

Abstract Submitted
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Thermodynamic study of the superconducting gap structure of $(\text{TMTSF})_2\text{ClO}_4$ SHINGO YONEZAWA, YOSHITERU MAENO, Department of Physics, Graduate School of Science, Kyoto University, KLAUS BECHGAARD, Department of Chemistry, Oersted Institute, Copenhagen, Denmark, DENIS JEROME, Laboratoire de Physique des Solides, Univ. Paris-Sud, Orsay, France — We have studied the superconducting (SC) gap structure of the quasi-one-dimensional molecular conductor $(\text{TMTSF})_2\text{ClO}_4$ based on our high-resolution heat capacity measurement. We developed a new calorimeter, which allowed us field-angle resolved calorimetry using one single crystal weighing as small as $76 \mu\text{g}$. From our results, we investigate the SC gap structure in the k -space as well as in the spin space. Comparison between the SC phase diagram deduced from the present results and those obtained from previous resistivity measurements are also discussed.

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