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Novel phases in ferroelectric BaTiO₃ thin films

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Stellingen belonging to the thesis

“Novel phases in ferroelectric in BaTiO₃ thin flms“

Arnoud Everhardt, University of Groningen

1. Piezoelectric energy harvesting is a good means to power small, autonomous sensors (*Chapter 1*).
2. Quantitative information in thin film X-Ray Diffraction can solely be obtained by proper fitting to a model (*Chapter 2*).
3. Substrate anisotropy is a useful route to more ordered structures (*Chapter 4 & 6*).
4. All structural periodic variations in the out-of-plane direction, will show up in the out-of-plane X-Ray Diffraction (*Chapter 4*).
5. Domains are formed by strict domain periodicity halving (*Chapter 5*).
6. The magnitude of hysteresis is not properly defined just by the coercive field, but by the coercive field divided by the FWHM of the switching current peak (*Chapter 6*).
7. Continuous polarization rotation leads to low hysteresis (*Chapter 6*).
8. The impact of papers that can be published in a PhD on a new material is proportional to the difficulty of growing it.
9. Going to conferences alone is the best method to secure future contacts.
10. Any decision is better than no decision.
11. Teamwork is built on the principle of giving more than you receive.
12. Clarity must always take preference over efficiency.
13. Failing is the best way to learning.
14. It is more a curse than a blessing that it is too easy to get used to spicy food.
15. Taking an improvisation theater course is the best way to learn dealing with unexpected circumstances and, thus, everyone should take at least one course in his/her life.
16. The “Dutch style” of giving too honest opinions runs the risk of hurting feelings, but the benefit of better communication and a higher quantity of feedback outweighs this cost.