

PUBLICATION LIST OF HUGO DIL

99. *Triple-Point Fermions in Ferroelectric GeTe*, Juraj Krempaský, Laurent Nicolaï, Martin Gmitra, Houke Chen, Mauro Fanciulli, Eduardo B. Guedes, Marco Caputo, Milan Radović, Valentine V. Volobuev, Ondřej Čaha, Gunther Springholz, Jan Minár, and **J. Hugo Dil**, **Physical Review Letters** 126, 206403 (2021).
98. *Manipulating topological spin textures in multiferroic and polar materials*, **J. Hugo Dil**, Proc. SPIE 11470, Spintronics XIII, (2020); doi: 10.1117/12.2570644
97. *Single spin-polarized Fermi surface in SrTiO₃ thin films*, Eduardo B. Guedes, Stefan Muff, Mauro Fanciulli, Andrew P. Weber, Marco Caputo, Zhiming Wang, Nicholas C. Plumb, Milan Radović, and **J. Hugo Dil**, **Physical Review Research** 2, 033173 (2020).
96. *Unveiling the complete dispersion of the giant Rashba split surface states of ferroelectric α -GeTe(111) by alkali doping*, G. Kremer, T. Jaouen, B. Salzmann, L. Nicolaï, M. Rumo, C. W. Nicholson, B. Hildebrand, **J. H. Dil**, J. Minár, G. Springholz, J. Krempaský, and C. Monney, **Physical Review Research** 2, 033115 (2020).
95. *Finding Spin Hedgehogs in Chiral Crystals*, **J. Hugo Dil**, **Physics** 13, 45 (2020). **Viewpoint**
94. *Fully spin-polarized bulk states in ferroelectric GeTe*, Juraj Krempaský, Mauro Fanciulli, Laurent Nicolaï, Jan Minár, Henrieta Volfová, Ondřej Čaha, Valentine V. Volobuev, Jaime Sánchez-Barriga, Martin Gmitra, Koichiro Yaji, Kenta Kuroda, Shik Shin, Fumio Komori, Gunther Springholz, and **J. Hugo Dil**, **Physical Review Research** 2, 013107 (2020).
93. *Large magnetothermopower and anomalous Nernst effect in HfTe₅*, Junfeng Hu, Marco Caputo, Eduardo Bonini Guedes, Sa Tu, Edoardo Martino, Arnaud Magrez, Helmuth Berger, **J. Hugo Dil**, Haiming Yu, and Jean-Philippe Ansermet, **Physical Review B** 100, 115201 (2019).
92. *Ferroelectric Self-Poling in GeTe Films and Crystals*, Dominik Kriegner, Gunther Springholz, Carsten Richter, Nicolas Pilet, Elisabeth Müller, Marie Capron, Helmut Berger, Václav Holý, **J. Hugo Dil**, and Juraj Krempaský, **Crystals** 9, 335 (2019).
91. *Formation of Sn-Induced Nanowires on Si(557)*, Monika Jäger, Herbert Pfnür, Mauro Fanciulli, Andrew P. Weber, **J. Hugo Dil**, and Christoph Tegenkamp, **Phys. Status Solidi B**, 1900152 (2019).
90. *Spin- and angle-resolved photoemission on topological materials*, **J. Hugo Dil**, **Electronic Structure** 1 023001 (2019). **Topical Review**.
89. *Determination of the time scale of photoemission from the measurement of spin polarization*, Mauro Fanciulli, and **J. Hugo Dil**, **SciPost Physics** 5, 058 (2018).
88. *α -Sn phase on Si(111): Spin texture of a two-dimensional Mott state*, M. Jäger, C. Brand, A. P. Weber, M. Fanciulli, **J. H. Dil**, H. Pfnür, and C. Tegenkamp, **Physical Review B** 98, 165422 (2018).
87. *Spin-Resolved Electronic Response to the Phase Transition in MoTe₂*, Andrew P. Weber, Philipp Rübmann, Nan Xu, Stefan Muff, Mauro Fanciulli, Arnaud Magrez, Philippe Bugnon, Helmuth Berger, Nicholas C. Plumb, Ming Shi, Stefan Blügel, Phivos Mavropoulos, and **J. Hugo Dil**, **Physical Review Letters** 121, 156401 (2018).
86. *Evidence of a Coulomb-Interaction-Induced Lifshitz Transition and Robust Hybrid Weyl Semimetal in Ta-MoTe₂*, N. Xu, Z. W. Wang, A. Magrez, P. Bugnon, H. Berger, C. E. Matt, V. N. Strocov, N. C. Plumb, M. Radovic, E. Pomjakushina, K. Conder, **J. H. Dil**, J. Mesot, R. Yu, H. Ding, and M. Shi, **Physical Review Letters** 121, 136401 (2018).
85. *α -GeTe and (GeMn)Te semiconductors: A new paradigm for spintronics*, J. Krempaský, G. Springholz, J. Minár, and **J. H. Dil**, **AIP Conference Proceedings** 1996, 020026 (2018).
84. *Influence of ferroelectric order on the surface electronic structure of BaTiO₃ films studied by photoemission spectroscopy*, Stefan Muff, Nicolas Pilet, Mauro Fanciulli, Andrew P. Weber, Christian Wessler, Zoran Ristić, Zhiming Wang, Nicholas C. Plumb, Milan Radović, and **J. Hugo Dil**, **Physical Review B** 98, 045132 (2018).
83. *Operando imaging of all-electric spin texture manipulation in ferroelectric and multiferroic Rashba semiconductors*, J. Krempaský, S. Muff, J. Minar, N. Pilet, M. Fanciulli, A.P. Weber, E.B. Guedes, M. Caputo, E. Mueller, V.V. Volobuev, M. Gmitra, C.A.F. Vaz, V. Scagnoli, G. Springholz, **J. H. Dil**, **Physical Review X** 8, 021067 (2018).
82. *Evidence of large spin-orbit coupling effects in quasi-free-standing graphene on Pb/Ir(111)*, M. M. Otrokov, I. I. Klimovskikh, F. Calleja, A. M. Shikin, O. Vilkov, A. G. Rybkin, D. Estyunin, S. Muff, **J. H.**

- Dil**, A.L. Vazquez de Parga, R. Miranda, H. Ochoa, F. Guinea, J. I. Cerda, E. V. Chulkov, A. Arnau, **2D Materials** 5, 035029 (2018).
81. *Universal scattering response across the type-II Weyl semimetal phase diagram*, P. Rübmann, A. P. Weber, F. Glott, N. Xu, M. Fanciulli, S. Muff, A. Magrez, P. Bugnon, H. Berger, M. Bode, **J. H. Dil**, S. Blügel, P. Mavropoulos, and P. Sessi, **Physical Review B** 97, 075106 (2018).
80. *Topological surface state of α -Sn on InSb(001) as studied by photoemission*, M. R. Scholz, V. A. Rogalev, L. Dudy, F. Reis, F. Adler, J. Aulbach, L. J. Collins-McIntyre, L. B. Duffy, H. F. Yang, Y. L. Chen, T. Hesjedal, Z. K. Liu, M. Hoesch, S. Muff, **J. H. Dil**, J. Schäfer, and R. Claessen, **Physical Review B** 97, 075101 (2018).
79. *Spin-resolved electronic structure of ferroelectric α -GeTe and multiferroic $Ge_{1-x}Mn_xTe$* , J. Krempaský, M. Fanciulli, N. Pilet, J. Minar, W. Khan, M. Muntwiler, F. Bertran, S. Muff, A.P. Weber, V.N. Strocov, V.V. Volobuev, G. Springholz, **J.H. Dil**, **Journal of Physics and Chemistry of Solids** 128, 237 (2019).
78. *Observation of a two-dimensional electron gas at CaTiO₃ film surfaces*, Stefan Muff, Mauro Fanciulli, Andrew P. Weber, Nicolas Pilet, Zoran Ristic, Zhiming Wang, Nicholas C. Plumb, Milan Radovic, and **J. Hugo Dil**, **Applied Surface Science** 432, 41 (2018).
77. *Spin-resolved band structure of a densely packed Pb monolayer on Si(111)*, C. Brand, S. Muff, M. Fanciulli, H. Pfnür, M. C. Tringides, **J. H. Dil**, and C. Tegenkamp, **Physical Review B** 96, 035432 (2017).
76. *Spin polarization in photoemission from the cuprate superconductor $Bi_2Sr_2CaCu_2O_{8+\delta}$* , Mauro Fanciulli, Stefan Muff, Andrew P. Weber, **J. Hugo Dil**, **Physical Review B** 95, 245125 (2017).
75. *Clean, cleaved surfaces of the photovoltaic perovskite*, Márton Kollár, Luka Ćirić, **J. Hugo Dil**, Andrew Weber, Stefan Muff, Henrik M. Ronnow, Bálint Náfrádi, Benjamin Pierre Monnier, Jeremy Scott Luterbacher, László Forró, and Endre Horváth, **Scientific Reports** 7, 695 (2017).
74. *Selective probing of hidden spin-polarized states in inversion-symmetric bulk MoS₂*, E. Razzoli, T. Jaouen, M. -L. Mottas, B. Hildebrand, G. Monney, A. Pisoni, S. Muff, M. Fanciulli, N. C. Plumb, V. A. Rogalev, V. N. Strocov, J. Mesot, M. Shi, **J. H. Dil**, H. Beck, and P. Aebi, **Physical Review Letters** 118, 086402 (2017).
73. *Spin polarization and attosecond time delay in photoemission from spin degenerate states of solids*, Mauro Fanciulli, Henrieta Volfová, Stefan Muff, Jürgen Braun, Hubert Ebert, Jan Minár, Ulrich Heinzmann, **J. Hugo Dil**, **Physical Review Letters** 118, 067402 (2017).
72. *Disentangling bulk and surface Rashba effects in ferroelectric α -GeTe*, J. Krempaský, H. Volfová, S. Muff, N. Pilet, G. Landolt, M. Radović, M. Shi, D. Kriegner, V. Holý, J. Braun, H. Ebert, F. Bisti, V. A. Rogalev, V. N. Strocov, G. Springholz, J. Minár, and **J. H. Dil**, **Physical Review B** 94, 205111 (2016).
71. *Entanglement and manipulation of the magnetic and spin-orbit order in multiferroic Rashba semiconductors*, J. Krempasky, S. Muff, F. Bisti, M. Fanciulli, H. Volfova, A. Weber, N. Pilet, P. Warnicke, H. Ebert, J. Braun, J. Minar, G. Springholz, **J. H. Dil**, and V.N. Strocov, **Nature Communications** 7, 13071 (2016).
70. *Spin-resolved photoemission study of epitaxially grown MoSe₂ and WSe₂ thin films*, Sung-Kwan Mo, Choongyu Hwang, Yi Zhang, Mauro Fanciulli, Stefan Muff, **J Hugo Dil**, Zhi-Xun Shen and Zahid Hussain, **Journal of Physics: Condensed Matter** 28, 454001 (2016).
69. *Sputtering-induced reemergence of the topological surface state in Bi₂Se₃*, Raquel Queiroz, Gabriel Landolt, Stefan Muff, Bartosz Slomski, Thorsten Schmitt, Vladimir N. Strocov, Jianli Mi, Bo Brummerstedt Iversen, Philip Hofmann, Jürg Osterwalder, Andreas P. Schnyder, and **J. Hugo Dil**, **Physical Review B** 93, 165409 (2016).
68. *Observation of Fermi-Arc Spin Texture in TaAs*, B. Q. Lv*, S. Muff*, T. Qian, Z. D. Song, S. M. Nie, N. Xu, P. Richard, C. E. Matt, N. C. Plumb, L. X. Zhao, G. F. Chen, Z. Fang, X. Dai, **J. H. Dil**, J. Mesot, M. Shi, H. M. Weng, and H. Ding, **Physical Review Letters** 115, 217601 (2015).
67. *Fermi states and anisotropy of Brillouin zone scattering in the decagonal Al-Ni-Co quasicrystal*, V.A. Rogalev, O. Gröning, R. Widmer, **J.H. Dil**, F. Bisti, L.L. Lev, T. Schmitt, and V.N. Strocov, **Nature Communications** 6, 8607 (2015).
66. *Observation of correlated spin-orbit order in a strongly anisotropic quantum wire system*, C. Brand, H. Pfnür, G. Landolt, S. Muff, **J.H. Dil**, T. Das, and Ch. Tegenkamp, **Nature Communications** 6, 8118 (2015).
65. *Rashba-type spin splitting and spin interference of the Cu(1 1 1) surface state at room temperature*, **J. Hugo Dil**, Fabian Meier, Jürg Osterwalder, **Journal of Electron Spectroscopy and Related Phenomena** 201, 42–46 (2015).

64. *Surface states in lightly hole-doped sodium cobaltate $Na_{1-y}CoO_2$* , Meng-Yu Yao, Lin Miao, N. L. Wang, **J. H. Dil**, M. Z. Hasan, D. D. Guan, C. L. Gao, Canhua Liu, Dong Qian, and Jin-feng Jia, **Physical Review B** 91, 161411(R) (2015).
63. *Concept of a multichannel spin-resolving electron analyzer based on Mott scattering*, Vladimir N. Strocov, Vladimir N. Petrov and **J. Hugo Dil**, **Journal of Synchrotron Radiation** 22, 708 (2015).
62. *Unconventional transformation of spin Dirac phase across a topological quantum phase transition*, Su-Yang Xu, Madhab Neupane, Ilya Belopolski, Chang Liu, Nasser Alidoust, Guang Bian, Shuang Jia, Gabriel Landolt, Bartosz Slomski, **J. Hugo Dil**, Pavel P. Shibayev, Susmita Basak, Tay-Rong Chang, Horng-Tay Jeng, Robert J. Cava, Hsin Lin, Arun Bansil, and M. Zahid Hasan, **Nature Communications** 6, 6870 (2015).
61. *Response of the topological surface state to surface disorder in $TlBiSe_2$* , Florian Pielmeier, Gabriel Landolt, Bartosz Slomski, Stefan Muff, Julian Berwanger, Andreas Eich, Alexander A Khajetoorians, Jens Wiebe, Ziya S Aliev, Mahammad B Babanly, Roland Wiesendanger, Jürg Osterwalder, Evgueni V Chulkov, Franz J Giessibl and **J Hugo Dil**, **New Journal of Physics** 17, 023067 (2015).
60. *Direct measurement of the bulk spin structure of noncentrosymmetric $BiTeCl$* , Gabriel Landolt, Sergey V. Ereemeev, Oleg E. Tereshchenko, Stefan Muff, Konstantin A. Kokh, Jürg Osterwalder, Evgueni V. Chulkov, and **J. Hugo Dil**, **Physical Review B** 91, 081201(R) (2015).
59. *Giant spin splitting of the two-dimensional electron gas at the surface of $SrTiO_3$* , A. F. Santander-Syro, F. Fortuna, C. Bareille, T. C. Rödel, G. Landolt, N. C. Plumb, **J. H. Dil** and M. Radović, **Nature Materials**, 13, 1085 (2014).
58. *Exotic Kondo crossover in a wide temperature region in the topological Kondo insulator SmB_6 revealed by high-resolution ARPES*, N. Xu, C. E. Matt, E. Pomjakushina, X. Shi, R. S. Dhaka, N. C. Plumb, M. Radović, P. K. Biswas, D. Evtushinsky, V. Zabolotnyy, **J. H. Dil**, K. Conder, J. Mesot, H. Ding, and M. Shi, **Physical Review B** 90, 085148 (2014).
57. *Direct observation of the spin texture in SmB_6 as evidence of the topological Kondo insulator*, N. Xu, P. K. Biswas, **J. H. Dil**, R. S. Dhaka, G. Landolt, S. Muff, C. E. Matt, X. Shi, N. C. Plumb, M. Radović, E. Pomjakushina, K. Conder, A. Amato, S. V. Borisenko, R. Yu, H.-M. Weng, Z. Fang, X. Dai, J. Mesot, H. Ding, and M. Shi, **Nature Communications** 5, 4566 (2014).
56. *Spin-correlated electronic state on the surface of a spin-orbit Mott system*, Chang Liu, Su-Yang Xu, Nasser Alidoust, Tay-Rong Chang, Hsin Lin, Chetan Dhital, Sovit Khadka, Madhab Neupane, Ilya Belopolski, Gabriel Landolt, Horng-Tay Jeng, Robert S. Markiewicz, **J. Hugo Dil**, Arun Bansil, Stephen D. Wilson, and M. Zahid Hasan, **Physical Review B** 90, 045127 (2014).
55. *Angle-resolved synchrotron photoemission and density functional theory on the iridium modified $Si(111)$ surface*, Nuri Oncel, Deniz Çakır, **J Hugo Dil**, Bartosz Slomski, and Gabriel Landolt, **Journal of Physics: Condensed Matter** 26, 285501 (2014).
54. *Orbit- and atom-resolved spin textures of intrinsic, extrinsic, and hybridized Dirac cone states*, Lin Miao, Z. F. Wang, Meng-Yu Yao, Fengfeng Zhu, **J. H. Dil**, C. L. Gao, Canhua Liu, Feng Liu, Dong Qian, and Jin-Feng Jia, **Physical Review B** 89, 155116 (2014).
53. *Spin-Orbital Entanglement and the Breakdown of Singlets and Triplets in Sr_2RuO_4 Revealed by Spin- and Angle-Resolved Photoemission Spectroscopy*, C. N. Veenstra, Z.-H. Zhu, M. Raichle, B. M. Ludbrook, A. Nicolaou, B. Slomski, G. Landolt, S. Kittaka, Y. Maeno, **J. H. Dil**, I. S. Elfimov, M. W. Haverkort, and A. Damascelli, **Physical Review Letters** 112, 127002 (2014).
52. *Spin Texture of Bi_2Se_3 Thin Films in the Quantum Tunneling Limit*, Gabriel Landolt, Steffen Schreyeck, Sergey V. Ereemeev, Bartosz Slomski, Stefan Muff, Jürg Osterwalder, Evgueni V. Chulkov, Charles Gould, Grzegorz Karczewski, Karl Brunner, Hartmut Buhmann, Laurens W. Molenkamp, and **J. Hugo Dil**, **Physical Review Letters** 112, 057601 (2014).
51. *Interband spin-orbit coupling between anti-parallel spin states in Pb quantum well states*, Bartosz Slomski, Gabriel Landolt, Stefan Muff, Fabian Meier, Jürg Osterwalder and **J. Hugo Dil**, **New Journal of Physics** 15, 125031 (2013).
50. *Elemental Topological Insulator with Tunable Fermi Level: Strained α - Sn on $InSb(001)$* , A. Barfuss, L. Dudy, M. R. Scholz, H. Roth, P. Höpfner, C. Blumenstein, G. Landolt, **J. H. Dil**, N. C. Plumb, M. Radovic, A. Bostwick, E. Rotenberg, A. Fleszar, G. Bihlmayer, D. Wortmann, G. Li, W. Hanke, R. Claessen, and J. Schäfer, **Physical Review Letters** 111, 157205 (2013).
49. *Surface and bulk electronic structure of the strongly correlated system SmB_6 and implications for a topological Kondo insulator*, N. Xu, X. Shi, P.K. Biswas, C.E. Matt, R.S. Dhaka, Y. Huang, N.C. Plumb,

- M. Radovic, **J.H. Dil**, E. Pomjakushina, K. Conder, A. Amato, Z. Salman, D. McK Paul, J. Mesot, H. Ding, and M. Shi, **Physical Review B** 88, 121102(R) (2013).
48. *Bulk and surface Rashba splitting in single termination BiTeCl*, Gabriel Landolt, Sergey V Eremeev, Oleg E Tereshchenko, Stefan Muff, Bartosz Slomski, Konstantin A Kokh, Masaki Kobayashi, Thorsten Schmitt, Vladimir N Strocov, Jürg Osterwalder, Evgueni V Chulkov and **J. Hugo Dil**, **New Journal of Physics** 15, 085022 (2013).
47. *Separating the bulk and surface n- to p-type transition in the topological insulator $GeBi_{4-x}Sb_xTe_7$* , Stefan Muff, Fabian von Rohr, Gabriel Landolt, Bartosz Slomski, Andreas Schilling, Robert J. Cava, Jürg Osterwalder, and **J. Hugo Dil**, **Physical Review B** 88, 035407 (2013).
46. *Tuning of the Rashba effect in Pb quantum well states via a variable Schottky barrier*, B. Slomski, G. Landolt, G. Bihlmayer, J. Osterwalder & **J.H. Dil**, **Nature Scientific Reports** 3, 1963 (2013).
45. *Excitation of Coherent Phonons in the One-Dimensional Bi(114) Surface*, D. Leuenberger, H. Yanagisawa, S. Roth, **J.H. Dil**, J.W. Wells, P. Hofmann, J. Osterwalder, and M. Hengsberger, **Physical Review Letters** 110, 136806 (2013).
44. *Observation of a topological crystalline insulator phase and topological phase transition in $Pb_{1-x}Sn_xTe$* , SY. Xu, C Liu, N. Alidoust, M. Neupane, D. Qian, I. Belopolski, J.D. Denlinger, Y.J. Wang, H. Lin, L.A. Wray, G. Landolt, B. Slomski, **J.H. Dil**, A. Marcinkova, E. Morosan, Q. Gibson, R. Sankar, F.C. Chou, R.J. Cava, A. Bansil, and M.Z. Hasan, **Nature Communications** 3 (2012) 1192. doi:10.1038/ncomms2191
43. *Fermi Nesting between Atomic Wires with Strong Spin-Orbit Coupling*, C. Tegenkamp, D. Lükermann, H. Pfnür, B. Slomski, G. Landolt, and **J. H. Dil**, **Physical Review Letters** 109, 266401 (2012).
42. *Disentanglement of Surface and Bulk Rashba Spin Splittings in Noncentrosymmetric BiTeI*, Gabriel Landolt, Sergey V. Eremeev, Yury M. Koroteev, Bartosz Slomski, Stefan Muff, Titus Neupert, Masaki Kobayashi, Vladimir N. Strocov, Thorsten Schmitt, Ziya S. Aliev, Mahammad B. Babanly, Imamaddin R. Amiraslanov, Evgueni V. Chulkov, Jürg Osterwalder, and **J. Hugo Dil**, **Physical Review Letters** 109, 116403 (2012).
41. *Hedgehog spin texture and Berry's phase tuning in a magnetic topological insulator*, SY. Xu, M. Neupane, C. Liu, D. Zhang, A. Richardella, L. A. Wray, N. Alidoust, M. Leandersson, T. Balasubramanian, J. Sanchez-Barriga, O. Rader, G. Landolt, B. Slomski, **J.H. Dil**, J. Osterwalder, TR. Chang, HT. Jeng, H. Lin, A. Bansil, N. Samarth, and M. Zahid Hasan, **Nature Physics** 8 616 (2012).
40. *Three-Dimensional Spin Rotations at the Fermi Surface of a Strongly Spin-Orbit Coupled Surface System*, P. Höpfner, J. Schäfer, A. Fleszar, **J. H. Dil**, B. Slomski, F. Meier, C. Loho, C. Blumenstein L. Patthey, W. Hanke, and R. Claessen, **Physical Review Letters** 108, 186801 (2012).
39. *Spin-orbit-induced photoelectron spin polarization in angle-resolved photoemission from both atomic and condensed matter targets*, U. Heinzmann and **J.H. Dil**, **Journal of Physics: Condensed Matter** 24, 173001 (2012). **Topical Review**.
38. *Atom-specific spin mapping and buried topological states in a homologous series of topological insulators*, Sergey V. Eremeev, Gabriel Landolt, Tatiana V. Menshchikova, Bartosz Slomski, Yury M. Koroteev, Ziya S. Aliev, Mahammad B. Babanly, Jürgen Henk, Arthur Ernst, Luc Patthey, Andreas Eich, Alexander Ako Khajetoorians, Julian Hagemester, Oswald Pietzsch, Jens Wiebe, Roland Wiesendanger, Pedro M. Echenique, Stepan S. Tsirkin, Imamaddin R. Amiraslanov, **J. Hugo Dil**, and Evgueni V. Chulkov, **Nature Communications** 3:635 (2012) DOI: 10.1038/ncomms1638
37. *Manipulating the Rashba-type spin splitting and spin texture of Pb quantum well states*, B. Slomski, G. Landolt, F. Meier, J. Osterwalder, and **J.H. Dil**, **Physical Review B** 84, 193406(B) (2011).
36. *Large Tunable Rashba Spin Splitting of a Two-Dimensional Electron Gas in Bi_2Se_3* , P.D.C. King, R.C. Hatch, M. Bianchi, R. Ovsyannikov, C. Lupulescu, G. Landolt, B. Slomski, **J.H. Dil**, D. Guan, J.L. Mi, E.D.L. Rienks, J. Fink, A. Lindblad, S. Svensson, S. Bao, G. Balakrishnan, B.B. Iversen, J. Osterwalder, W. Eberhardt, F. Baumberger, and P. Hofmann, **Physical Review Letters** 107, 096802 (2011).
35. *Tuning the spin texture in binary and ternary surface alloys on Ag(111)*, I. Gierz, F. Meier, **J.H. Dil**, K. Kern, and C.R. Ast, **Physical Review B** 83, 195122 (2011).
34. *Topological Phase Transition and Texture Inversion in a Tunable Topological Insulator*, Su-Yang Xu, Y. Xia, L. A. Wray, S. Jia, F. Meier, **J. H. Dil**, J. Osterwalder, B. Slomski, A. Bansil, H. Lin, R. J. Cava, and M. Z. Hasan, **Science** 332, 560 (2011).

33. *Strongly enhanced electron-phonon coupling in the Rashba-split state of the Bi/Ag(111) surface alloy*, D.D. Guan, M. Bianchi, S.N. Bao, E. Perkins, F. Meier, **J.H. Dil**, J. Osterwalder, and P. Hofmann, **Physical Review B** 83, 155451 (2011).
32. *Interference of spin states in photoemission from Sb/Ag(111) surface alloys*, F. Meier, V. Petrov, H. Mirhosseini, L. Patthey, J. Henk, J. Osterwalder, and **J.H. Dil**, **Journal of Physics: Condensed Matter** 23, 072207 (2011).
31. *Controlling the effective mass of quantum well states in Pb/Si(111) by interface engineering*, B. Slomski, F. Meier, J. Osterwalder, and **J.H. Dil**, **Physical Review B** 83, 035409 (2011).
30. *Direct observation of spin-polarized surface states in the parent compound of a topological insulator using spin- and angle-resolved photoemission spectroscopy in a Mott-polarimetry mode*, D. Hsieh, L. Wray, D. Qian, Y. Xia, **J.H. Dil**, F. Meier, L. Patthey, J. Osterwalder, G. Bihlmayer, Y. S. Hor, R. J. Cava, and M. Z. Hasan, **New Journal of Physics** 12, 125001 (2010).
29. *Structural influence on the Rashba-type spin splitting in surface alloys*, Isabella Gierz, Benjamin Stadtmüller, Johannes Vuorinen, Matti Lindroos, Fabian Meier, **J. Hugo Dil**, Klaus Kern, and Christian R. Ast, **Physical Review B** 81, 245430 (2010).
28. *Robust Spin Polarization and Spin Textures on Stepped Au(111) Surfaces*, Jorge Lobo-Checa, Fabian Meier, **Jan Hugo Dil**, Taichi Okuda, Martina Corso, Vladimir N. Petrov, Matthias Hengsberger, Luc Patthey, and Jürg Osterwalder, **Physical Review Letters** 104, 187602 (2010).
27. *Influence of the substrate lattice structure on the formation of quantum well states in thin In and Pb films on silicon*, **J H Dil**, B Hülsen, T U Kampen, P Kratzer and K Horn, **Journal of Physics: Condensed Matter** 22, 135008 (2010).
26. *Spintronics without magnetism?*, **J.H. Dil**, **SPG Mitteilungen** 30, 8 (2010).
25. *Measuring spin polarization vectors in angle-resolved photoemission spectroscopy*, F. Meier, **J. H. Dil**, and J. Osterwalder, **New Journal of Physics** 11, 125008 (2009).
24. *Observation of Time-Reversal-Protected Single-Dirac-Cone Topological-Insulator States in Bi₂Te₃ and Sb₂Te₃*, D. Hsieh, Y. Xia, D. Qian, L. Wray, F. Meier, **J. H. Dil**, J. Osterwalder, L. Patthey, A. V. Fedorov, H. Lin, A. Bansil, D. Grauer, Y. S. Hor, R. J. Cava, and M. Z. Hasan, **Physical Review Letters** 103, 146401 (2009).
23. *Spin and angle resolved photoemission on non-magnetic low-dimensional systems*, **J. Hugo Dil**, **Journal of Physics: Condensed Matter** 21, 403001 (2009).
Topical Review.
22. *A tunable topological insulator in the spin helical Dirac transport regime*, D. Hsieh, Y. Xia, D. Qian, L. Wray, **J. H. Dil**, F. Meier, J. Osterwalder, L. Patthey, J. G. Checkelsky, N. P. Ong, A. V. Fedorov, H. Lin, A. Bansil, D. Grauer, Y. S. Hor, R. J. Cava, and M. Z. Hasan, **Nature** 460, 1101 (2009).
21. *Band Formation from Coupled Quantum Dots Formed by a Nanoporous Network on a Copper Surface*, Jorge Lobo-Checa, Manfred Matena, Kathrin Müller, **Jan Hugo Dil**, Fabian Meier, Lutz H. Gade, Thomas A. Jung, and Meike Stöhr, **Science**, 325, 300 (2009).
20. *Unconventional Fermi surface spin textures in the Bi_xPb_{1-x}/Ag(111) surface alloy*, Fabian Meier, Vladimir Petrov, Sebastian Guerrero, Christopher Mudry, Luc Patthey, Jürg Osterwalder, and **J. Hugo Dil**, **Physical Review B** 79, 241408(R) (2009). Editorial suggestion.
19. *Nondegenerate Metallic States on Bi(114): A One-Dimensional Topological Metal*, J.W. Wells, **J. H. Dil**, F. Meier, J. Lobo-Checa, V. N. Petrov, J. Osterwalder, M. M. Ugeda, I. Fernandez-Torrente, J. I. Pascual, E. D. L. Rienks, M. F. Jensen, and Ph. Hofmann, **Physical Review Letters** 102, 096802 (2009).
18. *Observation of unconventional spin textures in topological insulators*, D. Hsieh, Y. Xia, L. Wray, D. Qian, A. Pal, **J.H. Dil**, F. Meier, G. Bihlmayer, L. Patthey, J. Osterwalder, C. L. Kane, Y. S. Hor, R. J. Cava, M. Z. Hasan, **Science** 323, 919 (2009).
17. *Comparison of electronic structure and template function of single-layer graphene and a hexagonal boron nitride nanomesh on Ru(0001)*, T. Brugger, S. Günther, B. Wang, **J.H. Dil**, M.-L. Bocquet, J. Osterwalder, J. Wintterlin, T. Greber, **Physical Review B** 79, 045407 (2009).
16. *Rashba-type spin-orbit splitting of quantum well states in ultrathin Pb films*, **Hugo Dil**, Fabian Meier, Jorge Lobo-Checa, Luc Patthey, Gustav Bihlmayer, and Jürg Osterwalder, **Physical Review Letters** 101, 266802 (2008).
15. *Coexistence of Racemic and Homochiral Two-Dimensional Lattices Formed by a Prochiral Molecule: Dicarboxystilbene on Cu(110)*, R. Cortés, P.M. Schmidt-Weber, **J.H. Dil**, A. Mascaraque, K. Horn, and T.U. Kampen, **Nano Letters** 2008, 8 (12), 4162

14. *Quantitative vectorial spin analysis in angle-resolved photoemission: Bi/Ag(111) and Pb/Ag(111)*, Fabian Meier, **Hugo Dil**, Jorge Lobo-Checa, Luc Patthey, and Jürg Osterwalder, **Physical Review B** 77, 165431 (2008).
13. *Surface trapping of atoms and molecules with dipole rings*, **Hugo Dil**, Jorge Lobo-Checa, Robert Laskowski, Peter Blaha, Simon Berner, Jürg Osterwalder, and Thomas Greber, **Science** 319, 1824 (2008).
12. *Coupled Pb-chains on Si(557): origin of one-dimensional conductance*, C. Tegenkamp, T. Ohta, J. L. McChesney, **H. Dil**, E. Rotenberg, H. Pfnür, and K. Horn, **Physical Review Letters** 100, 076802 (2008).
11. *Quantum size effects in Pb/Si(111) investigated by laser-induced photoemission*, P.S. Kirchmann, M. Wolf, **J.H. Dil**, K. Horn, and U. Bovensiepen, **Physical Review B** 76, 075406 (2007).
10. *Conformational isomers of stilbene on Si(1 0 0)*, P.M. Schmidt, K. Horn, **J.H. Dil**, and T.U. Kampen, **Surface Science** 601, 8, 1775 (2007).
9. *Quantum size effects in quasi-free-standing Pb layers*, **J.H. Dil**, T.U. Kampen, B. Hülsen, T. Seyller, and K. Horn, **Physical Review B** (rapid communication) 75, 161401 (2007).
8. *Circular Dichroism in Photoelectrons from Adsorbed Chiral Molecules*, J.W. Kim, **J.H. Dil**, T.U. Kampen, and K. Horn, **AIP Conf. Proc.** 879, 1607-1610 (2007).
7. *Electron localisation in metallic quantum wells – Pb vs. In on Si(111)*, **J.H. Dil**, T.U. Kampen, K. Horn, and A.R.H.F. Ettema, **Physical Review B** (rapid communication) 73, 161308 (2006).
6. *Landkarten von elektronischen Strukturen*, **J.H. Dil**, T.U. Kampen, T. Seyller, and K. Horn, **Physik Journal** 5 (2006) nr3, 84.
5. *Surface relaxations in quantum confined Pb*, A. Mans, **J.H. Dil**, A.R.H.F. Ettema, and H.H. Weitering, **Physical Review B** 72, 155442 (2005).
4. *Atom-specific identification of adsorbed chiral molecules by photoemission*, J. W. Kim, M. Carbone, **J. H. Dil**, M. Tallarida, R. Flammini, M. P. Casaletto, K. Horn, and M. N. Piancastelli, **Physical Review Letters** 95, 107601 (2005).
3. *Adsorption of 2,3-butanediol on a Si(100) surface*, J. W. Kim, M. Carbone, **J. H. Dil**, M. Tallarida, R. Flammini, M. P. Casaletto, K. Horn, and M. N. Piancastelli, **Surface Science** 559, 2-3, 179 (2004).
2. *Self-organization of Pb thin films on Cu(111) induced by Quantum Size Effects*, **J.H. Dil**, J.W. Kim, S. Gokhale, M. Tallarida, and K. Horn, **Physical Review B** 70, 045405 (2004).
1. *Quantum electronic stability and spectroscopy of ultrathin Pb films on Si(111) 7x7*, A. Mans, **J.H. Dil**, A.R.H.F. Ettema, and H.H. Weitering, **Physical Review B** 66, 195410 (2002).