

PUBLICATIONS OF A.P. MACKENZIE

1. *Characterisation and Transport Measurements on Single Crystals in the Bi-Sr-Cu-O System*,
A.P. Mackenzie, E. Marseglia, I. Marsden, G. Lonzarich, C. Chen and B. Wanklyn, *Physica C* **162-164**, 1029 (1989).
2. *A Method to Overcome the Problem of Small Sample Tilts in Light Element Electron Microprobe Analysis*,
A. P. Mackenzie, Proceedings of the XIIth International Conference on Electron Microscopy, Vol 2, p. 221 (pub. San Francisco Press) (1990).
3. *Growth and Characterisation of Co-doped YBa₂Cu₃O_{7-x} Single Crystals*,
C.T. Lin, S.X. Li, W.Z. Zhou, A.P. Mackenzie and W.Y. Liang, *Physica C* **176**, 285 (1991).
4. *Transparent Conducting Thin Films: Precise Measurement of the Oxygen Content*,
J.R. Bellingham, A.P. Mackenzie and W. A. Phillips, *Appl. Phys. Lett.* **58**, 2506 (1991).
5. *Accurate Metal and Oxygen Analyses of Cuprate Single Crystals by Electron Probe Microanalysis*,
A.P. Mackenzie, *Physica C* **178**, 365 (1991).
6. *Temperature Dependence of Stoichiometry of Laser Ablated YBa₂Cu₃O_{7-x} Thin Films*,
K. Scott, A.P. Mackenzie, W. Dineen and W. A. Phillips, *Physica C* **185-9**, 1983 (1991).
7. *Single Crystal Hall Effect and Stoichiometry in "Bi₂Sr₂CuO₆"*,
S.D. Hughes, A.P. Mackenzie, J.R. Cooper, A. Carrington and J.S. Edmonds, *Physica C* **185-9**, 1243 (1991).
8. *Low Temperature Hall Effect in Bi₂Sr₂CuO_{6-δ}*,
A.P. Mackenzie, S.D. Hughes, J.R. Cooper, A. Carrington, C.Chen and B.M. Wanklyn, *Phys. Rev. B* **45**, 527 (1992).
9. *0.7 eV Excitation in YBa₂Cu₃O_{7-x}: Evidence from Single Crystal and Powder Samples*,
H.L. Dewing, E.K.H. Salje, K. Scott and A.P. Mackenzie, *J. Phys. C* **4**, L109 (1992).
10. *The growth of Zn-doped YBCO single crystals*,
C.T. Lin, S.X. Li, A.P. Mackenzie, W. Zhou, P.D. Hunneyball and W.Y. Liang, *Physica C* **193**, 129 (1992).
11. *Crystal Structure and Cation Stoichiometry of Superconducting Tl₂Ba₂CuO_{6+δ} Single Crystals*,
R.S. Liu, S.D. Hughes, R.J. Angel, T.P. Hackwell, A.P. Mackenzie and P.P. Edwards *Physica C* **198**, 203 (1992).

12. *The Variable Voltage Method for Calculating the Absorption Correction for Soft X-Rays*,
A.P. Mackenzie, in 'X-Ray Optics and Microanalysis 1992' eds. P.B. Kenway et al, pub. IOP Press, p. 127 (1992).
13. *Temperature Dependence of the Hall Angle in $YBa_2(Cu_{1-x}Co_x)_3O_{7-\delta}$* ,
A. Carrington, A.P. Mackenzie, C.T. Lin and J.R. Cooper, Phys. Rev. Lett. **69**, 2855 (1992).
14. *Recent Progress in Electron Probe Microanalysis*,
A.P. Mackenzie, Rep. Prog. Phys. **56**, 557 (1993) (An invited review article of 25000 words).
15. *Resistive Upper Critical Field of $Tl_2Ba_2CuO_6$ at Low Temperatures and High Magnetic Fields*,
A.P. Mackenzie, S.R. Julian, G.G. Lonzarich, A. Carrington, S.D. Hughes, R.S. Liu and D.C. Sinclair, Phys. Rev. Lett. **71**, 1238 (1993).
16. *Hall Effect and Resistivity of Oxygen-Deficient $YBa_2Cu_3O_{7-x}$ Thin Films*,
A. Carrington, D.J.C. Walker, A.P. Mackenzie and J.R. Cooper, Phys.Rev. B **48**, 13051 (1993).
17. *Resistive Upper Critical Field of Single Crystals of $Tl_2Ba_2CuO_6$* ,
A.P. Mackenzie, S.R. Julian, G.G. Lonzarich, A. Carrington, S.D. Hughes, R.S. Liu and D.C. Sinclair, Journal of Superconductivity **7**, 271 (1994).
18. *The Field Dependence of the Resistive Transition in $Tl_2Ba_2CuO_{6+\delta}$*
A. Carrington, A.P. Mackenzie, D.C. Sinclair and J.R. Cooper, Phys. Rev. B **49**, 13243 (1994).
19. *Flux Growth of Single Crystals of $(Sr,Ca)CuO_2$* ,
C.T. Lin, W. Zhou, A.P.Mackenzie, F. Gauthier and W.Y. Liang, Journal of Crystal Growth **140**, 72 (1994).
20. *The Resistive Upper Critical Field of the Cuprate Superconductors*,
A.P. Mackenzie, S.R. Julian, A. Carrington, G.G. Lonzarich, D.J.C. Walker, J.R. Cooper and D.C. Sinclair, Physica C **235-240**, 233 (1994).
21. *The Effect of Oxygen Depletion on the In-Plane Resistivity and Hall Coefficient of Crystalline Thin Films of $YBa_2(Cu_{1-x}Zn_x)_3O_{7-\delta}$*
D.J.C. Walker, A.P. Mackenzie and J.R. Cooper, Physica C **235-240**, 1335 (1994).
22. *Effects of Annealing Treatments on La doped Bi-2201 Single Crystals*,
Y. Dumont, C. Ayache, A. Carrington, G. Collin, S. Megtert and A.P. Mackenzie, Physica C **235-240**, 1515 (1994).

23. *Low energy excitations of highly correlated electron systems*,
S.R. Julian, A.P. Mackenzie, G.J. McMullan, C. Pfleiderer, F.S. Tautz, I.R.
Walker and G.G. Lonzarich, *J. Low Temp. Phys.* **95**, 39 (1994).
24. *The Resistive Upper Critical Field of Oxygen-Deficient*
 $YBa_2(Cu_{1-x}Zn_x)_3O_{7-\delta}$,
D.J.C. Walker, O. Laborde, A.P. Mackenzie, S.R. Julian, A. Carrington, J.W. Loram and J.R.
Cooper, *Phys. Rev. B* **51**, 9375 (1995).
25. *The Structure and Stoichiometry of Orthorhombic and Tetragonal*
 $Tl_2Ba_2CuO_6$ *by Resonant Synchrotron X-ray Diffraction and Electron Probe*
Microanalysis,
M.G. Aranda, D.C. Sinclair, J.P. Attfield and A.P. Mackenzie, *Phys. Rev. B* **51**, 12747
(1995).
26. *Transport Properties of Zinc-doped $YBa_2Cu_3O_{7-\delta}$ Thin Films*,
D.J.C. Walker, A.P. Mackenzie and J.R. Cooper, *Phys. Rev. B* **51**, 15653 (1995).
27. *Normal State Magnetotransport in Superconducting $Tl_2Ba_2CuO_{6+\delta}$ down to*
Millikelvin Temperatures,
A.P. Mackenzie, S.R. Julian, C.T. Lin and D.C. Sinclair, *Phys. Rev. B* **53**, 5848 (1996).
28. *Novel Anisotropic Fermi-Liquid Behaviour of a Superconducting Layered*
Perovskite: Sr_2RuO_4 ,
Y. Maeno, H. Hashimoto, K. Yoshida, S. Nishizaki, M. Nohara, T. Fujita, J.G. Bednorz, F.
Lichtenberg, A.P. Mackenzie and N.E. Hussey, *J. Phys. Soc. Japan* **66**, 1405 (1997).
29. *Observation of Quantum Oscillations in Sr_2RuO_4* ,
A.P. Mackenzie, S.R. Julian, A.J. Diver, G.J. McMullan, G.G. Lonzarich, Y. Maeno, S.
Nishizaki and T. Fujita, *Proc. 2nd Conference on Physical Phenomena at High Magnetic*
Fields, eds. Z. Fisk, L. Gor'kov, D. Meltzer and R. Schrieffer, pub. World Scientific p. 537
(1996).
30. *Angular Dependence of the C-axis Normal State Magnetoresistance in*
Single Crystal $Tl_2Ba_2CuO_{6+\delta}$,
N.E. Hussey, J.R. Cooper, J.M. Wheatley, I.R. Fisher, A. Carrington, A.P. Mackenzie, C.T.
Lin and O. Milat, *Phys. Rev. Lett.* **76**, 122 (1996).
31. *Quantum Oscillations in the Layered Perovskite Superconductor Sr_2RuO_4* ,
A.P. Mackenzie, S.R. Julian, A.J. Diver, G.J. McMullan, M.P. Ray, G.G. Lonzarich, Y.
Maeno, S. Nishizaki and T. Fujita, *Phys. Rev. Lett.* **76**, 3786 (1996).

32. *Calculation of Thermodynamic and Transport Properties of Sr_2RuO_4 at Low Temperatures Using Known Fermi Surface Parameters*,
A.P. Mackenzie, S.R. Julian, A.J. Diver, G.G. Lonzarich, N.E. Hussey, Y. Maeno, S. Nishizaki and T. Fujita, *Physica C* **263**, 510 (1996).
33. *The Low Temperature Properties of Overdoped $Tl_2Ba_2CuO_{6+\delta}$* ,
A.P. Mackenzie and S.R. Julian, *Proceedings of the Eighth International Symposium on Superconductivity*, Springer Verlag (1996).
34. *The Hall Effect in the Two-Dimensional Metal Sr_2RuO_4* ,
A.P. Mackenzie, N.E. Hussey, A.J. Diver, S.R. Julian, Y. Maeno, S. Nishizaki and T. Fujita, *Phys. Rev. B* **54**, 7425 (1996).
35. *Specific Heat of Low- T_c $Tl_2Ba_2CuO_{6+\delta}$* ,
A. Carrington, A.P. Mackenzie and A.W. Tyler, *Phys. Rev. B* **54**, 3788 (1996).
36. *Comment on "Extended Van Hove Singularity in a Noncuprate Layered Superconductor Sr_2RuO_4 "*,
A.P. Mackenzie, S.R. Julian, G.G. Lonzarich, Y. Maeno and T. Fujita, *Phys. Rev. Lett.* **78** 2271 (1997).
37. *Effect of the Reversibility Region on the Low Temperature Vortex Structure Imaged by Bitter Magnetic Decoration*,
F. Pardo, A.P. Mackenzie, F. de la Cruz and J. Guimpel, *Phys. Rev. B* **55**, 14610 (1997).
38. *Hall Effect of Single Layer, Tetragonal $Tl_2Ba_2CuO_{6+\delta}$ Near Optimal Doping*,
A.W. Tyler and A.P. Mackenzie *Physica C* **282-287**, 1185 (1997).
39. *Ab-plane Surface Impedance of the Single-Layer Cuprate $Tl_2Ba_2CuO_{6+\delta}$* ,
D.M. Broun, D. Morgan, R. Ormeno, A.W. Tyler, A.P. Mackenzie and J.R. Waldram, *Physica C* **282-287**, 1467 (1997).
40. *In-plane Microwave Conductivity of the Single-Layer Cuprate $Tl_2Ba_2CuO_{6+\delta}$* ,
D.M. Broun, D.C. Morgan, R.J. Ormeno, S.F. Lee, A.W. Tyler, A.P. Mackenzie and J.R. Waldram, *Phys. Rev. B* **56**, R11443 (1997).
41. *High Field Study of Normal State Magneto-transport in $Tl_2Ba_2CuO_{6+\delta}$* ,
A.W. Tyler, Y. Ando, F.F. Balakirev, A. Passner, G.S. Boebinger, A.J. Schofield, A.P. Mackenzie and O. Laborde, *Phys. Rev. B* **57**, R728 (1998).
42. *Extremely Strong Dependence of Superconductivity on Disorder in Sr_2RuO_4* ,
A.P. Mackenzie, R.K.W. Haselwimmer, A.W. Tyler, G.G. Lonzarich, Y. Mori, S. Nishizaki and Y. Maeno, *Phys. Rev. Lett.* **80**, 161 (1998).

43. *The Fermi Surface Topography of Sr_2RuO_4* ,
A.P. Mackenzie, S. Ikeda, Y. Maeno, T. Fujita, S.R. Julian and G.G. Lonzarich, J. Phys. Soc. Jpn. **67**, 385 (1998).
44. *Normal State Magnetoresistance of Sr_2RuO_4* ,
N.E. Hussey, A.P. Mackenzie, J.R. Cooper, S. Nishizaki, Y. Maeno and T. Fujita, Phys. Rev. B **57**, 5505 (1998).
45. *Superconducting Magnetisation above the Irreversibility Line in $Tl_2Ba_2CuO_{6+\delta}$* ,
C. Bergemann, A.W. Tyler, A.P. Mackenzie, J.R. Cooper, S.R. Julian and D.E. Farrell, Phys. Rev. B **57**, 14387 (1998).
46. *High Temperature Resistivity of Sr_2RuO_4 : Bad Metallic Transport in a Good Metal*,
A.W. Tyler, A.P. Mackenzie, S. NishiZaki and Y. Maeno, Phys. Rev. B **58**, R10107 (1998).
47. *Observation of a Square Flux Line Lattice in the Unconventional Superconductor Sr_2RuO_4* ,
T.M. Riseman, P.G. Kealey, E.M. Forgan, A.P. Mackenzie, L.M. Galvin, A.W. Tyler, S.L. Lee, C. Ager, D. McK. Paul, C.M. Aegerter, R. Cubitt, Z.Q. Mao, T. Akima and Y. Maeno, Nature **396**, 242 (1998).
48. *Observation of Quantum Oscillations in the Electrical Resistivity of $SrRuO_3$* ,
A.P. Mackenzie, J.W. Reiner, A.W. Tyler, L.M. Galvin, S.R. Julian, M.R. Beasley, T.H. Geballe and A. Kapitulnik, Phys. Rev. B **58**, R13318 (1998).
49. *Sr_2RuO_4 : Normal State Properties and the Effect of Disorder*,
A.P. Mackenzie, J. Supercon. **12**, 543 (1999).
50. *Normal State, Superconductivity and Quasiparticle Fermi Surface of the Strongly Correlated Oxide Sr_2RuO_4* ,
S.R. Julian, A.P. Mackenzie, G.G. Lonzarich, C. Bergemann, R.K.W. Haselwimmer, Y. Maeno, S. NishiZaki, A.W. Tyler, S. Ikeda and T. Fujita, Physica B **261**, 928 (1999).
51. *Quantum Oscillations and Overcritical Torque Interaction in Sr_2RuO_4* ,
C. Bergemann, S.R. Julian, A.P. Mackenzie, A.W. Tyler, D.E. Farrell, Y. Maeno and S. NishiZaki, Physica C **318**, 444 (1999).
52. *The Unconventional Superconductivity of Sr_2RuO_4* ,
E.M. Forgan, A.P. Mackenzie and Y. Maeno, J. Low Temp. Phys. **117**, 1567 (1999).
53. *Detailed Fermi surface topography of Sr_2RuO_4* ,
C. Bergemann, S.R. Julian, A.P. Mackenzie, S. Nishizaki and Y. Maeno, Phys. Rev. Lett. **84**, 2662 (2000).

54. *Vortex lattice structures and pairing symmetry in Sr_2RuO_4* ,
D.F. Agterberg, R. Heeb, P.G. Kealey, T.M. Riseman, E.M. Forgan, A.P. Mackenzie, L.M. Galvin, R.S. Perry, S.L. Lee, D. M^cK. Paul, R. Cubitt, Z.Q. Mao, S. Akima and Y. Maeno, *Physica C* **341**, 1643 (2000).
55. *A reconstruction from small-angle neutron scattering measurements of the real space magnetic field distribution in the mixed state of Sr_2RuO_4*
P.G. Kealey, T.M. Riseman, E.M. Forgan, L.M. Galvin, A.P. Mackenzie, S.L. Lee, D. M^cK. Paul, R. Cubitt, D.F. Agterberg, R. Heeb, Z.Q. Mao and Y. Maeno, *Phys. Rev. Lett.* **84**, 6094 (2000).
56. *P-wave superconductivity*
A.P. Mackenzie and Y. Maeno, *Physica B* **280**, 148 (2000).
57. *Hall effect of $Sr_3Ru_2O_7$*
R.S. Perry, L.M. Galvin, A.P. Mackenzie, D.M. Forsythe, S.R. Julian, S. Ikeda and Y. Maeno, *Physica B* **280**, 1469 (2000).
58. *Metamagnetism and critical fluctuations in high quality single crystals of the bilayer ruthenate $Sr_3Ru_2O_7$*
R.S. Perry, L.M. Galvin, S.A. Grigera, L. Capogna, A.J. Schofield, A.P. Mackenzie, M. Chiao, S.R. Julian, S. Ikeda, S. Nakatsuji, Y. Maeno and C. Pfleiderer, *Phys. Rev. Lett.* **86**, 2661 (2001).
59. *The Hall effect in single crystal $Ca_{2-x}Sr_xRuO_4$*
L.M. Galvin, R.S. Perry, A.W. Tyler, A.P. Mackenzie, S. Nakatsuji and Y. Maeno, *Phys. Rev. B* **63**, 161102 (2001).
60. *Normal state of the unconventional superconductor Sr_2RuO_4 in high magnetic fields*
C. Bergemann, J.S. Brooks, L. Balicas, A.P. Mackenzie, S.R. Julian, Z.Q. Mao and Y. Maeno, *Physica B* **294**, 371 (2001).
61. *Magnetic-field tuned quantum criticality in the metallic ruthenate $Sr_3Ru_2O_7$*
S.A. Grigera, R.S. Perry, A.J. Schofield, M. Chiao, S.R. Julian, G.G. Lonzarich, S.I. Ikeda, Y. Maeno, A.J. Millis and A.P. Mackenzie, *Science* **294**, 329 (2001).
62. *Sensitivity to disorder of the metallic state in ruthenates*
L. Capogna, A.P. Mackenzie, R.S. Perry, S.A. Grigera, L.M. Galvin, P. Raychaudhuri, A.J. Schofield, C.S. Alexander, G. Cao, S.R. Julian and Y. Maeno, *Phys. Rev. Lett.* **88**, 076602 (2002).
63. *Induced metamagnetism in the itinerant bilayer ruthenate $Sr_3Ru_2O_7$*
L. Capogna, E.M. Forgan, G.J. McIntyre, N. Burton, P.G. Kealey, R.S. Perry, L.M. Galvin, A.P. Mackenzie, S. Ikeda and Y. Maeno, *Appl. Phys. A* **74**, S926 (2002).

64. *Fermi liquid ground state in overdoped cuprates*
C. Proust, E. Boaknin, R.W. Hill, L. Taillefer and A.P. Mackenzie, Phys. Rev. Lett. **89**, 147003 (2002).
65. *Novel quantum order in the ruthenates*
A.P. Mackenzie, Y. Maeno and S.R. Julian, Physics World **15**, 33 (2002).
66. *Evolution of Fermi liquid interactions in Sr_2RuO_4 under pressure*
D. Forsythe, S.R. Julian, C. Bergemann, E. Pugh, M.J. Steiner, P.L. Alireza, G.J. McMullan, F. Nakamura, R.K.W. Haselwimmer, I.R. Walker, S.S. Saxena, G.G. Lonzarich, A.P. Mackenzie, Z.Q. Mao and Y. Maeno, Phys. Rev. Lett. **89**, 166402 (2002).
67. *A metamagnetic quantum critical end point in $Sr_3Ru_2O_7$*
S.A. Grigera, A.P. Mackenzie, A.J. Schofield, S.R. Julian and G.G. Lonzarich, Int. J. Mod. Phys. B **16**, 3258 (2002).
68. *Observation of two-dimensional spin fluctuations in the bilayer ruthenate $Sr_3Ru_2O_7$ by inelastic neutron scattering*
L. Capogna, E.M. Forgan, S.M. Hayden, A. Wildes, J.A. Duffy, A.P. Mackenzie, R.S. Perry, S. Ikeda, Y. Maeno and S.P. Brown, Phys. Rev. B **67**, 012504 (2003).
69. *The superconductivity of Sr_2RuO_4 and the physics of spin-triplet pairing*
A.P. Mackenzie and Y. Maeno, Rev. Mod. Phys. **75**, 657 (2003) (invited).
70. *Quasi-two-dimensional Fermi liquid properties of the unconventional superconductor Sr_2RuO_4*
C. Bergemann, A.P. Mackenzie, S.R. Julian, D. Forsythe and E. Ohmichi, Advances in Physics **52**, 639 (2003) (invited).
71. *Transport spin polarisation in $SrRuO_3$ measured through point contact Andreev reflection*
P. Raychaudhuri, A.P. Mackenzie, J.W. Reiner and M.R. Beasley, Phys. Rev. B **67**, 020411 (2003).
72. *Effects of in-plane impurity substitution in Sr_2RuO_4*
N. Kikugawa, A.P. Mackenzie and Y. Maeno, J. Phys. Soc. Jpn. **72**, 237 (2003).
73. *Angular dependence of the magnetic susceptibility in the itinerant metamagnet $Sr_3Ru_2O_7$*
S.A. Grigera, R.A. Borzi, S.R. Julian, R.S. Perry, Y. Maeno and A.P. Mackenzie, Phys. Rev. B **67**, 214427 (2003).
74. *Coherent Three-Dimensional Fermi Surface in a High-Temperature Superconductor*
N.E. Hussey, M. Abdel-Jawad, A. Carrington, A.P. Mackenzie and L. Balicas, Nature **425**, 814 (2003).

75. *Rigid-band shift of the Fermi Level in a Correlated Electron Metal: $Sr_{2-y}La_yRuO_4$*
N. Kikugawa, A.P. Mackenzie, C. Bergemann, R.A. Borzi, S.A. Grigera and Y. Maeno, Phys. Rev. B **70**, 060508 (2004)
76. *Multiple First-Order Metamagnetic Transitions and Quantum Oscillations in Ultra-pure $Sr_3Ru_2O_7$*
R.S. Perry, K. Kitagawa, S.A. Grigera, R.A. Borzi, A.P. Mackenzie, K. Ishida and Y. Maeno, Phys. Rev. Lett. **92**, 166602 (2004).
77. *Electronic Properties of the Layered Perovskite Ruthenates: Correlated Electron Physics Approaching the Low-Disorder Limit*
A.P. Mackenzie and S.A. Grigera, J. Low Temp. Phys. **135**, 39 (2004).
78. *de Haas-van Alphen Effect Across the Metamagnetic Transition in $Sr_3Ru_2O_7$*
R.A. Borzi, S.A. Grigera, R.S. Perry, N. Kikugawa, K. Kitagawa, Y. Maeno and A.P. Mackenzie, Phys. Rev. Lett **92**, 216403 (2004).
79. *Low Temperature Hall Effect in Substituted Sr_2RuO_4*
N. Kikugawa, A.P. Mackenzie, C. Bergemann and Y. Maeno, Phys. Rev. B **70**, 174501 (2004).
80. *Band-Selective Modification of the Magnetic Fluctuations in Sr_2RuO_4 : Study of Substitution Effects*
N. Kikugawa, C. Bergemann, A.P. Mackenzie and Y. Maeno, Phys. Rev. B **70**, 134520 (2004).
81. *Disorder-Sensitive Phase Formation Linked to Metamagnetic Quantum Criticality*
S.A. Grigera, P. Gegenwart, R. A. Borzi, F. Weickert, A. J. Schofield, R.S. Perry, T. Tayama, T. Sakakibara, Y. Maeno, A. G. Green & A. P. Mackenzie, Science **306**, 1155 (2004).
82. *Phase Bifurcation and Quantum Fluctuations in $Sr_3Ru_2O_7$*
A. G. Green, S. A. Grigera, R. A. Borzi, A. P. Mackenzie, R. S. Perry and B. D. Simons, Phys. Rev. Lett. **95**, 086402 (2005).
83. *A Quantum Critical Route to Field-Induced Superconductivity*, A.P. Mackenzie & S.A. Grigera, Science **309**, 1330 (2005). (invited Perspective)
84. *Nested Fermi Surface and Electronic Instability in $Ca_3Ru_2O_7$*
F. Baumberger, N.J.C. Ingle, N. Kikugawa, M.A. Hossain, W. Meevasana, R.S. Perry, K.M. Shen, D.H. Lu, A. Damascelli, A. Rost, A.P. Mackenzie, Z. Hussain, and Z.-X. Shen, Phys. Rev. Lett. **96**, 107601 (2006).

85. *Fermi surface and quasiparticle excitations of Sr_2RhO_4*
F. Baumberger, N.J.C. Ingle, W. Meevasana, K.M. Shen, D.H. Lu, R.S. Perry, A.P. Mackenzie, Z. Hussain, D.J. Singh and Z.-X. Shen, Phys. Rev. Lett. **96**, 246402 (2006).
86. *Quantum oscillations in high quality single crystals of the layered perovskite Sr_2RhO_4*
R. S. Perry, N. Kikugawa, L. Balicas, A. Rost, J. F. Mercure, Y. Maeno and A. P. Mackenzie, submitted to Phys. Rev. Lett. (2006).
87. *Sr_2RhO_4 : A new, clean correlated electron metal*
R. S. Perry, F. Baumberger, L. Balicas, N. Kikugawa, N.J.C. Ingle, A. Rost, J. F. Mercure, Y. Maeno, Z.X. Shen and A. P. Mackenzie, New Journal of Physics **8**, 175 (2006).
88. *Thermal conductivity in the vicinity of the quantum critical endpoint in $Sr_3Ru_2O_7$*
F. Ronning, R.W. Hill, M. Sutherland, D.G. Hawthorn, M.A. Tanatar, J. Paglione, Louis Taillefer, M. Graf, R.S. Perry, Y. Maeno and A.P. Mackenzie, Phys. Rev. Lett. **97**, 067005 (2006).
89. *Anisotropic scattering and anomalous normal-state transport in a high-temperature superconductor*
M. Abdel-Jawad, M. P. Kennett, L. Balicas, A. Carrington, A. P. Mackenzie, R. H. McKenzie, N. E. Hussey, Nature Physics **2**, 821 (2006).
90. *Formation of a nematic fluid at high fields in $Sr_3Ru_2O_7$*
R.A. Borzi, S.A. Grigera, J. Farrell, R.S. Perry, S. Lister, S.L. Lee, D.A. Tennant, Y. Maeno & A.P. Mackenzie, Science **315**, 214 (2007).
91. *Evolution of the Fermi Surface and Quasiparticle Renormalization through a van Hove Singularity in the Correlated Metal $Sr_{2-y}La_yRuO_4$*
K.M. Shen, N. Kikugawa, C. Bergemann, L. Balicas, F. Baumberger, W. Meevasana, N.J.C. Ingle, Y. Maeno, Z.-X. Shen & A.P. Mackenzie, Phys. Rev. Lett. **99**, 187001 (2007).
92. *$Ca_3Ru_2O_7$: Electronic instability and extremely strong quasiparticle renormalisation*
N. Kikugawa, A. Rost, F. Baumberger, N.J.C. Ingle, M.A. Hossain, W. Meevasana, K.M. Shen, D.J. Lu, A. Damascelli, A.P. Mackenzie, Z. Hussain and Z.X. Shen, J. Mag. Mag. Mat. **310**, 1027 (2007).
93. *Heavy fermions in the original Fermi liquid*
C.A. Hooley and A.P. Mackenzie, Science **317**, 1332 (2007) (invited Perspective).
94. *Quantum oscillations in an overdoped high temperature superconductor*
B. Vignolle, A. Carrington, R. A. Cooper, M. M. J. French, A. P. Mackenzie, C. Jaudet, D. Vignolles, Cyril Proust & N. E. Hussey, Nature **455**, 952 (2008).

95. *De Haas van Alphen oscillations in the charge-density wave compound lanthanum tritelluride (LaTe₃)*
N. Ru, R. A. Borzi, A. Rost, A. P. Mackenzie, J. Laverock, S. B. Dugdale, & I. R. Fisher, Phys. Rev. B **78** 045123 (2008).
96. *Fermi surface and van Hove singularities in the itinerant metamagnet Sr₃Ru₂O₇*
A. Tamai, M.P. Allan, J.F. Mercure, W. Meevasana, R. Dunkel, D.H. Lu, R.S. Perry, A.P. Mackenzie, D.J. Singh, Z.-X. Shen, and F. Baumberger, Phys. Rev. Lett. **101**, 026407 (2008).
97. *Effect of electron doping the metamagnet La_ySr_{3-y}Ru₂O₇*
J. Farrell, R. S. Perry, A. Rost, J. F. Mercure, N. Kikugawa, S. A. Grigera & A. P. Mackenzie, Phys. Rev. B **78**, 180409(R) (2008).
98. *Physical properties of single-crystalline CaRuO₃ grown by a floating-zone method*
N. Kikugawa, L. Balicas and A.P. Mackenzie, J. Phys. Soc. Jpn. **78**, 014701 (2009).
99. *Incommensurate magnetic ordering in Ti-doped Sr₃Ru₂O₇*
P. Steffens, S. Price, J. Farrell, A.P. Mackenzie, Y. Sidis, K. Schmalzl, and M. Braden, Phys. Rev. B **79**, 054422 (2009).
100. *Microscopic Theory of the Nematic Phase in Sr₃Ru₂O₇*
S. Raghu, A. Paramakanti, E.-A. Kim, R. A. Borzi, S.A. Grigera, A. P. Mackenzie, and S. A. Kivelson, Phys. Rev. B **79**, 214402 (2009).
101. *Quantum oscillations in the anomalous phase in Sr₃Ru₂O₇*
J.-F. Mercure, S. K. Goh, E. C. T. O'Farrell, R. S. Perry, M. L. Sutherland, A. Rost, S. A. Grigera, R. A. Borzi, P. Gegenwart and A. P. Mackenzie, Phys. Rev. Lett. **103**, 176401 (2009).
102. *Entropy Landscape of Phase Formation Associated with Quantum Criticality in Sr₃Ru₂O₇*
A.W. Rost, R.S. Perry, J.F. Mercure, A.P. Mackenzie & S.A. Grigera, Science **325**, 1360 (2009).
103. *Heavy d-electron quasiparticle interference and real-space electronic structure of Sr₃Ru₂O₇*
J. Lee, M.P. Allan, M.A. Wang, J. Farrell, S.A. Grigera, F. Baumberger, J.C. Davis & A.P. Mackenzie, Nature Physics **11**, 800 (2009).
104. *Ca₃Ru₂O₇: Density wave formation and quantum oscillations in the Hall resistivity*
N. Kikugawa, A.W. Rost, C.W. Hicks, A.J. Schofield & A.P. Mackenzie, J. Phys. Soc. Jpn **79**, 024704 (2010).

105. *Quantum Phase Transitions in NbFe₂ and Ca₃Ru₂O₇*
W.J. Duncan, O.P. Welzel, D. Moroni-Klometowicz, C. Albrecht, P.G. Niklowitz, D. Gruener, M. Brando, A. Neubauer, C. Pfleiderer, N. Kikugawa, A.P. Mackenzie & F.M. Grosche, Phys. Stat. Solidi B **247**, 544 (2010).
106. *Power law specific heat divergence in Sr₃Ru₂O₇*
A.W. Rost, A.M. Berridge, R.S. Perry, J.F. Mercure, S.A. Grigera & A.P. Mackenzie, Phys. Stat. Solidi B **247**, 513 (2010).
107. *Quantum oscillations near the metamagnetic transition in Sr₃Ru₂O₇*
J.F. Mercure, A.W. Rost, E.C.T. O'Farrell, S.W. Goh, R.S. Perry, M.L. Sutherland, S.A. Grigera, R.A. Borzi, P. Gegenwart, A.S. Gibbs & A.P. Mackenzie, Phys. Rev. B **81**, 235103 (2010).
108. *Nematic Fermi fluids in Condensed Matter Physics*
E. Fradkin, S.A. Kivelson, M.A. Lawler, J.P. Eisenstein & A.P. Mackenzie, Annual Reviews of Condensed Matter Physics **1**, 153 (2010) (invited).
109. *Unconventional magnetisation processes and thermal runaway in spin-ice Dy₂Ti₂O₇*
D. Slobinsky, R.A. Borzi, C. Castelnovo, A.S. Gibbs, A.P. Mackenzie, R. Moessner & S.A. Grigera, Phys. Rev. Lett **105**, 267205 (2010).
110. *Quantum critical metamagnetism of Sr₃Ru₂O₇ under hydrostatic pressure*
W. Wu, A. McCollam, S.A. Grigera, R.S. Perry, A.P. Mackenzie & S.R. Julian, Phys. Rev. B **83**, 045106 (2011).
111. *Spin-orbit coupling and k-dependent Zeeman splitting in strontium ruthenate*
E.J. Rozbicki, J.-R. Souquet, J.F. Annett & A.P. Mackenzie, J. Phys. Cond. Matt. **23**, 094201 (2011).
112. *Vortex imaging and vortex lattice transitions in superconducting Sr₂RuO₄ single crystals*
P. J. Curran, V. V. Khotkevych, S. J. Bending, A.S. Gibbs, S.L. Lee & A.P. Mackenzie, Phys. Rev. B **84**, 104507 (2011).
113. *Thermodynamics of phase formation in the quantum critical metal Sr₃Ru₂O₇*
A.W. Rost, S.A. Grigera, J.A.N. Bruin, R.S. Perry, D. Tian, S. Raghu, S.A. Kivelson & A.P. Mackenzie, Proc. Nat. Acad. Sci. **108**, 16549 (2011).
114. *Hall coefficient anomaly in the low-temperature high-field phase of Sr₃Ru₂O₇*
R.A. Borzi, A. McCollam, J.A.N. Bruin, R.S. Perry, A.P. Mackenzie & S.A. Grigera, Phys. Rev. B **84**, 205112 (2011).

115. *Anisotropic Energy Gaps of Iron-Based Superconductivity from Intraband Quasiparticle Interference in LiFeAs*
M. P. Allan, A. W. Rost, A. P. Mackenzie, Yang Xie, J. C. Davis, K. Kihou, C. H. Lee, A. Iyo, H. Eisaki and T.-M. Chuang, *Science* **336**, 563 (2012).
116. *Quantum criticality and the formation of a putative electronic liquid crystal in $Sr_3Ru_2O_7$*
A.P. Mackenzie, J.A.N. Bruin, R.A. Borzi, A.W. Rost and S.A. Grigera, *Physica C* **481**, 207 (2012) (invited)
117. *Quantum oscillations and high carrier mobility in the delafossite $PdCoO_2$*
C.W. Hicks, A.S. Gibbs, A.P. Mackenzie, H. Takatsu, Y. Maeno and E.A. Yelland, *Phys. Rev. Lett.* **109**, 116401 (2012).
118. *Fast sweep-rate plastic Faraday force magnetometer with simultaneous sample temperature measurement*
D. Slobinsky, R.A. Borzi, A.P. Mackenzie and S.A. Grigera, *Rev. Sci. Instr.* **83**, 125104 (2012)
119. *Similarity of scattering rates in metals showing T -linear resistivity*
J.A.N. Bruin, H. Sakai, R.S. Perry & A.P. Mackenzie, *Science* **339**, 804 (2013).
120. *Study of the electronic nematic phase of $Sr_3Ru_2O_7$ with precise control of the applied magnetic field vector*
J.A.N. Bruin, R.A. Borzi, S.A. Grigera, A.W. Rost, R.S. Perry and A.P. Mackenzie, *Phys. Rev. B* **87**, 161106 (2013).
121. *Imaging Cooper pairing of heavy fermions in $CeCoIn_5$*
M.P. Allan, F. Masee, D.K. Morr, J. van Dyke, A.W. Rost, A.P. Mackenzie, C. Petrovic and J.C. Davis, *Nature Physics* **9**, 468 (2013).
122. *Formation of heavy d -electron quasiparticles in $Sr_3Ru_2O_7$*
M.P. Allan, A. Tamai, E. Rozbicki, M.H. Fischer, J. Voss, P.D.C. King, W. Meevasana, S. Thirupathiah, E. Rienks, J. Fink, D A. Tennant, R.S. Perry, J. F. Mercure, M.A. Wang, Jinho Lee, C.J. Fennie, E.-A. Kim, M.J. Lawler, K.M. Shen, A.P. Mackenzie, Z.-X. Shen and F. Baumberger, *New Journal of Physics* **15**, 063029 (2013).
123. *Evidence from tunnelling spectroscopy for a quasi-one-dimensional origin of superconductivity in Sr_2RuO_4*
I.A. Firmo, S. Lederer, C. Lupien, A.P. Mackenzie, J.C. Davis and S. Kivelson, *Phys. Rev. B* **88** 134521 (2013).

124. *Pressure study of nematicity and quantum criticality in $Sr_3Ru_2O_7$ for an in-plane field*
D. Sun, W. Wu, S.A. Grigera, R.S. Perry, A.P. Mackenzie and S.R. Julian, Phys. Rev. B **88**, 235129 (2013)
125. *Strong increase of T_c of Sr_2RuO_4 under both tensile and compressive strain*
C.W. Hicks, D.O. Brodsky, E.A. Yelland, A.S. Gibbs, J.A.N. Bruin, M.E. Edmonds, S.D. Edkins, K. Nishimura, S. Yonezawa, Y. Maeno and A.P. Mackenzie, Science **344**, 283 (2014)
126. *Piezoelectric-based apparatus for strain tuning*
C.W. Hicks, M.E. Barber, S.D. Edkins, D.O. Brodsky and A.P. Mackenzie, submitted to Reviews of Scientific Instruments
127. *Muon-spin rotation measurements of a low-field crossover from a triangular to a square vortex lattice and an unusual semi-Meissner state in Sr_2RuO_4*
S.J. Ray, A.S. Gibbs, S.J. Bending, P.J. Curran, E. Babaev, C. Baines, A.P. Mackenzie and S.L. Lee, Phys. Rev. B **89**, 094504 (2014)
128. *Search for spontaneous edge currents and vortex imaging in Sr_2RuO_4 mesostructures*
P.J. Curran, S.J. Bending, W.M. Desoky, A.S. Gibbs, S.L. Lee and A.P. Mackenzie, Phys. Rev. B **89**, 144504 (2014)