

Designing Properties of $(\text{Na}_{1/2}\text{Bi}_x)\text{TiO}_3$ -Based Ferroelectrics Through A-Site Non-Stoichiometry

Till Frömling^{a,*}, Sebastian Steiner^a, Azatuhi Ayrikyan^b, Daniel Bremicker^a, Michael Dürrschnabel^a, Leopoldo Molina-Luna^a, Hans-Joachim Kleebe^a, Herbert Hutter^c, Kyle Webber^b, Matias Acosta^d

^aDepartment of Materials and Earth Science, Technische Universität Darmstadt, Alarich-Weiss-Strasse 2, D-64287 Darmstadt, Germany

^bDepartment of Materials Science and Engineering, Friedrich-Alexander-Universität Erlangen-Nürnberg, Martensstraße 5, 91058 Erlangen, Germany

^cInstitute of Chemical Technologies and Analytics, Getreidemarkt 9/164 AC, 1060 Vienna, Austria

^dDepartment of Materials Science and Metallurgy, University of Cambridge, Charles Babbage Road 27, CB3 0FS Cambridge, UK

*Corresponding author. Tel.: +49 6151 16 21695; Fax: +49 6151 16 21690; E-mail address: froemling@ceramics.tu-darmstadt.de

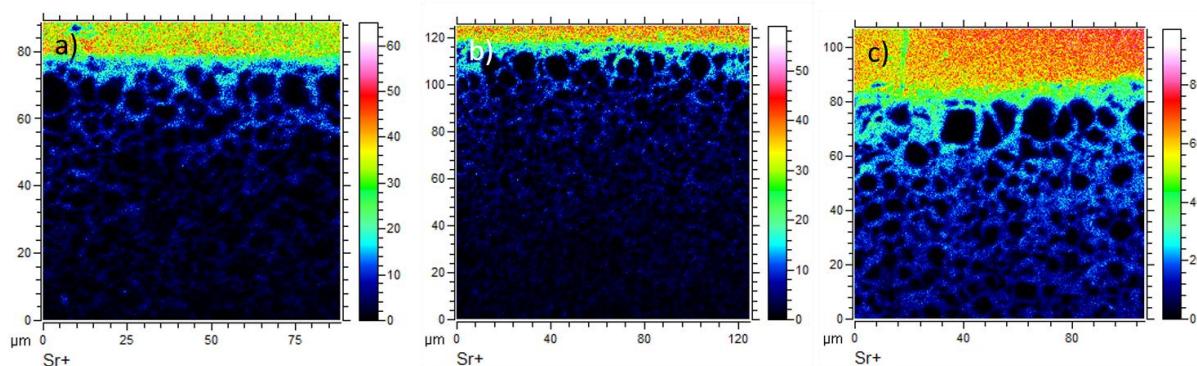


Figure 1: Intensity of Sr^{2+} signal from TOF-SIMS measurement of NBT/ST bilayer interdiffusion experiments sintered for a) 2 h, b) 5 h, c) 10 h

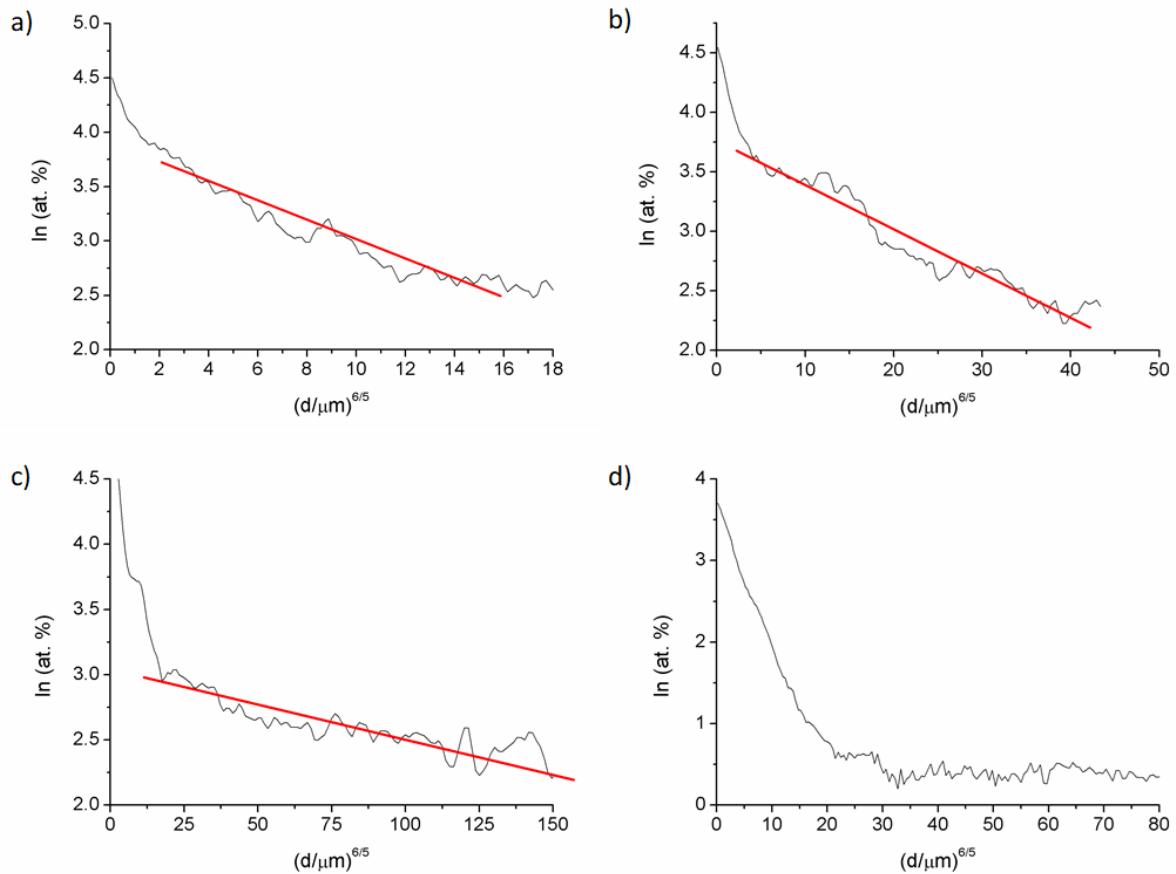


Figure 2: Concentration of Sr^{2+} in NBT from EDX measurements after NBT/ST bilayer interdiffusion experiments sintered for a) 2 h, b) 5 h, c) 10 h and d) 10 h with Bi-excess.