

List of Publications 2011

- [1] E. Abou-Hamad, P. Bontemps, and G. L. J. A. Rikken, "NMR in pulsed magnetic field," *Solid State Nuclear Magnetic Resonance* **40**, 42–44 (2011).
- [2] F. Aimo, S. Krämer, M. Klanjšek, M. Horvatić, and C. Berthier, "Magnetic structure of azurite above the magnetization plateau at $\frac{1}{3}$ of saturation," *Physical Review B* **84**, 012401 (2011).
- [3] T. Albuissiere, P. Cardin, F. Debray, P. La Rizza, J. P. Masson, F. Plunian, A. Ribeiro, and D. Schmitt, "Experimental evidence of Alfvén wave propagation in a Gallium alloy," *Physics of Fluids* **23**, 096601 (2011).
- [4] Dai Aoki, Tatsuma D. Matsuda, Frédéric Hardy, Christoph Meingast, Valentin Taufour, Elena Hassinger, Ilya Sheikin, Carley Paulsen, Georg Knebel, Hisashi Kotegawa, and Jacques Flouquet, "Superconductivity Reinforced by Magnetic Field and the Magnetic Instability in Uranium Ferromagnets," *Journal of the Physical Society of Japan* **80SA**, SA008 (2011).
- [5] Dai Aoki, Ilya Sheikin, Tatsuma D. Matsuda, Valentin Taufour, Georg Knebel, and Jacques Flouquet, "First Observation of Quantum Oscillations in the Ferromagnetic Superconductor UCoGe," *Journal Of The Physical Society Of Japan* **80** (2011), 10.1143/JPSJ.80.013705.
- [6] A. Audouard, F. Duc, D. Vignolles, R. B. Lyubovskii, L. Vendier, G. V. Shilov, E. I. Zhilyaeva, R. N. Lyubovskaya, and E. Canadell, "Temperature- and pressure-dependent metallic states in (BEDT-TTF)₈[Hg₄Br₁₂(C₆H₅Br)₂]," *Physical Review B* **84**, 045101 (2011).
- [7] A. B. A. Baranga, R. Battesti, M. Fouché, C. Rizzo, and G. L. J. A. Rikken, "Observation of the inverse Cotton-Mouton effect," *Europhysics Letters* **94**, 44005 (2011).
- [8] Anne-Laure Barra, Anders Dossing, Thorbjorn Morsing, and Johan Vibenholt, "A high field and frequency electron paramagnetic resonance study of the S=2 chromium(II) complex trans-[Cr(NCCH₃)₄(FBF₃)₂] and investigation of its reaction with dioxygen: Crystal structure of [(CH₃CN)₅CrOCr(NCCH₃)₅](BF₄)₄ · 2CH₃CN," *Inorganica Chimica Acta* **373**, 266–269 (2011).
- [9] P. Berceau, R. Battesti, M. Fouché, and C. Rizzo, "The vacuum magnetic birefringence experiment: a test for quantum electrodynamics," *Canadian Journal Of Physics* **89**, 153–158 (2011).
- [10] Paul Berceau, Rmy Battesti, Mathilde Fouch, Paul Frings, Marc Nardone, Oliver Portugall, Geert Rikken, and Carlo Rizzo, "Quantum vacuum magnetic birefringence," *Hyperfine Interactions* , 1–6 (2011), 10.1007/s10751-011-0517-z.
- [11] B. Bergk, A. Demuer, I. Sheikin, Y. Wang, J. Wosnitza, Y. Nakazawa, and R. Lortz, "Magnetic torque evidence for the Fulde-Ferrell-Larkin-Ovchinnikov state in the layered organic superconductor κ – (BEDT – TTF)₂Cu(NCS)₂," *Physical Review B* **83**, 064506 (2011).
- [12] I. Bisotto, E. S. Kannan, S. Sassine, R. Murali, T. J. Beck, L. Jalabert, and J-C Portal, "Microwave based nanogenerator using the ratchet effect in Si/SiGe heterostructures," *Nanotechnology* **22**, 245401 (2011).
- [13] Angelika B. Boeer, Anne-Laure Barra, Liviu F. Chibotaru, David Collison, Eric J. L. McInnes, Richard A. Mole, Giovanna G. Simeoni, Grigore A. Timco, Liviu Ungur, Tobias Unruh, and Richard E. P. Winpenny, "A Spectroscopic Investigation of Magnetic Exchange Between Highly Anisotropic Spin Centers," *Angewandte Chemie-International Edition* **50**, 4007–4011 (2011).
- [14] Pierre Bouillot, Corinna Kollath, Andreas M. Läuchli, Mikhail Zvonarev, Benedikt Thielemann, Christian Rüegg, Edmond Orignac, Roberta Citro, Martin Klanjšek, Claude Berthier, Mladen Horvatić, and Thierry Giamarchi, "Statics and dynamics of weakly coupled antiferromagnetic spin- $\frac{1}{2}$ ladders in a magnetic field," *Physical Review B* **83**, 054407 (2011).
- [15] M. V. Budantsev, A. G. Pogosov, D. A. Pokhabov, E. Yu. Zhdanov, A. K. Bakarov, A. I. Toropov, and J. C. Portal, "Inverted hysteresis of magnetoresistance of a 2DEG at integer filling factors," *AIP Conference Proceedings* **1399**, 601–602 (2011).
- [16] J. Chang, Nicolas Doiron-Leyraud, Francis Laliberte, R. Daou, David LeBoeuf, B. J. Ramshaw, Ruixing Liang, D. A. Bonn, W. N. Hardy, Cyril Proust, I. Sheikin, K. Behnia, and Louis Taillefer, "Nernst effect in the cuprate superconductor YBa₂Cu₃O_y: Broken rotational and translational symmetries," *Physical Review B* **84**, 014507 (2011).
- [17] Cayetano Cobaleda, Francesco Rossella, Sergio Pezzini, Enrique Diez, Vittorio Bellani, Duncan Maude, and Peter Blake, "Quantum hall effect in inhomogeneous trilayer graphene," *Physica E: Low-dimensional Systems and Nanostructures* **44**, 530 – 533 (2011).
- [18] T. A. Dauzhenga, V. K. Ksenevich, I. A. Bashmakov, and J. Galibert, "Origin of negative magnetoresistance in polycrystalline SnO₂ films," *Physical Review B* **83**, 165309 (2011).
- [19] O. Drachenko, H. Schneider, M. Helm, D. Kozlov, V. Gavrilenko, J. Wosnitza, and J. Leotin, "Modification to the central-cell correction of germanium acceptors," *Physical Review B* **84**, 245207 (2011).
- [20] O. Drachenko, S. Winnerl, H. Schneider, M. Helm, J. Wosnitza, and J. Leotin, "Compact magnetospectrometer for pulsed magnets based on infrared quantum cascade lasers," *Review Of Scientific Instruments* **82**, 033108 (2011).
- [21] C. A. Duarte, L. E. G. Armas, E. C. F. da Silva, G. M. Gusev, A. K. Bakarov, S. Wiedmann, and J. C. Portal, "Fractional quantum Hall effect in second subband of a 2DES," *Europhysics Letters* **94**, 37010 (2011).
- [22] F. El Hallak, P. Rosa, P. Vidal, I. Sheikin, M. Dressel, and J. van Slageren, "Giant magnetisation step in Fe₂: Molecular nanomagnets in the weak exchange limit," *Europhysics Letters* **95**, 57002 (2011).

- [23] X. Fabrèges, I. Mirebeau, S. Petit, P. Bonville, and A. A. Belik, "Frustration-driven magnetic order in hexagonal InMnO₃," *Physical Review B* **84**, 054455 (2011).
- [24] C. Faugeras, M. Amado, P. Kossacki, M. Orlita, M. Kuehne, A. A. L. Nicolet, Yu. I. Latyshev, and M. Potemski, "Magneto-Raman Scattering of Graphene on Graphite: Electronic and Phonon Excitations," *Physical Review Letters* **107**, 036807 (2011).
- [25] H. V. A. Galeti, Y. Galvao Gobato, V. O. Gordo, L. F. dos Santos, M. J. S. P. Brasil, V. López-Richard, G. E. Marques, M. Orlita, J. Kunc, D. K. Maude, M. Henini, and R. J. Airey, "Magneto-optical investigation of two-dimensional gases in n-type resonant tunneling diodes," *Semiconductor Science and Technology* **27**, 015018 (2012).
- [26] V. Gasparov, L. Drigo, A. Audouard, D. Sun, C. Lin, S. Budko, P. Canfield, F. Wolff-Fabris, and J. Wosnitza, "Upper critical magnetic field in Ba_{0.68}K_{0.32}Fe₂As₂ and Ba(Fe_{0.93}Coo_{0.07})₂As₂," *JETP Letters* **93**, 667–672 (2011).
- [27] V. Gavrilenko, S. Krishtopenko, and M. Goiran, "Electron-electron interaction and spin-orbit coupling in InAs/AlSb heterostructures with a two-dimensional electron gas," *Semiconductors* **45**, 110–117 (2011).
- [28] Y. Galvao Gobato, H. V. A. Galeti, L. F. dos Santos, V. Lopez-Richard, D. F. Cesar, G. E. Marques, M. J. S. P. Brasil, M. Orlita, J. Kunc, D. K. Maude, M. Henini, and R. J. Airey, "Spin injection from two-dimensional electron and hole gases in resonant tunneling diodes," *Applied Physics Letters* **99**, 233507 (2011).
- [29] M. Goiran, M. Millot, J. M. Poumirol, I. Gherasoiu, W. Walukiewicz, and J. Leotin, "Electron cyclotron effective mass in indium nitride," *Applied Physics Letters* **98**, 079903 (2011).
- [30] Abdessamad Grirrane, Antonio Pastor, Agustin Galindo, Eleuterio Alvarez, Carlo Mealli, Andrea Ienco, Annabella Orlandini, Patrick Rosa, Andrea Caneschi, Anne-Laure Barra, and Javier Fernandez Sanz, "Thiodiacetate-Manganese Chemistry with N ligands: Unique Control of the Supramolecular Arrangement over the Metal Coordination Mode," *Chemistry-A European Journal* **17**, 10599–10616 (2011).
- [31] G. M. Gusev, Z. D. Kvon, O. A. Shegai, N. N. Mikhailov, S. A. Dvoretsky, and J. C. Portal, "Transport in disordered two-dimensional topological insulators," *Phys. Rev. B* **84**, 121302 (2011).
- [32] G. M. Gusev, S. Wiedmann, O. E. Raichev, A. K. Bakarov, and J. C. Portal, "Evidence for zero-differential resistance states in electronic bilayers," *Physical Review B* **83**, 041306 (2011).
- [33] F. G. G. Hernandez, G. M. Gusev, Z. D. Kvon, and J. C. Portal, "Linear and nonlinear transport in a small charge-tunable open quantum ring," *Physical Review B* **84**, 075332 (2011).
- [34] N. E. Hussey, R. A. Cooper, X. F. Xu, Y. Wang, I. Mouzopoulou, B. Vignolle, and C. Proust, "Dichotomy in the T-linear resistivity in hole-doped cuprates," *Philosophical Transactions Of The Royal Society A-Mathematical Physical And Engineering Sciences* **369**, 1626–1639 (2011).
- [35] A. V. Ikonnikov, M. S. Zholudev, K. E. Spirin, A. A. Lastovkin, K. V. Maremyanin, V. Ya. Aleshkin, V. I. Gavrilenko, O. Drachenko, M. Helm, J. Wosnitza, M. Goiran, N. N. Mikhailov, S. A. Dvoretskii, F. Teppe, N. Diakonova, C. Consejo, B. Chenaud, and W. Knap, "Cyclotron resonance and interband optical transitions in HgTe/CdTe(0 1 3) quantum well heterostructures," *Semiconductor Science and Technology* **26**, 125011 (2011).
- [36] J. Jadcak, L. Bryja, A. Wójcik, G. Bartsch, D. R. Yakovlev, M. Bayer, P. Plochocka, M. Potemski, D. Reuter, and A. Wieck, "Strong temperature destabilization of free exciton recombination in a two-dimensional structures with hole gas," *Journal of Physics: Conference Series* **334**, 012050 (2011).
- [37] J. Jadcak, L. Bryja, A. Wojs, G. Bartsch, D. R. Yakovlev, M. Bayer, P. Plochocka, M. Potemski, D. Reuter, and A. Wieck, "Exciton Exchange between Nearly-Free and Acceptor-Bound States of a Positive Trion Assisted by Cyclotron Excitation," *Acta Physica Polonica A* **119**, 600–601 (2011), 39th Conference on the Physics of Semiconductors, Jaszowied Int Sch, Krynica-Zdroj, POLAND, JUN 19-24, 2010.
- [38] S. Jandl, S. Mansouri, A. A. Mukhin, V. YuIvanov, A. Balbashov, M. M. Gospodino, V. Nekvasil, and M. Orlita, "Study of crystal-field excitations and Raman active phonons in o-DyMnO₃," *Journal Of Magnetism And Magnetic Materials* **323**, 1104–1108 (2011).
- [39] M. Jeong, F. Bert, P. Mendels, F. Duc, J. C. Trombe, M. A. de Vries, and A. Harrison, "Field-Induced Freezing of a Quantum Spin Liquid on the Kagome Lattice," *Physical Review Letters* **107**, 237201 (2011).
- [40] Johannes Jobst, Daniel Waldmann, Florian Speck, Roland Hirner, Duncan K. Maude, Thomas Seyller, and Heiko B. Weber, "Transport properties of high-quality epitaxial graphene on 6H-SiC(0001)," *Solid State Communications* **151**, 1061–1064 (2011).
- [41] E. S. Kannan, I. Bisotto, J. C. Portal, R. Murali, and T. J. Beck, "Photovoltage induced by ratchet effect in Si/SiGe heterostructures under microwave irradiation," *Applied Physics Letters* **98**, 3590255 (2011).
- [42] M. V. Kartsovnik, T. Helm, C. Putzke, F. Wolff-Fabris, I. Sheikin, S. Lepault, C. Proust, D. Vignolles, N. Bittner, W. Biberacher, A. Erb, J. Wosnitza, and R. Gross, "Fermi surface of the electron-doped cuprate superconductor Nd_{2-x}Ce_xCuO₄ probed by high-field magnetotransport," *New Journal Of Physics* **13**, 015001 (2011).
- [43] H. Katsuno, H. Ohta, O. Portugall, N. Ubrig, M. Fujisawa, F. Elmasry, S. Okubo, and Y. Fujiwara, "Energy structure of Er-2O center in GaAs:Er,O studied by high magnetic field photoluminescence measurement," *Journal Of Luminescence* **131**, 2294–2298 (2011).
- [44] T. Kazimierczuk, J. A. Gaj, A. Golnik, M. Goryca, M. Nawrocki, M. Koperski, T. Smolenski, J. Suffczynski, P. Wojnar, and P. Kossacki, "Excitation Mechanisms of CdTe/ZnTe Quantum Dots under Non-Resonant and Quasi-Resonant Regime," *Acta Physica Polonica A* **119**, 588–591 (2011), 39th Conference on the Physics of Semiconductors, Jaszowied Int Sch, Krynica-Zdroj, POLAND, JUN 19-24, 2010.
- [45] L. Kilanski, W. Dobrowolski, E. Dynowska, M. Wojciech, B. J. Kowalski, N. Nedelko, A. Slawska-Waniewska, D. K. Maude, S. A. Varnavskiy, I. V. Fedorchenko, and S. F. Marenkin, "Colossal linear magnetoresistance in a CdGeAs₂:MnAs micro-composite ferromagnet," *Solid State Communications* **151**, 870–873 (2011).
- [46] Ki-Won Kim, Z. D. Kvon, J. H. Lee, E. B. Olshanetsky, and J. C. Portal, "Spin relaxation and weak antilocalization in a high density 2D electron gas in a AlGaN/GaN heterostructure," *AIP Conference Proceedings* **1399**, 713–714 (2011).
- [47] P. Kopcansky, N. Tomasovicova, M. Koneracka, M. Timko, V. Zavisova, A. Dzarova, J. Jadzyn, E. Beaugnon, and X. Chaud, "Phase Transitions in Liquid Crystal Doped with Magnetic Particles of Different Shapes," *International*

- Journal Of Thermophysics** **32**, 807–817 (2011).
- [48] M. Koperski, M. Goryca, T. Kazimierczuk, P. Kossacki, P. Wojnar, and J. A. Gaj, “Magnetoluminescence of a CdTe Quantum Dot with a Single Manganese Ion in Voigt Configuration,” *Acta Physica Polonica A* **119**, 618–620 (2011), 39th Conference on the Physics of Semiconductors, Jaszowied Int Sch, Krynica-Zdroj, POLAND, JUN 19-24, 2010.
- [49] P. Kossacki, C. Faugeras, M. Kühne, M. Orlita, A. A. L. Nicolet, J. M. Schneider, D. M. Basko, Yu. I. Latyshev, and M. Potemski, “Electronic excitations and electron-phonon coupling in bulk graphite through Raman scattering in high magnetic fields,” *Physical Review B* **84**, 235138 (2011).
- [50] D. A. Kozlov, Z. D. Kvon, N. N. Mikhailov, S. A. Dvoretskii, and J. C. Portal, “Cyclotron Resonance in a Two-Dimensional Semimetal Based on a HgTe Quantum Well,” *JETP Letters* **93**, 170–173 (2011).
- [51] R. B. G. Kramer, V. S. Egorov, V. A. Gasparov, A. G. M. Jansen, and W. Joss, “Condon domain phase diagram for silver,” *Low Temperature Physics* **37**, 39–44 (2011).
- [52] S. S. Krishtopenko, V. I. Gavrilenko, and M. Goiran, “Theory of g-factor enhancement in narrow-gap quantum well heterostructures,” *Journal Of Physics-Condensed Matter* **23**, 385601 (2011).
- [53] V. K. Ksenovich, N. I. Gorbachuk, T. A. Dauzhenka, I. A. Bashmakov, N. A. Poklonski, and A. D. Wieck, “AC-Conductivity of Thin Polycrystalline Tin Dioxide Films,” *Acta Physica Polonica A* **119**, 146–147 (2011).
- [54] M. Kubisa, K. Ryczko, J. Jadczak, L. Bryja, J. Misiewicz, and M. Potemski, “Nonlinear Zeeman Splitting of Holes in Doped GaAs Heterostructures,” *Acta Physica Polonica A* **119**, 609–611 (2011), 39th Conference on the Physics of Semiconductors, Jaszowied Int Sch, Krynica-Zdroj, POLAND, JUN 19-24, 2010.
- [55] A. Kumar, W. Escoffier, J. M. Poumirol, C. Faugeras, D. P. Arovas, M. M. Fogler, F. Guinea, S. Roche, M. Goiran, and B. Raquet, “Integer Quantum Hall Effect in Trilayer Graphene,” *Physical Review Letters* **107**, 126806 (2011).
- [56] F. Laliberte, J. Chang, N. Doiron-Leyraud, E. Hassinger, R. Daou, M. Rondeau, B. J. Ramshaw, R. Liang, D. A. Bonn, W. N. Hardy, S. Pyon, T. Takayama, H. Takagi, I. Sheikin, L. Malone, C. Proust, K. Behnia, and Louis Taillefer, “Fermi-surface reconstruction by stripe order in cuprate superconductors,” *Nature Communications* **2**, 432 (2011).
- [57] Vladimir N. Laukhin, Alain Audouard, David Vignolles, Enric Canadell, Tatyana G. Prokhorova, and Eduard B. Yagubskii, “Magnetoresistance oscillations up to 32 K in the organic metal β'' -(ET)₄(H₃O)[Fe(C₂O₄)₃]C₆H₄Cl₂,” *Low Temperature Physics* **37**, 749–754 (2011), Translation of *Fizika Nizkikh Temperatur* 37, 943-949 (2011).
- [58] D. LeBoeuf, N. Doiron-Leyraud, B. Vignolle, M. Sutherland, B. J. Ramshaw, J. Levallois, R. Daou, F. Laliberté, O. Cyr-Choinière, J. Chang, Y. J. Jo, L. Balicas, R. Liang, D. A. Bonn, W. N. Hardy, C. Proust, and L. Taillefer, “Lifshitz critical point in the cuprate superconductor YBa₂Cu₃O_y from high-field Hall effect measurements,” *Physical Review B* **83**, 054506 (2011).
- [59] P. Lejay, E. Canevet, S. K. Srivastava, B. Grenier, M. Klanjsek, and C. Berthier, “Crystal growth and magnetic property of MC₂V₂O₈ (M=Sr and Ba),” *Journal Of Crystal Growth* **317**, 128–131 (2011).
- [60] Gregory P. Lousberg, J-F Fagnard, X. Chaud, M. Ausloos, P. Vanderbemden, and B. Vanderheyden, “Magnetic properties of drilled bulk high-temperature superconductors filled with a ferromagnetic powder,” *Superconductor Science & Technology* **24**, 035008 (2011).
- [61] O Makarovskiy, O Thomas, A Patané, R P Campion, C T Foxon, E E Vdovin, D K Maude, A G Balanov, and L Eaves, “Electronic energy levels, wavefunctions and potential landscape of nanostructures probed by magneto-tunnelling spectroscopy,” *Journal of Physics: Conference Series* **334**, 012010 (2011).
- [62] L. Malone, T. D. Matusda, A. Antunes, G. Knebel, V. Taufour, D. Aoki, K. Behnia, C. Proust, and J. Flouquet, “Thermoelectric evidence for high-field anomalies in the hidden order phase of URu₂Si₂,” *Physical Review B* **83**, 245117 (2011).
- [63] Catalin Maxim, Sylvie Ferlay, and Cyrille Train, “Binuclear heterometallic M(III)-Mn(II) (M = Fe, Cr) oxalate-bridged complexes associated with a bisamidinium dication: a structural and magnetic study,” *New Journal Of Chemistry* **35**, 1254–1259 (2011).
- [64] C. Mayer, S. Gorsse, G. Ballon, R. Caballero-Flores, V. Franco, and B. Chevalier, “Tunable magnetocaloric effect in Gd-based glassy ribbons,” *Journal of Applied Physics* **110**, 053920 (2011).
- [65] M. Millot, N. Ubrig, J.-M. Poumirol, I. Gherasoiu, W. Walukiewicz, S. George, O. Portugall, J. Léotin, M. Goiran, and J.-M. Broto, “Determination of effective mass in InN by high-field oscillatory magnetoabsorption spectroscopy,” *Physical Review B* **83**, 125204 (2011).
- [66] Zuzana Mitroova, Natalia Tomasovicova, Milan Timko, Martina Koneracka, Jozef Kovac, Jan Jadzyn, Ivo Vavra, Nandor Eber, Tibor Toth-Katona, Eric Beaugnon, Xavier Chaud, and Peter Kopcansky, “The sensitivity of liquid crystal doped with functionalized carbon nanotubes to external magnetic fields,” *New Journal Of Chemistry* **35**, 1260–1264 (2011).
- [67] A. Nogaret, F. Nasirpour, J-C Portal, H. E. Beere, D. A. Ritchie, A. T. Hindmarch, and C. H. Marrows, “Double spin resonance in a spatially periodic magnetic field with zero average,” *Europhysics Letters* **94**, 28001 (2011).
- [68] A. Nogaret, P. Saraiva, F. Nasirpour, J. C. Portal, H. E. Beere, and D. A. Ritchie, “Electron Spin Antiresonance in Magnetic Superlattices,” *AIP Conference Proceedings* **1399**, 695–696 (2011).
- [69] Lucie Norel, Jean-Baptiste Rota, Lise-Marie Chamoreau, Guillaume Pilet, Vincent Robert, and Cyrille Train, “Spin Transition and Exchange Interaction: Janus Visions of Supramolecular Spin Coupling between Face-to-Face Verdagyl Radicals,” *Angewandte Chemie-International Edition* **50**, 7128–7131 (2011).
- [70] Maximilian Nothaft, Steffen Höhla, Aurélien Nicolet, Fedor Jelezko, Norbert Fröhlauf, Jens Pflaum, and Jörg Wrachtrup, “Optical Sensing of Current Dynamics in Organic Light-Emitting Devices at the Nanometer Scale,” *ChemPhysChem* **12**, 2590–2595 (2011).
- [71] E. B. Olshanetsky, Z. D. Kvon, S. S. Kobylkin, D. A. Kozlov, N. N. Mikhailov, S. A. Dvoretskii, and J. C. Portal, “Quantum Hall Effect in a Quasi-Three-Dimensional HgTe Film,” *JETP Letters* **93**, 526–529 (2011).
- [72] M. Orlita, C. Faugeras, J. Borysiuk, J. M. Baranowski, W. Strupinski, M. Sprinkle, C. Berger, W. A. de Heer, D. M. Basko, G. Martinez, and M. Potemski, “Magneto-optics of bilayer inclusions in multilayered epitaxial graphene on the carbon face of SiC,” *Physical Review B* **83**, 125302 (2011).

- [73] M. Orlita, C. Faugeras, R. Grill, A. Wysmolek, W. Strupinski, C. Berger, W. A. de Heer, G. Martinez, and M. Potemski, "Carrier Scattering from Dynamical Magnetoconductivity in Quasineutral Epitaxial Graphene," *Physical Review Letters* **107**, 216603 (2011).
- [74] M. Orlita, K. Masztalerz, C. Faugeras, M. Potemski, E. G. Novik, C. Bruene, H. Buhmann, and L. W. Molenkamp, "Fine structure of zero-mode Landau levels in $HgTe/Hg_xCd_{1-x}Te$ quantum wells," *Physical Review B* **83**, 115307 (2011).
- [75] Emilio Pardo, Cyrille Train, Geoffrey Gontard, Kamal Boubekeur, Oscar Fabelo, Hongbo Liu, Brahim Dkhil, Francesc Lloret, Kosuke Nakagawa, Hiroko Tokoro, Shin-ichi Ohkoshi, and Michel Verdaguer, "High Proton Conduction in a Chiral Ferromagnetic Metal-Organic Quartz-like Framework," *Journal Of The American Chemical Society* **133**, 15328–15331 (2011).
- [76] M. L. Peres, V. A. Chitta, D. K. Maude, N. F. Oliveira, Jr., P. H. O. Rappl, A. Y. Ueta, and E. Abramof, "Spin-Orbit Coupling in n-Type PbTe/PbEuTe Quantum Wells," *Acta Physica Polonica A* **119**, 602–605 (2011), 39th Conference on the Physics of Semiconductors, Jaszowied Int Sch, Krynica-Zdroj, POLAND, JUN 19-24, 2010.
- [77] A. P. Petrović, R. Lortz, G. Santi, C. Berthod, C. Dubois, M. Decroux, A. Demuer, A. B. Antunes, A. Paré, D. Salloum, P. Gougeon, M. Potel, and Ø. Fischer, "Multiband Superconductivity in the Chevrel Phases $SnMo_6S_8$ and $PbMo_6S_8$," *Physical Review Letters* **106**, 017003 (2011).
- [78] Z. Pribulova, J. Kacmarcik, C. Marcenat, P. Szabo, T. Klein, A. Demuer, P. Rodiere, D. J. Jang, H. S. Lee, H. G. Lee, S.-I. Lee, and P. Samuely, "Superconducting energy gap in $MgCNi_3$ single crystals: Point-contact spectroscopy and specific-heat measurements," *Physical Review B* **83**, 104511 (2011).
- [79] P. Puech, S. Nanot, B. Raquet, J.-M. Broto, M. Millot, A.W. Anwar, E. Flahaut, and W. Bacsa, "Comparative Raman spectroscopy of individual and bundled double wall carbon nanotubes," *Physica Status Solidi B* **248**, 974–979 (2011).
- [80] Yu. A. Pusep, G. M. Gusev, A. K. Bakarov, A. I. Toropov, and J. C. Portal, "Magnetotransport in a wide parabolic well superimposed with a superlattice," *Journal Of Applied Physics* **109**, 3576134 (2011), 30th International Conference on the Physics of Semiconductors (ICPS-30), Seoul, SOUTH KOREA, JUL 25-30, 2010.
- [81] B. J. Ramshaw, B. Vignolle, J. Day, R. X. Liang, W. N. Hardy, C. Proust, and D. A. Bonn, "Angle dependence of quantum oscillations in $YBa_2Cu_3O_{6.59}$ shows free-spin behaviour of quasiparticles," *Nature Physics* **7**, 234–238 (2011).
- [82] J. M. Rey, M. Bruchon, X. Chaud, F. Debray, T. Lecrevisse, E. Mossang, and P. Tixador, "Geometry Optimization for SMES Solenoids Using HTS Ribbons," *IEEE Transactions On Applied Superconductivity* **21**, 1670–1673 (2011).
- [83] R. Ribeiro, J. M. Poumirol, A. Cresti, W. Escoffier, M. Goiran, J. M. Broto, S. Roche, and B. Raquet, "Unveiling the Magnetic Structure of Graphene Nanoribbons," *Physical Review Letters* **107**, 086601 (2011).
- [84] G. L. J. A. Rikken, "A New Twist on Spintronics," *Science* **331**, 864–865 (2011).
- [85] G. L. J. A. Rikken and B. A. van Tiggelen, "Measurement of the Abraham Force and Its Predicted QED Corrections in Crossed Electric and Magnetic Fields," *Physical Review Letters* **107**, 170401 (2011).
- [86] Maria Jesus Rodriguez-Douton, Matteo Mannini, Lidia Armelao, Anne-Laure Barra, Erik Tancini, Roberta Sessoli, and Andrea Cornia, "One-step covalent grafting of Fe_4 single-molecule magnet monolayers on gold," *Chemical Communications* **47**, 1467–1469 (2011).
- [87] P. M. C. Rourke, I. Mouzopoulou, X. F. Xu, C. Panagopoulos, Y. Wang, B. Vignolle, C. Proust, E. V. Kurganova, U. Zeitler, Y. Tanabe, T. Adachi, Y. Koike, and N. E. Hussey, "Phase-fluctuating superconductivity in overdoped $La_{2-x}Sr_xCuO_4$," *Nature Physics* **7**, 455–458 (2011).
- [88] F. Rullier-Albenque, H. Alloul, and G. Rikken, "High-field studies of superconducting fluctuations in high-T_c cuprates: Evidence for a small gap distinct from the large pseudogap," *Physical Review B* **84**, 014522 (2011).
- [89] Lara F. dos Santos, Yara Galvao Gobato, Marcio D. Teodoro, Victor Lopez-Richard, Gilmar E. Marques, Maria J. S. P. Brasil, Milan Orlita, Jan Kunc, Duncan K. Maude, Mohamed Henini, and Robert J. Airey, "Circular polarization in a non-magnetic resonant tunneling device," *Nanoscale Research Letters* **6**, 101 (2011).
- [90] J. Scola, Y. Dumont, N. Keller, M. Vallee, J. G. Caputo, I. Sheikin, P. Lejay, and A. Pautrat, "Incomplete spin reorientation in yttrium orthoferrite," *Physical Review B* **84**, 104429 (2011).
- [91] Rikio Settai, Keisuke Katayama, Dai Aoki, Ilya Sheikin, Georg Knebel, Jacques Flouquet, and Yoshichika Onuki, "Field-Induced Antiferromagnetic State in Non-centrosymmetric Superconductor $CeIrSi_3$," *Journal Of The Physical Society Of Japan* **80**, 094703 (2011).
- [92] Ilya Sheikin, Pierre Rodiere, Rikio Settai, and Yoshichika Ōnuki, "High-Field de Haas-van Alphen Effect in Non-Centrosymmetric $CeCoGe_3$ and $LaCoGe_3$," *Journal of the Physical Society of Japan* **80SA**, SA020 (2011).
- [93] Donglu Shi, Peng He, Peng Zhao, Fang Fang Guo, Feng Wang, Chris Huth, Xavier Chaud, Sergey L. Bud'ko, and Jie Lian, "Magnetic alignment of Ni/Co-coated carbon nanotubes in polystyrene composites," *Composites Part B-Engineering* **42**, 1532–1538 (2011).
- [94] T. Smolenski, T. Kazimierczuk, M. Goryca, P. Kossacki, J. A. Gaj, P. Wojnar, K. Fronc, M. Korkusinski, and P. Hawrylak, "Influence of Configuration Mixing on Energies and Recombination Dynamics of Excitonic States in $CdTe/ZnTe$ Quantum Dots," *Acta Physica Polonica A* **119**, 615–617 (2011), 39th Conference on the Physics of Semiconductors, Jaszowied Int Sch, Krynica-Zdroj, POLAND, JUN 19-24, 2010.
- [95] Radostina Stoyanova, Anne-Laure Barra, Meglena Yoncheva, Elitza Kuzmanova, and Ekaterina Zhecheva, "Local structure of Mn^{4+} and Fe^{3+} spin probes in layered $LiAlO_2$ oxide by modelling of zero-field splitting parameters," *Dalton Transactions* **40**, 9106–9115 (2011).
- [96] A. Sytcheva, U. Löw, S. Yasin, J. Wosnitza, S. Zherlitsyn, P. Thalmeier, T. Goto, P. Wyder, and B. Lüthi, "Acoustic Faraday effect in $Tb_3Ga_5O_{12}$," *Physical Review B* **81**, 214415 (2010).
- [97] P. Thakur, Amit Kumar, S. Gautam, and K.H. Chae, "Electronic charge transfer in cobalt doped fullerene thin films and effect of energetic ion impacts by x-ray absorption spectroscopy," *Thin Solid Films* **519**, 8401 – 8405 (2011), first International Conference of the Asian Union of Magnetics Societies (ICAUMS 2010).
- [98] Ane B. Tomter, Giorgio Zoppellaro, Florian Schmitzberger, Niels H. Andersen, Anne-Laure Barra, Henrik Engman,

- Pr Nordlund, and K. Kristoffer Andersson, "HF-EPR, Raman, UV/VIS Light Spectroscopic, and DFT Studies of the Ribonucleotide Reductase R2 Tyrosyl Radical from Epstein-Barr Virus," *PLoS ONE* **6**, e25022 (2011).
- [99] Cyrille Train, Michel Gruselle, and Michel Verdaguier, "The fruitful introduction of chirality and control of absolute configurations in molecular magnets," *Chemical Society Reviews* **40**, 3297–3312 (2011).
- [100] V. Tripathi, K. Dhochak, B. A. Aronzon, V. V. Rylkov, A. B. Davydov, B. Raquet, M. Goiran, and K. I. Kugel, "Charge inhomogeneities and transport in semiconductor heterostructures with a Mn δ -layer," *Physical Review B* **84**, 075305 (2011).
- [101] A. H. Trojnar, M. Korkusiński, E. S. Kadantsev, P. Hawrylak, M. Goryca, T. Kazimierczuk, P. Kossacki, P. Wojnar, and M. Potemski, "Quantum Interference in Exciton-Mn Spin Interactions in a CdTe Semiconductor Quantum Dot," *Physical Review Letters* **107**, 207403 (2011).
- [102] N. Ubrig, P. Plochocka, P. Kossacki, M. Orlita, D. K. Maude, O. Portugall, and G. L. J. A. Rikken, "High-field magnetotransmission investigation of natural graphite," *Physical Review B* **83**, 073401 (2011).
- [103] B. Vignolle, D. Vignolles, D. LeBoeuf, S. Lepault, B. Ramshaw, R. X. Liang, D. A. Bonn, W. N. Hardy, N. Doiron-Leyraud, A. Carrington, N. E. Hussey, L. Taillefer, and C. Proust, "Quantum oscillations and the Fermi surface of high-temperature cuprate superconductors," *Comptes Rendus Physique* **12**, 446–460 (2011).
- [104] D. Vignolles, A. Audouard, V. N. Laukhin, E. Canadell, T. G. Prokhorova, and E. B. Yagubskii, "Quantum interference and Shubnikov-de Haas oscillations in β'' -(ET)₄(H₃O)[Fe(C₂O₄)₃]C₆H₄Cl₂ under pressure," *Synthetic Metals* **160**, 2467–2470 (2010).
- [105] G. H. Wagnière and G. L. J. A. Rikken, "Chirality and magnetism II: Free electron on an infinite helix, inverse Faraday effect and inverse magnetochemical effect," *Chemical Physics Letters* **502**, 126–129 (2011).
- [106] S. Wiedmann, G. M. Gusev, A. K. Bakarov, and J. C. Portal, "Emergent fractional quantum Hall effect at even denominator $\nu = 3/2$ in a triple quantum well in tilted magnetic fields," *Journal of Physics: Conference Series* **334**, 012026 (2011).
- [107] S. Wiedmann, G. M. Gusev, O. E. Raichev, A. K. Bakarov, and J. C. Portal, "Zero-resistance states in bilayer electron systems induced by microwave irradiation," *Journal of Physics: Conference Series* **334**, 012014 (2011).
- [108] S. Wiedmann, G. M. Gusev, O. E. Raichev, A. K. Bakarov, and J. C. Portal, "Nonlinear transport phenomena in a two-subband system," *Physical Review B* **84**, 165303 (2011).
- [109] S. Wiedmann, G. M. Gusev, O. E. Raichev, A. K. Bakarov, and J. C. Portal, "Microwave-induced zero-resistance states in bilayer electron systems," *AIP Conference Proceedings* **1399**, 275–276 (2011).
- [110] S. Wiedmann, G. M. Gusev, O. E. Raichev, S. Kraemer, A. K. Bakarov, and J. C. Portal, "Microwave-induced Hall resistance in bilayer electron systems," *Physical Review B* **83**, 195317 (2011).
- [111] S. Winnerl, M. Orlita, P. Plochocka, P. Kossacki, M. Potemski, T. Winzer, E. Malic, A. Knorr, M. Sprinkle, C. Berger, W. A. de Heer, H. Schneider, and M. Helm, "Carrier Relaxation in Epitaxial Graphene Photoexcited Near the Dirac Point," *Physical Review Letters* **107**, 237401 (2011).
- [112] Tao Wu, Hadrien Mayaffre, Steffen Kraemer, Mladen Horvatic, Claude Berthier, W. N. Hardy, Ruixing Liang, D. A. Bonn, and Marc-Henri Julien, "Magnetic-field-induced charge-stripe order in the high-temperature superconductor YBa₂Cu₃O_y," *Nature* **477**, 191–194 (2011).
- [113] Michael V. Yakushev, Franziska Luckert, Clement Faugeras, Anatoli V. Karotki, Alexander V. Mudryi, and Robert W. Martin, "Excited States of the A and B Free Excitons in CuInSe₂," *Japanese Journal Of Applied Physics* **50**, 05FC03 (2011).
- [114] Q. Zhang, W. Knafo, P. Adelmann, P. Schweiss, K. Grube, N. Qureshi, Th. Wolf, H. v. Löhneysen, and C. Meingast, "Complex magnetoelastic properties in the frustrated kagome-staircase compounds (Co_{1-x}Ni_x)₃V₂O₈," *Physical Review B* **84**, 184429 (2011).
- [115] X. Q. Zhou, B. Schmidt, C. Proust, G. Gervais, L. N. Pfeiffer, K. W. West, and S. Das Sarma, "Quantum-Classical Crossover and Apparent Metal-Insulator Transition in a Weakly Interacting 2D Fermi Liquid," *Physical Review Letters* **107**, 086804 (2011).