



**FIGURE 3** Crystal structure of the post-perovskite phase projected along (A) (001), (B) (100), and (C) (010) directions, and (D) a stereoscopic view showing the layer-stacking structure (after Murakami et al. 2004). Coordination polyhedra of oxygen atoms around Si atoms are shown as octahedra, and the Mg<sup>2+</sup> ions are shown as spheres. The lines indicate the unit cell. Note that the octahedral sheets are stacked along the *b*-axis with interlayer Mg<sup>2+</sup> ions.