

Abstract Submitted
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Angular magnetoresistance oscillations in quasi-one-dimensional organic conductors in the presence of a crystal superstructure ANAND BANERJEE, VICTOR YAKOVENKO, University of Maryland — Crystal superstructures, produced by anion ordering in the quasi-one-dimensional organic conductors $(\text{TMTSF})_2\text{ReO}_4$ and $(\text{TMTSF})_2\text{ClO}_4$, modify electron spectra in these materials and generate effective tunneling amplitudes between distant chains. These amplitudes cause multiple peaks in the interlayer conductivity for the magnetic field orientations along the rational crystallographic directions (the Lebed magic angles). The different wave vectors of anion ordering in $(\text{TMTSF})_2\text{ReO}_4$ and $(\text{TMTSF})_2\text{ClO}_4$ result in the odd and even Lebed angles, as observed experimentally.
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