol Chang**, Tajahiko Kouyama, Tatsuhsisa Kato, Masako Kato\*  
*Dalton Trans.*, **2014**, *43*, 7514-7521.
70. Flexible Coordination Polymers Composed of Luminescent Ru(II)-Metalloligands: Importance of Position of Coordination Site in Metalloligands  
Atsushi Kobayashi, Tadashi Ohba, Erika Saitoh, Yui Suzuki, Shin-ichiro Noro, **Ho-Chol Chang**, Masako Kato  
*Inorg. Chem.*, **2014**, *53*, 2910-2921.
69. Photo-induced dimerization reaction coupled with oxygenation of a platinum(II)-hydrazone complex  
Atsushi Kobayashi, Daisuke Yamamoto, Hiroyuki Horike, Kana Sawaguchi, Takeshi Matsumoto, Kiyohiko Nakajima, **Ho-Chol Chang**, Masako Kato  
*Inorg. Chem.*, **2014**, *54*, 2573-2581.

68. Photo- and Vapor-Controlled Luminescence of Rhombic Dicopper(I) Complexes Containing Dimethyl Sulfoxide  
Atsushi Kobayashi, Kahori Komatsu, Hiroki Ohara, Waka Kamada, Yuko Chishina, Kiyoshi Tsuge,  
**Ho-Chol Chang**, Masako Kato  
*Inorg. Chem.*, **2013**, *52*, 13188-13198.
67. Self-association and Columnar Liquid Crystalline Phase of Cationic Alkyl-substituted-Bipyridine Benzenedithiolato Gold(III) Complexes  
Tomohiro Ogawa, Misaki Sakamoto, Hirotaka Honda, Takeshi Matsumoto, Atsushi Kobayashi,  
Masako Kato, **Ho-Chol Chang\***  
*Dalton Trans. (the themed issue on Coordination Programming: Science of Molecular Superstructures towards Chemical Devices)*, **2013**, *42*, 15595-16005.
66. Non-precious-Metal-assisted Photochemical Hydrogen Evolution from *ortho*-Phenylenediamine  
Takeshi Matsumoto, **Ho-Chol Chang**,\* Masanori Wakizaka, Sho Ueno, Atsushi Kobayashi,  
Akira Nakayama, Tetsuya Taketsugu, Masako Kato\*  
*J. Am. Chem. Soc.*, **2013**, *135*, 8646-8654.
65. Integration of Alkyl-Substituted Bipyridyl Benzenedithiolato Platinum(II) Complexes with Cadmium(II) Ion via Selective Dative Bond Formation  
Hirotaka Honda, Takeshi Matsumoto, Misaki Sakatomo, Atsushi Kobayashi, **Ho-Chol Chang**,\*  
Masako Kato  
*Inorg. Chem.* **2013**, *52*, 4324-4334.
64. Vapour and mechanically induced chromic behaviour of platinum complexes with a dimer-of-dimer motif and the effects of hetero metal ions  
Tadashi Ohba, Atsushi Kobayashi, **Ho-Chol Chang**, Masako Kato\*  
*Dalton. Trans.* **2013**, *42*, 5490-5499.
63. Synchronic Transformation of Molecular States and Macroscopic Phases in Valence Tautomeric Complexes  
**Ho-Chol Chang**\* and Daisuke Kiriya  
*Eur. J. Inorg. Chem. (Spin crossover Issue)*, **2013**, 642-652 (Microreview).
62. Terpyridine Platinum(II) Complexes Containing Triazine di- or tri-thiolate Bridges: Structures, Luminescence, Electrochemistry, and Aggregation  
Hua-Xin Zhang, Masako Kato, Yoichi Sasaki, Takashi Ohba, Hiroto Ito, Atsushi Kobayashi,  
**Ho-Chol Chang**, Kohei Uosaki  
*Dalton. Trans.*, **2012**, *41*, 11497-11506.
61. Vapor-controlled Linkage Isomerization of a Vapochromic Bis(thiocyanato)platinum(II) Complex: New External Stimuli to Control Isomerization Behavior  
Atsushi Kobayashi, Yuki Fukuzawa, **Ho-Chol Chang**, Masako Kato  
*Inorg. Chem.*, **2012**, *51*, 7508-7519.
60. Coordination Site-dependent Cation Binding and Multi-responsible Redox Properties of Janus-head Metalloligand,  $[Mo^V(1,2\text{-mercaptophenolato})_3]^-$   
Takeshi Matsumoto, Masanori Wakizaka, Hirokazu Yano, Atsushi Kobayashi, **Ho-Chol Chang**,\*  
Masako Kato\*  
*Dalton. Trans.*, **2012**, *41*, 8303-8315.
59. Systematic Structural Control of Multichromic Platinum(II)-Diimine Complexes Ranging from

- Ionic Solid to Coordination Polymer  
Atsushi Kobayashi,\* Hirofumi Hara, T. Yonemura, **Ho-Chol Chang**, and Masako Kato\*  
*Dalton Trans.*, **2012**, *41*, 1878-1888.
58. ON-OFF Switching of the Solvatochromic Behavior of a Copper(II)-Hydrazone Complex Induced by Protonation/Deprotonation  
Mee Chang, Atsushi Kobayashi, **Ho-Chol Chang**, K. Nakajima, Masako Kato\*  
*Chem. Lett.* **2011**, *40*, 1335-1337.
57. Dimensionality Control of Vapochromic Hydrogen-Bonded Proton-Transfer Assemblies Composed of a Bis(hydrazone)iron(II) Complex  
Mee Chang, Atsushi Kobayashi\*, Kiyohiko Nakajima, **Ho-Chol Chang**, Masako Kato\*  
*Inorg. Chem.*, **2011**, *50*, 8308-8317.
56. Chromic Behaviors of Hexagonal Columnar Liquid Crystalline Platinum Complexes with Catecholato, 2-Thiophenolato, and Benzenedithiolato  
**Ho-Chol Chang**\*, Kazuki Komasaka, Keisuke Kishida, Tomoki Shiozaki, Takashi Ohmori, Takeshi Matsumoto, Atsushi Kobayashi, Masako Kato, and Susumu Kitagawa  
*Inorg. Chem.*, **2011**, *50*, 4279-4288.
55. Synthesis, Structure and Photophysical Properties of a Flavin-Based Platinum(II) Complex  
Atsushi Kobayashi,\* Korin Ohbayashi, Rie Aoki, **Ho-Chol Chang**, Masako Kato\*  
*Dalton Trans.*, **2011**, *40*, 3484-3489.
54. Ln-Co Based Rock-Salt Type Porous Coordination Polymers: Vapor Response Controlled by Changing the Lanthanide Ion  
Atsushi Kobayashi,\* Yui Suzuki, Tadashi Ohba, Shin-ichiro Noro, **Ho-Chol Chang**,  
Masako Kato\*  
*Inorg. Chem.*, **2011**, *50*, 2061-2063.
53. Metal-dependent and Redox-selective Coordination Behaviors of Metalloligand  $[Mo^V(1,2\text{-benzene dithiolato})_3]^-$  with Cu<sup>I</sup>/Ag<sup>I</sup> ions  
Takeshi Matsumoto, **Ho-Chol Chang**\*, Atsushi Kobayashi, Kohei Uosaki, Masako Kato\*  
*Inorg. Chem.*, **2011**, *50*, 2859-2869.
52. Structures and Luminescence Properties of Cyclometalated Dinuclear Platinum(II) Complexes Bridged by Pyridinethiolate  
Rie Aoki, Atsushi Kobayashi, **Ho-Chol Chang**, Masako Kato\*  
*Bull. Chem. Soc. Jpn.*, **2011**, *84*, 218-225.
51. Acid-Base Behavior of Substituted Hydrazone Complexes Controlled by the Coordination Geometry  
Mee Chang, Hiroyuki Horiki, Kiyohiko Nakajima, Atsushi Kobayashi, **Ho-Chol Chang**, Masako Kato  
*Bull. Chem. Soc. Jpn.*, **2010**, *83*, 905-910.
50. Modulable Cooperativity in a Valence Tautomeric Complex Functionalized with Branched Alkyl Chains  
Daisuke Kiriya, Kohei Nakamura, Susumu Kitagawa, and **Ho-Chol Chang**  
*Chem. Commun.*, **2010**, *46*, 3729-3731.
49. Assembled Functional Chemistry of Redox-active Complexes  
**Ho-Chol Chang**

- Bull. Jpn. Soc. Coord. Chem.*, **2009**, *53*, 24-32.
48. Bimodal Three-Membered Valence Tautomerism of an Alkyl Chain-Functionalized Manganese Complex  
Daisuke Kiriya, Kohei Nakamura, **Ho-Chol Chang**, Susumu Kitagawa  
*Chem. Commun.* **2009**, 4085-4087.
47. Voltammetric Antioxidant Analysis in Mineral Oil Samples Immobilised into Boron-Doped Diamond Micro-Pore Array Electrodes  
Xiaohang Zhang, Christopher A. Paddon, Yohan Chan, Philip C. Bulman-Page, Paul S. Fordred, Stephen D. Bull, **Ho-Chol Chang**, Nadeem Rizvi, and Frank Marken  
*Electroanalysis*, **2009**, *21*, 1341-1347.
46. Polymorph-Dependent Molecular Valence Tautomerism Synchronized with Crystal-Melt Phase Transitions  
Daisuke Kiriya, **Ho-Chol Chang**, Kohei Nakamura, Daisuke Tanaka, Ko Yoneda, Susumu Kitagawa  
*Chem. Mat.* **2009**, *21*, 1980-1988.
45. Allosteric binding of amino alcohols and diamines by dimeric zinc biladienone  
Tomofumi Shimizu, Naomi Asano, Tadashi Mizutani, **Ho-Chol Chang**, Susumu Kitagawa  
*Tetrahedron Lett.*, **2009**, *50*, 536-539.
44. Dynamic Torsional Motion of a Diruthenium Complex with Four Homo-Catecholates and First Synthesis of a Diruthenium Complex with Mixed-Catecholates  
**Ho-Chol Chang**, Katsunori Mochizuki, and Susumu Kitagawa  
*J. Mol. Struc.* **2008**, *890*, 303-308 (*A Special Issue for A. F. Cotton*).
43. Ambipolar, Single-Component, Metal-Organic Thin-Film Transistors with High and Balanced, Hole and Electron Mobilities  
Shin-ichiro Noro, Taishi Takenobu, Yoshihiro Iwasa, **Ho-Chol Chang**, Susumu Kitagawa, Tomoyuki Akutagawa, and Takayoshi Nakamura  
*Adv. Mat.* **2008**, *20*, 3399-3403.
42. Molecule-based Valence Tautomeric Bistability Synchronized with a Macroscopic Crystal-Melt Phase Transition  
Daisuke Kiriya, **Ho-Chol Chang**, and Susumu Kitagawa  
*J. Am. Chem. Soc.* **2008**, *130*, 5515-5522.
41. A Redox-Active Columnar Metallomesogen and Its Cyclic Voltammetric Response  
**Ho-Chol Chang**, Tomoki Shiozaki, Akiko Kamata, Keisuke Kishida, Takeshi Ohmori, Daisuke Kiriya, Takae Yamauchi, Hirotaka Furukawa, Susumu Kitagawa  
*J. Mat. Chem.* **2007**, *17*, 4136-4138 (*Front Cover*).
40. Structural and Spectroscopic Characterization of a Diruthenium *o*-Dioxolene Complex Possessing a SOMO Delocalized over the Entire Molecule,  $[\text{Ru}_2(3,6\text{-DTBDiox})_4]^-$   
Katsunori Mochizuki, Takashi Kawamura, **Ho-Chol Chang**, and Susumu Kitagawa  
*Inorg. Chem.* **2006**, *45*, 3990-3997.
39. Tuning of the Spin States in Trinuclear Cobalt Compounds of Pyridazine by the Second Simple Bridging Ligand  
Tao Yi, **Ho-Chol Chang**, Song Gao, and Susumu Kitagawa  
*Eur. J. Inorg. Chem.* **2006**, 1381-1387.

38. Polytypic Phase Transition in Alkyl Chain-Functionalized Valence Tautomeric Complexes  
Daisuke Kiriya, **Ho-Chol Chang**, Akiko Kamata, and Susumu Kitagawa  
*Dalton Trans.* **2006**, 1377-1382 (*Front Cover*).
37. Synthesis, Structures, and Magnetic Properties of the Copper(II), Cobalt(II), and Manganese(II) Complexes with 9-Acridinecarboxylate and 4-Quinolinecarboxylate Ligands  
Xian-He Bu, Ming-Liang Tong, Ya-Bo Xie, Jian-Rong Li, **Ho-Chol Chang**, Susumu Kitagawa, Joan Ribas  
*Inorg. Chem.* **2005**, 44, 9837-9846.
36. Effect of Countercations on the Structural Isomerization of a Dianionic Diruthenium Complex with a Ligand-Unsupported Ru–Ru Bond  
Katsunori Mochizuki, **Ho-Chol Chang**, Takashi Kawamura, and Susumu Kitagawa  
*Chem. Lett.* **2005**, 1622.
35. Metal-Organic Thin-Film Transistor Based on Ni<sup>II</sup>-*o*-diiminobenzosemiquinonate Complex  
Shin-ichiro Noro, **Ho-Chol Chang**, Taishi Takenobu, Tomoyuki Akutagawa, Daisuke Tanaka, Takayoshi Nakamura, Susumu Kitagawa, Yoshihiro Iwasa, Tetsuya Aoyama, Takafumi Sassa, Tatsuo Wada  
*J. Am. Chem. Soc.* **2005**, 127, 10012-10013.
34. Formation of 3D networks by H-bonding from novel trinuclear or 1D chain complexes of zinc(II) and cadmium(II) with isonicotinic acid analogues and the effects of π-π stacking  
Xian-He Bu, Ming-Liang Tong, Jian-Rong Li, **Ho-Chol Chang**, Li-Jun Li, Susumu Kitagawa  
*Cryst. Eng. Comm.* **2005**, 7, 411-416.
33. Porous Lanthanide-organic Framework with Zeolite-like Topology  
Tapas Kumar Maji, Golam Mostafa, **Ho-Chol Chang**, Susumu Kitagawa  
*Chem. Commun.* **2005**, 2436-3438.
32. Effect of the Metal-Assisted Assembling Mode on the Redox States of Hexaazatriphenylene Hexacarbonitrile  
Shuhei Furukawa, Takashi Okubo, Shigeyuki Masaoka, Daisuke Tanaka, **Ho-Chol Chang**, Susumu Kitagawa  
*Angew. Chem. Int. Ed.* **2005**, 44, 2700-2704.
31. Effects of Counter Cations on Structures, Redox, and Spectroscopic Properties of Diruthenium Catecholate Complexes with Ligand-unsupported Ru–Ru Bonds  
**Ho-Chol Chang**, Katsunori Mochizuki, and Susumu Kitagawa  
*Inorg. Chem.* **2005**, 44, 3810-3817.
30. Substituent-directed Structural and Physicochemical Controls of Diruthenium Catecholate Complexes with Ligand-unsupported Ru–Ru Bonds  
**Ho-Chol Chang**, Katsunori Mochizuki, and Susumu Kitagawa  
*Inorg. Chem.* **2005**, 44, 3799-3809.
29. A facile and versatile preparation of bilindiones and biladienones from tetraarylporphyrins  
Takae Yamauchi, Tadashi Mizutani, Kenji Wada, Shoji Horii, Hirotaka Furukawa, Shigeyuki Masaoka, **Ho-Chol Chang** and Susumu Kitagawa  
*Chem. Commun.* **2005**, 1309-1311.
28. Formation of a Ligand-based Mixed-valence Cluster Triggered by Dehydration Condensation of Semiquinonates with *o*-Phenylenediamines

- Ho-Chol Chang**, Nao Nishida, and Susumu Kitagawa  
*Chem. Lett.* **2005**, 402-403.
27. Third-order Nonlinear Optical Properties of Soluble Cr(III)-dioxolene Complexes  
Shin-ichiro Noro, Takafumi Sassa, T. Aoyama, **Ho-Chol Chang**, Susumu Kitagawa, Tatsuo Wada  
*Linear and Nonlinear Optics of Organic Materials IV*, **2004**, 5517, 12-19.
26. Expanding and shrinking porous modulation based on Pillared-layer coordination polymers showing selective guest adsorption  
Tapas Kumar Maji, Kazuhiro Uemura, **Ho-Chol Chang**, Ryotaro Matsuda, Susumu Kitagawa  
*Angew. Chem. Int. Ed.* **2004**, 43, 3269-3272.
25. Metal-complex assemblies constructed from the flexible hinge-like ligand H<sub>2</sub>bhnq: Structural versatility and dynamic behavior in the solid state  
Koichi Yamada, Sadahiro Yagishita, Hirokazu Tanaka, Kazuhiro Tohyama, Keiichi Adachi, Sumio Kaizaki, Hitoshi Kumagai, Katsuya Inoue, Ryo Kitaura, **Ho-Chol Chang**, Susumu Kitagawa, Satoshi Kawata  
*Chem. Eur. J.* **2004**, 10, 2647-2660.
24. Temperature-controlled hydrothermal synthesis of a 2D ferromagnetic coordination bilayered polymer and a novel 3D network with inorganic Co<sub>3</sub>(OH)<sub>2</sub> ferrimagnetic chains  
Ming-Liang Tong, Susumu Kitagawa, **Ho-Chol Chang**, Masaaki Ohba  
*Chem. Commun.* **2004**, 418-419.
23. A Neutral 3D Copper Coordination Polymer Showing 1D Open Channels and the First Interpenetrating NbO-type Network  
Xian-He Bu, Ming-Liang Tong, **Ho-Chol Chang**, Susumu Kitagawa, Stuart R Batten  
*Angew. Chem. Int. Ed.* **2004**, 43, 192-195.
22. Rational Design of a Ferromagnetic Coupled Trinuclear Copper(II) Complex with a Novel in-situ Synthesized Metallocligand  
Ming-Liang Tong, Y.-M. Wu, Tong Y.-X., Xiao-Ming Chen, **Ho-Chol Chang**, Susumu Kitagawa  
*Eur. J. Inorg. Chem.* **2003**, 2385-2388.
21. Cation-templated Constructions of Three-dimensional a-Pocubic-type [M(dca)<sub>3</sub>]-networks. Syntheses, Structures and Magnetic Properties of A[M(dca)<sub>3</sub>]  
Ming-Liang Tong, J. Ru, Y.-M. Wu, Xiao-Ming Chen, **Ho-Chol Chang**, Katsunori Mochizuki, Susumu Kitagawa  
*New J. Chem.* **2003**, 27, 779-782.
20. Syntheses and Crystal Structures of Three One-dimensional Copper(II) Complexes Constructed by Salicylate and 4,4'-Bipyridine: Ladder, Zig-zag and Linear Polymeric Assembly  
Long-Guan Zhu, Susumu Kitagawa, Hitoshi Miyasaka, **Ho-Chol Chang**  
*Inorg. Chim. Acta.* **2003**, 355, 121-126.
19. A Novel Three-dimensional Coordination Polymer Constructed with Mixed-valence Dimeric Copper(I,II) Units  
Ming-Liang Tong, Li-Jun Li, Katsunori Mochizuki, **Ho-Chol Chang**, Xiao-Ming Chen, Ying Li, Susumu Kitagawa  
*Chem. Commun.* **2003**, 428-429.
18. Formation of a One-Dimensional Array of Oxygen in a Microporous Metal-Organic Solid  
Ryo Kitaura, Susumu Kitagawa, Y. Kubota, T. Kobayashi, K/ Kindo, Y. Mita, A. Matsuo,

- M. Kobayashi, **Ho-Chol Chang**, T. Ozawa, M. Suzuki, M. Sakata, M. Takata  
*Science*, **2002**, 298, 2358-2361.
17. Crystal structure of 2-D stacking network of  $[\text{Cu}(\text{Hsal})_2(\text{py})_2]_n$   
Long-Guan Zhu, Guo-Qiang Cai, Susumu Kitagawa, **Ho-Chol Chang**  
*Chin. J. Inorg. Chem.* **2002**, 18, 911-914.
16. Pseudo-Polyrotaxane and Beta-Sheet Layer-Based Three-Dimensional Coordination  
Ming-Liang Tong, Y.-M. Wu, J. Ru, Xiao-Ming Chen, **Ho-Chol Chang**, Susumu Kitagawa  
*Inorg. Chem.* **2002**, 41, 4846-4848.
15. Synthesis and Crystal Structures of Mononuclear Rhodium Hydrido Complexes from the  
Reactions of  $[\text{Rh}(\text{H})_2(\text{PPH}_3)_2(\text{EtOH})_2]\text{ClO}_4$  with Various Nitrogen Ligands  
X.-Y. Yu, M. Maekawa, T. Morita, **Ho-Chol Chang**, Susumu Kitagawa, G.-X. Jin  
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