

## School of Physics Publications 2009

### Book

**Johnston, I. D.**, 2009, *Measured Tones the Interplay of Physics and Music*, CRC Press, Boca Raton, Florida, 436

### Book Chapters

**Argyros, A.**, 2009, *Structure, properties and characteristics of optical fibres*, Handbook of textile fibre structure, volume 2: Natural, regenerated, inorganic and specialist fibres, Woodhead Publishing Ltd, Boca Raton, FL, USA, 516

**Girelli, F.**, 2009, *From Quantum Reference Frames to Deformed Special Relativity, Approaches to Quantum Gravity: Toward a new understanding of space, time and matter*, Cambridge University Press, New York, 590

**Lenzen, M.**, and Wiedmann, T., 2009, *Unravelling the impacts of sloppy chains – a new triple-bottom-line accounting approach and software tool*, Environmental Management Accounting for Cleaner Production, Springer, Netherlands

**Melrose, D. B.**, 2009, *Acceleration Mechanisms*, Encyclopedia of Complexity and Systems Science, Springer, New York, USA, 780

**Melrose, D. B.**, and **McOrist, J.**, 2009, *Pair modes in Relativistic Quantum Plasmas, in celebration of K chines*, World Scientific Publishing Co., 5 Toh Tuck Link, Singapore 596224-229

**Murray, M. J.**, 2009, *The Leadership Program, Views from the inside: participant perspectives on community leadership*, Common Ground Publishing, Australia, 81

**Murray, M. J.**, 2009, *Theoretical Framework, Views from the inside: participant perspectives on community leadership*, Common Ground Publishing, 81

**Wood, R. J.**, and **Lenzen, M.**, 2009, *Principal Methodological Approaches to Studying Sustainable Consumption: Scenario Analysis, Ecological Footprints and Structural Decomposition Analysis*, Handbook of Input-Output Economics in Industrial Ecology Eco-Efficiency in Industry and Science 23, Springer, Heidelberg, 882

**Yu, T.**, **Lenzen, M.**, **Dey, C. J.**, and **Badcock, J.**, 2009, *Automatically Estimating and Updating Input-Output Tables, Knowledge-Based and Intelligent Information and Engineering Systems 13th International Conference, KES 2009 Santiago, Chile, September 28-30, 2009 Proceedings, Part II*, Springer, Germany, 873

## Refereed Journal Articles

Abazajian, K., Adelman-McCarthy, J., Agueros, M., Allam, S., Prieto, C., An, D., Anderson, K., Anderson, S., Annis, J., Bahcall, N., and **Murphy, T.**, 2009, *The Seventh Data Release of the Sloan Digital Sky Survey*, *Astrophysical Journal Supplement Series*, 182[2], 543-558

**Ahmad, M.**, and **Melrose, D. B.**, 2009, *Quantum effects on the dispersion of ion acoustic waves*, *Physics of Plasmas*, 16[10], 102110-1-102110-5

**Ahmad, M.**, Saeed, R., and Haque, Q., 2009, *Ion acoustic solitary waves in magnetized pair-ion electron plasmas*, *Physics of Plasmas*, 16, 084501-1-084501-4

Akimov, Y., **Ostrikov, K.**, and Li, E., 2009, *Surface Plasmon Enhancement of Optical Absorption in Thin-Film Silicon Solar Cells*, *Plasmonics*, 4, 107-113

Almenara, J., Deeg, H., Aigrain, S., Alonso, R., Auvergne, M., Baglin, A., Barbieri, M., Barge, P., Borde, P., Bouchy, F., and **Bruntt, H.**, 2009, *Rate and nature of false positives in the CoRoT exoplanet search*, *Astronomy & Astrophysics*, 506[1], 337-341

Altarawneh, M., Radny, M., Smith, P., Mackie, J., Kennedy, E., Dlugogorski, B., **Soon, A. S.**, and **Stampfl, C.**, 2009, *A first-principles density functional study of chlorophenol adsorption on Cu<sub>2</sub>O(110):CuO*, *Journal of Chemical Physics*, 130[18], 184505-1-184505-7

Anny Huang, Y., **Lenzen, M.**, Weber, C., **Murray, M. J.**, and Matthews, H., 2009, *The role of input-output analysis for the screening of corporate carbon footprints*, *Economic Systems Research*, 21[3], 217-242

**Argyros, A.**, 2009, *Microstructured Polymer Optical Fibers*, *Journal of Lightwave Technology*, 27[11], 1571-1579

**Argyros, A.**, **Leon-Saval, S. G.**, and **Van Eijkelenborg, M. A.**, 2009, *Twin-hollow-core optical fibers*, *Optics Communications*, 282[9], 1785-1788

**Argyros, A.**, **Pla, J. J.**, Ladouceur, F., and Poladian, L., 2009, *Circular and elliptical birefringence in spun microstructured optical fibres*, *Optics Express*, 17[18], 15983-15990

**Arulsamy, A. D.**, and **Ostrikov, K.**, 2009, *Diffusivity of adatoms on plasma-exposed surfaces determined from the ionization energy approximation and ionic polarizability*, *Physics Letters. Section A: General, Atomic and Solid State Physics*, 373[26], 2267-2272

**Arulsamy, A. D.**, and **Ostrikov, K.**, 2009, *Electron-Conduction Mechanism and Specific Heat Above Transition Temperature in LaFeAsO and BaFe<sub>2</sub>As<sub>2</sub> Superconductors*, *Journal of Superconductivity and Novel Magnetism*, 22[8], 785-789

**Arulsamy, A. D.**, **Rider, A. E.**, **Cheng, Q.**, Xu, S., and **Ostrikov, K.**, 2009, *Effect of elemental composition and size on electron confinement in self-assembled SiC quantum dots: A combinatorial approach*, *Journal of Applied Physics*, 105[9], 094314-1-094314-8

**Awaja, F.**, and Pigram, P., 2009, *Surface molecular characterisation of different epoxy resin composites subjected to UV accelerated degradation using XPS and ToF-SIMS*, *Polymer Degradation and Stability*, 94, 651-658

Bains, I., Cohen, J., Chapman, J., **Deacon, R. M.**, and Redman, M., 2009, *Revealing the transition from post-AGB stars to planetary nebulae: non-thermal and thermal radio continuum observations*, Monthly Notices of the Royal Astronomical Society, 397[3], 1386-1401

**Baker, N. J., Roelens, M. A.**, Madden, S., Luther-Davies, B., **de Sterke, C. M.**, and **Eggleton, B.**, 2009, *Pulse train generation by soliton fission in highly nonlinear chalcogenide (As<sub>2</sub>S<sub>3</sub>) waveguide Bragg grating*, Electronics Letters, 45[15], 2 pages-

**Baldock, C.**, and Ma, R., 2009, *The h index is the best measure of a scientist's research productivity*, Medical Physics, 36[4], 1043-1045

Balog, Z., **Kiss, L. L.**, Vinko, J., Rieke, G., Muzerolle, J., Gaspar, A., Young, E., and Gorlova, N., 2009, *Spitzer/IRAC-MIPS survey of NGC 2451A and B: debris disks at 50-80 million years*, The Astrophysical Journal, 698[2], 1989-2013

Barrett, S., **Bartlett, S. D.**, Doherty, A., **Jennings, D.**, and Rudolph, T., 2009, *Transitions in the computational power of thermal states for measurement-based quantum computation*, Physical Review A (Atomic, Molecular and Optical Physics), 80[6], 062328-1-062328-8

Barthel, C., **Reilly, D.**, Marcus, C., Hanson, M., and Gossard, A., 2009, *Rapid Single-Shot Measurement of a Singlet-Triplet Qubit*, Physical Review Letters, 103[16], 160503-1-160503-4

**Bartlett, S. D.**, Rudolph, T., Spekkens, R., and Turner, P., 2009, *Quantum communication using a bounded-size quantum reference frame*, New Journal of Physics, 11[6], 1-30

**Barton, M. J., Robinson, P. A.**, Sureshkumar, S., Galka, A., Durrant-Whyte, H. F., Guivant, J., and Ozaki, T., 2009, *Evaluating the Performance of Kalman-Filter-Based EEG Source Localization*, IEEE Transactions on Biomedical Engineering, 56[1], 122-136

**Bastug, T.**, and **Kuyucak, S.**, 2009, *Importance of the Peptide Backbone Description in Modeling the Selectivity Filter in Potassium Channels*, Biophysical Journal, 96[10], 4006-4012

Batusov, Y., Bradnova, V., **Hashemi-Nezhad, S. R.**, Tereshchenko, VV., and Tereshchenko, SV., 2009, *Investigation of fast neutron spectra in the uranium assembly of the experimental setup "energy plus transmutation" in the JINR Nuclotron proton beam at an energy of 1.5GeV*, Radiation Measurements, 44, 917-921

**Bax, D., McKenzie, D. R., Weiss, A. S.**, and **Bilek, M.**, 2009, *Linker-free covalent attachment of the extracellular matrix protein tropoelastin to a polymer surface for directed cell spreading*, Acta Biomaterialia, 5[9], 3371-3381

**Bax, D., Rodgers, U. R., Bilek, M.**, and **Weiss, A. S.**, 2009, *Cell adhesion to tropoelastin is mediated via the C-terminal GRKRK motif and integrin  $\alpha$ 3*, Journal of Biological Chemistry, 284[42], 28616-28623

Belcher, D., Schofield, S., **Warschkow, O.**, Radny, M., and Smith, P., 2009, *Carbonyl mediated attachment to silicon: Acetaldehyde on Si(001)*, Journal of Chemical Physics, 131[10], 104707-1-104707-8

Belous, K., Shapkin, M., Adachi, I., Aihara, H., Arinstein, K., Aulchenko, V., **Bakich, A. M.**, Balagura, V., Berberio, E., Bartel, W., Bay, A., **McOnie, S. T.**, **Varvell, K. E.**, and **Yabsley, B. D.**, 2009, *Measurement of cross sections of exclusive  $e+e- \rightarrow VP$  processes at  $\sqrt{s} = 1058$  GeV*, *Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics*, 681, 400-405

**Bennett, D.**, Miljak, D., and **Khachan, J.**, 2009, *The measurement of chalcopyrite content in rocks and slurries using magnetic resonance*, *Minerals Engineering*, 22[9-10], 821-825

**Bennett, J. M.**, **Warschkow, O.**, and **Marks, N. A.**, 2009, *Aminoxyl Radicals on the Silicon (001) Surface*, *Journal of Physical Chemistry Part C: Nanomaterials and Interfaces*, 113[3], 1020-1027

**Bennett, J. M.**, **Warschkow, O.**, Marks, N., and **McKenzie, D. R.**, 2009, *Diffusion pathways of phosphorus atoms on silicon (001)*, *Physical Review B (Condensed Matter and Materials Physics)*, 79[16], 165311-1-165311-9

Bentz, M., Walsh, J., Barth, A., Baliber, N., Bennert, V., Canalizo, G., Filippenko, A., Ganeshalingam, M., Gates, E., Greene, J., and **Hidas, M.**, 2009, *The Lick AGN Monitoring Project: Broad-line Region Radii and Black Hole Masses from Reverberation Mapping of H $\gamma$* , *The Astrophysical Journal*, 705[1], 199-217

Berry, D., Higgins, B., **Bartlett, S. D.**, Mitchell, M., Pryde, G., and Wiseman, H., 2009, *How to perform the most accurate possible phase measurements*, *Physical Review A (Atomic, Molecular and Optical Physics)*, 80[5], 052114-1-052114-22

**Bi, H.**, Kou, K., **Ostrikov, K.**, and Wang, Z., 2009, *High-yield atmospheric-pressure CVD of highly-uniform carbon nanocoils using Co-P catalyst nanoparticles prepared by electroless plating*, *Journal of Alloys and Compounds*, 484, 860-863

**Bi, H.**, Kou, K., **Ostrikov, K.**, Yan, L., and Wang, Z., 2009, *Microstructure and electromagnetic characteristics of Ni nanoparticle film coated carbon microcoils*, *Journal of Alloys and Compounds*, 478[1-2], 796-800

**Bi, H.**, Kou, K., **Ostrikov, K.**, Yan, L., Zhang, J., Ji, T., and Wang, Z., 2009, *Unconventional Ni-P alloy-catalyzed CVD of carbon coil-like micro- and nano-structures*, *Materials Chemistry and Physics*, 116[2-3], 442-448

**Bi, H.**, Kou, K., **Ostrikov, K.**, Zhang, J., and Wang, Z., 2009, *Mechanical model and superelastic properties of carbon microcoils with circular cross-section*, *Journal of Applied Physics*, 106[2], 023520-1-023520-7

**Bi, H.**, Kou, K., **Rider, A. E.**, **Ostrikov, K.**, Wu, H., and Wang, Z., 2009, *Low-phosphorous nickel-coated carbon microcoils: Controlling microstructure through an electroless plating process*, *Applied Surface Science*, 255[15], 6888-6893

Blake, C., Jurek, R., Brough, S., Colless, M., Couch, W., **Croom, S. M.**, Davis, T., Drinkwater, M., Forbes, D., Glazebrook, K., and Madore, B., 2009, *The Wiggle Z Dark Energy Survey: small-scale clustering of Lyman-break galaxies at  $z < 1$* , *Monthly Notices of the Royal Astronomical Society*, 395[1], 240-254

**Bland-Hawthorn, J.**, and Kern, P., 2009, *Astrophotonics: a new era for astronomical instruments*, *Optics Express*, 17[3], 1880-1884

Bohnen, K., Heid, R., Pintschovius, L., **Soon, A. S.**, and **Stampfl, C.**, 2009, *Ab initio lattice dynamics and thermal expansion of Cu<sub>2</sub>O*, Physical Review B (Condensed Matter and Materials Physics), 80[13], 134304-1-134304-6

**Bosi, S. G.**, **Brown, G.**, **Sarabipour, S.**, De Deene, Y., and **Baldock, C.**, 2009, *Modelling optical scattering artefacts for varying pathlength in a gel dosimeter phantom*, Physics in Medicine and Biology, 54[2], 275-283

**Bosi, S. G.**, **Naseri, P.**, and **Baldock, C.**, 2009, *Light-scattering-induced artifacts in a complex polymer gel dosimetry phantom*, Applied Optics, 48[13], 2427-2434

**Brand, G. F.**, 2009, *Dispersion relations for cylindrical waveguides with metamaterial linings*, International Journal of Electronics, 96[1], 99-107

**Brewer, B. J.**, and **Stello, D.**, 2009, *Gaussian process modelling of asteroseismic data*, Monthly Notices of the Royal Astronomical Society, 395[4], 2226-2233

Briguglio, R., Tosti, G., Strassmeier, K., **Bruntt, H.**, Nesci, R., and Sabbatini, L., 2009, *The Small IRAIT telescope. Photometric time-series during the polar night*, Societa Astronomica Italiana. Memorie, 80[147], 147-150

**Bromley, R.**, **Oliver, L. D.**, Davey, R. A., Harvie, R., and **Baldock, C.**, 2009, *Predicting the clonogenic survival of A549 cells after modulated x-ray irradiation using the linear quadratic model*, Physics in Medicine and Biology, 54[2], 187-206

**Bruntt, H.**, 2009, *Accurate fundamental parameters of CoRoT asteroseismic targets The solar-like stars HD 49933, HD 175726, HD 181420, and HD 181906*, Astronomy & Astrophysics, 506[1], 235-244

**Bruntt, H.**, Kurtz, D., Cunha, M., Brandao, I., Handler, G., **Bedding, T. R.**, Medupe, T., Buzasi, D., Mashigo, D., Zhang, I., and Van Wyk, F., 2009, *Asteroseismic analysis of the roAp star Circini: 84d of high-precision photometry from the WIRE satellite*, Monthly Notices of the Royal Astronomical Society, 396[2], 1189-1201

**Bryant, J. J.**, **Broderick, J. W.**, **Johnston, H. M.**, **Hunstead, R. W.**, **Gaensler, B. M.**, and De Breuck, C., 2009, *A new search for distant radio galaxies in the Southern hemisphere - II. 2.2m imaging\**, Monthly Notices of the Royal Astronomical Society, 394[4], 2197-2222

**Bryant, J. J.**, **Johnston, H. M.**, **Broderick, J. W.**, **Hunstead, R. W.**, De Breuck, C., and Gaensler, B. M., 2009, *A new search for distant radio galaxies in the Southern hemisphere - III. Optical spectroscopy and analysis of the MRCR - SUMSS sample*, Monthly Notices of the Royal Astronomical Society, 395[2], 1099-1120

**Bucher, D.**, and **Kuyucak, S.**, 2009, *Importance of water polarization for ion permeation in narrow pores*, Chemical Physics Letters, 477[1-3], 207-210

Bui, L., **Pelusi, M. D.**, **Vo, T.**, Sarkhosh, N., Emami, H., **Eggleton, B.**, and Mitchell, A., 2009, *Instantaneous frequency measurement system using optical mixing in highly nonlinear fiber*, Optics Express, 17[25], 22983-22991

Burgmann, F., McCulloch, D., **Ryves, L. J., Lim, S. H., McKenzie, D. R., and Bilek, M.**, 2009, *Enhancing the hardness of Al/W nanostructured coatings*, Journal of Physics: Condensed Matter, 21, 055003-1-055003-9

Burke-Spolaor, S., Ekers, R., Massardi, M., **Murphy, T.**, Partridge, B., Ricci, R., and **Sadler, E. M.**, 2009, *Wide-field imaging and polarimetry for the biggest and brightest in the 20-GHz southern sky*, Monthly Notices of the Royal Astronomical Society, 395[1], 504-517

**Buryak, A., Bland-Hawthorn, J., and Steblina, V.**, 2009, *Comparison of Inverse Scattering Algorithms for Designing Ultrabroadband Fibre Bragg Gratings*, Optics Express, 17[3], 1995-2004

**Cairns, I. H., Lobzin, V., Warmuth, A., Li, B., Robinson, P. A., and Mann, G.**, 2009, *Direct radio probing and interpretation of the sun's plasma density profile*, The Astrophysical Journal, 706[2], L265-L269

Camilo, F., Ng, C. Y., **Gaensler, B. M.**, Ransom, S., Chatterjee, S., Reynolds, J., and Sarkissian, J., 2009, *Out of the Frying Pan: A Young Pulsar with a Long Radio Trail Emerging from SNR G315.9-0.0*, The Astrophysical Journal, 703[1], L55-L58

Camilo, F., Ransom, S., **Gaensler, B. M.**, and Lorimer, D., 2009, *Discovery of the Energetic Pulsar J1747-2809 in the Supernova Remnant G0.9+0.1*, The Astrophysical Journal, 700[1], L34-L38

**Campbell, S., Botten, L., McPhedran, R. C., and de Sterke, C. M.**, 2009, *Modal method for conical diffraction by slanted lamellar gratings*, Optical Society of America. Journal A: Optics Image Science and Vision, 26[4], 938-948

**Carter, D. J., and Stampfl, C.**, 2009, *Atomic and electronic structure of single and multiple vacancies in GaN nanowires from first-principles*, Physical Review B (Condensed Matter and Materials Physics), 79[19], 195302-1-195302-14

**Carter, D. J., Puckeridge, M., Delley, B., and Stampfl, C.**, 2009, *Quantum confinement effects in gallium nitride nanostructures: abinitio investigations*, Nanotechnology, 20[42], 425401-1-425401-5

**Carter, D. J., Warschkow, O., Marks, N., and McKenzie, D. R.**, 2009, *Electronic structure models of phosphorus delta-doped silicon*, Physical Review B (Condensed Matter and Materials Physics), 79[3], 033204-1-033204-4

**Cartwright, L. E., Lambert, J., McKenzie, D. R., and Suchowerska, N. O.**, 2009, *The angular dependence and effective point of measurement of a cylindrical scintillation dosimeter with and without a radio-opaque marker for brachytherapy*, Physics in Medicine and Biology, 54[7], 2217-2227

Casado, M., Belanger-Champagne, C., Benslama, K., Bosman, M., Brenner, R., Czyculac, Z., Dam, M., Demers, S., Farrington, S., Igonkinah, O., et al, v., and **Saavedra, A. F.**, 2009, *The ATLAS tau trigger*, Nuclear Physics, Section B, Proceedings Supplements, 189, 291-298

Chan, C., **Fulton, R. R.**, Feng, D. D., and Meikle, S. R., 2009, *Regularized image reconstruction with an anatomically adaptive prior for positron emission tomography*, Physics in Medicine and Biology, 54[24], 7379-7400

Chang, Y., Wang, M., Adachi, I., Aihara, H., Aushev, T., **Bakich, A. M.**, Balagura, V., Bay, A., Bhardwaj, V., Bitenc, U., Bondar, A., **McOnie, S. T.**, **Peak, L. S.**, **Yabsley, B. D.**, 2009, *Observation of  $B^-$ ;  $K$  and  $B^- - K^*$  at Belle*, Physical Review D (Particles, Fields, Gravitation and Cosmology), 79[5], 052006-1-052006-13

Chaplin, W., Houdek, G., Elsworth, Y., New, R., **Bedding, T. R.**, and Kjeldsen, H., 2009, *Excitation and Damping of  $p$ -Mode Oscillations of  $\zeta$  Cen B*, The Astrophysical Journal, 692[1], 531-537

**Chatterjee, S.**, Briskin, W., Vlemmings, W., Goss, W., Lazio, T., Cordes, J., Thorsett, S., Fomalont, E., Lyne, A., and Kramer, M., 2009, *Precision Astrometry with the Very Long Baseline Array: Parallaxes and Proper Motions for 14 Pulsars*, The Astrophysical Journal, 698[1], 250-265

Chechetkin, V., and **Lobzin, V.**, 2009, *Local stability and evolution of the genetic code*, Journal of Theoretical Biology, 261[4], 643-653

**Chen, P.**, and **Kuyucak, S.**, 2009, *Mechanism and Energetics of Charybdotoxin Unbinding from a Potassium Channel from Molecular Dynamics Simulations*, Biophysical Journal, 96[7], 2577-2588

Chen, P., Wang, M., Aihara, H., **Bakich, A. M.**, Balagura, V., Bhardwaj, V., Bischofberger, M., Bozek, A., Bracko, M., Browder, T., Chang, M., **McOnie, S. T.**, **Peak, L. S.**, **Varvell, K. E.**, and **Yabsley, B. D.**, 2009, *Observation of  $B^+$ ;  $p^+$  at Belle*, Physical Review D (Particles, Fields, Gravitation and Cosmology), 80[11], 111103-1-111103-6

Cheng, Q., Xu, S., and **Ostrikov, K.**, 2009, *Rapid, low-temperature synthesis of nc-Si in high-density, non-equilibrium plasmas: enabling nanocrystallinity at very low hydrogen dilution*, Journal of Materials Chemistry, 19[29], 5134-5140

**Cheng, Q.**, Xu, S., and **Ostrikov, K.**, 2009, *Structural evolution of nanocrystalline silicon thin films synthesized in high-density, low-temperature reactive plasmas*, Nanotechnology, 20, 1-8

Cheng, Q., Xu, S., and **Ostrikov, K.**, 2009, *Temperature-Dependent Properties of nc-Si Thin Films Synthesized in Low-Pressure, Thermally Nonequilibrium, High-Density Inductively Coupled Plasmas*, Journal of Physical Chemistry Part C: Nanomaterials and Interfaces, 113[33], 14759-14764

**Cheng, Q.**, Xu, S., Huang, S., and **Ostrikov, K.**, 2009, *Effective Control of Nanostructured Phases in Rapid, Room-Temperature Synthesis of Nanocrystalline Si in High-Density Plasmas*, Crystal Growth & Design, 9[6], 2863-2867

Cheung, C. K., Fletcher, D. F., Barton, G. W., and **McNamara, P.**, 2009, *Simulation of particle transport and deposition in the modified chemical vapor deposition process*, Journal of Non-Crystalline Solids, 355, 327-334

Chua, B., Xu, S., Ren, Y., Cheng, Q., and **Ostrikov, K.**, 2009, *High-rate, room temperature plasma-enhanced deposition of aluminum-doped zinc oxide nanofilms for solar cell applications*, Journal of Alloys and Compounds, 485[1-2], 379-384

**Chung, T. S.**, **Bartlett, S. D.**, and Doherty, A., 2009, *Characterizing measurement-based quantum gates in quantum many-body systems using correlation functions*, Canadian Journal of Physics, 87[3], 219-224

Cioni, M., Irwin, M., Ferguson, A., McConnachie, A., Conn, B., Huxor, A., Ibata, R., **Lewis, G. F.**, and Tanvir, N., 2009, *AGB stars as tracers of metallicity and mean age across M 33*, *Astronomy & Astrophysics*, 500[3], 1025-1025

Clausen, J., **Bruntt, H.**, Claret, A., Larsen, A., Andersen, J., Nordstrom, B., and Gimenez, A., 2009, *Absolute dimensions of solar-type eclipsing binaries. II. V636 Centauri: A 1.05 M primary with an active, cool, oversize 0.85 M secondary*, *Astronomy & Astrophysics*, 502[1], 253-265

Collins, M., Chapman, S., Irwin, M., Ibata, R., Martin, N., Ferguson, A., **Lewis, G. F.**, Mackey, A., McConnachie, A., and Tanvir, N., 2009, *A spectroscopic survey of EC4, an extended cluster in Andromeda's halo*, *Monthly Notices of the Royal Astronomical Society*, 396[3], 1619-1628

Collis, S., Dall, R., Howard, J., **Andruczyk, D. E.**, and **James, B. W.**, 2009, *Validation of collisional radiative modelling of emission line ratios for helium beam plasma diagnostic*, *Journal of Quantitative Spectroscopy & Radiative Transfer*, 110[6-7], 340-346

Cooper, J., Bicknell, G., Sutherland, R., and **Bland-Hawthorn, J.**, 2009, *Starburst-Driven Galactic Winds: Filament Formation And Emission Processes*, *The Astrophysical Journal*, 703[1], 330-347

**Corcoran, W. P.**, **Monat, C. B.**, **Grillet, C. E.**, **Moss, D. J.**, **Eggleton, B.**, White, T., O'Faolain, L., and Krauss, T., 2009, *Green light emission in silicon through slow-light enhanced third-harmonic generation in photonic-crystal waveguides*, *Nature Photonics*, 3, 206-210

**Couedel, L.**, Mezeghrane, A., **Samaritan, A. A.**, Mikikian, M., Tessier, Y., Cavarroc, M., and Boufendi, L., 2009, *Complex Plasma Afterglow*, *Contributions to Plasma Physics*, 49[4-5], 235-259

**Cover, M. F.**, **Warschkow, O.**, **Bilek, M.**, and **McKenzie, D. R.**, 2009, *A comprehensive survey of M2AX phase elastic properties*, *Journal of Physics: Condensed Matter*, 21[30], 305403-1-305403-9

**Croom, S. M.**, Richards, G., Shanks, T., Boyle, B., Sharp, R., **Bland-Hawthorn, J.**, Bridges, T., Brunner, R., Cannon, R., Carson, D., Chui, K., Colless, M., and **Fine, S. L.**, 2009, *The 2dF-SDSS LRG and QSO Survey: the spectroscopic QSO catalogue*, *Monthly Notices of the Royal Astronomical Society*, 392[1], 19-44

**Croom, S. M.**, Richards, G., Shanks, T., Boyle, B., Strauss, M., Myers, A., Nichol, R., Pimblet, K., Ross, N., and Schneider, D., 2009, *The 2dF-SDSS LRG and QSO survey: the QSO luminosity function at 0.4 <math>z</math> <math>< 2.6</math>*, *Monthly Notices of the Royal Astronomical Society*, 399[4], 1755-1772

**Cross, R. C.**, 2009, *Mechanics of swinging a bat*, *American Journal of Physics*, 77[1], 36-43

**Cui, X. C.**, Delley, B., Freeman, A., and **Stampfl, C.**, 2009, *First-principles investigation of Mn -layer doped GaN/AlN/GaN (0001) tunneling junctions*, *Journal of Applied Physics*, 106[4], 043711-1-043711-9

Cvelbar, U., **Ostrikov, K.**, **Levchenko, I.**, Mozetic, M., and Sunkara, M., 2009, *Control of morphology and nucleation density of iron oxide nanostructures by electric conditions on iron surfaces exposed to reactive oxygen plasmas*, *Applied Physics Letters*, 94[21], 211502-1-211502-3

Cvetojevic, N., Lawrence, J., **Ellis, S.**, **Bland-Hawthorn, J.**, Haynes, R., and Horton, A., 2009, *Characterization and on-sky demonstration of an integrated photonic spectrograph for astronomy*, *Optics Express*, 17[21], 18643-18650

Dalseno, J., Adachi, I., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.**, Balagura, V., Bay, A., Bhardwaj, V., Bitenc, U., Bondar, A., **McOnie, S. T.**, **Peak, L. S.**, **Yabsley, B. D.**, 2009, *Time-dependent Dalitz plot measurement of CP parameters in B - Ks+-decays*, Physical Review D (Particles, Fields, Gravitation and Cosmology), 79[7], 072004-1-072004-17

**Davis, J.**, **Jacob, A.**, **Robertson, J. G.**, **Ireland, M. J.**, **North, J. R.**, **Tango, W. J.**, and **Tuthill, P. G.**, 2009, *Observations of the pulsation of the Cepheid Car with the Sydney University Stellar Interferometer*, Monthly Notices of the Royal Astronomical Society, 394[3], 1620-1630

De Silva, G., Freeman, K., and **Bland-Hawthorn, J.**, 2009, *Reconstructing Fossil Sub-structures of the Galactic Disk: Clues from Abundance Patterns of Old Open Clusters and Moving Groups*, Publications of the Astronomical Society of Australia, 26[1], 11-16

**de Sterke, C. M.**, Dossou, K., White, T., Botten, L., and **McPhedran, R. C.**, 2009, *Efficient coupling into slow light photonic crystal waveguide without transition region: role of evanescent modes*, Optics Express, 17[20], 17338-17343

Delanty, M., **Levchenko, I.**, **Ostrikov, K.**, Rebic, S., and Xu, S., 2009, *A quantification of the interaction and spatial ordering in nano-arrays*, Applied Surface Science, 255[17], 7477-7482

**Denysenko, I.**, and **Ostrikov, K.**, 2009, *Plasma heating effects in catalyzed growth of carbon nanofibres*, Journal of Physics D: Applied Physics, 42[1], 015208-1-015208-12

Denysenko, I., **Ostrikov, K.**, and Azarenkov, N., 2009, *Dust charge and ion drag forces in a high-voltage, capacitive radio frequency sheath*, Physics of Plasmas, 16[11], 113707-1-113707-10

Derekas, A., **Kiss, L. L.**, **Bedding, T. R.**, Ashley, M., Csak, B., **Danos, A.**, Fernandez, J., Furesz, G., Meszaros, S., Szabo, G., Szakats, R., Szekely, P., and Szatmary, K., 2009, *Binarity and multiperiodicity in high-amplitude Scuti stars*, Monthly Notices of the Royal Astronomical Society, 394[2], 995-1008

DeRosa, M., Schrijver, C., Barnes, G., Leka, K., Lites, B., Aschwanden, M., Amari, T., Canou, A., Regnier, S., McTiernan, J., and **Wheatland, M. S.**, 2009, *A Critical Assessment of Nonlinear Force-Free Field Modeling of the Solar Corona for Active Region 10953*, The Astrophysical Journal, 696[2], 1780-1791

Dickey, J., Strasser, S., **Gaensler, B. M.**, Haverkorn, M., Kavars, D., McClure-Griffiths, N., Stil, J., and Taylor, A., 2009, *The Outer Disk of the Milky Way Seen in 21 cm Absorption*, The Astrophysical Journal, 693[2], 1250-1260

**Dobbie, P. B.**, **Kuncic, Z.**, Bicknell, G., and Salmeron, R., 2009, *Enhanced MHD Transport in Astrophysical Accretion Flows: Turbulence, Winds and Jets*, Plasma and Fusion Research, 4[017], 017-1-017-7

Docherty, A., Poladian, L., **Argyros, A.**, **Large, M. C.**, Poulin, J., and Kashyap, R., 2009, *Increasing the Numerical Aperture of Large-Core Microstructured Polymer Optical Fibers Using a 'Y'-Bridge Cladding*, Journal of Lightwave Technology, 27[11], 1610-1616

Dogan, G., Brandao, I., **Bedding, T. R.**, Christensen-Dalsgaard, J., Cunha, M., and Kjeldsen, H., 2009, *Asteroseismic modelling of the solar-like star; Hydri*, Astrophysics and Space Science, 4 pages-

Doherty, A., and **Bartlett, S. D.**, 2009, *Identifying Phases of Quantum Many-Body Systems That Are Universal for Quantum Computation*, Physical Review Letters, 103[2], 020506-1-020506-4

**dos Remedios, C. G.**, Yamane, M., Hughes, J. M., Stefani, M., Fukuda, N., Kurihara, S., Steenman, M., and Ishiwata, S., 2009, *SPOC: A Functional Assay of Failing and Non-Failing Human Cardiomyocytes*, Biophysical Journal, 96[3], 224a-224a

**dos Remedios, C. G.**, Yamane, M., Robinson, r., Hughes, J. M., Stefani, M., Fukuda, N., Kurihara, S., Steenman, M., and Ishiwata, S., 2009, *Spontaneous Oscillatory Contraction: A Functional Assay of Contractile Function of Human Heart Samples Stored at -190 °C*, Heart, Lung and Circulation, 18[3], S311-S311

Dossou, K., Poulton, C., Botten, L., **Mahmoodian, S.**, **McPhedran, R. C.**, and **de Sterke, C. M.**, 2009, *Modes of symmetric composite defects in two-dimensional photonic crystals*, Physical Review A (Atomic, Molecular and Optical Physics), 80[1], 013826-1-13826-14

**Duan, X.**, and **Stampfl, C.**, 2009, *Defect complexes and cluster doping of InN: First-principles investigations*, Physical Review B (Condensed Matter and Materials Physics), 79[3], 035207-1-035207-16

**Duan, X.**, and **Stampfl, C.**, 2009, *Vacancies and interstitials in indium nitride: Vacancy clustering and molecular bondlike formation from first principles*, Physical Review B (Condensed Matter and Materials Physics), 79[17], 174202-1-174202-9

**Duan, X.**, **Stampfl, C.**, **Bilek, M.**, and **McKenzie, D. R.**, 2009, *Codoping of aluminum and gallium with nitrogen in ZnO: A comparative first-principles investigation*, Physical Review B (Condensed Matter and Materials Physics), 79[23], 235208-1-235208-9

Duchesne, D., Ferrera, M., Razzari, L., Morandotti, R., Little, B., Chu, S., and **Moss, D. J.**, 2009, *Efficient self-phase modulation in low loss, high index doped silica glass integrated waveguides*, Optics Express, 17[3], 1865-1870

Duchesne, D., Razzari, L., Halloran, L., Morandotti, R., SpringThorpe, A., Christodoulides, D., and **Moss, D. J.**, 2009, *Two-photon photodetector in a multi-quantum well GaAs laser structure at 1.55 $\mu$ m*, Optics Express, 17[7], 5298-5310

Dupuy, T., Liu, M., and **Ireland, M. J.**, 2009, *Dynamical Mass of the Substellar Benchmark Binary HD 130948BC*, The Astrophysical Journal, 692[1], 729-752

Dupuy, T., Liu, M., and **Ireland, M. J.**, 2009, *Keck Laser Guide Star Adaptive Optics Monitoring of the M8+L7 Binary LHS 2397aAB: First Dynamical Mass Benchmark at the L/T Transition*, The Astronomical Journal, 699[1], 168-185

Durbeej, B. R., Sandala, G. M., **Bucher, D.**, Smith, D., and Radom, L., 2009, *On the importance of ribose orientation in the substrate activation of the coenzyme B(-12)-dependent mutases*, Chemistry: A European Journal, 15[34], 8578-8585

**Ebnali-Heidari, M.**, **Grillet, C. E.**, **Monat, C. B.**, and **Eggleton, B.**, 2009, *Dispersion engineering of slow light photonic crystal waveguides using microfluidic infiltration*, Optics Express, 17[3], 1628-1635

Ebnali-Heidari, M., **Monat, C. B., Grillet, C. E.**, and Moravvej-Farshi, M., 2009, *A proposal for enhancing four-wave mixing in slow light engineered photonic crystal waveguides and its application to optical regeneration*, Optics Express, 17[20], 18340-18353

Eisner, J., Monnier, J., **Tuthill, P. G.**, and Lacour, S., 2009, *Spatially Resolved Mid-Infrared Imaging of the SR 21 Transition Disk*, The Astrophysical Journal, 698[2], L169-L173

**Ellis, S.**, and **Bland-Hawthorn, J.**, 2009, *The Search for Celestial Positronium via the Recombination Spectrum*, The Astrophysical Journal, 707[1], 457-471

**Else, D., Kompaneets, R.**, and **Vladimirov, S.**, 2009, *Instability of the ionization-absorption balance in a complex plasma at ion time scales*, Physical Review E, 80, 016403-1-016403-6

**Else, D., Kompaneets, R.**, and **Vladimirov, S.**, 2009, *On the reliability of the Bhatnagar-Gross-Krook collision model in weakly ionized plasmas*, Physics of Plasmas, 16[6], 062106-1-062106-8

Feain, I., Ekers, R., **Murphy, T., Gaensler, B. M.**, Macquart, J., Norris, R., Cornwell, T., Johnston-Hollitt, M., Ott, J., and Middelberg, E., 2009, *Faraday Rotation Structure on Kiloparsec Scales in the Radio Lobes of Centaurus A*, The Astrophysical Journal, 707[1], 114-125

**Felmingham, K. L., Williams, L. M., Kemp, A. H., Rennie, C. J., Gordon, E., and Bryant, R. A.**, 2009, *Anterior cingulate activity to salient stimuli is modulated by autonomic arousal in posttraumatic stress disorder*, Psychiatry Research: Neuroimaging, 173[1], 59-62

Felmingham, K. L., Williams, L. M., Kemp, A., **Rennie, C. J.**, Gordon, E., and Bryant, R. A., 2009, *Anterior cingulate activity to salient stimuli is modulated by autonomic arousal in Posttraumatic Stress Disorder*, Psychiatry Research: Neuroimaging, 173[1], 59-62

**Foroutan Kharajou, G.**, Medhipour, H., and Zahed, H., 2009, *Simulation study of the magnetized sheath of a dusty plasma*, Physics of Plasmas, 16[10], 103703-1-103703-11

**Francis, M. J., Lewis, G. F.**, and Linder, E., 2009, *Can early dark energy be detected in non-linear structure?*, Monthly Notices of the Royal Astronomical Society, 394[2], 605-614

**Francis, M. J., Lewis, G. F.**, and Linder, E., 2009, *Halo mass functions in early dark energy cosmologies*, Monthly Notices of the Royal Astronomical Society, 393[1], L31-L35

Freyer, F., **Aquino, K. M., Robinson, P. A.**, Ritter, P., and Breakspear, M., 2009, *Bistability and Non-Gaussian Fluctuations in Spontaneous Cortical Activity*, The Journal of Neuroscience, 29[26], 8512-8524

**Fronzi, M., Piccinin, S.**, Delley, B., Traversa, E., and **Stampfl, C.**, 2009, *Water adsorption on the stoichiometric and reduced CeO<sub>2</sub>(111) surface: a first-principles investigation*, Physical Chemistry Chemical Physics, 11[40], 9188-9199

**Fronzi, M., Soon, A. S.**, Delley, B., Traversa, E., and Stampfl, C., 2009, *Stability and morphology of cerium oxide surfaces in an oxidizing environment: A first-principles investigation*, Journal of Chemical Physics, 131[10], 104701-1-104701-16

Galili, M., Xu, J., Mulvad, H., Oxenlowe, L., Clausen, A., Jeppesen, P., Luther-Davies, B., Madden, S., Rode, A., Choi, D., **Pelusi, M. D., Luan, F., and Eggleton, B.**, 2009, *Breakthrough switching speed with an all-optical chalcogenide glass chip: 640 Gbit/s demultiplexing*, Optics Express, 17[4], 2182-2187

Garcia, R., Regulo, C., Samadi, R., Ballot, J., Barban, C., Benomar, O., Chaplin, W., Gaulme, P., Appourchaux, T., Mathur, S., and **Bruntt, H.**, 2009, *Solar-like oscillations with low amplitude in the CoRoT target HD 181906*, Astronomy & Astrophysics, 506[1], 41-50

**Gong, P.**, and Van Leeuwen, C., 2009, *Distributed Dynamical Computation in Neural Circuits with Propagating Coherent Activity Patterns*, P L o S Computational Biology, 5[12], 1-11

**Goto, R., Jackson, S. D.**, and Takenaga, K., 2009, *Single-polarization operation in birefringent all-solid hybrid microstructured fiber with additional stress applying parts*, Optics Letters, 34[20], 3119-3121

**Goto, R., Magi, E. C.**, and **Jackson, S. D.**, 2009, *Narrow-linewidth, Yb<sup>3+</sup>-doped, hybrid microstructured fibre laser operating at 1178nm*, Electronics Letters, 45[17], 1-2

**Gray, R.**, and **Robinson, P. A.**, 2009, *Stability and structural constraints of random brain networks with excitatory and inhibitory neural populations*, Journal of Computational Neuroscience, 27[1], 81-101

Gray, M., Wittkowski, M., Humphreys, E., Ohnaka, K., Bobolz, D., and **Scholtz, M.**, 2009, *SioMasers emission in miras*, Monthly Notices of the Royal Astronomical Society, 394 (1), 51-66

**Gray, R. T.**, and **Robinson, P. A.**, 2009, *Stability of random brain networks with excitatory and inhibitory connections*, Neurocomputing, 72[7-9], 1849-1858

**Gray, R. T.**, Fung, C. K., and **Robinson, P. A.**, 2009, *Stability of small-world networks of neural populations*, Neurocomputing, 72[7-9], 1565-1574

**Groothoff, N.**, Jovanovic, N., Marshall, G., Canning, J., and Withford, M., 2009, *Femtosecond laser writing of fibre Bragg gratings in large diameter air-clad optical fibre*, Glass Technology: European Journal of Glass Science and Technology, Part A, 50[1], 75-78

**Grujic, T., Kuhlmeier, B. T., de Sterke, C. M.**, and Poulton, C., 2009, *Modelling of photonic crystal fiber based on layered inclusions*, Optical Society of America. Journal B: Optical Physics, 26[10], 1852-1861

**Gustafsson, H. B., Vial, P. J., Kuncic, Z., Baldock, C.**, and Greer, P., 2009, *EPID dosimetry: Effect of different layers of materials on absorbed dose response*, Medical Physics, 36[12], 5665-5674

Ha, S., Sukhorukov, A., Dossou, K., Botten, L., **de Sterke, C. M.**, and Kivshar, Y., 2009, *Bloch-mode extraction from near-field data in periodic waveguides*, Optics Letters, 34[24], 3776-3778

Haffner, L., Dettmar, R., Beckman, J., Wood, K., Slavin, J., Giammanco, C., **Madsen, G. J.**, Zurita, A., and Reynolds, R., 2009, *The warm ionized medium in spiral galaxies*, Reviews of Modern Physics, 81[3], 969-997

**Hales, C. A., Gaensler, B. M., Chatterjee, S., Van Der Swaluw, E., and Camilo, F.,** 2009, *A proper motion for the pulsar wind nebula G359.23-0.82, the "mouse", associated with the energetic radio pulsar J1747 - 2958*, The Astrophysical Journal, 706[2], 1316-1322

Han, Z., **Morrow, R.**, Tay, B., and **McKenzie, D. R.**, 2009, *Time-dependent electrical double layer with blocking electrode*, Applied Physics Letters, 94[4], 043118-1-043118-3

Han, Z., Tay, B., Shakerzadeh, M., and **Ostrikov, K.**, 2009, *Superhydrophobic amorphous carbon/carbon nanotube nanocomposites*, Applied Physics Letters, 94[22], 223106-1-223106-3

Han, Z., Tay, B., Tan, C., Shakerzadeh, M., and **Ostrikov, K.**, 2009, *Electrowetting Control of Cassie-to-Wenzel Transitions in Superhydrophobic Carbon Nanotube-Based Nanocomposites*, ACS Nano, 3[10], 3031-3036

**Hancock, P. J.**, Tingay, S., **Sadler, E. M.**, Phillips, C., and Deller, A., 2009, *e-VLBI observations of GHz-peaked spectrum radio sources in nearby galaxies from the AT20G survey*, Monthly Notices of the Royal Astronomical Society, 397[4], 2030-2036

Hannikainen, D., **Hunstead, R. W.**, Wu, K., McIntyre, V., Lovell, J., **Campbell-Wilson, D.**, McCollough, M., Reynolds, J., and Tzioumis, A., 2009, *Revisiting the relativistic ejection event in XTE J1550-564 during the 1998 outburst*, Monthly Notices of the Royal Astronomical Society, 397[1], 569-576

**Harikandei, a., Robinson, P. A.**, Skjaeraasen, O., and **Cairns, I. H.**, 2009, *Coupled Langmuir and nonlinear ion acoustic waves in the presence of non-thermal electrons*, Journal of Plasma Physics, 75[2], 193-202

**Henke, H., Robinson, P. A., Drysdale, P. M., and Loxley, P.**, 2009, *Spatiotemporal dynamics of pattern formation in the primary visual cortex and hallucinations*, Biological Cybernetics: communication and control in organisms and automata, 101, 3-18

Herrid, M., Olejnik, J., **Jackson, M. A., Suchowerska, N. O.**, Stockwell, S., Davey, R., Hutton, K., Hope, S., and Hill, J., 2009, *Irradiation Enhances the Efficiency of Testicular Germ Cell Transplantation in Sheep*, Biology of Reproduction, 81[5], 898-905

Higgins, B., Berry, D., **Bartlett, S. D.**, Mitchell, W., Wiseman, H., and Pryde, G., 2009, *Demonstrating Heisenberg-limited unambiguous phase estimation without adaptive measurements*, New Journal of Physics, 11, 073023-1-073023-14

Higgins, B., Booth, B., Doherty, A., **Bartlett, S. D.**, Wiseman, H., and Pryde, G., 2009, *Mixed State Discrimination Using Optical Control*, Physical Review Letters, 103[22], 220503-1-220503-4

**Hill, R. F., Mo, Z., Haque, A. M., and Baldock, C.**, 2009, *An evaluation of ionization chambers for the relative dosimetry of kilovoltage x-ray beams*, Medical Physics, 36[9], 3971-3981

Hobbs, G., Bailes, M., Bhat, N., Burke-Spolaor, S., Champion, D., Coles, W., Hotan, A., Jenet, F., Kedziora-Chudczer, L., Khoo, J., **To, S.**, and **Yardley, D.**, 2009, *Gravitational-Wave Detection Using Pulsars: Status of the Parkes Pulsar Timing Array Project*, Publications of the Astronomical Society of Australia, 26[2], 103-109

Hobbs, G., Hollow, R., Champion, D., Khoo, J., **Yardley, D.**, Carr, M., Keith, M., Jenet, F., Amy, S., and Burgay, M., 2009, *The PULSE@Parkes Project: a New Observing Technique for Long-Term Pulsar Monitoring*, Publications of the Astronomical Society of Australia, 26[4], 468-475

Hobbs, G., Jenet, F., Lee, K., Verbiest, J., **Yardley, D.**, Manchester, R., Lommen, A., Coles, W., Edwards, R., and Shettigara, C., 2009, *TEMPO2: a new pulsar timing package - III. Gravitational wave simulation*, Monthly Notices of the Royal Astronomical Society, 394[4], 1945-1955

Huang, S., **Arulsamy, A.**, Xu, M., Xu, S., Cvelbar, U., Mozetic, M., and **Ostrikov, K.**, 2009, *Customizing electron confinement in plasma-assembled Si/AlN nanodots for solar cell applications*, Physics of Plasmas, 16[12], 123504-1-123504-5

Huang, S., Xu, S., Chai, J., **Cheng, Q.**, Long, J., and **Ostrikov, K.**, 2009, *p-type doping of ZnO by means of high-density inductively coupled plasmas*, Materials Letters, 63, 972-974

Huang, S., Xu, S., **Cheng, Q.**, Long, J., and **Ostrikov, K.**, 2009, *Aluminum-assisted crystallization and p-type doping of polycrystalline Si*, Applied Physics A: materials science & processing, 97, 375-380

**Huber, D.**, Matthews, J., Croll, B., Obbrugger, M., Gruberbauer, M., Guenther, D., Weiss, W., Rowe, J., Kallinger, T., Kuschnig, R., and Scholtz, A., 2009, *A search for p-modes and other variability in the binary system 85 Pegasi using MOST photometry*, Astronomy & Astrophysics, 505[2], 715-725

**Huber, D.**, **Stello, D.**, **Bedding, T. R.**, Chaplin, W., Arentoft, T., Quirion, P., and Kjeldsen, H., 2009, *Automated extraction of oscillation parameters for Kepler observations of solar-type stars*, Communications in Asteroseismology, 160[October2009], 74-91

Huxor, A., Ferguson, A., Barker, M., Tanvir, N., Irwin, M., Chapman, S., Ibata, R., and **Lewis, G. F.**, 2009, *The Discovery of Remote Globular Clusters in M33*, The Astrophysical Journal, 698[2], L77-L81

Ibata, R., Bellazzini, M., Chapman, S., Dalessandro, E., Ferraro, F., Irwin, M., Lanzoni, B., **Lewis, G. F.**, Mackey, A., Miocchi, P., and Varghese, A., 2009, *Density and Kinematic Cusps in M54 at the Heart of the Sagittarius Dwarf Galaxy: Evidence for A 104 M<sub>⊙</sub> Black Hole?*, The Astrophysical Journal, 699[2], L169-L173

Inami, K., Ohshima, T., Kaji, S., Adachi, I., Aihara, H., Arinstein, K., Aulchenko, V., Aushev, T., Bedny, I., Bhardwaj, V., et al, v., **McOnie, S. T.**, and **Peak, L. S.**, 2009, *Precise measurement of hadronic t-decays with an  $\eta$  meson*, Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics, 672[3], 209-218

**Jackson, S. D.**, 2009, *High-power erbium cascade fibre laser*, Electronics Letters, 45[16], 1-2

Jacoby, B., Bailes, M., **Ord, S. M.**, Edwards, R., and Kulkarni, S., 2009, *A Large-Area Survey for Radio Pulsars at High Galactic Latitudes*, The Astrophysical Journal, 699[2], 2009-2016

**James, J. B.**, Colless, M., **Lewis, G. F.**, and Peacock, J., 2009, *Topology of non-linear structure in the 2dF Galaxy Redshift Survey*, Monthly Notices of the Royal Astronomical Society, 394[1], 454-466

**Jennings, D.**, Dragan, A., Barrett, S., **Bartlett, S. D.**, and Rudolph, T., 2009, *Quantum computation via measurements on the low-temperature state of a many-body system*, Physical Review A (Atomic, Molecular and Optical Physics), 80[3], 032328-1-032328-8

Johnston, T., **Tyshetskiy, Y. O.**, Ghizzo, A., and Bertrand, P., 2009, *Persistent subplasma-frequency kinetic electrostatic electron nonlinear waves*, Physics of Plasmas, 16[4], 042105-1-042105-15

**Jolley, E., Kuncic, Z.**, Bicknell, G., and Wagner, S., 2009, *Accretion discs in blazars*, Monthly Notices of the Royal Astronomical Society, 400, 1521-1526

Jones, D., Read, M., Saunders, W., Colless, M., Jarrett, T., Parker, Q., Fairall, A., Mauch, T., **Sadler, E. M.**, Watson, F., **Croom, S. M.**, Burton, D., and Moore, L., 2009, *The 6dF Galaxy Survey: final redshift release (DR3) and southern large-scale structures*, Monthly Notices of the Royal Astronomical Society, 399[2], 683-698

Joushaghani, A., Iyer, R., Poon, K., Aitchison, J., **de Sterke, C. M.**, Wan, J., and Dignam, M., 2009, *Quasi-Bloch Oscillations in Curved Coupled Optical Waveguides*, Physical Review Letters, 103[14], 143903-1-143903-4

Ju, P., Pages, G., Riek, R., **Chen, P.**, Torres, A., Bansal, P., **Kuyucak, S.**, Kuchel, P. W., and Vandenberg, J., 2009, *The Pore Domain Outer Helix Contributes to Both Activation and Inactivation of the hERG K<sup>+</sup> Channel*, Journal of Biological Chemistry, 284, 1000-1008

**Judge, A. C.**, Bang, O., **Eggleton, B.**, **Kuhlmey, B. T.**, **Magi, E. C.**, **Pant, R.**, and **de Sterke, C. M.**, 2009, *Optimization of the soliton self-frequency shift in a tapered photonic crystal fiber*, Optical Society of America. Journal B: Optical Physics, 26[11], 2064-2071

**Kabakova, I.**, **Corcoran, W. P.**, **Bolger, J. A.**, **de Sterke, C. M.**, and **Eggleton, B.**, 2009, *All-optical self-switching in optimized phase-shifted fiber Bragg grating*, Optics Express, 17[7], 5083-5088

Kaplan, D., **Chatterjee, S.**, **Hales, C. A.**, **Gaensler, B. M.**, and Slane, P., 2009, *Constraining the Proper Motions of Two Magnetars*, The Astronomical Journal, 137[1], 354-366

**Karnutsch, C.**, **Smith, C. L.**, **Graham, A.**, **Tomljenovic-Hanic, S.**, **McPhedran, R. C.**, **Eggleton, B.**, O'Faolain, L., Krauss, T., Xiao, S., and Mortensen, N., 2009, *Temperature stabilization of optofluidic photonic crystal cavities*, Applied Physics Letters, 94[23], 231114-1-231114-3

**Kerr, C. C.**, **Rennie, C. J.**, and **Robinson, P. A.**, 2009, *Deconvolution analysis of target evoked potentials*, Journal of Neuroscience Methods, 179[1], 101-110

Khalilpour, H., **Foroutan Kharajou, G.**, Moslehi-Fard, M., **Li, B.**, and **Robinson, P. A.**, 2009, *Dynamics of a beam of hot electrons propagating through a plasma in the presence of nonthermal electrons*, Physics of Plasmas, 16[7], 072901-1-072901-9

**Kim, J.**, Lee, J., **Robinson, P. A.**, and Jeong, D., 2009, *Markov Analysis of Sleep Dynamics*, Physical Review Letters, 102[17], 178104-1-178104-4

**Kim, J.**, Lee, J., **Robinson, P. A.**, and Jeong, D., 2009, *Sleep fragmentation index: An useful measure for obstructive sleep apnea*, Sleep, 32, A386-A386

**Kim, J.**, **Roberts, J. A.**, and **Robinson, P. A.**, 2009, *Dynamics of epileptic seizures: Evolution, spreading, and suppression*, Journal of Theoretical Biology, 257, 527-532

**Kim, J., Shin, H., and Robinson, P. A.,** 2009, *Quantitative study of the sleep onset period via detrended fluctuation analysis: Normal vs. narcoleptic subjects*, *Clinical Neurophysiology*, 120[7], 1245-1251

**Kipritidis, J., and Khachan, J.,** 2009, *Application of Doppler Spectroscopy in  $H_2$  to the prediction of experimental  $D(d,n)^3He$  reaction rates in an inertial electrostatic confinement device*, *Physical Review E* 79, 026403-1-026403-8

Kitzes, J., Galli, A., Bagliani, M., Barrett, J., Dige, G., Ede, S., Erb, K., Giljum, S., Haberl, H., Hails, C., and **Lenzen, M.,** 2009, *A research agenda for improving national Ecological Footprints accounts*, *Ecological Economics*, 68[7], 1991-2007

Ko, B., Won, E., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.,** Balagura, V., Barberio, E., Bondar, A., Bozek, A., Bracko, M., **McOnie, S. T., Varvell, K. E., Yabsley, B. D.,** 2009, *Observation of the Doubly Cabibbo-Suppressed Decay  $Ds^+ \rightarrow K^+ K^+ \pi^-$* , *Physical Review Letters*, 102[22], 221802-1-221802-5

**Kocer, C., Abe, T., and Soon, A. S.,** 2009, *The Z-phase in 9–12% Cr ferritic steels: A phase stability analysis*, *Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing*, 505[1-2], 1-5

**Kocer, C., McKenzie, D. R., and Bilek, M.,** 2009, *Elastic properties of a material composed of alternating layers of negative and positive Poisson's ratio*, *Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing*, 505[1-2], 111-115

**Kompaneets, R., Morfill, G., and Ivlev, A.,** 2009, *Design of new binary interaction classes in complex plasmas*, *Physics of Plasmas*, 16, 043705-1-043705-6

**Kondyurin, A., Naseri, P., Fisher, K. J., McKenzie, D. R., and Bilek, M.,** 2009, *Mechanisms for surface energy changes observed in plasma immersion ion implanted polyethylene: The roles of free radicals and oxygen-containing groups*, *Polymer Degradation and Stability*, 94[4], 638-646

Kotani, T., Lacour, S., Perrin, G., **Robertson, J. G., and Tuthill, P. G.,** 2009, *Pupil remapping for high contrast astronomy: results from an optical testbed*, *Optics Express*, 17[3], 1925-1934

Krivopustov, M., Pavliouk, A., Kovalenko, A., Mariin, I., Elishev, A., Adam, J., Kovalik, A., Batusov, Y., Kalinnikov, V., Brudanin, V., and **Hashemi-Nezhad, S. R.,** 2009, *First results studying the transmutation of  $^{129}I$ ,  $^{237}Np$ ,  $^{238}Pu$ , and  $^{239}Pu$  in the irradiation of an extended natU/Pb-assembly with 2.52 GeV deuterons\**, *Journal of Radioanalytical and Nuclear Chemistry*, 279[2], 567-584

**Kuhlmeiy, B. T., Coen, S., and Mahmoodian, S.,** 2009, *Coated photonic bandgap fibres for low-index sensing applications: cutoff analysis*, *Optics Express*, 17[18], 16306-16321

**Kuhlmeiy, B. T., Eggleton, B., and Wu, D. K.,** 2009, *Fluid-filled solid-core photonic bandgap fibers*, *Journal of Lightwave Technology*, 27[11], 1617-1630

Kullenberg, C., Mishra, S., Seaton, M., Kim, J., Tian, X., Scott, A., Kirsanov, M., Petti, R., Alekhin, S., Astier, P., Boyd, S., **Ellis, M., Peak, L. S., Soler, P., Ulrichs, J., Varvell, K. E., and Yabsley, B. D.,** 2009, *A measurement of coherent neutral pion production in neutrino neutral current interactions in the NOMAD experiment*, *Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics*, 682, 177-184

**Kwan, J., Francis, M. J., and Lewis, G. F.**, 2009, *Fractal Bubble cosmology: a concordant cosmological model?*, Monthly Notices of the Royal Astronomical Society, 399, L6-L11

Kyeong, S., Kwon, Y., Adachi, I., Aihara, H., **Bakich, A. M.**, Balagura, V., Barberio, E., Bay, A., Belous, K., Bischofberger, M., Bozek, A., **McOnie, S. T.**, **Varvell, K. E.**, and **Yabsley, B. D.**, 2009, *Measurements of charmless hadronic  $b \rightarrow s$  penguin decays in the  $B \rightarrow \pi K^+ K^-$  final state and first observation of  $B \rightarrow \pi K^+ K^-$* , Physical Review D (Particles, Fields, Gravitation and Cosmology), 80[5], 051103-1-051103-6

Lacour, S., Thiebaut, E., Perrin, G., Meimon, S., Haubois, X., Pedretti, E., Ridgway, S., Monnier, J., Berger, J., Schuller, P., and **Woodruff, H. C.**, 2009, *The pulsation of cygni imaged by optical interferometry: A novel technique to derive distance and mass of mira stars*, The Astrophysical Journal, 707, 632-643

Lafargue, C., **Bolger, J. A.**, Genty, G., Dias, F., Dudley, J., and **Eggleton, B.**, 2009, *Direct detection of optical rogue wave energy statistics in supercontinuum generation*, Electronics Letters, 45[4], 217-219

**Lambert, J., Yin, Y., McKenzie, D. R., Law, S. H., and Suchowerska, N. O.**, 2009, *Cerenkov light spectrum in an optical fiber exposed to a photon or electron radiation therapy beam*, Applied Optics, 48[18], 3362-3367

Lancaster, D., and **Jackson, S. D.**, 2009, *In-fiber resonantly pumped Q-switched holmium fiber laser*, Optics Letters, 34[21], 3412-3414

Lancry, M., **Grothoff, N.**, Poumellec, B., and Canning, J., 2009, *Photo-induced densification in Er(3+)/Al doped silica preform plates using 193-nm laser light*, Applied Physics B: Lasers and Optics, 94[4], 589-597

**Lane, R. R., Kiss, L. L., Lewis, G. F.**, Ibata, R., Siebert, A., **Bedding, T. R.**, and Szekely, P., 2009, *Testing Newtonian gravity with AAOmega: mass-to-light profiles of four globular clusters*, Monthly Notices of the Royal Astronomical Society, 400[2], 917-923

Lau, D., Moafi, A., Taylor, M., Partridge, J., McCulloch, D., **Powles, R. C.**, and **McKenzie, D. R.**, 2009, *The structural phases of non-crystalline carbon prepared by physical vapour deposition*, Carbon, 47[14], 3263-3270

Lau, D., Partridge, J., Taylor, M., McCulloch, D., Wasyluk, J., Perova, T., and **McKenzie, D. R.**, 2009, *Microstructured investigation supporting an abrupt stress induced transformation in amorphous carbon films*, Journal of Applied Physics, 105[8], 084302-1-084302-6

Law, N., Mackay, C., Dekany, R., **Ireland, M. J.**, Lloyd, J., Moore, A., **Robertson, J. G.**, **Tuthill, P. G.**, and **Woodruff, H. C.**, 2009, *Getting Lucky with Adaptive Optics: Fast Adaptive Optics Image Selection in the Visible with a Large Telescope*, The Astrophysical Journal, 692[1], 924-930

**Lawrence, F. J.**, Botten, L., Dossou, K., **de Sterke, C. M.**, and **McPhedran, R. C.**, 2009, *Impedance of square and triangular lattice photonic crystals*, Physical Review A (Atomic, Molecular and Optical Physics), 80[2], 023826-1-023826-9

Lawrence, J., Ashley, M., Bailey, J., Navascues, D., **Bedding, T. R., Bland-Hawthorn, J.**, Bond, I., Boulanger, F., Bouwens, R., **Bruntt, H.**, Bunker, A., Burgarella, D., **Kiss, L. L.**, and **Stello, D.**, 2009, *The Science Case for PILOT I: Summary and Overview*, Publications of the Astronomical Society of Australia, 26[4], 379-396

Lawrence, J., Ashley, M., Bailey, J., Navascues, D., **Bedding, T. R., Bland-Hawthorn, J.**, Bond, I., **Bruntt, H.**, Burton, M., Cioni, M., Eiroa, C., Epchtein, N., **Kiss, L. L.**, Lagage, P., and Stello, D., 2009, *The Science Case for PILOT III: the Nearby Universe*, Publications of the Astronomical Society of Australia, 26[4], 415-438

**Lazaro, J., Kuhlmeiy, B. T.**, Knight, J., Lopez-Higuera, J., and **Eggleton, B.**, 2009, *Ultrasensitive UV-tunable grating in all-solid photonic bandgap fibers*, Optics Communications, 282[12], 2358-2361

**Lee, M. W., Grillet, C. E., Tomljenovic-Hanic, S., Magi, E. C., Moss, D. J., Eggleton, B.**, Gai, X., Madden, S., Choi, D., Bulla, D., and Luther-Davies, B., 2009, *Photowritten high-Q cavities in two-dimensional chalcogenide glass photonic crystals*, Optics Letters, 34[23], 3671-3673

Lemiere, A., Slane, P., **Gaensler, B. M.**, and Murray, S., 2009, *High-Resolution X-Ray Observations of The Pulsar Wind Nebula Associated with the Gamma-Ray Source Hess J1640-465*, The Astrophysical Journal, 706[2], 1269-1276

**Lenzen, M.**, 2009, *Dealing with double-counting in tiered hybrid life-cycle inventories: a few comments*, Journal of Cleaner Production, 17[15], 1382-1384

**Lenzen, M.**, 2009, *Understanding virtual water flows: A multiregion input-output case study of Victoria*, Water Resources Research, 45, 1 of 11-11 of 11

**Lenzen, M.**, and Crawford, R., 2009, *The Path Exchange Method for Hybrid LCA*, Environmental Science & Technology, 43[21], 8251-8256

**Lenzen, M., Gallego, B., and Wood, R. J.**, 2009, *Matrix balancing under conflicting information*, Economic Systems Research, 21[1], 23-44

**Lenzen, M.**, and Barrett, J., 2009, *Companies on the scale-comparing and benchmarking the sustainability performances of businesses*, Journal of Industrial Ecology, 13[3], 264-283

**Lenzen, M.**, Lane, A. M., Widmer-Cooper, A., and Williams, M. C., 2009, *Effects of land use on threatened species*, Conservation Biology, 23[2], 294-306

**Lenzen, M.**, Maganov, P., and Fitzgerald Ryan, F., 2009, *'Operationalising' the ecological footprint metric within a municipal authority*, Journal of Public Works and Infrastructure, 1[4], 391-406

Letarte, B., Chapman, S., Collins, M., Ibata, R., Irwin, M., Ferguson, A., **Lewis, G. F.**, Martin, N., McConnachie, A., and Tanvir, N., 2009, *A Keck/DEIMOS spectroscopic survey of the faint M31 satellites and XV and And XVI*, Monthly Notices of the Royal Astronomical Society, 400, 1472-1478

**Levchenko, I.**, and **Ostrikov, K.**, 2009, *Self-organized quantum dot arrays: Kinetic mapping of adatom capture*, Applied Physics Letters, 95[24], 243102-1-243102-3

**Levchenko, I.**, Cvelbar, U., and **Ostrikov, K.**, 2009, *Kinetics of the initial stage of silicon surface oxidation: Deal-Grove or surface nucleation?*, Applied Physics Letters, 95[2], 021502-1-021502-3

**Levchenko, I.**, Keidar, M., and **Ostrikov, K.**, 2009, *Electron transport across magnetic field in low-temperature plasmas: An alternative approach for obtaining evidence of Bohm mechanism*, Physics Letters. Section A: General, Atomic and Solid State Physics, 373[12-13], 1140-1143

**Levchenko, I.**, **Ostrikov, K.**, and Mariotti, D., 2009, *The production of self-organized carbon connections between Ag nanoparticles using atmospheric microplasma synthesis*, Carbon, 47[1], 344-347

**Levchenko, I.**, **Ostrikov, K.**, and Xu, S., 2009, *Thermodynamical and plasma-driven kinetic growth of high-aspect-ratio nanostructures: effect of hydrogen termination*, Journal of Physics D: Applied Physics, 42[12], 1-6

**Levchenko, I.**, Ostrikov, K., Mariotti, D., and Svrcek, V., 2009, *Self-organized carbon connections between catalyst particles on a silicon surface exposed to atmospheric-pressure Ar + CH<sub>4</sub> microplasmas*, Carbon, 47[10], 2379-2390

**Levchenko, I.**, Huang, S., **Ostrikov, K.**, Xu, S., 2009, *Silicon on silicon: self-organised nanotip arrays formed in reactive Ar+H<sub>2</sub> plasmas*, Nanotechnology, 21, 025605-1-025605-9

**Li, B.**, Cairns, I. H., and **Robinson, P. A.**, 2009, *Simulations of coronal type III solar radio bursts: 3. Effects of beam and coronal parameters*, Journal of Geophysical Research, 114[A2], A02104 -1-A02104 -18

**Liang, Y.**, Lim, C., and Deng, D., 2009, *Reexamination of a multisetting Bell inequality for qubits*, Physical Review A (Atomic, Molecular and Optical Physics), 80[5], 052116-1-052116-8

**Lim, S. H.**, **McKenzie, D. R.**, and **Bilek, M.**, 2009, *van der Pauw method for measuring resistivity of a plane sample with distant boundaries*, Review of Scientific Instruments, 80[7], 075109-1-075109-4

Limosani, A., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.**, Balagura, V., Barberio, E., Bay, A., Belous, K., Bischofberger, M., Bondar, A., **Varvell, K. E.**, **Yabsley, B. D.**, 2009, *Measurement of Inclusive Radiative B-Meson Decays with a Photon Energy Threshold of 1.7 GeV*, Physical Review Letters, 103[24], 241801-1-241801-6

**Lindstrom, C.**, and **Sharma, M. D.**, 2009, *Link maps and map meetings: Scaffolding student learning*, Physical Review Special Topics - Physics Education Research, 5[1], 010102-1-010102-11

Ling, C. D., Avdeev, M., **Kutteh, R. A.**, Kharton, V., Yaremchenko, A., Fialkova, S., Sharma, N., Macquart, R. B., Hoelzel, M., and Gutmann, M., 2009, *Structures, phase transitions, hydration, and ionic conductivity of Ba(4)Nb(2)O(9)*, Chemistry of Materials, 21[16], 3853-3864

Liu, C., Zhang, Z., Adachi, I., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.**, Barberio, E., Bay, A., Bhardwaj, V., Bozek, A., **McOnie, S. T.**, **Varvell, K. E.**, and **Yabsley, B. D.**, 2009, *Search for the X(1812) in B - Kw*, Physical Review D (Particles, Fields, Gravitation and Cosmology), 79[7], 071102-1-071102-6

**Lobzin, V.**, Cairns, I. H., **Robinson, P. A.**, Steward, G., and Patterson, G., 2009, *Automatic recognition of type III solar radio bursts: Automated Radio Burst Identification System method and first observations*, Space Weather, 7[4]

**Loxley, P., and Robinson, P. A.,** 2009, *Soliton Model of Competitive Neural Dynamics during Binocular Rivalry*, Physical Review Letters, 102[25], 258701-1-258701-4

**Luan, F., Pelusi, M. D., Lamont, M. R.,** Choi, D., Madden, S., Luther-Davies, B., and **Eggleton, B.,** 2009, *Dispersion engineered As<sub>2</sub>S<sub>3</sub> planar waveguides for broadband four-wave mixing based wavelength conversion of 40 Gb/s signals*, Optics Express, 17[5], 3514-3520

**Luo, Q., and Melrose, D. B.,** 2009, *Saturated magnetic field amplification at supernova shocks*, Monthly Notices of the Royal Astronomical Society, 397[3], 1402-1409

Lyubushkin, V., Popov, B., Kim, J., Camilleri, L., Levy, J., Mezzetto, M., Naumov, D., Alekhin, S., Astier, P., Autiero, D., Boyd, S., **Ellis, M., Peak, L. S., Ulrichs, J., Varvell, K. E., and Yabsley, B. D.,** 2009, *A study of quasi-elastic muon neutrino and antineutrino scattering in the NOMAD experiment*, European Physical Journal C. Particles and Fields, 63, 355-381

**Mahmoodian, S., McPhedran, R. C., de Sterke, C. M.,** Dossou, K., Poulton, C., and Botten, L., 2009, *Single and coupled degenerate defect modes in two-dimensional photonic crystal band gaps*, Physical Review A (Atomic, Molecular and Optical Physics), 79[1], 013814-1-013814-12

**Mahmoodian, S.,** Poulton, C., Dossou, K., **McPhedran, R. C.,** Botten, L., and **de Sterke, C. M.,** 2009, *Modes of Shallow Photonic Crystal Waveguides: Semi-Analytic Treatment*, Optics Express, 17[22], 19629-19643

Malaspina, D., **Li, B., Cairns, I. H., Robinson, P. A., Kuncic, Z.,** and Ergun, R., 2009, *Terrestrial foreshock Langmuir waves: STEREO observations, theoretical modeling, and quasi-linear simulations*, Journal of Geophysical Research, 114, 1 of 16-16 of 16

Malhotra, Y., Roy, S., Srivastava, M., Kant, C., and **Ostrikov, K.,** 2009, *Extremely non-equilibrium synthesis of luminescent zinc oxide nanoparticles through energetic ion condensation in a dense plasma focus device*, Journal of Physics D: Applied Physics, 42, 1-7

Mariotti, D., and **Ostrikov, K.,** 2009, *Tailoring microplasma nanofabrication: from nanostructures to nanoarchitectures*, Journal of Physics D: Applied Physics, 42, 1-4

**Maroney, O. J.,** 2009, *Generalising Landauer's Principle*, Physical Review E, 79[3], 031105-1-031105-29

**Maroney, O. J.,** 2009, *Thermodynamic constraints on fluctuation phenomena*, Physical Review E, 80[6], 061141-1-061141-12

Martin, N., McConnachie, A., Irwin, M., Widrow, L., Ferguson, A., Ibata, R., Dubinski, J., Babul, A., Chapman, S., Fardal, M., **Lewis, G. F.,** Navarro, J., and Rich, R., 2009, *PAndAS' CUBS: Discovery of Two New Dwarf Galaxies in the Surroundings of the Andromeda and Triangulum Galaxies*, The Astrophysical Journal, 705[1], 758-765

Martinache, F., Rojas-Ayala, B., **Ireland, M. J.,** Lloyd, J., and **Tuthill, P. G.,** 2009, *Visual Orbit of the Low-Mass Binary GJ 164 AB*, The Astrophysical Journal, 695[2], 1183-1190

**Mayo, A. J., Sharma, M. D., and Muller, D. A.,** 2009, *Qualitative Differences Between Learning Environments Using Videos in Small Groups and Whole Class Discussions: A Preliminary Study in Physics*, Research in Science Education, 39[4], 477-493

McClure-Griffiths, N., Pisano, D., Calabretta, M., Alyson Ford, H., Lockman, F., Staveley-Smith, L., Kalberla, P., Bailin, J., Dedes, L., Janowiecki, S., Gibson, B., **Murphy, T.**, Nakanishi, H., and **Newton-McGee, K. J.**, 2009, *Gass: The Parkes Galactic All-Sky Survey. I. Survey Description, Goals and Initial Data Release*, *Astrophysical Journal Supplement Series*, 181[2], 398-412

McConnachie, A., Irwin, M., Ibata, R., Dubinski, J., Widrow, L., Martin, N., Cote, P., Dotter, A., Navarro, J., Ferguson, A., and **Lewis, G. F.**, 2009, *The remnants of galaxy formation from a panoramic survey of the region around M31*, *Nature*, 461, 66-69

**McNamara, A. L., Kuncic, Z.**, and Wu, K., 2009, *X-ray polarization in relativistic jets*, *Monthly Notices of the Royal Astronomical Society*, 395[3], 1507-1514

**McNamara, P.**, Lancaster, D., **Bailey, R. E.**, Hemming, A., **Henry, P. C.**, and Mair, R. H., 2009, *A large core microstructured fluoride glass optical fibre for mid-infrared single-mode transmission*, *Journal of Non-Crystalline Solids*, 335, 1461-1467

**McPhedran, R. C., Chen, P.**, Bonod, N., and Popov, E., 2009, *Gratings and their quasistatic equivalents for high optical absorptance*, *Physical Review A (Atomic, Molecular and Optical Physics)*, 79[5], 053850-1-053850-11

**McPhedran, R. C.**, Movchan, A., and Movchan, N., 2009, *Platonic crystals: Bloch bands, neutrality and defects*, *Mechanics of Materials*, 41[4], 356-363

**McPhedran, R. C., Nicorovici, N., Botten, L.**, and Milton, G., 2009, *Cloaking by plasmonic resonance among systems of particles: cooperation or combat?*, *Comptes Rendus Physique*, 10[5], 391-399

**Melrose, D. B.**, and **Ahmad, M.**, 2009, *Quantum recoil and Bohm diffusion*, *Physics of Plasmas*, 16[9], 094508-1-094508-3

**Melrose, D. B.**, and **Luo, Q.**, 2009, *Linear Acceleration Emission. II. Power Spectrum*, *The Astrophysical Journal*, 698[1], 124-130

**Melrose, D. B.**, and **Weise, J. I.**, 2009, *Response of a relativistic quantum magnetized electron gas*, *Journal of Physics A: Mathematical and Theoretical*, 42[34], 1-18

**Melrose, D. B., Rafat, M. Z.**, and **Luo, Q.**, 2009, *Linear Acceleration Emission. I. Motion in a Large-Amplitude Electrostatic Wave*, *The Astrophysical Journal*, 698[1], 115-123

Meurer, G., Wong, O., Kim, J., Hanish, D., Heckman, T., Werk, J., **Bland-Hawthorn, J.**, Dopita, M., Zwaan, M., Koribalski, B., and Seibert, M., 2009, *Evidence for a Nonuniform Initial Mass Function in the Local Universe*, *The Astrophysical Journal*, 695[1], 765-780

**Miloch, W. J.**, and **Vladimirov, S.**, 2009, *Charge and Potential Distributions for Particles Approaching Substrates with Regular Structures*, *IEEE Transactions on Plasma Science*, 37[9], 1670-1674

**Miloch, W. J.**, and **Vladimirov, S.**, 2009, *Charging of spinning insulating objects by plasma and photoemission*, *Geophysical Research Letters*, 36[18], L18110-1-L18110-4

**Miloch, W. J., Vladimirov, S.,** Pecseli, H., and Trulsen, J., 2009, *Charging of Dust in the Presence of a Directed Photon Flux: Numerical Simulations*, Journal of Plasma and Fusion Research Series, 8, 265-268

**Miloch, W. J., Vladimirov, S.,** Pecseli, H., and Trulsen, J., 2009, *Charging of insulating and conducting dust grains by flowing plasma and photoemission*, New Journal of Physics, 11, 1-20

**Miloch, W. J., Vladimirov, S.,** Pecseli, H., and Trulsen, J., 2009, *Interaction of two elongated dust grains in flowing plasmas studied by numerical simulations*, Physics of Plasmas, 16, 023703-1-023703-11

**Min, S., Zhao, Y., and Fleming, S. C.,** 2009, *Semiconductor optical amplifier based high duty-cycle, self-starting figure-eight 1.7 GHz laser source*, Optics Express, 17[8], 6187-6193

Minx, J., **Wiedmann, T., Wood, R. J.,** Peters, G., **Lenzen, M.,** Owen, A., Scott, K., Barrett, J., Hubacek, K., Baiocchi, G., Paul, A., Dawkins, E., Briggs, J., Guan, D., Suh, S., and Ackerman, F., 2009, *Input-output analysis and carbon footprinting: an overview of applications*, Economic Systems Research, 21[3], 187-216

Misawa, T., Charlton, J., Kobulnicky, H., Wakker, B., and **Bland-Hawthorn, J.,** 2009, *The Magellanic Bridge as a Damped Lyman Alpha System: Physical Properties of Cold Gas Toward PKS 0312-770*, The Astrophysical Journal, 695[2], 1382-1398

**Mitchell, J. J., Cairns, I. H.,** and Heerikhuisen, J., 2009, *Pick-up ions and the 2-3 kHz radio emissions*, Geophysical Research Letters, 36, 1-5

Miyazaki, Y., Adachi, I., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.,** Bay, A., Bedney, I., Bitenc, U., Bondar, A., et al, v., **McOnie, S. T., Yabsley, B. D.,** 2009, *Search for lepton- $\tau$ avor-violating  $t$  decay into a lepton and an  $f_0(980)$  meson*, Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics, 672[4-5], 317-322

Mizuk, R., Adachi, I., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.,** Balagura, V., Barberio, E., Bay, A., Belous, K., Bhardwaj, V., **McOnie, S. T., Varvell, K. E., and Yabsley, B. D.,** 2009, *Dalitz analysis of  $B; K^+$  decays and the  $Z(4430)^+$* , Physical Review D (Particles, Fields, Gravitation and Cosmology), 80[3], 031104-1-031104-7

Mobasher, B., Dahlen, T., **Hopkins, A. M.,** Scoville, N., Capak, P., Rich, R., Sanders, D., Schinnerer, E., Ilbert, O., Salvato, M., and Sheth, K., 2009, *Relation Between Stellar Mass and Star-Formation Activity in Galaxies*, The Astrophysical Journal, 690[2], 1074-1083

**Monat, C. B., Corcoran, W. P., Ebnali-Heidari, M., Grillet, C. E., Eggleton, B.,** White, T., O'Faolain, L., and Krauss, T., 2009, *Slow light enhancement of nonlinear effects in silicon engineered photonic crystal waveguides*, Optics Express, 17[4], 2944-2953

Monnier, J., **Tuthill, P. G., Ireland, M. J.,** Cohen, R., Tannirkulam, A., and Perrin, M., 2009, *Mid-Infrared Size Survey of Young Stellar Objects: Description of Keck Segment-Tilting Experiment and Basic Results*, The Astrophysical Journal, 700[1], 491-505

Mortlock, D., Patel, M., Warren, S., Venemans, B., McMahon, R., Hewitt, P., Simpson, C., Sharp, R., Burningham, B., Dye, S., and **Ellis, S.,** 2009, *Discovery of a redshift 6.13 quasar in the UKIRT infrared deep sky survey*, Astronomy & Astrophysics, 505[1], 97-104

Moses, J., Huang, S., Hong, K., Mucke, O., Falcao-Filho, E., Benedick, A., Ilday, F., Dergachev, A., **Bolger, J. A., Eggleton, B.**, and Kartner, F., 2009, *Highly stable ultrabroadband mid-IR optical parametric chirped-pulse amplifier optimized for superfluorescence suppression*, Optics Letters, 34[11], 1639-1641

**Moss, V. A., Samarian, A. A.**, and **Vladimirov, S.**, 2009, *Dust Cluster Oscillation Spectrum in; the Presence of Charge Fluctuations*, Journal of Plasma and Fusion Research SERIES, 8, 282-285

Mosser, B., Michel, E., Appourchaux, T., Barban, C., Baudin, F., Boumier, P., **Bruntt, H.**, Catala, C., Deheuvels, S., Garcia, R., and Gaulme, P., 2009, *The CoRoT target HD 175726: an active star with weak solar-like oscillations*, Astronomy & Astrophysics, 506[1], 33-40

Mountrichas, G., Sawangwit, U., Shanks, T., **Croom, S. M.**, Schneider, D., Myers, A., and Pimblet, K., 2009, *QSO-LRG two-point cross-correlation function and redshift-space distortions*, Monthly Notices of the Royal Astronomical Society, 394[4], 2050-2064

Movchan, N., **McPhedran, R. C.**, Movchan, A., and Poulton, C., 2009, *Wave scattering by platonic grating stacks*, Proceedings of The Royal Society A. Mathematical, Physical and Engineering Sciences, 465[2111], 3383-3400

Munari, U., Siviero, A., Bienayme, O., Binney, J., **Bland-Hawthorn, J.**, Campbell, R., Freeman, K., Fulbright, J., Gibson, B., Gilmore, G., and Grebel, E., 2009, *RAVE spectroscopy of luminous blue variables in the Large Magellanic Cloud*, Astronomy & Astrophysics, 503, 511-520

**Murray, M. J.**, 2009, *The wider social benefits of higher education: What do we know about them?*, Australian Journal of Education, 53[3], 230-244

**Murray, M. J.**, and **Dey, C. J.**, 2009, *The carbon neutral free for all*, International Journal of Greenhouse Gas Control, 3[2], 237-248

Nadeem, M., and **Ahmad, M.**, 2009, *Thermal cycling induced reversibility/irreversibility in the ac electrical properties of La 0.50 Ca 0.50 MnO 3+ by impedance spectroscopy*, Journal of Applied Physics, 106[7], 073713-1-073713-6

**Neumann, P. R., Bilek, M., Tarrant, R. N.**, and **McKenzie, D. R.**, 2009, *A pulsed cathodic arc spacecraft propulsion system*, Plasma Sources Science & Technology, 18[4], 1-8

**Ng, C. Y., Gaensler, B. M.**, Murray, S., Slane, P., Park, S., Staveley-Smith, L., *Manchester, R., and Burrows, D.*, 2009, *High-Resolution X-Ray Imaging of Supernova Remnant 1987A*, Astrophysical Journal Supplement Series, 706[1], L100-L105

**Nichols, M. L.**, and **Bland-Hawthorn, J.**, 2009, *The Smith Cloud: High-Velocity Accretion and Dark Matter Confinement*, The Astrophysical Journal, 707[2], 1642-1649

Nikolaev, A., Gepshtein, S., **Gong, P.**, Van Leeuwen, C., 2009, *Duration of Coherence Intervals in Electrical Brain Activity in Perceptual Organisation*, Cerebral Cortex, 20[2], 365-382

**North, J. R., Davis, J., Robertson, J. G., Bedding, T. R., Bruntt, H., Ireland, M. J., Jacob, A., Lacour, S., O'Byrne, J. W., Owens, S. M., Stello, D., Tango, W. J., and Tuthill, P. G.**, 2009, *The radius and other fundamental parameters of the F9V star; Virginis*, Monthly Notices of the Royal Astronomical Society, 393[1], 245-252

**Nosworthy, N. J., McKenzie, D. R., and Bilek, M.,** 2009, *A New Surface for Immobilizing and Maintaining the Function of Enzymes in a Freeze-Dried State*, *Biomacromolecules*, 10[9], 2577-2583

**O'Byrne, J. W., Britton, S. C., George, A. V., Franklin, S. E., and Frey, A. S.,** 2009, *Using academic predictors to identify first year science students at risk of failing*, *CAL-Laborate*, 17[1], 15-25

**Ostrikov, K.,** 2009, *Surface science of plasma exposed surfaces: a challenge for applied plasma science*, *Vacuum*, 83, 4-10

Pakhlov, P., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.,** Balagura, V., Barberio, E., Bay, A., Belous, K., Bhardwaj, V., Bondar, A., **McOnie, S. T., Yabsley, B. D.,** 2009, *Measurement of the  $e+e$   $J/cc$  cross section at  $\sqrt{s} = 10.6$  GeV*, *Physical Review D (Particles, Fields, Gravitation and Cosmology)*, 79[7], 071101-1-071101-7

Pakhlova, G., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.,** Balagura, V., Barberio, E., Bay, A., Belous, K., Bhardwaj, V., Bischofberger, M., **McOnie, S. T., Varvell, K. E., and Yabsley, B. D.,** 2009, *Measurement of the  $e+e- DD^{*+}$  cross section using initial-state radiation*, *Physical Review D (Particles, Fields, Gravitation and Cosmology)*, 80[9], 091101-1-091101-7

Pan, Y., Hang, L., Wu, Z., and **Yin, Y.,** 2009, *Design and fabrication of ultra broadband infrared antireflection hard coatings on ZnSe in the range from 2 to 16  $\mu$ m*, *Infrared Physics & Technology*, 52[5], 193-195

**Pandey, B. P., and Vladimirov, S.,** 2009, *Charge fluctuations and Hall effect in dusty plasmas*, *Physics of Plasmas*, 16, 083704-1-083704-7

**Pandey, B. P., Samarian, A. A., and Vladimirov, S.,** 2009, *Dust in Flowing Magnetized Plasma*, *Journal of Plasma and Fusion Research SERIES*, 8, 385-388

**Pandey, B. P., Vladimirov, S., and Samarian, A. A.,** 2009, *Current driven instability in collisional dusty plasmas*, *Physics of Plasmas*, 16[11], 113708-1-113708-5

**Pandey, B. P., Vladimirov, S., and Samarian, A. A.,** 2009, *DNLS Solitons in Collisional Dusty Plasma*, *Journal of Plasma and Fusion Research SERIES*, 8, 305-307

Pedretti, E., Monnier, J., Lacour, S., Traub, W., Danchi, W., **Tuthill, P. G.,** Thureau, N., Millan-Gabet, R., Berger, J., Lacasse, M., and Schuller, P., 2009, *Detection of non-radial pulsation and faint companion in the symbiotic star CH Cyg*, *Monthly Notices of the Royal Astronomical Society*, 397[1], 325-334

**Pelusi, M. D., Luan, F., Vo, T., Lamont, M. R.,** Madden, S., Bulla, D., Choi, D., Luther-Davies, B., and **Eggleton, B.,** 2009, *Photonic-chip-based radio-frequency spectrum analyser with terahertz bandwidth*, *Nature Photonics*, 1-5

**Pelusi, M. D., Vo, T. D., Luan, F.,** Madden, S., Choi, D., Bulla, D., Luther-Davies, B., and Eggleton, B., 2009, *Terahertz bandwidth RF spectrum analysis of femtosecond pulses using a chalcogenide chip*, *Optics Express*, 17[11], 9314-9322

Persson, P., Rosen, J., **McKenzie, D. R.**, and **Bilek, M.**, 2009, *Formation of the MAX-phase oxycarbide  $Ti_2AlC_{1-x}O_x$  studied via electron energy-loss spectroscopy and first-principles calculations*, Physical Review B (Condensed Matter and Materials Physics), 80[9], 092102-1-092102-4

**Phillips, A. J.**, and **Robinson, P. A.**, 2009, *Potential formulation of sleep dynamics*, Physical Review E, 79[2], 021913-1-021913-9

**Piccinin, S.**, **Stampfl, C.**, and Scheffler, M., 2009, *Ag–Cu alloy surfaces in an oxidizing environment: A first-principles study*, Surface Science, 603[10-12], 1467-1475

Piestun, R., and **de Sterke, C. M.**, 2009, *Fundamental limit for two-dimensional passive devices*, Optics Letters, 34[6], 779-781

Pogorelov, N., Heerikhuisen, J., **Mitchell, J. J.**, **Cairns, I. H.**, and Zank, G., 2009, *Heliospheric Asymmetries and 2-3 kHz Radio Emission Under Strong Interstellar Magnetic Field Conditions*, The Astrophysical Journal, 695[1], L31-L34

Pogorelov, N., Heerikhuisen, J., Zank, G., **Mitchell, J. J.**, and **Cairns, I. H.**, 2009, *Heliospheric asymmetries due to the action of the interstellar magnetic field*, Advances in Space Research, 44[11], 1337-1344

Poladian, L., **Wickham, S.**, Lee, K. H., and **Large, M. C.**, 2009, *Iridescence from photonic crystals and its suppression in butterfly scales*, Journal of the Royal Society. Interface, 6[2], S233-S242

Ponseca, C., Estacio, E., Pobre, R., Diwa, G., De Los Reyes, G., Ono, S., Murakami, H., Sarukura, N., Aosaki, K., Sakane, Y., Sato, H., **Argyros, A.**, and **Large, M. C.**, 2009, *Transmission characteristics of lens-duct and photonic crystal waveguides in the terahertz region*, Optical Society of America. Journal B: Optical Physics, 26[9], A95-A100

Potter, T., Staveley-Smith, L., **Ng, C. Y.**, Ball, L., **Gaensler, B. M.**, Kesteven, M., Manchester, R., Tzioumis, A., and Zanardo, G., 2009, *High Resolution 36 GHz Imaging of the Supernova Remnant of SN 1987A*, The Astrophysical Journal, 705[1], 261-271

**Pudo, D.**, **Corcoran, W. P.**, **Monat, C. B.**, **Pelusi, M. D.**, **Eggleton, B.**, White, T., O'Faolain, L., and Krauss, T., 2009, *Investigation of slow light enhanced nonlinear transmission for all-optical regeneration in silicon photonic crystal waveguides at 10 Gbit/s*, Photonics and Nanostructures: Fundamentals and Applications

Quillen, A., Minchev, I., **Bland-Hawthorn, J.**, and Haywood, M., 2009, *Radial mixing in the outer Milky Way disc caused by an orbiting satellite*, Monthly Notices of the Royal Astronomical Society, 397[3], 1599-1606

**Rafat, M. Z.**, **Wheatland, M. S.**, and **Bedding, T. R.**, 2009, *Dynamics of a double pendulum with distributed mass*, American Journal of Physics, 77[3], 216-223

Rauer, H., Queloz, D., Csizmadia, S., Deleuil, M., Alonso, R., Aigrain, S., Almenara, J., Auvergne, M., Baglin, A., Barge, P., and **Bruntt, H.**, 2009, *Transiting exoplanets from the CoRoT space mission - ;VII. The "hot-jupiter"-type planet CoRoT-5b*, Astronomy & Astrophysics, 506[1], 281-286

Rea, N., McLaughlin, M., **Gaensler, B. M.**, Slane, P., Stella, L., Reynolds, S., Burgay, M., Israel, G., Possenti, A., and Chatterjee, S., 2009, *Discovery of Extended X-Ray Emission Around the Highly Magnetic RRAT J1819-1458*, The Astrophysical Journal, 703[1], L41-L45

Ren, H., **Wu, Z.**, Cao, J., and Chu, P., 2009, *Electrostatic drift modes in quantum dusty plasmas with jeans terms*, Physics of Plasmas, 16[10], 103705-1-103705-7

Ren, H., **Wu, Z.**, Cao, J., and Chu, P., 2009, *Magnetothermal instability of plasmas in a horizontal magnetic field*, Physics of Plasmas, 16[10], 102109-1-102109-5

Richardson, J., Ferguson, A., Mackey, A., Irwin, M., Chapman, S., Huxor, A., Ibata, R., **Lewis, G. F.**, and Tanvir, N., 2009, *An HST/ACS view of the inhomogeneous outer halo of M31*, Monthly Notices of the Royal Astronomical Society, 396, 1842-1850

Richichi, A., Percheron, I., and **Davis, J.**, 2009, *A list of bright interferometric calibrators measured at the European Southern Observatory Very Large Telescope Interferometer*, Monthly Notices of the Royal Astronomical Society, 339[1], 399-409

Rickett, B., **Johnston, S.**, Tomlinson, T., and Reynolds, J., 2009, *The inner scale of the plasma turbulence towards PSR J1644-4559*, Monthly Notices of the Royal Astronomical Society, 395[3], 1391-1402

**Rider, A. E.**, and **Ostrikov, K.**, 2009, *The path to stoichiometric composition of III-V binary quantum dots through plasma/ion-assisted self-assembly*, Surface Science, 603[2], 359-368

Riechers, D., Walter, F., Carilli, C., and **Lewis, G. F.**, 2009, *Imaging The Molecular Gas in a  $z = 3.9$  Quasar Host Galaxy at Ofarcs Resolution: A Central, Sub-Kiloparsec Scale Star Formation Reservoir in APM 08279+5255*, The Astrophysical Journal, 690[1], 463-485

**Roberts, A. L.**, **Sharma, M. D.**, **Britton, S. C.**, and **New, P. B.**, 2009, *Identification and use of theoretical frameworks for a qualitative understanding of mathematics transfer*, CAL-Laborate, 17[1], 1-14

**Robinson, P. A.**, Henderson, J., Matar, E., Riley, o., and **Gray, R.**, 2009, *Dynamical Reconnection and Stability Constraints on Cortical Network Architecture*, Physical Review Letters, 103[10], 108104-1-108104-4

**Robinson, P.A.**, Skjaeraasen, O., and **Cairns, I.H.**, 2009, *Coupled Langmuir and non-linear ion acoustic waves in the presence of non-thermal electrons*, Journal of Plasma Physics, 75[2], 793-802

**Roelens, M.**, **Bolger, J.**, **Williams, D.**, Frisken, S., Baxter, G., Clarke, A. M., and Eggleton, B., 2009, *Flexible and Reconfigurable Time-Domain Demultiplexing of Optical Signals at 160 Gb/s*, IEEE Photonics Technology Letters, 21[10], 618-620

Rosen, J., and **Warschkow, O.**, 2009, *Electronic structure of amorphous indium oxide transparent conductors*, Physical Review B (Condensed Matter and Materials Physics), 80[11], 115215-1-115215-10

**Ryves, L. J.**, **McKenzie, D. R.**, and **Bilek, M.**, 2009, *Cathode-Spot Dynamics in a High-Current Pulsed Arc: A Noise Study*, IEEE Transactions on Plasma Science, 37[2], 365-368

**Samarian, A. A., and Vladimirov, S.,** 2009, *Dust Particle Alignments in a Plasma Sheath*, Contributions to Plasma Physics, 49[4-5], 260-280

**Sangines de Castro, R., Bilek, M., and McKenzie, D. R.,** 2009, *Optimizing filter efficiency in pulsed cathodic vacuum arcs operating at high currents*, Plasma Sources Science & Technology, 18[4], 1-9

Sarty, G., **Kiss, L. L.,** Huziak, R., Catalan, L., Luciuk, D., Crawford, T., Lane, D., Pickard, R., Grzybowski, T., Closas, P., **Johnston, H. M.,** Balam, D., and Wu, K., 2009, *Periodicities in the high-mass X-ray binary system RX J0146.9+6121/LSI+61235*, Monthly Notices of the Royal Astronomical Society, 392[3], 1242-1252

Sawangwit, U., Shanks, T., Cannon, R., **Croom, S. M.,** Ross, N., and Wake, D., 2009, *Cross-correlating WMAP5 with 1.5 million LRGs: a new test for the ISW effect*, Monthly Notices of the Royal Astronomical Society, 1-17

**Scholz, M.,** Gray, M., Wittkowski, M., Humphreys, E., Ohnaka, K., Boboltz, D., 2009, *SiO maser emission in Miras*, Monthly Notices of the Royal Astronomical Society, 394[1], 51-66

**Schroeder, J. B., Vo, T., and Eggleton, B.,** 2009, *Repetition-rate-selective, wavelength-tunable mode-locked laser at up to 640 GHz*, Optics Letters, 34[24], 3902-3904

**Sharma, M. D.,** Swan, G., Mills, D., Pollard, J., **Mendez, A., and O'Byrne, J. W.,** 2009, *Physics learning and teaching in Australian Universities*, CAL-Laborate, 17[1], 26-40

Shen, C., Yuan, C., Wang, P., Wang, X., Adachi, I., Aihara, H., Arinstein, K., Aulchenko, V., **Bakich, A. M.,** Barberio, E., Belous, K., Bischofberger, M., **McOnie, S. T., and Yabsley, B. D.,** 2009, *Observation of the  $\psi(1680)$  and the  $Y(2175)$  in  $e^+e^-; +\pi^-$* , Physical Review D (Particles, Fields, Gravitation and Cosmology), 80[3], 031101-1-031101-7

**Shi, Q., and Kuhlmeiy, B. T.,** 2009, *Optimization of photonic bandgap fiber long period grating refractive-index sensors*, Optics Communications, 282[24], 4723-4728

Skrovseth, I., and **Bartlett, S. D.,** 2009, *Phase transitions and localizable entanglement in cluster-state spin chains with Ising couplings and local fields*, Physical Review A (Atomic, Molecular and Optical Physics), 80[2], 022316-1-022316-10

Sokolov, A., Shapkin, M., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.,** Barberio, E., Bay, A., Belous, K., Bhardwaj, V., Bondar, A., **McOnie, S. T., Varvell, K. E., Yabsley, B. D.,** 2009, *Measurement of the branching fraction for the decay  $\psi(4S) \rightarrow \psi(1S) + \pi^0$* , Physical Review D (Particles, Fields, Gravitation and Cosmology), 79[5], 051103-1-051103-5

Solovievao, E., Chistov, R., Adachi, I., Aihara, H., Arinstein, K., Aushev, T., **Bakich, A. M.,** Balagura, V., Bitenc, U., Bondar, A., **McOnie, S. T., Peak, L. S., Yabsley, B. D.,** et al, v., 2009, *Study of  $O^0C^0$  and  $O^*C^0$  source baryons at Belle*, Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics, 672[1], 1-5

**Soon, A. S., Cui, X. C.,** Delley, B., Wei, S., and Stampfl, C., 2009, *Native defect-induced multifarious magnetism in nonstoichiometric cuprous oxide: First-principles study of bulk and surface properties of  $Cu_2O$* , Physical Review B (Condensed Matter and Materials Physics), 79[3], 035205-1-035205-15

Soria, R., Risaliti, G., Elvis, M., Fabbiano, G., Bianchi, S., and **Kuncic, Z.**, 2009, *The XMM-Newton Long Look of NGC 1365: Lack of a High/Soft State in its Ultraluminous X-Ray Sources*, *The Astrophysical Journal*, 695[2], 1614-1622

Steele, T., Mo, L., **Bignell, o.**, Smith, M., and Alexiev, D., 2009, *FASEA: A FPGA Acquisition System and Software Event Analysis for liquid scintillation counting*, *Nuclear Instruments & Methods in Physics Research. Section A*, 609[2-3], 217-220

**Stello, D.**, and Gilliland, R., 2009, *Solar-like Oscillations in a Metal-poor Globular Cluster with the Hubble Space Telescope*, *The Astrophysical Journal*, 700[2], 949-955

**Stello, D.**, Chaplin, W., Basu, S., Elsworth, Y., and **Bedding, T. R.**, 2009, *The relation between and max for solar-like oscillations*, *Monthly Notices of the Royal Astronomical Society*, 400[1], L80-L84

**Stello, D.**, Chaplin, W., **Bruntt, H.**, Creevey, O., Garcia-Hernandez, A., Monteiro, M., Moya, A., Quirion, P., Sousa, S., Suarez, J., Appourchaux, T., Arentoft, T., and Bedding, T. R., 2009, *Radius Determination of Solar-type Stars Using Asteroseismology: What to Expect from the Kepler Mission*, *The Astrophysical Journal*, 700[2], 1589-1602

Subasinghe, N., **Awaja, F.**, and Bhargava, S., 2009, *Variation of kerogen content and mineralogy in some Australian tertiary oil shales*, *Fuel*, 88, 335-339

**Tabur, V.**, **Bedding, T. R.**, **Kiss, L. L.**, Moon, ., Szeidl, B., and Kjeldsen, H., 2009, *Long-term photometry and periods for 261 nearby pulsating M giants*, *Monthly Notices of the Royal Astronomical Society*, 400[4], 1945-1961

**Tabur, V.**, **Kiss, L. L.**, and **Bedding, T. R.**, 2009, *Hipparcos calibration of the tip of the red giant branch*, *The Astrophysical Journal*, 703[1], L72-L75

**Tam, E.**, and **Ostrikov, K.**, 2009, *Catalyst size effects on the growth of single-walled nanotubes in neutral and plasma systems*, *Nanotechnology*, 20, 1-9

**Tango, W. J.**, **Davis, J.**, **Jacob, A.**, **Mendez, A.**, **North, J. R.**, **O'Byrne, J. W.**, Seneta, E., and **Tuthill, P. G.**, 2009, *A new determination of the orbit and masses of the Be binary system; Scorpii*, *Monthly Notices of the Royal Astronomical Society*, 396[2], 842-848

Taylor, M., Lau, D., Partridge, J., McCulloch, D., Marks, N., Teo, E., and **McKenzie, D. R.**, 2009, *The origin of preferred orientation during carbon film growth*, *Journal of Physics: Condensed Matter*, 21[22], 225003-1-225003-9

Teixeira, T., Kjeldsen, H., **Bedding, T. R.**, Bouchy, F., Christensen-Dalsgaard, J., Cunha, M., Dall, T., Frandsen, S., Karoff, C., Monteiro, M., and Pijpers, F., 2009, *Solar-like oscillations in the G8 V star Ceti*, *Astronomy & Astrophysics*, 494[1], 237-242

Temim, T., Slane, P., **Gaensler, B. M.**, Hughes, J., and Van Der Swaluw, E., 2009, *Chandra and XMM Observations of the Composite Supernova Remnant G327.1-1.1*, *The Astrophysical Journal*, 691[2], 895-906

Thornton-Benko, E., **Nguyen, H.**, Hung, W., Thornton, B. ., and Person/Affiliation, N. ., 2009, *Improved observer dependent perception of weak edges when scanning an image in real time indicated by introducing 1/f noise into the primary visual cortex V1. Theory and experimental support*, *Australasian Physical & Engineering Sciences in Medicine*, 32[3], 136-149

**Tomljenovic-Hanic, S.**, Greentree, A., **de Sterke, C. M.**, and Praver, S., 2009, *Flexible design of ultrahigh-Q microcavities in diamond-based photonic crystal slabs*, Optics Express, 17[8], 6465-6475

**Tomljenovic-Hanic, S.**, Rahmani, A., **de Sterke, C. M.**, and Steel, M., 2009, *Comparison of the sensitivity of air and dielectric modes in photonic crystal slab sensors*, Optics Express, 17[17], 14552-14557

Tongchai, A., **Sharma, M. D.**, **Johnston, I. D.**, Arayathanitkul, K., and Soankwan, C., 2009, *Developing, Evaluating and Demonstrating the Use of a Conceptual Survey in Mechanical Waves*, International Journal of Science Education, 31[18], 2437-2457

Uehara, S., Watanabe, Y., Nakazawa, H., Adachi, I., Aihara, H., Arinstein, K., Aulchenko, V., **Bakich, A. M.**, Belous, K., Bondar, A., Bracko, and M., **McOnie, S. T.**, 2009, *High-statistics study of production in two-photon collisions*, Physical Review D (Particles, Fields, Gravitation and Cosmology), 80[3], 032001-1-032001-17

Uehara, S., Watanabe, Y., Nakazawa, H., Aihara, H., Arinstein, K., Aulchenko, V., **Bakich, A. M.**, Barberio, E., Belous, K., Bhardwaj, V., Bondar, A., **McOnie, S. T.**, **Yabsley, B. D.**, 2009, *High-statistics study of neutral-pion pair production in two-photon collisions*, Physical Review D (Particles, Fields, Gravitation and Cosmology), 79[5], 052009-1-052009-13

**Van Albada, S. J.**, and **Robinson, P. A.**, 2009, *Mean-field modeling of the basal ganglia-thalamocortical system. I Firing rates in healthy and parkinsonian states*, Journal of Theoretical Biology, 257, 642-663

**Van Albada, S. J.**, **Gray, R. T.**, **Drysdale, P. M.**, and **Robinson, P. A.**, 2009, *Mean-field modeling of the basal ganglia-thalamocortical system. II Dynamics of parkinsonian oscillations*, Journal of Theoretical Biology, 257, 664-688

Vanda, J., Skapa, J., Vasinek, V., **Argyros, A.**, **Large, M. C.**, and **Lwin, R.**, 2009, *Fluorescent response of dye-filled suspended-core microstructured polymer optical fiber*, Applied Optics, 48[31], G64-G67

Vaulina, O., Koss, X., and **Vladimirov, S.**, 2009, *The dynamics of formation of monolayer dust structures in a confining electric field*, Physica Scripta: an international journal for experimental and theoretical physics, 79, 035501-1-035501-7

Verbiest, J., Bailes, M., Coles, W., Hobbs, G., Van Straten, W., Champion, D., Jenet, F., *Manchester, R.*, *Bhat, N.*, *Sarkissian, J.*, and **Yardley, D.**, 2009, *Timing stability of millisecond pulsars and prospects for gravitational-wave detection*, Monthly Notices of the Royal Astronomical Society, 400[2], 951-968

**Verdon, A. L.**, **Cairns, I. H.**, **Melrose, D. B.**, and **Robinson, P. A.**, 2009, *Warm electromagnetic lower hybrid wave dispersion relation*, Physics of Plasmas, 16[5], 052105-1-052105-12

Vervink, K., Aushev, T., Schneider, O., Arinstein, K., **Bakich, A. M.**, Balagura, V., Barberio, E., Bay, A., Bhardwaj, V., Bitenc, U., Bondar, A., **McOnie, S. T.**, **Yabsley, B. D.**, 2009, *Evidence of time-dependent CP violation in the decay  $B \rightarrow D^*+D^{*-}$* , Physical Review D (Particles, Fields, Gravitation and Cosmology), 80[11], 111104-1-111104-6

**Vial, P. J., Gustafsson, H. B.,** Oliver, L., **Baldock, C.,** and Greer, P., 2009, *Direct-detection EPID dosimetry: investigation of a potential clinical configuration for IMRT verification*, Physics in Medicine and Biology, 54[23], 7151-7169

Vinko, J., Sarneczky, K., Balog, Z., Immler, S., Sugerman, B., Brown, P., Misselt, K., Szabo, G., Csizmadia, S., Kun, M., and **Kiss, L. L.**, 2009, *The young massive, star cluster sandage-96 after the explosion of supernova 2004dj in NGC 2403*, The Astrophysical Journal, 695[1], 619-635

Vlajic, M., **Bland-Hawthorn, J.**, and Freeman, K., 2009, *The Abundance Gradient in the Extremely Faint Outer Disk of NGC 300*, The Astrophysical Journal, 697[1], 361-372

**Wachsmann, U., Wood, R. J., Lenzen, M.,** and Schaeffer, R., 2009, *Structural decomposition of energy use in Brazil from 1970 to 1996*, Applied Energy, 86, 578-587

**Wang, A., Docherty, A., Kuhlmeiy, B. T., Cox, F.,** and **Large, M. C.**, 2009, *Side-hole fiber sensor based on surface plasmon resonance;*, Optics Letters, 34[24], 3890-3892

Wang, B., **Ostrikov, K.**, Tsakadze, Z., and Xu, S., 2009, *Analysis of photoluminescence background of Raman spectra of carbon nanotips grown by plasma-enhanced chemical vapor deposition*, Journal of Applied Physics, 106[1], 013315-1-013315-7

**Wang, H. D., Fleming, S. C.,** and Lee, Y., 2009, *A Remote, Non-destructive Laser Ultrasonic Material Evaluation System with Simplified Optical Fibre Interferometer Detection*, Journal of Nondestructive Evaluation, 28[2], 75-83

**Wang, H. D., Fleming, S. C.,** and Lee, Y., 2009, *Simple, all-optical, noncontact, depth-selective, narrowband surface acoustic wave measurement system for evaluating the Rayleigh velocity of small samples or areas*, Applied Optics, 48[8], 1444-1451

**Wang, H. D., Fleming, S. C.,** Lee, Y., **Law, S. H.,** Swain, M. V., and Xue, J., 2009, *Laser ultrasonic surface wave dispersion technique for non-destructive evaluation of human dental enamel*, Optics Express, 17[18], 15592-15607

**Wang, H. D., Fleming, S. C.,** Lee, Y., **Law, S. H., Swain, M. V.,** and Xue, J., 2009, *Noncontact, nondestructive elasticity evaluation of sound and demineralized human dental enamel using a laser ultrasonic surface wave dispersion technique.*, Journal of Biomedical Optics, 14[5], 054046-1-054046-8

**Warschkow, O., Gao, I.,** Schofield, S., Belcher, D., Radny, M., Saraireh, S., and Smith, P., 2009, *Acetone on silicon (001): ambiphilic molecule meets ambiphilic surface*, Physical Chemistry Chemical Physics, 11[15], 2747-2759

Waterhouse, A., Wise, S., **Yin, Y., Bilek, M.,** Weiss, A., and Ng, M., 2009, *Plasma-mediated immobilisation of recombinant tropoelastin dramatically enhances vascular biocompatibility of metals: Implications for coronary stents*, Heart, Lung and Circulation, 18[3], S224-S224

Wei, J., Chang, P., Adachi, I., Aihara, H., Aulchenko, V., Aushev, T., **Bakich, A. M.,** Balagura, V., Barberio, E., Bondar, A., Bozek, A., **McOnie, S. T., Varvell, and K. E., Yabsley, B. D.,** 2009, *Measurement of the Differential Branching Fraction and Forward-Backward Asymmetry for  $B_{K^{*0}}^0$* , Physical Review Letters, 103[17], 171801-1-171801-6

**Westman, H. F.**, and Sonego, S., 2009, *Coordinates, observables and symmetry in relativity*, Annals of Physics, 324[8], 1585-1611

**Wheatland, M. S.**, 2009, *Monte Carlo Simulation of Solar Active-Region Energy*, Solar Physics, 255[2], 211-227

**Wheatland, M. S.**, and Regnier, S., 2009, *A Self-Consistent Nonlinear Force-Free Solution for a Solar Active Region Magnetic Field*, The Astrophysical Journal, 700[2], L88-L91

White, R., Robson, R., Dujko, S., Nicoletopoulos, P., and **Li, B.**, 2009, *Recent advances in the application of Boltzmann equation and fluid equation methods to charged particle transport in non-equilibrium plasmas*, Journal of Physics D: Applied Physics, 42, 1-19

Wiehczynski, J., Lesiak, T., Aihara, H., Arinstein, K., Aulchenko, V., **Bakich, A. M.**, Balagura, V., Barberio, E., Bay, A., Belous, K., Bhardwaj, V., **McOnie, S. T.**, **Varvell, K. E.**, and **Yabsley, B. D.**, 2009, *Measurement of  $B \rightarrow D_s^* K$  branching fractions*, Physical Review D (Particles, Fields, Gravitation and Cosmology), 80[5], 052005-1-052005-7

**Wiedmann, T.**, **Lenzen, M.**, and Barrett, J., 2009, *Companies on the Scale -;Comparing and Benchmarking the Sustainability Performance of Businesses*, Journal of Industrial Ecology, 13[3], 361-383

Williams, L. M., Gatt, J. M., Kuan, S., Dobson-Stone, C., Paul, R., Palmer, D. M., **Song, L.**, Costa, P., Schofield, P., and Gordon, E., 2009, *A Polymorphism of the MAOA Gene is Associated with Emotional Brain Markers and Personality Traits on an Antisocial Index*, Neuropsychopharmacology, 34[7], 1797-1809

Wiseman, H., Berry, D., **Bartlett, S. D.**, Higgins, B., and Pryde, G., 2009, *Adaptive Measurements in the Optical Quantum Information Laboratory*, IEEE Journal on Selected Topics in Quantum Electronics, 15[6], 1661-1672

Won, E., Ko, B., Aihara, H., Arinstein, K., Aulchenko, V., Aushev, T., **Bakich, A. M.**, Balagura, V., Barberio, E., Bay, A., Belous, K., **McOnie, S. T.**, **Peak, L. S.**, **Varvell, K. E.**, and **Yabsley, B. D.**, 2009, *Measurement of  $D^+ \rightarrow K_s K^+$  and  $D^+ S \rightarrow K S^+$  branching ratios*, Physical Review D (Particles, Fields, Gravitation and Cosmology), 80[11], 111101-1-111101-5

**Wood, R. J.**, 2009, *Structural decomposition analysis of Australia's greenhouse gas emissions*, Energy Policy, 37, 4943-4948

**Wood, R. J.**, and **Dey, C. J.**, 2009, *Australia's Carbon Footprint*, Economic Systems Research, 21[3], 243-266

**Wood, R. J.**, and **Lenzen, M.**, 2009, *Aggregate Measures of Complex Economic Structure and Evolution - A Review and Case Study*, Journal of Industrial Ecology, 13[2], 264-283

**Wood, R. J.**, and **Lenzen, M.**, 2009, *Structural path decomposition*, Energy Economics, 31[3], 335-341

**Wood, R. J.**, **Lenzen, M.**, and Foran, B., 2009, *A Material History of Australia: Evolution of Material Intensity and Drivers of Change*, Journal of Industrial Ecology, 13[6], 847-862

**Woodruff, H. C., Ireland, M. J., Tuthill, P. G., Monnier, J., Bedding, T. R., Danchi, W., Scholz, M., Townes, C., and Wood, P.,** 2009, *The Keck Aperture Masking Experiment: Spectro-Interferometry of Three Mira Variables from 1.1 to 3.8 $\mu$ m*, *The Astrophysical Journal*, 691[2], 1328-1336

**Wu, D. K., Kuhlmeiy, B. T., and Eggleton, B.,** 2009, *Ultrasensitive photonic crystal fiber refractive index sensor*, *Optics Letters*, 34[3], 322-324

**Wu, H., Kim, J., Robinson, P. A., and Drysdale, P. M.,** 2009, *Firing pattern of bursting neurons under sinusoidal drive in mean-field modeling*, *Journal of Theoretical Biology*, 259[1], 101-108

**Wu, D.K., Kuhlmeiy, B.T., and Eggleton, B.,** 2009, *Ultrasensitive photonic crystal fiber refractive index sensor*, *Optics Letters*, 34[3], 322-324

Wu, K., Ottaway, D., Munch, J., Lancaster, D., Bennetts, S., and **Jackson, S. D.,** 2009, *Gain-switched holmium-doped fibre laser*, *Optics Express*, 17[3], 20872-20877

Wuttiprom, S., **Sharma, M. D., Johnston, I. D.,** Chitaree, R., and Soankwan, C., 2009, *Development and Use of a Conceptual Survey in Introductory Quantum Physics*, *International Journal of Science Education*, 31[5], 631-654

Xiao, L., Grogan, M., **Leon-Saval, S. G.,** Williams, R., England, R., Wadsworth, W., and Birks, T., 2009, *Tapered fibers embedded in silica aerogel*, *Optics Letters*, 34[18], 2724-2726

**Xiong, C., Magi, E. C., Luan, F.,** Tuniz, A., **Dekker, S. A.,** Sanghera, J., Shaw, L., Aggarwal, I., and **Eggleton, B.,** 2009, *Characterization of picosecond pulse nonlinear propagation in chalcogenide As<sub>2</sub>S<sub>3</sub> fiber*, *Applied Optics*, 48[29], 5467-5474

Xu, S., **Levchenko, I.,** Huang, S., and **Ostrikov, K.,** 2009, *Self-organized vertically aligned single-crystal silicon nanostructures with controlled shape and aspect ratio by reactive plasma etching*, *Applied Physics Letters*, 95[11], 111505-1-111505-3

**Yabsley, B. D.,** 2009, *Hidden and open charm at Belle (and elsewhere)*, *Nuclear Physics, Section B, Proceedings Supplements*, 187, 145-152

**Yin, Y., Bilek, M., McKenzie, D. R., Nosworthy, N. J., Kondyurin, A.,** Youssef, H., Byrom, o., and Yang, W., 2009, *Acetylene plasma polymerized surfaces for covalent immobilization of dense bioactive protein monolayers*, *Surface and Coatings Technology*, 203, 1310-1316

**Yin, Y., Fisher, K. J., Nosworthy, N. J.,** Bax, D., Rubanov, S., Gong, B., **Weiss, A. S., McKenzie, D. R.,** and **Bilek, M.,** 2009, *Covalently Bound Biomimetic Layers on Plasma Polymers with Graded Metallic Interfaces for in vivo Implants*, *Plasma Processes and Polymers*, 6[10], 658-666

**Yin, Y., Lambert, J., Yang, X. S., McKenzie, D. R., Jackson, M. A., and Suchowerska, N. O.,** 2009, *A self-checking fiber optic dosimeter for monitoring common errors in brachytherapy applications*, *Medical Physics*, 36[7], 2985-2991

**Yin, Y., Nosworthy, N. J.,** Gong, B., **Bax, D., Kondyurin, A., McKenzie, D. R., and Bilek, M.,** 2009, *Plasma Polymer Surfaces Compatible with a CMOS Process for Direct Covalent Enzyme Immobilization*, *Plasma Processes and Polymers*, 6[1], 68-75

**Yin, Y., Nosworthy, N. J.,** Youssef, H., Gong, B., **Bilek, M.,** and **McKenzie, D. R.,** 2009, *Acetylene plasma coated surfaces for covalent immobilization of proteins*, Thin Solid Films, 517[17], 5343-5346

**Yin, Y., Pan, Y., Hang, L., McKenzie, D. R.,** and **Bilek, M.,** 2009, *Direct current reactive sputtering Cr-Cr<sub>2</sub>O<sub>3</sub> cermet solar selective surfaces for solar hot water applications*, Thin Solid Films, 517[5], 1601-1606

**Yin, Y., Pan, Y., Rubanov, S., Bilek, M.,** and **McKenzie, D. R.,** 2009, *Sputtered Nanocrystalline Nickel Thin Films for Solar Thermal Energy Applications*, Nanoscience and Nanotechnology Letters, 1[1], 32-36

**Yin, Y., Wise, S. G., Nosworthy, N. J.,** Waterhouse, A., **Bax, D.,** Youssef, H., Byrom, M., **Bilek, M., McKenzie, D. R.,** Weiss, A. S., and Ng, M. K., 2009, *Covalent immobilisation of tropoelastin on a plasma deposited interface for enhancement of endothelialisation on metal surfaces*, Biomaterials, 30[9], 1675-1681

**Yu, H. C., Argyros, A., Leon-Saval, S. G.,** Fuerbach, A., Efimov, A., and **Barton, G. W.,** 2009, *Emission properties of quantum dots in polymer optical fibres*, Optics Express, 17[24], 21344-21349

**Yuan, X., Cairns, I. H.,** Trichtchenko, L., Rankin, R., and Danskin, D., 2009, *Confirmation of quasi-perpendicular shock reformation in two-dimensional hybrid simulations*, Geophysical Research Letters, 36, 1-4

Zamani, M., Fragopoulou, M., Stoulos, S., Manolopoulou, M., Krivopustov, M., Sosnin, N., Brandt, R., Westmeyer, W., Debeauvais, M., Kulakov, B., and **Hashemi-Nezhad, S. R.,** 2009, *Erratum to "Neutron yields from massive lead and uranium targets irradiated with relativistic protons"* [Radiation Measurements 40 (2005) 410-414], Radiation Measurements, 44[2], 214-214

**Zeng, A., Bilek, M., McKenzie, D. R.,** and Lay, P. A., 2009, *Correlation of film structure and molecular oxygen reduction at nitrogen doped amorphous carbon thin film electrochemical electrodes*, Diamond and Related Materials, 18[9], 1102-1108

**Zeng, A., Bilek, M., McKenzie, D. R.,** and Lay, P. A., 2009, *Semiconductor properties and redox responses at a-C:N thin film electrochemical electrodes*, Diamond and Related Materials, 18[10], 1211-1217

Zhong, X., Wu, X., and **Ostrikov, K.,** 2009, *Pulsed i-PVD of Dielectric Nanodot Arrays Using a Nanoporous Template*, Plasma Processes and Polymers, 6, 161-169

**Zhou, W. V., Kyme, A., Meikle, S. R.,** and **Fulton, R. R.,** 2009, *A Scheme for PET Data Normalisation in Event-based Motion Correction*, Physics in Medicine and Biology, 54[17], 5321-5339

Zupanc, A., Adachi, I., Aihara, H., Arinstein, K., Aulchenko, V., Aushev, T., **Bakich, A. M.,** Balagura, V., Barberio, E., Bay, A., Belous, K., **McOnie, S. T., Varvell, K. E.,** and **Yabsley, B. D.,** 2009, *Measurement of  $\gamma$  cp in D meson decays to the KsK+K- final state*, Physical Review D (Particles, Fields, Gravitation and Cosmology), 80[5], 052006-1-052006-11

Zwintz, K., Kallinger, T., Guenther, D., Gruberbauer, M., Rowe, J., **Huber, D.**, Kuschnig, R., Weiss, W., Matthews, J., Moffat, A., Rucinski, S., Sasselov, D., Walker, G., and Casey, M., 2009, *MOST photometry of the enigmatic PMS pulsator HD 142666*, *Astronomy & Astrophysics*, 494[3], 1031-1040

## Refereed Conference Proceedings

**An, H., and Fleming, S. C.,** 2009, *Second-order Optical Nonlinearity in Thermally Poled Silica Waveguides Written by Femtosecond Laser Pulses*, International Conference on Advanced Infocomm Technology, China

**Argyros, A.,** 2009, *Free radical copolymerization of MMA and (-)MnMA for polymer optical fiber (POF)*, 11th Pacific Polymers Conference, Cairns, Australia, 06-DEC-09 1, 10-DEC-09 1

**Argyros, A.,** 2009, *High precision microstructured fibre based refractive index sensing: absolute refractive index measurements and low-index sensing*, Australian Conference on Optical Fibre Technology (ACOFT) 2009;, Adelaide, Australia, 29-NOV-09 1, 03-DEC-09 1

**Argyros, A.,** 2009, *Hollow-core and photonic bandgap optical fibres*, 8th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/Pacific Rim 2009);, 1-2, Shanghai, China, 30-AUG-09 1, 03-SEP-09 1

Aslund, M. L., Jovanovic, N., **Jackson, S. D., Canning, J.,** Marshall, G., Fuerbach, A., Withford, M., and Cook, K., 2009, *Photo-erasure of Type-II femtosecond laser written Bragg gratings employed as high reflectors in moderate power Q-switch fibre laser*, SPIE Europe Optics and Optoelectronics 2009: Optical Sensors 2009, 735611-1-735611-10, Prague, Czech Republic, 20-APR-09 1, 22-APR-09 1

Chan, C., Meikle, S. R., **Fulton, R. R.,** Tian, G., Cai, W., and Feng, D. D., 2009, *A non-local post-filtering algorithm for PET incorporating anatomical knowledge*, 2009 IEEE Nuclear Science Symposium, 2728-2732, Orlando, Florida, USA, 25-OCT-09 1, 31-OCT-09 1

**Clarke, A. M., Williams, D.,** Roelens, M., **Lamont, M. R.,** and **Eggleton, B.,** 2009, *Parabolic Pulse Shaping for Enhanced Continuum Generation Using an LCoS-based Wavelength Selective Switch*, The 14th Opto Electronics and Communications Conference, 1-2, Hong Kong, 13-JUL-09 1, 17-JUL-09 1

**Ekins-Daukes, N. J.,** and Schmidt, T., 2009, *Molecular approaches to up-conversion and the intermediate band solar cell*, Solar Quest 2009, Tokyo, Japan

**Fleming, S. C.,** and **An, H.,** 2009, *Progress in Creating Second-order Optical Nonlinearity in Silicate Glasses and Optical Fibres through Thermal Poling*, International Conference on Materials for Advanced Technologies, Singapore, 28-JUN-09 1, 03-JUL-09 1

**Gaensler, B. M.,** 2009, *A Half-Megasecond Chandra Observation of the Oxygen-rich Supernova Remnant G292.01+1.8*, Chandra's First Decade of Discovery, Boston, MA, 22-SEP-09 1, 25-SEP-09 1

**Gaensler, B. M.,** 2009, *Cosmic magnetism with the Square Kilometre Array and its pathfinders*, Cosmic Magnetic Fields: from Planets, to Stars and Galaxies, International Astronomical Union (IAU) Symposia;, 645-652, Puerto Santiago, Tenerife, Spain, 03-NOV-08 1, 07-NOV-08 1

**Georgiou, H., Sharma, M. D., O'Byrne, J. W., Sefton, I. M.,** and **McInnes, B.,** 2009, *University students' conceptions about familiar thermodynamic processes and the implications for instruction*, UniServe Science, The University of Sydney Conference. Motivating Science Undergraduates: Ideas and interventions, 118-124, Sydney, Australia, 01-OCT-09 1, 02-OCT-09 1

**Girelli, F.**, and Livine, E., 2009, *Field theories with homogenous momentum space*, THE PLANCK SCALE: Proceedings of the XXV Max Born Symposium, Wroclaw, Poland, 29-JUN-09 1, 03-JUL-09 1

Heiles, C., and **Robshaw, T.**, 2009, *Zeeman splitting in the diffuse interstellar medium - The Milky Way and beyond*, Cosmic Magnetic Fields: from Planets, to Stars and Galaxies, International Astronomical Union (IAU) Symposia;, Puerto Santiago, Tenerife, Spain

Jewart, C., Chen, K., Avdeev, I., **Michie, A. M.**, **Hambley, P. O.**, and **Canning, J.**, 2009, *Torsion of air-hole microstructured fiber devices under large deflection*, 20th International Conference on Optical Fibre Sensors(OFS-20), 75033J-1-75033J-4, Edinburgh Conference Centre, Heriot Watt University, Edinburgh, UK, 05-OCT-09 1, 09-OCT-09 1

Kjeldsen, H., **Bedding, T. R.**, and Christensen-Dalsgaard, J., 2009, *Measurements of Stellar Properties through Asteroseismology: A Tool for Planet Transit Studies*, Transiting Planets, 309-317, Boston, MA, 19-MAY-08 1, 23-MAY-08 1

**Kuan, N. C.**, **Sharma, M. D.**, **Lindstrom, C.**, and **Muller, D. A.**, 2009, *Embedding research principles into multimedia teaching and learning tools*, UniServe Science, The University of Sydney Conference. Motivating Science Undergraduates: Ideas and interventions, 167-172, Sydney, Australia, 01-OCT-09 1, 02-OCT-09 1

Leonhardt, R., Anthony, J., Lo, Y., **Argyros, A.**, and **Large, M. C.**, 2009, *Efficient coupling into THz PCF fibres using specially designed lenses*, CLEO/Europe - EQEC 2009 - European Conference on Lasers and Electro-Optics and the European Quantum Electronics Conference, 1-1, Munich, Germany, 14-JUN-09 1, 19-JUN-09 1

Malaspina, D., Ergun, R., and **Cairns, I. H.**, 2009, *Plasma Emission at Shocks by the Eigenmode-Antenna Mechanism*, Shock Waves in Space and Astrophysical Environments: 18th Annual International Astrophysics Conference, 131-138, Kona, Hawaii, 01-MAY-09 1, 07-MAY-09 1

Meikle, S. R., Kyme, A., **Baldock, C.**, and **Fulton, R. R.**, 2009, *Understanding and compensating for refraction errors in stereo-optical tracking during small animal PET/SPECT*, 2009 IEEE Nuclear Science Symposium Conference Record, Orlando, Florida, USA

**Melrose, D. B.**, 2009, *Coherent Emission*, Universal Heliophysical Processes Proceedings IAU Symposium No. 257, 305-315, Ioannina, Greece, 15-SEP-08 1, 19-SEP-08 1

**Pelusi, M. D.**, **Vo, T. D.**, **Luan, F.**, Madden, S., Choi, D., Bulla, D., Luther-Davies, B., and **Eggleton, B.**, 2009, *Highly-nonlinear Chalcogenide Glass Devices for High-speed Signal Processing and Characterization*, The 14th Opto Electronics and Communications Conference, 1-2, Hong Kong, 13-JUL-09 1, 17-JUL-09 1

Schuker, M., Krebber, K., **Large, M. C.**, and **Lwin, R.**, 2009, *Climatic investigations of microstructured polymer optical fibers*, 18th International Conference on Plastic Optical Fibres, 1-4, Sydney, Australia, 07-SEP-09 1, 11-SEP-09 1

**Tuniz, A.**, **Chen, P.**, **Fleming, S. C.**, and **Kuhlmey, B. T.**, 2009, *Design of an optical hyperlens with metallic nanocylinders*, Australasian Conference on Optics, Lasers and Spectroscopy and Australian Conference on Optical Fibre Technology, Adelaide, Australia, 29-NOV-09 1, 03-DEC-09 1

**Tuniz, A., Kuhlmeiy, B. T., Lwin, R., and Fleming, S. C.,** 2009, *A novel technique for fabricating metamaterials*, Australasian Conference on Optics, Lasers and Spectroscopy and Australian Conference on Optical Fibre Technology, Adelaide, Australia, 29-NOV-09 1, 03-DEC-09 1

**Wu, D. S., and Leon-Saval, S. G.,** 2009, *Emission spectra of gas plasma discharge in polymer capillaries*, 18th International Conference on Plastic Optical Fibres, Sydney, Australia, 07-SEP-09 1, 11-SEP-09 1

Xiao, L., Grogan, M., **Leon-Saval, S. G.,** Williams, R., England, R., Wadsworth, W., and Birks, T., 2009, *Optical Fibre with an Aerogel-Filled Core*, 2009 Conference on Lasers and Electro-Optics and 2009 Conference on Quantum Electronics and Laser Science Conference, CLEO/QELS, 1-2, Baltimore, USA, 02-JUN-09 1, 04-JUN-09 1

Xiao, L., Grogan, M., **Leon-Saval, S. G.,** Williams, R., England, R., Wadsworth, W., and Birks, T., 2009, *Tapered fibres embedded in silica aerogel*, 2009 Conference on Lasers and Electro-Optics and 2009 Conference on Quantum Electronics and Laser Science Conference, CLEO/QELS, 1-2, Baltimore, USA, 02-JUN-09 1, 04-JUN-09 1

**Xiong, C., Magi, E. C., Luan, F., Dekker, S. A.,** Sanghera, J., Shaw, L., Aggarwal, I., and **Eggleton, B.,** 2009, *Raman Response in Chalcogenide AsS fiber*, The 14th Opto Electronics and Communications Conference, 1-2, Hong Kong, 13-JUL-09 1, 17-JUL-09 1

**Yu, H. C., Argyros, A., Leon-Saval, S. G., Fuerbach, A., and Barton, G.,** 2009, *Emission properties of quantum dots in PMMA*, 18th International Conference on Plastic Optical Fibres, Sydney, Australia, 07-SEP-09 1, 11-SEP-09 1