

# Synthesis, Crystal Structures, and Properties of Ln(III)-Cu(I)-Na(I) and Ln(III)-Ag(I) Heterometallic Coordination Polymers

Rong-Hua Zeng <sup>a,b,c</sup>, Guo Peng <sup>a</sup>, Yong-Cai Qiu <sup>d</sup>, Sheng-Run Zheng <sup>a</sup>, Wei-Shan Li <sup>\*a,b,c</sup>,  
Wei-Xiong Zhang <sup>e</sup>, Hong Deng <sup>a,b,c</sup> and Yue-Peng Cai <sup>a,b,c</sup>

*a. School of Chemistry and Environment, South China Normal University, Guangzhou 510006, China.*

*b. Key Laboratory of Electrochemical Technology on Energy Storage and Power Generation of Guangdong Higher Education Institutes, South China Normal University, Guangzhou 510006, China*

*c. Engineering Research Center of Materials and Technology for Electrochemical Energy Storage (Ministry of Education), South China Normal University, Guangzhou 510006, China*

*d. The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, China*

*e Tohoku University, Department of Chemistry, Graduate School of Science, Aramaki-Aza-Aoba, Aoba-ku, Sendai 980-8578, Japan*

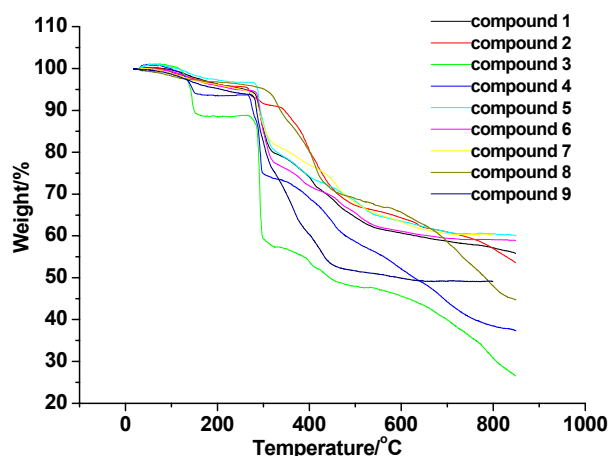


Fig. S1. The TGA curves of the compounds 1-9.

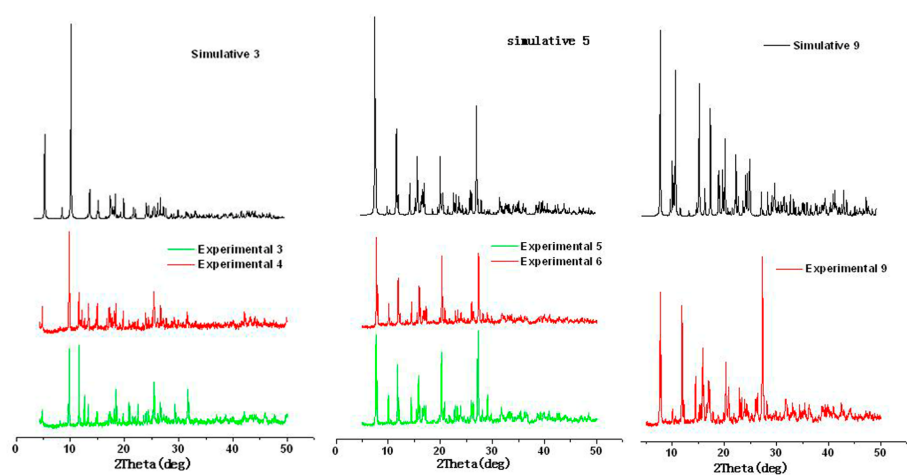


Fig. S2. PXRD patterns by simulated based on the X-ray single crystal diffraction data and by synthesized compounds.

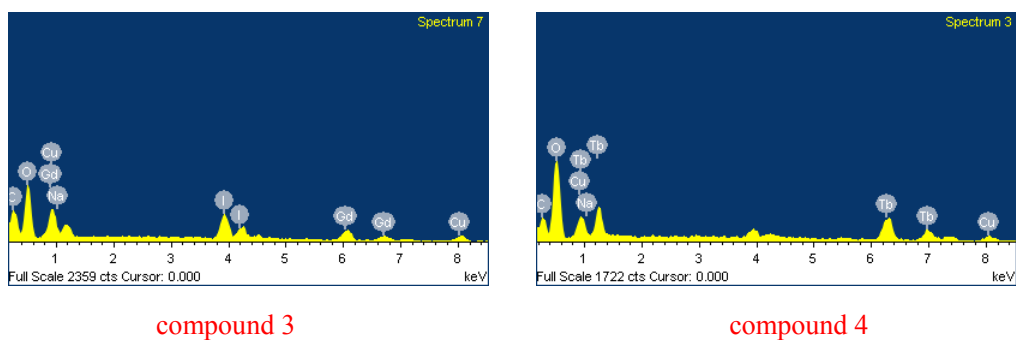


Fig. S3. The EDX spectrum of the compounds 3-4