Cover of the Month

Takuya HOSHINA1, Ryuichi SASE1, Junji NISHIYAMA1, Hiroaki TAKEDA1 and Takaaki TSURUMI1, 1Nano-Phononics Lab., School of Materials and Chemical Technology, Tokyo Institute of Technology.

“Effect of oxygen vacancies on intrinsic dielectric permittivity of strontium titanate ceramics” Vol. 126, No. 5, p. 263–268

Cover presents partial charge density distribution and THz dielectric spectra of oxygen-deficient strontium titanate ceramics. In the presence of oxygen vacancies, the covalency of the Ti–O bonding decreased and the Slater-type phonon mode hardened, causing a decrease in the intrinsic permittivity of strontium titanate.

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