



Ferroelectrics >

Volume 185, 1996 - [Issue 1](#)

29 Views | 3 CrossRef citations to date | 0 Altmetric

Section III: Posters

Hypereine characterization of BaTi_{1-x}Hf_xO₃ for $x \leq 0.20$

A. Ayala & A. López-García

Pages 1-4 | Received 04 Jul 1995, Published online: 26 Oct 2011

🗨️ Cite this article 🔗 <https://doi.org/10.1080/00150199608210465>

Sample our
Physical Sciences
Journals



>> **Sign in here** to start your access
to the latest two volumes for 14 days

📖 References

🗨️ Citations

📊 Metrics

🖨️ Reprints & Permissions

Read this article

🔗 Share

Abstract

It is known that the substitution of cations in perovskites produce changes in the macroscopic properties of these materials. A case to study is for example the influence of 4⁺-cation B' partially substituted by other 4⁺-cation B' when ABO₃ is ferroelectric and AB'O₃ is paraelectric. In this work the system BaTi_{1-x}Hf_xO₃ with $x = 0.05, 0.10, 0.15$ and 0.20 is studied by Perturbed Angular Correlations (PAC) spectroscopy in order to get microscopic information through the electric field gradient tensor (EFG) produced by electrons close to probes. Samples were prepared by solid state reactions and characterized by x-ray powder diffraction analyses and irradiated with thermal neutrons to produce ¹⁸¹Ta, the PAC probe. Two hyperfine quadrupole interactions were detected. One of them correspond to probes in sites with defects originated during the nuclear processes after neutron irradiation. The other probes are located in B sites. At RT the hyperfine parameters are analyzed in terms of Hf concentration.

Related research

People also read

Recommended articles

Cited by
3

Information for

- Authors
- R&D professionals
- Editors
- Librarians
- Societies

Opportunities

- Reprints and e-prints
- Advertising solutions
- Accelerated publication
- Corporate access solutions

Open access

- Overview
- Open journals
- Open Select
- Dove Medical Press
- F1000Research
- Help and information
- Help and contact
- Newsroom
- All journals
- Books

Keep up to date

Register to receive personalised research and resources by email

 Sign me up

