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C-axis Transport Properties of DyNi2B2C W.C. LEE, Dept. of Physics, Sookmyung Women's Univ. — The resistivity along c-axis ρc(H,T) of DyNi2B2C have been measured with the applied magnetic field H perpendicular and parallel to c-axis, 0 kG <H <4 kG, and temperature range 2K <T <300K. From these, the superconducting upper critical field HC2(T) curves of DyNi2B2C for the c-axis were constructed for each magnetic fields and our HC2(T) curves from ρc(H,T) measurement have been compared with those from previous known ρab(H,T) results. Since RNi2N2C (R = non magnetic rare earth element) has isotropic electronic structure and properties, the anisotropy in HC2(T) curves of the magnetic DyNi2N2C, which has the superconducting transition temperature, TC, is lower than the Néel temperatures, TN, is thought to be originated from the anisotropic magnetic Dy+3 sublattice.

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