

**Prof. Dr. G. Jakob, publication list
scientific journals:**

Years: [2021](#), [2020](#),
[2019](#), [2018](#), [2017](#), [2016](#), [2015](#), [2014](#), [2013](#), [2012](#), [2011](#), [2010](#),
[2009](#), [2008](#), [2007](#), [2006](#), [2005](#), [2004](#), [2003](#), [2002](#), [2001](#), [2000](#),
[1999](#), [1998](#), [1997](#), [1996](#), [1995](#), [1994](#), [1993](#), [1992](#), [1991](#), [1990](#)

- 252) **Nanoscale subsurface dynamics of solids upon high-intensity laser irradiation observed by femtosecond grazing-incidence x-ray scattering**
Lisa Randolph, Mohammadreza Banjafar, Thomas R. Preston, Toshinori Yabuuchi, Mikako Makita, Nicholas P. Dover, Christian Rödel, Sebastian Göde, Yuichi Inubushi, Gerhard Jakob, Johannes Kaa, Akira Kon, James K. Koga, Dmitriy Ksenzov, Takeshi Matsuoka, Mamiko Nishiuchi, Michael Paulus, Frederic Schon, Keiichi Sueda, Yasuhiko Sentoku, Tadashi Togashi, Michael Bussmann, Thomas E. Cowan, Mathias Kläui, Carsten Fortmann-Grote, Lingen Huang, Adrian P. Mancuso, Thomas Kluge, Christian Gutt, and Motoaki Nakatsutsumi
Phys. Rev. Research **4**, 033038 (2022), [doi: 10.1103/PhysRevResearch.4.033038](https://doi.org/10.1103/PhysRevResearch.4.033038)
- 251) **Average power scaling of THz spintronic emitters efficiently cooled in reflection geometry**
Tim Vogel, Alan Omar, Samira Mansourzadeh, Frank Wulf, Natalia Martin Sabenes, Melanie Müller, Tom S. Seifert, Alexander Weigel, Gerhard Jakob, Mathias Kläui, Joachim Pupeza, Tobias Kampfrath, and Clara J. Saraceno,
Opt. Express **30**, 20451 (2022), [doi: 10.1364/OE.453539](https://doi.org/10.1364/OE.453539)
- 250) **Terahertz-wave decoding of femtosecond extreme-ultraviolet light pulses**
I. Ilyakov, N. Agrawal, J. Deinert, J. Liu, A. Yaroslavtsev, L. Foglia, G. Kurdi, R. Mincigrucci, E. Principi, G. Jakob, M. Kläui, T. S. Seifert, T. Kampfrath, S. Kovalev, R. E. Carley, A. O. Scherz, M. Gensch,
Optica **9**, 545 (2022), [doi: 10.1364/OPTICA.453130](https://doi.org/10.1364/OPTICA.453130)
- 249) **Transition of laser-induced terahertz spin currents from torque- to conduction-electron-mediated transport**
Pilar Jiménez-Cavero, Oliver Gueckstock, Lukáš Nádvořník, Irene Lucas, Tom S. Seifert, Martin Wolf, Reza Rouzegar, Piet W. Brouwer, Sven Becker, Gerhard Jakob, Mathias Kläui, Chenyang Guo, Caihua Wan, Xiufeng Han, Zuanming Jin, Hui Zhao, Di Wu, Luis Morellón, and Tobias Kampfrath,
Phys. Rev. B. **105**, 067201 (2022), [doi: 10.1103/PhysRevB.105.184408](https://doi.org/10.1103/PhysRevB.105.184408)
- 248) **Observation of the Orbital Rashba-Edelstein Magnetoresistance**
Shilei Ding, Zhongyu Liang, Dongwook Go, Chao Yun, Mingzhu Xue, Zhou Liu, Sven Becker, Wenyun Yang, Honglin Du, Changsheng Wang, Yingchang Yang, Gerhard Jakob, Mathias Kläui, Yuriy Mokrousov, and Jinbo Yang,
Phys. Rev. Lett. **128**, 067201 (2022), [doi: 10.1103/PhysRevLett.128.067201](https://doi.org/10.1103/PhysRevLett.128.067201)
- 247) **Tuning spin-orbit torques across the phase transition in VO₂/NiFe heterostructures**
Jun-young Kim, Joel Cramer, Kyujoon Lee, Dong-Soo Han, Dongwook Go, Pavel Salev, Pavel N. Lapa, Nicolas M. Vargas, Ivan K. Schuller, Yuriy Mokrousov, Gerhard Jakob, and Mathias Kläui,
Adv. Funct. Mater. **2022**, 2111555 (2022), [doi: 10.1002/adfm.202111555](https://doi.org/10.1002/adfm.202111555)

2021 [top](#)

- 246) **Anomalous Hall effect in magnetic insulator heterostructures: Contributions from spin-Hall and magnetic-proximity effects**
Shilei Ding, Zhongyu Liang, Chao Yun, Rui Wu, Mingzhu Xue, Zhongchong Lin, Andrew Ross, Sven Becker, Wenyun Yang, Xiaobai Ma, Dongfeng Chen, Kai Sun, Gerhard Jakob, Mathias Kläui, and Jinbo Yang,
Phys. Rev. B **104**, 224410 (2021), [doi: 10.1103/PhysRevB.104.224410](https://doi.org/10.1103/PhysRevB.104.224410)
- 245) **Imprinting the complex dielectric permittivity of liquids into the spintronic terahertz emissions**
Vasileios Balos, Patrick Müller, Gerhard Jakob, Mathias Kläui, and Mohsen Sajadi,
Appl. Phys. Lett. **119**, 091104 (2021), [doi: 10.1063/5.0056909](https://doi.org/10.1063/5.0056909)
- 244) **Assembly of iron oxide nanosheets at the air–water interface by leucine–histidine peptides**
Nina Hoinkis, Helmut Lutz, Hao Lu, Thaddeus W. Golbek, Mikkel Bregnhøj, Gerhard Jakob, Mischa Bonn, and Tobias Weidner
RSC Advances **11**, 27965 (2021), [doi: 10.1039/d1ra04733g](https://doi.org/10.1039/d1ra04733g)
- 243) **Tailoring large magnetoresistance in Dirac semimetal SrIrO₃ films**
Z. Y. Ren, Jun Miao, L. P. Zhang, Z. L. Lv, J. P. Cao, Gerhard Jakob, Jing Zhou, J. K. Chen, K. K. Meng, H. F. Li, and Y. Jiang
Appl. Phys. Lett. **119**, 112402 (2021), [doi: 10.1063/5.0055713](https://doi.org/10.1063/5.0055713)
- 242) **Magnetic coupling in Y₃Fe₅O₁₂/Gd₃Fe₅O₁₂ heterostructures**
S. Becker, Z. Ren, F. Fuhrmann, A. Ross, S. Lord, S. Ding, R. Wu, J. Yang, J. Miao, M. Kläui, and G. Jakob
Phys. Rev. Appl. **16**, 014047 (2021), [doi: 10.1103/PhysRevApplied.16.014047](https://doi.org/10.1103/PhysRevApplied.16.014047)
- 241) **Modulating the polarization of broadband terahertz pulses from a spintronic emitter at rates up to 10 kHz**
O. Gueckstock, L. Nadvornik, T.S. Seifert, M. Borchert, G. Jakob, G. Woltersdorf, M. Kläui, M. Wolf, and T. Kampfrath
Optica **8**, 1013 (2021), [doi: 10.1364/OPTICA.430504](https://doi.org/10.1364/OPTICA.430504)
- 240) **Heisenberg Exchange and Dzyaloshinskii-Moriya Interaction in Ultrathin CoFeB Single and Multilayers**
Tobias Böttcher, Kyujoon Lee, Frank Heussner, Samridh Jaiswal, Gerhard Jakob, Mathias Kläui, Burkard Hillebrands, Thomas Brächer, Philipp Pirro
IEEE Transactions on Magnetics **57**, 1600207 (2021), [doi: 10.1109/TMAG.2021.3079259](https://doi.org/10.1109/TMAG.2021.3079259)
- 239) **Broadband Terahertz Probes of Anisotropic Magnetoresistance Disentangle Extrinsic and Intrinsic Contributions**
Lukáš Nadvorník, Martin Borchert, Liane Brandt, Richard Schlitz, Koen A. de Mare, Karel Výborný, Ingrid Mertig, Gerhard Jakob, Matthias Kläui, Sebastian T. B. Goennenwein, Martin Wolf, Georg Woltersdorf, and Tobias Kampfrath,
Phys. Rev. X **11**, 021030 (2021), [doi: 10.1103/PhysRevX.11.021030](https://doi.org/10.1103/PhysRevX.11.021030)
- 238) **Terahertz Spin-To-Charge Conversion by Interfacial Skew Scattering in Metallic Bilayers**
Oliver Gueckstock, Lukáš Nadvorník, Martin Gradhand, Tom Sebastian Seifert, Genaro Bierhance, Reza Rouzegar, Martin Wolf, Mehran Vafae, Joel Cramer, Maria Andromachi Syskaki, Georg Woltersdorf, Ingrid Mertig, Gerhard Jakob, Mathias Kläui, and Tobias Kampfrath
Adv. Mater. **2021**, 2006281 (2021), [doi: 10.1002/adma.202006281](https://doi.org/10.1002/adma.202006281)
- 237) **Impact of the interplay of piezoelectric strain and current-induced heating on the field-like spin–orbit torque in perpendicularly magnetized Ta/Co₂₀Fe₆₀B₂₀/Ta/MgO film**
M. Filianina, Z. Wang, L. Baldrati, K. Lee, M. Vafae, G. Jakob, and M. Kläui,
Appl. Phys. Lett. **118**, 032401 (2021), [doi: 10.1063/5.0035869](https://doi.org/10.1063/5.0035869)

- 236) **Electrical detection of the spin reorientation transition in antiferromagnetic TmFeO₃ thin films by spin Hall magnetoresistance**
S. Becker, A. Ross, R. Lebrun, L. Baldrati, S. Ding, F. Schreiber, F. Maccherozzi, D. Backes, M. Kläui, and G. Jakob,
Phys. Rev. B **103**, 024423 (2021), [doi: 10.1103/PhysRevB.103.024423](https://doi.org/10.1103/PhysRevB.103.024423)
- 235) **Description of intermodulation generation of nonlinear responses beyond the validity of the power series expansion**
F. Bergmann, M. Letz, H. Maune, and G. Jakob,
Appl. Phys. Lett. **118**, 012902 (2021), [doi: 10.1063/5.0034697](https://doi.org/10.1063/5.0034697)
2020 [top](#)
- 234) **Rapid online solid-state battery diagnostics with optically pumped magnetometers**
Yinan Hu, Geoffrey Z. Iwata, Lykourgos Bougas, John W. Blanchard, Arne Wickenbrock, Gerhard Jakob, Stephan Schwarz, Clemens Schwarzinger, Alexej Jerschow, and Dmitry Budker,
Appl. Sci. **10**, 7864 (2020), [doi: 10.3390/app10217864](https://doi.org/10.3390/app10217864)
- 233) **Harnessing non-local orbital-to-spin conversion of interfacial orbital currents for efficient spin-orbit torques**
Shilei Ding, Andrew Ross, Dongwook Go, Lorenzo Baldrati, Zengyao Ren, Frank Freimuth, Sven Becker, Fabian Kammerbauer, Jinbo Yang, Gerhard Jakob, Yuriy Mokrousov, Mathias Kläui,
Phys. Rev. Lett. **125**, 177201 (2020), [doi: 10.1103/PhysRevLett.125.177201](https://doi.org/10.1103/PhysRevLett.125.177201)
- 232) **Enhancement of Spin Hall Conductivity in W-Ta alloy**
Jun-Young Kim, Dong-Soo Han, Mehran Vafaei, Samridh Jaiswal, Kyujoon Lee, Gerhard Jakob, Mathias Kläui,
Appl. Phys. Lett. **117**, 142403 (2020), [doi: 10.1063/5.0022012](https://doi.org/10.1063/5.0022012)
- 231) **Impact of Annealing Temperature on Tunneling Magnetoresistance Multilayer Stacks**
Leo Schnitzspan, Joel Cramer, Jan Kubik, Tareq Tarequzzaman, Gerhard Jakob, and Mathias Kläui,
IEEE Mag. Lett. **11**, 4503705 (2020), [doi: 10.1109/LMAG.2020.3005381](https://doi.org/10.1109/LMAG.2020.3005381)
- 230) **Phonon Bridge Effect in Superlattices of Thermoelectric TiNiSn/HfNiSn With Controlled Interface Intermixing**
Sven Heinz, Emigdio Chavez Angel, Maximilian Trapp, Hans-Joachim Kleebe, and Gerhard Jakob,
Nanomaterials **10**, 1239 (2020), [doi: 10.3390/nano10061239](https://doi.org/10.3390/nano10061239)
- 229) **Spin-orbit torque driven multi-level switching in He⁺ irradiated W-CoFeB-MgO Hall bars with perpendicular anisotropy**
Xiaoxuan Zhao, Yang Liu, Daoqian Zhu, Mamour Sall, Xueying Zhang, Helin Ma, Jürgen Langer, Berthold Ocker, Samridh Jaiswal, Gerhard Jakob, Mathias Kläui, Weisheng Zhao, and Dafiné Ravelosona,
Appl. Phys. Lett. **116**, 242401 (2020), [doi: 10.1063/5.0010679](https://doi.org/10.1063/5.0010679)
- 228) **Electric-field control of spin-orbit torques in perpendicularly magnetized W/CoFeB/MgO film**
Mariia Filianina, Jan-Philipp Hanke, Kyujoon Lee, Dong-Soo Han, Samridh Jaiswal, Adithya Rajan, Gerhard Jakob, Yuriy Mokrousov, and Mathias Kläui,
Phys. Rev. Lett. **124**, 217701 (2020), [doi: 10.1103/PhysRevLett.124.217701](https://doi.org/10.1103/PhysRevLett.124.217701)
- 227) **Current induced chiral domain wall motion in CuIr/CoFeB/MgO thin films with strong higher order spin-orbit torques**
Franziska Martin, Kyujoon Lee, Alexander Kronenberg, Samridh Jaiswal, Robert Reeve, Mariia Filianina, Sanghyun Ji, Myung-Hwa Jung, Gerhard Jakob, and Mathias Kläui,
Appl. Phys. Lett. **116**, 132410 (2020), [doi: 10.1063/1.5139704](https://doi.org/10.1063/1.5139704)

- 226) **The challenges in realizing an exchange coupled BiFeO₃ – double perovskite ferrimagnet bilayer**
Sven Becker, Sven Heinz, Mehran Vafaei, Mathias Kläui, and Gerhard Jakob,
J. Mag. Mater. **506**, 166766 (2020), [doi: 10.1016/j.jmmm.2020.166766](https://doi.org/10.1016/j.jmmm.2020.166766)
- 225) **Propagation Length of Antiferromagnetic Magnons Governed by Domain Configurations**
Andrew Ross, Romain Lebrun, Olena Gomony, Daniel Grave, Asaf Kay, Lorenzo Baldrati, Sven Becker, Alireza Qaiumzadeh, Camilo Ulloa, Gerhard Jakob, Florian Kronast, Jairo Sinova, Rembert Duine, Arne Brataas, Avner Rothschild, and Mathias Kläui,
Nano Lett. **20**, 306 (2020), [doi: 10.1021/acs.nanolett.9b03837](https://doi.org/10.1021/acs.nanolett.9b03837)
- 2019** [top](#)
- 224) **Individual skyrmion manipulation by local magnetic field gradients**
Arianna Casiraghi, Hector Corte-Leon, Mehran Vafaei, Felipe Garcia-Sanchez, Gianfranco Durin, Massimo Pasquale, Gerhard Jakob, Mathias Kläui, and Olga Kazakova,
Commun. Phys. **2**, 145 (2019), [doi: 10.1038/s42005-019-0242-5](https://doi.org/10.1038/s42005-019-0242-5)
- 223) **Hole Localization in Thermoelectric Half-Heusler (Zr_{0.5}Hf_{0.5})Co(SbSn_x) Thin Films**
Sven Heinz, Benjamin Balke, Gerhard Jakob,
Thin Solid Films **692**, 137581 (2019), [doi: 10.1016/j.tsf.2019.137581](https://doi.org/10.1016/j.tsf.2019.137581)
- 222) **Interfacial Dzyaloshinskii–Moriya interaction and chiral magnetic textures in a ferrimagnetic insulator**
Shilei Ding, Andrew Ross, Romain Lebrun, Sven Becker, Kyujoon Lee, Isabella Boventer, Souvik Das, Yuichiro Kurokawa, Shruti Gupta, Jinbo Yang, Gerhard Jakob, Mathias Kläui,
Phys. Rev. B **100**, 100406(R) (2019); [doi: 10.1103/PhysRevB.100.100406](https://doi.org/10.1103/PhysRevB.100.100406)
- 221) **Enhancing domain wall velocity through interface intermixing in W-CoFeB-MgO films with perpendicular anisotropy**
Xiaoxuan Zhao, Boyu Zhang, Nicolas Vernier, Xueying Zhang, Mamour Sall, Tao Xing, Liza Herrera Diez, Carolyn Hepburn, Lin Wang, Gianfranco Durin, Arianna Casiraghi, Mohamed Belmeguenai, Yves Roussign, Andrei Stashkevich, Salim Mourad Cherif, Jürgen Langer, Berthold Ocker, Samridh Jaiswal, Gerhard Jakob, Mathias Kläui, Weisheng Zhao, and Dafine Ravelosona,
Appl. Phys. Lett. **115**, 122404 (2019); [doi: 10.1063/1.5121357](https://doi.org/10.1063/1.5121357)
- 220) **Antenna-coupled spintronic terahertz emitters driven by a 1550 nm femtosecond laser oscillator**
U. Nandi, M.S. Abdelaziz, S. Jaiswal, G. Jakob, O. Gückstock, R. Rouzegar, T.S. Seifert, M. Kläui, T. Kampfrath, and S. Preu,
Appl. Phys. Lett. **115**, 022405 (2019); [doi: 10.1063/1.5089421](https://doi.org/10.1063/1.5089421)
- 219) **Enhanced thermoelectric properties of lightly Nb doped SrTiO₃ thin films**
S. Bhansali, W. Khunsin, A. Chatterjee, J. Santiso, B. Abad, M. Martin-Gonzalez, G. Jakob, C. M. Sotomayor Torres, and E. Chávez-Angel, Nanoscale Adv. (2019) [doi: 10.1039/c9na00361d](https://doi.org/10.1039/c9na00361d)
- 218) **Thermal skyrmion diffusion used in a reshuffler device**
Jakub Zázvorka, Florian Jakobs, Daniel Heinze, Niklas Keil, Sascha Kromin, Samridh Jaiswal, Kai Litzius, Gerhard Jakob, Peter Virnau, Daniele Pinna, Karin Everschor-Sitte, Levente Rózsa, Andreas Donges, Ulrich Nowak, Mathias Kläui,
Nature Nanotechnology **14**, 658 (2019); [doi: 10.1038/s41565-019-0436-8](https://doi.org/10.1038/s41565-019-0436-8)
- 217) **Gilbert damping of CoFe-alloys**
Ramon Weber, Dong Soo Han, Isabella Boventer, Samridh Jaiswal, Romain Lebrun, Gerhard Jakob, and Mathias Kläui,
J. Phys. D **52**, 325001 (2019); [doi: 10.1088/1361-6463/ab2096](https://doi.org/10.1088/1361-6463/ab2096)
- 216) **High sensitivity characterization of the nonlinear electric susceptibility of a glass ceramic in the microwave range**
Florian Bergmann, Martin Letz, Holger Maune, and Gerhard Jakob,
Appl. Phys. Lett. **114**, 212903 (2019); [doi: 10.1063/1.5097545](https://doi.org/10.1063/1.5097545)

- 215) **Tuning of interfacial perpendicular magnetic anisotropy and domain structures in magnetic thin film multilayers**
S. Jaiswal, K. Lee, J. Langer, B. Ocker, M. Kläui, G. Jakob,
J. Phys. D: Appl. Phys. **52**, 295002 (2019); doi: [10.1088/1361-6463/ab1c42](https://doi.org/10.1088/1361-6463/ab1c42)
- 214) **Impact of pump wavelength on terahertz emission of a cavity-enhanced spintronic trilayer**
R. I. Herapath, S. M. Hornett, T. S. Seifert, G. Jakob, M. Kläui, J. Bertolotti, T. Kampfrath, and E. Hendry,
Appl. Phys. Lett. **114**, 041107 (2019); doi: [10.1063/1.5048297](https://doi.org/10.1063/1.5048297)
- 213) **Microstructure design for fast lifetime measurements of magnetic tunneling junctions**,
Andres Conca, Frederick Casper, Johannes Paul, Ronald Lehdorff, Christian Haupt, Gerhard Jakob, Matthias Kläui and Burkard Hillebrands,
Sensors **19**, 583 (2019); doi: [10.3390/s19030583](https://doi.org/10.3390/s19030583)
- 2018** [top](#)
- 212) **Determining the Magnetite/Maghemite Composition and Core-Shell Nanostructure from Magnetization Curve for Iron Oxide Nanoparticles**
Hamed Sharifi Dehsari, Vadim Ksenofontov, Angela Möller, Gerhard Jakob, Kamal Asadi,
J. Phys. Chem. C **122**, 28292 (2018); doi: [10.1021/acs.jpcc.8b06927](https://doi.org/10.1021/acs.jpcc.8b06927)
- 211) **High-Performance Flexible Magnetic Tunnel Junctions for Smart Miniaturized Instruments**
Selma Amara, Gallo A. Torres Sevilla, Mayyada Hawsawi, Yousof Mashraei, Hanan Mohammed, Melvin E. Cruz, Yurii P. Ivanov, Samridh Jaiswal, Gerhard Jakob, Mathias Kläui, Muhammad Hussain, and Jürgen Kosel,
Advanced Engineering Materials **20**, 1800471 (2018); doi: [10.1002/adem.201800471](https://doi.org/10.1002/adem.201800471)
- 210) **Large modulation of perpendicular magnetic anisotropy in a BiFeO₃/Al₂O₃/Pt/Co/Pt multiferroic heterostructure via spontaneous polarizations**
P. F. Liu, J. Miao, Z. D. Xu, G. Jakob, Q. Liu, Z. Y. Ren, K. K. Meng, Y. Wu, J. K. Chen, X. G. Xu, and Y. Jiang,
Appl. Phys. Lett **113**, 1062401 (2018); doi: [10.1063/1.5040876](https://doi.org/10.1063/1.5040876)
- 209) **Subamorphous thermal conductivity of crystalline half-Heusler superlattices**,
E. Chavez-Angel, N. Reuter, P. Komar, S. Heinz, U. Kolb, H.-J. Kleebe and G. Jakob,
Nano- and Microscale Thermophys. Eng. **23**, 1 (2018), doi: [10.1080/15567265.2018.1505987](https://doi.org/10.1080/15567265.2018.1505987)
- 208) **Terahertz spectroscopy for all-optical spintronic characterization of the spin-Hall-effect metals Pt, W and Cu₈₀Ir₂₀**
T.S. Seifert, N.M. Tranh, O. Gueckstock, S.M. Rouzegar, L. Nadvornik, S. Jaiswal, G. Jakob, V.V. Temnov, M. Muenzenberg, M. Wolf, M. Kläui, and T. Kampfrath,
Journal of Physics D **51**, 364003 (2018), doi: [10.1088/1361-6463/aad536](https://doi.org/10.1088/1361-6463/aad536).
- 207) **Femtosecond formation dynamics of the spin Seebeck effect revealed by terahertz spectroscopy**
Tom Seifert, Samridh Jaiswal, Joseph Barker, Sebastian T. Weber, Ilya Razdolski, Joel Cramer, Oliver Gueckstock, Sebastian Maehrlein, Lukas Nadvornik, Shun Watanabe, Chiara Ciccarelli, Alexey Melnikov, Gerhard Jakob, Markus Muenzenberg, Sebastian T.B. Goennenwein, Georg Woltersdorf, Baerbel Rethfeld, Piet W. Brouwer, Martin Wolf, Mathias Kläui, Tobias Kampfrath,
Nature Commun. **9**, 2899 (2018), doi: [10.1038/s41467-018-05135-2](https://doi.org/10.1038/s41467-018-05135-2)
- 206) **Magnetic Exchange Interaction in Nitronyl Nitroxide Radical-Based Single Crystals of 3d Metal Complexes: A Combined Experimental and Theoretical Study**,
Pramod Bhatt, Kubandiran Kolanji, Anela Ivanova, Arvind Yogi, Gerhard Jakob, Mayuresh D. Mukadam, Seikh Mohammad Yusuf, and Martin Baumgarten,
ACS Omega **3**, 2918 (2018); doi: [10.1021/acsomega.7b01669](https://doi.org/10.1021/acsomega.7b01669)

- 205) **Complex THz and DC inverse spin Hall effect in YIG/Cu_{1-x}Ir_x bilayers across a wide concentration range**,
Joel Cramer, Tom Seifert, Alexander Kronenberg, Felix Fuhrmann, Gerhard Jakob, Martin Jourdan, Tobias Kampfrath, Mathias Kläui,
Nano Lett **18**, 1064 (2018); [doi: 10.1021%2Facs.nanolett.7b04538](https://doi.org/10.1021%2Facs.nanolett.7b04538)
- 2017 [top](#)
- 204) **Combined Experimental and Theoretical Investigation of Heating Rate on Growth of Iron Oxide Nanoparticles**
Hamed Sharifi Dehsari, Maziar Heidari, Anielen Halda Ribeiro, Wolfgang Tremel, Gerhard Jakob, Davide Donadio, Raffaello Potestio, and Kamal Asadi,
Chemistry of Materials **29**, 9648 (2017); [doi: 10.1021/acs.chemmater.7b02872](https://doi.org/10.1021/acs.chemmater.7b02872)
- 203) **Effect of precursor concentration on size evolution of iron oxide nanoparticles**,
Hamed Sharifi Dehsari, Anielen Halda Ribeiro, Bora Ersöz, Wolfgang Tremel, Gerhard Jakob, and Kamal Asadi,
CrystEngComm **19**, 6694 (2017); [doi: 10.1039/C7CE01406F](https://doi.org/10.1039/C7CE01406F)
- 202) **Alloy-like behaviour of the thermal conductivity of nonsymmetric superlattices**
Emigdio Chavez Angel, Paulina Komar, and Gerhard Jakob,
Nano- and Microscale Thermophys. Eng.**21**, 287 (2017); [doi: 10.1080/15567265.2017.1354106](https://doi.org/10.1080/15567265.2017.1354106)
- 201) **Temperature dependence of the non-local spin Seebeck effect in YIG/Pt nanostructures**
Kathrin Ganzhorn, Tobias Wimmer, Joel Cramer, Richard Schlitz, Stephan Geprägs, Gerhard Jakob, Rudolf Gross, Hans Huebl, Mathias Kläui, and Sebastian T. B. Goennenwein,
AIP Advances **7**, 085102 (2017); [doi: 10.1063/1.4986848](https://doi.org/10.1063/1.4986848)
- 200) **Investigation of the Dzyaloshinskii-Moriya interaction and room temperature skyrmions in W/CoFeB/MgO thin films and microwires**
S. Jaiswal, K. Litzius, I. Lemesh, F. Büttner, S. Finizio, J. Raabe, M. Weigand, K. Lee, J. Langer, B. Ocker, G. Jakob, G. S. D. Beach, and M Kläui
Appl. Phys. Lett. **111**, 022409 (2017); [doi: 10.1063/1.4991360](https://doi.org/10.1063/1.4991360)
- 199) **Probing ultrafast changes of a vertical spin density profile with resonant XUV**
C. Gutt, T. Sant, D. Ksenzov, F. Capotondi, E. Pedersoli, L. Raimondi, I.P. Nikolov, M. Kiskinova, S. Jaiswal, G. Jakob, M. Kläui, H. Zabel, and U. Pietsch,
Structural Dynamics **4**, 055110 (2017), [doi: 10.1063/1.4990650](https://doi.org/10.1063/1.4990650)
- 198) **Synergy of Miniemulsion and Solvothermal Conditions for the Low Temperature Crystallization of Magnetic Nanostructured Transition Metal Ferrites**
Alice Antonello, Gerhard Jakob, Paolo Dolcet, Rebecca Momper, Maria Kokkinopoulou, Katharina Landfester, Rafael Muñoz-Espí, and Silvia Gross,
Chem. Mater. **29**, 985 (2017); [doi: 10.1021/acs.chemmater.6b03467](https://doi.org/10.1021/acs.chemmater.6b03467)
- 197) **Ultrabroadband single-cycle terahertz pulses with peak fields of 300 kV cm⁻¹ from a metallic spintronic emitter**
Tom Seifert, Samridh Jaiswal, Mohsen Sajadi, Gerhard Jakob, Stephan Winnerl, Martin Wolf, Mathias Kläui, and Tobias Kampfrath,
Appl. Phys. Lett. **110**, 252402 (2017); [doi: 10.1063/1.4986755](https://doi.org/10.1063/1.4986755)
- 196) **Reconstruction of an effective magnon mean free path distribution from spin Seebeck measurements in thin films**
E. Chavez-Ángel, R. A. Zarate, S. Fuentes, E. J. Guo, M. Kläui, and G. Jakob,
New Journal of Physics **19**, 013011 (2017); [doi: 10.1088/1367-2630/aa5163](https://doi.org/10.1088/1367-2630/aa5163)
- 195) **CADEM - Calculate X-ray Diffraction of Epitaxial Multilayers**
Paulina Komar and Gerhard Jakob
Journal of Applied Crystallography **50**, 288 (2017); [doi: 10.1107/S1600576716018379](https://doi.org/10.1107/S1600576716018379)

2016 [top](#)

- 194) **Influence of Thickness and Interface on the Low-Temperature Enhancement of the Spin Seebeck Effect in YIG Films**
Er-Jia Guo, Joel Cramer, Andreas Kehlberger, Ciaran A. Ferguson, Donald A. MacLaren, Gerhard Jakob, and Mathias Kläui
Phys. Rev. X. **6**, 031012 (2016); [doi: 10.1103/PhysRevX.6.031012](https://doi.org/10.1103/PhysRevX.6.031012)
- 193) **Quantitative analysis of magnetization reversal in Ni thin films on unpoled and poled (011) [PbMg_{1/3}Nb_{2/3}O₃]_{0.68}–[PbTiO₃]_{0.32} piezoelectric substrates**
Alexander Tkach, Andreas Kehlberger, Felix Büttner, Gerhard Jakob, Stefan Eisebitt, and Mathias Kläui,
J. Phys. D: Appl. Phys. **49**, 335004 (2016); [doi:10.1088/0022-3727/49/33/335004](https://doi.org/10.1088/0022-3727/49/33/335004)
- 192) **Tailoring of the electrical and thermal properties using ultra-short period non-symmetric superlattices**
Paulina Komar, Emigdio Chávez Ángel, Christoph Euler, Benjamin Balke, Ute Kolb, Mathis M. Müller, Hans-Joachim Kleebe, Gerhard Fecher, and Gerhard Jakob,
APL Mater. **4**, 104902 (2016); [doi:10.1063/1.4954499](https://doi.org/10.1063/1.4954499)
- 191) **Modification of magnetic anisotropy in Ni thin films by poling of (011) PMN-PT piezosubstrates**
Alexander Tkach, Andreas Kehlberger, Felix Büttner, Gerhard Jakob, Stefan Eisebitt, and Mathias Kläui,
Ferroelectrics **499**, 135 (2016), [doi: 10.1080/00150193.2016.1167519](https://doi.org/10.1080/00150193.2016.1167519)
- 190) **Efficient metallic spintronic emitters of ultrabroadband terahertz radiation**
T. Seifert, S. Jaiswal, U. Martens, J. Hannegan, L. Braun, P. Maldonado, F. Freimuth, A. Kronenberg, J. Henrizi, I. Radu, E. Beaurepaire, Y. Mokrousov, P.M. Oppeneer, M. Jourdan, G. Jakob, D. Turchinovich, L.M. Hayden, M. Wolf, M. Münzenberg, M. Kläui, T. Kampfrath,
Nature Photonics **10**, 483 (2016), [doi: 10.1038/nphoton.2016.91](https://doi.org/10.1038/nphoton.2016.91)
- 189) **Influence of the MgO barrier thickness on the lifetime characteristics of magnetic tunneling junctions for sensors**
A. Conca, F. Casper, J. Paul, R. Lehndorff, G. Jakob, M. Kläui, B. Hillebrands, and B. Leven,
J. Phys. D: Appl. Phys. **49**, 225001 (2016); [doi: 10.1088/0022-3727/49/22/225001](https://doi.org/10.1088/0022-3727/49/22/225001)
- 188) **Half-Heusler superlattices as model systems for nanostructured thermoelectrics**
Paulina Komar, Tino Jäger, Christoph Euler, Emigdio Chavez Angel, Ute Kolb, Mathis M. Müller, Benjamin Balke, Myriam Haydee Aguirre, Sascha Populoh, Anke Weidenkaff, and Gerhard Jakob,
Phys. Stat. Sol. A **213**, 732 (2016); [doi: 10.1002/pssa.201532445](https://doi.org/10.1002/pssa.201532445)
- 187) **The effect of interface roughness on exchange bias in La_{0.7}Sr_{0.3}MnO₃ - BiFeO₃ heterostructures**
Mehran Vafae, Simone Finizio, Hakan Deniz, Dietrich Hesse, Hartmut Zabel, Gerhard Jakob, and Mathias Kläui
Appl. Phys. Lett. **108**, 072401 (2016); [doi: 10.1063/1.4941795](https://doi.org/10.1063/1.4941795)
- 186) **Origin of the spin Seebeck effect in compensated ferrimagnets**
Stephan Geprägs, Andreas Kehlberger, Francesco Della Coletta, Zhiyong Qiu, Er-Jia Guo, Tomek Schulz, Christian Mix, Sibylle Meyer, Akashdeep Kamra, Matthias Althammer, Hans Huebl, Gerhard Jakob, Yuichi Ohnuma, Hiroto Adachi, Joseph Barker, Sadamichi Maekawa, Gerrit E.W. Bauer, Eiji Saitoh, Rudolf Gross, Sebastian T.B. Goennenwein, and Mathias Kläui,
Nat. Comms. **7**, 10452 (2016); [doi: 10.1038/ncomms10452](https://doi.org/10.1038/ncomms10452)
- 185) **Thermal generation of spin current in epitaxial CoFe₂O₄ films**
E. J. Guo, A. Kehlberger, J. Cramer, G. Jakob, and M. Kläui,
Appl. Phys. Lett. **108**, 022403 (2016); [doi: 10.1063/1.4939625](https://doi.org/10.1063/1.4939625)

- 184) **Qualitative comparative analysis of MgB₂ powder-in-tube wires: superconductivity and X-ray cone-beam microtomography**
P. Badica, I. Tiseanu, G. Aldica, T. Craciunescu, V. Sandu, G. Jakob, M. Rindfleisch
J. Optoelectronics and Advanced Materials **17**, 1636-1649, (2015);
- 183) **Reduced thermal conductivity of TiNiSn/HfNiSn superlattices**
Paulina Hołuj, Christoph Euler, Benjamin Balke, Ute Kolb, Gregor Fiedler, Mathis M. Müller, Tino Jäger, Emigdio Chávez Angel, Peter Kratzer, and Gerhard Jakob,
Phys. Rev. B **92**, 125436 (2015); [doi: 10.1103/PhysRevB.92.125436](https://doi.org/10.1103/PhysRevB.92.125436)
- 182) **Thermal conductance of thin film YIG determined using Bayesian statistics**
Christoph Euler, Paulina Hołuj, Thomas Langner, Andreas Kehlberger, V. I. Vasyuchka, M. Kläui and Gerhard Jakob,
Phys. Rev. B **92**, 094406 (2015); [doi: 10.1103/PhysRevB.92.094406](https://doi.org/10.1103/PhysRevB.92.094406)
- 181) **Length scale of the spin Seebeck effect**
Andreas Kehlberger, Ulrike Ritzmann, Denise Hinzke, Er-Jia Guo, Joel Cramer, Gerhard Jakob, Mehmet C. Onbasli, Dong Hun Kim, Caroline A. Ross, Matthias B. Jungfleisch, Burkard Hillebrands, Ulrich Nowak, and Mathias Kläui,
Phys. Rev. Lett. **115**, 096602 (2015); [doi: 10.1103/PhysRevLett.115.096602](https://doi.org/10.1103/PhysRevLett.115.096602)
- 180) **Enhanced Magneto-optic Kerr Effect and Magnetic Properties of CeY₂Fe₅O₁₂ Epitaxial Thin Films**
Andreas Kehlberger, Kornel Richter, Mehmet C. Onbasli, Gerhard Jakob, Dong Hun Kim, Taichi Goto, Caroline A. Ross, Gerhard Götz, Günter Reiss, Timo Kuschel, and Mathias Kläui,
Phys. Rev. Appl. **4**, 014008 (2015); [doi: 10.1103/PhysRevApplied.4.014008](https://doi.org/10.1103/PhysRevApplied.4.014008)
- 179) **Thermoelectric sintered glass-ceramics with a Bi₂Sr₂Co₂O_x phase**
Julian Lingner, Ryoji Funahashi, Emmanuel Combe, Martin Letz, and Gerhard Jakob,
Appl. Phys. A **120**, 59 (2015); [doi: 10.1007/s00339-015-9169-1](https://doi.org/10.1007/s00339-015-9169-1)
- 178) **Investigations on Ni-Co-Mn-Sn thin films: Effect of substrate temperature and Ar gas pressure on the martensitic transformations and exchange bias properties**
Ramudu Machavarapu and Gerhard Jakob,
AIP Advances **5**, 037108 (2015); [doi: 10.1063/1.4914404](https://doi.org/10.1063/1.4914404)
- 177) **Electric field modification of magnetotransport in Ni thin films on (011) PMN-PT piezosubstrates**
Alexander Tkach, Andreas Kehlberger, Felix Büttner, Gerhard Jakob, Stefan Eisebitt, and Mathias Kläui,
Appl. Phys. Lett. **106**, 062404 (2015); [doi: 10.1063/1.4907775](https://doi.org/10.1063/1.4907775)
- 176) **Ellipsoid-Shaped Superparamagnetic Nanoclusters through Emulsion Electrospinning**
M. Bannwarth, A. Camerlo, S. Ulrich, G. Jakob, G. Fortunato, R. M. Rossi and L. Boesel,
Chem, Commun. **51**, 3758 (2015); [doi: 10.1039/C4CC10076J](https://doi.org/10.1039/C4CC10076J)
- 175) **Structural characterization and Anomalous Hall effect of Rh₂MnGe thin films**
M. Emmel and G. Jakob,
J. Mag. Mag. Mater. **381**, 360, (2015); [doi: 10.1016/j.jmmm.2015.01.012](https://doi.org/10.1016/j.jmmm.2015.01.012)
- 174) **Magnetic field dependent thermal conductance in La_{0.67}Ca_{0.33}MnO₃**
C. Euler, P. Hołuj, A. Talkenberger, and G. Jakob,
J. Mag. Mag. Mater. **381**, 188, (2015); [doi: 10.1016/j.jmmm.2014.12.083](https://doi.org/10.1016/j.jmmm.2014.12.083)
- 2014** [top](#)
- 173) **Thermoelectric properties of p-type Bi₂Sr₂Co₂O₉ glass-ceramics**
Matthias Jost, Julian Lingner, Martin Letz, Gerhard Jakob
Semicond. Sci. Technol. **29**, 124011 (2014), [doi: 10.1088/0268-1242/29/12/124011](https://doi.org/10.1088/0268-1242/29/12/124011)

- 172) **Thermal conductivity of half-Heusler superlattices**
Tino Jaeger, Christian Mix, Christoph Euler, Paulina Holuj, Myriam Haydee Aguirre, Sascha Populoh, Anke Weidenkaff and Gerhard Jakob,
Semicond. Sci. Technol. **29**, 124003 (2014), [doi:10.1088/0268-1242/29/12/124003](https://doi.org/10.1088/0268-1242/29/12/124003)
- 171) **Detailed photoluminescence study of vapor deposited Bi₂S₃ films of different surface morphology**
Hendrik Sträter, Sebastian ten Haaf, Rudolf Brüggemann, Gerhard Jakob, Niklas Nilus, and Gottfried H. Bauer,
physica status solidi (b) **251**, 2247 (2014), [doi: 10.1002/pssb.201470168](https://doi.org/10.1002/pssb.201470168)
- 170) **Pulsed laser deposition of epitaxial yttrium iron garnet films with low Gilbert damping and bulk-like magnetization**
M. C. Onbasli, A. Kehlberger, D. H. Kim, G. Jakob, M. Kläui, A. V. Chumak, B. Hillebrands, and C. A. Ross,
APL Materials **2**, 106102 (2014), [doi: 10.1063/1.4896936](https://doi.org/10.1063/1.4896936)
- 169) **Structural and Magnetic Dynamics in the Magnetic Shape Memory Alloy Ni₂MnGa**
S. O. Mariager, C. Dornes, J. Johnson, A. Ferrer, S. Grübel, T. Huber, A. Caviezel, S. L. Johnson, T. Eichhorn, G. Jakob, H. J. Elmers, P. Beaud, C. Quitmann, and G. Ingold,
Phys. Rev. B. **90**, 161103(R) (2014), [doi: 10.1103/PhysRevB.90.161103](https://doi.org/10.1103/PhysRevB.90.161103)
- 168) **Tailor-Made Nanocontainers for Combined Magnetic-Field-Induced Release and MRI**
Markus B. Bannwarth, Sandro Ebert, Maximilian Lauck, Ulrich Ziener, Stefanie Tomcin, Gerhard Jakob, Kerstin Münnemann, Volker Mailänder, Anna Musyanovych, and Katharina Landfester,
Macromol. Biosci. **14**, 1205-1214, (2014), [doi: 10.1002/mabi.201400122](https://doi.org/10.1002/mabi.201400122)
- 167) **Electronic properties of Co₂FeSi investigated by X-ray magnetic linear dichroism**
M. Emmel, I. Krug, D. Gottlob, A. Alfonsov, M. Belesi, B. Büchner, S. Wurmehl, G. Jakob, and H. J. Elmers,
J. Mag. Mag. Mater. **368**, 364, (2014); [doi: 10.1016/j.jmmm.2014.06.001](https://doi.org/10.1016/j.jmmm.2014.06.001)
- 166) **Conductance control at the LaAlO₃/SrTiO₃-interface by a multiferroic BiFeO₃ ad-layer**
Christian Mix, Simone Finizio, Mathias Kläui, and Gerhard Jakob,
Appl. Phys. Lett. **104**, 262903 (2014); [doi:10.1063/1.4886405](https://doi.org/10.1063/1.4886405)
- 165) **Direct observation of temperature dependent magnetic domain structure of the multiferroic La_{0.66}Sr_{0.34}MnO₃/BiFeO₃ bilayer system by x-ray linear dichroism- and x-ray magnetic circular dichroism-photoemission electron microscopy, microscopy,**
C. Mix, S. Finizio, M. Buzzi, F. Kronast, F. Nolting, G. Jakob and M. Kläui,
J. Appl. Phys. **115**, 193901 (2014); [doi:10.1063/1.4876300](https://doi.org/10.1063/1.4876300)
- 164) **Investigation of the magnetic properties of insulating thin films using the longitudinal spin Seebeck effect**
A. Kehlberger, G. Jakob, M. C. Onbasli, D. H. Kim, C. A. Ross, and M. Kläui,
J. Appl. Phys. **115**, 17C731 (2014); [doi:10.1063/1.4864252](https://doi.org/10.1063/1.4864252)

2013 [top](#)

- 163) **Exchange coupling in the correlated electronic states of amorphous GdFe films**
H. J. Elmers, A. Chernenkaya, K. Medjanik, M. Emmel, G. Jakob, G. Schönhense, D. Gottlob, I. Krug, F. M. F. de Groot, and A. Gloskovskii,
Phys. Rev. B **88**, 174407 (2013), [doi:10.1103/PhysRevB.88.174407](https://doi.org/10.1103/PhysRevB.88.174407)
- 162) **Exchange bias effect in the martensitic state of Ni-Co-Mn-Sn film**
Ramudu Machavarapu and Gerhard Jakob
Appl. Phys. Lett. **102**, 232406 (2013), [doi:10.1063/1.4811164](https://doi.org/10.1063/1.4811164)

- 161) **Extraordinary Hall effect in Pt- or Ni-based multilayer stacks with strong perpendicular magnetic anisotropy**
Heinen Jan, Schulz Tomek, Jakob Gerhard, Kläui Mathias, Boulle Olivier, Malinowski Gregory, Swagten Henk, Koopmans Bert, Ulysse Christian, Faini Giancarlo, Ocker Berthold, Wrona Jerzy, Ahn Sung-Min, Nguyen Ngoc-Minh, Ravelosona Dafiné,
Journal of the Korean Physical Society **62**, 1399 (2013), [doi:10.3938/jkps.62.1399](https://doi.org/10.3938/jkps.62.1399)
- 160) **Magnetic states in low-pinning high-anisotropy material nanostructures suitable for dynamic imaging**
F. Büttner, C. Moutafis, A. Bisig, P. Wohlhüter, C. M. Günther, J. Mohanty, J. Geilhufe, M. Schneider, C. v. Korff Schmising, S. Schaffert, B. Pfau, M. Hantschmann, M. Riemeier, M. Emmel, S. Finizio, G. Jakob, M. Weigand, J. Rhensius, J. H. Franken, R. Lavrijsen, H. J. M. Swagten, H. Stoll, S. Eisebitt, and M. Kläui
Phys. Rev. B **87**, 134422 (2013), [doi:10.1103/PhysRevB.87.134422](https://doi.org/10.1103/PhysRevB.87.134422)
- 159) **Transport properties of Co₂(Mn,Fe)Si thin films**
H. Schneider, E. Vilanova Vidal, and G. Jakob,
Spintronics (Springer) eds. C. Felser and G.H. Fecher,
chap 15 p331, (2013), [doi:10.1007/978-90-481-3832-6](https://doi.org/10.1007/978-90-481-3832-6)
- 158) **Inhibition of the detrimental double vortex-kink formation in thick YBa₂Cu₃O₇ films with BaZrO₃ nanorods**
D. Miu, I. Ivan, A. Crisan, P Mele, G Jakob, and L Miu,
Supercond. Sci. Technol. **26**, 045008 (2013), [doi:10.1088/0953-2048/26/4/045008](https://doi.org/10.1088/0953-2048/26/4/045008)
- 157) **Magnetic domain structure of La_{0.7}Sr_{0.3}MnO₃ thin-films probed at variable temperature with Scanning Electron Microscopy with Polarization Analysis**
Robert M. Reeve, Christian Mix, Markus König, Michael Foerster, Gerhard Jakob, and Mathias Kläui,
Applied Physics Letters **102**, 122407 (2013), [doi:10.1063/1.4798538](https://doi.org/10.1063/1.4798538)
- 156) **Thermal conductivity of thermoelectric Al-substituted ZnO thin films**
N. Vogel-Schäuble, T. Jaeger, Y. E. Romanyuk, S. Populoh, C. Mix, G. Jakob, and A. Weidenkaff,
Phys. Status Solidi RRL **7**, 364 (2013), [doi:10.1002/pssr.201307025](https://doi.org/10.1002/pssr.201307025)
erratum in Phys. Status Solidi RRL **8**, 206 (2014), [doi:10.1002/pssr.201409055](https://doi.org/10.1002/pssr.201409055)
- 155) **Multiferroic and structural properties of BiFeO₃ close to the strain induced phase transition on different substrates**
C. Mix and G. Jakob,
J. Appl. Phys. **113**, 17D907 (2013), [doi:10.1063/1.4795216](https://doi.org/10.1063/1.4795216)
- 154) **Luminescent and Magnetoresponse Multifunctional Chalcogenide/Polymer Hybrid Nanoparticles**
Viktor Fischer, Markus B. Bannwarth, Gerhard Jakob, Katharina Landfester, Rafael Muñoz-Espí,
J. Phys. Chem. C. **117**, 5999 (2013), [doi:10.1021/jp400277k](https://doi.org/10.1021/jp400277k)
- 153) **PVD and analysis of Bi₂S₃ as alternative absorber material in thin film photovoltaics**
S. ten Haaf, H. Sträter, R. Brüggemann, C. Felser, G. Jakob,
Thin Solid Films **535**, 394 (2013), doi.org/10.1016/j.tsf.2012.11.089
- 152) **Fabrication and characterization of semiconducting half-Heusler YPtSb thin films**
Rong Shan, E. Vilanova Vidal, Juan Qin, F. Casper, G. H. Fecher, G. Jakob, and C. Felser,
Physica Status Solidi, RRL **7**, 145 (2013), [doi:10.1002/pssr.201206413](https://doi.org/10.1002/pssr.201206413)
- 151) **SrTiO₃ glass–ceramics as oxide thermoelectrics**
J. Lingner, M. Letz, and G. Jakob,
J. Mater. Sci. **48**, 2812 (2013), [doi:10.1007/s10853-012-6847-7](https://doi.org/10.1007/s10853-012-6847-7)

- 150) **Metal oxide/Polymer Hybrid Nanoparticles with Versatile Functionality Prepared by Controlled Surface Crystallization**
V. Fischer, I. Lieberwirth, G. Jakob, K. Landfester, R. Muñoz-Espí,
Adv. Func. Mater. **23**, 451 (2013), [doi:10.1002/adfm.201201839](https://doi.org/10.1002/adfm.201201839)
- 2012** [top](#)
- 149) **HAXPES investigation of Bi₂S₃ thin films**
S. ten Haaf, B. Balke, C. Felser, G. Jakob,
J. Appl. Phys. **112**, 053705 (2012), [doi:10.1063/1.4748299](https://doi.org/10.1063/1.4748299)
- 148) **Structure and Microscopic Magnetism of Epitaxial Ni–Mn–Ga films**
T. Eichhorn, R. Hausmanns, P. Klaer, M. Kallmayer, H.-J. Elmers, and G. Jakob,
Adv. Eng. Mater. **14**, 687 (2012), [doi:10.1002/adem.201200042](https://doi.org/10.1002/adem.201200042)
- 147) **Bi-2212 and Y123 highly curved single-crystal-like objects: whiskers, bows and ring-like structures**
P. Badica, A. Agostino, M. M. R. Khan, Stefano Cagliero, C. Plapcianu, L. Pastero, M. Truccato, Y. Hayasaka, and G. Jakob,
Supercond. Sci. Technol. **25**, 105003 (2012), [doi:10.1088/0953-2048/25/10/105003](https://doi.org/10.1088/0953-2048/25/10/105003)
- 2011** [top](#)
- 146) **Electronic structure and symmetry of valence states of epitaxial NiTiSn and NiZr_{0.5}Hf_{0.5}Sn thin films by hard x-ray photoemission**
X. Kozina, T. Jaeger, G. Stryganyuk, S. Ouardi, G.H. Fecher, G. Jakob, C. Felser, and E. Ikenaga,
Appl. Phys. Lett. **99**, 221908 (2011), [doi:10.1063/1.3665621](https://doi.org/10.1063/1.3665621)
- 145) **Epitaxial growth and thermoelectric properties of TiNiSn and Zr_{0.5}Hf_{0.5}NiSn thin films**
T. Jaeger, Ch. Mix, M. Schwall, X. Kozina, J. Barth, B. Balke, M. Finsterbusch, Y.U. Idzerda, C. Felser, and G. Jakob,
Thin Solid Films **520**, 1010 (2011), [doi:10.1016/j.tsf.2011.08.008](https://doi.org/10.1016/j.tsf.2011.08.008)
- 144) **Exploring Co₂MnAl Heusler compound for Anomalous Hall effect sensors**
E. Vilanova Vidal, G. Stryganyuk, H. Schneider, C. Felser, and G. Jakob,
Appl. Phys. Lett. **99**, 132509 (2011), [doi:10.1063/1.3644157](https://doi.org/10.1063/1.3644157)
- 143) **Element-specific magnetic properties of Co₂(Mn_{1-x}Fe_x)Si films probed by X-ray circular/linear dichroism**
M. Kallmayer, P. Klaer, H. Schneider, G. Jakob, H. J. Elmers, D. Legut, and P. M. Oppeneer,
Phys. Rev. B **84**, 054448 (2011), [doi:10.1103/PhysRevB.84.054448](https://doi.org/10.1103/PhysRevB.84.054448)
- 142) **On the determination of vortex creep parameters in superconductors using standard magnetization relaxation data**
I. Ivan, D. Miu, S. Popa, G. Jakob, and L. Miu,
Supercond. Sci. Technol. **24**, 095005 (2011), [doi:10.1088/0953-2048/24/9/095005](https://doi.org/10.1088/0953-2048/24/9/095005)
- 141) **Microstructure of free-standing single crystalline Ni₂MnGa thin films**
T. Eichhorn, R. Hausmanns, and G. Jakob,
Acta Materialia **59**, 5067 (2011), [doi:10.1016/j.actamat.2011.04.032](https://doi.org/10.1016/j.actamat.2011.04.032)
- 140) **Microscopic origin of magnetic anisotropy in martensitic Ni₂MnGa**
P. Klaer, T. Eichhorn, G. Jakob, and H. J. Elmers,
Phys. Rev. B **83**, 214419 (2011), [doi:10.1103/PhysRevB.83.214419](https://doi.org/10.1103/PhysRevB.83.214419)
- 139) **Influence of disorder on Anomalous Hall Effect for Heusler compounds**
E. Vilanova-Vidal, H. Schneider, and G. Jakob,
Phys. Rev. B **83**, 174410 (2011), [doi:10.1103/PhysRevB.83.174410](https://doi.org/10.1103/PhysRevB.83.174410)
- 138) **Vortex-creep crossover in YBCO/PrBCO superlattices during standard magnetization relaxation measurements**
A. El Tahan, G. Jakob, D. Miu, I. Ivan, P. Badica, and L. Miu,
Supercond. Sci. Technol. **24**, 045014 (2011), [doi:10.1088/0953-2048/24/4/045014](https://doi.org/10.1088/0953-2048/24/4/045014)

2010 [top](#)

- 137) **Origin of the fast magnetization relaxation at low temperatures in HTS with strong pinning**
L. Miu, I. Ivan, P. Badica, G. Jakob, D. Miu, P. Mele, K. Matsumoto, M. Mukaida, Y. Yoshida, T. Horide, A. Ichinose, and S. Hori
Physica C **470**, 1126 (2010), [doi:10.1016/j.physc.2010.05.054](https://doi.org/10.1016/j.physc.2010.05.054)
- 136) **Non-centro-symmetric superconductors $\text{Li}_2\text{Pd}_3\text{B}$ and $\text{Li}_2(\text{Pd}_{0.8}\text{Pt}_{0.2})_3\text{B}$: amplitude and phase fluctuations analysis of the experimental magnetization data**
P. Badica, S. Salem-Sugui, Jr., A.D. Alvarenga, and G. Jakob,
Supercond. Sci. Techn. **23**, 105018 (2010), [doi:10.1088/0953-2048/23/10/105018](https://doi.org/10.1088/0953-2048/23/10/105018)
- 135) **Magnetization relaxation in YBCO films with improved supercurrent transport properties**
L. Miu, I. Ivan, P. Badica, G. Jakob, D. Miu, P. Mele, K. Matsumoto, M. Mukaida, Y. Yoshida, T. Horide, A. Ichinose, and S. Horii
J. Phys. Conf. Ser. **243**, 012026 (2010) [doi:10.1088/1742-6596/234/1/012026](https://doi.org/10.1088/1742-6596/234/1/012026)
- 134) **Improvement of the critical current density of spark plasma sintered MgB_2 by C_{60} addition**
L. Miu, G. Aldica, P. Badica, I. Ivan, D. Miu, and G. Jakob,
Supercond. Sci. Technol. **23**, 095002 (2010) [doi:10.1088/0953-2048/23/9/095002](https://doi.org/10.1088/0953-2048/23/9/095002)
- 133) **Hyperfine magnetic field on iron atoms and Co-Fe disordering in Co_2FeSi**
V. Ksenofontov, M. Wójcik, S. Wurmehl, H. Schneider, B. Balke, G. Jakob and C. Felser,
J. Appl. Phys. **107**, 09B106 (2010) [doi:10.1063/1.3352572](https://doi.org/10.1063/1.3352572)
- 132) **Comment on “Enhanced spin injection and voltage bias in $(\text{Zn},\text{Co})\text{O}/\text{MgO}/(\text{Zn},\text{Co})\text{O}$ magnetic tunnel junctions”**
G. Jakob
Appl. Phys. Lett. **96**, 116101 (2010), [doi:10.1063/1.3360207](https://doi.org/10.1063/1.3360207)
- 131) **A Facile Semi-open Method for Synthesis of Non Centrosymmetric Superconducting $\text{Li}_2(\text{Pd},\text{Pt})_3\text{B}$ Bulks and Thin Films,**
P. Badica and G. Jakob,
Physica C **470**, S655 (2010), [doi:10.1016/j.physc.2009.11.067](https://doi.org/10.1016/j.physc.2009.11.067)
- 130) **Hall effect and electronic structure of $\text{Co}_2\text{Fe}_x\text{Mn}_{1-x}\text{Si}$ films**
H. Schneider, E. Vilanova Vidal, G. Jakob, S. Chadov, G. H. Fecher, and C. Felser,
J. Magn. Magn. Mater. **322**, 579 (2010), [doi:10.1016/j.jmmm.2009.09.048](https://doi.org/10.1016/j.jmmm.2009.09.048)
- 129) **Vortex-creep activation energy in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
A. El Tahan, G. Jakob, H. Adrian, and L. Miu
Physica C **470**, 1 (2010), [doi:10.1016/j.physc.2009.09.001](https://doi.org/10.1016/j.physc.2009.09.001)
- 128) **Recent Progress in FSMA Microactuator Developments**
M. Kohl, Srinivasa Reddy Y., F. Khelifaoui, B. Krevet, A. Backen, S. Fähler, T. Eichhorn, G. Jakob, and A. Mecklenburg,
Mater. Sci. For. **635**, 145 (2010), [doi:10.4028/www.scientific.net/MSF.635.145](https://doi.org/10.4028/www.scientific.net/MSF.635.145)
- 127) **Structural and magnetic properties of epitaxial Ni_2MnGa thin films**
T. Eichhorn and G. Jakob,
Mater. Sci. For. **635**, 155 (2010), [doi:10.4028/www.scientific.net/MSF.635.155](https://doi.org/10.4028/www.scientific.net/MSF.635.155)

2009 [top](#)

- 126) **Full tunability of strain along the fcc-bcc Bain path in epitaxial films and consequences for magnetic properties**
J. Buschbeck, I. Opahle, M. Richter, U.K. Röbber, G. Jakob, L. Schultz, S. Fähler
Phys. Rev. Lett. **103**, 216101 (2009), [doi:10.1103/PhysRevLett.103.216101](https://doi.org/10.1103/PhysRevLett.103.216101)
- 125) **Exchange stiffness in Co_2 -based Heusler compounds**
O. Gaier, J. Hamrle, S. Trudel, B. Hillebrands, H. Schneider, and G. Jakob
J. Phys. D: Appl. Phys. **42**, 232001 (2009), [doi:10.1088/0022-3727/42/23/232001](https://doi.org/10.1088/0022-3727/42/23/232001)

- 124) **Spin-resolved unoccupied density of states in epitaxial Heusler alloy films**
M. Kallmayer, P. Klaer, H. Schneider, E. Arbelo Jorge, C. Herbort, G. Jakob, M. Jourdan, and H.J. Elmers
Phys. Rev. B **80**, 020406R (2009), [doi:10.1103/PhysRevB.80.020406](https://doi.org/10.1103/PhysRevB.80.020406)
- 123) **Off-stoichiometry in Co₂FeSi thin films sputtered from stoichiometric targets revealed by nuclear magnetic resonance**
S. Wurmehl, J.T. Kohlhepp, H.J.M. Swagten, B. Koopmans, C.G.F. Blum, V. Ksenofontov, H. Schneider, G. Jakob, D. Ebke and G. Reiss
J. Phys. D **42**, 0840178 (2009), [doi:10.1088/0022-3727/42/8/084017](https://doi.org/10.1088/0022-3727/42/8/084017)
- 122) **Compositional dependence of element-specific magnetic moments in Ni₂MnGa films**
M. Kallmayer, P. Pörsch, T. Eichhorn, H. Schneider, C.A. Jenkins, G. Jakob, H.J. Elmers
J. Phys. D **42**,084008 (2009), [doi:10.1088/0022-3727/42/8/084008](https://doi.org/10.1088/0022-3727/42/8/084008)
- 121) **Hall Effect in Laser Ablated Co₂(Mn,Fe)Si thin films**
H. Schneider, E. Vilanova, B. Balke, C. Felser, and G. Jakob
J. Phys. D **42**,084012 (2009), [doi:10.1088/0022-3727/42/8/084012](https://doi.org/10.1088/0022-3727/42/8/084012)
2008 [top](#)
- 120) **Growth and magnetic properties of epitaxial Ni₂MnGa based films**
T. Eichhorn, C. A. Jenkins, M. Kallmayer, H. J. Elmers, and G. Jakob,
Actuator08, Conference Proceedings, **723** (2008)
- 119) **Origin of the plateau in the temperature dependence of the normalized magnetization relaxation rate in disordered high temperature superconductors**
L. Miu, D. Miu, T. Petrisor, A. El Tahan, G. Jakob, and H. Adrian
Phys. Rev. B **78**, 212508 (2008), [doi:10.1103/PhysRevB.78.212508](https://doi.org/10.1103/PhysRevB.78.212508)
- 118) **Growth and magnetic control of twinning structure in thin films of Heusler shape memory compound Ni₂MnGa**
C. A. Jenkins, R. Ramesh, M. Huth, T. Eichhorn, P. Pörsch, H. J. Elmers, and G. Jakob,
Appl. Phys. Lett. **93**, 234101 (2008), [doi:10.1063/1.3044473](https://doi.org/10.1063/1.3044473)
- 117) **Pulsed Laser deposition of ferromagnetic Zn_{0.95}Co_{0.05}O thin films**
M. Gacic, H. Adrian, and G. Jakob,
Appl. Phys. Lett. **93**, 152509 (2008), [doi:10.1063/1.3005413](https://doi.org/10.1063/1.3005413)
- 116) **Analysis of magnetization relaxation in MgB₂ bulk samples obtained by electric-field assisted sintering**
L. Miu, I. Ivan, G. Aldica, P. Badica, J.R. Groza, D. Miu, G. Jakob, and H. Adrian,
Physica C **468**, 2279 (2008), [doi:10.1016/j.physc.2008.08.001](https://doi.org/10.1016/j.physc.2008.08.001)
- 115) **Anomalous behavior of the second magnetization peak in La_{1.81}Sr_{0.19}CuO₄ single crystals: Possible influence of two-band superconductivity**
L. Miu, Y. Tanabe, T. Adachi, Y. Koike, D. Miu, G. Jakob, and H. Adrian
Phys. Rev. B. **78**, 024520 (2008), [doi:10.1103/PhysRevB.78.024520](https://doi.org/10.1103/PhysRevB.78.024520)
- 114) **Suppression of martensitic phase transition at the Ni₂MnGa film surface**
P. Poersch, M. Kallmayer, T. Eichhorn, G. Jakob, H.J. Elmers, H. Schneider, C.A. Jenkins, C. Felser, R. Ramesh, and M. Huth
Appl. Phys. Lett. **93**, 022501 (2008), [doi:10.1063/1.2957647](https://doi.org/10.1063/1.2957647)
- 113) **Martensite transition and microscopic magnetism of epitaxial Ni₂MnGa Films**
Gerhard Jakob, Tobias Eichhorn, Michael Kallmayer, and Hans-Joachim Elmers
Mater. Res. Soc. Symp. Proc. **1050E**, 1050-BB08-02 (2008)
- 112) **XMCD studies on Co and Li doped ZnO magnetic semiconductors**
Thomas Tietze, Milan Gacic, Gisela Schütz, Gerhard Jakob, Sebastian Brück and Eberhard Goering,
New Journal of Physics **10**, 055009 (2008), [doi:10.1088/1367-2630/10/5/055009](https://doi.org/10.1088/1367-2630/10/5/055009)

- 111) **Epitaxial growth and properties of (001)-oriented TbBaCo₂O_{6-δ} films**
N.V. Kasper, P. Wochner, A. Vigliante, H. Dosch, G. Jakob, H.D. Carsanjen, and R.K. Kremer,
Journal of Applied Physics **103**, 013907 (2008), [doi:10.1063/1.2827504](https://doi.org/10.1063/1.2827504)
2007 [top](#)
- 110) **Solid-State Reaction at the interface between Heusler alloys and Al cap accelerated by elevated temperature and rough surface**
M. Kallmayer, K. Hild, T. Eichhorn, H. Schneider, G. Jakob, M. Jourdan, A. Conca, H. J. Elmers, A. Gloskovskii, S. Schuppler, and P. Nagel,
Appl. Phys. Lett. **91**, 192501 (2007), [doi:10.1063/1.2805812](https://doi.org/10.1063/1.2805812)
- 109) **Correlation of electronic structure and martensitic transition in epitaxial Ni₂MnGa films**
G. Jakob, T. Eichhorn, M. Kallmayer, and H.J. Elmers,
Phys. Rev. B **76**, 174407 (2007), [doi:10.1103/PhysRevB.76.174407](https://doi.org/10.1103/PhysRevB.76.174407)
- 108) **Vortex-system ordering during magnetisation measurements in YBa₂Cu₃O_{7-δ} films at low temperatures**
L. Miu, D. Miu, G. Jakob, and H. Adrian,
Physica C **460-462**, 1206 (2007), [doi:10.1016/j.physc.2007.04.050](https://doi.org/10.1016/j.physc.2007.04.050)
- 107) **Relaxation of remnant magnetisation in YBa₂Cu₃O_{7-δ} films**
D. Miu, L. Miu, G. Jakob, and H. Adrian,
Physica C **460-462**, 1243 (2007), [doi:10.1016/j.physc.2007.04.069](https://doi.org/10.1016/j.physc.2007.04.069)
- 106) **Location of the mean-field critical temperature of underdoped YBa₂Cu₃O_y films**
L. Miu, D. Miu, G. Jakob, and H. Adrian,
Phys. Rev. B **75**, 214504 (2007), [doi:10.1103/PhysRevB.75.214504](https://doi.org/10.1103/PhysRevB.75.214504)
- 105) **Magnetism of Co doped ZnO thin films**
M. Gacic, G. Jakob, Ch. Herbort, H. Adrian, T. Tietze, S. Brück, and E. Goering,
Phys. Rev. B **75**, 205206 (2007), [doi:10.1103/PhysRevB.75.205206](https://doi.org/10.1103/PhysRevB.75.205206)
- 104) **Huge quadratic magneto-optical Kerr effect in the Co₂FeSi Heusler compound**
J. Hamrle, S. Blomeier, O. Gaier, B. Hillebrands, K. Postava, H. Schneider, G. Jakob, and C. Felser,
J. Phys. D: Appl. Phys. **40**, 1563 (2007), [doi:10.1088/0022-3727/40/6/S09](https://doi.org/10.1088/0022-3727/40/6/S09)
- 103) **Ion beam induced modification of exchange interaction and spin-orbit coupling in the Co₂FeSi Heusler compound**
J. Hamrle, S. Blomeier, O. Gaier, B. Hillebrands, B. Reuscher, A. Brodyanski, M. Kopnarski, K. Postava, H. Schneider, G. Jakob, and C. Felser,
J. Phys. D: Appl. Phys. **40**, 1558 (2007), [doi:10.1088/0022-3727/40/6/S08](https://doi.org/10.1088/0022-3727/40/6/S08)
- 102) **Structural, magnetic, and transport properties of Co₂FeSi films**
H. Schneider, Ch. Herbort, G. Jakob, H. Adrian, S. Wurmehl, and C. Felser,
J. Phys. D: Appl. Phys. **40**, 1548 (2007), [doi:10.1088/0022-3727/40/6/S06](https://doi.org/10.1088/0022-3727/40/6/S06)
- 101) **Correlation of local disorder and electronic properties in the Heusler alloy Co₂Cr_{0.6}Fe_{0.4}Al**
M. Kallmayer, A. Conca, M. Jourdan, H. Schneider, G. Jakob, B. Balke, A. Gloskovskii, and H.J. Elmers,
J. Phys. D: Appl. Phys. **40**, 1539 (2007), [doi:10.1088/0022-3727/40/6/S04](https://doi.org/10.1088/0022-3727/40/6/S04)
- 100) **Epitaxial films of the magnetic shape memory material Ni₂MnGa**
G. Jakob and H. J. Elmers,
J. Mag. Mater. **310**, 2779 (2007), [doi:10.1016/j.jmmm.2006.10.1046](https://doi.org/10.1016/j.jmmm.2006.10.1046)
- 99) **Interface magnetization of ultrathin epitaxial Co₂FeSi(110)/Al₂O₃ films**
M. Kallmayer, H. Schneider, G. Jakob, H. J. Elmers, B. Balke, and S. Cramm,
J. Phys. D: Appl. Phys. **40**, 1552 (2007), [doi:10.1088/0022-3727/40/6/S07](https://doi.org/10.1088/0022-3727/40/6/S07)
2006 [top](#)

- 98) **Epitaxial film growth and magnetic properties of Co_2FeSi**
H. Schneider, G. Jakob, M. Kallmayer, H. J. Elmers, M. Cinchetti, B. Balke, S. Wurmehl, C. Felser, M. Aeschlimann, and H. Adrian,
Phys. Rev. B **74**, 174426 (2006), [doi:10.1103/PhysRevB.74.174426](https://doi.org/10.1103/PhysRevB.74.174426)
- 97) **Determination of two-dimensional zero-magnetic-field I-V exponent in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$**
L. Miu, D. Miu, G. Jakob, and H. Adrian,
Phys. Rev. B **73**, 224526 (2006), [doi:10.1103/PhysRevB.73.224526](https://doi.org/10.1103/PhysRevB.73.224526)
- 96) **Mixed state Hall angle and Hall conductivity in Hg,Re-containing HTSC thin films**
A. Salem, G. Jakob and H. Adrian
J. Phys. Conf. Ser. **43**, 259 (2006), [doi:10.1088/1742-6596/43/1/065](https://doi.org/10.1088/1742-6596/43/1/065)
- 95) **Reduction of surface magnetism of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ Heusler alloy films**
M. Kallmayer, H. Schneider, G. Jakob, H. J. Elmers, K. Kroth, H.C. Kandhpal, U. Stumm, and S. Cramm,
Appl. Phys. Lett. **88**, 072506 (2006), [doi:10.1063/1.2175486](https://doi.org/10.1063/1.2175486)
2005 [top](#)
- 94) **Ultrafast optical and magneto-optical dynamics in colossal-magnetoresistance (CMR) manganites**
V. Dorosinets, P. Richter, G. Jakob, and H.G. Roskos,
Acta Phys. Pol. A **107**, 211 (2005) [Acta Phys. Pol. A 107, 211 \(2005\)](https://doi.org/10.1063/1.1861111)
- 93) **Magnetic tunnelling junctions with the Heusler compound $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$**
A. Conca, S. Falk, G. Jakob, M. Jourdan, and H. Adrian,
J. Mag. Mag. Mat. **290-291**, 1127 (2005), [doi:10.1016/j.jmmm.2004.11.473](https://doi.org/10.1016/j.jmmm.2004.11.473)
- 92) **Thin epitaxial films of the Heusler compound $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$**
G. Jakob, F. Casper, V. Beaumont, S. Falk, N. Auth, H.J. Elmers, C. Felser, and H. Adrian,
J. Mag. Mag. Mat. **290-291**, 1104 (2005), [doi:10.1016/j.jmmm.2004.11.466](https://doi.org/10.1016/j.jmmm.2004.11.466)
- 91) **Pulsed laser deposition of $\text{Sr}_2\text{FeMoO}_6$ thin films**
D. Sánchez, N. Auth, G. Jakob, J.L. Martínez and M. García-Hernández,
J. Mag. Mag. Mat. **294**, e112 (2005), [doi:10.1016/j.jmmm.2005.03.066](https://doi.org/10.1016/j.jmmm.2005.03.066)
- 90) **Picosecond energy relaxation in $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$**
V. Dorosinets, P. Richter, E. Mohler, H.G. Roskos, and G. Jakob,
Physica B **359-361**, 1297 (2005), [doi:10.1016/j.physb.2005.01.362](https://doi.org/10.1016/j.physb.2005.01.362)
2004 [top](#)
- 89) **Field dependence of orbital magnetic moments in the Heusler compounds $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ and Co_2FeAl**
H.J. Elmers, S. Wurmehl, G. Fecher, G. Jakob, C. Felser, and G. Schönhense,
Appl. Phys. A **79**, 557 (2004), [doi:10.1007/s00339-003-2366-3](https://doi.org/10.1007/s00339-003-2366-3)
- 88) **Normal and mixed state Hall effect in $\text{Hg}_{0.9}\text{Re}_{0.1}\text{Ba}_2\text{CaCu}_2\text{O}_{6+\delta}$ fully textured HTS's thin films**
A. Salem, G. Jakob and H. Adrian,
Physica C **415**, 62 (2004), [doi:10.1016/j.physc.2004.08.002](https://doi.org/10.1016/j.physc.2004.08.002)
- 87) **Structural, magnetic and transport properties of high quality epitaxial $\text{Sr}_2\text{FeMoO}_6$ thin films prepared by pulsed laser deposition**
D. Sánchez, N. Auth, G. Jakob and M. García-Hernández,
J. Appl. Phys. **96**, 2736 (2004), [doi:10.1063/1.1774244](https://doi.org/10.1063/1.1774244)
- 86) **Superconductivity in high-quality $(\text{Hg}_{0.9}\text{Re}_{0.1})\text{Ba}_2\text{CaCu}_2\text{O}_{6+\delta}$ HTSC thin films**
A. Salem, G. Jakob, and H. Adrian,
Phys. Stat. Sol (C) **1**, 1961 (2004), [doi:10.1002/pssc.200304499](https://doi.org/10.1002/pssc.200304499)

- 85) **Preparation, scaling behavior of activation energy, and flux-flow anisotropy of $(\text{Hg}_{0.9}\text{Re}_{0.1})\text{Ba}_2\text{CaCu}_2\text{O}_{6+\delta}$ HTS thin films**
A. Salem, G. Jakob, and H. Adrian,
Physica C **402**, 354 (2004), [doi:10.1016/j.physc.2003.10.015](https://doi.org/10.1016/j.physc.2003.10.015)
- 84) **Crystal structure and magnetism of the double perovskites A_2FeReO_6 (A=Ca, Sr, Ba)**
N. Auth, G. Jakob, W. Westerburg, C. Ritter, I. Bonn, C. Felser, W. Tremel,
J. Mag. Mag. Mat. **272-276**, e607 (2004), [doi:10.1016/j.jmmm.2003.12.484](https://doi.org/10.1016/j.jmmm.2003.12.484)
- 83) **Enhanced orbital magnetic moments in the Heusler compounds Co_2CrAl ; $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$; Co_2FeAl**
H.J. Elmers, S. Wurmehl, G. Fecher, G. Jakob, C. Felser, and G. Schönhense,
J. Mag. Mag. Mat. **272-276**, 758 (2004), [doi:10.1016/j.jmmm.2003.12.1086](https://doi.org/10.1016/j.jmmm.2003.12.1086)
- 82) **Shift of the surface barrier part of the irreversibility line due to columnar defects in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ thin films**
Yu. Talanov, H. Adrian, M. Basset, G. Jakob, and G. Wirth,
Physica C **402**, 114 (2004), [doi:10.1016/j.physc.2003.09.068](https://doi.org/10.1016/j.physc.2003.09.068)
- 2003** [top](#)
- 81) **Investigation of a novel material for magnetoelectronics: $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$**
C. Felser, B. Heitkamp, F. Kronast, D. Schmitz, S. Cramm, H.A. Dürr, H.-J. Elmers, G.H. Fecher, S. Wurmehl, T. Block, D. Valdaitsev, S.A. Nepijko, A. Gloskovskii, G. Jakob, G. Schönhense, and W. Eberhardt,
J. Phys.: Condens. Matter **15**, 7019 (2003), [doi:10.1088/0953-8984/15/41/010](https://doi.org/10.1088/0953-8984/15/41/010)
- 80) **Large negative magnetoresistance effects in $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$**
T. Block, C. Felser, G. Jakob, J. Enslin, B. Mühlning, P. Gütlich, and R. J. Cava,
J. Solid State Chem. **176**, 646 (2003) [doi:10.1016/j.jssc.2003.07.002](https://doi.org/10.1016/j.jssc.2003.07.002)
- 79) **Spin polarisation of magnetoresistive materials by point contact spectroscopy**
N. Auth, G. Jakob, T. Block, and C. Felser,
Phys. Rev. B **68**, 024403 (2003), [doi:10.1103/PhysRevB.68.024403](https://doi.org/10.1103/PhysRevB.68.024403)
- 78) **Element specific magnetic moments from core-absorption magnetic circular dichroism of the doped Heusler alloy $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$**
H.J. Elmers, G. Fecher, D. Valdaitsev, S. Nepijko, A. Gloskowskij, G. Jakob, G. Schönhense, S. Wurmehl, T. Block, C. Felser, P.-C. Hsu, W.-L. Tsai, and S. Cramm,
Phys. Rev. B **67**, 104412 (2003), [doi:10.1103/PhysRevB.67.104412](https://doi.org/10.1103/PhysRevB.67.104412)
- 77) **Resistivity and irreversibility line of $\text{Hg}_{0.9}\text{Re}_{0.1}\text{Ba}_2\text{CaCu}_2\text{O}_{6+\delta}$ HTS thin films**
A. Salem, G. Jakob, M. Basset, and H. Adrian,
Physica C **388-389**, 747 (2003), [doi:10.1016/S0921-4534\(02\)02562-5](https://doi.org/10.1016/S0921-4534(02)02562-5)
- 2002** [top](#)
- 76) **Magnetic and structural properties of the double-perovskite $\text{Ca}_2\text{FeReO}_6$**
W. Westerburg, O. Lang, C. Felser, W Tremel, C. Ritter, and G. Jakob,
Sol. Stat. Commun. **122**, 201 (2002), [doi:10.1016/S0038-1098\(02\)00079-0](https://doi.org/10.1016/S0038-1098(02)00079-0)
<http://www.sciencedirect.com/science/journal/00381098>
- 2001** [top](#)
- 75) **Optical determination of the oxygen content of $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ thin films by IR reflectance and transmittance measurements**
P. Richter, M. Kreß, E. Mohler, H.G. Roskos, G. Jakob, and H. Adrian,
Physica C **366**, 63 (2001), [doi:10.1016/S0921-4534\(01\)00788-2](https://doi.org/10.1016/S0921-4534(01)00788-2)

- 74) **Nondiverging vortex pinning barriers at low current densities across the putative elastic vortex-glass–vortex-liquid transition in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ films**
L. Miu, M. Basset, G. Jakob, H. Rodriguez, and H. Adrian,
Phys. Rev. B **64**, 220502 (2001), [doi:10.1103/PhysRevB64.220502](https://doi.org/10.1103/PhysRevB64.220502)
- 73) **Broadband Infrared Conductivity in an $\text{YBa}_2\text{Cu}_3\text{O}_{6.7}$ film**
A. Pimenov, Ch. Hartinger, F. Mayr, A. Loidl, G. Jakob, and H. Adrian,
Ferroelectrics **249**, 165 (2001), [doi:10.1080/00150190108214978](https://doi.org/10.1080/00150190108214978)
- 72) **Patterned irradiation of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ thin films**
M. Basset, G. Jakob, G. Wirth, and H. Adrian,
Phys. Rev. B **64**, 024525 (2001), [doi:10.1103/PhysRevB64.024525](https://doi.org/10.1103/PhysRevB64.024525)
- 2000** [top](#)
- 71) **Preparation and characterization of $(\text{Hg}_{0.7}\text{Mo}_{0.3})\text{Sr}_2(\text{Ca}_{0.7}\text{Y}_{0.3})\text{Cu}_2\text{O}_x$ and $(\text{Hg}_{0.9}\text{Re}_{0.1})\text{Ba}_2\text{CaCu}_2\text{O}_y$ superconducting films by laser ablation**
Z. L. Xiao, G. Jakob, B. Hensel, H. Adrian, and E. Y. Andrei,
Physica C **341-348**, 2393 (2000), [doi:10.1016/S0921-4534\(00\)01278-8](https://doi.org/10.1016/S0921-4534(00)01278-8)
- 70) **Importance of the crossover-current density for a vortex-glass analysis**
P. Voss-de Haan, Gerhard Jakob, and Hermann Adrian,
Physica C **341-348**, 1387 (2000), [doi:10.1016/S0921-4534\(00\)00902-3](https://doi.org/10.1016/S0921-4534(00)00902-3)
- 69) **Hall-effect of epitaxial double perovskite $\text{Sr}_2\text{FeMoO}_6$ thin films**
W. Westerburg, F. Martin, and G. Jakob,
J. Appl. Phys. **87**, 5040 (2000), [doi:10.1063/1.373241](https://doi.org/10.1063/1.373241)
- 68) **Epitaxy and magnetotransport of $\text{Sr}_2\text{FeMoO}_6$ thin films**
W. Westerburg, D. Reisinger, and G. Jakob,
Phys. Rev. B **62**, R767 (2000), [doi:10.1103/PhysRevB.62.R767](https://doi.org/10.1103/PhysRevB.62.R767)
- 67) **c-Axis tunneling in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
J.C. Martinez, A. Schattke, M. Jourdan, G. Jakob, and H. Adrian,
Phys. Rev. B **61**, 9162 (2000), [doi:10.1103/PhysRevB.61.9162](https://doi.org/10.1103/PhysRevB.61.9162)
- 66) **Frequency dependent relaxation rate in the superconducting $\text{YBa}_2\text{Cu}_3\text{O}_{6+\delta}$**
A. Pimenov, A. Loidl, G. Jakob, and H. Adrian,
Phys. Rev. B **61**, 7039 (2000), [doi:10.1103/PhysRevB.61.7039](https://doi.org/10.1103/PhysRevB.61.7039)
- 65) **Charge carrier density collapse in $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$ and $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$ epitaxial thin films**
W. Westerburg, F. Martin, G. Jakob, P. J. M. van Bentum, and J.A.A.J. Perenboom,
Eur. Phys. J. B **14**, 509 (2000), [doi:10.1007/s100510051059](https://doi.org/10.1007/s100510051059)
- 64) **Perpendicular transport properties of $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
J.C. Martinez, A. Schattke, G. Jakob, and H. Adrian,
Physica B **284-288**, 553 (2000), [doi:10.1016/S0921-4526\(99\)02170-5](https://doi.org/10.1016/S0921-4526(99)02170-5)
- 63) **Ferroelectricity and structure of BaTiO_3 grown on $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ thin films**
Ch. Schwan, F. Martin, G. Jakob, J. C. Martinez, and H. Adrian,
Eur. Phys. J. B **14**, 447 (2000), [doi:10.1007/s100510051056](https://doi.org/10.1007/s100510051056)
- 62) **Transport and magnetic properties of $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ films ($0.1 < x < 0.9$)**
G. Jakob, F. Martin, S. Friedrich, W. Westerburg, and M. Maier,
Physica B **284-288**, 1440 (2000), [doi:10.1016/S0921-4526\(99\)02662-9](https://doi.org/10.1016/S0921-4526(99)02662-9)
- 61) **Flux-Flow Instability and Heating Effects in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ and $\text{YBa}_2\text{Cu}_3\text{O}_7$ Thin Films**
G. Jakob, P. Voss-de Haan, M. Wagner, Z.L. Xiao, and H. Adrian,
Physica B **284-288**, 897 (2000), [doi:10.1016/S0921-4526\(99\)02214-0](https://doi.org/10.1016/S0921-4526(99)02214-0)

1999 [top](#)

- 60) **High dynamic exponents in the vortex glass transitions: Dependence of critical scaling on the electric field range**
P. Voss-de Haan, G. Jakob, and H. Adrian,
Phys. Rev. B **60**, 12443 (1999), [doi:10.1103/PhysRevB.60.12443](https://doi.org/10.1103/PhysRevB.60.12443)
- 59) **Structural and electrical characterization of SrBi₂Nb₂O₉ thin films deposited on YBa₂Cu₃O_{7-δ} and Nb doped SrTiO₃**
Ch. Schwan, P. Haibach, G. Jakob, J. C. Martinez, and H. Adrian,
J. Appl. Phys. **86**, 960 (1999), [doi:10.1063/1.370832](https://doi.org/10.1063/1.370832)
- 58) **Universal relationship between conductivity and penetration depth in YBaCuO**
A. Pimenov, A. Loidl, B. Schey, B. Stritzker, G. Jakob, H. Adrian, A.V. Pronin, and Yu.G. Goncharev,
Europhys. Lett. **48**, 73 (1999), [doi:10.1209/epl/i1999-00116-1](https://doi.org/10.1209/epl/i1999-00116-1)
- 57) **Current dependence of grain boundary magnetoresistance in La_{0.67}Ca_{0.33}MnO₃ films**
W. Westerburg, F. Martin, S. Friedrich, M. Maier, and G. Jakob,
J. Appl. Phys. **86**, 2173 (1999), [doi:10.1063/1.371026](https://doi.org/10.1063/1.371026)
- 56) **Resistivity and Hall Effect at High Temperatures in La_{0.67}Ca_{0.33}MnO₃**
G. Jakob, W. Westerburg, F. Martin, H. Adrian, P. J. M. van Bentum, and J.A.A.J. Perenboom,
J. Appl. Phys. **85**, 4803 (1999), [doi:10.1063/1.370487](https://doi.org/10.1063/1.370487)
- 55) **High Temperature Transport Properties of La_{0.67}Ca_{0.33}MnO₃ Films**
W. Westerburg, G. Jakob, F. Martin, and H. Adrian,
J. Mag. Mag. Mat. **196-197**, 536 (1999), [doi:10.1016/S0304-8853\(98\)00882-8](https://doi.org/10.1016/S0304-8853(98)00882-8)
- 54) **Growth Mechanism and Transport Properties of La_{0.67}Ca_{0.33}MnO₃ Films**
F. Martin, G. Jakob, W. Westerburg, and H. Adrian,
J. Mag. Mag. Mat. **196-197**, 509 (1999), [doi:10.1016/S0304-8853\(98\)00859-2](https://doi.org/10.1016/S0304-8853(98)00859-2)
- 53) **Optical Conductivity in YBa₂Cu₃O₇ Thin Films**
A. Pimenov, A. Loidl, G. Jakob, and H. Adrian,
Phys. Rev. B **59**, 4390 (1999), [doi:10.1103/PhysRevB.59.4390](https://doi.org/10.1103/PhysRevB.59.4390)
- 52) **Comment on ‘Nonlocal In-Plane Resistance due to Vortex-Antivortex Dynamics in High-*T_c* Superconducting Films’**
L. Miu, G. Jakob, and H. Adrian,
Phys. Rev. Lett. **82**, 672 (1999), [doi:10.1103/PhysRevLett.82.672](https://doi.org/10.1103/PhysRevLett.82.672)
- 51) **Flux-flow instability and its anisotropy in Bi₂Sr₂CaCu₂O_{8+δ} superconducting films**
Z.L. Xiao, P. Voss-de Haan, G. Jakob, Th. Kluge, P. Haibach, H. Adrian, E.Y. Andrei,
Phys. Rev. B **59**, 1481 (1999), [doi:10.1103/PhysRevB.59.1481](https://doi.org/10.1103/PhysRevB.59.1481)
- 50) **Direct observation of the quasiparticle relaxation in YBa₂Cu₃O_{7-δ}**
A. Pimenov, A. Loidl, G. Jakob, and H. Adrian,
Physica B **259-261**, 524 (1999), [doi:10.1016/S0921-4526\(98\)00632-2](https://doi.org/10.1016/S0921-4526(98)00632-2)
- 49) **Absence of Correlated Flux Pinning by Columnar Defects in Epitaxial Bi₂Sr₂CaCu₂O₈ -Thin Films**
F. Hillmer, G. Wirth, G. Jakob, P. Haibach, U. Frey, Th. Kluge, E. Jäger, E. Schimpf, and H. Adrian,
Physica C **311**, 11 (1999), [doi:10.1016/S0921-4534\(98\)00552-8](https://doi.org/10.1016/S0921-4534(98)00552-8)
- 1998 [top](#)
- 48) **Small Polaron Transport in La_{0.67}Ca_{0.33}MnO₃ Thin Films**
G. Jakob, F. Martin, W. Westerburg, and H. Adrian,
Phys. Rev. B **58**, 14966 (1998), [doi:10.1103/PhysRevB.58.14966](https://doi.org/10.1103/PhysRevB.58.14966)

- 47) **Heavy Ion Induced Columnar Defects: A Sensitive Probe for the 2D/3D Behaviour of Vortex Matter in High-Temperature Superconductors**
G. Wirth, F. Hillmer, G. Jakob, E. Jäger, E. Schimpf, and H. Adrian,
Nucl. Instr. and Meth. in Phys. Res. B **146**, 581 (1998) [doi:10.1016/S0168-583X\(98\)00447-9](https://doi.org/10.1016/S0168-583X(98)00447-9)
- 46) **Evidence of Charge Carrier Compensation Effects in $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$**
G. Jakob, F. Martin, W. Westerburg, and H. Adrian,
Phys. Rev. B **57**, 10252 (1998), [doi:10.1103/PhysRevB.57.10252](https://doi.org/10.1103/PhysRevB.57.10252)
- 45) **Magnetoresistivity and Crystal Structure of Epitaxial $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$ Films**
G. Jakob, F. Martin, W. Westerburg, and H. Adrian,
J. Mag. Mag. Mat. **177-181**, 1247 (1998), [doi:10.1016/S0304-8853\(97\)00761-0](https://doi.org/10.1016/S0304-8853(97)00761-0)
- 44) **Vortex Liquid Entanglement in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ Films in the Presence of Quenched Disorder**
L. Miu, G. Jakob, P. Haibach, F. Hillmer, P. Voss-de Haan, C.C. Almasan, and H. Adrian,
Phys. Rev. B **57**, 3151 (1998), [doi:10.1103/PhysRevB.57.3151](https://doi.org/10.1103/PhysRevB.57.3151)
- 43) **Length Scale Dependent Vortex-Antivortex Unbinding in Epitaxial $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ Films**
L. Miu, G. Jakob, P. Haibach, Th. Kluge, U. Frey, P. Voss-de Haan, and H. Adrian,
Phys. Rev. B **57**, 3144 (1998), [doi:10.1103/PhysRevB.57.3144](https://doi.org/10.1103/PhysRevB.57.3144)
- 42) **Voltage-Jumps in Current Voltage Characteristics of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ Superconducting Thin Films: Evidence for Flux Flow Instability under Influence of Self-Heating**
Z.L. Xiao, P. Voss-de Haan, G. Jakob, and H. Adrian,
Phys. Rev. B **57**, R736 (1998), [doi:10.1103/PhysRevB.57.R736](https://doi.org/10.1103/PhysRevB.57.R736)
- 1997 [top](#)
- 41) **Investigations on the c-axis Transport Properties of $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ Thin Film Superlattices**
A. Schattke, G. Jakob, J.C. Martinez, and H. Adrian, 10.1109/77.621801
IEEE Transactions on Applied Supercond. **7**, 2727 (1997), [doi:10.1109/77.621801](https://doi.org/10.1109/77.621801)
- 40) **An Interface Effect in c-oriented (Y/Pr) $\text{Ba}_2\text{Cu}_3\text{O}_7$ Superlattices: Raman Scattering by Forbidden Phonons**
R. Li, R. Feile, E. Sherman, H. Adrian, and G. Jakob,
J. Phys. Chem. Solids **58**, 379 (1997), [doi:10.1016/S0022-3697\(96\)00151-5](https://doi.org/10.1016/S0022-3697(96)00151-5)
- 39) **Finite Range Scattering of Ni and Zn Impurities in Y-123 Thin Films**
Th. Kluge, G. Jakob, M. Speckmann, and H. Adrian,
Physica C **282-287**, 669 (1997), [doi:10.1016/S0921-4534\(97\)00487-5](https://doi.org/10.1016/S0921-4534(97)00487-5)
- 38) **History dependence of the magnetization of thin HTSC films - An explanation for distorted SQUID signals**
A. Wienss, G. Jakob, P. Voss-de Haan, and H. Adrian,
Physica C **280**, 158 (1997), [doi:10.1016/S0921-4534\(97\)00183-4](https://doi.org/10.1016/S0921-4534(97)00183-4)
- 1996 [top](#)
- 37) **Scattering Phase Shifts in Ni and Zn Doped Y-123**
T. Kluge, G. Jakob, C. Tome-Rosa, M. Speckmann, and H. Adrian,
J. Low Temp. Phys. **105**, 1415 (1996), [doi:10.1007/BF00753898](https://doi.org/10.1007/BF00753898)
- 36) **$\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ Based Josephson Junctions and SQUIDs**
U. Frey, H. Meffert, P. Haibach, K. Üstüner, G. Jakob, and H. Adrian,
Czech. J. Phys. **46**, 1289 (1996), [doi:10.1007/BF02562759](https://doi.org/10.1007/BF02562759)
- 35) **Patterning of Suitable Structures for the Investigation of the Josephson Effect in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ Superlattices**
A. Schattke, Ch. Schwan, H. Meffert, G. Jakob, and H. Adrian,
J. Physique IV **6**, 357-360 (1996), [doi:10.1051/jp4:1996354](https://doi.org/10.1051/jp4:1996354)

- 34) **Charge transfer in high- T_c (Y/Pr)Ba₂Cu₃O₇ superlattices**
R. Li, E. Sherman, R. Feile, G. Jakob, Th. Hahn, and H. Adrian,
Phys. Rev. B **53**, 6836 (1996), [doi:10.1103/PhysRevB.53.6836](https://doi.org/10.1103/PhysRevB.53.6836)
1995 [top](#)
- 33) **Light Scattering Mechanism in (Y/Pr)Ba₂Cu₃O₇ Superlattices**
E. Sherman, R. Li, R. Feile, H. Adrian, and G. Jakob,
J. Low Temp. Phys. **99**, 263 (1995), [doi:10.1007/BF00752292](https://doi.org/10.1007/BF00752292)
- 32) **Hall effect and flux dynamics in YBa₂Cu₃O₇/PrBa₂Cu₃O₇ multilayers in the mixed state**
X.G. Qiu, G. Jakob, V.V. Moshchalkov, Y. Bruynseraede, and H. Adrian,
Phys. Rev. B **52**, 12994 (1995), [doi:10.1103/PhysRevB.52.12994](https://doi.org/10.1103/PhysRevB.52.12994)
- 31) **Metal-Insulator Transition in Ytterbium Under Pressure: an EPR Study**
M.A. Continentino, B. Elschner, and G. Jakob,
Europhys. Lett. **31**, 485 (1995), [doi:10.1209/0295-5075/31/8/011](https://doi.org/10.1209/0295-5075/31/8/011)
- 30) **Superconductivity and giant negative magnetoresistance in YBa₂Cu₃O₇/La_{0.67}Ba_{0.33}MnO₃ superlattices**
G. Jakob, V. V. Moshchalkov, and Y. Bruynseraede,
Appl. Phys. Lett. **66**, 2564 (1995), [doi:10.1063/1.113168](https://doi.org/10.1063/1.113168)
- 29) **Light scattering in a (Y/Pr)Ba₂Cu₃O₇ superlattice and the intensity of a new Raman active phonon**
R. Li, E. Sherman, R. Feile, H. Adrian, G. Jakob, and Th. Hahn,
Physica C **242**, 46 (1995), [doi:10.1016/0921-4534\(94\)02413-8](https://doi.org/10.1016/0921-4534(94)02413-8)
- 28) **Confined and extended optical phonons in an ultrathin-layer YBa₂Cu₃O₇/PrBa₂Cu₃O₇ superlattice**
R. Li, R. Feile, Th. Hahn, G. Jakob, and H. Adrian,
Phys. Rev. B **51**, 1322 (1995), [doi:10.1103/PhysRevB.51.1322](https://doi.org/10.1103/PhysRevB.51.1322)
1994 [top](#)
- 27) **Magnetoresistance of YBa₂Cu₃O₇/PrBa₂Cu₃O₇ multilayers.**
E. Rosseel, X.G. Qiu, G. Jakob, V.V. Moshchalkov, Y. Bruynseraede, T. Hahn, and H. Adrian,
Physica C **235-240**, 3161 (1994), [doi:10.1016/0921-4534\(94\)91107-X](https://doi.org/10.1016/0921-4534(94)91107-X)
- 26) **Kosterlitz-Thouless scaling of the resistive transition in YBa₂Cu₃O₇/PrBa₂Cu₃O₇ superlattices**
G. Jakob, T. Hahn, K. Li, and H. Adrian,
Physica B **194-196**, 2379 (1994), [doi:10.1016/0921-4526\(94\)91689-6](https://doi.org/10.1016/0921-4526(94)91689-6)
- 25) **Effect of dimensional crossover on critical currents and flux creep in YBa₂Cu₃O₇/PrBa₂Cu₃O₇ multilayers**
V.V. Metlushko, G. Güntherodt, V.V. Moshchalkov, C.M. Fu, Y. Bruynseraede, G. Jakob,
Th. Hahn, and H. Adrian,
Physica B **194-196**, 2391 (1994), [doi:10.1016/0921-4526\(94\)91695-0](https://doi.org/10.1016/0921-4526(94)91695-0)
- 24) **Raman Scattering Studies of Ultrathin-Layer YBa₂Cu₃O₇/PrBa₂Cu₃O₇ Superlattices**
R. Li, R. Feile, G. Jakob, T. Hahn, and H. Adrian,
Journal of Superconductivity **7**, 213 (1994), [doi:10.1007/BF00730397](https://doi.org/10.1007/BF00730397)
- 23) **Characterization of epitaxial Bi₂Sr₂CaCu₂O_{8+δ} thin films**
P. Wagner, U. Frey, A. Hadish, G. Jakob, H. Adrian, T. Steinborn, L. Ranno, A. Elschner,
I. Heyvaert, and Y. Bruynseraede,
Journal of Superconductivity **7**, 217 (1994), [doi:10.1007/BF00730398](https://doi.org/10.1007/BF00730398)
- 22) **Characterization of YBa₂Cu₃O₇/PrBa₂Cu₃O₇ superlattices**
G. Jakob, T. Hahn, T. Kluge, P. Wagner, and H. Adrian,
Journal of Superconductivity **7**, 197 (1994), [doi:10.1007/BF00730393](https://doi.org/10.1007/BF00730393)
1993 [top](#)

- 21) **Structural and compositional characterization of $(\text{YBa}_2\text{Cu}_3\text{O}_7)_{n\text{Y}}/(\text{PrBa}_2\text{Cu}_3\text{O}_7)_{n\text{Pr}}$ superlattices by means of high-resolution electron microscopy**
C.L. Jia, H. Soltner, G. Jakob, Th. Hahn, H. Adrian, and K. Urban,
Physica C **210**, 1 (1993), [doi:10.1016/0921-4534\(93\)90003-9](https://doi.org/10.1016/0921-4534(93)90003-9)
- 20) **Chemically sensitive imaging of $(\text{YBa}_2\text{Cu}_3\text{O}_7)_m/(\text{PrBa}_2\text{Cu}_3\text{O}_7)_n$ superlattices by means of high-resolution electron microscopy**
C.L. Jia, A. Thust, G. Jakob, and K. Urban,
Ultramicroscopy **49**, 330 (1993), [doi:10.1016/0304-3991\(93\)90239-T](https://doi.org/10.1016/0304-3991(93)90239-T)
- 19) **Effect of dimensional crossover on magnetoresistance and conductivity fluctuations in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
C.M. Fu, V.V. Moshchalkov, E. Rosseel, M. Baert, W. Boon, Y. Bruynseraede, G. Jakob, Th. Hahn, and H. Adrian,
Physica C **206**, 110 (1993), [doi:10.1016/0921-4534\(93\)90708-X](https://doi.org/10.1016/0921-4534(93)90708-X)
- 18) **Scaling properties of the anisotropic magnetoresistance in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
C.M. Fu, V.V. Moshchalkov, W. Boon, K. Temst, Y. Bruynseraede, G. Jakob, Th. Hahn, and H. Adrian,
Physica C **205**, 111 (1993), [doi:10.1016/0921-4534\(93\)90175-P](https://doi.org/10.1016/0921-4534(93)90175-P)
- 17) **Renormalization of phonons in a $(\text{Y/Pr})\text{Ba}_2\text{Cu}_3\text{O}_7$ superlattice investigated by raman spectroscopy**
R. Li, R. Feile, G. Jakob, Th. Hahn, and H. Adrian,
Phys. Rev. Lett. **70**, 3804 (1993), [doi:10.1103/PhysRevLett.70.3804](https://doi.org/10.1103/PhysRevLett.70.3804)
- 16) **Scaling of the angular dependence of the critical current density in high- T_c -superconductors**
G. Jakob, M. Schmitt, Th. Kluge, C. Tomé-Rosa, P. Wagner, Th. Hahn, and H. Adrian,
Phys. Rev. B **47**, 12099 (1993), [doi:10.1103/PhysRevB.47.12099](https://doi.org/10.1103/PhysRevB.47.12099)
- 15) **Superconductivity of $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
G. Jakob, M. Schmitt, Th. Hahn, C. Stölzel, and H. Adrian,
IEEE Trans. Appl. Supercond. **3**, 1624 (1993), [IEEE Trans. Appl. Supercond. 3, 1624 \(1993\)](https://doi.org/10.1109/4227.1993.12099)
1992 [top](#)
- 14) **Contribution of Zn impurity atoms to the anisotropic pinning force density of thin epitaxial $\text{YBa}_2(\text{Cu}_{1-x}\text{Zn}_x)_3\text{O}_7$ films**
A. Walkenhorst, C. Tomé-Rosa, P. Wagner, Th. Kluge, C. Stölzel, G. Adrian, G. Jakob, and H. Adrian,
Europhys. Lett. **18**, 641 (1992), [doi:10.1209/0295-5075/18/7/012](https://doi.org/10.1209/0295-5075/18/7/012)
- 13) **Transport properties of $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
G. Jakob, Th. Hahn, C. Stölzel, C. Tomé-Rosa, and H. Adrian,
Europhys. Lett. **19**, 135 (1992), [doi:10.1209/0295-5075/19/2/013](https://doi.org/10.1209/0295-5075/19/2/013)
- 12) **Superconductivity and transport properties of epitaxial $\text{YBa}_2(\text{Cu}_{1-x}\text{Zn}_x)_3\text{O}_7$ -thin films**
C. Tomé-Rosa, G. Jakob, M. Paulson, P. Wagner, A. Walkenhorst, M. Schmitt, A. Elschner, and H. Adrian,
Supercond. Sci. Techn. **5**, 133 (1992), [doi:10.1088/0953-2048/5/1S/026](https://doi.org/10.1088/0953-2048/5/1S/026)
- 11) **Critical current density of $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
P. Przyslupski, G. Jakob, C. Stölzel, C. Tomé-Rosa, A. Walkenhorst, M. Schmitt, and H. Adrian,
Supercond. Sci. Techn. **5**, 149 (1992); [doi:10.1088/0953-2048/5/1S/030](https://doi.org/10.1088/0953-2048/5/1S/030)
1991 [top](#)
- 10) **High-superconducting critical current densities in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
G. Jakob, P. Przyslupski, C. Stölzel, C. Tomé-Rosa, A. Walkenhorst, M. Schmitt, and H. Adrian,
Appl. Phys. Lett. **59**, 1626 (1991), [doi:10.1063/1.106251](https://doi.org/10.1063/1.106251)

- 9) **Critical current density and upper critical field of $\text{YBa}_2\text{Cu}_3\text{O}_7$ thin films**
C. Tomé-Rosa, G. Jakob, A. Walkenhorst, M. Maul, M. Schmitt, M. Paulson, and H. Adrian,
Z. Phys. B - Cond. Matt. **83**, 221 (1991), [doi:10.1007/BF01309422](https://doi.org/10.1007/BF01309422)
1990 [top](#)
- 8) **Anisotropy of the depinning field and the pinning force density of thin epitaxial $\text{YBa}_2\text{Cu}_3\text{O}_7$ films**
A. Walkenhorst, C. Tomé-Rosa, C. Stölzel, G. Jakob, M. Schmitt, and H. Adrian,
Physica C **177**, 165 (1990), [doi:10.1016/0921-4534\(91\)90314-O](https://doi.org/10.1016/0921-4534(91)90314-O)
- 7) **Thermally activated flux-flow in epitaxially grown $\text{YBa}_2(\text{Cu}_{1-x}\text{Zn}_x)_3\text{O}_7$ films**
C. Tomé-Rosa, G. Jakob, M. Paulson, P. Wagner, A. Walkenhorst, M. Schmitt, and H. Adrian,
Physica C **185-189**, 2175 (1990), [doi:10.1016/0921-4534\(91\)91212-M](https://doi.org/10.1016/0921-4534(91)91212-M)
- 6) **Anisotropy of the pinning force density and the resistive transitions in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{PrBa}_2\text{Cu}_3\text{O}_7$ superlattices**
G. Jakob, P. Przyslupski, C. Stölzel, C. Tomé-Rosa, A. Walkenhorst, M. Schmitt, and H. Adrian,
Physica C **185-189**, 2087 (1990), [doi:10.1016/0921-4534\(91\)91168-4](https://doi.org/10.1016/0921-4534(91)91168-4)
- 5) **Thin film preparation, transport properties and superconductivity of $\text{YBa}_2\text{Cu}_3\text{O}_7$**
H. Adrian, C. Tomé-Rosa, G. Jakob, A. Walkenhorst, M. Maul, M. Paulson, M. Schmitt,
P. Przyslupski, G. Adrian, M. Huth, and Th. Becherer,
Supercond. Sci. Technol. **4**, 166 (1991), [doi:10.1088/0953-2048/4/1S/041](https://doi.org/10.1088/0953-2048/4/1S/041)
- 4) **Growth of high quality $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ films on various substrate materials and influence of Zn-doping on superconductivity**
C. Tomé-Rosa, G. Jakob, M. Maul, A. Walkenhorst, M. Schmitt, P. Wagner, P. Przyslupski, and H. Adrian,
Physica C **171**, 231 (1990), [doi:10.1016/0921-4534\(90\)90135-2](https://doi.org/10.1016/0921-4534(90)90135-2)
- 3) **Preparation, patterning and critical current density of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ thin films**
C. Tomé-Rosa, A. Walkenhorst, M. Maul, G. Jakob, H. Adrian, K. Haberle, P. Przyslupski, and G. Adrian,
Physica B **165&166**, 1477 (1990), [doi:10.1016/S0921-4526\(09\)80324-4](https://doi.org/10.1016/S0921-4526(09)80324-4)
- 2) **Fabrication of in-situ superconducting thin films of (Y,Tm)-Ba-Cu-O on SrTiO_3 , NdAlCaO_4 and LaGaO_3 substrates**
P. Przyslupski, L.T. Baczewski, M. Berkowski, H. Adrian, C. Tomé-Rosa and G. Jakob,
Physica B **165&166**, 1475 (1990), [doi:10.1016/S0921-4526\(09\)80323-2](https://doi.org/10.1016/S0921-4526(09)80323-2)
- 1) **Influence of composition and long term annealing on the formation of the 110K phase in the Bi-Pb-Sr-Ca-Cu-O system**
G. Jakob, M. Huth, Th. Becherer, M. Schmitt, H. Spille, and H. Adrian,
Physica B **165&166**, 1677 (1990), [doi:10.1016/S0921-4526\(09\)80424-9](https://doi.org/10.1016/S0921-4526(09)80424-9)