

Development of a versatile synthesis method for trinuclear Co(III), Rh(III), and Ir(III) dithiolene complexes, and their crystal structures and multi-step redox properties

Yusuke Shibata, Baohua Zhu, Shoko Kume, and Hiroshi Nishihara*

Supplementary Information

Cyclic voltammograms

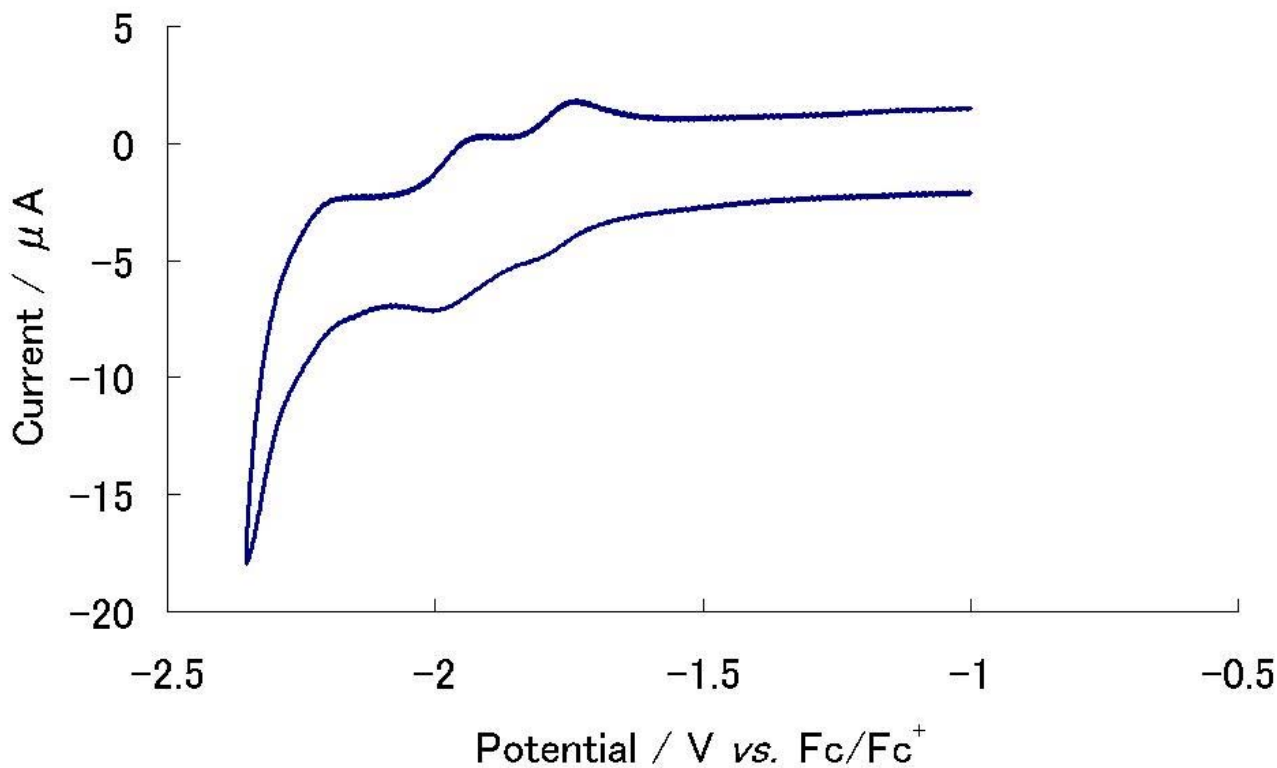


Fig. S1. Cyclic voltammogram of [Rh₃(η⁵-C₅Me₅)₃(S₆C₆)] (4) at a glassy carbon electrode in 0.1 mol dm⁻³ Bu₄NClO₄-C₆H₅CN at 0.1 V s⁻¹.

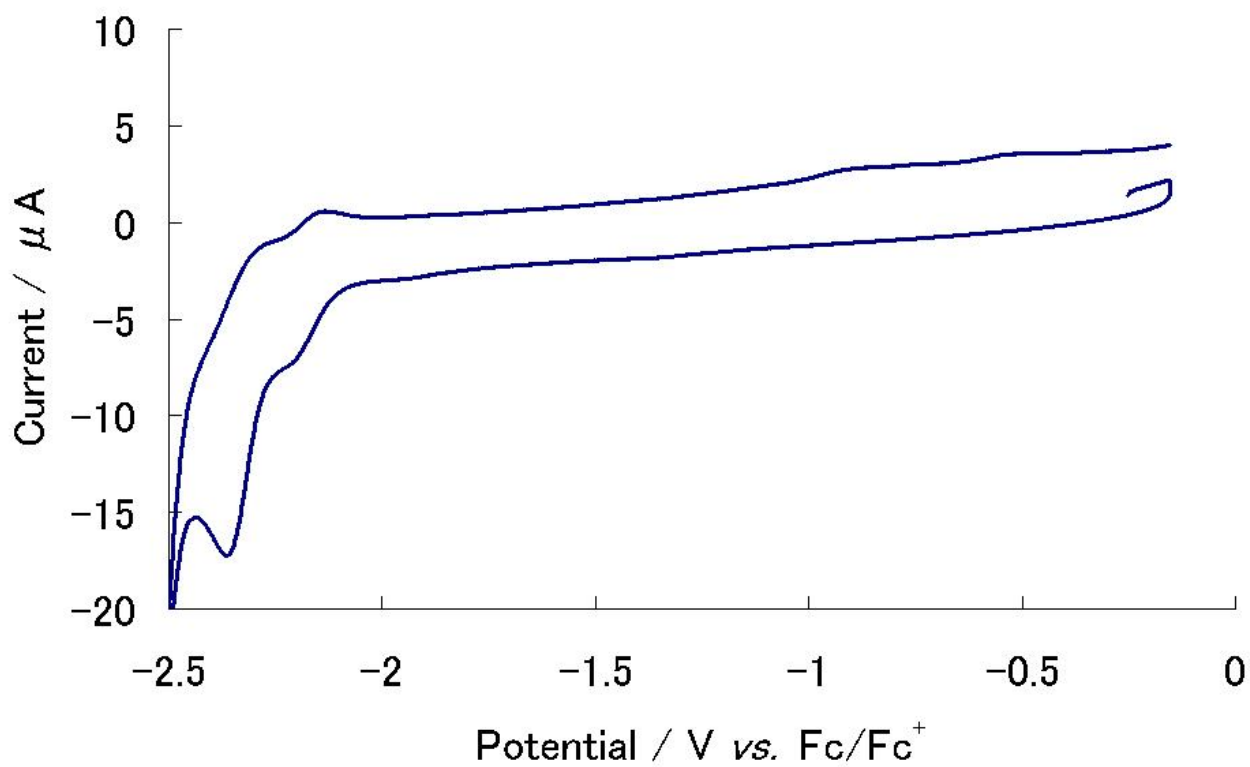


Fig. S2. Cyclic voltammogram of $[\text{Ir}_3(\eta^5\text{-C}_5\text{Me}_5)_3(\text{S}_6\text{C}_6)]$ (**5**) at a glassy carbon electrode in $0.1 \text{ mol dm}^{-3} \text{ Bu}_4\text{NClO}_4\text{-C}_6\text{H}_5\text{CN}$ at 0.1 Vs^{-1} .

X-ray crystal structures

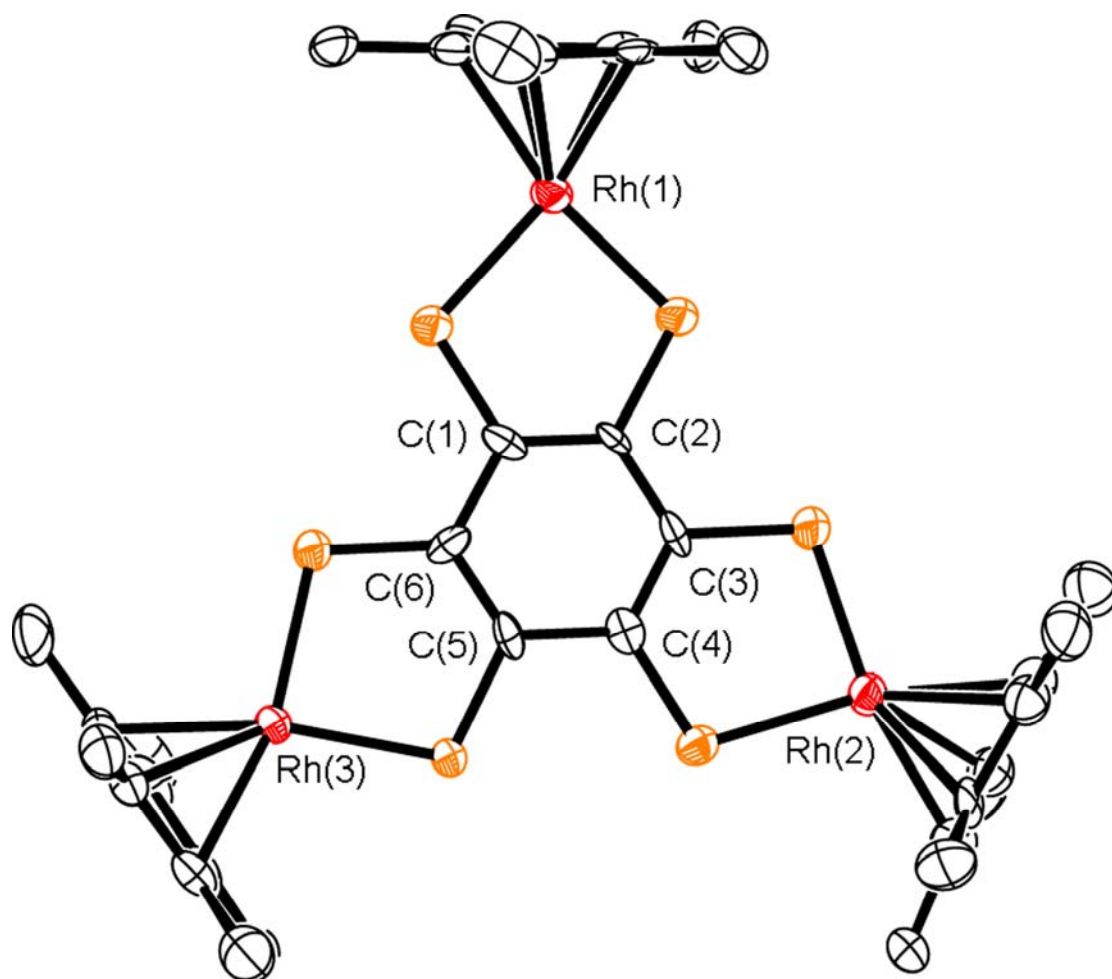


Fig. S3. X-ray crystal structure of **4**. H atoms and solvent molecules are omitted for clarity. Thermal ellipsoids are drawn at the 50 % level.

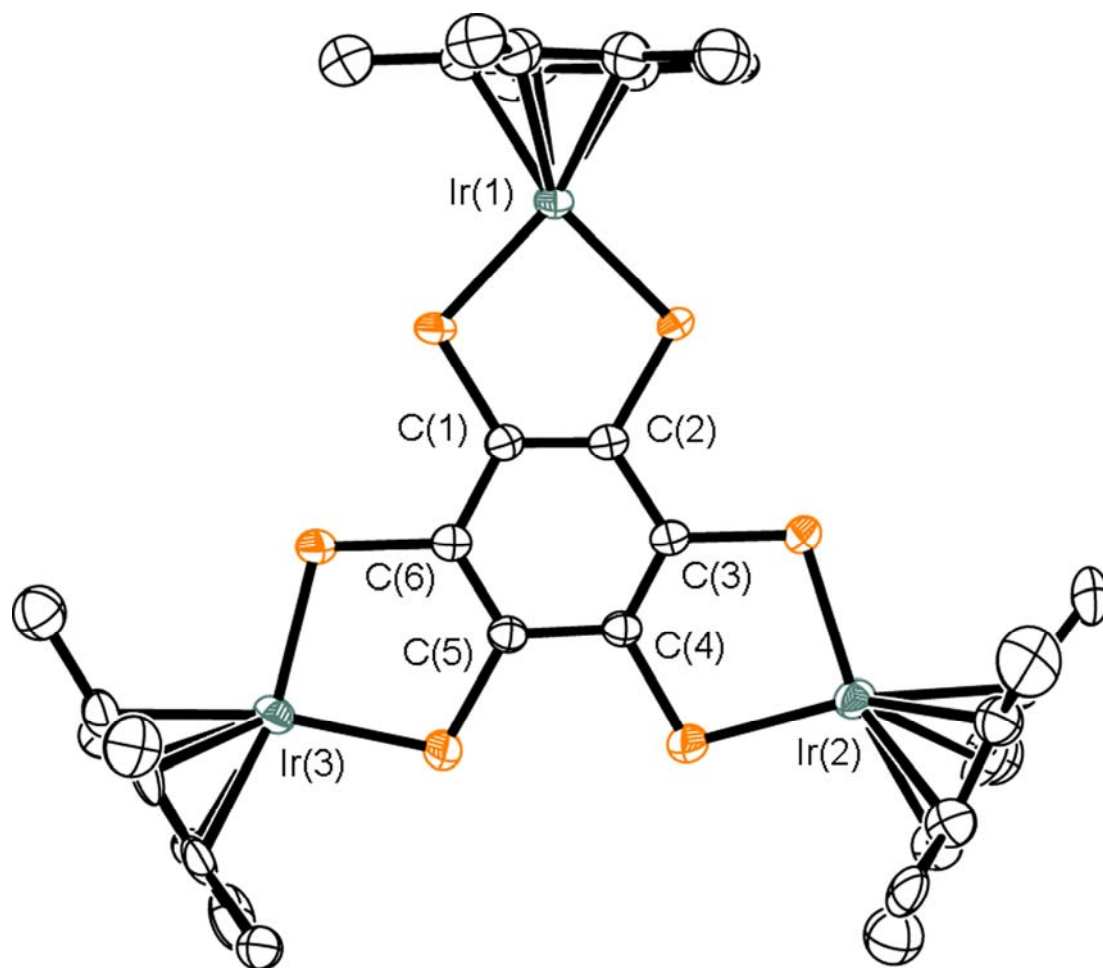


Fig. S4. X-ray crystal structure of **5**. H atoms are omitted for clarity. Thermal ellipsoids are drawn at the 50 % level.