

Yu-Chuang Chuang



Affiliation:

National Synchrotron Radiation Research Center, Hsinchu, Taiwan

Address: 101 Hsin-Ann Road, Hsinchu Science Park, Hsinchu, Taiwan

E-mail: chuang.yc@nsrrc.org.tw

Website:

https://www.nsrrc.org.tw/english/personal.aspx?ID=15264&Dept_UID=55&Type=D

Education

- 2005 – 2010 Ph. D. National Taiwan University (Department of Chemistry)
2003 – 2005 M. S. National Taiwan University (Department of Chemistry)
1999 – 2003 B. S. National Cheng-Kung University (Department of Chemistry)

Professional Career

- 2024.08 – Present Deputy Division Head of Scientific Research Division, NSRRC
2023.08 – Present Adjunct Associate Professor, Department of Chemistry, National Taiwan University, Taiwan
2022.01 – Present Associate Scientist, NSRRC
2022.01 – Present Group leader of Material Science Group, Scientific Research Division, NSRRC
2019.08 – 2020.06 Jointly Appointed Assistant Professor, Graduate Institute of Applied Science and Technology, National Taiwan University of Science and Technology
2012.01 – 2021.12 Assistant Scientist, NSRRC
2011.08 – 2012.17 Postdoctoral Researcher, Dpt. of Chemistry, National Taiwan University, Taiwan
2010.02 – 2010.06 Short visiting, ChemMatCARS, Argonne National Laboratory, USA

Selected Publications

1. Wang, C. C.*; Liao, P. J.; Chung, Y. C.; Shin, C. Y.; Wu, Y. C.; Lee, G. H.; Chien, S. Y.; Chen, B. H.; **Chuang, Y. C.***, *ACS Omega*, **2024**, 9, 40920-40931, "Structural Diversity and Dimensionality of Three Cu(II)-dpds-C₅O₅²⁻ Coordination Polymers Controlled by the Coordination Sphere of Cu(II) Centers and the Coordination Modes of C₅O₅²⁻ (dpds = 4,4'-Dipyridyldisulfide)", (IF=4.1, Times Cited:0)
2. Wang, C. C.*; Chung, Y. C.; Liu, C. Y.; Lee, G. H.; Chien, S. Y.; Chen, B. H.; **Chuang, Y. C.***, *CrystEngComm*, **2023**, 25, 290-298, 'Structural Characterization and Solvent Vapor Sorption of Two Solvent-dependent Zn(II) Supramolecular Architectures Based on a Flexible Tripodal Thioether-based Pyridyl Ligand and a Dicarboxylate-based Ligand', (IF= 3.756, Times Cited:0)
3. Chen, B. H.; Xu, J. J.; Lai, W. R.; Chang, C. K.; Chen, J. L., Lee, J. F.; Chen, J. M.; Sheu, H. S.; Lee, J. J.; Kubota, Y.; Chiang, M. H.; Kitagawa, Y.*; **Chuang, Y. C.***; Hsu, I. J.*, *J. Chin. Chem. Soc.* **2023**, 70, 1187-1199, 'Structure Determination and Magnetic Studies of Triazole Chelated Co(II) Coordination Polymers', (IF=1.753, Times Cited:0)
4. Wang, C. C.*; Tsai, C. S.; Lee, G. H.; Chien, S. Y.; Chen, B. H.; **Chuang, Y. C.***, *J. Chin. Chem. Soc.* **2023**, 70, 1155-1167, "Structural Characterization, Thermal Stability, and Solvent de-/ad-sorption Behavior of Two d¹⁰ M(II) (M=Cd and Zn) Coordination Polymers Constructed by 1,3,5-tris(4-pyridylsulfanyl-methyl)-2,4,6-trimethyl-benzene (L¹)", (IF=1.753, Times Cited:0)

5. Wang, C. C.*, Lin, G. M., Lin, C. H., Chang, T. W., Ke, S. Y., Liu, C. Y., Lee, G. H., Chen, B. H., **Chuang, Y. C.***, *ACS Omega*, **2022**, 7, 14089-14101, "Synthesis, Structural Characterization, and Water Vapor Sorption Behavior of Two Ligand Ratio-Dependent Supramolecular Networks, [Cd(2,2'-bpym)_{1.5}(BDC)]·0.5(2,2'-bpym)·5H₂O and [Cd(2,2'-bpym)_{0.5}(BDC)(H₂O)₃]", (IF=4.132, Times Cited:0)
6. Wang, C. C.*; Yi, W. C., Huang, Z. L., Chien, W. C., **Chuang, Y. C.***, Lee, G. H. *Crystals*, **2021**, 11, 371, "Reversible Water Ad-/Desorption Behavior of a 3D Polycatenation Network, [Zn(bpp)(BDC)].1.5(H₂O), Constructed by 2D Undulated Layered MOF"
7. Wang, C. C.*; Yi, W. C.; Huang, Z. L.; Chang, T. W.; Chien, W. C.; Tseng, Y. Y.; Chen, B. H.; **Chuang, Y. C.***; Lee, G. H. *Polymers*, **2020**, 12, 2222, "Synthesis, Structures, and Water Adsorption of Two Coordination Polymers Constructed by M(II) (M = Ni(1) and Zn (2)) with 1,3-Bis(4-Pyridyl)Propane (bpp) and 1,2,4,5-Benzenetetracarboxylate (BT⁴⁻) Ligands"
8. Wang, C. C.*; Tsai, J. H.; Ke, S. Y.; Lee, G. H.; **Chuang, Y. C.***; Yang, E. C. *Cryst. Growth Des.* **2020**, 20, 5395-5405. " Structural Characterization, Water Adsorption, and Magnetic Properties of Two Composite Mn(II)–Squarate–dpe Supramolecular Architectures"
9. Kuo, C. S.; Lyu, L. M.; Sia, R. F.; Lin, H. M.; Sneed, T. B.; Chen, C. F.; Chang, J.; Chiu, T. W.; **Chuang, Y. C.***; Kuo, C. H.*, *ACS Sustainable Chem. Eng.* **2020**, 8, 10544-10553, "Ultrathin Octahedral CuPt Nanocages Obtained by Facet Transformation from Rhombic Dodecahedral Core–Shell Nanocrystals"

Research Interests

1. Structure determination from powder diffraction (High Resolution Powder X-ray Diffraction (TPS 19A spokesperson))
2. Atomic Pair Distribution Function (PDF)
3. X-ray Crystallography and Crystal Engineering
4. Charge Density Analysis from High Resolution Single Crystal X-ray Diffraction
5. Spin Crossover Materials