

Article

Structures and properties of new organic molecule-based metals, $(D)_2BrC_2H_4SO_3$ [D = BEDT-TTF and BETS]

Hiroki Akutsu ^{1,*}, Yuta Koyama ¹, Scott S. Turner ² and Yasuhiro Nakazawa ¹

¹ Department of Chemistry, Graduate School of Science, Osaka University, 1-1 Machikaneyama, Toyonaka, Osaka 560-0043, Japan

² Department of Chemistry, University of Surrey, Guildford, Surrey GU2 7XH, UK

* Correspondence: akutsu@chem.sci.osaka-u.ac.jp; Tel.: +81-6-6850-5399

1. Supporting Information

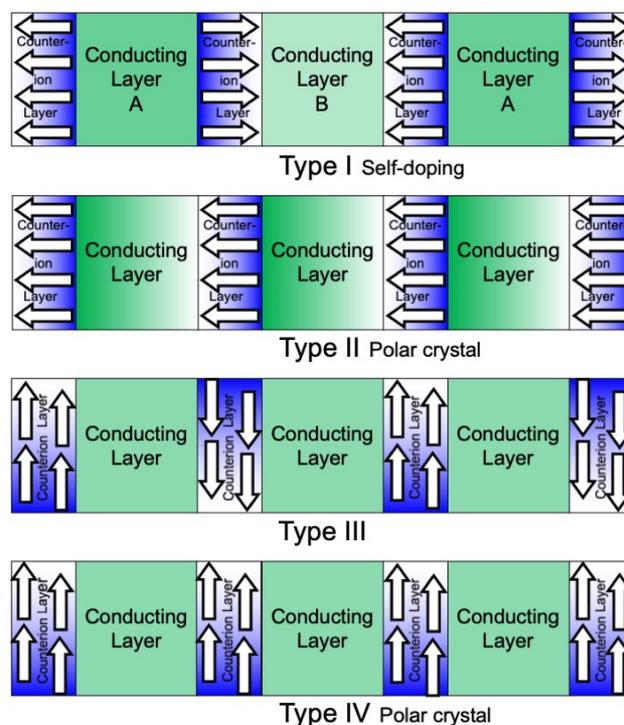


Figure S1. Schematic diagrams of the crystal structures of Type I-IV salts where the electrical dipoles of the counterions are indicated by arrows, electrically conducting layers are shown as green squares, and counterion layers are shown as blue rectangles.

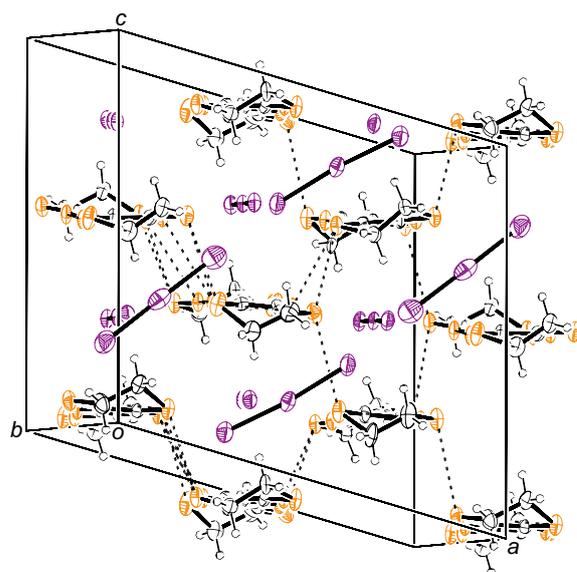


Figure S2. Crystal structure of 4 [1].

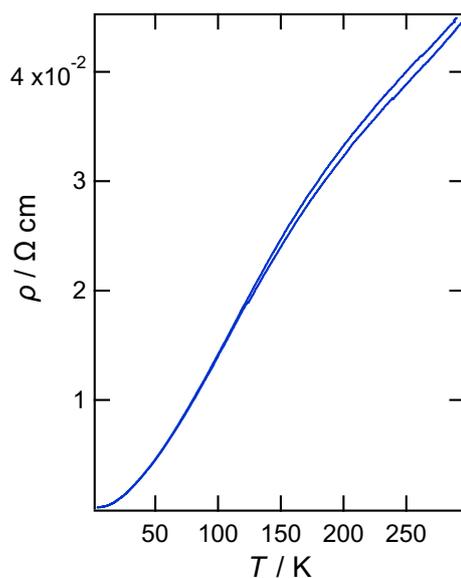


Figure S3. Temperature-dependent electrical resistivity of 4.

Reference

1. Crystal data for 4: (BEDT-TTF)₃(Br₃)₅, C₃₀H₂₄S₂₄Br₁₅, M_r = 2352.52, monoclinic, space group P2₁/c, a = 14.5521(14), b = 31.419(3), c = 14.1648(12) Å, β = 106.545(8)°, V = 6208.3(10) Å³, T = 150 K, Z = 4, μ(Mo Kα) = 10.54 mm⁻¹, D_{calcd} = 2.517 g/cm³, 55312 reflections measured, 14207 independent (R_{int} = 0.132), R = 0.093 (I > 2.0σ(I)), RW = 0.315 (all data).