P.R. WILLMOTT - PUBLICATIONS

An online version of this list can be found at `http://www.psi.ch/lsc/phil-willmott#Publication_list`

1. Peer-reviewed articles

2010 – 2013

1. C. Cancellieri, M. L. Reinle-Schmitt, M. Kobayashi, V. N. Strocov, T. Schmitt, P.R. Willmott, S. Gariglio, and J.-M. Triscone

   Interface Fermi states of $LaAlO_3/SrTiO_3$ and related heterostructures.

   Phys. Rev. Lett., **110** (2013) 137601

2. M. L. Reinle-Schmitt, C. Cancellieri, D. Li, D. Fontaine, M. Medarde, E. Pomjakushina, C. W. Schneider, S. Gariglio, Ph. Ghosez, J.-M. Triscone, and P. R. Willmott

   Tunable conductivity threshold at polar oxide interfaces.

   Nat. Commun. **3** (2012) 932

3. S. A. Pauli, S. J. Leake, M. Björck, and P. R. Willmott

   Atomic imaging and direct phase retrieval using anomalous surface x-ray diffraction.

   J. Phys. Condens. Matter **24** (2012) 305002

4. S. Meyer, T. E. Umbach, C. Blumenstein, J. Schäfer, R. Claessen, S. Sauer, S. J. Leake, P. R. Willmott, M. Fiedler, and F. Bechstedt

   Structural examination of Au/Ge(001) by surface x-ray diffraction and scanning tunneling microscopy.

   Phys. Rev. B **85** (2012) 235439

5. C. Cancellieri, D. Fontaine, S. Gariglio, N. Reyren, A. D. Caviglia, A. Fete, S. J. Leake, S. A. Pauli, P. R. Willmott, M. Stengel, P. Ghosez, and J.-M. Triscone

   Electrostriction at the $LaAlO_3/SrTiO_3$ interface.

   Phys. Rev. Lett. **107** (2011) 056102

6. Z. Salman, M. Smadella, W. A. MacFarlane, B. D. Patterson, P. R. Willmott, K. H. Chow, M. D. Hossain, H. Saadaoui, D. Wang, and R. F. Kiefl

   Depth dependence of the structural phase transition of $SrTiO_3$ studied with β-NMR and grazing incidence x-ray diffraction.

   Phys. Rev. B **83** (2011) 224112

7. Y. Sassa, M. Radovic, M. Mansson, E. Razzoli, X. Y. Cui, S. Pailhes, S. Guerrero, M. Shi, P. R. Willmott, F. Miletto Granozio, J. Mesot, M. R. Norman, and L. Patthey

   Ortho-II band folding in clean $YBa_2Cu_3O_{7-\delta}$ films revealed by angle-resolved photoemission.

   Phys. Rev. B (Rapid Communications) **83** (2011) 140511

8. S. A. Pauli, S. J. Leake, B. Delley, M. Björck, C. W. Schneider, C. M. Schlepütz, D. Martoccia, S. Paetel, J. Mannhart, and P. R. Willmott

   Evolution of the Interfacial Structure of $LaAlO_3$ on $SrTiO_3$.

   Phys. Rev. Lett. **106** (2011) 036101

9. C. M. Schlepütz, S. O. Mariager, S. A. Pauli, R. Feidenhans'l, and P. R. Willmott

   Angle calculations for a (2+3)-type diffractometer: focus on area detectors.

   J. Appl. Cryst. **44** (2011) 73

10. C. M. Schlepütz, M. Björck, E. Koller, S. A. Pauli, D. Martoccia, Ø. Fischer, and P. R. Willmott

    Structure of ultrathin heteroepitaxial superconducting $YBa_2Cu_3O_{7-x}$ films.

    Phys. Rev. B **81** (2010) 174520

11. S. O. Mariager, S. L. Lauridsen, C. B. Sorensen, A. Dohn, P. R. Willmott, J. Nygard, and R. Feidenhans'l
Stages in molecular beam epitaxy growth of GaAs nanowires studied by x-ray diffraction.
Nanotechnology **21** (2010) 115603

12. D. Martoccia, M. Björck, C. M. Schlepütz, T. Brugger, S. A. Pauli, B. D. Patterson, T. Greber, and P. R. Willmott
Graphene on Ru(0001): a corrugated and chiral structure.
New J. Phys. **12** (2010) 043028

13. D. Martoccia, S. A. Pauli, T. Brugger, T. Greber, B. D. Patterson, and P. R. Willmott
h-BN on Rh(111): Persistence of a commensurate 13-on-12 superstructure up to high temperatures.
Surf. Sci. Lett. **604** (2010) L9

14. D. Martoccia, T. Brugger, M. Björck, C. M. Schlepütz, S. A. Pauli, T. Greber, B. D. Patterson, and P. R. Willmott
h-BN/Ru(0001) nanomesh: A 14-on-13 superstructure with 3.5 *nm periodicity.*
Surf. Sci. Lett. **604** (2010) L16

2005 – 2009

15. S. O. Mariager, C. M. Schlepütz, M. Aagesen, C. B. Sorensen, E. Johnson, P. R. Willmott, and R. Feidenhans'l
High-resolution three-dimensional reciprocal space mapping of semiconductor nanostructures.
Physica Stat. Sol. A **206** (2009) 1771

16. B. A. Sobott, C. Brönnimann, E. F. Eikenberry, R. Dinapoli, P. Kraft, G. N. Taylor, P. R. Willmott, C. M. Schlepütz, and R. P. Rassool
Synchrotron radiation hardness studies of PILATUS II.
J. Synch. Rad. **16** (2009) 489

17. S. O. Mariager, S. L. Lauridsen, A. Dohn, N. Bovet, C. B. Sorensen, C. M. Schlepütz, P. R. Willmott, and R. Feidenhans'l
High-resolution three-dimensional reciprocal space mapping of InAs nanowires.
J. Appl. Crystallogr. **42** (2009) 369

18. M. Sing, G. Berner, K. Goss, A. Müller, A. Ruff, A. Wetscherek, S. Thiel, J. Mannhart, S. A. Pauli, C. W. Schneider, P. R. Willmott, M. Gorgoi, F. Schafers, and R. Claessen
Profiling the interface electron gas of $LaAlO_3/SrTiO_3$ heterostructures with hard x-ray photoelectron spectroscopy.
Phys. Rev. Lett. **102** (2009) 176805

19. P. Kraft, A. Bergamaschi, C. Brönnimann, R. Dinapoli, E. F. Eikenberry, B. Henrich, I. Johnson, A. Mozzanica, C. M. Schlepütz, P. R. Willmott, and B. Schmitt
Performance of single-photon-counting PILATUS detector modules.
J. Synch. Rad. **16** (2009) 368

20. M. Björck, C. M. Schlepütz, S. A. Pauli, D. Martoccia, R. Herger, and P. R. Willmott
Atomic imaging of thin films with surface x-ray diffraction: Introducing DCAF.
J. Phys.: Condens. Matter **20** (2008) 445006

21. O. Bunk, D. K. Satapathy, F. Pfeiffer, A. Diaz, C. David, K. Nygard, E. Perret, C. Padeste, P. R. Willmott, B. D. Patterson, B. Schmitt, and J. F. van der Veen
Concentration Profiles of Colloidal Fluids in One-Dimensional Confinement.
Chimia **62** (2008) 789

22. D. Martoccia, P. R. Willmott, C. M. Schlepütz, A. Cervellino, S. A. Pauli, M. Björck, B. D. Patterson, T. Brugger, J. Osterwalder, T. Greber, S. Marchini, S. Günther, and J. Wintterlin
The unit cell of graphene on Ru(0001): a 25×25 *supercell with* 1250 *carbon atoms.*
Phys. Rev. Lett. **101** (2008) 126102

23. D. P. Kumah, A. Riposan, C. N. Cionca, N. S. Husseini, R. Clarke, J. Y. Lee, J. M. Millunchick, Y. Yacoby, C. M. Schlepütz, M. Björck, and P. R. Willmott

Resonant coherent Bragg rod analysis of strained epitaxial heterostructures.

Appl. Phys. Lett. **93** (2008) 081910

24. J. Hoppler, J. Stahn, H. Bouyanfif, V. K. Malik, B. D. Patterson, P. R. Willmott, G. Cristiani, H.-U. Habermeier, and C. Bernhard

X-ray study of structural domains in the near-surface region of $SrTiO_3$-substrates with $Y_{0.6}Pr_{0.4}Ba_2Cu_3O_7/La_{2/3}Ca_{1/3}MnO_3$ superlattices grown on top.

Phys. Rev. B **78** (2008) 134111

25. A. Kohlstedt, S. Kalbfleisch, T. Salditt, M. Reiche, U. Gösele, E. Lima, and P. R. Willmott

Two-dimensional X-ray waveguides: fabrication by wafer-bonding process and characterization.

Appl. Phys. A **91** (2008) 7

26. J. Krempasky, V. N. Strocov, L. Patthey, P. R. Willmott, R. Herger, M. C. Falub, P. Blaha, M. Hoesch, V. Petrov, M. C. Richter, O. Heckmann, and K. Hricovini

Effects of three-dimensional band structure in angle- and spin-resolved photoemission from half-metallic $La_{2/3}Sr_{1/3}MnO_3$.

Phys. Rev. B **77** (2008) 165120

27. M. Shi, M. C. Falub, P. R. Willmott, J. Krempasky, R. Herger, L. Patthey, K. Hricovini, C. V. Falub, and M. Schneider

The electronic structure of $La_{1-x}Sr_xMnO_3$ thin films and its T_c dependence as studied using angle-resolved photoemission.

J. Phys. Condens. Matter **20** (2008) 222001

28. R. Herger, P. R. Willmott, C. M. Schlepütz, M. Björck, S. A. Pauli, D. Martoccia, B. D. Patterson, D. Kumah, R. Clarke, Y. Yacoby, and M. Döbeli

Structure determination of monolayer-by-monolayer grown $La_{1-x}Sr_xMnO_3$ thin films and the onset of magnetoresistance.

Phys. Rev. B **77** (2008) 085401

29. P. R. Willmott, S. A. Pauli, R. Herger, C. M. Schlepütz, D. Martoccia, B. Delley, R. Clarke, D. Kumah, C. Cionca, and Y. Yacoby

Structural basis for the conducting interface between $LaAlO_3$ and $SrTiO_3$.

Phys. Rev. Lett. **99** (2007) 155502

30. R. Herger, P. R. Willmott, O. Bunk, C. M. Schlepütz, B. D. Patterson, B. Delley, V. L. Shneerson, P. F. Lyman, and D. K. Saldin

Surface structure of $SrTiO_3(001)$.

Phys. Rev. B **76** (2007) 195435

31. R. Herger, P. R. Willmott, O. Bunk, C. M. Schlepütz, B. D. Patterson, and B. Delley

Surface of strontium titanate.

Phys. Rev. Lett. **98** (2007) 076102

32. S. A. Pauli, R. Herger, P. R. Willmott, E. U. Donev, J. Y. Suh, and R. F. Haglund

X-ray diffraction studies of the growth of vanadium dioxide nanoparticles.

J. Appl. Phys. **102** (2007) 073527

33. S. O. Mariager, C. B. Sorensen, M. Aagesen, J. Nygard, R. Feidenhans'l, and P. R. Willmott

Facet structure of GaAs nanowires grown by molecular beam epitaxy.

Appl. Phys. Lett. bf 91 (2007) 083106

34. T. Lippert, M. J. Montenegro, M. Döbeli, A. Weidenkaff, S. Müller, P. R. Willmott, and A. Wokaun
Perovskite thin films deposited by pulsed laser ablation as model systems for electrochemical applications.
Prog. Solid State Chem. **35** (2007) 221

35. O. Bunk, A. Diaz, F. Pfeiffer, C. David, C. Padeste, H. Keymeulen, P. R. Willmott, B. D. Patterson, B. Schmitt, and D. K. Satapathy
Confinement-induced liquid ordering investigated by x-ray phase retrieval.
Phys. Rev. E **75** (2007) 021501

36. O. Bunk, M. Corso, D. Martoccia, R. Herger, P. R. Willmott, B. D. Patterson, J. Osterwalder, J. F. van der Veen, and T. Greber
Surface x-ray diffraction study of boron-nitride nanomesh in air.
Surface Science **601** (2007) L7

37. P. R. Willmott, R. Herger, C. M. Schlepütz, D. Martoccia, and B. D. Patterson
Energetic surface smoothing of complex metal-oxide thin films.
Phys. Rev. Lett. **96** (2006) 176102

38. M. J. Montenegro, K. Conder, M. Döbeli, T. Lippert, P. R. Willmott, and A. Wokaun
Pulsed reactive crossed beam laser ablation of $La_{0.6}Ca_{0.4}CoO_3$ using O-18 - Where does the oxygen come from?
Appl. Surf. Sci. **252** (2006) 4642

39. C. M. Schlepütz, R. Herger, P. R. Willmott, B. D. Patterson, O. Bunk, C. Brönnimann, B. Henrich, G. Hülsen, and E. F. Eikenberry
Improved data acquisition in grazing-incidence X-ray scattering experiments using a pixel detector.
Acta Cryst. A **61** (2005) 418

40. C. Steiner, B. Schönfeld, M. M. I. P. van der Klis, G. Kostorz, B. D. Patterson, and P. R. Willmott
Near-surface microstructure of Pt–Rh(110) and (111) surfaces.
Phys. Rev. B **73** (2006) 174205

41. S. Czekaj, F. Nolting, L. J. Heyderman, P. R. Willmott, and G. van der Laan
Sign dependence of the X-ray magnetic linear dichroism on the antiferromagnetic spin axis in $LaFeO_3$ thin films.
Phys. Rev. B **73** (2006) 020401

42. P. R. Willmott, R. Herger, B. D. Patterson, and R. Windiks
Experimental and theoretical study of the strong dependence of the microstructural properties of $Sr_xBa_{1-x}Nb_2O_6$ thin films as a function of their composition.
Phys. Rev. B, **71** (2005) 144114

43. P. R. Willmott, C. M. Schlepütz, R. Herger, B. D. Patterson, K. Hassdenteufel, and W. Steurer
In situ diffraction studies of the initial growth processes of textured icosahedral quasicrystalline thin films.
Phys. Rev. B, **71** (2005) 094203

44. B. D. Patterson, R. Abela, H. Auderset, Q. Chen, F. Fauth, F. Gozzo, G. Ingold, H. Kuhne, M. Lange, D. Maden, D. Meister, P. Pattison, T. Schmidt, B. Schmitt, C. Schulze-Briese, M. Shi, M. Stampanoni, and P. R. Willmott
The Materials Science Beamline at the Swiss Light Source: design and realization.
Nucl. Instrum. Meth. A, **540** (2005) 42

45. M. J. Montenegro, M. Döbeli, T. Lippert, S. Müller, A. Weidenkaff, P. R. Willmott, and A. Wokaun
Can thin perovskite film materials be applied as model systems for battery applications?
Appl. Surf. Sci. **247** (2005) 197

46. P. R. Willmott, C. M. Schlepütz, B. D. Patterson, R. Herger, M. Lange, D. Meister, D. Maden, C. Brönnimann, E. F. Eikenberry, G. Hülsen, A. Al-Adwan
In situ studies of complex PLD-grown films using hard X-ray surface diffraction.
Appl. Surf. Sci. **247** (2005) 188

47. P. R. Willmott, C. M. Schlepütz, R. Herger, B. D. Patterson, O. Bunk, C. Brönnimann, B. Henrich, G. Hülsen, and E. F. Eikenberry
A single-photon counting pixel detector for surface diffraction experiments.
Synch. Rad. News **18**(2) (2005) 16

48. P. R. Willmott, R. Herger, C. M. Schlepütz, D. Martoccia, and B. D. Patterson
Pulsed laser deposition and in-situ surface x-ray diffraction at the Materials Science beamline at the Swiss Light Source.
Synch. Rad. News **18**(4) (2005) 37

49. M. C. Falub, M. Shi, P. R. Willmott, J. Krempasky, S. G. Chiuzbaian, K. Hricovini, and L. Patthey
Polarization-dependent angle-resolved photoemission spectroscopy study of $La_{1-x}Sr_xMnO_3$.
Phys. Rev. B **72** (2005) 054444

50. B. D. Patterson, C. Brönnimann, D. Maden, F. Gozzo, A. Groso, B. Schmitt, M. Stampanoni, and P. R. Willmott
The materials science beamline at the Swiss Light Source.
Nucl. Instrum. Methods B **238** (2005) 224

2000 – 2004

51. M. Shi, M. C. Falub, P. R. Willmott, J. Krempasky, R. Herger, K. Hricovini, and L. Patthey
k-dependent electronic structure of the colossal magnetoresistive perovskite $La_{0.66}Sr_{0.34}MnO_3$.
Phys. Rev. B, **70** (2004) 140407

52. P. R. Willmott, R. Herger, M. C. Falub, L. Patthey, M. Döbeli, C. V. Falub, M. Shi, and M. Schneider
Pulsed laser deposition of atomically flat $La_{1-x}Sr_xMnO_3$ thin films using a novel target geometry.
Appl. Phys. A, **79** (2004) 1199

53. M. J. Montenegro, M. Döbeli, T. Lippert, S. Müller, A. Weidenkaff, P. R. Willmott, and A. Wokaun
Microstructures and film properties of $La_{0.7}Ca_{0.3}CoO_3$ produced by pulsed reactive crossed-beam laser ablation.
Thin Solid Films, **453** (2004) 182

54. P. R. Willmott, R. Herger, and C. M. Schlepütz
Multilayers, alloys, and complex profiles by pulsed laser deposition using a novel target geometry.
Thin Solid Films, **453** (2004) 436

55. G. Hülsen, E. F. Eikenberry, R. Horisberger, B. Schmitt, C. Schulze-Briese, T. Tomizaki, H. Toyokawa, M. Stampanoni, G. L. Borchert, P. R. Willmott, B. D. Patterson, and Ch. Brönnimann
Pixel detectors for diffraction experiments at the Swiss Light Source.
AIP Conf. Proc. **705** (2004) 1009

56. F. Gozzo, B. Schmitt, T. Bortolamedi, C. Giannini, A. Guagliardi, M. Lange, D. Meister, D. Maden, P. R. Willmott, and B. D. Patterson
First experiments at the Swiss Light Source Materials Science beamline powder diffractometer.
J. Alloys Comp. **362** (2004) 206

57. M. J. Montenegro, C. Clerc, T. Lippert, S. Müller, P. R. Willmott, A. Weidenkaff, and A. Wokaun
Analysis of the plasma produced by pulsed reactive crossed-beam laser ablation of $La_{0.6}Ca_{0.4}CoO_3$.
Appl. Surf. Sci., **208** (2003) 45

58. M. J. Montenegro, T. Lippert, S. Müller, A. Weidenkaff, P. R. Willmott, and A. Wokaun
Pulsed laser deposition of electrochemically active perovskites.
Appl. Surf. Sci., **197–198** (2002) 505

59. H. Spillmann, C. Clerc, M. Döbeli and P. R. Willmott
Gas-phase mechanisms in the growth of ZrC_yN_{1-y} thin films by pulsed reactive crossed-beam laser ablation.
Appl. Surf. Sci., **197–198** (2002) 304

60. M. Morstein, P. R. Willmott, H. Spillmann, and M. Döbeli
From nitride to carbide – control of zirconium-based hard materials film growth and their characterization.
Appl. Phys. A **75** (2002) 647

61. M. Montenegro, M. Döbeli, T. Lippert, S. Müller, B. Schnyder, A. Weidenkaff, P. R. Willmott, and A. Wokaun
Pulsed laser deposition of $La_{0.6}Ca_{0.4}CoO_3$ (LCCO) films. A promising metal-oxide catalyst for air-based batteries.
Phys. Chem. Chem. Phys. **4** (2002) 2799

62. P. R. Willmott, H. Spillmann, and J. R. Huber
Design and synthesis of novel thin films and structures by reactive crossed-beam laser ablation.
J. Mater. Chem. **Cover Article**, **12** (2002) 397

63. P. R. Willmott and H. Spillmann
Materials by Design – Exploiting the Unique Properties of Pulsed Laser Deposition for the Synthesis of Novel Hard Materials and Structures.
Appl. Surf. Sci., **197–198** (2002) 432

64. H. Spillmann, and P. R. Willmott, M. Morstein, and P. J. Uggowitzer
ZrN, Zr_xAl_yN and Zr_xGa_yN thin films – novel materials for hard coatings grown using pulsed laser deposition.
Appl. Phys. A **73** (2001) 441

65. P. R. Willmott and J. R. Huber
Dünne Schichten nach Mass – Herstellung dünner Filme mit Hilfe intensiver Laserstrahlung.
Neue Zürcher Zeitung, 31.01.2001

66. H. Spillmann and P. R. Willmott
Growth of SiN_x and SiC_x thin films by pulsed reactive crossed–beam laser ablation.
Appl. Phys. A **70** (2000) 323

67. P. R. Willmott, P. Manoravi, and K. Holliday
Production and characterization of Nd,Cr:GSGG thin films on Si(001) grown by pulsed laser ablation.
Appl. Phys. A **70** (2000) 425

68. P. R. Willmott, F. Antoni, and M. Döbeli
Kinetic, crystallographic and optical studies of GaN and $Al_xGa_{1-x}N$ thin films grown on Si(111) by pulsed reactive crossed-beam laser ablation using liquid alloys and N_2 or NH_3.
J. Appl. Phys. **88** (2000) 188

<u>1988 – 1999</u>

69. P. Manoravi, P. R. Willmott, J. R. Huber, and T. Greber
Deposition of Ti:sapphire thin films by reactive pulsed laser ablation using liquid metals and oxygen.
Appl. Phys. A **69** (1999) S865

70. P. R. Willmott, P. Manoravi, J. R. Huber, T. Greber, T. A. Murray, and K. Holliday
Production and characterization of Ti:sapphire thin films grown by reactive laser ablation using elemental precursors.
Optics Lett. **24** (1999) 1581

71. P. R. Willmott
Pulsed reactive crossed-beam laser ablation.
Appl. Phys. A **69** (1999) S437

72. P. R. Willmott, R. Timm, and J. R. Huber
RHEED analysis of interface growth modes of TiN films on Si(001) produced by crossed beam laser ablation.
Appl. Surf. Sci. **127 - 129** (1998) 105

73. P. R. Willmott and F. Antoni
Growth of GaN(0001) thin films on Si(001) by pulsed reactive crossed-beam laser ablation using liquid Ga and N_2.
Appl. Phys. Lett. **73** (1998) 1394

74. R. Timm, P. R. Willmott, and J. R. Huber
Parallel epitaxy of TiN(100) thin films on Si(100) produced by pulsed reactive crossed-beam laser ablation.
Appl. Phys. Lett. **71** (1997) 1966

75. P. R. Willmott, R. Timm, and J. R. Huber
Reactive crossed beam scattering of a Ti plasma and a N_2 pulse in a novel laser ablation method.
J. Appl. Phys. **82** (1997) 2082

76. R. Larciprete, P. Willmott, S. Martelli, M. C. Cesile, E. Borsella, S. Chiussi, P. González, and B. León
ArF excimer laser epitaxy of Si_xGe_{1-x} alloys studied by XRD and XPS.
Appl. Surf. Sci. **106** (1996) 179

77. E. Fritsch, E. Mächler, F. Arrouy, O. Orama, H. Berke, I. Povey, P. R. Willmott, and J.-P. Locquet
Benzoylpivaloylmethanide precursors for the chemical beam epitaxy of oxide thin films.
I. Synthesis, characterization, and use of yttrium benzoylpivaloylmethanide.
Chem. Mater. **9** (1997) 127

78. E. Fritsch, E. Mächler, F. Arrouy, H. Berke, I. Povey, P. R. Willmott, and J.-P. Locquet
Schiff base precursor compounds for the chemical beam epitaxy of oxide thin films.
I. Deposition of CuO on MgO[001] using copper (II) bis(benzoylacetone)-ethylendiimine.
J. Vac. Sci. Technol. **A 14** (1996) 3208

79. R. Timm, P. R. Willmott, and J. R. Huber
Ablation and blow-off characteristics at 248 nm of Al, Sn, and Ti targets used for thin film pulsed laser deposition.
J. Appl. Phys. **80** (1996) 1794

80. S. Chiussi, P. Gonzáles, B. León, R. Larciprete, P. R. Willmott, S. Martelli, C. Cesile, and E. Borsella
Laser-induced integrated processing for heteroepitaxial Si_xGe_{1-x} alloys.
Appl. Surf. Sci. **102** (1996) 42

81. P. R. Willmott, P. Felder, M. Lingenauer, J. R. Huber, E. Fritsch, W. Bidell, H. Berke, E. Mächler, E. J. Williams, J.-P. Locquet, and J. G. Bednorz
The beam and decomposition properties of copper containing metallorganic precursors and their use for CuO thin film preparation in chemical beam epitaxy.
J. Vac. Sci. Technol. **A 13** (1995) 248

82. E. Mächler, J.-P. Locquet, E. Fritsch, E. J. Williams, P. R. Willmott, M. Lingenauer, P. Felder, J. R. Huber, and H. Berke
Superconducting $La_{2-x}Ba_xCuO_4$ thin films prepared by chemical beam epitaxy.
Physica C **235 – 240** (1994) 705

83. P. R. Willmott, R. Timm, P. Felder, and J. R. Huber
Growth of CuO films by pulsed laser deposition in conjunction with a pulsed oxidation source.
J. Appl. Phys. **76** (1994) 2657

84. P. R. Willmott and H. Bitto
The role of hyperfine interaction in the dynamics of S_1 ($^1B_{3u}$) pyrazine.
Chem. Phys. Lett. **207** (1993) 93

85. H. Bitto and P. R. Willmott
The dynamics and its power dependence of S_1 ($^1B_{3u}$) pyrazine studied with transform-limited nanosecond laser pulses.
Chem. Phys. **165** (1992) 113

86. P. R. Willmott, H. Bitto, and J. R. Huber
J mixing in the polyatomic molecule propynal.
Chem. Phys. Lett. **188** (1992) 369

87. H. Bitto, P. R. Willmott, and J. R. Huber
Rotational state dependence of radiationless processes in an electronically excited polyatomic molecule.
J. Chem. Phys. **95** (1991) 4765

88. P. R. Willmott, H. Bitto, and J. R. Huber
Energy and rotational state dependence of radiationless processes in propynal.
Chem. Phys. **156** (1991) 177

89. S. Vepřek, M. Heintze, F.-A. Sarott, M. Jurčik-Rajman, and P. R. Willmott
Mechanisms of plasma induced silicon deposition and the control of the properties of the deposit.
Mat. Res. Soc. Symp. Proc. **118** (1988) 3

2. Reviews

1. S. A. Pauli and P. R. Willmott
Conducting interfaces between polar and non-polar insulating perovskites.
J. Phys. Condens. Matter **20** (2008) 264012

2. P. R. Willmott
Deposition of complex multielemental thin films.
Prog. Surf. Sci. **76** (2004) 163

3. P. R. Willmott and J. R. Huber
Pulsed laser vaporization and deposition.
Rev. Mod. Phys. **72** (2000) 315

3. Book contributions

1. P. R. Willmott
Quasicrystalline thin films, in *Pulsed Laser Deposition of Thin Films: Applications-Led Growth of Functional Materials.*
Ed. R. W. Eason, John Wiley and Sons, New York (December 2006)

4. Monographs

1. P. R. Willmott
An Introduction to Synchrotron Radiation: Techniques and Applications.
John Wiley and Sons, July 2011 (second print: August 2012)