

# Halocuprate(I) Zigzag Chain Structures with *N*-Methylated DABCO Cations – Bright Metal-Centered Luminescence and Thermally Activated Color Shifts

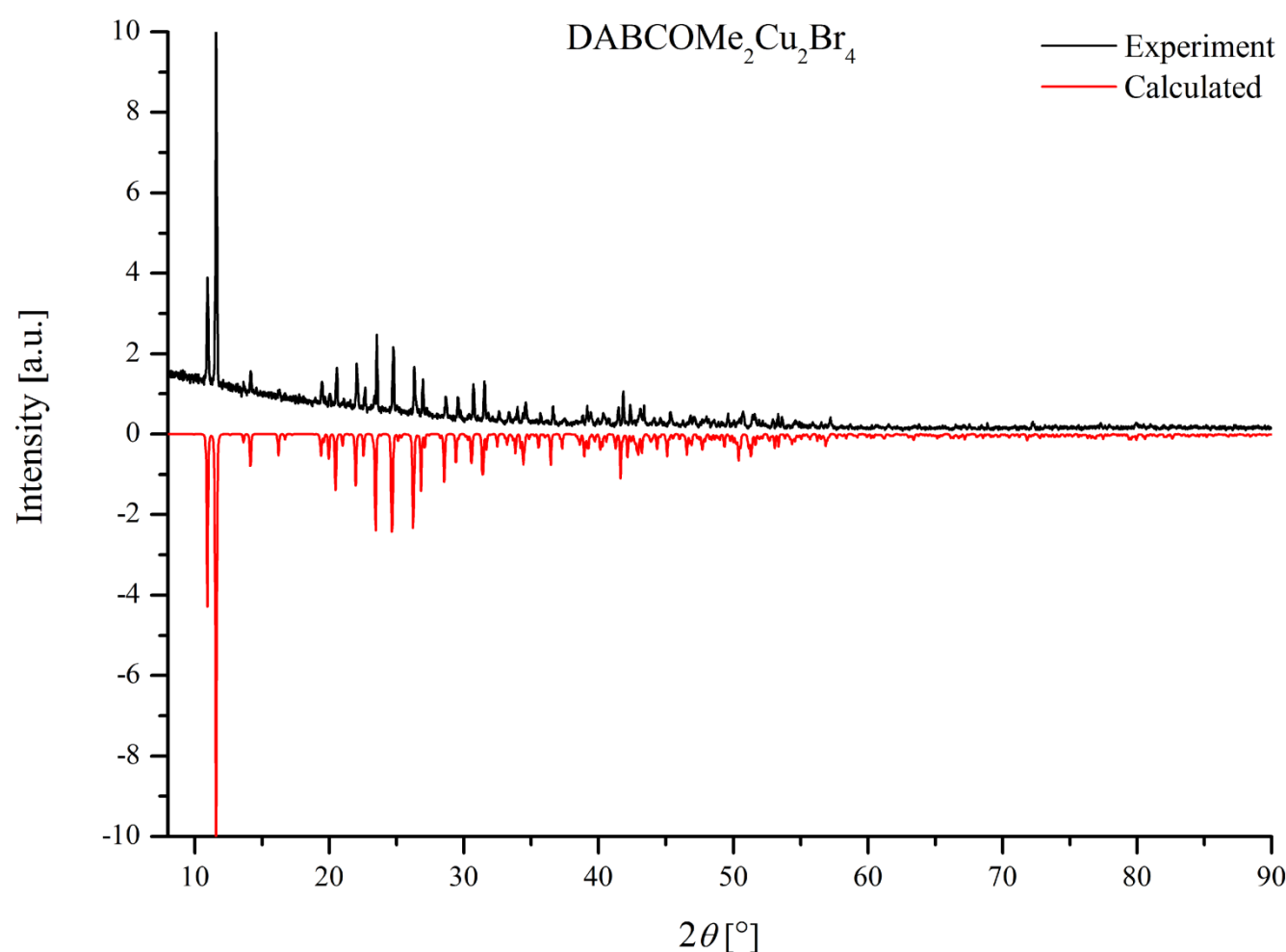
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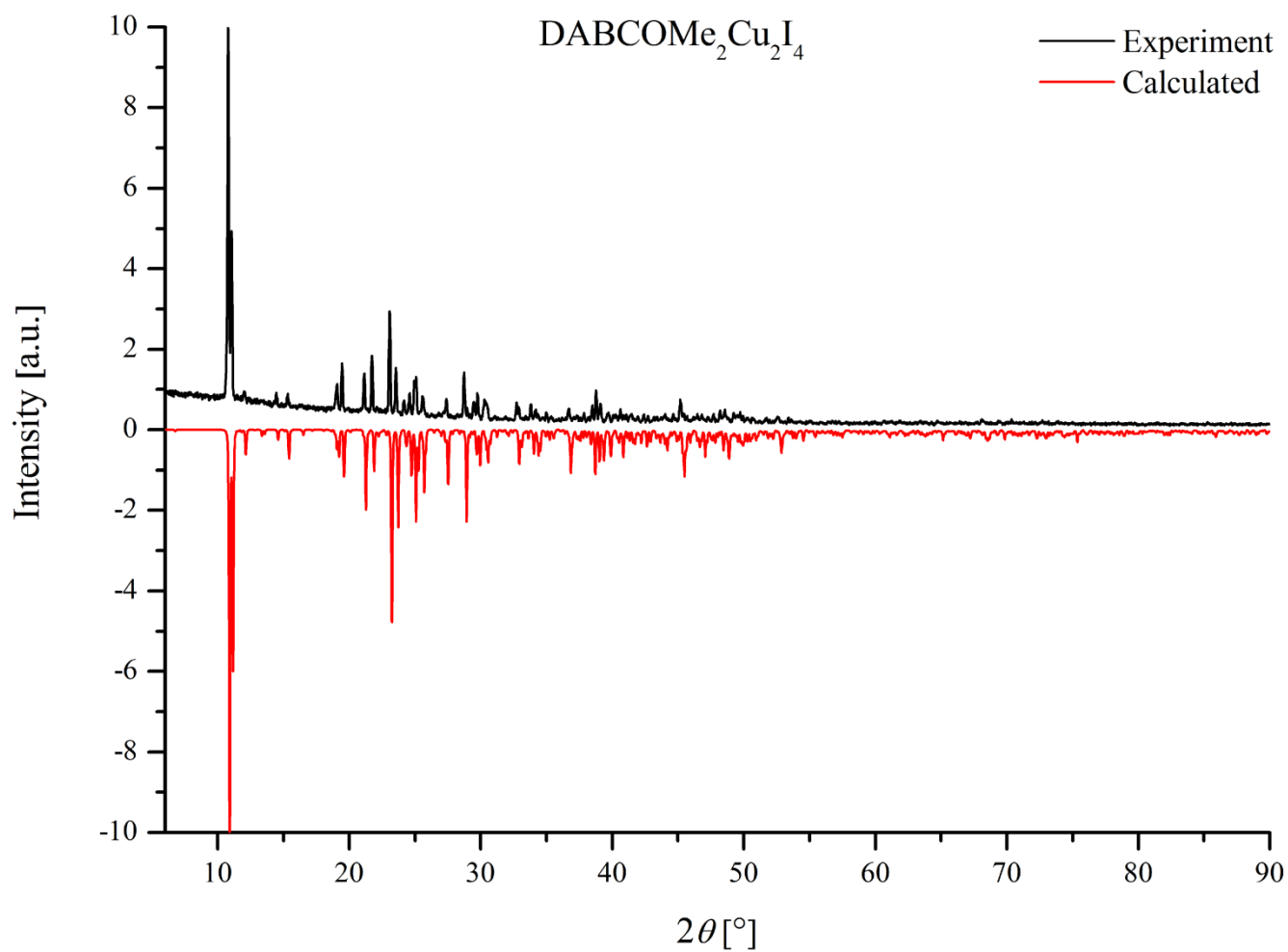
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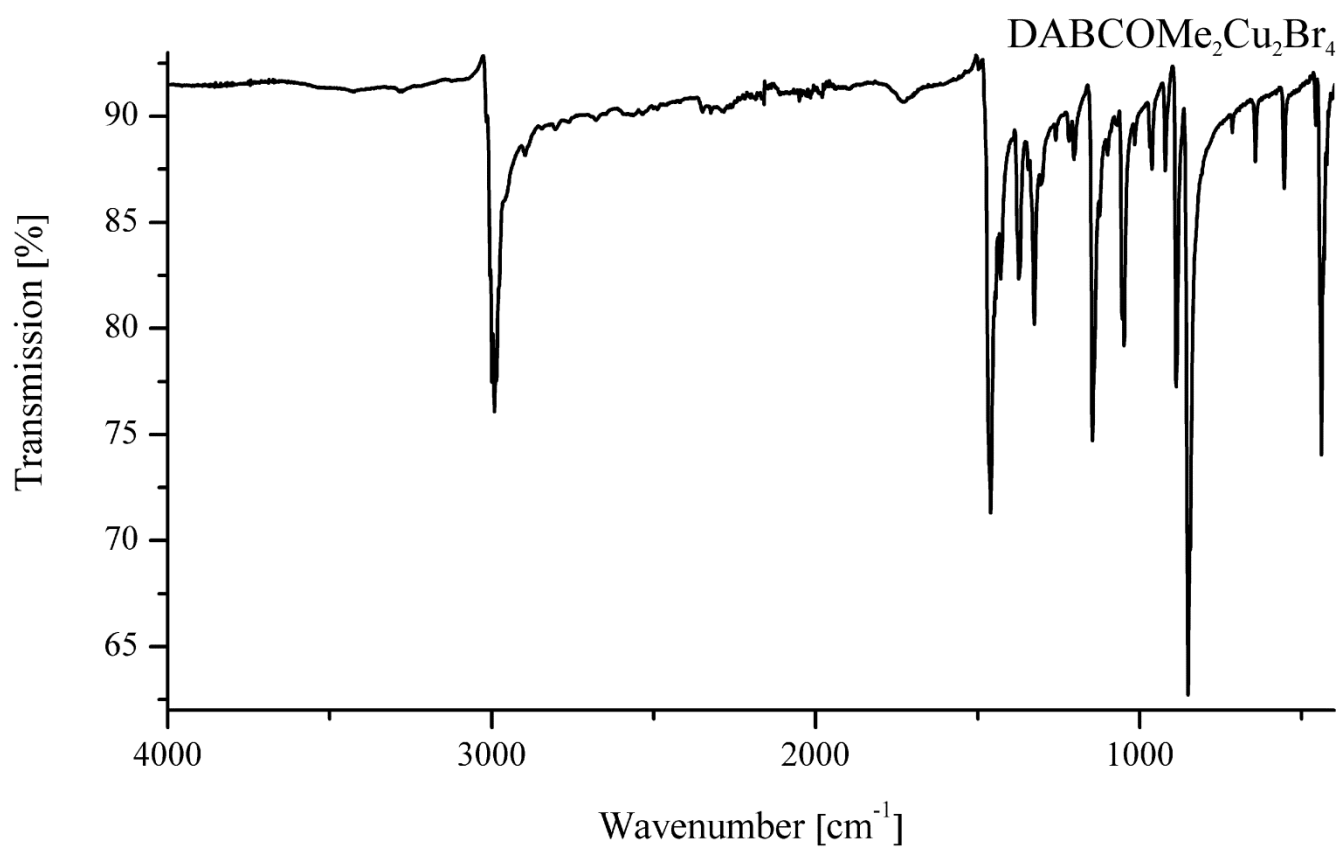
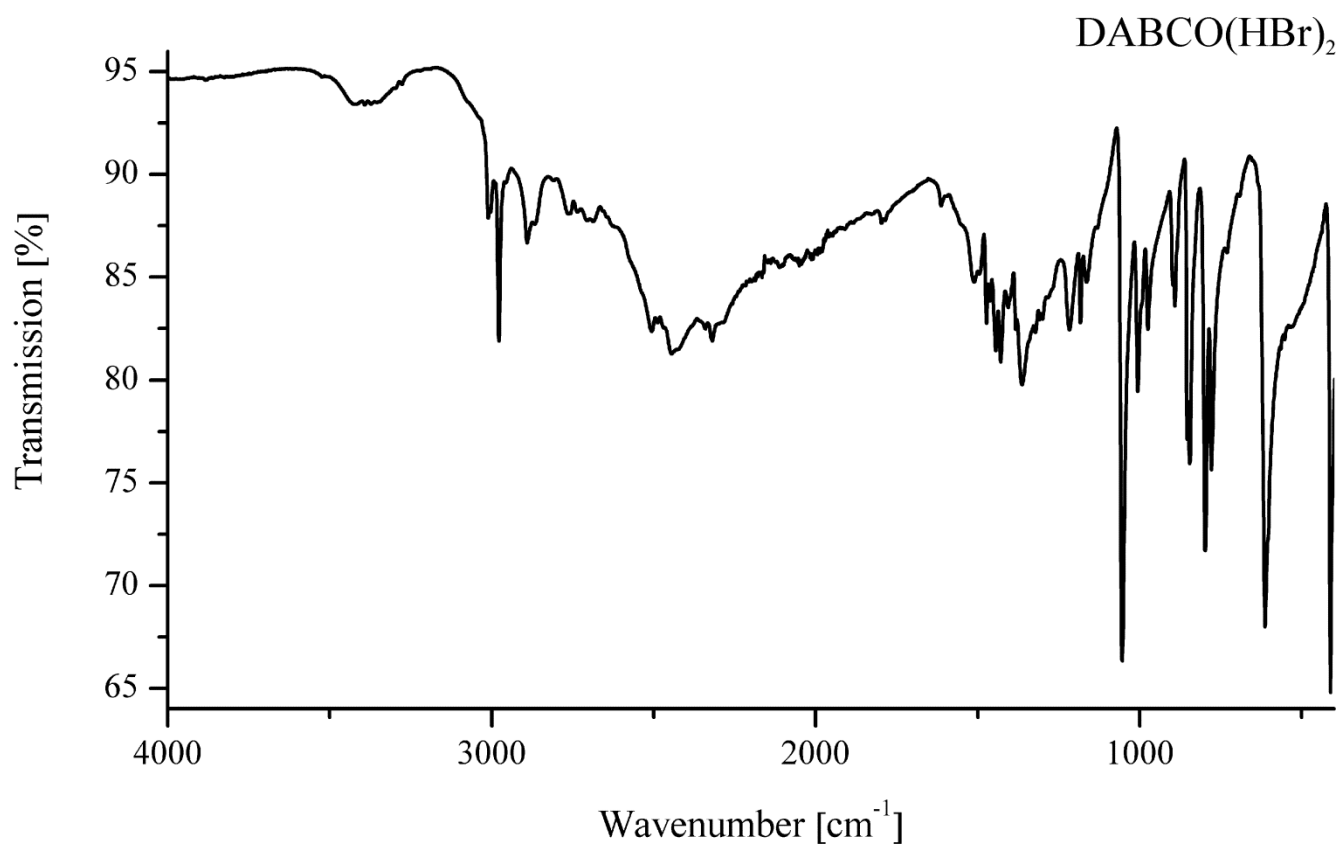
## Electronic Supporting Information



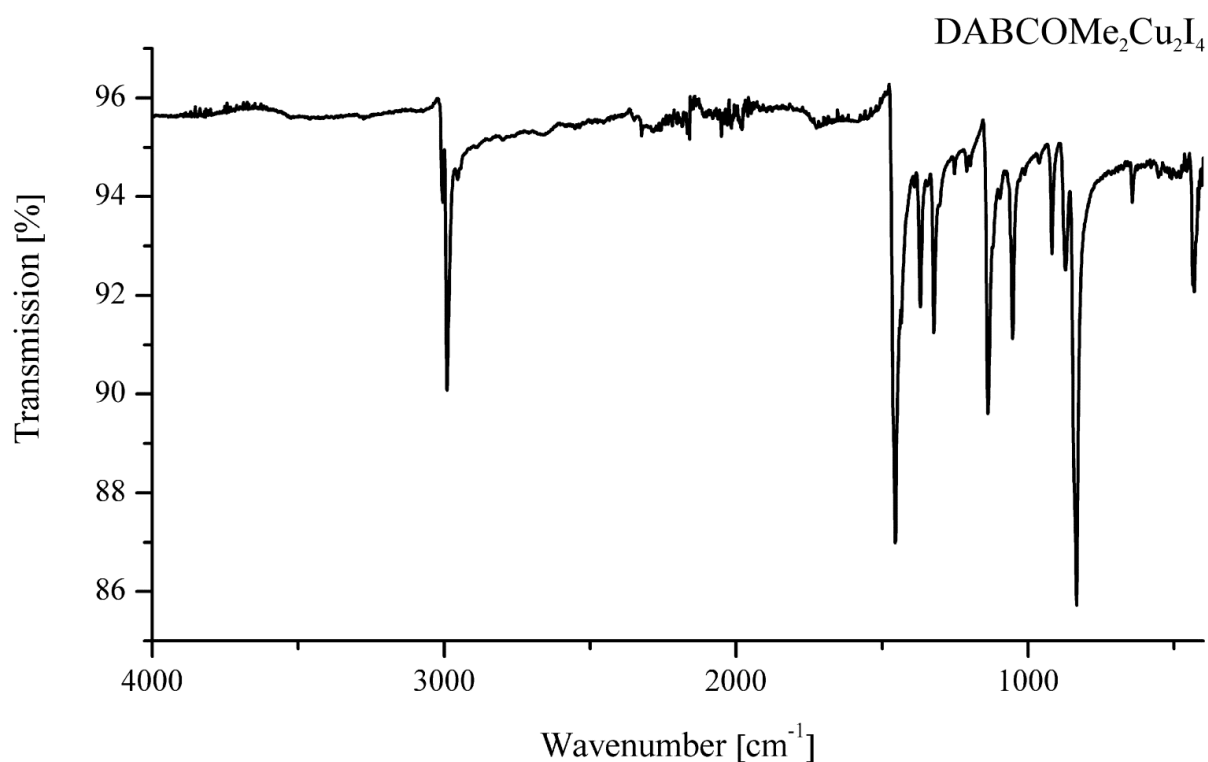
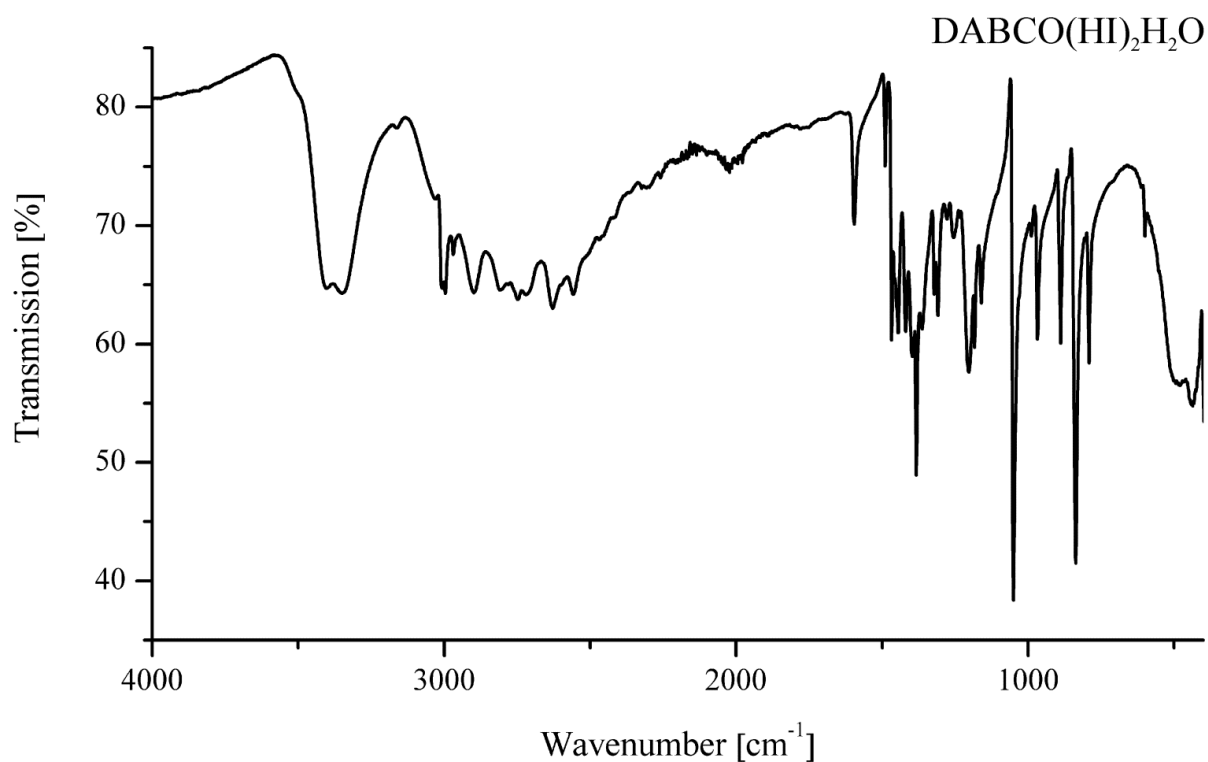
**Figure S1.** Experimental and calculated powder diffraction pattern of **1** showing the excellent match of experimental and simulated data.



**Figure S2.** Experimental and calculated powder diffraction pattern of **2** showing a very good match of experimental and simulated data.



**Figure S3.** IR-spectra of DABCO(HBr)<sub>2</sub> and **1**.



**Figure S4.** IR-spectra of DABCO(HI)<sub>2</sub>H<sub>2</sub>O and **2**.

The IR-spectra clearly show the quantitative twofold *N*-methylation of the DABCO molecules. The N-H-stretching modes present in the spectra of the starting materials in the range from 2000 to 2800 cm<sup>-1</sup> are absent in **1** and **2**. Only one large peak at approximately 3000 cm<sup>-1</sup> which is caused by the C-H-stretching modes of the methyl and methylene groups of the DABCOMe<sub>2</sub><sup>2+</sup> cations can be observed in **1** and **2**.