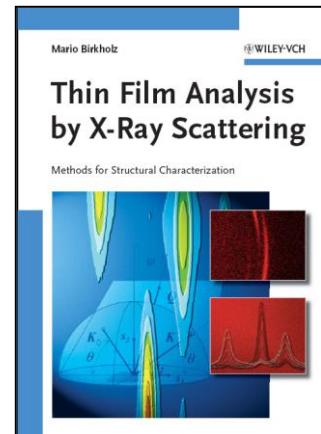


Publication List of Mario Birkholz

- I. Monographs
- II. Edited Books
- III. Chapters in Edited Books
- IV. Refereed Contributions
- V. Other Publications, Posters and Talks

I. Monographs

- 2. *Atomic Puzzle – Growth-Structure-Property Relations in Thin Solid Films for Advanced Technological Applications*
M. Birkholz
Habilitation thesis, Frankfurt and Cottbus (2006) 154 pages
- 1. [Thin Film Analysis by X-Ray Scattering](#)
M. Birkholz
with contributions by P. Fewster and C. Genzel
Wiley-VCH, Weinberg (2005) 378 pages



II. Edited Books

- 2. [X-ray Techniques for Materials Research – from Laboratory Sources to Free Electron Lasers](#)
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Nuclear Instruments and Methods in Physics Research B **284** (2012)
- 1. [X-Ray Techniques for Advanced Materials, Nanostructures and Thin Films: From Laboratory Sources to Synchrotron Radiation](#)
F. Boscherini, M. Birkholz, D. Chateigner, J.-Y. Buffiere, P. F. Fewster, S. Heun (Guest Editors)
Nuclear Instruments and Methods in Physics Research B **268**, Issues 3-4 (2010)

III. Chapters in Edited Books

- 3. [Implantable Microelectronics](#)
M. Birkholz
Handbook “[Bioelectronics: Materials, Technologies and Emerging Applications](#)”
A. Kumar and R.K. Gupta (Eds.), CRC Press, Chapter 21 (2022) ISBN 9781032203133

- 2 *Thin Films and Multilayers*
 M. Birkholz
[International Tables for Crystallography, Volume H – Powder Diffraction](#)
 C. Gilmore, J. Kaduk and H. Schenk (Eds.), Wiley-Blackwell, Chapter 5.4 (2019) 581-600
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IV. Refereed Contributions

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78. [Dielectrophoretic Separation of Blood Cells](#)
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77. [Separation of Heterotrophic Microalgae *Cryptocodonium cohnii* by Dielectrophoresis](#)
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Frontiers in Bioengineering and Biotechnology (May 2022) 855035
76. [Dem Zufall eine Chance geben](#)
 M. Birkholz
Physik Journal **2** (2022) 3
75. [Functionalization of Oxide-Free Silicon Surfaces for Biosensing Applications](#)
 A. Henriksson, P. Neubauer, M. Birkholz
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74. [Modeling and Analysis of the Electrolyte Voltage Drop in Dielectrophoresis Actuators](#)
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53. [Separation of extremely miniaturized medical sensors by IR laser dicing](#)
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V. Other Publications, Posters and Talks (since 2008)

- *The Impact of Signal Quality in Dielectrophoresis Experiments*
N. Boldt, J. Späth, S. Hartmann, M. Birkholz, R. Thewes
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- [Wie viel Energie verbraucht mein Handy, um mich zu überwachen?](#)
M. Birkholz, M. Kögler, K. Paulick, L. Sieben, B. Altpeter
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- *Electroporation of PUFA-Producing Dinoflagellate*
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- *Modeling and Analysis of the Electrolyte Voltage Drop in Dielectrophoresis Actuators*
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- *Impedance Matching in Dielectrophoresis Experiments*
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- *Applying Dielectrophoresis to Improve a Microring Resonator Biosensor Platform*
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- *Dielektrophorese-basiertes Lab-on-Chip System zur Separation von Mikroalgen*
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- *Microalgae cell separation and concentration
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- *Biofunctionalization of a microring resonator
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- A. Henriksson, L. Kasper, C. Schipp, P. Neubauer, M. Birkholz
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- *Simulation assisted development of microfluidic system with integrated electrodes for dielectrophoresis based analysis and sorting of micro algae C. cohnii*
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 - *Comparison of Impedance and Permittivity Based Dielectric Sensors for Cell Density Measurements*
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 - *Numerical analysis of dielectrophoresis for separation of microalgae*
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- *Systemarchitektur intelligenter Sensorimplantate*
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