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Full Publication List

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Bibliographic Figures

Times cited: 3340; h-index: 27; average citations per item: 45.75 (source: ISI web of knowledge).

Peer-reviewed journal articles (click on title will open article URL in browser)

73 – Substrate-Independent Magnetic Bistability in Monolayers of the Single-Molecule Magnet Dy₂ScN@C₈₀ on Metals and Insulators

D.S. Krylov, S. Schimmel, V. Dubrovin, F. Liu, T.T. Nhung Nguyen, L. Spree, C.-H. Chen, G. Velkos, C. Bulbucan, R. Westerström, M. Studniarek, J. Dreiser, C. Hess, B. Büchner, S.M. Avdoshenko, A.A. Popov, accepted for publication in *Angewandte Chemie Int. Ed.* (2020).

72 – Unconventional Spin Relaxation Involving Localized Vibrational Modes in Ho Single-Atom Magnets

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71 – Electro spray Deposition and Magnetic Properties of Prototypical Molecular Magnets

F. Paschke, P. Erler, L. Gagnaniello, J. Dreiser, M. Fonin, *Quantum Materials Research* **1**, (2020).

70 – Understanding the Superior Stability of Single-Molecule Magnets on an Oxide Film

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67 – Large Effect of Metal Substrate on Magnetic Anisotropy of Co on Hexagonal Boron Nitride

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66 – Direct Observation of Charge Transfer and Magnetism in Fe₄Co₄ Cyanide-Bridged Molecular Cubes

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- 65 – Non-Empirical Calculation of X-ray Magnetic Circular Dichroism in Lanthanide Compounds**
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- 64 – Hysteresis Enhancement on a Hybrid Dy(III) Single Molecule Magnet/Iron Oxide Nanoparticle System**
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- 63 – Stability of Metallo-Porphyrin Networks Under Oxygen Reduction and Evolution Conditions in Alkaline Media**
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Conference proceedings

C1 – XMCD Study of the Magnetic Exchange Coupling in a Fluoride-Bridged DyCr Molecular Cluster

J. Dreiser, C. Piamonteze, F. Nolting, K. S. Pedersen, J. Bendix, S. Rusponi, H. Brune, *J. Korean Phys. Soc. (Conf. Proc. of ICM 2012)*, **62**, 1368 (2013).

Invited talks (>=23 within the last 10 years)

- *Functional Molecular Magnets at Interfaces*
Symposium at the Institut de Physique et Chimie des Matériaux de Strasbourg (IPCMS), February 14, 2020, Strasbourg, France.
- *Functional Molecular Magnets at Interfaces*
SiMS (Spins in Molecular Systems) Conference, Indian Institute of Science, December 2-4, 2019, Bangalore, India.

- *Studying Functional Molecular Materials by X-ray Absorption Spectroscopy*
Seminar, Max-Planck Institute for Chemical Energy Conversion, May 21, 2019, Mülheim, Germany.
- *Shedding light on functional molecular magnetic interfaces*
Satellite workshop of the International Conference on Molecule-based Magnets, Brazilian Synchrotron Light Laboratory, August 30-31, 2018, Campinas, São Paulo, Brazil.
- *Reaching Magnetic Stability of Single-Molecule Magnets by Ultrathin Insulating Films*
Seminar Condensed Matter Physics, Basel University, October 23, 2017, Basel, Switzerland.
- *Tuning the Properties of Lanthanide Single-Molecule Magnets at Interfaces*
Sino-Swiss Technology Cooperation Workshop on Endohedral Fullerenes, June 24-27, 2017, Villa Garbald, Castasegna, Switzerland.
- *Tuning the Properties of Single-Ion Molecular Magnets at Interfaces*
Seminar Surface Chemistry Group Chr. Coperet, ETH Hönggerberg, March 27, 2017, Zürich, Switzerland.
- *Tailoring the Properties of Molecular Single-Ion Magnets on Surfaces,*
Seminar Max-Planck-Institut für Festkörperforschung, November 2, 2016, Stuttgart, Germany.
- *Studying molecular magnets on surfaces using x-rays and scanning tunneling microscopy,*
Discussion meeting Profs Waldmann/Powell/Schnack with students, October 12-14, 2016, Oberkirch, Germany
- *Molecular Single-Ion Magnets: Harnessing Molecule-Surface Interactions,* International School and Symposium on Synchrotron Radiation in Natural Science (ISSRNS), June 13-18, 2016, Ustron, Poland
- *Engineering Magnetic Molecule-Inorganic Heterointerfaces,* Bordeaux Olivier Kahn discussions (BOOK-D), May 26-27, 2016, Bordeaux, France
- *XMCD on molecular magnets,* CoNEXT workshop, Niels Bohr Institute, September 28, 2015, Copenhagen, Denmark
- *Using X-rays - Instrumentation for Spectroscopy,* PSI summer school on condensed matter research, Lyceum Alpinum, August 15-21, 2015, Zuoz, Switzerland
- *Single-Ion Magnets: Getting Control of the Molecule-Metal Interface,* Swiss-Sino Workshop, FHNW Campus Brugg/Windisch, May 4-5, 2015, Windisch, Switzerland
- *X-ray Absorption Spectroscopy & X-ray Magnetic Circular Dichroism – An Introduction,* Symposium on X-ray spectroscopy, Copenhagen Univ., June 17-19, 2014, Copenhagen, Denmark

- *Bulk and submonolayer studies of novel single-ion molecular magnets*, Focus Session: New trends in Molecular Magnetism, Annual meeting of the German Physical Society, March 30-April 04, 2014, Dresden, Germany
- *Three-Axis Anisotropic Exchange Coupling in the Single-Molecule Magnets $NEt_4 [Mn^{III}_2 (5-Brsalen)_2 (MeOH)_2 M^{III}(CN)_6]$ ($M=Ru, Os$)*, European Conference on Molecular Magnetism, October 6-10, 2013, Karlsruhe, Germany
- *Single-molecule magnets studied by synchrotron-based Terahertz and X-ray techniques*, BESSY user meeting, December 13, 2012, BESSY, Berlin, Germany
- *Studying magnetism at the nanoscale — using molecular magnets*, Atomic, Mesoscopic and Optical Physics Seminar, May 28, 2012, Cavendish Lab, University of Cambridge, United Kingdom
- *Magnetism at the nanoscale: From single spins to coupled clusters*, Seminar, group Prof. Wulfhekel, May 2, 2012, Karlsruhe Institute of Technology, Karlsruhe, Germany
- *Magnetic exchange coupling in 3d-4f molecular nanomagnets investigated by X-ray magnetic circular dichroism*, Annual Meeting of the Danish Chemical Society, June 9, 2011, Odense, Denmark
- *Terahertz - EPR on cyanide-bridged single-molecule magnets*, Low-alpha workshop, December 8, 2010, BESSY, Berlin, Germany
- *Molecular spin clusters: A toolbox for studying magnetism at the nanoscale*, Solid State Seminar, May 19, 2010, Zurich University, Switzerland
- *Observation of Faraday rotation from a single quantum dot spin*, CLEO / IQEC Europe, June 17-22, 2007, Munich, Germany
- *Optical control of an electron spin in a quantum dot*, Scopes - Seminar, September 13, 2006, Lebedev Institute, Moscow, Russia
- *Spin qubits in quantum dots and solid-state cavity-QED*, LEOS annual meeting, October 22-28, 2005, Sydney, Australia

Other conference contributions (within last 10 years: ≥ 18 contributed talks and ≥ 7 posters)

- *Excited Spin-State Trapping in Spin Crossover Complexes on Ferroelectric Substrates* (oral p.), 7th European Conference on Molecular Magnetism, September 15-18, 2019, Florence, Italy.
- *Interface Engineering for the Stabilization of Single-Molecule Magnetic Bits* (oral p.), 2nd Conference on Interface Properties in Organic and Hybrid Electronics, July 8-11, 2019, Cergy-Pontoise, France.

- *Stabilizing the Magnetic Moment of LnPc₂ SMMs Using Ultrathin MgO Films* (oral p.), International Conference on Molecule-Based Magnets, Sep 1-5, 2018, Rio de Janeiro, Brazil.
- *Excited Spin-State Trapping in Spin Crossover Complexes on Ferroelectric Substrates* (oral p.), Annual Meeting of the German Physical Society, March 11-16, 2018, Berlin, Germany.
- *Giant Hysteresis of Single-Molecule Magnets Adsorbed on a Nonmagnetic Insulator* (oral p.) 33rd European Conference on Surface Science (ECOSS), Aug 27 – Sep 1st, 2017, Szeged, Hungary.
- *Giant Hysteresis of TbPc₂ Single-Molecule Magnets on MgO* (oral flash pres. + poster), International Conference on Molecule-Based Magnets, Sept. 4-8, 2016, Sendai, Japan
- *Giant Hysteresis of TbPc₂ Single-Molecule Magnets on MgO* (poster pres.), International conference on Vacuum Ultraviolet and X-ray Physics, July 3-8, 2016, Zurich, Switzerland
- *Orienting the Magnetic Easy Axes of Molecular Single-Ion Magnets by a Graphene Interlayer* (oral p.), Annual meeting of the German Physical Society, March 6-11, 2016, Regensburg, Germany
- *Reduction of Mn₁₉ Coordination Clusters on a Gold Surface* (poster presentation), European Conference on Molecular Magnetism, September 6-10, 2015, Zaragoza, Spain
- *X-ray induced demagnetization of single-molecule magnets* (oral p.), Annual meeting of the German Physical Society, March 15-20, 2015, Berlin, Germany
- *Single-ion magnets: Playing with molecule-substrate interactions* (oral p.), JUMP user meeting PSI, September 18-20, 2013, Villigen, Switzerland
- *Exchange coupling in 3d-4f molecular magnets studied by XMCD* (oral p.), MaNEP workshop, Paul Scherrer Institut, November 15, 2012, Villigen, Switzerland
- *Direct observation of a ferri-to-ferromagnetic transition in a fluoride-bridged 3d-4f molecular cluster*, (oral p.), International Conference on Magnetism, July 8-13, 2012, Busan, South Korea
- *Towards molecular spintronics with rare earth single-ion molecular magnets – First results*, (oral p.), 7th Int. Workshop on Nanoscale Spectroscopy and Nanotechnology, July 2-6, 2012, Zurich, Switzerland
- *Towards molecular spintronics with rare earth single-ion molecular magnets – First results* (oral p.), Annual meeting of the Swiss Physical Society, June 21-22, 2012, Zurich, Switzerland
- *Towards molecular spintronics with rare earth single-ion molecular magnets - First results* (oral p.), MolCHsurf meeting, June 11, 2012, Swiss National Science Foundation, Bern, Switzerland

- *Direct observation of a ferri-to-ferromagnetic transition in a fluoride-bridged 3d-4f molecular cluster* (oral p.), Annual meeting of the German Physical Society, March 25-30, 2012, Berlin, Germany
- *Towards submonolayers of single-ion magnets and high-spin molecular clusters* (poster), Annual Meeting of the Swiss Working Group on Surface and Interface Science, January 28, 2012, Fribourg, Switzerland
- *X-ray magnetic circular dichroism for the study of 3d-4f molecular nanomagnets* (poster), European Conference on Molecular Magnetism, November 22-25, 2011, Paris, France
- *X-ray magnetic circular dichroism for the study of 3d-4f molecular nanomagnets* (poster), Advanced Complex Inorganic Nanomaterials, September 12, 2011, Namur, Belgium
- *Magnetic exchange coupling in 3d-4f molecular nanomagnets investigated by X-ray magnetic circular dichroism* (oral p.), Annual meeting of the Swiss Physical Society, June 16, 2011, Lausanne, Switzerland
- *Magnetic exchange coupling in a 3d-4f molecular nanomagnet investigated by X-ray magnetic circular dichroism* (oral p.), Annual meeting of the German Physical Society, March 13-18, 2011, Dresden, Germany
- *THz - EPR on cyanide-bridged single-molecule magnets: First results* (oral p.), Annual meeting of the German Physical Society, March 13-18, 2011, Dresden, Germany
- *Molecular nanomagnets: new insights with terahertz-EPR* (poster), Summer school on condensed matter research, August 7-13, 2010, Zuz, Switzerland
- *Quantized spin waves in the CsFe₈ ring* (oral p.), International conference on magnetism, July 26-31, 2009, Karlsruhe, Germany
- *Quantized spin-wave excitations in CsFe₈: an inelastic neutron scattering study* (oral p.), Annual meeting of the German Physical Society, March 22-27, 2009, Dresden, Germany
- *Investigation of the antiferromagnetic wheel CsFe₈ by inelastic neutron scattering and high-field EPR* (poster), Int. conference on molecule-based magnets, September 20-24, 2008, Florence, Italy
- *High-fidelity preparation of a quantum-dot-electron spin state* (oral p.), Int. conference on nanoscience and technology, July 31- August 7, 2006, Basel, Switzerland
- *Quantum-dot spin-state preparation with near-unity fidelity* (poster), Conference on quantum dots 'QD2006', May 1-5, 2006, Chamonix-Mont Blanc, France
- *High-fidelity preparation of a quantum-dot-electron spin state* (oral p.), Meeting on quantum systems for information technology, March 22, 2006, Engelberg, Switzerland

- *Laser cooling of a single-quantum-dot electron spin* (poster), Annual meeting of the Swiss Physical Society, February 13-14, 2006, Lausanne, Switzerland
- *On the way to all-optical electron-spin detection in a single quantum dot* (oral p.), Swiss National Center for Competence in Research (NCCR) Quantum Photonics, June, 2005, Leysin, Switzerland