

Abstract Submitted
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Novel superconductivity in a new noncentrosymmetric superconductor LEI FANG, XIYU ZHU, GANG MU, HAI-HU WEN, National Lab for Superconductivity, Institute of Physics, CAS — Low temperature specific, resistivity and magnetization are measured in a newly fabricated superconductor. It is found that this material has no central inversion symmetry. Specific heat measurement show that the major part of the system has a s-wave symmetry and the superconducting gap is thus derived. However, when the superconductivity is suppressed by the magnetic field, a further drop of specific heat coefficient is observed just at T_c . This unexpected behavior remains to a very high magnetic field and without any obvious shift of the transition temperature. It is tempting to argue that this drop of specific heat coefficient may be induced by the spin triplet pairs.

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