Conductance and gating effects at sputtered oxide interfaces

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List of Publications

- **C. Yin**, D. Krishnan, N. Gauquelin, J. Verbeeck, and J. Aarts. Controlling the interfacial conductance in $LaAlO_3/SrTiO_3$ in 90° off-axis sputter deposition, *Physical Review Materials*, **3**, 034002 (2019).

- **C. Yin**, A. E. M. Smink, I. Leermakers, L. M. K. Tang, N. Lebedev, U. Zeitler, W. van der Wiel, H. Hilgenkamp, and J. Aarts. Electron trapping mechanism in $LaAlO_3/SrTiO_3$ heterostructures, *under review*.

- **C. Yin**, P. Seiler, L. M. K. Tang, I. Leermakers, N. Lebedev, U. Zeitler, and J. Aarts. Tuning Rashba spin-orbit coupling in $LaAlO_3/SrTiO_3$ heterostructures by band filling, *under review*.

- **C. Yin**, K. Prateek, W. Gelling, and J. Aarts. Tunable magnetic interactions in $LaAlO_3/SrTiO_3$ heterostructures by ionic liquid gating, *under review*.

- J. Jobst, L. M. Boers, **C. Yin**, J. Aarts, R. M. Tromp, and S. J. van der Molen, Quantifying work function differences using low-energy electron microscopy: The case of mixed-terminated strontium titanate, *Ultramicroscopy*, **200**, 43–49 (2019).

- G. Mattoni, N. Manca, P. Zubko, M. Hadjimichael, A. J. H. van der Torren, **C. Yin**, S. Catalano, M. Gibert, F. Maccherozzi, Y. Liu, J. Aarts, S. S. Dhesi, J.-M. Triscone, and A. D. Caviglia. Light control of the nanoscale phase separation in strongly correlated nickelates, *Physical Review Materials*, **2**, 085002 (2018).

- A. J. H. van der Torren, Z. Liao, C. Xu, N. Gauquelin, **C. Yin**, J. Aarts, and S. J. van der Molen. Formation of a conducting $LaAlO_3/SrTiO_3$ interface studied by low energy electron reflection during growth, *Physical Review Materials*, **1**, 075001 (2017).

- J. L. Cholula-Díaz, J. Barzola-Quiquia, M. Videa, **C. Yin**, and P. Esquinazi. The frequency-dependent AC photoresistance behavior of ZnO thin films grown on different sapphire substrates, *Physical Chemistry Chemical Physics*, **19**, 23919–23923 (2017).

Curriculum Vitæ

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Education

2003–2006	Cangzhou No. 1 Middle School High School
2006–2010	Yanshan University Bachelor in Materials Physics *Thesis:* Non-isothermal crystallization of Hafnium-based amorphous alloys *Supervisor:* Dr. Baoru Sun
2010–2013	Institute of Semiconductors, Chinese Academy of Sciences Master in Materials Engineering *Thesis:* Group III-Nitride-based diluted magnetic semiconductors *Supervisor:* Assoc. Prof. Chao Liu
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Working experience

2013-2015	Beijing Luhe International Academy Physics teacher

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