

Publications in reviewed journals

2026

167. [Elementary Steps of Energy Conversion in Strongly Correlated Systems: Beyond Single Quasiparticles and Rigid Bands](#)
Vasily Moshnyaga, Peter E. Blöchl, Vitaly Bruchmann-Bamberg, Annika Dehning, Lukas Allen-Rump, Christopher Hausmann, Matthias Krüger, Amrith Rathnakaran, Sangeeta Rajpurohit, Daniel Steil, Christoph Flathmann, Jörg Hoffmann, Michael Seibt, Cynthia Volkert, and Christian Jooss, Energy & Environmental Materials, under review.
166. [Time-resolved photo-electrochemical measurements to study band bending of BiVO₄ photoanodes](#), Natalie Ottinger, Hilmar Scharf, Erwin Fernandez, Fatemeh Ebrahimi, Fatwa Abdi and Christian Jooss, The Journal of Physical Chemistry C, accepted for publication.
165. [Atomic Scale Ordering of Liquid Water at a Dynamic Pt\(111\) Interface Under Electrochemical Conditions Imaged by Electron Holography](#), Jonas Lindner, Ulrich Ross, Tobias Meyer, Sung Sakong, Axel Gross, Michael Seibt, Christian Jooss, Advanced Energy Materials (2026): e05756.
<https://doi.org/10.1002/aenm.202505756>

2025

164. [A Thin Film Source in a Solid-State Diffusion Experiment: CoO on SrTiO₃](#)
Qian Ma, Janina Malin Rybak, Natalie Jacqueline Ottinger, Timo Kassubek, Jörg Hoffmann, Karl-Michael Weitzel, Cynthia A. Volkert, and Christian Jooss, Microscopy and Microanalysis, 2025, accepted for publication
163. [Atomic-Scale Investigation of an Asymmetric Strontium Titanate Grain Boundary](#), Janina Malin Rybak, Jonas Arlt, Qian Ma, Carmen Fuchs, Baptiste Gault, Timo Jacob, Christian Jooss, Tobias Meyer, Cynthia A. Volkert, Adv. Mater. Interfaces 12, no. 22 (2025): e00602.
<https://doi.org/10.1002/admi.202500602>
162. [Advancing Energy Materials by In Situ Atomic Scale Methods](#)
C. Jooss, M. Seibt, M. Wenderoth, O. Bünermann, O. Bunjes, T. Domröse, C. Eckel, F. Falorsi, C. Flathmann, M. Kolek Martinez de Azagra, M. Krüger, J. Lindner, T. Meyer, C. Ropers, U. Ross, K. Rossnagel, S. Sreekantan Nair Lalithambika, S. Techert, G. A. Traeger, C. Volkert, R. T. Weitz and A. M. Wodtke, Advanced Energy Materials, 15 (2025) 2404280.
<https://doi.org/10.1002/aenm.202404280>

2024

161. [Relationship between structure and charge/orbital order in epitaxial single layer Ruddlesden–Popper manganite thin films](#)
Christoph Flathmann, Tobias Meyer, Ulrich Ross, Annika Dehning, Christian Jooss, Michael Seibt, APL Mater. 12, 061112 (2024)
<https://doi.org/10.1063/5.0208123>
160. [Scaling Behavior in the Spectral and Power Density Dependent Photovoltaic Response of Hot Polaronic Heterojunctions](#)
Birte Kressdorf, Jörg Hoffmann, Annika Dehning, Peter E. Blöchl, Michael Seibt, Christian Jooss Adv. Energy Mater. 14 (2024) 2401189,
<https://doi.org/10.1002/aenm.202401189>
159. [Potassium Diffusion in Mono- and Bi-Crystalline SrTiO₃ – Mechanisms and Activation Energies](#), Janek Bernzen, Carmen Fuchs, Timo Jacob, Qian Ma, Tobias Meyer, Christian Jooss, Karl-Michael Weitzel, Adv. Mater. Interfaces 2024, 11, 2400338; <https://doi.org/10.1002/admi.202400338>
158. [Orientation-Dependent Oxygen Evolution Activity of Epitaxial Ruddlesden-Popper Pr_{0.5}Ca_{1.5}MnO₄ Thin Films](#), Fatemeh Ebrahimi, Natalie Ottinger, Alexandr Belenchuk, Oleg Shapoval, Christopher Hausmann, Qian Ma, Vasily Moshnyaga, Christian Jooss, J. Phys. Chem. C, 128 (2024) 95-103, DOI10.1021/acs.jpcc.3c06472

2023

157. [Characteristic THz-emissions induced by optically excited collective orbital modes](#), Sangeeta Rajpurohit, Christian Jooss, Simone Techert, Tadashi Ogitsu, P. E. Blöchl, L. Z. Tan, arXiv:2306.09107
156. [Reconstruction of Ångström resolution exit-waves by the application of drift-corrected phase-shifting off-axis electron holography](#), J. Lindner, U. Ross, T. Meyer, M. Seibt, Ch. Jooss, Ultramicroscopy 256, (2024) 113880.
<https://doi.org/10.1016/j.ultramic.2023.113880>
155. [Advancements in Liquid Jet Technology and X-ray Spectroscopy for Understanding Energy Conversion Materials during Operation](#), Torben Reuss, Sreeju Sreekantan Nair Lalithambika, Christian David, Florian Döring, Christian Jooss, Marcel Risch, and Simone Techert, Accounts of Chemical Research Article ASAP (2023) DOI: 10.1021/acs.accounts.2c00525
154. [Contrasting Pr_{1-x}Ca_xMnO₃ OER Catalyst with Different Valence and Covalence](#), G. Lole, F. Ebrahimi, T. Meyer, D. Mierwaldt, V. Roddatis, J.

Geppert, M. Risch, Ch. Jooss, J. Phys. Chem. C 127 (2023) 177–186,
<https://doi.org/10.1021/acs.jpcc.2c05622>

153. [Langmuir analysis of electron beam induced plasma in environmental TEM](#), J Lindner, U Ross, V Roddatis, Ch Jooss, Ultramicroscopy, 243 (2023) 113629

2022

152. [Atomistic Insights into Activation and Degradation of La_{0.6}Sr_{0.4}CoO_{3-δ} Electrocatalysts under Oxygen Evolution Conditions](#), M. L. Weber, G. Lole, A. Kormanyos, A. Schwiers, L. Heymann, F. D. Speck, T. Meyer, R. Dittmann, S. Cherevko, Ch. Jooss, C. Baeumer, and F. Gunkel, J. Am. Chem. Soc. 144 (2022) 17966–17979
151. [A Binuclear Cobalt Complex in the Electrochemical Water Oxidation Reaction](#), S. Nestke, J. Stubbe, R. Koehler, E. Ronge, U. Albold, W. Vioel, Ch. Jooss, B. Sarkar, I. Siewert, Z. Anorg. Allg. Chem. 648 (2022) e202200119.
150. [Photocatalytic Hydrogen Evolution Using ZnS Particles and LEDs](#) M. C. Maass, A. Tasch, C. Jooss, T. Waitz, Journal of Chemical Education, 99 (2022) 2086, DOI10.1021/acs.jchemed.1c01157

2021

149. [Phase Transitions in a Perovskite Thin Film Studied by Environmental In Situ Heating Nano-Beam Electron Diffraction](#), T. Meyer, B. Kressdorf, V. Roddatis, J. Hoffmann, C. Jooss, M. Seibt, Small methods, 5 (2021) 2100464; <https://doi.org/10.1002/smt.202100464>.
148. [Polaronic Contributions to Friction in a Manganite Thin Film](#), Niklas A. Weber, Hendrik Schmidt, Tim Sievert, Christian Jooss, Friedrich Güthoff, Vasily Moshneaga, Konrad Samwer, Matthias Krüger, Cynthia A. Volkert, Adv. Sci. 2021,8, 2003524
147. [Site-specific plan-view TEM lamella preparation of pristine surfaces with a large field of view](#), Tobias Meyer, Tobias Westphal, Birte Kressdorf, Ulrich Ross, Christian Jooss, Michael Seibt, Ultramicroscopy 228 (2021) 113320; <https://doi.org/10.1016/j.ultramic.2021.113320>
146. [Reusable Manganese Catalyst for Site-Selective Pyridine C–H Arylations and Alkylations](#), Isaac Choi, Zhigao Shen, Emanuel Ronge, Volker Karius, Christian Jooss, Lutz Ackermann, Chem. Eur. J. 27 (2021) 12737–12741
145. [Charge density wave breakdown in a heterostructure with electron-phonon coupling](#), D Jansen, C Jooss, F Heidrich-Meisner, Phys. Rev. B 104 (2021) 195116
144. [Operation of calcium-birnessite water-oxidation anodes: interactions of the catalyst with phosphate buffer anions](#), Emanuel Ronge, Jonas Ohms, Vladimir

Roddatis, Travis Jones, Frederic Sulzmann, Axel Knop-Gericke, Robert Schlögl, Philipp Kurz, Christian Jooss* and Katarzyna Skorupska*, Sustainable Energy Fuels, 2021, 5, 5535

143. [Tailoring c-Axis Orientation in Epitaxial Ruddlesden–Popper \$\text{Pr}_{0.5}\text{Ca}_{1.5}\text{MnO}_4\$ Films](#), Sarah Hoffmann-Urlaub, Ulrich Ross, Jörg Hoffmann, Alexander Belenchuk, Oleg Shapoval, Vladimir Roddatis, Qian Ma, Birte Kressdorf, Vasily Moshnyaga, Christian Jooss, Advanced Materials Interfaces, 8 (2021) 2002049. <https://doi.org/10.1002/admi.202002049>
 142. [Orbital-order phase transition in \$\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3\$ probed by photovoltaics](#) B. Kressdorf, T. Meyer, M. ten Brink, C. Seick, S. Melles, N. Ottinger, T. Titze, H. Meer, A. Weisser, J. Hoffmann, S. Mathias, H. Ulrichs, D. Steil, M. Seibt, P.E. Blöchl, C. Jooss, Phys. Rev. B 103, 235122 (2021)
 141. [Atom Surface Dynamics of Manganese Oxide under Oxygen Evolution Reaction-Like Conditions Studied by In Situ Environmental Transmission Electron Microscopy](#), Emanuel Ronge, Jonas Lindner, Ulrich Ross, Jens Melder, Jonas Ohms, Vladimir Roddatis, Philipp Kurz, and Christian Jooss, J. Phys. Chem. C 2021, 125, 5037–5047, <https://doi.org/10.1021/acs.jpcc.0c09806>
- 2020**
140. [Ultrafast spin-nematic and ferroelectric phase transitions induced by femto-second light pulses](#) Sangeeta Rajpurohit, Liang Z. Tan, Christian Jooss and P. E. Blöchl Phys. Rev. B 102, 174430 (2020), arXiv:2007.14662
 139. [Room temperature hot polaron photovoltaics in the charge ordered state of a layered perovskite oxide heterojunction](#) B. Kressdorf, T. Meyer, A. Belenchuk, O. Shapoval, M. ten Brink, S. Melles, U. Ross, J. Hoffmann, V. Moshnyaga, M. Seibt, P. Blöchl, Ch. Jooss Phys. Rev. Appl. 14 (2020) 054006; DOI: <https://doi.org/10.1103/PhysRevApplied.14.054006>
 138. [Water Oxidizing Diruthenium Electrocatalysts Immobilized on Carbon Nanotubes – Effects of the Number and Positioning of Pyrene Anchors](#) S. Rajabi, F. Ebrahimi, G. Lole, J. Odrobina, S. Dechert, C. Jooss, F. Meyer ACS Catal. 10 (2020) 10614
 137. [Evolution of the magnetic and polaronic order of \$\text{Pr}_{1/2}\text{Ca}_{1/2}\text{MnO}_3\$ following an ultrashort light pulse](#) S. Rajpurohit, Ch. Jooss, and P.E. Blöchl, Phys. Rev. B 102 (2020) 01430.
 136. [Dynamic observation of Mn-adatom mobility at perovskite oxide catalyst interfaces with water](#) G. Lole, V. Roddatis, U. Ross, M. Risch, T. Meyer, L. Rump, J. Geppert, G. Wartner, P. Blöchl and Ch. Jooss, Communication Materials, 1 (2020) 68

135. [A metal-free heterogeneous photocatalyst for the selective oxidative cleavage of C=C bonds in aryl olefins via harvesting direct solar energy](#)
Y. Zhang, N. S. Lange, N. Hatami, E. Ronge, W. Schilling, Ch. Jooss, S. Das, Green Chem., 22 (2020) 4516-4522.
134. [A Dinuclear Rhenium Complex in the Electrochemically Driven Homogeneous and Heterogeneous H⁺/CO₂-Reduction](#); L. A. Paul, S. Rajabi, C. Jooss, F. Meyer, F. Ebrahimi, I. Siewert, Dalton Trans. 49 (2020) 8367.
133. [Probing the surface of La_{0.6}Sr_{0.4}MnO₃ in water vapor by in-situ RIXS: Interpretation of the fluorescence yields](#)
Ph. Busse, Zh. Yin, D. Mierwaldt, J. Scholz, B. Kressdorf, L. Glaser, S. Deinert, A. Rothkirch, J. Viehhaus, P. Miedema, Ch. Jooss, S. Techert and M. Risch, J. Phys. Chem. C 124 (2020) 7893.
132. [Structure of nanocrystalline, partially disordered MoS₂+δ derived from HRTEM – an abundant material for efficient HER catalysis](#)
E Ronge, S Hildebrandt, M-L Grutza, H Klein, Ph Kurz and Ch Jooss, Catalyst, Catalysts 10, 856 (2020); doi:10.3390/catal10080856
131. [Integrated Devices for Photoelectrochemical Water Splitting Using Adapted Silicon Based Multi-junction Solar Cells Protected by ALD TiO₂ Coatings](#)
T. Cottre, K. Welter, E. Ronge, V. Smirnov, F. Finger, Ch. Jooss, B. Kaiser, W. Jaegermann, Z. Phys. Chem. 234 (2020) 1155–1169.
130. [Photo-Induced Heterogeneous C–H Arylation by Reusable Hybrid-Copper Catalyst](#)
I. Choi, V. Müller, Gurav Lole, R. Köhler, V. Karius, W. Viöl, Ch. Jooss, and L. Ackermann
Chem. Eur. J. 26 (2020) 3509 – 3514.
129. [Transition into a phonon glass in crystalline thermoelectric \(Sb_{1-x}Bi_x\)₂Te₃ films](#)
F. Rieger, V. Roddatis, K. Kaiser, G. Bendt, S. Schulz, and C. Jooss
Phys. Rev. Materials 4 (2020) 025402.

2019

128. [A zone plate based two-color X-ray absorption spectrometer for fast and undistorted measurements with high resolution](#)
F. Döring, M. Risch, B. Rösner, M. Beye, Ph. Busse, K. Kubicek, L. Glaser, P. Miedema, J. Soltan, D. Raiser, V. A. Guzenko, L. Szabadics, L. Kochannek, M. Baumung, J. Buck, Ch. Jooss, S. Techert and Ch. David,
J. SynchrotronRad. 26 (2019) 1266–1271.
127. [In Situ Preparation of Pr_{1-x}Ca_xMnO₃ and La_{1-x}Sr_xMnO₃ Catalysts Surface for High-Resolution Environmental Transmission Electron Microscopy](#),
Vladimir Roddatis, Gaurav Lole and Christian Jooss,
Catalysts 9 (2019) 751.

126. [Stability and Degradation Mechanism of Si-based Photocathodes for Water Splitting with Ultrathin TiO₂ Protection Layer](#)
E. Ronge, Th. Cottre, K. Welter, V. Smirnov, N. J. Ottinger, F. Finger, B. Kaiser, W. Jaegermann and Ch. Jooss
Z. Phys. Chem. 234 (2019) 1171–1184
125. [High-resolution Scanning Transmission EBIC Analysis of Misfit Dislocations at Perovskite pn-Heterojunctions](#)
T Meyer, B Kressdorf, J Lindner, P Peretzki, V Roddatis, C Jooss and M Seibt
IOP Conf. Series: Journal of Physics: Conf. Series 1190 (2019) 012009.
124. [Peroxide yield of the \(001\) La_{0.6}Sr_{0.4}MnO₃ surface as a bifunctional electrocatalyst for the oxygen reduction reaction and oxygen evolution reaction in alkaline media](#)
L. Köhler, L. Szabadics, Ch. Jooss and M. Risch
Batteries & Supercaps, 2 (2019) 364-372.

2018

123. [Effect of charge ordering on cross-plane thermal conductivity in correlated perovskite oxide superlattices](#)
P. Thiessen, V. Roddatis, F. Rieger, A. Belenchuk, M. Keunecke, V. Moshnyaga, and Ch. Jooss, Phys. Rev. B **98** (2018) 195114.
122. [Structural and thermoelectrical characterization of epitaxial Sb₂Te₃ high quality thin films grown by thermal evaporation.](#)
G. Bendt, K. Kaiser, A. Heckel, F. Rieger, D. Oing, A. Lorke, N. P. Rodriguez, G. Schierning, Ch. Jooss and S. Schulz, Semiconductor Science and Technology **33** (2018) 105002.
121. [Low-temperature MOCVD deposition of Bi₂Te₃ thin films using Et₂BiTeEt as single source precursor.](#)
G. Bendt, S. Gassa, F. Rieger, Ch. Jooss & S. Schulz, J. Cryst. Growth 490 (2018) 77.
120. [Low intrinsic c-axis thermal conductivity in PVD grown epitaxial Sb₂Te₃ films](#)
F. Rieger, K. Kaiser, G. Bendt, V. Roddatis, P. Thiessen, S. Schulz, and C. Jooss, J. Appl. Phys. 123 (2018) 175108.

2017

119. [Chasing the Achilles' Heel in Hybrid Systems of Diruthenium Water Oxidation Catalysts Anchored on Indium Tin Oxide: the Stability of the Anchor](#)
Jann Odrobina, Julius Scholz, Marcel Risch, Sebastian Dechert, Christian Jooss, and Franc Meyer, ACS Catal. 7 (2017) 6235–6244
118. [Environmental TEM Investigation of Electrochemical Stability of Perovskite and Ruddlesden–Popper Type Manganite Oxygen Evolution Catalysts](#)

- Daniel Mierwaldt, Vladimir Roddatis, Marcel Risch, Julius Scholz, Janis Geppert, Majid Ebrahimizadeh Abrishami, and Christian Jooss, *Adv. Sustainable Syst.* 2017, 1, 1700109, DOI: 10.1002/adsu.201700109
117. [Tailoring the oxygen evolution activity and stability using defect chemistry](#)
Julius Scholz, Marcel Risch, Garlef Wartner, Christoph Luderer, Vladimir Roddatis and Christian Jooss, *Catalysts* 7 (2017) 139; doi:10.3390/catal7050139
 116. [Developing an in situ environmental TEM set up for observations of resistive switching mechanisms in Pt-Pr_{1-x}Ca_xMnO₃-Pt sandwich structures](#)
Thilo Kramer, Daniel Mierwaldt, Malte Scherff, Mike Kanbach, and Christian Jooss, *Ultramicroscopy* 184 (2017) 61-70. doi: 10.1016/j.ultramic.2017.08.012.
 115. [A Copper Complex as Catalyst in Proton Reduction](#)
Sebastian Nestke, Merle Kügler, Julius Scholz, Mona Wilken, Christian Jooss, and Inke Siewert, *Eur. J. Inorg. Chem.* 2017 (2017) 3376-3382, DOI: 10.1002/ejic.201700154
 114. [Role of oxygen vacancies for resistive switching in noble metal sandwiched Pr_{0.67}Ca_{0.33}MnO₃](#)
Thilo Kramer, Malte Scherff, Daniel Mierwaldt, Joerg Hoffmann and Christian Jooss, *Appl. Phys. Lett.* 110 (2017) 243502; doi: http://dx.doi.org/10.1063/1.4985645.
 113. [Contribution of Jahn-Teller and charge transfer excitations to the photovoltaic effect of manganite/titanite heterojunctions](#)
B. Ifland, J. Hoffmann, B. Kressdorf, V. Roddatis, M. Seibt and Ch. Jooss, *New J. Phys.* 19 063046 (2017)
 112. [Charge attachment induced transport – bulk and grain boundary diffusion of potassium in PrMnO₃](#)
Johannes Martin, Melanie Gräf, Thilo Kramer, Christian Jooss, Min-Ju Choe, Katsuyo Thornton and Karl-Michael Weitzel, *Phys.Chem.Chem.Phys.* 19 (2017) 9762
 111. [Electronic structure of Pr_{1-x}Ca_xMnO₃](#)
M. Sotoudeh, S. Rajpurohit, P.E. Blöchl, D. Mierwaldt, J. Norpoth, V. Roddatis, S. Mildner, B. Ifland, C. Jooss, *Phys. Rev. B* 95 (2017) 235150.
 110. [Backbone Immobilization of the Bis\(bipyridyl\)pyrazolate Diruthenium Catalyst for Electrochemical Water Oxidation](#)
J. Odrobina, J. Scholz, A. Pannwitz, L. Francàs, S. Dechert, A. Llobet, C. Jooss, F. Meyer, *ACS Catal.* 7 (2017) 2116–2125
 109. [Evolution of hot polaron states with a nanosecond lifetime in a manganite](#)
D. Raiser, S. Mildner, B. Ifland, M. Sotoudeh, P. Blöchl, S. Techert, C. Jooss, *Adv. Energy Mater.* 7 (2017) 1602174, DOI: 10.1002/aenm.201602174
 108. [An End Station for Resonant Inelastic X-ray Scattering Studies of Solid and Liquid Samples](#)
Z. Yin, H.-P. Peters, U. Hahn, J. Gonschior, D. Mierwaldt, I. Rajkovic, J. Viehhaus, C. Jooss, S. Techert, *J. Synchr. Rad.* 24 (2017) DOI:10.1107/S1600577516016611
 107. [Meta-C-H Bromination on Purine Bases by Heterogeneous Ruthenium Catalysis](#)
S. Waaratz, D. J. Burns, C. Zhu, K. Korvorapun, T. Rogge, J. Scholz, Ch. Jooss, L. Ackermann, *Angewandte Chemie*, 129 (2017) 1579-1582, <https://doi.org/10.1002/ange.201609014>

2016

106. [Rotating Ring Disk Study of Oxygen Evolution at a Perovskite Surface: Correlating Activity to Manganese Concentration](#)
J. Scholz, M. Risch, K.A. Stoerzinger, G. Wartner, Y. Shao-Horn, C. Jooss, J. Phys. Chem. 120 (2016) 27746–27756; DOI: 10.1021/acs.jpcc.6b07654
105. [Oxygen evolution at manganite perovskite Ruddlesden-Popper type particles: Trends of activity on structure, valence and covalence](#)
M. Ebrahimizadeh Abrishami, M. Risch, J. Scholz, V. Roddatis, N. Osterthun, C. Jooss, , Materials 9 (2016) 921.
104. [Transport of ions in a mixed Na⁺/K⁺ ion conducting glass -electrodiffusion profiles and electrochemical interphase formation](#)
J. Martin, S. Mehrwald, M. Schäfer, Th. Kramer, Ch. Jooss, K.-M. Weitzel, Electrochimica Acta, 191 (2016) 616-623
103. [The 3 \$\omega\$ -method for thermal conductivity measurements in a bottom electrode geometry](#)
M. Feuchter, Ch. Jooss, and M. Kamlah, Phys. Status Solidi A 213 (2016) 649–661 DOI 10.1002/pssa.201532466
102. [Achieving large acoustic and phonon band gaps in multilayered structures](#)
K.R. Mangipudi, Ch. Jooss, C.A. Volkert, Phys. Status Solidi A 213 (2016) 824.
101. [Low energy scanning transmission electron beam induced current for nanoscale characterization of pn-junctions in photovoltaic systems](#)
P. Peretzki, B. Iffland, C. Jooss, M. Seibt, Phys. Status Solidi RRL 11 (2017) 1600358, DOI 10.1002/pssr.201600358

2015

100. [Temperature and doping dependent optical absorption in the small polaron system Pr_{1-x}Ca_xMnO₃](#)
S. Mildner, J. Hoffmann, and C. Jooss, P. E. Bloechl, S. Techert, Phys. Rev B. 92 (2015) 035145; https://doi.org/10.1103/PhysRevB.92.035145
99. [Strain driven phase decomposition in ion-beam sputtered Pr_{1-x}Ca_xMnO₃ films,](#)
B. Iffland, J. Hoffmann, Th. Kramer, M. Scherff, S. Mildner, and Ch. Jooss, J. of Nanomaterials, Volume 2015 (2015), Article ID 935167, DOI:10.1155/2015/935167
98. [Current–voltage characteristics of manganite–titanite perovskite junctions,](#)
B. Iffland, P. Peretzki, B. Kressdorf, Ph. Saring, A. Kelling, M. Seibt and Ch. Jooss, Beilstein Journal of Nanotechnology, 2015, 6, 1467–1484
97. [Pulse length and amplitude dependent resistive switching mechanisms in Pt-Pr_{0.67}Ca_{0.33}MnO₃-Pt sandwich structures](#)
M. Scherff, B. Meyer, J. Hoffmann and Ch. Jooss, M. Feuchter and M. Kamlah. New J. of Phys. 17 (2015) 033011 DOI:10.1088/1367-2630/17/3/033011
96. [ETEM studies of electrodes and electro-catalysts](#)

Ch. Jooss, S. Mildner, M. Beleggia, D. Mierwaldt, V. Roddatis, Handbook chapter in "Controlled Atmosphere Transmission Electron Microscopy - Principles and Practice", edited by Jakob Birkedal Wagner and Thomas Willum Hansen, Springer 2016

95. [Environmental TEM Study of Electron Beam Induced Electro-chemistry of \$\text{Pr}_{0.64}\text{Ca}_{0.36}\text{MnO}_3\$ Catalysts for Oxygen Evolution](#),
S. Mildner M. Beleggia, D. Mierwaldt Th. W. Hansen, J. B. Wagner, S. Yazdi, T. Kasama, J. Ciston, Y. Zhu, and Ch. Jooss, J. Phys. Chem. C, 119 (2015) 5301–5310, DOI:10.1021/jp511628c.

2014

94. [From Sunscreen to Solar Cells - A Science Outreach Project Connecting School and University](#)
J. Schakowske, C. Jooss, K. Langemeier, T. Waitz
New Perspective for Science Education, Conference Proceedings (ISBN 978-88-6292-469-6), Libreriauniversitaria.it, (2014) 187-191
93. [Trace phase detection and strain characterization from serial X-ray free-electron laser crystallography of a \$\text{Pr}_{0.5}\text{Ca}_{0.5}\text{MnO}_3\$ powder](#)
K. R. Beyerlein, Ch. Jooss, A. Bartya, R. Bean, S. Boutet, S. S. Dhesi, R. Bruce Doak, M. Först, L. Galli, R. A. Kirian, J. Kozak, M. Lang, R. Mankowsky, M. Messerschmidt, J. C. H. Spence, D. Wang, U. Weierstall, Th. A. White, G. J. Williams, O. Yefanov, N. A. Zatsepin, A. Cavalleri and H. N. Chapman,
Powder Diffraction, <http://dx.doi.org/10.1017/S0885715614001171> (2014)
92. [In situ TEM analysis of resistive switching in manganite based thin-film heterostructures](#)
J. Norpoth, S. Mildner, M. Scherff, J. Hoffmann, and Ch. Jooss
Nanoscale 6, 9852-62 (2014)
91. [In Situ XANES/XPS Investigation of Doped Manganese Perovskite Catalysts](#)
D. Mierwaldt, S. Mildner, R. Arrigo, A. Knop-Gericke, E. Franke, A. Blumenstein, J. Hoffmann, C. Jooss, Catalysts 4, 129-145 (2014)
90. [Effects of interaction and disorder on polarons in colossal resistance manganite \$\text{Pr}_{0.68}\text{Ca}_{0.32}\text{MnO}_3\$ thin films](#)
J. Hoffmann, P. Moschkau, J. Norpoth, and Ch. Jooss, Mater. Res. Express 1, 046403 (2014)

2013

89. [Interplay of cross-plane polaronic transport and resistive switching in \$\text{Pt-Pr}_{0.67}\text{Ca}_{0.33}\text{MnO}_3\$ heterostructures](#)
M. Scherff, J. Hoffmann, B. Meyer, Th. Danz and Ch. Jooss
New J. Phys. 15 (2013) 103008.
88. [Origin of "Phonon Glass –Electron Crystal" behavior in Thermoelectric Layered Cobaltate](#)
L. Wu, Q. Meng, Ch. Jooss, J.-C. Zheng, H. Inada, D. Su, Q. Li, and Y. Zhu
Adv. Funct. Mater. 23, 5728–5736, 2013

2012

87. [Ferromagnetism in Lightly Doped \$\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3\$ \(\$x = 0.023, 0.036\$ \) Nanoparticles Synthesized by Microwave Irradiation](#)
Anustup Sadhu, Thilo Kramer, Abheek Datta, Stefanie Anna Wiedigen, Jonas Norpoth, Christian Jooss, and Sayan Bhattacharyya
Chem. Mater., 24 (2012) 3758–3764
86. [Interfacial reconstruction and superconductivity in cuprate–manganite multilayers of \$\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}\$ and \$\text{Pr}_{0.68}\text{Ca}_{0.32}\text{MnO}_3\$](#)
J. Norpoth, D. Su, H. Inada, S. Sievers, Y. Zhu and Ch. Jooss,
New J. Phys. 14 (2012) 093009
85. [In-situ electrochemical electron microscopy study of oxygen evolution activity of doped manganite perovskites](#)
S. Raabe, D. Mierwaldt, J. Ciston, M. Uijtewaal, H. Stein, J. Hoffmann, Y. Zhu, P. Blöchl, and Ch. Jooss, Advanced Functional Materials, 22 (2012) 3378–3388
84. [Polaron absorption for photovoltaic energy conversion in a manganite-titanate pn-heterojunction](#)
G. Saucke, J. Norpoth, D. Su, Y. Zhu and Ch. Jooss
Phys. Rev. B 85, 165315 (2012)
83. [Time-resolved near-edge x-ray absorption fine structure spectroscopy on photo-induced phase transitions using a tabletop soft-x-ray spectrometer](#)
P. Grossmann, I. Rajkovic, R. Moré, J. Norpoth, S. Techert, C. Jooss, and Klaus Mann, Rev. Sci. Instrum. 83, 053110 (2012)
82. [Nano-composite stability in Fe, Co, and Mn-based perovskite/spinel systems](#)
J. Hoffmann, S. Schnittger, S. Raabe, J. Norpoth, T. Kramer, and Ch. Jooss, J. Mat. Res. 27 (2012), 1462-1470
81. [Interplay of point defects, biaxial strain and thermal conductivity in homoepitaxial \$\text{SrTiO}_3\$ thin films](#)
S. Wiedigen, T. Kramer, M. Feuchter, I. Knorr, N. Nee, J. Hoffmann, M. Kamlah, C. A. Volkert, Ch. Jooss, Appl. Phys. Lett. **100** (2012) 061904;

2011

80. [Polarity reversal in bipolar resistive switching in \$\text{Pr}_{0.7}\text{Ca}_{0.3}\text{MnO}_3\$ noble metal sandwich structures](#)
M. Scherff, B.-U. Meyer, J. Hoffmann, and Ch. Jooss
J. Appl. Phys. **110** (2011) 043718
79. [Magnetostatic interaction mechanisms in a two-dimensional composite magnet](#)
S. Sievers, S. Schnittger, J. Norpoth, X. Hu, U. Siegner, H.W. Schuhmacher, and C. Jooss,
J. Appl. Phys. **110** (2011) 043927
78. [Solar fuels](#)
Ch. Jooss and H. Tributsch
Invited article for
Handbook Materials for Energy and Environmental Sustainability
Edited by David Ginley and David Cahen, published MRS & Cambridge University Press, 2011

2010

77. [Characterization of the Stator of a Variable Reluctance \(VR\) Micro Step Motor](#) S. Hansen, J. Norpoth, Ch. Jooss, L. Rissing, H.H. Gatzert: Magneto-optical Proc. 12th Int. Conf. on New Actuators 2010, Bremen, Germany, pp706-709, 2010
76. [Reconstruction of the electric field in type-II superconducting films in perpendicular magnetic field](#)
C. Romero-Salazar, O.A. Hernandez-Flores and Ch. Jooss
Phys. Rev B **81** (2010) 144506
75. [Magnetic and structural properties of cobalt ferrite thin films and structures](#)
S. Schnittger, Ch. Jooss, and S. Sievers
Journal of Physics: Conference Series, Volume 200 (2010) 072086
74. [Using magneto-optical measurements for the evaluation of a hybrid magnetic shape memory \(MSM\) based microactuator](#)
B. Spasova, M. C. Wurz, J. Norpoth, Ch. Jooss, and H. H. Gatzert
IEEE Transactions on Magnetics 46 (2010) 2256 - 2259

2009

2008

73. [Transport and Ordering of Polarons in CER-Manganites PrCaMnO](#)
S. Schramm, J. Hoffmann and Ch. Jooss,
J. Phys.: Condens. Matter **20** (2008) 395231
72. [Electric pulse induced resistance change effect in manganites due to polaron localization at the metal-oxide interfacial region](#)
Ch. Jooss, J. Hoffmann, J. Fladerer, M. Ehrhardt, T. Beetz, L. Wu, Y. Zhu
Phys. Rev. B **77** (2008) 132409
71. [Dipolar coupling of square arrays with perpendicular easy axis](#)
J. Norpoth, S. Dreyer, Ch. Jooss
J. Phys. D: Applied Physics (IOP) **41** (2008) 025001

2007

70. [Electronic Phase Separation and the CMR Effect in Pr_{1-x}Ca_xMnO₃ Films on \(001\) vicinal SrTiO₃ Substrates](#)
P. Moschkau, S. Schramm, J. Hoffmann, J. Fladerer, Ch. Jooss, L. Wu and Y. Zhu
Materials Science and Engineering B **144** (2007) 78–82
69. [Polaron melting and ordering as key mechanisms for colossal resistance effects in manganites](#)
Ch. Jooss, T. Beetz, L. Wu, M. Beleggia, R. Klie, M. Schofield, Y. Zhu, S. Schramm, J. Hoffmann
Proceedings of the National Academy of Science (PNAS), **104** (2007) 13597.
68. [Confirmation of Zener polaron ordering in Pr_{1-x}Ca_xMnO₃](#)
L. Wu, R. Klie Y. Zhu, and Ch. Jooss,

Phys. Rev. B **76** (2007) 174210

67. [Quantitative imaging of stray fields and magnetizations distributions in hard magnetic element arrays.](#)
S. Dreyer, J. Norpoth, S. Sievers, V. Neu, T. Johansen and Ch. Jooss
J. Appl. Phys., **101** 083905 (2007)
66. [Manipulating the dipolar magnetic interaction in FePt square arrays: The role of edge roughness.](#)
J. Norpoth, S. Dreyer, S. Sievers and Ch. Jooss
J. Appl. Phys., **101**, 09F518 (2007)
65. [Magnetostatic interactions in patterned CoPt films embedded in a Permalloy matrix](#)
S. Schnittger, Ch. Jooss, S. Sievers and U. Siegner
Appl. Phys. Lett. **90**, 042506 (2007)
64. [Inductive methodology suitable to determine simultaneously grain and grain boundary critical currents in YBCO Coated Conductors](#)
A. Palau, T. Puig, X. Obradors and Ch. Jooss,
Phys. Rev. B, **75**, 054517 (2007)

2006

63. [Combined optical and force microscopy of nanopatterned magnetic films](#)
S. Sievers, M. Albrecht, U. Siegner, S. Dreyer and Ch. Jooss
J. Appl. Phys., **99**, 08S504 (2006)
62. [Determination of electric field distributions in superconductors from time-resolved magneto-optical measurements.](#)
Ch. Jooss and V. Born
Phys. Rev. B, **73** (2006) 094508
61. [Comparative study of magnetic and electric field induced insulator-metal-transition in \$\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3\$ films](#)
W. Westhäuser, S. Schramm, J. Hoffmann and Ch. Jooss
Europ. J. Phys. B **53** (2006) 323–331

2005

61. [Enhanced current transport at grain boundaries in high- \$T_c\$ superconductors](#)
R. F. Klie, J. P. Buban, M. Varela, A. Franceschetti, C. Jooss, Y. Zhu, N. D. Browning, S. T. Pantelides, S. J. Pennycook
Nature, **435** (2005) 475.
60. [The Evolution of the Universe in the Light of Modern Microscopic and High-Energy Physics](#), Christian Jooss, Josef Lutz, Proceedings of the Crisis in Cosmology Conference I, American Institute of Physics, Conference Proceedings **822**, 200 (2005).
59. [Piezoresistive cantilever magnetic field sensor](#)
E. Peiner, M. Oehler, S. Dreyer, Ch. Jooss, A. Mofor, H. El-Shaer, A. Waag, L. Doering, Proceedings of the 12. Sensor Conference, Nürnberg, 2005
58. [Combined experimental and theoretical study of field and current conditioning in superconducting strips via soft magnetic environments](#)

Ch. Jooss, E. Brinkmeier, H. Heese
Phys. Rev. B 72 (2005) 144516

57. [Epitaxial MOD-CGO buffer layers on YSZ substrates of varying roughness and thickness](#)
H. Jarzina, S. Sievers, Ch. Jooss, H. C. Freyhardt, P. Lobinger, H. W. Roesky, J. Garleff and H. Kröger
Supercond. Sci. Technol., 18 (2005) 260

2004

56. [Direct evidence for negative grain boundary potential in Ca-doped and undoped YBaCuO](#)
M. A. Schofield, M. Beleggia, Y. Zhu, K. Guth, Ch. Jooss
Phys. Rev. Lett. **92** (2004) 195502
55. [Inhomogeneous current distribution in wide high-temperature superconducting small-angle grain boundaries](#)
K. Guth, V. Born and Ch. Jooss
Eur. Phys. J. B, 42 (2004) 239.
54. [Biaxial texture analysis of YBa₂Cu₃O₇ coated conductors by micro-Raman spectroscopy](#)
J. C. Gonzales, N. Mestres, T. Puig, J. Gazquez, F. Sandiumenge, X. Obradors, A. Usoskin, C. Jooss, H. C. Freyhardt, R. Feenstra
Phys. Rev. B **70** (2004) 094525
53. [The visualization of current-limiting defects in YBa₂Cu₃O₇ films on ion-beam assisted deposition buffer layers of Yttrium stabilized ZrO₂ and Gd₂Zr₂O₇](#)
V. Born, J. Hoffmann, S. Sievers, Ch. Thiele, K. Guth, H. C. Freyhardt, and Ch. Jooss
Supercond. Sci. Technol. **17** (2004) 1335.
52. [Quantitative magneto-optical imaging of superconducting films: Static and dynamic properties of the critical state](#)
Ch. Jooss, V. Born and K. Guth
Topical issue of the Journal of Microscopy Research and Technique (MRT) 2004.
51. [Magnetic instability in YNi₂B₂C thin films: Observation of dendritic flux instabilities in borocarbides.](#)
S. C. Wimbush, Ch. Jooss, B. Holzapfel.
J. Appl. Phys. **96** (2004) 3589
50. [Magneto-optical imaging of small angle grain boundaries on different bi-crystalline substrates](#)
K. Guth, V. Born, S. Sievers, H. C. Freyhardt and Ch. Jooss
Magneto-Optical imaging, ed. By T. Johansen and D. V. Shantsev, NATO Science Series II, Vol **142** (2004) p. 149
49. [Modifying the current distribution of grain boundaries in YBaCuO films](#)
E. Brinkmeier, H. Jarzina, V. Born, K. Guth, W. Westhäuser and Ch. Jooss
Magneto-Optical imaging, ed. By T. Johansen and D. V. Shantsev, NATO Science Series II, Vol **142**. (2004) p. 183
48. [Quantitative Magneto-Optics: Flux, current and electric field imaging](#)
Ch. Jooss, E. Brinkmeier, V. Born, W. Westhäuser and K. Guth

Magneto-Optical imaging, ed. By T. Johansen and D. V. Shantsev, NATO Science Series II, Vol **142**. (2004) p. 29

47. [Direct measurements of electric potentials at grain boundaries: Mechanism for current improvement in high \$T_c\$ superconductors](#)
Ch. Jooss, K. Guth, M. A. Schofield, M. Beleggia, Y. Zhu,
Physica C, **408-410** (2004) 443-444
46. [Imaging the electric field distribution of the high temperature superconductor YBaCuO by magneto-optics](#)
V. Born, K. Guth, Ch. Jooss, and H. C. Freyhardt
Physica C, **408-410** (2004)
45. [Flux and current distribution of bicrystalline YBCO films](#)
K. Guth, V. Born and Ch. Jooss
Physica C **408-410** (2004) 518-519

2003

44. [Self-enhanced flux penetration into small-angle grain boundaries in YBaCuO films.](#)
V. Born, K. Guth, H. C. Freyhardt, Ch. Jooss
Supercond. Sci. Technol. **17** (2004) 380-385.
43. [Improved grain boundary currents in textured \$\text{YBa}_2\text{Cu}_3\text{O}_7\$ thin films on bicrystalline Ni substrates.](#)
K. Guth, V. Born, S. Sievers, H. C. Freyhardt, Ch. Jooss
Supercond. Sci. Technol. **17** (2004) 65-70.
42. [The Identification of grain-boundary networks of distinct critical current density in \$\text{YBa}_2\text{Cu}_3\text{O}_{7-x}\$ coated conductors](#)
T. Puig, A. Palau, X. Obradors, E. Pardo, C. Navau, A. Sanchez, Ch. Jooss, K. Guth, H.C. Freyhardt
Supercond. Sci. Technol. **17** (2004) 1283-1288.
41. [Flux line lattice structure and behaviour in antiphase boundary free vicinal \$\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}\$ thin films](#)
J. H. Durrell, S. Menema, Ch. Jooss, G. Gibson, Z. H. Barber, H. Zandbergen, and J. E. Evetts
J Appl. Phys. **93**, 9869 (2003)
40. [Room temperature preparation of biaxially textured indium tin oxide thin films with ion beam assisted deposition](#)
K. Thiele, S. Sievers, Ch. Jooss, J. Hoffmann and H. C. Freyhardt
J. Mat. Res. **18**, 442 (2003)

2002

39. [Magneto-optical studies of current distributions in high \$T_c\$ superconductors](#)
Ch. Jooss, J. Albrecht, H. Kuhn, H. Kronmüller, S. Leonhardt,
Rep. Prog. Phys. **65**, 651, 2002
38. [Overcritical Meissner current densities in YBaCuO thin films in soft magnetic environments](#)

- H. Jarzina, Ch. Jooss, and H.C. Freyhardt
J. Appl. Phys. **91**, 3775 (2002)
37. [Scanning tunneling spectroscopy of optimally doped and underdoped YBaCuO thin films](#)
V. Born, Ch. Jooss, H.C. Freyhardt
Physica C **382**, 224 (2002)
 36. [Magneto-optical studies of flux pinning in high-temperature superconductors](#)
Ch. Jooss and J. Albrecht
Zeitschrift für Metallkunde, **93**, 1065 (2002)
 35. [Influence of the seed distance on the microstructure and the superconducting properties of grain boundaries in a multi-seeded melt growth monolith](#)
M. P. Delamare, B. Bringmann, Ch. Jooss, H. Walter, A. Leenders, and H. C. Freyhardt
Supercond. Sci. Technol. **15** (2002) 16-22
 34. [Enhancement of the critical current density by silver sheeting of YBCO thin films](#)
M. Kienzle, J. Albrecht, R. Warthmann, S. Leonhardt, H. Kronmüller, and Ch. Jooss
Phys. Rev. B **66**, 054525 (2002)
- 2001**
33. [Electric field distribution at low angle grain boundaries in high-temperature superconductors](#)
Ch. Jooss, K. Guth, V. Born, J. Albrecht
Phys. Rev. B **65**, 014505, (2002)
 32. [Preparation of high quality HTS rings for application in the magnetic bearing of cryotanks and pinning in grain boundaries](#)
B. Bringmann, H. Walter, Ch. Jooss, A. Leenders, and H.C. Freyhardt
Proc. of Eucas 2001 Physica C, 372-376, 1487—1481 (2002)
 31. [New conductive IBAD buffer for HTS applications](#)
K. Thiele, S. Sievers, J. Dzick, L.-O. Kautschor, Ch. Jooss, J. Hoffmann, H. C. Freyhardt
MRS Proceedings **689**, E8.2, (2001), ed. M. P. Paranthaman, M. W. Rupich, K. Salama, J. Mannhart, and T. Hasegawa .
 30. [Magneto-optical study of grain boundaries, interfaces and grain boundary networks in YBaCuO](#)
Ch. Jooss, L.-O. Kautschor, M.P. Delamare, B. Bringmann, K. Guth, V. Born, S. Sievers, H. Walter, J. Dzick, J. Hoffmann, H.C. Freyhardt, B. de Boer, B. Holzapfel, and F. Sandiumenge
MRS Proceedings **659**, II 7.1., (2001) by U. Balachandran, H. C. Freyhardt, T. Izumi, and D. C. Larbalestier.
 29. [Natural and artificial grain boundaries with high current carrying capabilities](#)
M.P. Delamare, Ch. Jooss, B. Bringmann, H. Walter, F. Garcia-Moreno, A. Leenders, and H.C. Freyhardt
IEEE Trans. Appl. Supercond., **11**, 3788, (2001)
 28. [High quality HTS tiles designed for the application in magnetic bearings of cryotanks and flywheels"](#)
A. Leenders, H. Walter, B. Bringmann, M.P. Delamare, Ch. Jooss, and H.C. Freyhardt
IEEE Trans. Appl. Supercond., **11**, 3728, (2001)

27. [Bi₂Sr₂Ca_{n-1}Cu_nO_{2\(n+2\)+x} thin films on c-axis oriented and vicinal substrates](#)
R. Rössler, J.D. Pedarnig, and Ch. Jooss
Physica C, **361**, 13, (2001)
 26. [Current distributions at grain boundaries in melt-textured YBaCuO](#)
Ch. Jooss, B. Bringmann, M.P. Delamare, H. Walter, A. Leenders, H.C. Freyhardt
Superc. Science Technol., **14**, 260, (2001)
 25. [Growth of grain boundaries in YBaCuO on bicrystalline Ni substrates](#)
K. Thiele, Ch. Jooss, J. Hoffmann, L.-O. Kautschor, J. Dzick, H.C. Freyhardt
Physica C, **355**, 203, (2001)
 24. [Large Critical Currents in Bonded YBCO Monoliths](#)
H. Walter, Ch. Jooss, B. Bringmann, M. P. Delamare, A. Leenders, and H. C. Freyhardt
Europhys. Letters, **55**, 100, (2001)
 23. [Modification of transport properties in low angle grain boundaries via calcium doping of YBCO thin films](#)
K. Guth, H. U. Krebs, H. C. Freyhardt and Ch. Jooss
Phys. Rev. B, **64**, 140508, (2001)
- 2000**
22. [Pinning mechanism of vortices at antiphase boundaries in YBaCuO](#)
Ch. Jooss, R. Warthmann and H. Kronmüller
Phys. Rev. B **61**, 12433, (2000)
 21. [Magneto-optical study of current distributions at grain boundaries in YBaCuO melt-textured monoliths](#)
Ch. Jooss, B. Bringmann, M. P. Delamare, H. Walter, A. Leenders and H. C. Freyhardt
Physica C, **341-348**, 1423, (2000)
 20. [Influence of external strains on YBCO films deposited on thin buffered technical substrates](#)
F. García-Moreno, A. Usoskin, J. Wiesmann, J. Dzick, Ch. Jooß, H. C. Freyhardt
Proceedings of EUCAS, Inst. Phys. Conf. Ser. **167**, 323, (2000)
 19. [Pinning mechanism of vortices at antiphase boundaries in YBaCuO](#)
Ch. Jooss, R. Warthmann and H. Kronmüller
Physica C, **341-348**, 1419, (2000)
 18. [Characterization of YBCO coated conductors deposited by LPE on MgO substrates](#)
A. Vostner, H. W. Weber, A. Mathen, Ch. Jooss, J. Hoffmann and H. C. Freyhardt
Physica C, **341-348**, 2487, (2000)
 17. [Anisotropic flux pinning in thin YBCO films by substrate modifications](#)
S. Leonhardt, R. Warthmann, J. Albrecht, Ch. Jooss, H. Kronmüller, T. Haage, J. Zegenhagen and H.-U. Habermeier
Physica C, **332**, 214, (2000)
 16. [Spectral distribution of activation energies in YBaCuO thin films](#)
R. Warthmann, J. Albrecht, H. Kronmüller, and Ch. Jooss
Phys. Rev. B **62**, 15226, (2000)

1999

15. [Anisotropic defect structure and transport properties of YBa₂Cu₃O_{7-δ} films on vicinal SrTiO₃](#)
J. Brötz, H. Fuess, T. Haage, J. Zegenhagen, Ch. Jooss, A. Forkl and R. Warthmann
J. Appl. Phys., **85**, 635, (1999)
14. [Vortex pinning due to strong quasiparticle scattering at antiphase boundaries in YBa₂Cu₃O_{7-δ}](#)
Ch. Jooss, R. Warthmann, H. Kronmüller, T. Haage, H.-U. Habermeier and J. Zegenhagen
Phys. Rev. Lett., **82**, 632, (1999)
13. [Magneto-optical study of vortex pinning mechanism in YBaCuO thin films](#)
Ch. Jooss, H. C. Freyhardt, R. Warthmann and H. Kronmüller
Proceedings of the 9. International workshop on critical currents, June 1999, Madison Wisconsin
12. [What determines J_c in YBaCuO thin film superconductors ?](#)
H. C. Freyhardt, Ch. Jooss, J. Hoffmann, F. Garcia-Moreno and A. Usoskin
Proceedings of the 9. International workshop on critical currents, June 1999, Madison Wisconsin

1998

11. [High resolution magneto-optical imaging of critical currents in YBaCuO thin films](#)
Ch. Jooss, R. Warthmann, A. Forkl and H. Kronmüller
Physica C, **299**, 215, (1998)
10. [Observation of microscopic currents in superconducting ceramics](#)
J. Albrecht, Ch. Jooss, R. Warthmann, A. Forkl and H. Kronmüller
Phys. Rev. B, **57**, 10332, (1998)
9. [Anisotropic enhancement of flux pinning in YBaCuO thin films by substrate mediated defect control](#)
H.-U. Habermeier, T. Haage, J. Zegenhagen, R. Warthmann and Ch. Jooss
Supercond. Sci. Technol., **11**, 929, (1998)

1997

8. [Anisotropic flux penetration and current distribution in \(001\) tilted YBaCuO thin films](#)
Ch. Jooss, R. Warthmann, A. Forkl, T. Haage, J. Zegenhagen, H.-U. Habermeier and H. Kronmüller
M2S-HTSC-V Proceedings, Physica C, **282-287**, 2311 (1997)
7. [Nanoscale engineering: Tailored transport properties by self-organization in YBaCuO thin films](#)
Haage, J. Zegenhagen, Ch. Jooss, R. Warthmann, J. Q. Li, H.-U. Habermeier and M. Cardona
M2S-HTSC-V Proceedings, Physica C **282-287** 557 (1997)
6. [Transport properties and flux pinning by self-organization in YBaCuO films on vicinal SrTiO₃ \(001\)](#)
T. Haage, J. Zegenhagen, J.Q. Li, H.-U. Habermeier, M. Cardona, Ch. Jooss, R. Warthmann, A. Forkl and H. Kronmüller
Phys. Rev. B **56** 8404 (1997)
5. [High-resolution magneto-optical imaging of critical currents in YBaCuO thin films](#)
Ch. Jooss, R. Warthmann, A. Forkl, H. Kronmüller, Proceedings of the international

workshop “Critical Currents in Superconductors for Practical Applications”, edited by L. Zhou, H. W. Weber and E. W. Collings, World Scientific, 1997, p 319.

1996

4. [Thickness and roughness dependence of magnetic flux penetration and critical current densities in YBaCuO thin films](#)
Ch. Jooss, A. Forkl, R. Warthmann, H.-U. Habermeier, B. Leibold and H. Kronmüller
Physica C, **266**, 235 (1996)
3. [Simple model of vortex pinning at rough superconductor surfaces in YBaCuO thin films](#)
Ch. Jooss, A. Forkl, H. Kronmüller
Physica C, **268**, 87 (1996)
2. [Substrate mediated anisotropy of transport properties in YBaCuO thinfilms](#)
T. Haage, J.Q. Li, B. Leibold, M. Cardona, J. Zegenhagen, H.-U. Habermeier, A. Forkl, Ch. Jooss, R. Warthmann and H. Kronmüller
Solid State Commun., **99**, 553, (1996)
1. [Investigation of the magnetic flux-density distribution, current distribution and magnetization curve of YBaCuO thin films](#)
A. Forkl, Ch. Jooss, R. Warthmann, H. Kronmüller and H.-U. Habermeier
Journal of All. and Comp., **251**, 146, (1996)