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La-substitution effect on thermal properties of Filled-Skutterudite $PrFe_4P_{12}$

T. Namiki, Y. Aoki, Y. Yamada, T. D. Matsuda, K. Abe, H. Sugawara, H. Sato
Dept. of Physics, Tokyo Metropolitan University, Minami-Ohsawa 1-1, Hachioji-shi, Tokyo 192-0397, Japan

Filled skutterudite compound $PrFe_4P_{12}$ shows anomaly at T_a=6.5K, and shows non-magnetic ordered state under T_a. At high fields which non-magnetic ordered state is supressed, heavy fermion state occures. To study inter-site effects in $PrFe_4P_{12}$, we have perfomed the magnetic susceptibility, electrical resistivity and specific heat measurement for La- substitute system $Pr_xLa_{1-x}Fe_4P_{12}$. The anomary obserbed in $PrFe_4P_{12}$ is supressed very rapidly with substitution of La, and at x=0.95, the anomary becomes very weak and shifts to lower temperature, 4K. On the other hand, for x=0.85, specific heat measurment shows anomaly at 1.4K, which might come from another origin. Nuclear specific heat (C_N) for x=0.85 indicates magnetic order and ordered moment is esticated to be0.67μ_B/Pr.