

Supplementary material.

Non-destructive identification of micrometer scale minerals and their position within a bulk sample

H.O. Sørensen^{1 §}, S. S. Hakim², S. Pedersen², B.C. Christiansen¹, Z.I. Balogh¹, C.P. Hem¹, I.S. Pasarin¹, S. Schmidt³, U.L. Olsen³, J. Oddershede³, C. Frandsen⁴, R. Feidenhans'l² and S.L.S. Stipp¹.

¹ Nano-Science Center, Department of Chemistry, University of Copenhagen, Universitetsparken 5, DK-2100 Copenhagen Ø, Denmark

² Nano-Science Center, Niels Bohr Institute, University of Copenhagen, Universitetsparken 5, DK-2100 Copenhagen Ø, Denmark

³ Center for Fundamental Research: Metal Structures in Four Dimensions, Materials Research Division, Risø National Laboratory for Sustainable Energy, Technical University of Denmark, Frederiksborgvej 399, P.O. 49, DK-4000 Roskilde, Denmark

⁴ Department of Physics, Technical University of Denmark, Building 307, DK-2800 Kongens Lyngby, Denmark

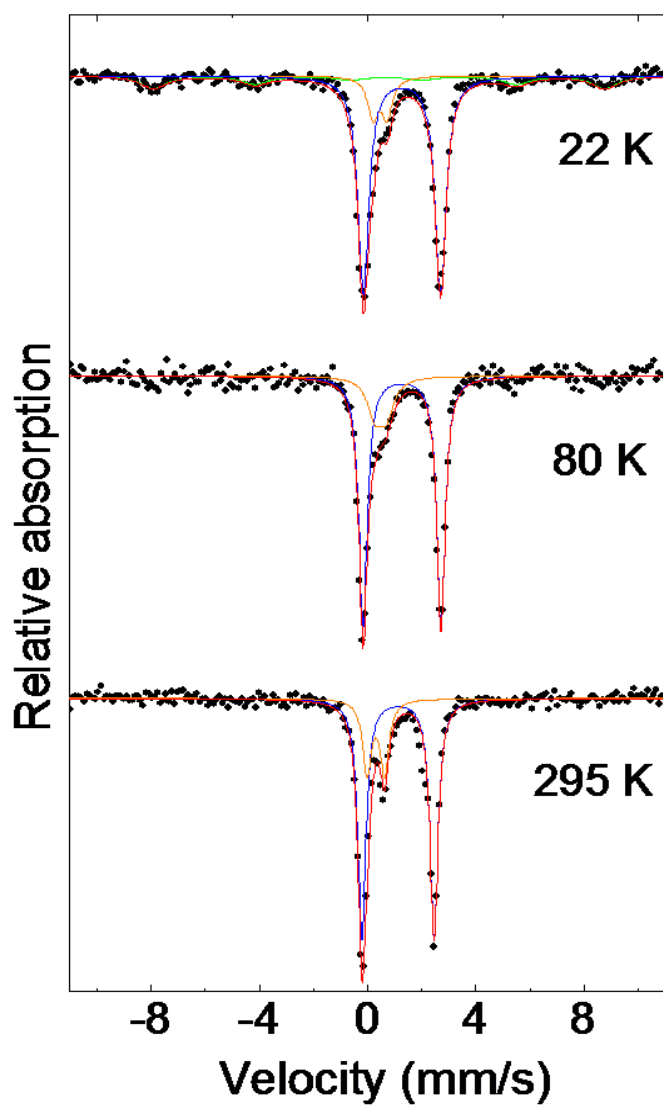


FIG. S1. Mössbauer spectra obtained at 22 K, 80 K and 295 K. The data show a Fe²⁺-doublet (blue fit line), a Fe³⁺-doublet (orange fit line) and a Fe³⁺-sextet (green fit line). Sum of the fit is shown in red.