

Search or Article-id (Help | Advanced search) arXiv.org > astro-ph > arXiv:1107.1054 All papers Go! Ŧ Astrophysics > High Energy Astrophysical Phenomena Download: PDF {\it Suzaku} observation of PostScript Other formats Galactic supernova remnant CTB Current browse context: 37A (G348.5+0.1) astro-ph.HE < prev | next > new | recent | 1107 A. Sezer, F. Gök, M. Hudaverdi, E.N. Ercan Change to browse by: (Submitted on 6 Jul 2011) astro-ph We present here the results of the observation of CTB 37A obtained with the References & Citations X-ray Imaging Spectrometer onboard the {\it Suzaku} satellite. The X-ray **INSPIRE HEP** spectrum of CTB 37A is well fitted by two components, a single-temperature (refers to | cited by) ionization equilibrium component (VMEKAL) with solar abundances, an NASA ADS electron temperature of \$kT_{\rm e}\sim0.6\$ keV, absorbing column density of \$N_{\rm H}\sim3\times10^{22}\$ \${\rm cm^{-2}}\$ and a power-law component Bookmark(what is this?) with photon index of \$\Gamma\$ \$\sim 1.6\$. The X-ray spectrum of CTB 37A is 📃 💿 🗶 💀 🖬 🖬 🚽 🔛 🧐 characterized by clearly detected K-shell emission lines of Mg, Si, S, and Ar. The plasma with solar abundances supports the idea that the X-ray emission originates from the shocked interstellar material. The ambient gas density, and age of the remnant are estimated to be \$\sim1f^{-1/2}\$\${\rm cm^{-3}}\$ and \$\sim3\times10^{4}f^{1/2}\$ yr, respectively. The center-filling X-ray emission surrounded by a shell-like radio structure and other X-ray properties indicate that this remnant would be a new member of mixed-morphology supernova remnant class. Subjects: High Energy Astrophysical Phenomena (astro-ph.HE)

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