List of Publications 2018

[1] Najla K. Almulhem, Maksym E. Stebliy, Alain Nogaret, Jean-Claude Portal, Harvey E. Beere, and David A. Ritchie, "Photovoltage detection of Damon-Eshbach and dipolar edge spin waves of nanomagnets with two-dimensional electron gas system," Japanese Journal of Applied Physics **57**, 09TF01 (2018), Magnetics and Optics Research International Symposium (MORIS), City Univ New York, Qeens Coll, Qeens, NY, JAN 07-10, 2018.

[2] Ashish Arora, Thorsten Deilmann, Philipp Marauhn, Matthias Drueppel, Robert Schneider, Maciej R. Molas, Diana Vaclavkova, Steffen Michaelis de Vasconcellos, Michael Rohlfing, Marek Potemski, and Rudolf Bratschitsch, "Valley-contrasting optics of interlayer excitons in Mo- and W-based bulk transition metal dichalcogenides," Nanoscale **10**, 15571–15577 (2018).

[3] Ashish Arora, Maciej Koperski, Artur Slobodeniuk, Karol Nogajewski, Robert Schmidt, Robert Schneider, Maciej R Molas, Steffen Michaelis de Vasconcellos, Rudolf Bratschitsch, and Marek Potemski, "Zeeman spectroscopy of excitons and hybridization of electronic states in few-layer WSe_2 , $MoSe_2$ and $MoTe_2$," 2D Materials (2018), 10.1088/2053-1583/aae7e5.

[4] Sergey Artyukhin, Dmitry Fishman, Clement Faugeras, Marek Potemski, Alexandre Revcolevschi, Maxim Mostovoy, and Paul H. M. van Loosdrecht, "Magneto-absorption spectra of hydrogen-like yellow exciton series in cuprous oxide: excitons in strong magnetic fields," Scientific Reports **8**, 7818 (2018).

[5] Audouard, Alain and Fortin, Jean-Yves, "Does fourier analysis yield reliable amplitudes of quantum oscillations?" Eur. Phys. J. Appl. Phys. **83**, 30201 (2018).

[6] Kelig Aujogue, Alban Potherat, Binod Sreenivasan, and Francois Debray, "Experimental study of the convection in a rotating tangent cylinder," Journal of Fluid Mechanics **843**, 355–381 (2018).

[7] Julien Avronsart, Christophe Berriaud, Xavier Chaud, Clement Hilaire, Mario Kazazi, Davide Nardelli, and Matteo Tropeano, "Measurements on Critical Current and Bending Strain Tolerance for Ex Situ MgB2 Wires and Tapes Under High Field up to 8 T," IEEE Transactions on Applied Superconductivity **28**, 6200305 (2018).

[8] Nathaniel T. Baker, Alban Potherat, Laurent Davoust, and Francois Debray, "Inverse and Direct Energy Cascades in Three-Dimensional Magnetohydrodynamic Turbulence at Low Magnetic Reynolds Number," Physical Review Letters **120**, 224502 (2018).

[9] Michal Baranowski, Lukasz Janicki, Marta Gladysiewicz, Monika Welna, Magdalena Latkowska, Jan Misiewicz, Lucja Marona, Dario Schiavon, Piotr Perlin, and Robert Kudrawiec, "Direct evidence of photoluminescence broadening enhancement by local electric field fluctuations in polar InGaN/GaN quantum wells," Japanese Journal of Applied Physics **57**, 020305 (2018).

[10] M. Baranowski, J. M. Urban, N. Zhang, A. Surrente, D. K. Maude, Zahra Andaji-Garmaroudi, S. D. Stranks, and P. Plochocka, "Static and Dynamic Disorder in Triple-Cation Hybrid Perovskites," The Journal of Physical Chemistry C **122,**, 17473–17480 (2018).

[11] Rémy Battesti, Jerome Beard, Sebastian Böser, Nicolas Bruyant, Dmitry Budker, Scott A. Crooker, Edward J. Daw, Victor V. Flambaum, Toshiaki Inada, Igor G. Irastorza, Felix Karbstein, Dong Lak Kim, Mikhail G. Kozlov, Ziad Melhem, Arran Phipps, Pierre Pugnat, Geert Rikken, Carlo Rizzo, Matthias Schott, Yannis K. Semertzidis, Herman H.J. ten Kate, and Guido Zavattini, "High magnetic fields for fundamental physics," Physics Reports **765-766**, 1–39 (2018).

[12] S. L. Bayliss, L. R. Weiss, A. Mitioglu, K. Galkowski, Z. Yang, K. Yunusova, A. Surrente, K. J. Thorley, J. Behrends, R. Bittl, J. E. Anthony, A. Rao, R. H. Friend, P. Plochocka, P. C. M. Christianen, N. C. Greenham, and A. D. Chepelianskii, "Site-selective measurement of coupled spin pairs in an organic semiconductor," Proceedings of the National Academy of Sciences **115**, 5077–5082 (2018).

[13] J. Béard, J. Billette, N. Ferreira, P. Frings, J. Lagarrigue, F. Lecouturier, and J. Nicolin, "Design and Tests of the 100-T Triple Coil at LNCMI," IEEE Transactions on Applied Superconductivity **28**, 1–5 (2018).

[14] T. Benkel, X. Jacolin, B. Rozier, X. Chaud, A. Badel, T. Lecrevisse, P. Fazilleau, and P. Tixador, "Characterization of HTS Insulated Coil for High Field Insert up to 19 T," IEEE Transactions on Applied Superconductivity **28**, 4601905 (2018).

[15] Mahabub A. Bhuiyan, Zakhar R. Kudrynskyi, Debarati Mazumder, Jake D. G. Greener, Oleg Makarovsky, Christopher J. Mellor, Evgeny E. Vdovin, Benjamin A. Piot, Inna I. Lobanova, Zakhar D. Kovalyuk, Marina Nazarova, Artem Mishchenko, Kostya S. Novoselov, Yang Cao, Laurence Eaves, Go Yusa, and Amalia Patané, "Photoquantum Hall Effect and Light-Induced Charge Transfer at the Interface of Graphene/InSe Heterostructures," Advanced Functional Materials , 1805491 (2018).

[16] L. S. Bovkun, A. V. Ikonnikov, V. Ya. Aleshkin, S. S. Krishtopenko, N. N. Mikhailov, S. A. Dvoretski, M. Potemski, B. A. Piot, M. Orlita, and V. I. Gavrilenko, "Polarization-sensitive Fourier spectroscopy of HgTe quantum wells," JETP Letters **108**, 352 (2018).

[17] L. S. Bovkun, K. V. Maremyanin, A. V. Ikonnikov, K. E. Spirin, V. Ya. Aleshkin, M. Potemski, B. A. Piot, M. Orlita, N. N. Mikhailov, S. A. Dvoretskii, and V. I. Gavrilenko, "Magnetooptics of HgTe/CdTe Quantum Wells with Giant Rashba Splitting in Magnetic Fields up to 34 T," Semiconductors **52**, 1386 (2018).

[18] Fan Bu, Xiangyi Xue, Jun Wang, Hongchao Kou, Chao Li, Pingxiang Zhang, Eric Beaugnon, and Jinshan 1 Li, "Effect of strong static magnetic field on the microstructure and transformation temperature of Co-Ni-Al ferromagnetic shape memory alloy," Journal of Materials Science: Materials in Electronics **29**, 19491 (2018).

[19] Philip C. Bunting, Mihail Atanasov, Emil Damgaard-Moller, Mauro Perfetti, Iris Crassee, Milan Orlita, Jacob Overgaard, Joris van Slageren, Frank Neese, and Jeffrey R. Long, "A linear cobalt(II) complex with maximal orbital angular momentum from a non-Aufbau ground state," Science **362**, 1378 (2018).
[20] A. A. Bush, N. Buettgen, A. A. Gippius, M. Horvatić, M. Jeong, W. Kraetschmer, V. I. Marchenko, Yu. A. Sakhratov, and L. E. Svistov, "Exotic phases of frustrated antiferromagnet $LiCu_2O_2$," Physical Review B **97**, 054428 (2018).
[21] Bruno Cury Camargo and Walter Escoffier, "Taming the magnetoresistance anomaly in graphite," Carbon **139**, 210 – 215 (2018).
[22] J. Ciceron, A. Badel, P. Tixador, R. Pasquet, and F. Forest, "Test in Strong Background Field of a Modular Element of a REBCO 1 MJ High Energy Density SMES," IEEE Transactions on Applied Superconductivity **28**, 1–5 (2018).
[23] Pierre Corfdir, Hong Li, Oliver Marquardt, Guanhui Gao, Maciej R. Molas, Johannes K. Zettler, David van Treeck, Timur Flissikowski, Marek Potemski, Claudia Draxl, Achim Trampert, Sergio Fernandez-Garrido, Holger T. Grahn, and Oliver Brandt, "Crystal-Phase Quantum Wires: One-Dimensional Heterostructures with Atomically Flat Interfaces," Nano Letters **18**, 247–254 (2018).
[24] Jean-Pierre Costes, Ghenadie Novitchi, Veacheslav Vieru, Liviu F. Chibotaru, Carine Duhayon, Laure Vendier, Jean-Pierre Majoral, and Wolfgang Wernsdorfer, "Effects of the Exchange Coupling on Dynamic Properties in a Series of CoGdCo Complexes," Inorg. Chem. (2018), 10.1021/acs.inorgchem.8b02921.
[25] I. Crassee, E. Martino, C. C. Homes, O. Caha, J. Novak, P. Tueckmantel, M. Hakl, A. Nateprov, E. Arushanov, Q. D. Gibson, R. J. Cava, S. M. Koohpayeh, K. E. Arpino, T. M. McQueen, M. Orlita, and Ana Akrap, "Nonuniform carrier density in Cd_3As_2 evidenced by optical spectroscopy," Physical Review B **97**, 125204 (2018).
[26] I. Crassee, R. Sankar, W.-L. Lee, A. Akrap, and M. Orlita, "3D Dirac semimetal Cd_3As_2: A review of material properties," Phys. Rev. Materials **2**, 120302 (2018).
[27] O. Cyr-Choiniere, R. Daou, F. Laliberte, C. Collignon, S. Badoux, D. LeBoeuf, J. Chang, B. J. Ramshaw, D. A. Bonn, W. N. Hardy, R. Liang, J. Q. Yan, J. G. Cheng, J. S. Zhou, J. B. Goodenough, S. Pyon, T. Takayama, H. Takagi, N. Doiron-Leyraud, and Louis Taillefer, "Pseudogap temperature T^* of cuprate superconductors from the Nernst effect," Physical Review B **97**, 064502 (2018).
[28] O. Cyr-Choiniere, D. LeBoeuf, S. Badoux, S. Dufour-Beausejour, D. A. Bonn, W. N. Hardy, R. Liang, D. Graf, N. Doiron-Leyraud, and Louis Taillefer, "Sensitivity of T_c to pressure and magnetic field in the cuprate superconductor YBa_2Cu_3Oy: Evidence of charge-order suppression by pressure," Physical Review B **98**, 064513 (2018).
[29] W. Desrat, S. S. Krishtopenko, B. A. Piot, M. Orlita, C. Consejo, S. Ruffenach, W. Knap, A. Nateprov, E. Arushanov, and F. Teppe, "Band splitting in Cd_3As_2 measured by magnetotransport," Physical Review B **97**, 245203 (2018).
[30] W. Desrat, M. Moret, O. Briot, T-H Ngo, B. A. Piot, B. Jabakhanji, and B. Gil, "Superconducting Ga/GaSe layers grown by van der Waals epitaxy," Materials Research Express **5**, 045901 (2018).
[31] F. Duc, X. Tonon, J. Billette, B. Rollet, W. Knafo, F. Bourdarot, J. Béard, F. Mantegazza, B. Longuet, J. E. Lorenzo, E. Lelièvre-Berna, P. Frings, and L.-P. Regnault, "40-Tesla pulsed-field cryomagnet for single crystal neutron diffraction," Review of Scientific Instruments **89**, 053905 (2018).
[32] Clement Faugeras, Milan Orlita, and Marek Potemski, "Raman scattering of graphene-based systems in high magnetic fields," Journal Of Raman Spectroscopy **49**, 146–156 (2018).
[33] Benoît Fauqué, Xiaojun Yang, Wojciech Tabis, Mingsong Shen, Zengwei Zhu, Cyril Proust, Yuki Fuseya, and Kamran Behnia, "Magnetoresistance of semimetals: The case of antimony," Phys. Rev. Materials **2**, 114201 (2018).
[34] Philippe Fazilleau, Benjamin Borgnic, Xavier Chaud, Francois Debray, Thibault Lecrevisse, and Jung-Bin Song, "Metal-as-insulation sub-scale prototype tests under a high background magnetic field," Superconductor Science And Technology **31**, 095003 (2018).
[35] G Gäumann, I Crassee, N Numan, M Tamagnone, J R Mosig, J-M Poumirol, J-P Wolf, and T Feurer, "Nonlinear THz spectroscopy and simulation of gated graphene," Journal of Physics Communications **2**, 065016 (2018).
[36] Tong Guo, Jinshan Li, Jun Wang, William Yi Wang, Yi Liu, Ximing Luo, Hongchao Kou, and Eric Beaugnon, "Microstructure and properties of bulk $Al_{0.5}CoCrFeNi$ high-entropy alloy by cold rolling and subsequent annealing," Materials Science And Engineering A-Structural Materials Properties Microstructure And Processing **729**, 141–148 (2018).
[37] M. Hakl, S. Tchoumakov, I. Crassee, A. Akrap, B. A. Piot, C. Faugeras, G. Martinez, A. Nateprov, E. Arushanov, F. Teppe, R. Sankar, Wei-li Lee, J. Debray, O. Caha, J. Novak, M. O. Goerbig, M. Potemski, and M. Orlita, "Energy scale of Dirac electrons in Cd_3As_2," Physical Review B **97**, 115206 (2018).
[38] M. T. Hartman, R. Battesti, and C. Rizzo, "Status of the Vacuum Birefringence Search at BMV," in *2018 Conference on Precision Electromagnetic Measurements (CPEM 2018)* (2018) pp. 1–2.
[39] Yixuan He, Jinshan Li, Jun Wang, and Eric Beaugnon, "Transition from hypereutectic to hypoeutectic for rapid solidification in an undercooled Co-B alloy," Journal of Crystal Growth **499**, 98–105 (2018).
[40] Hugo Henck, Jose Avila, Zeineb Ben Aziza, Debora Pierucci, Jacopo Baima, Betul Pamuk, Julien Chaste, Daniel Utt, Miroslav Bartos, Karol Nogajewski, Benjamin A. Piot, Milan Orlita, Marek Potemski, Matteo Calandra, Maria C. Asensio, Francesco Mauri, Clement Faugeras, and Abdelkarim Ouerghi, "Flat electronic bands in long sequences of rhombohedral-stacked graphene," Physical Review B **97**, 245421 (2018).
[41] Tomasz Jakubczyk, Karol Nogajewski, Maciej R. Molas, Miroslav Bartos, Wolfgang Langbein, Marek Potemski, and Jacek Kasprzak, "Impact of environment on dynamics of exciton complexes in a WS_2 monolayer," 2D Materials **5**, 031007 (2018).
[42] J. Kačmarčík, I. Vinograd, B. Michon, A. Rydh, A. Demuer, R. Zhou, H. Mayaffre, R. Liang, W. N. Hardy, D. A. Bonn, N. Doiron-Leyraud, L. Taillefer, M.-H. Julien, C. Marcenat, and T. Klein, "Unusual Interplay between Superconductivity and Field-Induced Charge Order in $YBa_2Cu_3O_y$," Physical Review Letters **121**, 167002 (2018).
[43] Heedae Kim, Seongho Park, Rin Okuyama, Kwangseuk Kyhm, Mikio Eto, Robert A. Taylor, Gilles Nogues, Le Si Dang, Marek Potemski, Koochul Je, Jongsu Kim, Jihoon Kyhm, and Jindong Song, "Light Controlled Optical Aharonov-Bohm Oscillations in a Single Quantum Ring," Nano Letters **18**, 6188–6194 (2018).
[44] Yannick Klein, Michele Casula, David Santos-Cottin, Alain Audouard, David Vignolles, Gwendal Fève, Vincent

Freulon, Bernard Plaçais, Marine Verseils, Hancheng Yang, Lorenzo Paulatto, and Andrea Gauzzi, "Importance of nonlocal electron correlation in the $BaNiS_2$ semimetal from quantum oscillations studies," Physical Review B **97**, 075140 (2018).

[45] L Klopotowski, N Czechowski, A A Mitioglu, C Backes, D K Maude, and P Plochocka, "Long-lived photoluminescence polarization of localized excitons in liquid exfoliated monolayer enriched WS_2," Nanotechnology **29**, 335703 (2018).

[46] J. Klotz, K. Goetze, E. L. Green, A. Demuer, H. Shishido, T. Ishida, H. Harima, J. Wosnitza, and I. Sheikin, "Fermi-surface topology of the heavy-fermion system Ce_2PtIn_8," Physical Review B **97**, 165120 (2018).

[47] J. Klotz, K. Goetze, I Sheikin, T. Foerster, D. Graf, J-H Park, E. S. Choi, R. Hu, C. Petrovic, J. Wosnitza, and E. L. Green, "Fermi surface reconstruction and dimensional topology change in Nd-doped $CeCoIn_5$," Physical Review B **98**, 081105(R) (2018).

[48] W. Knafo, D. Aoki, G.W. Scheerer, F. Duc, F. Bourdarot, K. Kuwahara, H. Nojiri, L.-P. Regnault, and J. Flouquet, "URu_2Si_2 under intense magnetic fields: From hidden order to spin-density wave," Physica B: Condensed Matter **536**, 457 – 460 (2018).

[49] J. Kobak, A. Bogucki, T. Smolenski, M. Papaj, M. Koperski, M. Potemski, P. Kossacki, A. Golnik, and W. Pacuski, "Direct determination of the zero-field splitting for a single Co_{2+} ion embedded in a CdTe/ZnTe quantum dot," Physical Review B **97**, 045305 (2018).

[50] Maciej Koperski, Maciej R. Molas, Ashish Arora, Karol Nogajewski, Miroslav Bartos, Jan Wyzula, Diana Vaclavkova, Piotr Kossacki, and Marek Potemski, "Orbital, spin and valley contributions to Zeeman splitting of excitonic resonances in $MoSe_2$,WSe_2 and WS_2 Monolayers," 2D Materials **6**, 015001 (2018).

[51] M. Koperski, K. Nogajewski, and M. Potemski, "Single photon emitters in boron nitride: More than a supplementary material," Optics Communications **411**, 158–165 (2018).

[52] Philippe Kowalczyk, Francoise Hippert, Nicolas Bernier, Cristian Mocuta, Chiara Sabbione, Walter Batista-Pessoa, and Pierre Noe, "Impact of Stoichiometry on the Structure of van der Waals Layered GeTe/Sb_2Te_3 Superlattices Used in Interfacial Phase-Change Memory (iPCM) Devices," Small **14**, 1704514 (2018).

[53] J. Krieg, R. Giraud, H. Funke, J. Dufouleur, Walter Escoffier, C. Trautmann, and M.E. Toimil-Molares, "Magneto-transport measurements on Bi_2Te_3 nanowires electrodeposited in etched ion-track membranes," Journal of Physics and Chemistry of Solids (2018), 10.1016/j.jpcs.2018.02.002.

[54] G. Krizman, B. A. Assaf, M. Orlita, T. Phuphachong, G. Bauer, G. Springholz, G. Bastard, R. Ferreira, L. A. de Vaulchier, and Y. Guldnerl, "Avoided level crossing at the magnetic field induced topological phase transition due to spin-orbital mixing," Physical Review B **98**, 161202 (2018).

[55] Varun Kumar, Sergiu Shova, Vincent Maurel, Ghenadie Novitchi, and Cyrille Train, "Crystallographic Insights into the Synthesis and Magnetic Properties of Oxoverdazyl Radicals Functionalized by Benzoic Acid," European Journal Of Inorganic Chemistry , 517–524 (2018).

[56] Mahieddine Lahoubi, "Magnetic study of the low temperature anomalies in the magnetodielectric terbium iron garnet," Physica B: Condensed Matter **536**, 96 – 101 (2018).

[57] Francis Laliberté, Mehdi Frachet, Siham Benhabib, Benjamin Borgnic, Toshinao Loew, Juan Porras, Mathieu Le Tacon, Bernhard Keimer, Steffen Wiedmann, Cyril Proust, and David LeBoeuf, "High field charge order across the phase diagram of $YBa_2Cu_3O_y$," NJP Quantum Materials **3**, 11 (2018).

[58] T. Le Quang, K. Nogajewski, M. Potemski, M. T. Dau, M. Jamet, P. Mallet, and J-Y Veuillen, "Band-bending induced by charged defects and edges of atomically thin transition metal dichalcogenide films," 2D Materials **5**, 035034 (2018).

[59] T. Lecrevisse, A. Badel, T. Benkel, X. Chaud, P. Fazilleau, and P. Tixador, "Metal-as-insulation variant of no-insulation HTS winding technique: pancake tests under high background magnetic field and high current at 4.2K," Superconductor Science And Technology **31**, 055008 (2018).

[60] A. Legros, S. Benhabib, W. Tabis, F. Laliberté, M. Dion, M. Lizaire, B. Vignolle, D. Vignolles, H. Raffy, Z. Z. Li, P. Auban-Senzier, N. Doiron-Leyraud, P. Fournier, D. Colson, L. Taillefer, and C. Proust, "Universal T-linear resistivity and Planckian dissipation in overdoped cuprates," Nature Physics (2018), 10.1038/s41567-018-0334-2.

[61] Tadhg Mahon, Etienne Gaudin, Baptiste Vignolle, Géraldine Ballon, Bernard Chevalier, and Sophie Tencé, "$R_2Co_{3-x}Si_x$ (R = Pr, Nd, Sm, Gd) and $R_2Ni_{3-x}Si_x$ (R = Gd-Er), new series of La_2Ni_3-type phases," Journal of Alloys and Compounds **737**, 377 – 386 (2018).

[62] S. Mansouri, S. Jandl, M. Balli, P. Fournier, A. A. Mukhin, V. Yu Ivanov, A. Balbashov, and M. Orlita, "Study of crystal-field excitations and infrared active phonons in $TbMnO_3$," Journal Of Physics-Condensed Matter **30**, 175602 (2018).

[63] S. Mansouri, S. Jandl, M. Balli, P. Fournier, B. Roberge, M. Orlita, I. A. Zobkalo, S. N. Barilo, and S. V. Shiryaev, "Probing the role of Nd^{3+} ions in the weak multiferroic character of $NdMn_2O_5$ by optical spectroscopies," Physical Review B **98**, 205119 (2018).

[64] L. V. Mingalieva, R. T. Galeev, A. A. Sukhanov, V. K. Voronkova, I. K. Budnikova, and G. Novitchi, "Features of Exchange Interaction Between Cr_{3+} Ions in Compounds $[Fe(phen)_3)][Cr_2(OH)(Ac)(nta)_2]\cdot 6{,}25H_2O$ and $[Fe(bpy)_3][Cr\text{-}2(OH)(Ac)(nta)_2]\cdot 8H_2O$," Applied Magnetic Resonance **49**, 61–69 (2018).

[65] A. Nachawaty, M. Yang, S. Nanot, D. Kazazis, R. Yakimova, W. Escoffier, and B. Jouault, "Large nonlocality in macroscopic Hall bars made of epitaxial graphene," Physical Review B **98**, 045403 (2018).

[66] Alessio Nicolini, Rita Galavotti, Anne-Laure Barra, Marco Borsari, Matteo Caleffi, Guangpu Luo, Ghenadie Novitchi, Kyungwha Park, Antonio Ranieri, Luca Rigamonti, Fabrizio Roncaglia, Cyrille Train, and Andrea Cornia, "Filling the Gap in Extended Metal Atom Chains: Ferromagnetic Interactions in a Tetrairon(II) String Supported by Oligo-alpha-pyridylamido Ligands," Inorganic Chemistry **57**, 5438–5448 (2018).

[67] Gen Nishijima, Kozo Osamura, Tatsuoki Nagaishi, Toru Fukushima, Yasuhiro Iijima, Tsutomu Koizumi, Yifei Zhang, Marco Breschi, Xavier Chaud, Hyung-Seop Shin, and Takanobu Kiss, "International Round Robin Test for Critical Current Measurement of RE-Ba-Cu-O Superconducting Tapes," IEEE Transactions on Applied Superconductivity

28, 6601205 (2018).
[68] P. Noé and F. Hippert, "In book - Phase Change Memory: Chapter - Structure and Properties of Chalcogenide Materials for PCM," , 125–179 (2018), Editor A. Redaelli, Published by Springer.
[69] A. Orlova, H. Mayaffre, S. Krämer, M. Dupont, S. Capponi, N. Laflorencie, A. Paduan-Filho, and M. Horvatić, "Detection of a Disorder-Induced Bose-Einstein Condensate in a Quantum Spin Material at High Magnetic Fields," Physical Review Letters **121**, 177202 (2018).
[70] Laura Cristina de Jesus Pereira, Joana T Coutinho, Mauro Perfetti, José J Baldovi, Maria Augusta Antunes, Philipp Hallmen, Heiko Bamberger, Iris Crasse, Milan Orlita, Manuel Almeida, and Joris van Slageren, "Spectroscopic Determination of the Electronic Structure of a Uranium Single-Ion Magnet," Chemistry - A European Journal (2018), 10.1002/chem.201805090.
[71] Pierre Pugnat, Romain Barbier, Christophe Berriaud, Romain Berthier, Theo Boujet, Francois Debray, Philippe Fazilleau, Patrick Graffin, Pierre Hanoux, Bertrand Hervieu, Frederic Molinie, Hubert Neyrial, Mickael Pelloux, Charles Peroni, Rolf Pfister, Yannick Queinec, Luc Ronayette, and Benjamin Vincent, "Progress in the Construction of the 43 T Hybrid Magnet at LNCMI-Grenoble," IEEE Transactions on Applied Superconductivity **28**, 4300907 (2018).
[72] Pierre Pugnat, Theo Boujet, Thibaut Disparti, Pierre Hanoux, Charles Peroni, Rolf Pfister, Marc Pissard, Luc Ronayette, and Jean-Marc Tudela, "In-House Industrial Production of the Superconducting Conductor for the 43 T Hybrid Magnet of LNCMI-Grenoble," IEEE Transactions on Applied Superconductivity **28**, 4301005 (2018).
[73] D. Rauch, N. Steinki, W. Knafo, C. Pfleiderer, W.J. Duncan, F.M. Grosche, and S. Süllow, "High magnetic field behavior of $NbFe_2$," Physica B: Condensed Matter **536**, 510 – 511 (2018).
[74] V. V. Rumyantsev, L. S. Bovkun, A. M. Kadykov, M. A. Fadeev, A. A. Dubinov, V. Ya. Aleshkin, N. N. Mikhailov, S. A. Dvoretsky, B. Piot, M. Orlita, M. Potemski, F. Teppe, S. V. Morozov, and V. I. Gavrilenko, "Magnetooptical Studies and Stimulated Emission in Narrow Gap HgTe/CdHgTe Structures in the Very Long Wavelength Infrared Range," Semiconductors **52**, 436–441 (2018), 25th International Symposium on Nanostructures - Physics and Technology, Saint Petersburg, RUSSIA, JUN 26-30, 2017.
[75] Ayaan Saleem, Paulina A. Kobielska, Klaus Harms, Maria G. Katskogianni, Richard Telford, Ghenadie Novitchi, and Sanjit Nayak, "Transition metal complexes of a versatile polyalkoxy oxazolidine-based ligand derived from in situ cyclization," Dalton Transactions **47**, 6156–6165 (2018).
[76] Hans J. Schneider-Muntau, Guy Aubert, Yehia Eyssa, Christophe Trophime, Benjamin Vincent, and Pierre Pugnat, "Ultimate Forces of the Grenoble Hybrid Magnet," IEEE Transactions on Applied Superconductivity **28**, 4900506 (2018).
[77] E. H. da Silva Neto, M. Minola, B. Yu, W. Tabis, M. Bluschke, D. Unruh, H. Suzuki, Y. Li, G. Yu, D. Betto, K. Kummer, F. Yakhou, N. B. Brookes, M. Le Tacon, M. Greven, B. Keimer, and A. Damascelli, "Coupling between dynamic magnetic and charge-order correlations in the cuprate superconductor $Nd_{2-x}Ce_xCuO_4$," Physical Review B **98**, 161114 (2018).
[78] Atena B. Solea, Tobie Wohlhauser, Parisa Abbasi, Yvan Mongbanziama, Aurelien Crochet, Katharina M. Fromm, Ghenadie Novitchi, Cyrille Train, Melanie Pilkington, and Olimpia Mamula, "Versatile synthesis of chiral 6-oxoverdazyl radical ligands - new building blocks for multifunctional molecule-based magnets," Dalton Transactions **47**, 4785–4789 (2018).
[79] Samuel D. Stranks and Paulina Plochocka, "The influence of the Rashba effect," Nature Materials **17**, 381–382 (2018).
[80] M. Sulc, P. Pugnat, R. Ballou, G. Deferne, J. Hosek, S. Kunc, and A. Siemko, "OSQAR chameleon afterglow search experiment," Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (2018), 10.1016/j.nima.2018.11.065.
[81] Alessandro Surrente, Lukasz Klopotowski, Nan Zhang, Michal Baranowski, Anatolie A. Mitioglu, Mariana V. Ballottin, Peter C.M. Christianen, Dumitru Dumcenco, Yen-Cheng Kung, Duncan K. Maude, Andras Kis, and Paulina Plochocka, "Intervalley Scattering of Interlayer Excitons in a $MoS_2/MoSe_2/MoS_2$ Heterostructure in High Magnetic Field," Nano Letters **18**, 3994–4000 (2018).
[82] D. Szymański, R. Zach, W. Chajec, R. Duraj, J. Tobola, M. Guillot, S. Haj-Khlifa, and D. Fruchart, "Magnetization, high pressure, and magnetocaloric studies of $MnRu_xRh_{1-x}As$ (x=0.05, 0.1): Experimental and theoretical approaches," Journal of Alloys and Compounds **776**, 59–70 (2018).
[83] T. Thuillier, D. Bondoux, J. Angot, M. Baylac, E. Froidefond, J. Jacob, T. Lamy, A. Leduc, P. Sole, F. Debray, C. Trophime, V. Skalyga, and I. Izotov, "Prospect for a 60 GHz multicharged ECR ion source," Review of Scientific Instruments **89**, 052302 (2018), 17th Annual International Conference on Ion Sources, European Org Nucl Res, Geneva, SWITZERLAND, OCT, 2017.
[84] Y. Tokunaga, D. Aoki, H. Mayaffre, S. Krämer, M.-H. Julien, C. Berthier, M. Horvatić, H. Sakai, T. Hattori, S. Kambe, and S. Araki, "Field-induced reentrant superconductivity driven by quantum tricritical fluctuations in URhGe," Physica B:Condensed Matter **536**, 122–124 (2018), International Conference on Strongly Correlated Electron Systems (SCES), Prague, CZECH REPUBLIC, JUL 17-21, 2017.
[85] Tibor Toth-Katona, Veronika Gdovinova, Natalia Tomasovicova, Nandor Eber, Katalin Fodor-Csorba, Alena Jurikova, Vlasta Zavisova, Milan Timko, Xavier Chaud, and Peter Kopcansky, "Tuning the phase transition temperature of ferronematics with a magnetic field," Soft Matter **14**, 1647–1658 (2018).
[86] Joanna Urban, Michal Baranowskki, Agnieszka Kuc, Lukasz Klopotowski, Alessandro Surrente, Yandong Ma, Damian Roman Wlodarczyk, Andrzej Suchocki, Dmitry Ovchinnikov, Thomas Heine, Duncan K Maude, Andras Kis, and Paulina Plochocka, "Non equilibrium anisotropic excitons in atomically thin ReS_2," 2D Materials **6**, 015012 (2018).
[87] D. Vaclavkova, J. Wyzula, K. Nogajewski, M. Bartos, A. O. Slobodeniuk, C. Faugeras, M. Potemski, and M. R. Molas, "Singlet and triplet trions in WS_2 monolayer encapsulated in hexagonal boron nitride," Nanotechnology **29**, 325705 (2018).

[88] Florian Vigneau, Zaiping Zeng, Walter Escoffier, Philippe Caroff, Renaud Leturcq, Yann-Michel Niquet, Bertrand Raquet, and Michel Goiran, "Anisotropic transport properties of quasiballistic InAs nanowires under high magnetic field," Physical Review B **97**, 125308 (2018).

[89] Jiaxiang Wang, Jinshan Li, Jun Wang, Fan Bu, Hongchao Kou, Chao Li, Pingxiang Zhang, and Eric Beaugnon, "Effect of Solidification on Microstructure and Properties of $FeCoNi(AlSi)_{0.2}$ High-Entropy Alloy Under Strong Static Magnetic Field," Entropy **20**, 275 (2018).

[90] Michael V. Yakushev, Alexander V. Mudryi, Clement Faugeras, and Robert W. Martin, "A Magneto-Reflectivity Study of $CuGaSe_2$ Single Crystals," physica status solidi (RRL) - Rapid Research Letters , 1800374 (2018).

[91] Nan Zhang, Alessandro Surrente, Michal Baranowski, Dumitru Dumcenco, Yen-Cheng Kung, Duncan K. Maude, Andras Kis, and Paulina Plochocka, "Impact of photodoping on inter- and intralayer exciton emission in a $MoS_2/MoSe_2/MoS_2$ heterostructure," Applied Physics Letters **113**, 062107 (2018).

[92] Nan Zhang, Alessandro Surrente, Michal Baranowski, Duncan K. Maude, Patricia Gant, Andres Castellanos-Gomez, and Paulina Plochocka, "Moiré Intralayer Excitons in a $MoSe_2/MoS_2$ Heterostructure," Nano Letters **18**, 7651 (2018).

[93] Yu Zhang, Jinshan Li, Jun Wang, William Yi Wang, Hongchao Kou, and Eric Beaugnon, "Temperature dependent deformation mechanisms of $Al_{0.3}CoCrFeNi$ high-entropy alloy, starting from serrated flow behavior," Journal Of Alloys And Compounds **757**, 39–43 (2018).

[94] Tianxiang Zheng, Yunbo Zhong, Licheng Dong, Bangfei Zhou, Zhongming Ren, Francois Debray, and Eric Beaugnon, "Orientation of Magnetized MnBi in a Strong Static Magnetic Field," Metallurgical And Materials Transactions A-Physical Metallurgy And Materials Science **49A**, 1981–1985 (2018).

[95] Tianxiang Zheng, Yunbo Zhong, Jiang Wang, Zhongming Ren, Weili Ren, Zuosheng Lei, Francois Debray, Eric Beaugnon, and Xicheng Wei, "Droplet Evolution and Refinement During Liquid-Liquid Decomposition of Zn-6 Wt Pct Bi Immiscible Alloy Under High Static Magnetic Fields," Metallurgical And Materials Transactions A-Physical Metallurgy And Materials Science **49A**, 3333–3345 (2018).

[96] Tianxiang Zheng, Bangfei Zhou, Jiang Wang, Sansan Shuai, Yunbo Zhong, Weili Ren, Zhongming Ren, Francois Debray, and Eric Beaugnon, "Compression properties enhancement of Al-Cu alloy solidified under a 29 T high static magnetic field," Materials Science And Engineering A-Structural Materials Properties Microstructure And Processing **733**, 170–178 (2018).