

Charge separated states and singlet oxygen generation of mono and bis adducts of C60 and C70 P. Dallas, G. Rogers, B. Reid, RA Taylor, H. Shinohara, G.A.D. Briggs and K. Porfyraakis.
Chemical Physics **465**, 28-39(2016)

Photon-assisted tunneling and charge dephasing in a carbon nanotube double quantum dot A. Mavalankar, T. Pei, J. H. Warner, G.A.D. Briggs, and E.A. Laird .
Physical Review B [published online]

Quantum Interference in Graphene Nanoconstrictions P. Gehring, H. Sadegh, S. Sangtarash, C.S. Lau, J. Liu, A. Ardavan, J.H. Warner, C.J. Lambert, G.A.D. Briggs and J. A. Mol.
Nano Letters **16**, 4210-4216 (2016)

Sensitive Radio-Frequency Measurements of a Quantum Dot by Tuning to Perfect Impedance Matching N. Ares, F.J. Schupp, A. Mavalankar, G. Rogers, J. Griffiths, G.A.C. Jones, I. Farrer, D. A. Ritchie, C.G. Smith, A. Cotten, G. A. D. Briggs, and E. A. Laird.
Physical Review Applied **5**, 034011 (2016).

Probing the Dipolar Coupling in a Hetero-spin Endohedral Fullerene-Phthalocyanine Dyad.
S. Zhou, M. Yamamoto, G. Briggs, H. Imahori, K. Porfyraakis.
Journal of the American Chemical Society **138**, 1313-1319 (2016).

Redox-dependent Franck-Condon blockade and avalanche transport in a graphene-fullerene nanoelectromechanical oscillator.
C.S. Lau, H. Sadeghi, G. Rogers, S. Sangtarash, P. Dallas, K. Porfyraakis, J.H. Warner, C.J. Lambert, G.A.D. Briggs and J.A. Mol. *Nano Letters* **16**, 170-176 (2015).

Three-terminal graphene single-electron transistor fabricated using feedback-controlled electroburning P. Puczkarski, P. Gehring, C.S. Lau, J. Liu, A. Ardavan, J.H. Warner, G.A.D. Briggs and J.A. Mol. *Phys. Lett.* **107**, 133105 (2015).

Graphene-porphyrin single-molecule transistors.
J.A. Mol, C.S. Lau, W.J.M. Lewis, H. Sadeghi, C. Roche, A. Cnossen, J.H. Warner, C.J. Lambert, H.L. Anderson and G.A.D. Briggs.
Nanoscale **7**, 13181-13185 (2015).

Violation of a Leggett-Garg inequality with ideal non-invasive measurements.
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.
Nat. Commun. **3**, 606 (2012).

Storage of multiple coherent microwave excitations in an electron spin ensemble.
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.
Phys. Rev. Lett. **105**, 140503 (2011).

Quantum computing with an electron spin ensemble.
J.H. Wesenberg, A. Ardavan, G.A.D. Briggs, J.J.L. Morton, R.J. Schoelkopf, D.I. Schuster and K. Mølmer.
Phys. Rev. Lett. **103**, 070502 (2009).

Structural transformation of graphene studied with high spatial and fast temporal resolution.

J.H Warner, M.H. Rümmeli, T. Gemming, B. Montanari, N.M. Harrison, B. Büchner, H. Shinohara and G.A.D. Briggs.

Nature Nanotech. **4**, 500-504 (2009).

Magnetic field sensing beyond the standard quantum limit using 10-spin NOON states.

J.A. Jones, S.D. Karlen, J. Fitzsimons, A. Ardavan, S.C. Benjamin, G.A.D. Briggs and J.J.L. Morton.

Science **324**, 1166-1168 (2009). □Reported in *Electronics Weekly* 29 April – 5 May 2009, p. 7; *This Week in Science* 29 May 2009, p. 1115.

Direct imaging of rotational stacking faults in few layer graphene.

J.H. Warner, M.H. Rümmeli, T. Gemming, B. Büchner and G.A.D. Briggs.

Nano Lett. **9**, 102-106 (2009).

Towards a fullerene-based quantum computer.

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. Porfyraakis, M.R. Sambrook and A.M. Tyryshkin.

J. Phys.: Condens. Matter **18**, S867-S883 (2006).

Bang-bang control of fullerene qubits using ultra-fast phase gates.

J.J.L. Morton, A.M. Tyryshkin, A. Ardavan, S.C. Benjamin, K. Porfyraakis, S.A. Lyon and G.A.D. Briggs.

Nature Physics **2**, 40-43 (2006).

Molecules in carbon nanotubes. □A.N. Khlobystov, D.A. Britz and G.A.D. Briggs.

Accounts of Chemical Research **38**, 901-909 (2005). □Selected as a cover article for the December 2005 issue.

High fidelity single qubit operations using pulsed electron paramagnetic resonance.

J.J.L. Morton, A.M. Tyryshkin, A. Ardavan, K. Porfyraakis, S.A. Lyon and G.A.D. Briggs. □*Phys. Rev. Lett.* **95**, 200501 (2005).

Selected for the 21 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.

Chemical reactions inside single-walled carbon nano test-tubes.

D.A. Britz, A.N. Khlobystov, K. Porfyraakis, A. Ardavan and G.A.D. Briggs. □*Chem. Commun.* **2005**, 37-39 (2005).

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.

Observation of ordered phases of fullerene in carbon nanotubes.

A.N. Khlobystov, D.A. Britz, A. Ardavan and G.A.D. Briggs. *Phys. Rev. Lett.* **92**, 245507 (2004). *Selected for Virtual Journal of Nanoscale Science & Technology.*

Optical schemes for quantum computation in quantum dot molecules.

B.W. Lovett, J.H. Reina, A. Nazir and G.A.D. Briggs. *Phys. Rev. B* **68**, 205319, 1-18 (2003).

Selected for Virtual Journal of Nanoscale Science & Technology.

InGaN quantum dots grown by metalorganic vapor phase epitaxy

employing a post-growth nitrogen anneal. 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. *Appl. Phys. Lett.* **83**, 755-757 (2003).

Selected for Virtual Journal of Nanoscale Science & Technology.

Gas permeation in silicon-oxide/polymer (SiO_x/PET) barrier films: role of the oxide lattice, nano-defects and macro-defects.

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.

J. Membrane Sci. **208**, 75-88 (2002).

Surface glass transition temperature of amorphous polymers. A new insight with SFM.

V.N. Bliznyuk, H.E. Assender and G.A.D. Briggs. *Macromolecules* **35**, 6613-6622 (2002).

STM experiment and atomistic modelling hand in hand: individual molecules on surfaces of semiconductors. G.A.D. Briggs and A.J. Fisher. *Surface Science Reports* **33**, 1-81 (1999).

Elastic and shear moduli of single-walled carbon nanotube ropes.

J.- P. Salvetat, G.A.D. Briggs, J.- M. Bonard, R.R. Bacsá, A.J. Kulik, T. Stöckli, N.A. Burnham and L. Forró. *Phys. Rev. Lett.* **82**, 944-947 (1999).

Imaging the elastic nanostructure of Ge islands by ultrasonic force microscopy. O.V. Kolosov, M.R. Castell, C.D. Marsh, G.A.D. Briggs, T.I. Kamins and R. Stanley Williams. *Phys. Rev. Lett.* **81**, 1046-1049 (1998).

Defect structure of nonstoichiometric CeO₂(111) surfaces studied by scanning tunneling microscopy.

H. Norenberg and G.A.D. Briggs. *Phys. Rev. Lett.* **79**, 4222-4225 (1997).

Nucleation of "hut" pits and clusters during gas-source molecular-beam epitaxy of Ge/Si(001) in *in situ* scanning tunneling microscopy.

I. Goldfarb, P.T. Hayden, J.H.G. Owen and G.A.D. Briggs. *Phys. Rev. Lett.* **78**, 3959-3962 (1997).

Atomic-resolution STM of a system with strongly correlated electrons:

NiO(001) surface structure and defect sites. M.R. Castell, P.L. Wincott, N.G. Condon, C. Muggelberg, G. Thornton, S.L. Dudarev, A.P. Sutton and G.A.D. Briggs.

Phys. Rev. B **55**, 7859-7863 (1997).

How does a Tip Tap?

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. *Nanotechnology* **8**, 67-75 (1997).

Included in Volume 25 of Nanotechnology (2013) as one of the top ten best papers published to date.

Hydrocarbon adsorption on Si(001): When does the Si dimer bond break?

A.J. Fisher, P.E. Blöchl and G.A.D. Briggs. *Surf. Sci.* **374**, 298-305 (1997).

Adsorption, abstraction, and pairing of atomic hydrogen on Si(100)-(2 × 1).

W. Widdra, S.I. Yi, R. Maboudian, G.A.D. Briggs and W.H. Weinberg. *Phys. Rev. Lett.* **74**, 2074-2077 (1995).

Elastic quantum transport through small structures. T.N. Todorov, G.A.D. Briggs and A.P. Sutton.

J. Phys: Condens. Matter **5**, 2389-2406 (1993).

An STM study of the chemisorption of C₂H₄ on Si(001)-

(2 × 1). A.J. Mayne, A.R. Avery, J. Knall, T.S. Jones, G.A.D. Briggs and W.H. Weinberg.

Surf. Sci. **284**, 247-256 (1993).

A two-dimensional imaging theory of surface discontinuities with the scanning acoustic microscope.

M.G. Somekh, H.L. Bertoni, G.A.D. Briggs and N.J. Burton. *Proc. R. Soc. Lond.* **A 401**, 29-51 (1985).

Reprinted in *Selected Papers on Scanning Acoustic Microscopy* (eds B.T. Khuri-Yakub, C.F. Quate), *SPIE Milestone Series MS 53*, 104-123 (1992).

The effect of anisotropy on contrast in the scanning acoustic microscope. M.G. Somekh, G.A.D. Briggs and C. Ilett.

Phil. Mag. **A 49**, 179-204 (1984).

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