

Publications

The h index (the number of papers cited at least h times) is 46.

Publications for a non-specialist readership are indicated §.

Books

1. *An Introduction to Scanning Acoustic Microscopy*. Royal Microscopical Society Handbook 12, Oxford University Press (1985). Andrew Briggs.
Reviews: *Proceedings RMS* **22** (2) 79, by Professor A. Howie F.R.S.; *IEEE Trans UFFC* **34** (1) 116, by Professor H.L. Bertoni.
2. *Acoustic Microscopy*. Oxford: Clarendon Press (1992). Andrew Briggs.
Reviews: *Proceedings RMS* **27** (4) 280 and *Journal of Microscopy* **169** (1) 91, by Professor A. Howie F.R.S.; *Contemporary Physics* **33** (4) 296, by Professor L.M. Brown F.R.S.; *Ultrasonics* **32** (2) 157, by Dr A.J. Kulik. §
3. *The Science of New Materials*. Oxford: Blackwell (1992). Ed Andrew Briggs.
4. *Advances in Acoustic Microscopy 1*. New York: Plenum Press (1995). Ed Andrew Briggs.
Reviews: *Proceedings RMS* **32** (3) 182-4, by Professor M.G. Somekh; *Ultramicroscopy* **62**, 283-303, by P.W. Hawkes.
5. *Advances in Acoustic Microscopy 2*. New York: Plenum Press (1996). Eds Andrew Briggs and Walter Arnold.
Reviews: *Proceedings RMS* **32** (3) 182-4, by Professor M.G. Somekh; *Scanning* **20** (1) 61, by Professor A. Meunier.
6. *Acoustic Microscopy, 2nd Edition*. Oxford: Clarendon Press (2010, publication date 17 September 2009). G.A.D. Briggs and O.V. Kolosov.

Papers and articles

7. The dissipation of energy in the friction of rubber. *Wear* **35**, 357-364 (1975). G.A.D. Briggs and B.J. Briscoe.
8. Effect of surface roughness on rolling friction and adhesion between elastic solids. *Nature* **260**, 313-315 (1976). G.A.D. Briggs and B.J. Briscoe (summarized in *Physics Bulletin* June 1976).
9. Effect of roughness on rubber friction when waves of detachment are present. *Nature* **262**, 381-382 (1976). G.A.D. Briggs and B.J. Briscoe.
10. How rubber sticks and slides — the adhesion and traction of viscoelastomers. *Ph.D. Thesis*, Cambridge. (Submitted September 1976; Ph.D. awarded February 1977.)
11. The effect of tangential force on the contact of elastic solids in adhesion. *Proc. R. Soc. Lond. A* **356**, 103-114 (1977). A.R. Savkoor and G.A.D. Briggs.
12. The effect of surface topography on the adhesion of elastic solids. *J. Phys D: Appl. Phys* **10**, 2453-2466 (1977). G.A.D. Briggs and B.J. Briscoe.
13. How rubber grips and slips: Schallamach waves and the friction of elastomers. *Phil. Mag. A* **38**, 387-399 (1978). G.A.D. Briggs and B.J. Briscoe.
14. Surface roughness and the friction and adhesion of elastomers. *Wear* **57**, 269-280 (1979). G.A.D. Briggs and B.J. Briscoe.
15. Stress intensity factor calculation of a mixed mode crack growth problem. *Numerical methods in fracture mechanics* (eds D.R.J. Owen, A.R. Luxmore), 135-144. Pineridge Press (1980). G.A.D. Briggs and R.A. Smith.
16. Crack growth monitoring. UK Patent No: 8041561, Specification No: GB2066964A (1981). G.A.D. Briggs.
17. Fatigue crack growth under controlled K. In *Advances in fracture research* (ed D. Francois), 2005-2011. Oxford: Pergamon Press (1982). G.A.D. Briggs and R.A. Smith.
18. Acoustic microscopy of ferroelectric ceramics. *J. Mater. Sci.* **17**, 2449-2452 (1982). Q.R. Yin, C. Ilett and G.A.D. Briggs.
19. Acoustic microscopy for materials studies. In *Acoustical Imaging* **12** (eds E.A. Ash, C.R. Hill), 89-99. New York and London: Plenum Press (1982). G.A.D. Briggs, C. Ilett and M.G. Somekh.
20. K control for fatigue crack growth. In *Advances in crack length measurement* (ed C.J. Beevers), 395-409. EMAS, Birmingham (1982). G.A.D. Briggs, N.A. Fleck and R.A. Smith.
21. Acoustic microscopy — a prospectus. In *Advances in crack length measurement* (ed C.J. Beevers), 447-472. EMAS, Birmingham (1982). G.A.D. Briggs.
22. Acoustic microscopy in materials science. In *Microscopy — techniques and capabilities*. SPIE **368**, 74-80 (1982). G.A.D. Briggs, M.G. Somekh and C. Ilett.
23. Elastic and viscoelastic adhesion. In *Physicochemical aspects of polymer surfaces* (ed K.L. Mittal), 669-687. New York and London: Plenum Press (1983). G.A.D. Briggs.
24. Non-destructive testing and acoustic microscopy of diffusion bonds. *J. Mater. Sci.* **18**, 2345-2353 (1983). B. Derby, G.A.D. Briggs and E.R. Wallach.
25. The potential drop across an imperfect diffusion bond. *J. Mater. Sci.* **18**, 2354-2360 (1983). K.W. Lodge and G.A.D. Briggs.

26. Enhanced nuclear acoustic resonance in HoVO₄. *Proc. R. Soc. Lond. A* **388**, 479-486 (1983). B. Bleaney, G.A.D. Briggs, J.F. Gregg, G.H. Swallow and J.M.R. Weaver.
27. Examination of cracks and other defects in sodium $\text{\textcircled{R}}$ - and $\text{\textcircled{R}}''$ -alumina using acoustic, optical and electron microscopy. *Solid State Ionics* **9/10**, 173-176 (1983). A.K. Petford, R. Hull, C.J. Humphreys, G.A.D. Briggs and C. Ilett.
28. Acoustic microscopy of ultrasonic attenuation. *J. Physique* **12** C9, 371-376 (1984). J.M.R. Weaver, G.A.D. Briggs and M.G. Somekh.
29. The effect of anisotropy on contrast in the scanning acoustic microscope. *Phil. Mag. A* **49**, 179-204 (1984). M.G. Somekh, G.A.D. Briggs and C. Ilett.
30. Acoustic microscopy of elastic discontinuities. *Proc. R. Soc. Lond. A* **393**, 171-183 (1984). C. Ilett, M.G. Somekh and G.A.D. Briggs.
31. The origin of grain contrast in the scanning acoustic microscope. In *Acoustical Imaging* (eds M. Kaveh, R.K. Mueller) **13**, 107-118. New York and London: Plenum Press (1984). M.G. Somekh, G.A.D. Briggs and C. Ilett.
32. Detection of surface breaking cracks with acoustic microscope. In *Acoustical Imaging* (eds M. Kaveh, R.K. Mueller) **13**, 119. New York and London: Plenum Press (1984). M.G. Somekh, C. Ilett and G.A.D. Briggs.
33. Scanning electron acoustic microscopy and scanning acoustic microscopy: a favourable comparison. *Scanning Electron Microsc.* **3**, 1041-1052 (1984). G.A.D. Briggs.
34. Enhanced nuclear acoustic resonance in HoVO₄. *22nd Congress Ampere on Magnetic Resonance and Related Phenomena* **312**, 273-274 (1984). B. Bleaney, G.A.D. Briggs, J.F. Gregg, G.H. Swallow and J.M.R. Weaver.
35. Applications of a two-dimensional Green's function model to image interpretation in SAM. *Proc. 1984 IEEE Ultrasonics Symposium* 588-592 (1984). M.G. Somekh, H.L. Bertoni and G.A.D. Briggs.
36. Acoustic microscopy of solid materials. *Metallography* **18**, 3-34 (1985). G.A.D. Briggs, J.M.R. Weaver, C. Ilett and M.G. Somekh.
37. Applications of the scanning reflection acoustic microscope to the study of Materials Science. *IEEE Trans SU-32*, 302-312 (1985). J.M.R. Weaver, M.G. Somekh, G.A.D. Briggs, S.D. Peck and C. Ilett.
38. A two-dimensional imaging theory of surface discontinuities with the scanning acoustic microscope. *Proc. R. Soc. Lond. A* **401**, 29-51 (1985). M.G. Somekh, H.L. Bertoni, G.A.D. Briggs and N.J. Burton. Reprinted in *Selected Papers on Scanning Acoustic Microscopy* (eds B.T. Khuri-Yakub, C.F. Quate), *SPIE Milestone Series MS 53*, 104-123 (1992).
39. Phase contrast imaging of tissue in the scanning acoustic microscope. *J. Microsc.* **139**, RP3-4 (1985). Reprinted in *Selected Papers on Scanning Acoustic Microscopy* (eds B.T. Khuri-Yakub, C.F. Quate), *SPIE Milestone Series MS 53*, 270-271 (1992). C.M.W. Daft, J.M.R. Weaver and G.A.D. Briggs.
40. Acoustic microscopy techniques for observing dislocation damping. *J. Physique* **12** C10, 743-750 (1985). J.M.R. Weaver and G.A.D. Briggs.
41. The elastic properties of ion-implanted silicon. *J. Mater. Sci.* **21**, 1828-1836 (1986). P.J. Burnett and G.A.D. Briggs.
42. A scanning acoustic microscope study of the small caries lesion in human enamel. *Caries Res.* **20**, 356-360 (1986). S.D. Peck and G.A.D. Briggs.
43. Acoustic microscopy of surface cracks. *Phil. Trans. R. Soc. Lond. A* **320**, 201-214 (1986). J.M. Rowe, J. Kushibiki, M.G. Somekh and G.A.D. Briggs.
44. Magnetoacoustic and Barkhausen emission in ferromagnetic materials. *Phil. Trans. R. Soc. Lond. A* **320**, 363-378 (1986). D.J. Buttle, G.A.D. Briggs, J.P. Jakubovics, E.A. Little and C.B. Scruby.
45. How to observe short surface cracks by acoustic microscopy. *The Behaviour of Short Fatigue Cracks*, EGF Pub. **1** (eds K.J. Miller, E.R. de los Rios), 529-536. Mechanical Engineering Publications, London (1986). G.A.D. Briggs, E.R. de los Rios and K.J. Miller.
46. Acoustic properties of proton-exchanged LiNbO₃ studied using the acoustic microscopy V(z) technique. *J. Appl. Phys* **60**, 2517-2522 (1986). P.J. Burnett, G.A.D. Briggs, S.M. Al-Shukri, J.F. Duffy and R.M. De La Rue.
47. Techniques for the characterization of film adhesion. *Proc. 1986 IEEE Ultrasonics Symposium* (ed B.R. McAvoy) 775-782 (1986). Reprinted in *Selected Papers on Scanning Acoustic Microscopy* (eds B.T. Khuri-Yakub, C.F. Quate), *SPIE Milestone Series MS 53*, 299-306 (1992). R.C. Addison, M.G. Somekh and G.A.D. Briggs.
48. Tissue characterization with microscopic resolution. *Proc. 1986 IEEE Ultrasonics Symposium* (ed B.R. McAvoy), 945-948 (1986). C.M.W. Daft, J.M.R. Weaver and G.A.D. Briggs.
49. Acoustic microscopy of surface cracks: Theory and practice. *Solid Mechanics Research for Quantitative Non-Destructive Evaluation* (eds J.D. Achenbach, Y. Rajapakse) 155-169. Martinus Nijhoff, Dordrecht (1987). G.A.D. Briggs and M.G. Somekh.
50. Characterization of thin-film adhesion with the scanning acoustic microscope. *Proc. International Symposium on Pattern Recognition and Acoustical Imaging*, 275-284. SPIE (1987). R.C. Addison, M.G. Somekh, G.A.D. Briggs and J.M. Rowe.
51. Biomorph-driven x-y-z translation stage for scanned image microscopy. *Rev. Sci. Instrum.* **58**, 567-570 (1987). J.R. Matey, R.S. Crandall, B. Brycki and G.A.D. Briggs.
52. Magneto-acoustic and Barkhausen emission: their dependence on dislocations in iron. *Phil. Mag. A* **55**, 717-734 (1987). D.J. Buttle, C.B. Scruby, J.P. Jakubovics and G.A.D. Briggs.

53. Magneto-acoustic and Barkhausen emission from domain-wall interactions with precipitates in Incoloy 904. *Phil. Mag. A* **55**, 735-756 (1987). D.J. Buttle, G.A.D. Briggs, J.P. Jakubovics and C.B. Scruby.
54. A study of neutron irradiation damage in α -iron with magnetoacoustic and Barkhausen emission. *Proc. R. Soc. Lond. A* **414**, 221-236 (1987). D.J. Buttle, E.A. Little, C.B. Scruby, G.A.D. Briggs and J.P. Jakubovics.
55. The measurement of stress in steels of varying microstructure by magnetoacoustic and Barkhausen emission. *Proc. R. Soc. Lond. A* **414**, 469-497 (1987). D.J. Buttle, C.B. Scruby, G.A.D. Briggs and J.P. Jakubovics.
56. The caries lesion under the scanning acoustic microscope. *Adv. Dent. Res.* **1**, 50-63 (1987). S.D. Peck and G.A.D. Briggs.
57. High-sensitivity ultrasonic interferometer for the detection of magnetic phase transitions. *J. Appl. Phys.* **61**, 3193-3195 (1987). C.H.A. Huan, J.F. Gregg, M.R. Wells, G.A.D. Briggs and W.P. Wolf.
58. Acoustical scattering by a shallow surface-breaking crack in elastic solid under light fluid loading. In *Recent Developments in Surface Acoustic Waves* (eds D.F. Parker, G.A. Maugin) 309-316. Berlin: Springer-Verlag (1988). R.H. Tew, J.R. Ockendon and G.A.D. Briggs.
59. Further studies of the enhanced nuclear magnet HoVO₄; II Experiments with acoustic waves. *Proc. R. Soc. Lond. A* **416**, 75-81 (1988). B. Bleaney, G.A.D. Briggs, J.F. Gregg, C.H.A. Huan, I.D. Morris and M.R. Wells.
60. Further studies of the enhanced nuclear magnet HoVO₄; IV The resonant magnetoacoustic absorption. *Proc. R. Soc. Lond. A* **416**, 93-101 (1988). B. Bleaney, G.A.D. Briggs, J.F. Gregg, C.H.A. Huan, I.D. Morris and M.R. Wells.
61. Was kann man mit dem akustischen Rastermikroskop erfassen? (What can you see with a scanning acoustic microscope?). *Vortragsveranstaltung des Arbeitskreises Rastermikroskopie in der Materialprüfung* **13**, 105-112 (1988). G.A.D. Briggs.
62. La lesione cariosa al microscopio acustico a scansione. *Il Dentista Moderno* **VI** (10), 2321-2345 (1988). S.D. Peck and G.A.D. Briggs.
63. Quantitative methods in acoustic microscopy. *Proc. IEEE 1998 Ultrasonics Symposium* 743-749 (1988). G.A.D. Briggs, J.M. Rowe, A.M. Sinton and D.S. Spencer.
64. Frequency dependence of tissue attenuation measured by acoustic microscopy. *Proc. 1998 IEEE Ultrasonics Symposium* 971-974 (1988). C.M.W. Daft, G.A.D. Briggs and W.D. O'Brien.
65. Acoustic microscopy of old and new materials. *Acoustical Imaging* **17**, 1-16 (1989). Reprinted in *Selected Papers on Scanning Acoustic Microscopy* (eds B.T. Khuri-Yakub, C.F. Quate), *SPIE Milestone Series MS 53*, 326-339 (1992). G.A.D. Briggs, C.M.W. Daft, A.F. Fagan, T.A. Field, C.W. Lawrence, M. Montoto, S.D. Peck, A. Rodriguez and C.B. Scruby.
66. Time-resolved acoustic microscopy of polymer coatings. *Acoustical Imaging* **17**, 87-95 (1989). A.M. Sinton, G.A.D. Briggs and Y. Tsukahara.
67. Evaluation of polymer coatings by ultrasonic spectroscopy. *Acoustical Imaging* **17**, 257-264 (1989). Y. Tsukahara, K. Ohira, M. Saito and G.A.D. Briggs.
68. Reconstruction of the complex reflectance function in acoustic microscopy. *J. Microsc.* **153**, 103-117 (1989). W.R. Fright, R.H.T. Bates, J.M. Rowe, D.S. Spencer, M.G. Somekh and G.A.D. Briggs.
69. Studies on sound and carious enamel with the quantitative acoustic microscope. *J. Dent. Res.* **68**, 107-112 (1989). S.D. Peck, G.A.D. Briggs and J.M. Rowe.
70. Acoustic microscopy of low-ductility materials. *J. Mater. Sci.* **24**, 23-40 (1989). D.G.P. Fatkin, G.A.D. Briggs and C.B. Scruby.
71. Acoustic microscopy of polymers and polymer based composites. *Fractography and failure mechanisms of polymers and composites* (ed A.C. Roulin-Moloney), Elsevier, London and New York, 213-230 (1989). A.F. Fagan, G.A.D. Briggs and J.M. Bell.
72. Wideband acoustic microscopy of tissue. *IEEE Trans UFFC* **36**, 258-263 (1989). C.M.W. Daft and G.A.D. Briggs.
73. The elastic microstructure of various tissues. *J. Acoust. Soc. Am.* **85**, 416-422 (1989). C.M.W. Daft and G.A.D. Briggs.
74. Frequency dependence of tissue attenuation by acoustic microscopy. *J. Acoust. Soc. Am.* **85**, 2194-2201 (1989). C.M.W. Daft, G.A.D. Briggs and W.D. O'Brien Jr.
75. A quantitative acoustic microscope with multiple detection modes. *IEEE Trans UFFC* **36**, 554-560 (1989). J.M.R. Weaver, C.M.W. Daft and G.A.D. Briggs.
76. Non-destructive testing of ceramics by acoustic microscopy. *Br. Ceram. Trans. J.* **88**, 127-132 (1989). C.B. Scruby, C.W. Lawrence, D.G.P. Fatkin, G.A.D. Briggs, A. Dunhill, A.E. Gee and C.-L. Chao.
77. A study of ceramic matrix composites by acoustic microscopy. *Inst. Phys. Conf. Ser.* **98**, 139-142 (1989). C.W. Lawrence, C.B. Scruby and G.A.D. Briggs.
78. Ultrasound—its chemical, physical and biological effects (ed K.S. Suslik). *Interdisciplinary Sci. Rev.* **15**, 190-191 (1990). G.A.D. Briggs.
79. How fine a surface crack can you see in a scanning acoustic microscope? *Elastic Waves and Ultrasonic Nondestructive Evaluation* (eds S.K. Datta, J.D. Achenbach, Y.S. Rajapakse), 63-68. Oxford: North Holland (1990). G.A.D. Briggs.

80. Characterization of the texture of heavily deformed metal-metal composites with acoustic microscopy. *Review of Progress in Quantitative Non-destructive Evaluation* (eds D.O. Thompson, D.E. Chimenti) **9**, 1433-1440. Plenum Press, New York (1990). R.B. Thompson, Y. Li, W.A. Spitzig, G.A.D. Briggs, A.F. Fagan and J. Kushibiki.
81. How sensitive is acoustic microscopy? *European Conference on Advanced Materials and Processes* (eds H.E. Exner, V. Schumacher), 1409-1414. DGM Informationsgesellschaft – Verlag (1990). G.A.D. Briggs.
82. In situ scanning tunneling microscopy: New insight for electrochemical electrode–surface investigations. *J. Electroanal. Chem.* **290**, 1-20 (1990). T.R.I. Cataldi, I.G. Blackham, G.A.D. Briggs, J.B. Pethica and H.A.O. Hill.
83. How fine a surface crack can you see with an acoustic microscope? *J. Microsc.* **159**, 1532 (1990). G.A.D. Briggs, P.J. Jenkins and M. Hoppe.
84. Acoustic microscopy of rocks. *J. Microsc.* **160**, 21-29 (1990). A. Rodriguez-Rey, G.A.D. Briggs, T.A. Field and M. Montoto.
85. Micro-structural observations of a deformed P.S.Z. ceramic using acoustic microscopy. *Trans. R. Microsc. Soc.* **1**, 81-84 (1990). A.F. Fagan, G.A.D. Briggs, J.T. Czernuszka and C.B. Scruby.
86. The measurement of acoustic properties of living human cells. *Trans. R. Microsc. Soc.* **1**, 9194 (1990). J. Wang, R. Gundale and G.A.D. Briggs.
87. Magnetoacoustic emission in a mild steel bar. *35th Annual Conference on Magnetism and Magnetic Materials* (1990). D.H.L. Ng, J.P. Jakubovics, G.A.D. Briggs and C.B. Scruby.
88. Crack detection in silicon nitride by acoustic microscopy. *NDT International* **23**, 3-10 (1990). C.W. Lawrence, C.B. Scruby, G.A.D. Briggs and A. Dunhill.
89. The sensitivity of magnetoacoustic emission to defects and coupling in the context of stress measurement. *J. Appl. Phys.* **69**, 5868-5870 (1991). D.H.L. Ng, J.P. Jakubovics, G.A.D. Briggs and C.B. Scruby.
90. Acoustic Microscopy. In *Images of Materials* (eds D.B. Williams, A.R. Pelton, R. Gronsky) 114-142. Oxford University Press (1991). G.A.D. Briggs and M. Hoppe. §
91. Acoustic microscopy. In *Fatigue Crack Measurement: Techniques and Applications* (eds K.J. Marsh, R.A. Smith, R.O. Ritchie) 147-172. EMAS (1991). P.J. Jenkins and G.A.D. Briggs.
92. The measurement of surface cracks using acoustic microscopy. *J. Fatigue and Fracture Eng. Mater. and Struct.* (1991). P.J. Jenkins and G.A.D. Briggs.
93. Acoustic microscopy: Pictures to ponder. In *Scanning Microscopy* (ed R. Cassing), 153-166. Springer-Verlag (1992). G.A.D. Briggs, R. Gundale, A. Rodriguez-Rey and C.B. Scruby.
94. Microstructural observations of two deformed partially stabilized zirconia ceramics using acoustic microscopy. *J. Mater. Sci.* **27**, 1202-1206 (1992). A.F. Fagan, G.A.D. Briggs, J.T. Czernuszka and C.B. Scruby.
95. Introduction to Crystallography—C. Hammond. *IEEE Trans UFFC* **39**, 453 (1992). G.A.D. Briggs.
96. Effect of stress on magnetoacoustic emission from mild steel and nickel. *J. Magnetism and Magnetic Materials* **104**, 355-356 (1992). D.H.L. Ng, J.P. Jakubovics, C.B. Scruby and G.A.D. Briggs.
97. An STM study of the Si(001)-(2 × 1) and GaAs(110)-(2 × 4) surfaces. *Nanotechnology* **3**, 113122 (1992). G.A.D. Briggs, J. Knall, A.J. Mayne, T.S. Jones, W.H. Weinberg and A.R. Avery.
98. Atom-resolved imaging and spectroscopy on the GaAs(001) surface using tunneling microscopy. *J. Vac. Sci. Technol. B* **10**, 1881-1885 (1992). V. Bressler-Hill, M. Wassermeier, K. Pond, R. Maboudian, G.A.D. Briggs, P.M. Petroff and W.H. Weinberg.
99. Tunneling spectroscopy on the GaAs(110) surface: effect of dopant concentration. *Surf. Sci. Lett.* **275**, L662-668 (1992). R. Maboudian, K. Pond, V. Bressler-Hill, M. Wassermeier, P.M. Petroff, G.A.D. Briggs and W.H. Weinberg.
100. Effect of biaxial stress on magnetoacoustic emission from nickel. *IEEE Trans Magn.* **28**, 2214-2216 (1992). D.H.L. Ng, J.P. Jakubovics, C.B. Scruby and G.A.D. Briggs.
101. The measurement of surface cracks using acoustic microscopy. *Short Fatigue Cracks*, ESIS **13** (Eds K.J. Miller, E.R. de los Rios), Mechanical Engineering Publications, London, 321-334 (1992). P.J. Jenkins and G.A.D. Briggs.
102. Acoustic Microscopy—a summary. *Rep. Prog. Phys.* **55**, 851-909 (1992). G.A.D. Briggs.
103. Acoustic microscope study of the elastic properties of fluorapatite and hydroxyapatite, tooth enamel and bone. *J. Biomechanics* **25**, 1265-1277 (1992). T.N. Gardner, J.C. Elliott, Z. Sklar and G.A.D. Briggs.
104. Chemisorption of organic adsorbates on silicon and gold studied by scanning tunnelling microscopy. *Faraday Discuss.* **94**, 199-212 (1992). A.J. Mayne, T.R.I. Cataldi, J. Knall, I.G. Blackham, A.R. Avery, T.S. Jones, L. Pinhero, H.A.O. Hill, G.A.D. Briggs, J.B. Pethica and W.H. Weinberg.
105. Neville Robinson. *St Catherine's Year* 1992, 23-25 (1992). G.A.D. Briggs.
106. Acoustic microscopy of ceramic fibre composites. *J. Microsc.* **169**, 139-153 (1993). G.A.D. Briggs, C.W. Lawrence and C.B. Scruby.
107. An STM study of the chemisorption of C₂H₄ on Si(001)-(2 × 1). *Surf. Sci.* **284**, 247-256 (1993). A.J. Mayne, A.R. Avery, J. Knall, T.S. Jones, G.A.D. Briggs and W.H. Weinberg.
108. Acoustic microscopy of ceramic fibre composites: (1) — glass matrix composites. *J. Mater. Sci.* **28**, 3635-3644 (1993). C.W. Lawrence, C.B. Scruby, G.A.D. Briggs and J.R.R. Davies.
109. Acoustic microscopy of ceramic fibre composites: (2) — glass-ceramic matrix composites. *J. Mater. Sci.* **28**, 3645-3652 (1993). C.W. Lawrence, G.A.D. Briggs and C.B. Scruby.

110. Acoustic microscopy of ceramic fibre composites: (3) — metal matrix composites. *J. Mater. Sci.* **28**, 3653-3660 (1993). C.W. Lawrence, G.A.D. Briggs and C.B. Scruby.
111. Determination of short crack depth with an acoustic microscope. *Review of Progress in Quantitative Non-destructive Evaluation* (eds D.O. Thompson, D.E. Chimenti) **12**, 2153-2158 (1993). D. Knauss, D.D. Bennink, T. Zhai, G.A.D. Briggs and J.W. Martin.
112. Elastic quantum transport through small structures. *J. Phys: Condens. Matter* **5**, 2389-2406 (1993). T.N. Todorov, G.A.D. Briggs and A.P. Sutton.
113. *Scanning Tunneling Microscopy* By H. Neddermeyer. *Contemporary Physics* **34**, 64 (1993). G.A.D. Briggs. §
114. Depth measurements of short cracks in perspex with the scanning acoustic microscope. *Materials Characterization* **31**, 115-126 (1993). T. Zhai, D.D. Bennink, D. Knauss, G.A.D. Briggs and J.W. Martin. *Buehler Technical Paper Merit Award for Excellence*.
115. Driving force. *The Independent* **2154**, 25 (14 September 1993). G.A.D. Briggs. §
116. Depth measurement of short cracks with an acoustic microscope. *J. Mater. Sci.* **28**, 4910-4917 (1993). D. Knauss, D.D. Bennink, T. Zhai, G.A.D. Briggs and J.W. Martin.
117. Quantitative acoustic microscopy of individual living human cells. *J. Microsc.* **172**, 3-12 (1993). G.A.D. Briggs, J. Wang and R. Gundel.
118. Image processing for the measurement of crack depth using the scanning acoustic microscope. *Acoustical Imaging* **20** (eds Y. Wei, B. Gu), 273-280. New York: Plenum Press (1993). D.D. Bennink, D. Knauss, T. Zhai, G.A.D. Briggs and J.W. Martin.
119. Depth measurements of short cracks in perspex with the scanning acoustic microscope. *Acoustical Imaging* **20** (eds Y. Wei, B. Gu), 281-288. New York: Plenum Press (1993). T. Zhai, D.D. Bennink, D. Knauss, G.A.D. Briggs and J.W. Martin.
120. Measurement of stress in an elastically bent steel bar by magnetoacoustic emission. *IEEE Trans Magn.* **29**, 3028-3030 (1993). D.H.L. Ng, J.P. Jakubovics and G.A.D. Briggs.
121. STM imaging of adsorbed trimethylgallium on GaAs(001)-(2·4). *Mater. Res. Soc. Symp. Proc.* **312** (eds P. Fuoss, J. Tsao, D.W. Kisker, A. Zangwill, T. Kuech), 219-224 (1993). A.R. Avery, A.J. Mayne, C.M. Goringe, J.H.G. Owen, C.W. Smith, M.O. Schweitzer, T.S. Jones, G.A.D. Briggs and W.H. Weinberg.
122. Adsorption of trimethylgallium on semiconductor surfaces: STM observation. *Inst. Phys. Conf. Ser.* **134** (eds A.G. Cullis, A.E. Stoen Bevan, J.L. Hutchison), 605-608 (1993). A.J. Mayne, M.O. Schweitzer, A.R. Avery, T.S. Jones, C.W. Smith, C.M. Goringe, J.B. Pethica and G.A.D. Briggs.
123. Ethylene and coadsorbed hydrogen on Si(100)-(2·1): Structure, bonding, and decomposition. *Journal of Electron Spectroscopy* **64/65**, 129-136 (1993). W. Widdra, C. Huang, G.A.D. Briggs and W.H. Weinberg.
124. Three-dimensional measurement of short fatigue cracks using scanning acoustic microscopy. *Materials Science and Technology* **9**, 1086-1093 (1993). D. Knauss, D.D. Bennink, J.W. Martin, G.A.D. Briggs and T. Zhai.
125. Time-resolved acoustic microscopy of short cracks. *Proc. 1993 IEEE Ultrasonics Symposium* (eds M. Levy, B.R. McAvoy) 599-602 (1993). D. Knauss, G.A.D. Briggs, T. Zhai and J.W. Martin.
126. Quantitative Acoustic Microscopy. In *Material Science and Technology* **2B** (eds R. Cahn, P. Hassen, E.J. Kramer), 241-279. VCH (1994). G.A.D. Briggs.
127. Ceramic fibre composites under the acoustic microscope. *Materials World* **2**, 73-6 (1994). G.A.D. Briggs.
128. Ceramic fiber composites under the acoustic microscope. *Advanced Materials & Processes* **146**, 26-29 (1994). G.A.D. Briggs. (Reprint of *Materials World* **2**, 73-6.)
129. Scanning acoustic microscopy. In *Microanalysis of Solids* (eds B.G. Yakobi, D.B. Holt, L.L. Kazmerski), 327-355. Plenum Press (1994). P. Mutti and G.A.D. Briggs.
130. Effects of compositional impurities and width variations on the conductance of a quantum wire. *J. Phys: Condens. Matter* **6**, 2559-2572 (1994). T.N. Todorov and G.A.D. Briggs.
131. Mixed mode crack mouth reflection in time-resolved acoustic microscopy of short fatigue cracks in single crystal aluminium. *J. Phys. D: Appl. Phys* **27**, 719-725 (1994). T. Zhai, D. Knauss, G.A.D. Briggs and J.W. Martin.
132. *Fatigue of Materials* By S. Suresh. *Contemporary Physics* **34**, 216-217 (1994). G.A.D. Briggs.
133. Acoustic microscopy. *EUROMAT '94* (eds B. Vorsatz, E. Szöke), 107-114 (1994). G.A.D. Briggs.
134. In-situ scanning acoustic microscopy of crack bridging in alumina. *J. Eur. Ceram. Soc.* **14**, 111-116 (1994). T.J. Marrow, G.A.D. Briggs and S.G. Roberts.
135. Arsenic-deficient GaAs(001)-(2·4) surfaces: Scanning-tunneling-microscopy evidence for locally disordered (1·2) Ga regions. *Phys. Rev. B* **50**, 8098-8101 (1994). A.R. Avery, D.M. Holmes, T.S. Jones, B.A. Joyce and G.A.D. Briggs.
136. *Scanning Tunneling Microscopy II*, Eds R. Wiesendanger and H.-J. Güntherodt. *Scanning* **16**, 320 (1994). G.A.D. Briggs.
137. *Scanning Tunneling Microscopy III*, Eds R. Wiesendanger and H.-J. Güntherodt. *Scanning* **16**, 320 (1994). G.A.D. Briggs.
138. Subsurface crack signals in time-resolved acoustic microscopy. *J. Phys. D: Appl. Phys* **27**, 1976-1983 (1994). D. Knauss and G.A.D. Briggs.
139. Nanosources and Manipulation of Atoms Under High Fields and Temperatures: Applications, Edited by V.T. Binh, N. Garcia and K. Dransfeld. *Contemporary Physics* **35**, 303-304 (1994). G.A.D. Briggs.

140. Detection of crack closure in time-resolved acoustic microscopy. *Proc. 1994 IEEE Ultrasonics Symposium Proceedings* (eds M. Levy, S.C. Schneider, B.R. McAvoy) 1421-1424 (1994). D. Knauss, T. Zhai, G.A.D. Briggs and J.W. Martin.
141. The influence of water on the coating-material interface: adhesion measurements and scanning acoustic microscopy. *Advances in Corrosion Protection by Organic Coatings II* (eds J.D. Scantlebury, M. Kendig), 274-283. The Electrochemical Society (1995). J.D. Crossen, J.M. Sykes, D. Knauss, G.A.D. Briggs and J.P. Lomas.
142. Measurement of short fatigue cracks by time-resolved acoustic microscopy. In *Advances in Acoustic Microscopy 1* (ed G.A.D. Briggs), 49-77. New York: Plenum Press (1995). D. Knauss, T. Zhai, G.A.D. Briggs and J.W. Martin.
143. Measurement of the elastic properties of stressed materials by quantitative acoustic microscopy. In *Advances in Acoustic Microscopy 1* (ed G.A.D. Briggs), 209-247. New York: Plenum Press (1995). Z. Sklar, P. Mutti, N.C. Stoodley and G.A.D. Briggs.
144. Surface Brillouin scattering—Extending surface wave measurements to 20 GHz. In *Advances in Acoustic Microscopy 1* (ed G.A.D. Briggs), 249-300. New York: Plenum Press (1995). P. Mutti, C.E. Bottani, G. Ghislotti, M. Beghi, G.A.D. Briggs and J.R. Sandercock.
145. Simultaneous AFM and local conductivity imaging. In *Forces in Scanning Probe Methods* (eds H.J. Güntherodt et al.) NATO ASI **286**, 119-122. Kluwer Academic Publishers (1995). A.J. Kulik, C. Wüthrich, G. Gremaud and G.A.D. Briggs.
146. Elastic properties of GaAs during amorphization by ion implantation. *J. Appl. Phys.* **77**, 2388-2392 (1995). P. Mutti, Z. Sklar, G.A.D. Briggs and C. Jeynes.
147. Adsorption, abstraction, and pairing of atomic hydrogen on Si(100)-(2 × 1). *Phys. Rev. Lett.* **74**, 2074-2077 (1995). W. Widdra, S.I. Yi, R. Maboudian, G.A.D. Briggs and W.H. Weinberg.
148. Fatigue damage in aluminium single crystals—I: On the surface containing the slip Burgers vector. *Acta metall. mater.* **43**, 3813-3825 (1995). T. Zhai, J.W. Martin and G.A.D. Briggs.
149. Nanosubharmonics: the dynamics of small nonlinear contacts. *Phys. Rev. Lett.* **74**, 5092-5095 (1995). N.A. Burnham, A.J. Kulik, G. Gremaud and G.A.D. Briggs.
150. Oscillations in $V(z)$ curves of thin samples. *IEEE Trans UFFC* **42**, 567-570 (1995). P. Mutti, G.A.D. Briggs and D.R. Bowler.
151. Quantitative acoustic microscopy of anodized and coated aluminium at frequencies up to 1 GHz. *J. Mater. Sci.* **30**, 3752-3760 (1995). Z. Sklar, G.A.D. Briggs, P. Cawley and A.J. Kinloch.
152. Materials science education: from school to university. *Mater. Sci. Eng. A* **199**, 89-94 (1995). G.A.D. Briggs. §
153. Measurement of adhesive-adherend interlayer properties using acoustic microscopy. *Review of Progress in Quantitative Non-destructive Evaluation* (eds D.O. Thompson, D.E. Chimenti) **14**, 1441-1448 (1995). Z. Sklar, G.A.D. Briggs, A.J. Kinloch and P. Cawley.
154. Elastic constants of a stressed layer from surface acoustic wave measurements. *Review of Progress in Quantitative Non-destructive Evaluation* (eds D.O. Thompson, D.E. Chimenti) **14**, 1813-1820 (1995). Z. Sklar, P. Mutti and G.A.D. Briggs.
155. Identification of the Si(001) missing dimer defect structure by low bias voltage STM and LDA modelling. *Surf. Sci. Lett.* **341**, L1042-1047 (1995). J.H.G. Owen, D.R. Bowler, C.M. Gorringe, K. Miki and G.A.D. Briggs.
156. Use of magnetoacoustic emission for studying stress in industrial components. *IEEE Trans Magn.* **31**, 4163-4165 (1995). S.B. Tochilin, J.P. Jakubovics and G.A.D. Briggs.
157. Individual molecules on GaAs(001)-(2 × 1) and Si(001)-(2 × 1): images, statistics, and modelling. *The Ultimate Limits of Fabrication and Measurement* (eds M.E. Welland, J.K. Gimzewski), *NATO ASI Series E: Applied Sciences* **292**, 213-220 (1995). C.M. Gorringe, A.R. Avery, A.J. Mayne, M.O. Schweitzer, W. Widdra, A.J. Fisher, T.S. Jones, G.A.D. Briggs, W.H. Weinberg and C.W. Smith.
158. *Scanning Probe Microscopy and Spectroscopy: Methods and Applications* By R. Wiesendanger. *Contemporary Physics* **36**, 288-289 (1995). G.A.D. Briggs. §
159. Sonography and quantitative measurements. *IEEE Engineering in Medicine and Biology* **15**, 35-41 (1996). C.S. Jørgensen, D. Knauss, H. Hager and G.A.D. Briggs.
160. Statistical analysis of adsorbates. *Surf. Sci.* **348**, 209-225 (1996). A.J. Mayne, C.M. Gorringe, C.W. Smith and G.A.D. Briggs.
161. Fatigue damage at room temperature in aluminium single crystals—II: TEM. *Acta mater.* **44**, 1729-1739 (1996). T. Zhai, J.W. Martin and G.A.D. Briggs.
162. *The Collapse of Chaos* By Jack Cohen and Ian Stewart. *Science & Christian Belief* **8**, 78-79 (1996). G.A.D. Briggs. §
163. Acoustic microscopy and dispersion of leaky Rayleigh waves on randomly rough surfaces: a theoretical study. *IEEE Trans UFFC* **43**, 428-433 (1996). C. Pecorari and G.A.D. Briggs.
164. The effect of anisotropy in time-resolved acoustic microscopy. *J. Phys. D: Appl. Phys.* **29**, 1093-1099 (1996). D. Knauss and G.A.D. Briggs.
165. Scanning tunneling microscopy of the $\text{UO}_2(111)$ surface. *J. Vac. Sci. Technol. B* **14**, 966-969 (1996). M.R. Castell, C. Muggelberg, G.A.D. Briggs and D.T. Goddard.
166. Fatigue damage at room temperature in aluminium single crystals—III: Lattice rotation. *Acta mater.* **44**, 3477-3488 (1996). T. Zhai, J.W. Martin and G.A.D. Briggs.

167. Fatigue damage at room temperature in aluminium single crystals—IV: Secondary slip. *Acta mater.* **44**, 3489-3496 (1996). T. Zhai, G.A.D. Briggs and J.W. Martin.
168. Materials characterization by surface acoustic waves from 200 MHz to 20 GHz. *Acoustical Imaging* **22** (eds P. Tortoli and L. Masotti), 657-664. New York: Plenum Press (1996). G.A.D. Briggs, O.V. Kolosov and M.M. Puentes Heras.
169. Nanoscale imaging of mechanical properties by ultrasonic force microscopy (UFM). *Acoustical Imaging* **22** (eds P. Tortoli and L. Masotti), 665-668. New York: Plenum Press (1996). O.V. Kolosov, G.A.D. Briggs, K. Yamanaka and W. Arnold.
170. Science and technology—profit or loss? In *Building a Society where Relationships Matter* (ed N. Baker), 167-182. Arena Publishing, Aldershot (1996). G.A.D. Briggs.
171. Acoustic microscopy for imaging and characterization. *MRS Bulletin October* **1996**, 30-35. G.A.D. Briggs and O.V. Kolosov.
172. Relationships in communication. *Science and Public Affairs Autumn* **1996**, 22-27 (1996). G.A.D. Briggs.
173. Evaluation of diffusion bonds formed between superplastic sheet materials. *J. Mater. Sci.* **31**, 5199-5206 (1996). Z.C. Wang, N. Ridley, G.W. Lorimer, D. Knauss and G.A.D. Briggs.
174. Paul Davies *Superforce. Science & Christian Belief* **8**, 168-169 (1996). G.A.D. Briggs.
175. I.B. Cohen and R.S. Westfall (Ed) *Newton. Science & Christian Belief* **8**, 188 (1996). G.A.D. Briggs.
176. Atomic Force Microscopy Apparatus and Method thereof. UK Patent Application No. 9617380.2 (19 August 1996). O.V. Kolosov and G.A.D. Briggs.
177. Characterisation of surface damage via contact probes. *Nanotechnology* **7**, 288-294 (1996). P.D. Warren, O.V. Kolosov, S.G. Roberts and G.A.D. Briggs.
178. Characterisation of surface damage via surface acoustic waves. *Nanotechnology* **7**, 295-301 (1996). P.D. Warren, C. Pecorari, O.V. Kolosov, S.G. Roberts and G.A.D. Briggs.
179. Hydrogen diffusion on Si(001). *Phys. Rev. B* **54**, 14153-14157 (1996). J.H.G. Owen, D.R. Bowler, C.M. Goringe, K. Miki and G.A.D. Briggs.
180. Microcracks of the thin-film head alumina: “L” cracks and “U” cracks. *IEEE Trans Magnetics* **32**, 3696-3698 (1996). A.S. Chekanov, T.S. Low, S. Alli, O.V. Kolosov and G.A.D. Briggs.
181. Materials, Properties of. *Encarta Encyclopedia*. Websters Multimedia (1996, CD ROM). G.A.D. Briggs.
182. Imaging of spheres with the confocal scanning optical microscope. *Opt. Lett.* **21**, 1800-1802 (1996). W. Weise, P. Zinin, T. Wilson, G.A.D. Briggs and S. Boseck.
183. Adhesive/adherand interlayer property measurement by acoustic microscopy. *European Adhesion Conference (Adhesion'96-Euradh'96)* 391-396. Institute of Materials (1996). B.D. Zeller, A.J. Kinloch, P. Cawley, P. Zinin, G.A.D. Briggs, G.E. Thompson and X. Zhou.
184. Cut-off properties of leaky surface waves for the evaluation of adhesive-adherand interlayers by acoustic microscopy. *Proc. 1996 IEEE Ultrasonics Symposium*, 803-806 (1996). P. Zinin, O. Lefevre, I. Goldfarb, G.A.D. Briggs, B.D. Zeller, A.J. Kinloch, P. Cawley, L. Robert and G.E. Thompson.
185. Scanning Tunneling Microscopy and its Application, in the series Springer Series in Surface Sciences 32, By C. Bai. *Contemporary Physics* **38**, 95 (1997). G.A.D. Briggs.
186. Acoustic microscopy. In *Handbook of Microscopy* (eds S. Amelinckx, D. Van Dyck, J.F. Van Landuyt, G. Van Tendeloo), 193-241. VCH, Weinheim (1997). G.A.D. Briggs.
187. Hydrocarbon adsorption on Si(001): When does the Si dimer bond break? *Surf. Sci.* **374**, 298-305 (1997). A.J. Fisher, P.E. Blöchl and G.A.D. Briggs.
188. How does a Tip Tap? *Nanotechnology* **8**, 67-75 (1997). N.A. Burnham, O.P. Behrend, F. Oulevey, G. Gremaud, P.J. Gallo, D. Gourdon, E. Dupas A.J. Kulik, H.M. Pollock and G.A.D. Briggs.
189. Atomic-resolution STM of a system with strongly correlated electrons: NiO(001) surface structure and defect sites. *Phys. Rev. B* **55**, 7859-7863 (1997). M.R. Castell, P.L. Wincott, N.G. Condon, C. Muggenberg, G. Thornton, S.L. Dudarev, A.P. Sutton and G.A.D. Briggs.
190. Tip-induced surface polarization: a new mechanism for contrast in the Scanning Tunnelling Microscope. *Surf. Sci.* **380**, L479-484 (1997). H. Ness, A.J. Fisher and G.A.D. Briggs.
191. Nonlinear dynamics of intermittent-contact mode atomic force microscopy. *Phys. Rev. B* **55**, 14899-14908 (1997). J.M. Berg and G.A.D. Briggs.
192. Elevated-temperature STM study of Ge and Si growth on Si(001) from GeH₄ and Si₂H₆. *Surface Diffusion: Atomistic and Collective Processes* (Ed M.C. Tringides), Plenum Press, New York, 245-252 (1997). J.H.G. Owen, K. Miki, D.R. Bowler, G.A.D. Briggs and I. Goldfarb.
193. Anomalous behaviour of leaky surface waves for stiffening layer near cutoff. *J. Appl. Phys* **82**, 1031-1035 (1997). P. Zinin, O. Lefevre, G.A.D. Briggs, B.D. Zeller, P. Cawley, A.J. Kinloch and G.E. Thompson.
194. Nucleation of “hut” pits and clusters during gas-source molecular-beam epitaxy of Ge/Si(001) in *in situ* scanning tunneling microscopy. *Phys. Rev. Lett.* **78**, 3959-3962 (1997). I. Goldfarb, P.T. Hayden, J.H.G. Owen and G.A.D. Briggs.
195. A proposed structure of the nucleus for gas-source epitaxial growth of silicon. *Surf. Sci.* **382**, L678-685 (1997). J.H.G. Owen, D.R. Bowler, C.M. Goringe, K. Miki and G.A.D. Briggs.

196. Ultrasound induced lubricity in microscopic contact. *Appl. Phys. Lett.* **71**, 1177-1179 (1997) F. Dinelli, S.K. Biswas, G.A.D. Briggs and O.V. Kolosov.
197. Surface states on NiO(100) and the origin of the contrast reversal of atomically resolved scanning tunnelling microscope images. *Phys. Rev. B* **56**, 4900-4908 (1997). S.L. Dudarev, A.I. Liechtenstein, M.R. Castell, G.A.D. Briggs and A.P. Sutton.
198. Surface response of a fluid loaded anisotropic solid to an impulsive point force: Application to scanning acoustic microscopy. *Phys. Rev. Lett.* **79**, 2478-2481 (1997). A.G. Every, A.A. Maznev and G.A.D. Briggs.
199. Competing growth mechanisms of Ge/Si(001) coherent clusters. *Phys. Rev. B* **56**, 10459-10468 (1997). I. Goldfarb, P.T. Hayden, J.H.G. Owen and G.A.D. Briggs.
200. A ramble up mount improbable. *Times Higher Education Supplement* **1,305**, 26 (7 November 1997). G.A.D. Briggs. §
201. Defect structure of nonstoichiometric CeO₂(111) surfaces studied by scanning tunneling microscopy. *Phys. Rev. Lett.* **79**, 4222-4225 (1997). H. Norenberg and G.A.D. Briggs.
202. Opening address. In *Science and Society*, JSPS – UK Research Council Symposium, 9-11. Pilkington Press (1997). G.A.D. Briggs. §
203. Adhesive/adherand interlayer property measurement by acoustic microscopy. *Review of Progress in Quantitative Non-destructive Evaluation* (eds D.O. Thompson, D.E. Chimenti) **16B**, 1237-1244, New York: Plenum Press (1997). B.D. Zeller, A.J. Kinloch, P. Cawley, P. Zinin, G.A.D. Briggs, G.E. Thompson and X. Zhou.
204. Gas-source growth of Group IV semiconductors: I. Si(001) nucleation mechanisms. *Surf. Sci.* **394**, 79-90 (1997). J.H.G. Owen, K. Miki, D.R. Bowler, C.M. Goringe, I. Goldfarb and G.A.D. Briggs.
205. Gas-source growth of Group IV semiconductors: II. Growth regimes and the effect of hydrogen. *Surf. Sci.* **394**, 91-104 (1997). J.H.G. Owen, K. Miki, D.R. Bowler, C.M. Goringe, I. Goldfarb and G.A.D. Briggs.
206. Gas-source growth of Group IV semiconductors: III. Nucleation and growth of Ge/Si(001). *Surf. Sci.* **394**, 105-118 (1997). I. Goldfarb, J.H.G. Owen, P.T. Hayden, D.R. Bowler, K. Miki and G.A.D. Briggs.
207. Atomic resolution STM of the NiO(100) surface structure and defect sites: *c*(2 × 2) patterning and effects of covalent bonding. *Surface Review and Letters* **4**, 1003-1008 (1997). M.R. Castell, S.L. Dudarev, P.L. Wincott, N.G. Condon, C. Muggelberg, G. Thornton, D. Nguyen Manh, A.P. Sutton and G.A.D. Briggs.
208. Determination of the defocused transfer function of a confocal reflection microscope by imaging of a sphere. *Optik* **107**, 45-48 (1997). P. Zinin, W. Weise, T. Zhai, G.A.D. Briggs and S. Boseck.
209. Depth measurements of short cracks in perspex with the scanning acoustic microscope. *Materials Characterization* **39**, 653-664 (1997, reprinted from *Materials Characterization*, **31**, 115-126 (1993)). T. Zhai, D.D. Bennink, D. Knauss, G.A.D. Briggs and J.W. Martin.
210. Nucleation, growth and size distributions of Ge islands on Si(001): *in-situ* STM studies. *Microscopy of Semiconducting Materials 10, Inst. Phys. Conf. Ser.* **157**, 597-600 (1997). I. Goldfarb, J.H.G. Owen, P.T. Hayden, K. Miki and G.A.D. Briggs.
211. Evaluation of lapping and polishing damage in brittle materials by quantitative acoustic microscopy. *Advances in the Characterisation of Ceramics* **21**, 167-176 (1997). P.D. Warren, C.W. Lawrence, S.G. Roberts, G.A.D. Briggs, C. Pecorari and O.V. Kolosov.
212. Study of the coating/substrate interface by scanning acoustic microscopy – Cathodic disbonding of epoxy-polyamide lacquer from mild steel. *Faraday Discussions* **107**, 417-424 (1997). J.D. Crossen, J.M. Sykes, T. Zhai and G.A.D. Briggs.
213. Bias-dependent STM investigations of trimethylgallium adsorption on Si(001) at elevated temperatures. *Appl. Surf. Sci.* **123**, 161-165 (1998). H. Nörenberg, D.R. Bowler and G.A.D. Briggs.
214. Visualization of precipitation induced crystallographic shear planes as one-dimensional structures on surfaces: an STM and RHEED study on TiO₂(110). *Surf. Sci.* **396**, 52-60 (1998). H. Nörenberg, R.E. Tanner, K.D. Schierbaum, S. Fischer and G.A.D. Briggs.
215. Acoustoelastic measurements on aluminium alloy by means of a contact and a non-contact (LFB acoustic microscopy) technique. *J. Acoust. Soc. Am.* **103**, 1370-1376 (1998). T. Berruti, M.M. Gola and G.A.D. Briggs.
216. Acoustic microscopy of room temperature fatigue damage in aluminium single crystals. *Phil. Mag. A* **77**, 957-980 (1998). T. Zhai, G.A.D. Briggs and J.W. Martin.
217. Surface wave dispersion beyond cutoff for a fast layer on a slow substrate. *Appl. Phys. Lett.* **72**, 856-857 (1998). O. Lefevre, P. Zinin, G.A.D. Briggs and A.G. Every.
218. Diffusion of paired hydrogen on Si(001). *Phys. Rev. B* **57**, 8790-8793 (1998). D.R. Bowler, J.H.G. Owen, K. Miki and G.A.D. Briggs.
219. The atomic structure of the UO₂(111) surface and the effects of additional surface oxygen studied by elevated temperature STM. *Surface Review and Letters* **5**, 315-320 (1998). C. Muggelberg, M.R. Castell, G.A.D. Briggs and D.T. Goddard.
220. Leaky surface waves propagating on a fast on slow system and the implications for material characterization. *Ultrasonics* **36**, 229-232 (1998). O. Lefevre, P. Zinin and G.A.D. Briggs.
221. Anisotropic elastic characterization of surfaces from 2 MHz to 20 GHz. *Ultrasonics* **36**, 317-321 (1998). G.A.D. Briggs and O.V. Kolosov.
222. Surface structure and bonding in the strongly correlated metal oxides NiO and UO₂. *J. Vac. Sci. Technol. A* **16**, 1055-1058 (1998). M.R. Castell, S.L. Dudarev, C. Muggelberg, A.P. Sutton, G.A.D. Briggs and D.T. Goddard.

223. *In situ* observation of gas-source molecular beam epitaxy of silicon and germanium on Si(001). *J. Vac. Sci. Technol. A* **16**, 1938-1943 (1998). I. Goldfarb, J.H.G. Owen, D.R. Bowler, C.M. Goringe, P.T. Hayden, K. Miki, D.G. Pettifor and G.A.D. Briggs.
224. Imaging insulating oxides by elevated temperature STM. *Appl. Phys. A* **66**, S963-967 (1998). M.R. Castell, C. Muggelberg, S.L. Dudarev, A.P. Sutton, G.A.D. Briggs and D.T. Goddard.
225. Atomic assembly of germanium on silicon. *J. Surf. Anal.* **4**, 143-147 (1998). I. Goldfarb and G.A.D. Briggs.
226. Surface response of a fluid-loaded solid to impulsive line and point forces: Application to scanning acoustic microscopy. *Phys. Rev. B* **58**, 1601-1612 (1998). A.G. Every and G.A.D. Briggs.
227. Examination of the two-dimensional pupil function in coherent scanning microscopes using spherical particles. *J. Acoust. Soc. Am.* **104**, 181-191 (1998). W. Weise, P. Zinin, G.A.D. Briggs, T. Wilson and S. Böseck.
228. Imaging the elastic nanostructure of Ge islands by ultrasonic force microscopy. *Phys. Rev. Lett.* **81**, 1046-1049 (1998). O.V. Kolosov, M.R. Castell, C.D. Marsh, G.A.D. Briggs, T.I. Kamins and R.S. Williams.
229. Acoustic microscopy of ceramic fibre composites. In *Microstructural Characterisation of Fibre-Reinforced Composites* (ed J. Summerscales), 256-303. Cambridge: Woodhead (1998). C.W. Lawrence and G.A.D. Briggs.
230. The atomic structure of $\text{UO}_{2+x}(110)$ surface and the effects of interstitial oxygen: an elevated-temperature STM study. *Surf. Sci.* **404**, 673-677 (1998). C. Muggelberg, M.R. Castell, G.A.D. Briggs and D.T. Goddard.
231. Surface structure of $\text{CeO}_2(111)$ studied by low current STM and electron diffraction. *Surf. Sci.* **404**, 734-737 (1998). H. Nörenberg and G.A.D. Briggs.
232. Surface structure of the most oxygen deficient Magnéli phase – an STM study of Ti_4O_7 . *Surf. Sci.* **404**, 738-741 (1998). H. Nörenberg and G.A.D. Briggs.
233. Pilots, parachutes and a drunk's walk. *Times Higher Education Supplement* **1,351**, 26 (25 September 1998). G.A.D. Briggs.
234. Studies of adhesion and disbonding of coatings by scanning acoustic microscopy. In *Organic coatings for Corrosion Control* (ed Gordon P. Bierwagen), ACS Symposium Series **689**, 106-122, American Chemical Society, Washington (1998). J.D. Crossen, J.M. Sykes, G.A.D. Briggs and J.P. Lomas.
235. Influence of HCl on the chemical vapor deposition and etching of Ge islands on Si(001). *Appl. Phys. Lett.* **73**, 1862-1864 (1998). T.I. Kamins, G.A.D. Briggs and R.S. Williams.
236. High resolution scanning tunnelling microscopy of the rutile $\text{TiO}_2(110)$ surface. *Surf. Sci.* **413**, 672-681 (1998). R.E. Tanner, M.R. Castell and G.A.D. Briggs.
237. Microstructural characterisation of transparent silicon oxide permeation barrier coatings on PET. *Society of Vacuum Coaters 41st Annual Technical Conference Proceedings* 434-439 (1998). B.M. Henry, A.P. Roberts, C.R.M. Grovenor, A.P. Sutton, G.A.D. Briggs, Y. Tsukahara, M. Yanaka and T. Mayamoto.
238. Memory materials: the flexible friends. *Times Higher Education Supplement* **1,357**, 28 (6 November 1998). G.A.D. Briggs.
239. Using growth kinetics for nanoengineering of Si-Ge surfaces. *Mater. Res. Soc. Symp. Proc.* **533**, 177-182 (1998). I. Goldfarb and G.A.D. Briggs.
240. Advances in germanium-silicon heteroepitaxy. *Recent Res. Devel. in Mat. Sci.* **1**, 189-213 (1998). I. Goldfarb and G.A.D. Briggs.
241. Acoustic microscopy and surface Brillouin spectroscopy for hard thin film characterisation. *ASME International Mechanical Engineering Congress and Exposition* (eds L. Olson, M.R. Baccouche, K.T. Ramesh, T. Kundu, H.V. Tippur) 111, New York: ASME (1998). P. Zinin, M.H. Manghnani, S. Tkachev, V. Askarpour, O. Lefevre, G.A.D. Briggs, A.G. Every, B.D. Zeller, P. Cawley and A.J. Kinloch.
242. Materials science and engineering. *Encarta Encyclopedia*. Websters Multimedia (1998, CD ROM). G.A.D. Briggs.
243. Covalent bonding in NiO: Evidence from a combined STM, LSDA + U and EELS study. *The Electron* (eds A. Kirmland and P.D. Brown), 299-305, IOM Communications (1998). M.R. Castell, S.L. Dudarev, G.A. Botton, G.A.D. Briggs and A.P. Sutton.
244. Characterization of near surface mechanical properties of ion-exchanged glasses using surface Brillouin spectroscopy. *Nondestructive Characterization of Materials VIII* (ed R.E. Green), 817-823, Plenum Press, New York (1998). M.M. Puentes, J. Bradshaw, G.A.D. Briggs, O.V. Kolosov, D.K. Bowen and N. Loxley.
245. Characterization of epoxy coated oxide films using acoustic microscopy. *Review of Progress in Quantitative Non-destructive Evaluation* (eds D.O. Thompson, D.E. Chimenti) **17B**, 1261-1268, New York: Plenum Press (1998). B.D. Zeller, A.J. Kinloch, P. Cawley, P. Zinin, O. Lefevre, G.A.D. Briggs, G.E. Thompson and X. Zhou.
246. Ultrasonic force microscopy in waveguide mode up to 100 MHz. *Proc. 1998 IEEE Ultrasonics Symposium* 1255-1259 (1998). K. Inagaki, O.V. Kolosov, G.A.D. Briggs, S. Muto, Y. Horisaki and O.B. Wright.
247. Elastic and shear moduli of single-walled carbon nanotube ropes. *Phys. Rev. Lett.* **82**, 944-947 (1999). J.P. Salvetat, G.A.D. Briggs, J.M. Bonard, R.R. Bacsa, A.J. Kulik, T. Stöckli, N.A. Burnham and L. Forró.
248. Elastic modulus of ordered and disordered multiwalled carbon nanotubes. *Adv. Mater.* **11**, 161-165 (1999). J.P. Salvetat, A.J. Kulik, J.M. Bonard, G.A.D. Briggs, T. Stöckli, K. Méténier, S. Bonnamy, F. Béguin, N.A. Burnham and L. Forró.
249. *Photons and Local Probes* By O. Martí and R. Möller. *Contemporary Physics* **39**, 212-213 (1998). G.A.D. Briggs.

250. Quantitative acoustic microscopy for determination of properties of hard coatings. DVM-Bericht **518**, *Bauteilversagen durch Mikrodefekte* 265-270, DVM Berlin (1998). E. Matthaei-Schulz, T. Flaherty, T. Randles, C. Flannery, G. Crean, O. Lefevre, P. Zinin, G.A.D. Briggs and L. Robert.
251. Up-to-date stuff for the use of. *Times Higher Education Supplement* **1,370**, 23 (5 February 1999). G.A.D. Briggs. §
252. Bismuth-induced structures on Si(001) surfaces. *Surf. Sci.* **421**, 397-418 (1999). K. Miki, J.H.G. Owen, D.R. Bowler, G.A.D. Briggs and K. Sakamoto.
253. Traffic lights and p-n junctions. *Times Higher Education Supplement* **1375**, 28 (12 March 1999). G.A.D. Briggs. §
254. Defect formation on CeO₂(111) surfaces after annealing studied by STM. *Surf. Sci.* **424**, L352-355 (1999). H. Nörenberg and G.A.D. Briggs.
255. Permeation of gases through polymer membranes investigated by mass spectroscopy. *Vacuum* **53**, 313-315 (1999). H. Nörenberg, T. Miyamoto, N. Fukugami, Y. Tsukahara, G.D.W. Smith and G.A.D. Briggs.
256. Unexpected differences in the surface electronic structure of NiO and CoO observed by STM and explained by first-principles theory. *Phys. Rev. B* **59**, 7342-7345 (1999). M.R. Castell, S.L. Dudarev, G.A.D. Briggs and A.P. Sutton.
257. STM experiment and atomistic modelling hand in hand: individual molecules on surfaces of semiconductors. *Surface Science Reports* **33**, 1-81 (1999). G.A.D. Briggs and A.J. Fisher.
258. The effect of mismatch strain on Stranski-Krastanow transition in epitaxial Ge_xSi_{1-x}/Si(001) gas-source growth. *J. Cryst. Growth* **199**, 1032-1038 (1999). I. Goldfarb and G.A.D. Briggs.
259. Bulk and surface electronic structure of NiO and CoO: a comparative ab initio LSDA + U analysis and application to the interpretation of STM images. *Physica B* **259-261**, 717-718 (1999). S.L. Dudarev, M.R. Castell, G.A.D. Briggs and A.P. Sutton.
260. Measurement of a stiffening layer density by acoustic microscopy. *J. Mater. Sci. Lett.* **18**, 259-261 (1999). P. Zinin, O. Lefevre and G.A.D. Briggs.
261. Elastic mapping of heterogenous nano-structures with ultrasonic force microscopy (UFM). *Surf. Interface Anal.* **27**, 562-567 (1999). F. Dinelli, H.E. Assender, N. Takeda, G.A.D. Briggs and O.V. Kolosov.
262. Mass spectrometric estimation of gas permeation coefficients for thin polymer membranes. *Rev. Sci. Instr.* **70**, 2414-2420 (1999). H. Nörenberg, T. Miyamoto, Y. Tsukahara, G.D.W. Smith and G.A.D. Briggs.
263. Supertext: the book that changed my life. *Times Higher Education Supplement* **1,386**, II (28 May 1999). G.A.D. Briggs. §
264. A study of fatigue damage in aluminium single crystals at room temperature with time-resolved acoustic microscopy. In *Engineering Against Fatigue* (eds J.H. Benyon, M.W. Brown, R.A. Smith, T.C. Lindley, B. Tomkins), 171-181 (A.A. Balkema, Rotterdam 1999). T. Zhai, G.A.D. Briggs and J.W. Martin.
265. The Si(001)-c(4 × 4) surface reconstruction: a comprehensive experimental study. *Surf. Sci.* **430**, 154-164 (1999). H. Nörenberg and G.A.D. Briggs.
266. Titanium disilicide nanostructures: two phases and their surfaces. *Surf. Sci.* **431**, 116-127 (1999). G. Medeiros-Ribeiro, D.A.A. Ohlberg, D.R. Bowler, R.E. Tanner, G.A.D. Briggs and R.S. Williams.
267. Atomically perfect bismuth lines on Si(001). *Phys. Rev. B* **59**, 14868-14871 (1999). K. Miki, D.R. Bowler, J.H.G. Owen, G.A.D. Briggs and K. Sakamoto.
268. An STM study of the UO₂(001) surface. *Appl. Surf. Sci.* **142**, 124-128 (1999). C. Muggelberg, M.R. Castell, G.A.D. Briggs and D.T. Goddard.
269. The surface structure of CeO₂(110) single crystals studied by STM and RHEED. *Surf. Sci.* **435**, 127-130 (1999). H. Nörenberg and G.A.D. Briggs.
270. Influence of carbon on the formation of the Si(001)-c(4 × 4) surface reconstruction. *Surf. Sci.* **435**, 397-400 (1999). H. Nörenberg and G.A.D. Briggs.
271. Comparative STM and RHEED studies of Ge/Si(001) and Si/Ge(001) surfaces. *Surf. Sci.* **435**, 449-454 (1999). I. Goldfarb and G.A.D. Briggs.
272. Ultrasonic force microscopies – merging ultrasound and SPM to explore nanometre scale mechanics on the nanosecond time scale. *Prelim. Proc. STM'99* (eds Y. Kuk, I.W. Lyo, D. Jeon, S.-I. Park), 392-395 (1999). O.V. Kolosov and G.A.D. Briggs.
273. Very high frequency ultrasonic force microscopy in waveguide mode. *Prelim. Proc. STM'99* (eds Y. Kuk, I.W. Lyo, D. Jeon, S.-I. Park), 521-522 (1999). K. Inagaki, O.V. Kolosov, G.A.D. Briggs, N. Mason and O.B. Wright.
274. Nonlinear detection of *free* versus *sample-induced* cantilever response to ultrasonic vibration. *Prelim. Proc. STM'99* (eds Y. Kuk, I.W. Lyo, D. Jeon, S.-I. Park), 533-534 (1999). M.T. Cuberes, H.E. Assender, G.A.D. Briggs and O.V. Kolosov.
275. Heterodyne force microscopy: nanomapping of viscoelastic response at ultrasonic speeds. *Prelim. Proc. STM'99* (eds Y. Kuk, I.W. Lyo, D. Jeon, S.-I. Park), 535-536 (1999). M.T. Cuberes, G.A.D. Briggs and O.V. Kolosov.
276. Reactive deposition epitaxy of CoSi₂ nanostructures on Si(001): nucleation and growth and evolution of dots during anneal. *Phys. Rev. B* **60**, 4800-4809 (1999). I. Goldfarb and G.A.D. Briggs.
277. Study of the degradation of the coating/substrate interface by time-resolved acoustic microscopy. *Proceedings of The Second Japan-US Symposium on Advances in NDT*, 368-372 (1999). P. Zinin, M.H. Manghnani, G.A.D. Briggs, B.D. Zeller, P. Cawley and A.J. Kinloch.

278. Determination of the elastic properties of a barrier film on aluminium by Brillouin spectroscopy. *Thin Solid Films* **350**, 53-58 (1999). O. Lefevre, W. Pang, P. Zinin, J.D. Comins, A.G. Every, G.A.D. Briggs, B.D. Zeller and G.E. Thompson.
279. And they let there be light. *Times Higher Education Supplement* **1,403**, 25 (24 September 1999). G.A.D. Briggs. §
280. Network-like ($7\sqrt{2} \times \sqrt{2}$) $R45^\circ$ surface reconstruction on rutile TiO₂(001) by non-equilibrium self-organization. *Surf. Sci. Lett.* **436**, L635-640 (1999). H. Nörenberg, F. Dinelli and G.A.D. Briggs.
281. Reply to ‘Comment on ‘High resolution scanning tunnelling microscopy of the rutile TiO₂(110) surface’ by R.E. Tanner, M.R. Castell, G.A.D. Briggs’ [Surf. Sci. **412/413** (1998) 672]. *Surf. Sci.* **437**, 263-264 (1999). R.E. Tanner, M.R. Castell and G.A.D. Briggs.
282. How to measure small cracks by nanosecond acoustic microscopy. *Small Fatigue Cracks: Mechanics, Mechanisms and Applications* (eds K.S. Ravichandran, R.O. Ritchie, Y. Murakami), 331-341. Elsevier science (1999). G.A.D. Briggs, T. Zhai and J.W. Martin.
283. A self-aligning four-point bend testing rig and sample geometry effect in four-point bend fatigue. *International Journal of Fatigue* **21**, 889-894 (1999). T. Zhai, Y.G. Xu, J.W. Martin, A.J. Wilkinson and G.A.D. Briggs.
284. Determination of density and elastic constants of a thin phosphoric acid-anodized oxide film by acoustic microscopy. *J. Acoust. Soc. Am.* **106**, 2560-2567 (1999). P. Zinin, O. Lefevre, G.A.D. Briggs, B.D. Zeller, P. Cawley, A.J. Kinloch, X. Zhou and G.E. Thompson.
285. Synthetic materials. *Encarta Encyclopedia*. Websters Multimedia (1999, CD ROM). G.A.D. Briggs. §
286. Glass. *Encarta Encyclopedia*. Websters Multimedia (1999, CD ROM). G.A.D. Briggs. §
287. Ever-decreasing rugby balls. *Times Higher Education Supplement* **1,409**, 27 (5 November 1999). G.A.D. Briggs. §
288. A microstructural study of transparent metal oxide gas barrier films. *Thin Solid Films* **356**, 500-505 (1999). B.M. Henry, F. Dinelli, K.Y. Zhao, C.R.M. Grovenor, O.V. Kolosov, G.A.D. Briggs, A.P. Roberts, R.S. Kumar and R.P. Howson.
289. The effect of thermal cycling damage on the permeability and structure of transparent gas barrier films. *Chem. Eng. Technol.* **22**, 1010-1011 (1999). B.M. Henry, H. Norenberg, F. Dinelli, C.R.M. Grovenor, G.A.D. Briggs, Y. Tsukahara and T. Miyamoto.
290. A new class of crystallography. *Times Higher Education Supplement* **1,412**, XIV (26 November 1999). G.A.D. Briggs. §
291. Bismuth and antimony nanolines in a Si epitaxial layer. *Inst. Phys. Conf. Ser.* **164**, 167-170 (1999). K. Miki, H. Matsuhata, K. Sakamoto, G.A.D. Briggs, J.H.G. Owen and D.R. Bowler.
292. Titanium disilicide nanoislands on Si(001) surfaces. *Inst. Phys. Conf. Ser.* **164**, 549-552 (1999). G. Medeiros-Ribeiro, D. Basile, T.A. Kamins, D.A.A. Ohlberg, G.A.D. Briggs and R.S. Williams.
293. Nucleation and growth of CoSi₂ dots on Si(001). *Inst. Phys. Conf. Ser.* **164**, 553-556 (1999). I. Goldfarb and G.A.D. Briggs.
294. An elevated temperature STM study of the Si(001)-c(4 × 4) surface reconstruction. *Inst. Phys. Conf. Ser.* **164**, 637-640 (1999). H. Nörenberg and G.A.D. Briggs.
295. Electron tunnelling at surfaces of Mott insulating *d*- and *f*-metal oxides: the *ab-initio* interpretation of STM images. *Nanostructures: Physics and Technology* **7** (ed Zh. Alferov, L. Esaki), 244-247; Ioffe Institute, St Petersburg (1999). S.L. Dudarev, M.R. Castell, G.A.D. Briggs and A.P. Sutton.
296. Acoustic microscopy for transversely isotropic layer characterisation in material science, in *Mechanical Properties of Cells and Tissues* (ed H.J. Hein), Augustusburg Conference of Advanced Science (ACAS'99), Halle/Saale, 7-10 (1999). P. Zinin, O. Lefevre, G.A.D. Briggs, B.D. Zeller, P. Cawley and A.J. Kinloch.
297. Teaching on Venus. *Times Higher Education Supplement* **1,426**, 27 (10 March 2000). G.A.D. Briggs. §
298. Understanding STM images and EELS spectra of oxides with strongly correlated electrons: a comparison of nickel and uranium oxides. *Micron* **31**, 363-372 (2000). S.L. Dudarev, M.R. Castell, G.A. Botton, S.Y. Savrasov, C. Muggelberg, G.A.D. Briggs, A.P. Sutton and D.T. Goddard.
299. The surface structure of TiO₂(001) after high temperature annealing studied by AFM, STM, and optical microscopy. *Surf. Sci. Lett.* **446**, L83-88 (2000). H. Nörenberg, F. Dinelli and G.A.D. Briggs.
300. Waveguide ultrasonic force microscopy at 60 MHz. *Appl. Phys. Lett.* **76**, 1836-1838 (2000). K. Inagaki, O.V. Kolosov, G.A.D. Briggs and O.B. Wright. *Selected for Virtual Journal of Nanoscale Science & Technology*.
301. Elastic measurements of layered nanocomposite materials by Brillouin spectroscopy. *Ultrasonics* **38**, 459-465 (2000). O. Lefevre, O.V. Kolosov, A.G. Every, G.A.D. Briggs and Y. Tsukahara.
302. Steven Jay Gould *Rocks of Ages: Science and Religion in the Fullness of Life*. *Science & Christian Belief* **12**, 177-180 (2000). G.A.D. Briggs. Reprinted in *Romulus* **4,1**, 23-24 (2000). §
303. Self-assembled metal-semiconductor compound nanocrystals on Group IV semiconductor surfaces. *Surf. Sci.* **454**, 837-841 (2000). I. Goldfarb and G.A.D. Briggs.
304. Measurements of stiff-material compliance on the nanoscale using ultrasonic force microscopy. *Phys. Rev. B* **61**, 13995-14006 (2000). F. Dinelli, S.K. Biswas, G.A.D. Briggs and O.V. Kolosov. *Selected for Virtual Journal of Nanoscale Science & Technology*.
305. The incommensurate nature of epitaxial titanium disilicide islands on Si(001). *Surf. Sci.* **457**, 147-156 (2000). G.A.D. Briggs, D.P. Basile, G. Medeiros-Ribeiro, T.I. Kamins, D.A.A. Ohlberg and R.S. Williams.

306. Evaluation of polishing damage in alumina. *Phil. Mag. A* **80**, 1913-1934 (2000). I. Pape, C.W. Lawrence, P.D. Warren, S.G. Roberts, G.A.D. Briggs, O.V. Kolosov, A.W. Hey, C.F. Paines and B.K. Tanner.
307. *In situ* crystallization study in PET films by elevated temperature AFM/UFM. *Polymer Preprints* **41**, 1489-1490 (2000). V.N. Bliznyuk, K. Kirov, H. E. Assender, G.A.D. Briggs and Y. Tsukahara.
308. Autocorrelation function analysis of the surface structure of amorphous PMMA. *Polymer Preprints* **41**, 1491-1492 (2000). V.N. Bliznyuk, V.M. Burlakov, H.E. Assender, G.A.D. Briggs and Y. Tsukahara.
309. An experimental-theoretical study of the behaviour of hydrogen on the Si(001) surface. *J. Phys: Condens. Matter* **12**, 7655-7670 (2000). D.R. Bowler, J.H.G Owen, C.M. Gorringe, K. Miki and G.A.D. Briggs.
310. Mapping surface elastic properties of stiff and compliant materials on the nanoscale using ultrasonic force microscopy (UFM). *Phil. Mag. A* **80**, 2299-2323 (2000). F. Dinelli, M.R. Castell, N. Mason, G.A.D. Briggs and O.V. Kolosov.
311. Microscopy of metal oxide surfaces. *Microsc. Microanal.* **6**, 324-328 (2000). M.R. Castell, S.L. Dudarev, C. Muggelberg, A.P. Sutton, G.A.D. Briggs and D.T. Goddard.
312. Heterodyne force microscopy of PMMA/rubber nanocomposites: nanomapping of viscoelastic response at ultrasonic frequencies. *J. Phys. D: Appl. Phys* **33**, 2347-2355 (2000). M.T. Cuberes, H.E. Assender, G.A.D. Briggs and O.V. Kolosov.
313. Surface reconstructions on the (100) CoSi₂ surface. *Surf. Sci.* **465**, 259-265 (2000). S.D. Kenny, I. Goldfarb, E. Akhmatskaya and G.A.D. Briggs.
314. On these Rocks. *Oxford Magazine* **181**, 13-15 (2000). Reprinted from *Science & Christian Belief* **12**, 177-180 (2000). G.A.D. Briggs.
315. Quantitative evaluation of surface damage in brittle materials by acoustic microscopy. *Phil. Mag. A* **80**, 2695-2708 (2000). C. Pecorari, C.W. Lawrence, S.G. Roberts and G.A.D. Briggs.
316. In situ crystallization study in PET films by elevated temperature AFM/UFM. *Abstr. Pap. Amer. Chem. Soc.* **220**, 381 (2000). V.N. Bliznyuk, K. Kirov, H.E. Assender, G.A.D. Briggs, Y. Tsukahara.
317. Auto-correlation function analysis of the surface structure of amorphous PMMA. *Abstr. Pap. Amer. Chem. Soc.* **220**, 382 (2000). V.N. Bliznyuk, V.M. Burlakov, H.E. Assender, G.A.D. Briggs, Y. Tsukahara.
318. Room for a spanner in the works? *Times Higher Education Supplement* **1463**, 43 (24 November 2000). G.A.D. Briggs.
319. A solid foundation in solid-state physics. *Times Higher Education Supplement* **1463**, XXII (24 November 2000). G.A.D. Briggs.
320. Measurement of the rate of transmission of a vapour through a sample. British Patent Application No. 0027431.6 (9 November 2000). H. Norenberg, G.A.D. Briggs, G.D.W. Smith, Y. Tsukahara and T. Miyamoto.
321. Treatment of a surface of a polymer. British Patent Application No. 0027432.4 (9 November 2000). V. Bliznyuk, H.A.E. Assender, G.A.D. Briggs, Y. Tsukahara.
322. Comparative study of oxygen permeation through polymers and gas barrier films. *Society of Vacuum Coaters 43rd Annual Technical Conference Proceedings*, 347-351 (2000). H. Nörenberg, C. Deng, H.-J. Kosmella, B.M. Henry, T. Miyamoto, Y. Tsukahara, G.D.W. Smith and G.A.D. Briggs.
323. Multistructural and gas barrier properties of transparent aluminium oxide and indium tin oxide films. *Society of Vacuum Coaters 43rd Annual Technical Conference Proceedings*, 373-378 (2000). B.M. Henry, A.G. Erlat, C.R.M. Grovenor, G.A.D. Briggs, Y. Tsukahara, T. Miyamoto and T. Niijima.
324. Nucleation and growth of gas barrier aluminium oxide on surfaces of poly(ethylene teraphthalate) and polypropylene: effects of the polymer surface properties. *J. Polymer Sci. B* **38**, 3151-3162 (2000). C.S. Deng, H.E. Assender, F. Dinelli, O.V. Kolosov, G.A.D. Briggs, T. Miyamoto and Y. Tsukahara.
325. Nanoscale elastic imaging and mechanical modulus measurements of aluminum/low-k dielectric interconnect structures. *AIP Conf. Proc.* **550**, 449-452 (2001). G.S. Shekhawat, G.A.D. Briggs, O.V. Kolosov and R. E. Geer.
326. A nanostructure diagram for the equilibrium size and shape distribution of epitaxial islands. *6th Int. Symposium on Advanced Physical Fields*, 120 (2001). R.E. Rudd, G.A.D. Briggs, A.P. Sutton, G. Medeiros-Ribeiro and R.S. Williams.
327. Surface studies of phase formation in Co-Ge system: Reactive deposition epitaxy versus solid-phase epitaxy. *J. Mater. Res.* **16**, 744-752 (2001). I. Goldfarb and G.A.D. Briggs.
328. The evolution of Ni nanoislands on the rutile TiO₂(110) surface with coverage, heating and oxygen treatment. *Surf. Sci.* **486**, 167-184 (2001). R.E. Tanner, I. Goldfarb, M.R. Castell and G.A.D. Briggs.
329. Characterization of transparent aluminium oxide and indium tin oxide layers on polymer substrates. *Thin Solid Films* **382**, 194-201 (2001). B.M. Henry, A.G. Erlat, A. McGuigan, C.R.M. Grovenor, G.A.D. Briggs, Y. Tsukahara, T. Miyamoto, N. Noguchi and T. Niijima.
330. Nonlinear detection of ultrasonic vibration of AFM cantilevers in and out of contact with the sample. *Nanotechnology* **12**, 53-59 (2001). M.T. Cuberes, G.A.D. Briggs and O.V. Kolosov.
331. Monte Carlo simulation of growth of porous SiO_x by vapour deposition. *Phys. Rev. Lett.* **86**, 3052-3055 (2001). V.M. Burlakov, G.A.D. Briggs, A.P. Sutton and Y. Tsukahara.
332. Surface structure of amorphous PMMA from SPM: Auto-correlation function and fractal analysis. *Macromolecular Symposia*. **167**, 89-100 (2001). V.N. Bliznyuk, V.M. Burlakov, H.E. Assender, G.A.D. Briggs and Y. Tsukahara.

333. Characterisation of aluminium oxynitride gas barrier films. *Thin Solid Films* **388**, 78-86 (2001). A.G. Erlat, B.M. Henry, J.J. Ingram, D.B. Mountain, A. McGuigan, R.P. Howson, C.R.M. Grovenor, G.A.D. Briggs and Y. Tsukahara.
334. A laboratory on the nanoscale. *Chemistry & Industry* **14**, 450 (2001). G.A.D. Briggs.
335. Pressure-dependent permeation of noble gases (He, Ne, Ar, Kr, Xe) through thin membranes of oriented polypropylene (OPP) studied by mass spectrometry. *Polymer* **42**, 10021-10026 (2001). H. Nörenberg, V.M. Burlakov, H.-J. Kossmella, G.D.W. Smith, G.A.D. Briggs, T. Miyamoto and Y. Tsukahara.
336. Lattice chain simulations of polymer dynamics and structure at interfaces and surfaces. *Abstr. Pap. Amer. Chem. Soc.* **222**, 292 (2001). G. Goldbeck-Wood, J. Wescott, K.L. Anderson, A.H. Windle, V.N. Bliznyuk and G.A.D. Briggs.
337. How cracks in SiO_x -coated polyester films affect gas permeation. *Thin Solid Films* **397**, 176-185 (2001). M. Yanaka, B.M. Henry, A.P. Roberts, C.R.M. Grovenor, G.A.D. Briggs, A.P. Sutton, T. Miyamoto, Y. Tsukahara N. Takeda and R.J. Chater.
338. Biomedical measurements in microscopically thin stratum corneum using acoustics. *Skin Research and Technology* **7**, 254-261 (2001). T.N. Gardner and G.A.D. Briggs.
339. Small intestine wall distribution of elastic stiffness measured with 500 MHz scanning acoustic microscopy. *Annals of Biomedical Engineering* **29**, 1059-1063 (2001). C.S. Jørgensen, J.E. Assentoft, D. Knauss, H. Gregersen and G.A.D. Briggs.
340. *Topics in Electron Diffraction and Microscopy of Materials*, Ed P.B. Hirsch. *Contemporary Physics* **42**, 268-269 (2001). G.A.D. Briggs.
341. Characterisation of the nanometer-scale mechanical compliance of semiconductors by Ultrasonic Force Microscopy. *Inst. Phys. Conf. Ser.* **169**, 531-534 (2001). B.D. Huey, R.M. Langford, G.A.D. Briggs and O.V. Kolosov.
342. Heteroepitaxial growth of InN islands on GaN(0001) and Si(111): a combined STM/AFM study. *Inst. Phys. Conf. Ser.* **169**, 539-542 (2001). C. Nörenberg, M.G. Martin, R.A. Oliver, M.R. Castell, and G.A.D. Briggs.
343. Nanoscale elastic imaging of aluminum/low-k dielectric interconnect structures. *Mater. Res. Soc. Symp. Proc.* **612**, 1-6 (2001). G.S. Shekhawat, O.V. Kolosov, G.A.D. Briggs, E.O. Shaffer, S. Martin, and R.E. Geer.
344. Microstructural characterisation of transparent barrier layers on polyethylene terphthalate. *Proc. 12th Int. Conf. Vacuum Web Coating*, 195-203 (1998). B.M. Henry, C.R.M. Grovenor, A.P. Roberts, H. Nörenberg, A.P. Sutton, G.A.D. Briggs, Y. Tsukahara and T. Mayamoto.
345. Measurement of debonding in cracked nanocomposite films by ultrasonic force microscopy. *Appl. Phys. Lett.* **80**, 1180-1182 (2002). A.P. McGuigan, B.D. Huey, G.A.D. Briggs, O.V. Kolosov, M. Yanaka and Y. Tsukahara.
346. Nanometer-scale mechanical imaging of aluminum damascene interconnect structures in a low-dielectric-constant polymer. *J. Appl. Phys.* **91**, 4549-4555 (2002). R.E. Geer, O.V. Kolosov, G.A.D. Briggs and G.S. Shekhawat. *Selected for Virtual Journal of Nanoscale Science & Technology*.
347. Finite element analysis of CoSi_2 nanocrystals on Si(001). *Interface Science* **10**, 75-81 (2002). I. Goldfarb, L. Banks-Sills and G.A.D. Briggs.
348. Analysis of complex heterogeneous surfaces by bias-dependent scanning tunneling microscopy and spectroscopy. *Mat. Sci. Eng. B* **91**, 115-119 (2002). I. Goldfarb and G.A.D. Briggs.
349. Ammonia-based quantum computer. *Phys. Rev. A* **65**, 034303 (2002). A.J. Ferguson, P.A. Cain, D.A. Williams and G.A.D. Briggs. *Selected for Virtual Journal of Nanoscale Science & Technology*.
350. States of advanced excitement. *Materials Modification by Electronic Excitation* By N. Itoh and A. M. Stoneham. *Times Higher Education Supplement* **1,528**, 31 (8 March 2002). G.A.D. Briggs.
351. Heteroepitaxial growth of InN islands studied by STM and AFM. *J. Phys. D: Appl. Phys.* **35**, 615-619 (2002). C. Nörenberg, M.G. Martin, R.A. Oliver, M.R. Castell and G.A.D. Briggs.
352. Electric Field Induced Patterning of Polymer Films. In *Nanopatterning – From Ultralarge-scale Integration to Biotechnology* (eds L. Merhari, K.E. Gonsalves, E.A. Dobisz, M. Angelopoulos, D. Herr), *Proc. MRS Symposium* **75**, 151-156 (2002). D.G. Bucknall and G.A.D. Briggs.
353. Surface structure of amorphous polystyrene: Comparison of SFM imaging and lattice chain simulations. *Macromolecules* **35**, 5283-5289 (2002). G. Goldbeck-Wood, V.N. Bliznyuk, V. Burlakov, H.E. Assender, G.A.D. Briggs, Y. Tsukahara, K.L. Anderson and A.H. Windle.
354. Surface glass transition temperature of amorphous polymers. A new insight with SFM. *Macromolecules* **35**, 6613-6622 (2002). V.N. Bliznyuk, H.E. Assender and G.A.D. Briggs.
355. Simulation of growth of porous SiO_x nanostructures. *Mater. Sci. Technol.* **18**, 739-742 (2002). V.M. Burlakov, Y. Tsukahara, G.A.D. Briggs and A.P. Sutton.
356. Morphological evolution of epitaxial cobalt-semiconductor compound layers during growth in a scanning tunneling microscope. *J. Vac. Sci. Technol. B* **20**, 1419-1426 (2002). I. Goldfarb, and G.A.D. Briggs.
357. Gas permeation in silicon-oxide/polymer (SiO_x /PET) barrier films: role of the oxide lattice, nano-defects and macro-defects. *J. Membrane Sci.* **208**, 75-88 (2002). A.P. Roberts, B.M. Henry, A.P. Sutton, C.R.M. Grovenor, G.A.D. Briggs, T. Miyamoto, M. Kano, Y. Tsukahara and M. Yanaka.
358. Get the notion of metals in motion. *Introduction to the Electron Theory of Metals* By Uichiro Mizutani. *Times Higher Education Supplement* **1,566**, IV (29 November 2002). G.A.D. Briggs.

359. Stranski-Krastanov Growth of InN nanostructures on GaN studied by RHEED, STM and AFM. *Phys. Stat. Sol. A* **194**, 536-540 (2002). C. Nörenberg, R.A. Oliver, M.G. Martin, L. Allers, M.R. Castell and G.A.D. Briggs.
360. Nanomechanics of microtubules. *Phys. Rev. Lett.* **89**, 248101 (2002). A. Kis, S. Kasas, B. Babic, A.J. Kulik, W. Benoit, G.A.D. Briggs, C. Schonenberger, S. Catsicas and L. Forró. *Selected for Virtual Journal of Nanoscale Science & Technology*.
361. Gas permeation studies of metal oxide/polymer composite films. *Society of Vacuum Coaters 45th Technical Conference Proceedings*, 514-518 (2002). B.M. Henry, A.G. Erlat, C.M.R. Grovenor and G.A.D. Briggs.
362. A new method for measuring low levels of water vapor permeation through polymers and permeation barrier coatings. *Society of Vacuum Coaters 45th Technical Conference Proceedings*, 546-550 (2002). H. Nörenberg, G.D.W. Smith, G.A.D. Briggs, T. Mayamoto and Y. Tsukahara.
363. Life after death gives birth to a significant prize. *The Road to Stockholm: Nobel Prizes, Science, and Scientists By István Hargittai. Times Higher Education Supplement* **1,572**, 26 (17 January 2003). G.A.D. Briggs. §
364. Information register. British Patent Application No. 0116943.2 (Priority Date 11 July 2001); International Publication Number WO 03/007234 A2 (International Application Number PCT/GB02/03176; International Filing Date 10 July 2002; International Publication Date 23 January 2003). G.A.D. Briggs.
365. Tribology and ultrasonic hysteresis at local scales. *Appl. Surf. Sci.* **210**, 54-60 (2003). R. Szoszkiewicz, B.D. Huey, O.V. Kolosov, G.A.D. Briggs, G. Gremaud and A.J. Kulik.
366. Equilibrium model of bimodal distributions of epitaxial island growth. *Phys. Rev. Lett.* **90**, 146101 (2003). R.E. Rudd, G.A.D. Briggs, A.P. Sutton, G. Medeiros-Ribeiro and R.S. Williams. Selected for *Virtual Journal of Nanoscale Science & Technology* **7**, 16 (2003).
367. An elastic-plastic shear lag model for fracture of layered coatings. *Thin Solid Films* **424**, 219-223 (2003). A.P. McGuigan, G.A.D. Briggs, V.M. Burlakov, M. Yanaka and Y. Tsukahara.
368. Birefringence measurement of thin polymer films under tensile stress by a Brillouin scattering method. *Jpn. J. Appl. Phys.* **42**, 3080-3083 (2003). K. Hisa, M. Matsukawa, T. Otani, B.D. Huey, G.A.D. Briggs and N. Ohtori.
369. Model for the pressure-dependent permeation of small molecules through a polymer membrane. *J. Polymer Sci. B – Polymer Phys.* **41**, 1308-1315 (2003). V.M. Burlakov, H. Norenberg, G.A.D. Briggs and Y. Tsukahara.
370. Nanoscale solid-state quantum computing. *Phil. Trans. R. Soc. Lond. A* **361**, 1473-1485 (2003). A. Ardavan, M. Austwick, S.C. Benjamin, G.A.D. Briggs, T.J.S. Dennis, A. Ferguson, D.G. Hasko, M. Kanai, A.N. Khlobystov, B.W. Lovett, G.W. Morley, R.A. Oliver, D.G. Pettifor, K. Porfyrakis, J.H. Reina, J.H. Rice, J.D. Smith, R.A. Taylor, D.A. Williams, C. Adelmann, H. Mariette and R.J. Hamers.
371. The effect of V:III ratio on the growth of InN nanostructures by molecular beam epitaxy. *Surf. Sci.* **532**, 806-810 (2003). R.A. Oliver, C. Nörenberg, M.G. Martin, M.R. Castell, L. Allers and G.A.D. Briggs.
372. Gallium nitride surface preparation optimized using in situ scanning tunneling microscopy. *Appl. Surf. Sci.* **214**, 1-10 (2003). R.A. Oliver, C. Nörenberg, M.G. Martin, A. Crossley, M.R. Castell and G.A.D. Briggs.
373. Dynamics of single InGaN quantum dots. *Physica E* **21**, 285-289 (2003). R.A. Taylor, J.W. Robinson, J.H. Rice, A. Jajour, J.D. Smith, R.A. Oliver, G.A.D. Briggs, M.J. Kappers, C.J. Humphreys and Y. Arakawa.
374. InGaN quantum dots grown by MOVPE via a droplet epitaxy route. *Physica E* **21**, 546-550 (2003). J.H. Rice, R.A. Oliver, J.W. Robinson, J.D. Smith, R.A. Taylor, G.A.D. Briggs, M.J. Kappers, C.J. Humphreys and S. Yasin.
375. InGaN quantum dots grown by metalorganic vapor phase epitaxy employing a post-growth nitrogen anneal. *Appl. Phys. Lett.* **83**, 755-757 (2003). R.A. Oliver, G.A.D. Briggs, M.J. Kappers, C.J. Humphreys, S. Yasin, J.H. Rice, J.D. Smith and R.A. Taylor. *Selected for Virtual Journal of Nanoscale Science & Technology*.
376. Resonant transfer of excitons and quantum computation. *Phys. Lett. A* **315**, 136-142 (2003). B.W. Lovett, J.H. Reina, A. Nazir, B. Kothari and G.A.D. Briggs.
377. Time-resolved dynamics in single InGaN quantum dots. *Appl. Phys. Lett.* **83**, 2674-2676 (2003). J.W. Robinson, J.H. Rice, A. Jarjour, J.D. Smith, R.A. Taylor, R.A. Oliver, G.A.D. Briggs, M.J. Kappers, C.J. Humphreys and Y. Arakawa. *Selected for Virtual Journal of Nanoscale Science & Technology*.
378. Optical schemes for quantum computation in quantum dot molecules. *Phys. Rev. B* **68**, 205319, 1-18 (2003). B.W. Lovett, J.H. Reina, A. Nazir and G.A.D. Briggs. *Selected for Virtual Journal of Nanoscale Science & Technology*.
379. Endohedral fullerene dimers as potential building blocks for a quantum computer. *Proceedings of the Electrochemical Society* **13**, 529-537 (2003). K. Porfyrakis, D.A. Britz, A.N. Khlobystov, A. Ardavan, G.A.D. Briggs, M. Kanai, S. Nawaz and T.J.S. Dennis.
380. Common methods for the preparation of clean A- and B-type GaN surfaces assessed by STM, RHEED and XPS. *Inst. Phys. Conf. Ser.* **180**, 329-332 (2003). R.A. Oliver, C. Nörenberg, M.G. Martin, A. Crossley, M.R. Castell, and G.A.D. Briggs.
381. Simulation of porous SiO_x layer growth. *2000 Intl Conf. on Modeling and Simulation of Microsystems, Tech. Proc.* (Eds M. Laudon, B. Romanowicz), 95-97 (2003). V.M. Burlakov, A.P. Sutton, G.A.D. Briggs and Y. Tsukahara.
382. Controlled orientation of ellipsoidal fullerene C₇₀ in carbon nanotubes. *Appl. Phys. Lett.* **84**, 792-794 (2004). A.N. Khlobystov, R. Scipioni D.A. Britz, D.G. Pettifor, G.A.D. Briggs, S.G. Lyapin, A. Ardavan and R.J. Nicholas. *Selected for Virtual Journal of Nanoscale Science & Technology* **9**, issue 5 (19th February 2004).

383. Comparative studies on acid and thermal based selective purification of HiPCO produced single-walled carbon nanotubes. *Chem. Phys. Lett.* **386**, 239-243 (2004). J.G. Wiltshire, A.N. Khlobystov, L.J. Li, S.G. Lyapin, G.A.D. Briggs and R.J. Nicholas.
384. Selective host-guest interaction of single-walled carbon nanotubes with functionalised fullerenes. *Chem. Commun.* **2004**, 176-177 (2004); DOI: 10.1039/b313585c. D.A. Britz, A.N. Khlobystov, A.S. O'Neil, J. Wang, A. Ardavan, M. Poliakoff and G.A.D. Briggs. *Reported in Chemical & Engineering News* **82** (4) 12 (26 January 2004).
385. Purification by HPLC and the UV/Vis absorption spectra of the nitrogen-containing incar-fullerenes $i\text{NC}_{60}$, and $i\text{NC}_{70}$. *Chem. Commun.* **2004**, 210-211 (2004); DOI: 10.1039/b310979h. M. Kanai, K. Porfyrakis, G.A.D. Briggs and T.J.S. Dennis.
386. Molecular motion of endohedral fullerenes in single-walled carbon nanotubes. *Angewandte Chemie – International Edition* **43**, 1386-1389 (2004); DOI: 10.1002/anie.200352389. A.N. Khlobystov, K. Porfyrakis, M. Kanai, D.A. Britz, A. Ardavan, H. Shinohara, T.J.S. Dennis and G.A.D. Briggs. *Chosen by Editors as Hot Paper; reported in Chemistry World (August 2004)* p. 9.
387. Time-integrated and time-resolved photoluminescence studies of InGaN quantum dots. *8th Conference on Optics of Excitons in Confined Systems (OECS-8)* ed R. Cingolani, 568-572 (2004). J.W. Robinson, J.H. Rice, A. Jarjour, J.D. Smith, R.A. Taylor, R.A. Oliver, G.A.D. Briggs, M.J. Kappers, C.J. Humphreys, S. Yasin and Y. Arakawa.
388. Nanocomposite titanium dioxide/polymer photovoltaic cells: effects of TiO_2 microstructure, time and illumination power. *Organic Photovoltaics IV* (Eds Z.H. Kafafi and P.A. Lane) *Proc. SPIE* **5215**, 32-40 (2004). M.J. Carey, V.M. Burlakov, B.M. Henry, K.R. Kirov, G.R. Webster, H.E. Assender, G.A.D. Briggs, P.L. Burn and C.R.M. Grovenor.
389. Dynamics of single InGaN quantum dots. *Physica E* **21**, 285-289 (2004). R.A. Taylor, J.H. Rice, A. Jajour, J.D. Smith, R.A. Oliver, G.A.D. Briggs, M.J. Kappers, C.J. Humphreys and Y. Arakawa.
390. InGaN quantum dots grown by MOVPE via a droplet epitaxy route. *Physica E* **21**, 546-550 (2004). J.H. Rice, R.A. Oliver, J.W. Robinson, J.D. Smith, R.A. Taylor, G.A.D. Briggs, M.J. Kappers, C.J. Humphreys and S. Yasin.
391. Temporal variation in photoluminescence from single InGaN quantum dots. *Appl. Phys. Lett.* **84**, 4110-4112 (2004). J.H. Rice, J.W. Robinson, A. Jajour, R.A. Taylor, R.A. Oliver, G.A.D. Briggs, M.J. Kappers and C.J. Humphreys. *Selected for Virtual Journal of Nanoscale Science & Technology*.
392. Observation of ordered phases of fullerene in carbon nanotubes. *Phys. Rev. Lett.* **92**, 245507 (2004). A.N. Khlobystov, D.A. Britz, A. Ardavan and G.A.D. Briggs. *Selected for Virtual Journal of Nanoscale Science & Technology*.
393. Growth of InGaN quantum dots on GaN by MOVPE, employing a growth temperature nitrogen anneal. *phys. stat. sol. (c)* **0**, 2515-2519 (2003); DOI: 10.1002/pssc.200303264. R.A. Oliver, M.J. Kappers, J.H. Rice, J.D. Smith, R.A. Taylor, C.J. Humphreys and G.A.D. Briggs.
394. Photoluminescence studies of exciton recombination and dephasing in single InGaN quantum dots. *IEEE Trans Nanotech.* **3**, 343-347 (2004). J.H. Rice, J.W. Robinson, J.D. Smith, A. Jarjour, R.A. Taylor, R.A. Oliver, G.A.D. Briggs, M.J. Kappers, S. Yasin and C.J. Humphreys.
395. Low temperature assembly of fullerene arrays in single-walled carbon nanotubes using supercritical fluids. *J. Mater. Chem.* **14**, 2852-2857 (2004). A.N. Khlobystov, D.A. Britz, A.S. O'Neil, J. Wang, M. Poliakoff and G.A.D. Briggs. *Cover picture of 7th October 2004 issue*.
396. Nucleation and growth of GaN/AlN quantum dots. *Phys. Rev. B* **70**, 125427 (2004). C. Adelmann, B. Daudin, R.A. Oliver, G.A.D. Briggs and R.E. Rudd. *Selected for Virtual Journal of Nanoscale Science & Technology*.
397. Ordering and interaction of molecules encapsulated in carbon nanotubes. *Mater. Sci. Technol.* **20**, 969-974 (2004). A.N. Khlobystov, K. Porfyrakis, D.A. Britz, M. Kanai, R. Scipioni, S.G. Lyapin, J.G. Wiltshire, A. Ardavan, D. Nguyen-Manh, R.J. Nicholas, D.G. Pettifor, T.J.S. Dennis and G.A.D. Briggs.
398. Modelling phase separation in non-stoichiometric silica. *Phys. Rev. Lett.* **93**, 135501 (2004). V.M. Burlakov, G.A.D. Briggs, A.P. Sutton, A. Bongiorno and A. Pasquarello.
399. Selective spin coupling through a single exciton. *Phys. Rev. Lett.* **93**, 150502 (2004). A. Nazir, B.W. Lovett, S.D. Barrett, T. P. Spiller and G.A.D. Briggs. *Selected for Virtual Journal of Nanoscale Science & Technology (18 October 2004)*.
400. Material world matters. *Physical Methods for Materials Characterization* (2nd Edn) By P.E.J. Flewitt and R.K. Wild. *Times Higher Education Supplement, Textbook Guide* **19**, XIII (26 November 2004). G.A.D. Briggs.
401. Non-steady state operation of polymer/ TiO_2 photovoltaic devices. *Organic Photovoltaics V, Proc. SPIE* **5520**, 68-75 (2004). K.R. Kirov, V.M. Burlakov, Z.B. Xie, B.M. Henry, M.J. Carey, C.R.M. Grovenor, P.L. Burn, H.E. Assender and G.A.D. Briggs.
402. Non-steady state operation of polymer/ TiO_2 photovoltaic devices. *Nanostructured Materials in Alternative Energy Devices* (eds E.M. Kelder, E.R. Leite, J.M. Tarascon, Y.M. Chiang), *Mater. Res. Soc. Symp. Proc.* **822**, 71-76 (2004). K.R. Kirov, V.M. Burlakov, M.J. Carey, B.M. Henry, Z.B. Xie, C.R.M. Grovenor, H.E. Assender, G.R. Webster and G.A.D. Briggs.
403. Inserting fullerene dimers into carbon nanotubes: pushing the boundaries of molecular self-assembly. *Electronic Properties of Synthetic Nanostructures* (eds H. Kuzmany, J. Fink, M. Mehring, S. Roth), *AIP Conf. Proc.* **723**, 255-258 (2004). K. Porfyrakis, A.N. Khlobystov, D.A. Britz, J.J.L. Morton, A. Ardavan, M. Kanai, T.J.S. Dennis and G.A.D. Briggs.

404. Creating excitonic entanglement in quantum dots through the optical Stark effect. *Phys. Rev. A* **70**, 052301 (2004), quant-ph/0406123. A. Nazir, B.W. Lovett and G.A.D. Briggs. *Selected for Virtual Journal of Quantum Information* (15 November 2004); *Selected for Virtual Journal of Nanoscale Science & Technology*.
405. Spontaneous formation of ordered lateral patterns in polymer thin film structures. *Adv. Funct. Mater.* **14**, 1081-1088 (2004). T. Okayasu, H.-L. Zhang, D.G. Bucknall and G.A.D. Briggs.
406. The influence of ammonia on the growth mode in InGaN/GaN heteroepitaxy. *J. Crystal Growth* **272**, 393-399 (2004). R.A. Oliver, M.J. Kappers, C.J. Humphreys and G.A.D. Briggs.
407. Comment on “Specific Raman Signatures of a dimetallofullerene peapod.” *Phys. Rev. Lett.* **93**, 269601 (2004). D.A. Britz, A.N. Khlobystov, G.A.D. Briggs and A. Ardavan.
408. Gas barrier properties of transparent metal oxide coatings on PET film. *Society of Vacuum Coaters 47th Annual Technical Conference Proceedings*, 609 (2004). B.M. Henry, H.E. Assender, A.G. Erlat, C.R.M. Grovenor, G.A.D. Briggs, T. Miyamoto and Y. Tsukahara.
409. Chemical reactions inside single-walled carbon nano test-tubes. *Chem. Commun.* **2005**, 37-39 (2005); DOI: 10.1039/b414247k. D.A. Britz, A.N. Khlobystov, K. Porfyrikis, A. Ardavan and G.A.D. Briggs. *Chosen by editors as Hot Paper* (19 November 2004), <http://www.rsc.org/is/journals/current/chemcomm/cchotpapers.htm>; *chosen by editors for cover story of Issue 1 of 40th Anniversary Year; reported in Blueprint 5, 3 (18 November 2004); New Scientist* (23 November 2004); *BBC News*, <http://news.bbc.co.uk/1/hi/sci/tech/4033641.stm>; www.democraticunderground.com; permanent.nouvelobs.com; saltyjesus.squarespace.com (24 November 2004); *Iran Daily Newspaper* (25 November 2004) p. 4; *Financial Times* **35621**, 13 (26 November 2004); nanotechweb.org, www.cnpowder.com, www2.e4engineering.com, *Chemical & Engineering News* **82** (48) 7 (29 November 2004); www.i-uk.com, www.britainusa.com, www.uknow.com.sg (1 December 2004); *newstrove.com* (13 December 2004); www.geocities.com (14 December 2004); *Chemistry World* **12** (December 2004), <http://www.rsc.org/chemistryworld/Issues/2004/August/novel.asp>; *Editor’s Choice, Science* **306**, 1863 (10 December 2004); *Smallest reactor ever, Materials Today* **8** (1) 9 (January 2005); “The smallest test tube” in *The Guinness Book of World Records* (2006). ‘The above article was amongst the top twenty most accessed from the online version of ChemComm during 2005.’ www.rsc.org/ChemComm.
410. Measuring errors in single qubit rotations by pulsed electron paramagnetic resonance. *Phys. Rev. A* **71**, 012332 (2005). J.J.L. Morton, A.M. Tyryshkin, A. Ardavan, K. Porfyrikis, S.A. Lyon and G.A.D. Briggs. *Selected for Virtual Journal of Nanoscale Science & Technology* **11**, issue 5 (7th February 2005).
411. Growth modes in heteroepitaxy of InGaN on GaN. *J. Appl. Phys.* **97**, 013707 (2005). R.A. Oliver, M.J. Kappers, C.J. Humphreys and G.A.D. Briggs.
412. Anticrossings in Förster coupled quantum dots. *Phys. Rev. B* **71**, 045334 (2005). A. Nazir, B.W. Lovett, S.D. Barrett, J.H. Reina and G.A.D. Briggs. *Selected for Virtual Journal of Nanoscale Science & Technology* **11**, issue 5 (7th February 2005).
413. Electron energy loss spectra of C₆₀ and C₇₀ fullerenes. *Chem. Phys. Lett.* **404**, 206-211 (2005). S.M. Lee, R.J. Nicholls, D. Nguyen-Manh, D.G. Pettifor, G.A.D. Briggs, S. Lazar, D.A. Pankhurst and D.J.H. Cockayne.
414. Some slimline tips to help you with the buckle on your coat. *Thin Film Materials* By L.B. Freund and S. Suresh. *Times Higher Education Supplement* **1,681**, 30 (4 March 2005). G.A.D. Briggs.
415. Magnetic separation of Fe catalyst from single-walled carbon nanotubes in an aqueous surfactant solution. *Carbon* **43**, 1151-1155 (2005). J.G. Wiltshire, L.-J. Li, A.N. Khlobystov, C.J. Padbury, G.A.D. Briggs and R.J. Nicholas.
416. Description of exciton transport in a TiO₂/MEH-PPV heterojunction photovoltaic material. *Sol. Energ. Mat. Sol. C* **87**, 715-724 (2005). K. Kawata, V.M. Burlakov, M.J. Carey, H.E. Assender, G.A.D. Briggs, A. Ruseckas and I.D.W. Samuel.
417. A new mechanism for electron spin echo envelope modulation. *J. Chem. Phys.* **122**, 174504 (2005). J.J.L. Morton, A.M. Tyryshkin, A. Ardavan, K. Porfyrikis, S.A. Lyon and G.A.D. Briggs.
418. Quantum-confined Stark effect in a single InGaN quantum dot under a lateral electric field. *Appl. Phys. Lett.* **86**, 213103 (2005). J.W. Robinson, J.H. Rice, K.H. Lee, J.H. Na, R.A. Taylor, D.G. Hasko, R.A. Oliver, M.J. Kappers, C.J. Humphreys and G.A.D. Briggs. *Selected for Virtual Journal of Nanoscale Science & Technology*.
419. Diameter-selective encapsulation of metallocenes in single-walled carbon nanotubes. *Nature Materials* **4**, 481-485 (2005). L.-J. Li, A.N. Khlobystov, J.G. Wiltshire, G.A.D. Briggs and R.J. Nicholas.
420. Time evolution of photoconductivity in TiO₂ electrodes fabricated by a sol gel method. *Materials for Photovoltaics* (eds M. Durstock, D. Friedman, R. Gaudiana, A. Rockett), *Mater. Res. Soc. Symp. Proc.* **836**, 43-48 (2005). Z. Xie, V.M. Burlakov, B.M. Henry, K.R. Kirov, C.R.M. Grovenor, H.E. Assender, G.A.D. Briggs, M. Kano and Y. Tsukahara.
421. Theoretical and experimental investigation of biexcitons and charged excitons in InGaN single quantum dots. *AIP Conf. Proc.* **772**, 695-696 (2005). D.P. Williams, A.D. Andreev, E.P. O'Reilly, J.H. Rice, J.W. Robinson, A.F. Jarjour, J.D. Smith, R.A. Taylor, G.A.D. Briggs, Y. Arakawa and S. Yasin.
422. Discrete hopping model of exciton transport in disordered media. *Phys. Rev. B* **72**, 075206 (2005). V.M. Burlakov, K. Kawata, H.E. Assender, G.A.D. Briggs, A. Ruseckas and I.D.W. Samuel. *Selected for Virtual Journal of Ultrafast Science* (September 2005).

423. Hyperfine structure of Sc@C₈₂ from ESR and DFT. *Nanotechnology* **16**, 2469-2473 (2005). G.W. Morley, B.J. Herbert, S.M. Lee, K. Porfyrakis, T.J.S. Dennis, D. Nguyen-Manh, R. Scipioni, J. van Tol, A.P. Horsfield, A. Ardavan, D.G. Pettifor, J.C. Green and G.A.D. Briggs. *Your article has been downloaded 500 times so far. This was achieved in 51 days from the date of publication. To put this into context, across all IOP journals 3% of articles were accessed over 500 times this year.* (03/11/05).
424. Distinguishing two isomers of Nd@C₈₂ by scanning tunneling microscopy and density functional theory. *Chem. Phys. Lett.* **414**, 307-310 (2005). D.F. Leigh, J.H.G. Owen, S.M. Lee, K. Porfyrakis, A. Ardavan, T.J.S. Dennis, D.G. Pettifor and G.A.D. Briggs.
425. Quantum computing with spin qubits interacting through delocalized excitons: Overcoming hole mixing. *Phys. Rev. B* **72**, 115324 (2005). B.W. Lovett, A. Nazir, E. Pazy, S.D. Barrett, T.P. Spiller and G.A.D. Briggs. *Selected for Virtual Journal of Nanoscale Science & Technology* (3 October 2005), www.vjnano.org.
426. Isolation and spectroscopic characterization of two isomers of the metallofullerene Nd@C₈₂. *Electronic Properties of Novel Nanostructures* (eds H. Kuzmany, J. Fink, M. Mehring, and S. Roth), *AIP Conf. Proc.* **786**, 73-76 (2005). K. Porfyrakis, M. Kanai, G.W. Morley, A. Ardavan, T.J. S. Dennis and G.A.D. Briggs.
427. High fidelity single qubit operations using pulsed electron paramagnetic resonance. *Phys. Rev. Lett.* **95**, 200501 (2005). J.J.L. Morton, A.M. Tyryshkin, A. Ardavan, K. Porfyrakis, S.A. Lyon and G.A.D. Briggs. *Selected for the November 2005 issue of Virtual Journal of Quantum Information*, www.vjquantuminfo.org; *selected for the 21 November 2005 issue of Virtual Journal of Nanoscale Science & Technology*, www.vjnano.org.
428. Intelligent design: the response. *Physics World* **18** (12), 18-19 (December 2005). A.M. Steane, G.A.D. Briggs, K. Burnett, G.B. Dalton, P. Ewart, A. Peacocke, J.S. Wark and W.D. Phillips.
429. Solid reasons to go with the flow. *Quantum Theory of the Electron Liquid* By Gabriele F. Giuliani and Giovanni Vignale. *Times Higher Education Supplement*, Textbook Guide **22**, IV (2 December 2005). G.A.D. Briggs.
430. Molecules in carbon nanotubes. *Accounts of Chemical Research* **38**, 901-909 (2005). A.N. Khlobystov, D.A. Britz and G.A.D. Briggs. *Selected as a cover article for the December 2005 issue*.
431. Registration of single quantum dots for solid state cavity quantum electrodynamics. *IEEE LEOS Ann. Meeting Conf. Proc.* 113-114 (2005). K.H. Lee, A.M. Green, F.S.F. Brossard, R.A. Taylor, A.J. Turberfield, D.A. Williams and G.A.D. Briggs.
432. Electron spin relaxation of N@C₆₀ in CS₂. *J. Chem. Phys.* **124**, 014508 (2006). J.J.L. Morton, A.M. Tyryshkin, A. Ardavan, K. Porfyrakis, S.A. Lyon and G.A.D. Briggs.
433. Bang-bang control of fullerene qubits using ultra-fast phase gates. *Nature Physics* **2**, 40-43 (2006). J.J.L. Morton, A.M. Tyryshkin, A. Ardavan, S.C. Benjamin, K. Porfyrakis, S.A. Lyon and G.A.D. Briggs.
434. Quantum computers using atoms in carbon buckeyballs. *The Ship* (St Anne's College Record 2005-2006) 13-14. G.A.D. Briggs and B.W. Lovett.
435. Bandgap modulation of narrow-gap carbon nanotubes in a transverse electric field. *Europhys. Lett.* **73**, 759-764 (2006). D. Gunlycke, C.J. Lambert, S.W.D. Bailey, D.G. Pettifor, G.A.D. Briggs and J.H. Jefferson.
436. Intensity-dependent relaxation of photoconductivity in nanocrystalline titania thin films. *Phys. Rev. B* **73**, 113317 (2006). Z. Xie, V.M. Burlakov, B.M. Henry, K.R. Kirov, H.E. Smith, C.R.M. Grovenor, H.E. Assender, G.A.D. Briggs, M. Kano and Y. Tsukahara.
437. Cryogenic two-photon laser photolithography with SU-8. *Appl. Phys. Lett.* **88**, 143123 (2006). K.H. Lee, A.M. Green, R.A. Taylor, D.N. Sharp, A.J. Turberfield, F.S.F. Brossard, D.A. Williams and G.A.D. Briggs.
438. Synthesis and reactivity of N@C₆₀O. *Phys. Chem. Chem. Phys.* **2006**, 2083-2088 (2006); DOI: 10.1039/b601171c. M.A.G. Jones, D.A. Britz, J.J.L. Morton, A.N. Khlobystov, K. Porfyrakis, A. Ardavan and G.A.D. Briggs.
439. Quantum information processing. *J. Phys.: Condens. Matter* **18** (2006); DOI: 10.1088/0953-8984/18/21/E01. G.A.D. Briggs, D. Ferry and A.M. Stoneham.
440. Coherence of spin qubits in silicon. *J. Phys.: Condens. Matter* **18**, S783-S794 (2006); DOI: 10.1088/0953-8984/18/21/S06. A. M. Tyryshkin, J.J.L. Morton, S.C. Benjamin, A. Ardavan, G.A.D. Briggs, J.W. Ager and S.A. Lyon. *Chosen for inclusion in the Journal of Physics: Condensed Matter (JPCM) Top Papers of 2006*.
441. Zener resonant tunneling action in carbon nanotubes. *J. Phys.: Condens. Matter* **18**, S843-S849 (2006); DOI: 10.1088/0953-8984/18/21/S10. D. Gunlycke, J.H. Jefferson, S.W.D. Bailey, C.J. Lambert, D.G. Pettifor and G.A.D. Briggs.
442. Entanglement between static and flying qubits in a semiconducting carbon nanotube. *J. Phys.: Condens. Matter* **18**, S851-S866 (2006); DOI: 10.1088/0953-8984/18/21/S11. D. Gunlycke, T. Rejec, J.H. Jefferson, A. Ramšak, D.G. Pettifor and G.A.D. Briggs.
443. Towards a fullerene-based quantum computer. *J. Phys.: Condens. Matter* **18**, S867-S883 (2006); DOI: 10.1088/0953-8984/18/21/S11. S.C. Benjamin, A. Ardavan, G.A.D. Briggs, D.A. Britz, D. Gunlycke, J.H. Jefferson, M.A.G. Jones, D.F. Leigh, B.W. Lovett, A.N. Khlobystov, S. Lyon, J.J.L. Morton, K. Porfyrakis, M.R. Sambrook and A.M. Tyryshkin.
444. Registration of single quantum dots using cryogenic laser photolithography. *Appl. Phys. Lett.* **88**, 193106 (2006). K.H. Lee, A.M. Green, R.A. Taylor, D.N. Sharp, J. Scrimgeour, O.M. Roche, J.H. Na, A.F. Jarjour, A.J. Turberfield, F.S.F. Brossard, D.A. Williams and G.A.D. Briggs. *Selected for the May 2006 issue of Virtual Journal of Quantum Information*, www.vjquantuminfo.org.
445. Atomic-molecular superlattices. *Chem. Commun.* **18**, 1944-1946 (2006). A.A.R. Watt, M.R. Sambrook, K. Porfyrakis, B.W. Lovett, H. El Mkami, G.M. Smith and G.A.D. Briggs.

446. Two-photon absorption from single InGaN/GaN quantum dots. *Physica E* **32**, 119-122 (2006). A.F. Jarjour, A.M. Green, T.J. Parker, R.A. Taylor, R.A. Oliver, G.A.D. Briggs, M.J. Kappers, C.J. Humphreys, R.W. Martin and I.M. Watson.
447. Study of the effect of changing the microstructure of titania layers on composite solar cell performance. *Thin Solid Films* **511**, 523-528 (2006); DOI: 10.1016/j.tsf.2005.12.016. Z. Xie, B.M. Henry, K.R. Kirov, H.E. Smith, A. Barkhouse, C.R.M. Grovenor, H.E. Assender, G.A.D. Briggs, G.R. Webster, P.L. Burn, M. Kano and Y. Tsukahara.
448. Encapsulation and IR probing of a cube-shaped octasilasesquioxane $H_8Si_8O_{12}$ within carbon nanotubes. *Angewandte Chemie – International Edition* **45**, 5188-5191 (2006); DOI: 10.1002/anie.200504273. J. Wang, M.K. Kuimova, M. Poliakoff, G.A.D. Briggs and A.N. Khlobystov.
449. Direct optical excitation of a fullerene-incarcerated metal ion. *Chem. Phys. Lett.* **428**, 303-306 (2006). M.A.G. Jones, R.A. Taylor, A. Ardavan, K. Porfyrikis and G.A.D. Briggs.
450. Determination of the thermal stability of the fullerene dimers C_{120} , $C_{120}O$ and $C_{120}O_2$. *J. Phys. Chem. B* **110**, 16979-16981 (2006). J.Y. Zhang, K. Porfyrikis, M.R. Sambrook, A. Ardavan and G.A.D. Briggs.
451. The $N@C_{60}$ nuclear spin qubit: Bang-bang decoupling and ultra-fast phase gates. *phys. stat. sol. (b)* **243**, 3028-3031 (2006). J.J.L. Morton, A.M. Tyryshkin, A. Ardavan, S.C. Benjamin, K. Porfyrikis, S.A. Lyon and G.A.D. Briggs.
452. PL, magneto-PL and PLE of the trimetallic nitride template fullerene $Er_3N@C_{80}$. *phys. stat. sol. (b)* **243**, 3037-3041 (2006). M.A.G. Jones, J.J.L. Morton, K. Porfyrikis, G.A.D. Briggs, R.A. Taylor and A. Ardavan.
453. Synthesis of a short-chain fullerene dimer. *Tetrahedron Lett.* **47**, 7413-7415 (2006); DOI: 10.1016/j.tetlet.2006.08.061. T.J. Hingston, M.R. Sambrook, K. Porfyrikis and G.A.D. Briggs.
454. Synthesis of an asymmetric fullerene dimer via sequential cycloadditions. *Tetrahedron Lett.* **47**, 8595-8597 (2006); DOI: 10.1016/j.tetlet.2006.09.119. T.J. Hingston, M.R. Sambrook, N.H. Rees, K. Porfyrikis and G.A.D. Briggs.
455. The effects of a pyrrolidine functional group on the magnetic properties of $N@C_{60}$. *Chem. Phys. Lett.* **432**, 523-527 (2006). J. Zhang, J.J.L. Morton, M.R. Sambrook, K. Porfyrikis, A. Ardavan and G.A.D. Briggs.
456. Equilibrium distributions and the nanostructure diagram for epitaxial quantum dots. *J. Comput. Theor. Nanosci.* **4**, 335-347 (2007); DOI: 10.1166/jctn.2007.019. R.E. Rudd, G.A.D. Briggs, A.P. Sutton, G. Medeiros-Ribeiro and R.S. Williams.
457. Correlation between photoconductivity in nanocrystalline titania and short circuit current transients in MEH-PPV/titania solar cells. *Nanotechnology* **18**, 145708 (2007); DOI: 10.1088/0957-4484/18/14/145708. Z.B. Xie, B.M. Henry, K.R. Kirov, D.A.R. Barkhouse, V.M. Burlakov, H.E. Smith, C.R.M. Grovenor, H.E. Assender, G.A.D. Briggs, M. Kano and Y. Tsukahara.
458. The scale and spin of life in the little league. *Small* Edited by P. Görlitz and E. Levy. *Times Higher Education Supplement* **1,794**, 20 (18 May 2007). G.A.D. Briggs.
459. Efficient dynamic nuclear polarization at high magnetic fields. *Phys. Rev. Lett.* **98**, 220501 (2007). G.W. Morley, J. van Tol, A. Ardavan, K. Porfyrikis, J. Zhang and G.A.D. Briggs.
460. Optical studies of non-linear absorption in single InGaN/GaN quantum dots. *Physics of Semiconductors* **893**, 953-954 (2007). A.F. Jarjour, R.A. Taylor, R.W. Martin, I.M. Watson, R.A. Oliver, G.A.D. Briggs, M.J. Kappers and C.J. Humphreys.
461. Diameter-dependent elastic modulus supports the metastable-catalyst growth of carbon nanotubes. *Nano Letters* **7**, 1598-1602 (2007); DOI: 10.1021/nl070502b. K.M. Lee, B. Lukić, A. Magrez, J.W. Seo, G.A.D. Briggs, A.J. Kulik and L. Forró.
462. Photoluminescence properties of a single GaN nanorod with GaN/AlGaN multi-layer quantum discs. *Appl. Phys. Lett.* **90**, 101901 (2007); DOI: 10.1063/1.2712772. S.N. Yi, J.H. Na, K.H. Lee, A.F. Jarjour, R.A. Taylor, Y.S. Park, T.W. Kang, S. Kim, D.H. Ha and G.A.D. Briggs.
463. Toward controlled spacing in one-dimensional molecular chains: alkyl-chain-functionalized fullerenes in carbon nanotubes. *J. Am. Chem. Soc.* **129**, 8609-8614 (2007). T.W. Chamberlain, A. Camenisch, N.R. Champness, G.A.D. Briggs, S.C. Benjamin, A. Ardavan and A.N. Khlobystov.
464. Self-assembly of trimetallic nitride template fullerenes on surfaces studied by STM. *Surf. Sci.* **601**, 2750-2755 (2007). D.F. Leigh, C. Nörenberg, D. Cattaneo, J.H.G. Owen, K. Porfyrikis, A. Li Bassi, A. Ardavan and G.A.D. Briggs.
465. Environmental effects on electron spin relaxation in $N@C_{60}$. *Phys. Rev. B* **76**, 085418 (2007); DOI: 10.1103/PhysRevB.76.085418. J.J.L. Morton, A. M. Tyryshkin, A. Ardavan K. Porfyrikis, S.A. Lyon and G.A.D. Briggs.
466. Optical studies of non-linear absorption in single InGaN/GaN quantum dots. *Physics of Semiconductors*, AIP Conference Proceedings **893**, 953-954 (2007). A.F. Jarjour, R.A. Taylor, R.W. Martin, I.M. Watson, R.A. Oliver, G.A.D. Briggs, M.J. Kappers and C.J. Humphreys.
467. Configuration-selective spectroscopic studies of Er^{3+} centers in $ErSc_2N@C_{80}$ and $Er_2ScN@C_{80}$. *J. Chem. Phys.* **127**, 194504 (2007); DOI: 10.1063/1.2805083. A. Tiwari, G. Dantelle, K. Porfyrikis, R.A. Taylor, A.A.R. Watt, A. Ardavan and G.A.D. Briggs. *Selected for the December 3, 2007 issue of Virtual Journal of Nanoscale Science & Technology*, www.vjnano.org.
468. Physics and faith are worth debating. *Physics World* **20** (12), 23 (December 2007). G.A.D. Briggs, G.B. Dalton, P. Ewart, A.M. Steane, J.S. Wark and W.D. Phillips.

469. Synthesis of fullerene dimers with controllable length. *phys. stat. sol. (b)* **244**, 3849-3852 (2007); DOI: 10.1002/pssb.20776131. K. Porfyrakis, M.R. Sambrook, T.J. Hingston, J. Zhang, A. Ardavan and G.A.D. Briggs.
470. Manipulation of quantum information in N@C₆₀ using electron and nuclear paramagnetic resonance. *phys. stat. sol. (b)* **244**, 3874-3878 (2007); DOI: 10.1002/pssb.20776192. A. Ardavan, J.J.L. Morton, S.C. Benjamin, K. Porfyrakis, G.A.D. Briggs, A. M. Tyryshkin and S.A. Lyon.
471. Pairs and heptamers of C₇₀ molecules ordered via PTCDI-melamine supramolecular networks. *Appl. Phys. Lett.* **91**, 253109 (2007); DOI: 10.1063/1.2819682. F. Silly, A.Q. Shaw, K. Porfyrakis, G.A.D. Briggs and M. R. Castell.
472. Epitaxial ordering of a perylenetetracarboxylic diimide-melamine supramolecular network driven by the Au(111)-(22 × √3) reconstruction. *Appl. Phys. Lett.* **92**, 023102 (2008); DOI: 10.1063/1.2830828. F. Silly, A.Q. Shaw, G.A.D. Briggs and M.R. Castell.
473. Photoisomerization of a fullerene dimer. *J. Phys. Chem. C* **112**, 2802-2804 (2008); DOI: 10.1021/jp711861z. J. Zhang, K. Porfyrakis, J.J.L. Morton, M.R. Sambrook, J. Harmer, L. Xiao, A. Ardavan and G.A.D. Briggs.
474. Entanglement of static and flying qubits in degenerate mesoscopic systems. *Phys. Rev. B* **77**, 075337 (2008); DOI: 10.1103/PhysRevB.77.075337. M. Habgood, J.H. Jefferson, A. Ramšák, D.G. Pettifor and G.A.D. Briggs.
475. A chiral pinwheel supramolecular network driven by the assembly of PTCDI and melamine. *Chem. Commun.* **16**, 1907-1909 (2008); DOI: 10.1039/b715658h. F. Silly, A.Q. Shaw, M.R. Castell and G.A.D. Briggs.
476. Dynamics of paramagnetic metallofullerenes in carbon nanotube peapods. *Nano Lett.* **8**, 1005-1010 (2008); DOI: 10.1021/nl0726104. J.H. Warner, A.A.R. Watt, L. Ge, K. Porfyrakis, T. Akachi, H. Okimoto, Y. Ito, A. Ardavan, B. Montinari, J.H. Jefferson, N.M. Harrison, H. Shinohara and G.A.D. Briggs.
477. Role of interaction anisotropy in the formation and stability of molecular templates. *Phys. Rev. Lett.* **100**, 156101 (2008); DOI: 10.1103/PhysRevLett.100.156101. U.K. Weber, V.M. Burlakov, L.M.A. Perdigão, R.H.J. Fawcett, P.H. Beton, N.R. Champness, J.H. Jefferson, G.A.D. Briggs and D.G. Pettifor. *Selected for the April 15, 2008 issue of Virtual Journal of Biological Physics Research*, www.vjbio.org; *selected for the April 28, 2008 issue of Virtual Journal of Nanoscale Science & Technology*, www.vjnano.org.
478. Entanglement between remote spin-qubits in one dimension by scattering in the real-space Anderson model. *Phys. Rev. B* **77**, 195308 (2008); DOI: 10.1103/PhysRevB.77.195308. M. Habgood, J.H. Jefferson and G.A.D. Briggs.
479. Deriving molecular bonding from macromolecular self-assembly using kinetic Monte Carlo simulations. *Phys. Rev. B* **77**, 201408 (2008); DOI: 10.1103/PhysRevB.77.201408. F. Silly, U.K. Weber, A.Q. Shaw, V.M. Burlakov, M.R. Castell, G.A.D. Briggs and D.G. Pettifor.
480. Pauli spin blockade in carbon nanotube double quantum dots. *Phys. Rev. B* **77**, 245439 (2008); DOI: 10.1103/PhysRevB.77.245439. M.R. Buitelaar, J. Fransson, A.L. Cantone, C.G. Smith, D. Anderson, G.A.C. Jones, A. Ardavan, A.N. Khlobystov, A.A.R. Watt, K. Porfyrakis, G.A.D. Briggs.
481. Modeling spin interactions in carbon peapods using a hybrid density functional theory. *Phys. Rev. B* **77**, 235416 (2008); DOI: 10.1103/PhysRevB.77.235416. L. Ge, B. Montanari, J.H. Jefferson, D.G. Pettifor, N.M. Harrison and G.A.D. Briggs. *Selected for the June 2008 issue of Virtual Journal of Quantum Information*, www.vquantuminfo.org; *selected for the June 23, 2008 issue of Virtual Journal of Nanoscale Science & Technology*, www.vjnano.org.
482. Publisher's Note: Entanglement between remote spin-qubits in one dimension by scattering in the real-space Anderson model [Phys. Rev. B 77, 195308 (2008)]. *Phys. Rev. B* **77**, 249907(E) (2008); DOI: 10.1103/PhysRevB.77.249907. M. Habgood, J.H. Jefferson and G.A.D. Briggs.
483. Switchable ErSc₂N rotor within a C₈₀ fullerene cage: An electron paramagnetic resonance and photoluminescence excitation study. *Phys. Rev. Lett.* **101**, 013002 (2008); DOI: 10.1103/PhysRevLett.101.013002. J.J.L. Morton, A. Tiwari, G. Dantelle, K. Porfyrakis, A. Ardavan, G.A.D. Briggs.
484. Melamine structures on the Au(111) surface. *J. Phys Chem C* **112**, 11476-11480 (2008); DOI: 10.1021/jp8033769. F. Silly, A.Q. Shaw, M.R. Castell, G.A.D. Briggs, M. Mura, N. Martsinovich and L. Kantorovich.
485. Small World. *The Ship*, St Anne's College Record **97**, 12-13 (2008). G.A.D. Briggs.
486. Rotating fullerene chains in carbon nanopeapods. *Nano Lett.* **8**, 2328-2335 (2008); DOI: 10.1021/nl0801149z. J.H. Warner, Y. Ito, M. Zaka, L. Ge, T. Akachi, H. Okimoto, K. Porfyrakis, A.A.R. Watt, H. Shinohara and G.A.D. Briggs. *Research Highlight, Nature Nanotechnology 11 July 2008*; DOI: 10.1038/nnano.2008.229.
487. Grating of single Lu@C₈₂ molecules using supramolecular network. *Chem. Commun.* **38**, 4616-4618 (2008); DOI: 10.1039/b809004a. F. Silly, A.Q. Shaw, K. Porfyrakis, J.H. Warner, A.A.R. Watt, M.R. Castell, H. Umemoto, T. Akachi, H. Shinohara and G.A.D. Briggs.
488. Temperature-dependent photoluminescence study of ErSc₂N@C₈₀ and Er₂ScN@C₈₀ fullerenes. *phys. stat. sol. (b)* **245**, 1998-2001 (2008); DOI: 10.1002/pssb.200879577. A. Tiwari, G. Dantelle, K. Porfyrakis, A. Ardavan and G.A.D. Briggs.
489. La@C₈₂ as a spin-active filling of SWCNTs: ESR study of magnetic and photophysical properties. *phys. stat. sol. (b)* **245**, 2042-2046 (2008); DOI: 10.1002/pssb.200879650. L. Čirić, K. Pierzchala, A. Sienkiewicz, A. Magrez, B. Náfrádi, D. Alexander, J.H. Warner, H. Shinohara, M.H. Ruemmeli, T. Pichler, G.A.D. Briggs and L. Forró.
490. Carbon nanotubes for interconnects in VLSI integrated circuits. *phys. stat. sol. (b)* **245**, 2303-2307 (2008); DOI: 10.1002/pssb.200879553. J. Robertson, G. Zhong, H. Telg, C. Thomsen, J.H. Warner, G.A.D. Briggs, U. Detlaff, S. Roth and J. Dijon.

491. Electronic transport characterization of Sc@C_{82} single-wall carbon nanotube peapods. *J. Appl. Phys.* **104**, 083717 (2008); DOI: 10.1063/1.3000443. A.L. Cantone, M.R. Buitelaar, C.G. Smith, D. Anderson, G.A.C. Jones, S.J. Chorley, C. Casiraghi, A. Lombardo, A.C. Ferrari, H. Shinohara, A. Ardavan, J. Warner, A.A.R. Watt, K. Porfyrakis and G.A.D. Briggs.
492. Single shot measurement of a silicon single electron transistor. *Appl. Phys. Lett.* **93**, 192116 (2008); DOI: 10.1063/1.3028344. D.G. Hasko, T. Ferrus, Q.R. Morrissey, S.R. Burge, E.J. Freeman, M.J. French, A. Lam, L. Creswell, R.J. Collier, D.A. Williams and G.A.D. Briggs.
493. Magnetic properties of $\text{ErSc}_2\text{N}@C_{80}$, $\text{Er}_2\text{ScN}@C_{80}$ and $\text{Er}_3\text{N}@C_{80}$ fullerenes. *Chem. Phys. Lett.* **466**, 155-158 (2008); DOI: 10.1016/j.cplett.2008.10.062. A. Tiwari, G. Dantelle, K. Porfyrakis, A.A.R. Watt, A. Ardavan and G.A.D. Briggs.
494. Growth and characterization of high-density mats of single-walled carbon nanotubes for interconnects. *Appl. Phys. Lett.* **93**, 163111 (2008); DOI: 10.1063/1.3000061. J. Robertson, G. Zhong, H. Telg, C. Thomsen, J.H. Warner, G.A.D. Briggs, U. Dettlaff-Weglikowska and S. Roth.
495. *Nanovision: Engineering the Future* By Colin Milburn. *Times Higher Education* **1,875**, 53 (11-17 December 2008). G.A.D. Briggs.
496. Self-assembly and electronic effects of $\text{Er}_3\text{N}@C_{80}$ and $\text{Sc}_3\text{N}@C_{80}$ on Au(111) and Ag/Si(111) surfaces. *J. Phys. Conf. Ser.* **100**, 052080 (2008); DOI: 10.1088/1742-6596/100/5/052080. C. Nörenberg, D.F. Leigh, D. Cattaneo, K. Porfyrakis, A. Li Bassi, C.S. Casari, M. Passoni, J.H.G. Owen and G.A.D. Briggs.
497. Spin lifetimes in quantum dots from noise measurements. *Phys. Rev. Lett.* **102**, 016802 (2009); DOI: 10.1103/PhysRevLett.102.016802. J. Wabnig, B.W. Lovett, J.H. Jefferson and G.A.D. Briggs.
498. Polyarene-functionalized fullerenes in carbon nanotubes: towards controlled geometry of molecular chains. *Small* **4**, 2262-2270 (2008); DOI: 10.1002/smll.200800552. T.W. Chamberlain, R. Pfeiffer, H. Peterlik, H. Kuzmany, F. Zerbetto, M. Melle-Franco, L. Stoddon, N.R. Champness, G.A.D. Briggs and A.N. Khlobystov.
499. Atomic clock. *International Patent Application No. PCT/GB008/002229; Pub. No. WO/2009/004317* (08.01.2009). G.A.D. Briggs and A. Ardavan.
500. Direct imaging of rotational stacking faults in few layer graphene. *Nano Lett.* **9**, 102-106 (2009); DOI: 10.1021/nl8025949. J.H. Warner, M.H. Rümmeli, T. Gemming, B. Büchner and G.A.D. Briggs.
501. Scattering-induced entanglement between spin-qubits at remote two-state structures. *J. Phys.: Condens. Matter* **21**, 075503 (2009); DOI: 10.1088/0953-8984/21/7/075503. M. Habgood, J.H. Jefferson and G.A.D. Briggs.
502. Effects of doping on electronic structure and correlations in carbon peapods. *ACS Nano* **3**, 1069-1076 (2009, published online 7 April); DOI: 10.1021/nn8008454. L. Ge, J.H. Jefferson, B. Montanari, N.M. Harrison, D.G. Pettifor and G.A.D. Briggs.
503. Magnetic field sensing beyond the standard quantum limit using 10-spin NOON states. *Science* **324**, 1166-1168 (2009, published online 23 April); DOI: 10.1126/science.1170730. J.A. Jones, S.D. Karlen, J. Fitzsimons, A. Ardavan, S.C. Benjamin, G.A.D. Briggs and J.J.L. Morton. *Reported in Electronics Weekly 29 April - 5 May 2009, p. 7; This Week in Science 29 May 2009, p. 1115.*
504. And information became physical. In *Real Scientists, Real Faith* (ed R. J. Berry) pp. 72-84, Lion Hudson (2009); ISBN: 978-1-85424-884-8. G.A.D. Briggs.
505. One-dimensional confined motion of single metal atoms inside double-walled carbon nanotubes. *Phys. Rev. Lett.* **102**, 195504 (2009); DOI: 10.1103/PhysRevLett.102.195504. J.H. Warner, Y. Ito, M.H. Rümmeli, T. Gemming, B. Büchner, H. Shinohara and G.A.D. Briggs.
506. And information became physical. *The Reader* **106**, 14-15 (2009); abridged chapter from *Real Scientists, Real Faith*. G.A.D. Briggs.
507. Investigating the diameter-dependent stability of single-walled carbon nanotubes. *ACS Nano* **3**, 1557-1563 (2009, published online 22 May); DOI: 10.1021/nn900362a. J.H. Warner, F. Schaffel, G. Zhang, M.H. Rümmeli, B. Büchner, J. Robertson and G.A.D. Briggs. *Nanowerk Spotlight 25 June 2009* www.nanowerk.com/spotlight/spotid=11356.php.
508. Structural transformation of graphene studied with high spatial and fast temporal resolution. *Nature Nanotech.* **4**, 500-504 (2009, published online 2 August); DOI: 10.1038/nnano.2009.194. J.H. Warner, M.H. Rümmeli, L. Ge, T. Gemming, B. Montanari, N.M. Harrison, B. Büchner and G.A.D. Briggs. *Reported in Graphene Times 2 August 2009* graphenetimes.com.
509. A bimetallic endohedral fullerene. *Chem. Commun.* **27**, 4082-4084 (2009); DOI: 10.1039/b902520k. S.R. Plant, T.C. Ng, J.H. Warner, G. Dantelle, A. Ardavan, G.A.D. Briggs and K. Porfyrakis.
510. Quantum computing with an electron spin ensemble. *Phys. Rev. Lett.* **103**, 070502 (2009, published online 11 August); DOI: 10.1103/PhysRevLett.103.070502. J.H. Wesenberg, A. Ardavan, G.A.D. Briggs, J.J.L. Morton, R.J. Schoelkopf, D.I. Schuster and K. Mølmer. *Reported in PhysOrg 9 September 2009* www.physorg.com/news171705608.html.
511. Accumulated fluorescence of Er^{3+} centres in endohedral fullerenes through the incarceration of a carbide cluster. *Chem. Phys. Lett.* **476**, 41-45 (2009); DOI: 10.1016/j.cplett.2009.05.042. S.R. Plant, G. Dantelle; Y. Ito; T.C. Ng; A. Ardavan; H. Shinohara, R.A Taylor, G.A.D. Briggs and K. Porfyrakis.
512. Cryogenic instrumentation for fast current measurement in a silicon single electron transistor. *J. Appl. Phys.* **106**, 033705 (2009, published online 7 August); DOI: 10.1063/1.3191671. T. Ferrus, D.G. Hasko, Q.R. Morrissey, S.R. Burge, E.J. Freeman, M.J. French, A. Lam, L. Creswell, R.J. Collier, D.A. Williams and G.A.D. Briggs.

513. Optical properties of Er³⁺ in fullerenes and in β -PbF₂ single-crystals. *Optical Materials* **32**, 251-256 (2009, published online 22 August); DOI: 10.1016/j.optmat.2009.07.021. G. Dantelle, A. Tiwari, R. Rahman, S.R. Plant, K. Porfyrakis, M. Mortier, R.A. Taylor and G.A.D. Briggs.
514. *Acoustic Microscopy: Fundamentals and Applications* By Roman Gr. Maev. *Physics Today* **62** (10) 59-60 (October 2009). G.A.D. Briggs. §
515. Capturing the motion of novel molecular nanomaterials encapsulated within carbon nanotubes with ultrahigh temporal resolution. *ACS Nano* **3**, 3037-3044 (2009); DOI: 10.1021/nn900747r. J.H Warner, Y. Ito, M.H. Rümmeli, B. Büchner, H. Shinohara and G.A.D. Briggs.
516. Erratum: Efficient Dynamic Nuclear Polarization at High Magnetic Fields [Phys. Rev. Lett. 98, 220501 (2007)]. *Phys. Rev. Lett.* **103**, 199902(E) (2009); DOI: 10.1103/PhysRevLett.103.199902. G.W. Morley, J. van Tol, A. Ardavan, K. Porfyrakis, J. Zhang and G.A.D. Briggs.
517. *Introduction to Nanoscience and Nanotechnology* By Gabor L. Hornyak, Harry F. Tibbals, Joydeep Dutta, John J. Moore. *Times Higher Education* **1925**, xii (3 December 2009). G.A.D. Briggs. §
518. A closer look at the hidden world. *No Small Matter: Science on the Nanoscale* By Felice C. Frankel and George M. Whitesides. *Times Higher Education*, **1926**, 50 (10 December 2009). G.A.D. Briggs. §
519. Investigations of N@C₆₀ and N@C₇₀ stability under high pressure and high temperature conditions. *Phys. Stat. Sol. B* **246**, 2767-2770 (2009); DOI: 10.1002/pssb.200982270. A. Iwasiewicz-Wabnig, K. Porfyrakis, G.A.D. Briggs and B. Sundqvist.
520. H-bonding supramolecular assemblies of PCDI molecules on the Au(111) surface. *J. Phys. Chem. C* **113**, 21840-21848 (2009); DOI: 10.1021/jp908046t. M. Mura, F. Silly, G.A.D. Briggs, M.R. Castell and L.N. Kantorovich.
521. Single shot measurement of a silicon single electron transistor. *Proc. 9th International Symposium on Foundations of Quantum Mechanics in the Light of New Technology*, 317-320 (2009); ISBN: 978-981-4282-12-3. D.G. Hasko, T. Ferrus, Q.R. Morrissey, S.R. Burge, E.J. Freeman, M.J. French, A. Lam, L. Creswell, R.J. Collier, D.A. Williams and G.A.D. Briggs.
522. Scanning tunnelling microscopy studies of C₆₀ monolayers on Au(111). *Phys. Rev. B* **80**, 235434 (2009); DOI: 10.1103/PhysRevB.80.235434. J.A. Gardener, G.A.D. Briggs and M.R. Castell.
523. Endohedral metallofullerenes in self-assembled monolayers. *Phys. Chem. Chem. Phys.* **12**, 123-131 (2010, published online 11 November 2009); DOI: 10.1039/b915170b. M.C. Gimenez-Lopez, J. Gardener, A. Iwasiewicz-Wabnig, K. Porfyrakis, C. Balmer, G. Dantelle, A.Q. Shaw, M. Hadjipanayi, A. Crossley, N.R. Champness, M.R. Castell, G.A.D. Briggs and A.N. Khlobystov.
524. Controlling intermolecular spin interactions of La@C₈₂ in empty fullerene matrices. *Phys. Chem. Chem. Phys.* **12**, 1618-1623 (2010); DOI: 10.1039/b913593f. Y. Ito, J.H. Warner, R. Brown, M. Zaka, R. Pfeiffer, T. Aono, N. Izumi, H. Okimoto, J.J.L. Morton, A. Ardavan, H. Shinohara, H. Kuzmany, H. Peterlik and G.A.D. Briggs.
525. *Nanoethics: Big Ethical Issues with Small Technology*, By Dónal P. O'Mathúna. *Times Higher Education* **1935**, 48-49 (18-24 February 2010); www.timeshighereducation.co.uk/story.asp?storycode=410398. G.A.D. Briggs. §
526. Exchange interactions of spin-active metallofullerenes in solid-state carbon networks. *Phys. Rev. B* **81**, 075424 (2010, published online 22 February); DOI: 10.1103/PhysRevB.81.075424. M. Zaka, J.H. Warner, Y. Ito, J.J.L. Morton, M.H. Rümmeli, T. Pichler, A. Ardavan, H. Shinohara and G.A.D. Briggs.
527. Intricate hydrogen-bonded networks: binary and ternary combinations of uracil, PTCDA and melamine. *J. Phys. Chem. C* **114**, 5859-5866 (2010); DOI: 10.1021/jp9113249. J.A. Gardener, O.Y. Shvarova, G.A.D. Briggs and M.R. Castell.
528. Magnetic field sensing using a driven double quantum dot. *Physica E* **42**, 895-898 (2010); DOI: 10.1016/j.physe.2009.11.138. G. Giavaras, J. Wabnig, B.W. Lovett, J. H. Jefferson and G.A.D. Briggs.
529. Experimental and theoretical analysis of H-bonding supramolecular assemblies of PTCDA molecules. *Phys. Rev. B* **81**, 195412 (2010); DOI: 10.1103/PhysRevB.81.195412. M. Mura, X. Sun, F. Silly, H.T. Jonkman, G.A.D. Briggs, M.R. Castell and L.N. Kantorovich.
530. Entangling remote nuclear spins linked by a chromophore. *Phys. Rev. Lett.* **104**, 200501 (2010); DOI: 10.1103/PhysRevLett.104.200501. M. Schaffry, V. Filidou, S.D. Karlen, E.M. Gauger, S.C. Benjamin, H.L. Anderson, A. Ardavan, G.A.D. Briggs, K. Maeda, K.B. Henbest, F. Giustino, J.J.L. Morton and B.W. Lovett.
531. Ultrahigh secondary electron emission of carbon nanotubes. *Appl. Phys. Lett.* **96**, 213113 (2010, published online 27 May); DOI: 10.1063/1.3442491. J. Luo, J.H. Warner, C. Feng, Y. Yao, Z. Jin, H. Wang, C. Pan, S. Wang, L. Yang, Y. Li, J. Zhang, A.A.R. Watt, L.M. Peng, J. Zhu and G.A.D. Briggs.
532. Single shot measurement in silicon single electron transistors. *2008 IEEE Silicon Electronics Workshop*, 32-33 (2008); IDS Number: BPK87; ISBN: 978-1-4244-2071-1. T. Ferrus, D.A. Williams, D.G. Hasko, L. Creswell, R.J. Collier, A. Lam, Q.R. Morrissey, S.R. Burge, M.J. French and G.A.D. Briggs.
533. Electron spin coherence in metallofullerenes: Y, Sc and La@C₈₂. *Phys. Rev. B* **82**, 033410 (2010); DOI: 10.1103/PhysRevB.82.033410. R.M. Brown, Y. Ito, J.H. Warner, A. Ardavan, H. Shinohara, G.A.D. Briggs and J.J.L. Morton.
534. Direct imaging and chemical identification of the encapsulated metal atoms in bimetallic endofullerene peapods. *ACS Nano* **4**, 3943-3948 (2010); DOI: 10.1021/nn100823e. R.J. Nicholls, K. Sader, J.H. Warner, S.R. Plant, K. Porfyrakis, P.D. Nellist, G.A.D. Briggs and D.J.H. Cockayne.

535. A cyclic porphyrin trimer as a receptor for fullerenes. *Org. Lett.* **12**, 3544–3547 (2010, published online 2 July); DOI: 10.1021/ol101393h. G. Gil-Ramírez, S.D. Karlen, A. Shundo, K. Porfyrakis, Y. Ito, G.A.D. Briggs J.J.L. Morton and H.L. Anderson.
536. Spin detection at elevated temperatures using a driven double quantum dot. *Phys. Rev. B* **82**, 085410 (2010, published online 6 August); DOI: 10.1103/PhysRevB.82.085410. G. Giavaras, J. Wabnig, B.W. Lovett, J.H. Jefferson and G.A.D. Briggs. Selected for the August 23, 2010 issue of Virtual Journal of Nanoscale Science & Technology, www.vjnano.org.
537. Book of the Week: Science vs. Religion: What Scientists Really Think. *Times Higher Education* (16 September 2010); www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=413457&c=1. G.A.D. Briggs. §
538. High cooperativity coupling of electron-spin ensembles to superconducting cavities. *Phys. Rev. Lett.* **105**, 140501 (2010, published online 27 September); DOI: 10.1103/PhysRevLett.105.140501. D.I. Schuster, A.P. Sears, E. Ginossar, L. DiCarlo, L. Frunzio, J.J.L. Morton, H. Wu, G.A.D. Briggs and R.J. Schoelkopf. Featured in Viewpoint PhysRevLett.105.140503; News & Views, *Nature* **468**, 44-45 (04 November 2010).
539. Storage of multiple coherent microwave excitations in an electron spin ensemble. *Phys. Rev. Lett.* **105**, 140503 (2010, published online 27 September); DOI: 10.1103/PhysRevLett.105.140503. H. Wu, R.E. George, A. Ardavan, J.H. Wesenberg, K. Mølmer, D.I. Schuster, R.J. Schoelkopf, K.M. Itoh, J.J.L. Morton and G.A.D. Briggs. Featured in Viewpoint PhysRevLett.105.140503; News & Views, *Nature* **468**, 44-45 (04 November 2010).
540. High performance field effect transistors from solution processed carbon nanotubes. *ACS Nano* **4**, 6659-6664 (2010, published online 19 October); DOI: 10.1021/nn1020743. Correction to references 12 and 28 *ACS Nano* **5**, 3400 (2011, published online 11 March); DOI: 10.1021/nn200779g. H.L. Wang, J. Luo, A. Robertson, Y. Ito, W. Yan, V. Lang, M. Zaka, F. Schäffel, M. Rümmeli, G.A.D. Briggs and J.H. Warner.
541. Synthesis and magnetic properties of a nitrogen containing fullerene dimer. *Eur. J. Org. Chem.* **1**, 117-121 (2010, published online 24 November); DOI: 10.1002/ejoc.201000867. F. Hörmann, A. Hirsch, K. Porfyrakis and G.A.D. Briggs.
542. Electron paramagnetic resonance investigation of purified catalyst-free single-walled carbon nanotubes. *ACS Nano* **4**, 7708-7716 (2010); DOI: 10.1021/nn102602a. M. Zaka, Y. Ito, H. Wang, W. Yan, A. Robertson, Y. Wu, M. Rümmeli, D. Staunton, T. Hashimoto, J.J.L. Morton, A. Ardavan, G.A.D. Briggs and J.H. Warner.
543. Atomic scale growth dynamics of nanocrystals within carbon nanotubes. *ACS Nano*, **5**, 1410-1417 (2011, published online 26 January); DOI: 10.1021/nn1031802. J.H. Warner, S.R. Plant, N.P. Young, K. Porfyrakis, A.I. Kirkland and G.A.D. Briggs.
544. Ultralow secondary electron emission of graphene. *ACS Nano* **5**, 1047-1055 (2011); DOI: 10.1063/1.3552976. J. Luo, P. Tian, C.T. Pan, A.W. Robertson, J.H. Warner, E.W. Hill and G.A.D. Briggs.
545. Response to ‘Comment on ‘Ultrahigh secondary electron emission of carbon nanotubes’.’ *Appl. Phys. Lett.* **98**, 66101 (2011). J. Luo, J.H. Warner and G.A.D. Briggs.
546. Coherent state transfer between an electron- and nuclear spin in ^{15}N @C₆₀. *Phys. Rev. Lett.* **106**, 110504 (2011, published online 14 March); DOI: 10.1103/PhysRevLett.106.110504. R.M. Brown, A.M. Tyryshkin, K. Porfyrakis, E.M. Gauger, B.W. Lovett, A. Ardavan, S.A. Lyon, G.A.D. Briggs and J.J.L. Morton.
547. Atomic resolution imaging of the edges of catalytically etched suspended few layer graphene. *ACS Nano* **5**, 1975-1983 (2011); DOI: 10.1021/nn103035y. F. Schäffel, A. Bachmatiuk, M. Rümmeli, U. Queitsch, B. Rellinghaus, G.A.D. Briggs and J.H. Warner.
548. Utilizing boron nitride sheets as thin supports for high resolution imaging of nanocrystals. *Nanotechnology*, **22**, 195603 (2011). Y.A. Wu, A.I. Kirkland, F. Schäffel, K. Porfyrakis, N.P. Young, G.A.D. Briggs and J.H. Warner.
549. Carbon nanotube nanoelectronic devices compatible with transmission electron microscopy. *Nanotechnology* **22**, 245305 (2011); DOI: 10.1088/0957-4484/22/24/245305. H.L. Wang, J. Luo, F. Schäffel, M. Rümmeli, G.A.D. Briggs and J.H. Warner.
550. Photochemical stability of N@C₆₀ and its pyrrolidine derivatives. *Chem. Phys. Lett.* **508**, 187-190 (2011); DOI: 10.1016/j.cplett.2011.04.039. K. Porfyrakis, G. Liu, A.N. Khlobystov, A. Ardavan and G.A.D. Briggs. Selected as Editor’s Choice.
551. Transport spectroscopy of an impurity spin in a carbon nanotube double quantum dot. *Phys. Rev. Lett.* **106**, 206801 (2011); DOI: 10.1103/PhysRevLett.106.206801. S.J. Chorley, G. Giavaras, J. Wabnig, G.A.C. Jones, C.G. Smith, G.A.D. Briggs and M.R. Buitelaar.
552. Quantum control in spintronics. *Phil. Trans. R. Soc. Lond. A* **369**, 3229-3248 (2011); DOI: 10.1098/rsta.2011.0009. A. Ardavan & G.A.D. Briggs.
553. Functionalized fullerenes in self-assembled monolayers. *Langmuir* **27**, 10977–10985 (2011); DOI: 10.1021/la200654n. M.D. Gimenez-Lopez, M.T. Räisänen, T.W. Chamberlain, U. Weber, M. Lebedeva, G.A. Rance, G.A.D. Briggs, D.G. Pettifor, V.M. Burlakov, M. Buck and A.N. Khlobystov.
554. Photostability of N@C₆₀ in common solvents. *ECS Transactions* **35**, 113-117 (2011); DOI: 10.1149/1.3655517. B.J. Farrington, T.J. Hingston, G.A.D. Briggs, M.R. Sambrook and K. Porfyrakis,
555. Resolving strain in carbon nanotubes at the atomic level. *Nature Materials* (2011, published online 2 October); DOI: 10.1038/nmat3125. J.H. Warner, N.P. Young, A.I. Kirkland and G.A.D. Briggs.
556. Violation of a Leggett-Garg inequality with ideal non-invasive measurements. *Nat. Commun.* **3**, 606 (2012, published online 3 January); doi:10.1038/ncomms1614. G.C. Knee, S. Simmons, E.M. Gauger, J.J.L. Morton, H. Riemann, N.V. Abrosimov, P. Becker, H.-J. Pohl, K.M. Itoh, M.L. Thewalt, G.A.D. Briggs and S.C. Benjamin.

557. Chemistry at the nanoscale: synthesis of an N@C₆₀-N@C₆₀ endohedral fullerene dimer. *Angew. Chem. Int. Ed.* **51**, 3587–3590 (2012, published online 1 March); doi: 10.1002/anie.201107490. B.J. Farrington, M. Jevric, G.A. Rance, A. Ardavan, A.N. Khlobystov, G.A.D. Briggs and K. Porfyrakis.
558. Catalytic and non-catalytic roles of pendant groups in the decomposition of N@C₆₀: a DFT investigation. *Chem. Comm.* **48**, 5148-5150 (2012); doi: 10.1039/c2cc30375b. G. Liu, A.N. Khlobystov, G.A.D. Briggs and K. Porfyrakis.
559. N@C₆₀-porphyrin: a dyad of two radical centers. *J. Amer. Chem. Soc.* **134**, 1938-1941 (2012); doi: 10.1021/ja209763u. G. Liu, A.N. Khlobystov, G. Charalambidis, A. Coutsolelos, G.A.D Briggs and K. Porfyrakis.
560. Formation mechanism for a hybrid supramolecular network involving cooperative interactions. *Phys. Rev. Lett.* **108**, 176103 (2012); doi: 10.1103/PhysRevLett.108.176103. M. Mura, F. Silly, V.M. Burlakov, M.R. Castell, G.A.D. Briggs and L. Kantorovich.
561. Comment on ‘A scattering quantum circuit for measuring Bell’s time inequality: a nuclear magnetic resonance demonstration using maximally mixed states’. *New J. Phys.* **14** 058001 (2012); doi:10.1088/1367-2630/14/5/058001. G.C. Knee, E.M. Gauger, G.A.D. Briggs and S.C. Benjamin.

Accepted for publication

562. Probing the interior environment of carbon nano-test-tubes. *Chem. Phys. Lett.* (2012, in press). A.A.R. Watt, M.R. Sambrook, S.V. Burlakov, K. Porfyrakis and G.A.D. Briggs.

Available at <http://xxx.soton.ac.uk/>

563. Electron paramagnetic resonance study of ErSc₂N@C₈₀. [arXiv:1004.3912](https://arxiv.org/abs/1004.3912). R. Rahman, A. Tiwari, G. Dantelle, J.J.L. Morton, K. Porfyrakis, A. Ardavan, K.-P. Dinse and G.A.D. Briggs.
564. Opening up the Quantum Three-Box Problem with Undetectable Measurements. [arXiv:1205.2594](https://arxiv.org/abs/1205.2594). R.E. George, L. Robledo, O.J.E. Maroney, M Blok, H. Bernien, M.L. Markham, D.J. Twitchen, J.J.L. Morton, G. A.D. Briggs and R. Hanson.

Submitted for publication

565. Shear alignment of fullerene in nanotubular supramolecular complexes. *J. Amer. Chem. Soc.* (ja-2012-00193p) (2012, submitted). M. Kincer, R. Choudhury, S. Rudra, D. Bucknall, K. Porfyrakis, G.A.D. Briggs and H. Beckham.