

Abstract Submitted
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Low-temperature STM studies of electronic properties of microbial nanowires¹ KATHY WALSH, SANELA LAMPA-PASTIRK, JOSHUA VEAZEY, GEMMA REGUERA, STUART TESSMER, Michigan State University — *Geobacter sulfurreducens* expresses pili that act as electrically conductive nanowires. These microbial nanowires transport metabolically generated electrons outside the cell body to electron acceptors in the organism's environment. We have performed scanning tunneling microscopy and spectroscopy on these pili in an endeavor to elucidate the mechanism of conductivity. In particular, we will discuss spectroscopy curves acquired at a temperature of 77 K.

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