

# Bibliography - David J. Lurie

---

## BOOK CHAPTERS:

---

1. Lurie D.J. and Nicholson I. "Proton-Electron Double-Resonance Imaging of Exogenous and Endogenous Free Radicals In-Vivo", in: "Proceedings of International School of Physics 'Enrico Fermi', Course CXXIII, Nuclear Magnetic Double Resonance", Maraviglia B., ed., North Holland, Amsterdam, pp485-503 (1993).
2. Lurie D.J. "Imaging Using the Electronic Overhauser Effect", In: Encyclopedia of Nuclear Magnetic Resonance, Grant D.M. and Harris R.K., eds., John Wiley and Sons Ltd., pp2481-2486 (1995).
3. Lurie D.J. "Overhauser Effect Imaging of Free Radicals", In: Methods in Biomedical Magnetic Resonance Imaging and Spectroscopy", Young I.R. and Grant D.M., eds., John Wiley and Sons Ltd. (2000).
4. Lurie D.J., Foster M.A., Youngdeed W., Khramtsov V.V. and Grigor'ev I. "Recent Progress and Future Prospects of Free Radical Imaging by PEDRI", in: EPR in the 21<sup>st</sup> Century, Kawamori A., Yamauchi J. and Ohta H., eds., Elsevier Science BV, pp515-523 (2002).
5. Lurie D.J. "Techniques and Applications of EPR Imaging", in: Electron paramagnetic resonance, Gilbert B.C., Davies M.J. and Murphy D.M., eds., Specialist Periodical Reports, Vol. 18, Royal Society of Chemistry, Cambridge, pp137-160 (2002).
6. Lurie D.J. "Proton-Electron Double-Resonance Imaging (PEDRI)", in: "In Vivo EPR (ESR): Theory and Applications" Biological Magnetic Resonance, Vol. 18, ed: L.J. Berliner, Kluwer Academic / Plenum Publishers, New York., pp547-578 (2003).
7. Fagan A.J. and Lurie D.J. "Absorption Methods for ESR and NMR Imaging of Solid Materials", In: Encyclopedia of Nuclear Magnetic Resonance, John Wiley and Sons Ltd. (2012).  
Also published in: MRI of Tissues with Short T2s or T2\*s, Bydder, G.M., Fullerton, G.D. and Young, I.R. (eds). John Wiley & Sons Ltd, Chichester, UK, pp 171-184 (2012).
8. Lurie D.J., Ross P.J. and Broche L.M. "Techniques and Applications of Field-cycling Magnetic Resonance in Medicine", in: "Field-cycling NMR Relaxometry: Instrumentation, Model Theories and Applications"; New Developments in NMR No. 18, Kimmich R., ed., Royal Society of Chemistry, UK, pp 358-384 (2018).

---

## REFEREED PAPERS:

---

1. Smith F.A., Lurie D.J., Brady F., Danpure H.J., Kensett M.J., Osman S., Sylvester D.J. and Waters S.L. "PAC Studies of <sup>111</sup>In Binding to Transferrin, Tropolone and Acetylacetonone in Aqueous Solutions" Int. J. Appl. Radiat. Isot. **35**, 501-506 (1984).
2. Lurie D.J., Smith F.A. and Shukri A. "The Dissociation of Some <sup>111</sup>In Chelates in the Presence of Transferrin and Haemoglobin Studied by PAC" Int. J. Appl. Radiat. Isot. **36**, 57-62 (1985).
3. Lurie D.J. "A Systematic Design Procedure for Selective Pulses in NMR Imaging" Magn. Reson. Imaging **3**, 235-243 (1985).
4. Lurie D.J. "Numerical Design of Composite Radiofrequency Pulses" J. Magn. Reson. **70**, 11-20 (1986).
5. Lurie D.J., Bussell D.M., Bell L.H. and Mallard J.R. "Proton Electron Double Magnetic Resonance Imaging of Free Radical Solutions" J. Magn. Reson. **76**, 366-370 (1988).
6. Lurie D.J., Hutchison J.M.S., Bell L.H., Nicholson I., Bussell D.M. and Mallard J.R. "Field-Cycled Proton-Electron Double Resonance Imaging of Free Radicals in Large Aqueous Samples" J. Magn. Reson. **84**, 431-437 (1989).
7. Lurie D.J., Hutchison J.M.S., Bell L.H., Nicholson I., Bussell D.M. and Mallard J.R. "Field-Cycled Proton Electron Double Resonance Imaging of Free Radicals" Physica Medica **5**, 85-89 (1989).
8. Lurie D.J., Nicholson I., Foster M.A. and Mallard J.R. "Free Radicals Imaged In-Vivo in the Rat by using Proton-Electron Double-Resonance Imaging" Phil.Trans.Roy.Soc.Lond. **A333**, 453-456 (1990). (Also published in the book "NMR Imaging", Mansfield P. and Hahn E.L., eds., Royal Society, London (1990)).
9. Lurie D.J., Nicholson I. and Mallard J.R. "EPR Spectral Information Obtained from Field-Cycled Proton-Electron Double-Resonance Images" J. Magn. Reson. **94**, 197-203 (1991).

10. Lurie D.J., McLay J., Nicholson I. and Mallard J.R. "Production of UV-Generated Hydroxyl Free Radicals Imaged by Proton-Electron Double-Resonance Imaging with Spin-Trapping" *J. Magn. Reson.* **95**, 191-195 (1991).
11. Lurie D.J., Nicholson I. and Mallard J.R. "Low-Field EPR Measurements by Field-Cycled Dynamic Nuclear Polarization" *J. Magn. Reson.* **95**, 405-409 (1991).
12. Lurie D.J., Nicholson I., McLay J.S. and Mallard J.R. "Spin-Trapped Hydroxyl Free Radicals Studied at Low Field by Field-Cycled Dynamic Nuclear Polarization" *Appl. Magn. Reson.* **3**, 917-925 (1992).
13. Seton H.C., Bussell D.M., Hutchison J.M.S., Nicholson I. and Lurie D.J. "DC SQUID-Based NMR Detection from Room Temperature Samples" *Phys. Med. Biol.* **37**, 2133-2138 (1992).
14. Nicholson I., Lurie D.J. and Robb F.J.L., "The Application of Proton Electron Double Resonance Imaging Techniques to Proton Mobility Studies" *J. Magn. Reson.* **B104**, 250-255 (1994).
15. Nicholson I., Robb F.J.L. and Lurie D.J., "Imaging Paramagnetic Species Using Radiofrequency Longitudinally-Detected ESR (LODESR Imaging)" *J. Magn. Reson.* **B104**, 284-288 (1994).
16. Lurie D.J. "Progress Towards Whole-Body Proton-Electron Double-Resonance Imaging of Free Radicals" *Magn. Reson. Mat. Phys. Biol. Med. (MAGMA)* **2**, 267-271 (1994).
17. Seton H.C., Bussell, D.M., Hutchison J.M.S. and Lurie D.J. "Use of a DC SQUID Receiver Preamplifier in a Low Field MRI System" *IEEE Trans. Appl. Supercon.* **5**, 3218-3221 (1995).
18. Alecci M., McCallum S.J. and Lurie D.J., "Design and Optimisation of an Automatic Frequency Control for a Radio Frequency EPR Spectrometer" *J. Magn. Reson.* **A117**, 272-277 (1995).
19. Yeung D., Hutchison J.M.S. and Lurie D.J., "An efficient Birdcage Resonator at 2.5MHz Using a Novel Multi-Layer Self-Capacitance (MLSC) Construction Technique" *Magn. Reson. Mat. Phys. Biol. Med. (MAG\*MA)*, **3**, 163-168 (1995).
20. Alecci M., Nicholson I. and Lurie D.J., "A Novel Multiple-Tuned Radio Frequency Loop-Gap Resonator for Use in PEDRI" *J. Magn. Reson.* **B110**, 82-86 (1996).
21. Lurie D.J., McCallum S.J., Hutchison J.M.S. and Alecci M., "Continuous-Wave NMR Imaging of Solids" *Magn. Reson. Mat. Phys. Biol. Med. (MAG\*MA)* **4**, 77-81 (1996).
22. McCallum S.J., Alecci A. and Lurie D.J., "Modification of a Whole-Body NMR Imager into a Radio Frequency EPR Spectrometer suitable for in-vivo Measurements" *Meas. Sci. Technol.* **7**, 1012-1018 (1996).
23. McCallum S.J., Nicholson I. and Lurie D.J., "A Combined PEDRI and CW-EPR Instrument for Detecting Free Radicals In-Vivo" *J. Magn. Reson.* **B113**, 65-69 (1996).
24. Lurie D.J., "Electron Spin Resonance Studies of Biological Systems" *Brit. J. Radiol.* **69**, 983-984 (1996).
25. Nicholson I., Foster M.A., Robb F.J.L., Hutchison J.M.S. and Lurie D.J., "*In Vivo* Imaging of Nitroxide Free Radical Clearance in the Rat using Radiofrequency Longitudinally-Detected ESR" *J. Magn. Reson.* **B113**, 256-261 (1996).
26. Alecci M., Lurie D.J., Nicholson I., Placidi G. and Sotgiu A. "A PEDRI Apparatus with Simultaneous Multiple EPR Irradiation at 10 mT" *Magn. Reson. Mat. Phys. Biol. Med. (MAG\*MA)* **4**, 187-193 (1996).
27. Seimenis I., Foster M.A., Lurie D.J., Hutchison J.M.S., Whiting P.H. and Payne S., "The Excretion Mechanism of the Spin Label Proxyl Carboxylic Acid (PCA) from the Rat Monitored by X-Band ESR and PEDRI" *Magn. Reson. Med.* **37**, 552-558 (1997).
28. Alecci M., Brivatti J.A., Placidi G., Testa L., Lurie D.J. and Sotgiu A. "A Submicrosecond Resonator and Receiver System for Pulsed Magnetic Resonance with Large Samples" *J. Magn. Reson.* **132**, 162-166 (1998).
29. Seimenis I., Foster M.A., Lurie D.J., Hutchison J.M.S., Whiting P.H. and Payne S. "Chemically-Induced Analgesic Nephropathy in the Rat Monitored by Proton-Electron Double-Resonance Imaging" *Magn. Reson. Med.* **40**, 280-286 (1998).
30. Foster M.A., Seimenis I. and Lurie D.J. "The Application of PEDRI to the Study of Free Radicals In Vivo" *Phys. Med. Biol.* **43**, 1893-1897 (1998).
31. McCallum S.J., Nicholson I. and Lurie D.J. "Multimodality Magnetic Resonance Systems for Studying Free Radicals In Vivo" *Phys. Med. Biol.* **43**, 1857-1861 (1998).
32. Nicholson I., Robb F.J.L., McCallum S.J., Koptioug A. and Lurie D.J. "Recent Developments in Combining LODESR Imaging with Proton NMR Imaging" *Phys. Med. Biol.* **43**, 1851-1855 (1998).

33. Lurie D.J., Foster M.A., Yeung D. and Hutchison J.M.S. "Design, Construction and Use of a Large-Sample Field-Cycled PEDRI Imager" *Phys. Med. Biol.* **43**, 1877-1886 (1998).
34. Lurie D.J. and Sotgiu A. "Introduction to Topical Issue on Electron Paramagnetic Resonance Imaging and Overhauser Techniques in Medicine" *Phys. Med. Biol.* **43**, 1821-1822 (1998).
35. Alecci M., Seimenis I., McCallum S.J., Lurie D.J. and Foster M.A. "Nitroxide Free Radical Clearance in the Live Rat Monitored by Radio-Frequency CW-EPR and PEDRI" *Phys. Med. Biol.* **43**, 1899-1905 (1998).
36. Alecci M. and Lurie D.J. "Low Field (10 mT) Pulsed Dynamic Nuclear Polarisation" *J. Magn. Reson.* **138**, 313-319 (1999).
37. Mülsch A., Lurie D.J., Seimenis I., Fichtlscherer B. and Foster M.A. "Detection of Nitrosyl-Iron Complexes by Proton-Electron Double-Resonance Imaging" *Free Radical Biology and Medicine* **27**, 636-646 (1999).
38. Puwanich P., Lurie D.J. and Foster M.A. "Rapid imaging of free radicals in vivo using field cycled PEDRI" *Phys. Med. Biol.* **44**, 2867-2877 (1999).
39. Khramtsov V.V., Grigor'ev I.A., Foster M.A., Lurie D.J. and Nicholson I. "Biological applications of spin pH probes", *Cell. Mol. Biol.* **46**, 1361-1374 (2000).
40. Davies G.R., Lurie D.J., Hutchison J.M.S., McCallum S.J. and Nicholson I. "Continuous-Wave MRI of Short T<sub>2</sub> Materials", *J. Magn. Reson.*, **148**, 289-297 (2001).
41. Lurie D.J. "Free Radical Imaging", *Brit. J. Radiol.*, **74**, 782-784 (2001).
42. Youngde W., Planincic G. and Lurie D.J. "Optimisation of field-cycled PEDRI for in vivo imaging of free radicals", *Phys. Med. Biol.*, **46**, 2531-2544 (2001).
43. Lurie D.J., Li H., Petryakov S. and Zweier J.L. "Development of a PEDRI free radical imager using a 0.38 T clinical MRI system", *Magn. Reson. Med.*, **47**, 181-186 (2002).
44. Youngde W., Lurie D.J. and Foster M.A. "Rapid imaging of free radicals *in vivo* using Hybrid FISP Field Cycled PEDRI", *Phys. Med. Biol.*, **47**, 1091-1100 (2002).
45. Li H., Deng Y., Kuppusamy P., Lurie D.J. and Zweier J.L. "Proton electron double resonance imaging of the in vivo distribution and clearance of a triaryl methyl radical in mice", *Magn. Reson. Med.*, **48**, 530-534 (2002).
46. Foster M.A., Grigor'ev I.A., Lurie D.J., Khramtsov V.V., McCallum S.J., Panagiotelis I., Hutchison J.M.S., Koptioug A., and Nicholson I. "In vivo detection of pH-sensitive nitroxide in the rat stomach by low-field ESR-based techniques". *Magn. Reson. Med.*, **49**, 558-567 (2003).
47. Fagan A.J., Davies G.R., Hutchison J.M.S. and Lurie D.J. "Continuous wave MRI of heterogeneous materials", *J. Magn. Reson.*, **163**, 318-324 (2003).
48. Khramtsov V.V., Grigor'ev I.A., Lurie D.J., Foster M.A., Zweier J.L. and Kuppusamy P. "Spin pH and SH probes: enhancing functionality of EPR-based techniques", *Spectroscopy*, **18**, 213-225 (2004).
49. Khramtsov V.V., Grigor'ev I.A., Foster M.A. and Lurie D.J. "In Vitro and In Vivo Measurement of pH and Thiols by EPR-Based Techniques", *Antioxidants & Redox Signalling*, **6**, 667-676 (2004).
50. Lurie D.J., Davies G.R., Foster M.A. and Hutchison J.M.S. "Field-cycled PEDRI imaging of free radicals with detection at 450 mT", *Magnetic Resonance Imaging*, **23**, 175-181 (2005).
51. Fagan A.J., Nestle N. and Lurie D.J. "Continuous wave MRI diffusion study of water in bentonite clay", *Magnetic Resonance Imaging*, **23**, 317-319 (2005).
52. Nestle N., Shet K. and Lurie D.J. "PEDRI imaging of free radical distribution in environmental science applications – first results and perspectives", *Magnetic Resonance Imaging*, **23**, 185-189 (2005).
53. Lurie D.J. and Maeder K. "Monitoring drug delivery processes by EPR and related techniques – principles and applications", *Advanced Drug Delivery Reviews*, **57**, 1171-1190 (2005).
54. Fagan A.J. and Lurie D.J. "Continuous Wave NMR Imaging in the Solid State", *Ann. Rep. NMR Spectrosc.*, **56**, 97-140 (2005).
55. Fagan A.J., Davies G.R., Hutchison J.M.S., Glasser F.P. and Lurie D.J. "Development of a 3D, multi-nuclear continuous wave NMR imaging system", *J. Magn. Reson.*, **176**, 140-150 (2005).
56. Modica A., Alecci A. and Lurie D.J. "Sequential, Co-registered Fluorine and Proton Field-Cycled Overhauser Imaging at a Detection Field of 59 mT", *Phys.Med.Biol.*, **51**, N39-N45 (2006).

57. Potapenko D.I., Foster M.A., Lurie D.J., Kirilyuk, I.A., Hutchison J.M.S., Grigor'ev I.A., Bagryanskaya E.G. and Khramtsov V.V. "Real-time Monitoring of Drug-Induced Changes in the Stomach Acidity of Living Rats Using Improved pH-Sensitive Nitroxides and Low-Field EPR Techniques", *J. Magn. Reson.*, **182**, 1-11 (2006).
58. Polyon C., Lurie D.J., Youngdee W., Thomas C. and Thomas I. "Field-cycled dynamic nuclear polarization (FC-DNP) of <sup>14</sup>N and <sup>15</sup>N nitroxide free radicals at low magnetic field", *J.Phys.D: Appl.Phys.* **40**, 5527-5532 (2007).
59. Pine K.J., Davies G.R. and Lurie D.J. "Field-Cycling NMR Relaxometry with Spatial Selection", *Magn. Reson. Med.* **63**, 1698–1702 (2010).
60. Choi C.-H., Davies G.R. and Lurie D.J. "Off-resonance Magnetisation Transfer Contrast (MTC) MRI using Fast Field-Cycling (FFC)", *J. Magn. Reson.* **204**, 145-149 (2010).
61. Shet K., Caia G.L., Kesselring E., Lurie D.J., Samouilov A., Petryakov S. and Zweier J.L. "A Novel Variable Field System for Field-Cycled Dynamic Nuclear Polarization Spectroscopy", *J. Magn. Reson.* **205**, 202-208 (2010).
62. Lurie D.J., Aime S., Baroni S., Booth N.A., Broche L.M., Choi C.-H., Davies G.R., Ismail S., Ó hÓgáin D. and Pine K.J. "Fast Field-Cycling Magnetic Resonance Imaging", *Comptes Rendus Physique* **11**, 136-148 (2010). DOI: [10.1016/j.crhy.2010.06.012](https://doi.org/10.1016/j.crhy.2010.06.012)
63. Choi C.-H., Hutchison J.M.S. and Lurie D.J. "Design and construction of an actively frequency-switchable RF coil for field-dependent Magnetisation Transfer Contrast MRI with Fast Field-Cycling", *J. Magn. Reson.* **207**, 134-139 (2010). DOI: [10.1016/j.jmr.2010.08.018](https://doi.org/10.1016/j.jmr.2010.08.018)
64. Ó hÓgáin D., Davies G.R., Baroni S., Aime S. and Lurie D.J. "Use of Contrast Agents with Fast Field-Cycling Magnetic Resonance Imaging", *Phys. Med. Biol.* **56**, 105-115 (2011). DOI: [10.1088/0031-9155/56/1/007](https://doi.org/10.1088/0031-9155/56/1/007)
65. Broche L.M., Ismail S.R., Booth N.A. and Lurie D.J. "Measurement of Fibrin Concentration by Fast Field-Cycling NMR", *Magn. Reson. Med.* **67**, 1453–1457 (2012). DOI: [10.1002/mrm.23117](https://doi.org/10.1002/mrm.23117)
66. Broche L.M., Ashcroft G.P. and Lurie D.J. "Detection of osteoarthritis in knee and hip joints by FFC NMR", *Magn. Reson. Med.*, **68**, 358-362 (2012). DOI: [10.1002/mrm.23266](https://doi.org/10.1002/mrm.23266)
67. Mitchell J., Broche L.M., Chandrasekera T.C., Lurie D.J. and Gladden L.F. "Exploring Surface Interactions in Catalysts using Low Field Nuclear Magnetic Resonance", *J. Phys. Chem. C*, **117**, 17699–17706 (2013). DOI: [10.1021/jp405987m](https://doi.org/10.1021/jp405987m)
68. Pine K.J., Goldie F. and Lurie D.J. "In vivo field-cycling relaxometry using an insert coil for magnetic field offset", *Magn. Reson. Med.* **72**, 1492-1497 (2014). DOI: [10.1002/mrm.25040](https://doi.org/10.1002/mrm.25040)
69. Broche L.M., Ross P.J., Pine K.J. and Lurie D.J. "Rapid multi-field T1 estimation algorithm for fast field-cycling MRI", *J. Magn. Reson.*, **238**, 44-51 (2014). DOI: [10.1016/j.jmr.2013.10.010](https://doi.org/10.1016/j.jmr.2013.10.010)
70. Ross P.J., Broche L.M. and Lurie D.J. "Rapid Field-Cycling MRI using Fast Spin-Echo", *Magn. Reson. Med.*, **73**, 1120-1124 (2015). DOI: [10.1002/mrm.25233](https://doi.org/10.1002/mrm.25233)
71. Broche L.M., Ross P.J., Davies G.R. and Lurie D.J. "Simple algorithm for the correction of MRI image artefacts due to random phase fluctuations", *Magn. Reson. Imaging*, **44**, 55-59 (2017). DOI: [10.1016/j.mri.2017.07.023](https://doi.org/10.1016/j.mri.2017.07.023)
72. Zampetoulas V., Lurie D.J. and Broche L.M. "Correction of Environmental Magnetic Fields for the Acquisition of Nuclear Magnetic Relaxation Dispersion Profiles Below Earth's Field", *J. Magn. Reson.*, **282**, 38-46 (2017). DOI: [10.1016/j.jmr.2017.07.008](https://doi.org/10.1016/j.jmr.2017.07.008)
73. Kishimoto S., Cherukiri M.K., Khramtsov V.V., Utsumi H. and Lurie D.J. "In vivo Application of Proton Electron Double Resonance Imaging", *Antioxidants & Redox Signaling*, **28**, 1345-1364 (2018). DOI: [10.1089/ars.2017.7341](https://doi.org/10.1089/ars.2017.7341)
74. Bödenler M., de Rochefort L., Ross P.J., Chanet N., Guillot G., Davies G.R., Gösweiner C., Scharfetter H., Lurie D.J. and Broche L.M. "Comparison of fast field-cycling magnetic resonance imaging methods and future perspectives", *Molecular Physics*, **117**, 832-848 (2019). DOI: [10.1080/00268976.2018.1557349](https://doi.org/10.1080/00268976.2018.1557349)
75. Broche L.M., Ross P.J., Davies G.R., MacLeod M.-J. and Lurie D.J. "A whole-body Fast Field-Cycling scanner for clinical molecular imaging studies", *Scientific Reports*, 9:10402 (2019). DOI: [10.1038/s41598-019-46648-0](https://doi.org/10.1038/s41598-019-46648-0)
76. Kruk D., Rochowski P., Masiewicz E., Wilczynski S., Wojciechowski M., Broche L.M. and Lurie D.J. "Mechanism of Water Dynamics in Hyaluronic Dermal Fillers Revealed by Nuclear Magnetic Resonance Relaxometry", *ChemPhysChem*, 20, 1-8 (2019). DOI: [10.1002/cphc.201900761](https://doi.org/10.1002/cphc.201900761)

77. Kruk D., Masiewicz E., Borkowska A.M., Rochowski P., Fries P.H., Broche L.M. and Lurie D.J. “Dynamics of Solid Proteins by Means of Nuclear Magnetic Resonance Relaxometry”, *Biomolecules*, 9, 652 (2019). DOI: [10.3390/biom9110652](https://doi.org/10.3390/biom9110652)
78. Baroni S., Ruggiero M.R., Bitonto V., Broche L.M., Lurie D.J., Aime S. and Geninatti Crich S. “In vivo assessment of tumour associated macrophages in murine melanoma obtained by low-field relaxometry in the presence of iron oxide particles”, *Biomaterials*, 236, 119805 (2020). DOI: [10.1016/j.biomaterials.2020.119805](https://doi.org/10.1016/j.biomaterials.2020.119805)
79. Abbas H, Broche L.M., Ezzoglian A., Li D., Yucel R., Ross P.J., Cheyne L., Wilson H.M., Lurie D.J. and Dawson D.K. “Fast field-cycling magnetic resonance detection of intracellular ultra-small iron oxide particles in vitro: Proof-of-concept”, *J. Magn. Reson.*, 303, 106722 (2020). DOI: [10.1016/j.jmr.2020.106722](https://doi.org/10.1016/j.jmr.2020.106722)
80. Kruk D., Rochowski P., Florek-Wojciechowska M., Sebastião P.J., Lurie D.J., Broche L.M. “<sup>1</sup>H spin-lattice NMR relaxation in the presence of residual dipolar interactions – Dipolar relaxation enhancement”, *J. Magn. Reson.*, 318, 106783 (2020) DOI: [10.1016/j.jmr.2020.106783](https://doi.org/10.1016/j.jmr.2020.106783)
81. Kruk D., Masiewicz E., Wojciechowski M., Florek-Wojciechowska M., Broche L.M. and Lurie D.J. “Slow dynamics of solid proteins – Nuclear magnetic resonance relaxometry versus dielectric spectroscopy”, *J. Magn. Reson.*, 314, 106721 (2020). DOI: [10.1016/j.jmr.2020.106721](https://doi.org/10.1016/j.jmr.2020.106721)
82. Baroni S., Stefania R., Broche L.M., Senn N., Lurie D.J., Ross P.J., Aime S., Geninatti Crich S. “A novel class of <sup>1</sup>H-MRI Contrast Agents based on the relaxation enhancement induced on water protons by <sup>14</sup>N imidazole moieties”, *Angew. Chemie*, 60, 4208-4214 (2021). DOI: [10.1002/anie.202011513](https://doi.org/10.1002/anie.202011513)
83. Lurie D.J. and Sharp P.F. “In memoriam: John R. Mallard (1927-2021)”, *Magn. Reson. Mat. Phys. Biol. Med.*, 34, 323-325 (2021). DOI: [10.1007/s10334-021-00925-0](https://doi.org/10.1007/s10334-021-00925-0)  
Note: this article was accepted for simultaneous publication by the journals of ESMRMB (MAGMA) and of ISMRM (Magnetic Resonance in Medicine). Therefore, it was also published as:  
Lurie D.J. and Sharp P.F. “In memoriam: John R. Mallard (1927-2021)”, *Magn. Reson. Med.*, 86, 1815-1817 (2021). DOI: [10.1002/mrm.28838](https://doi.org/10.1002/mrm.28838)
84. Broche L.M., Ross P.J., Kennedy B., MacEachern C., Lurie D.J., Ashcroft G.P. “A New Method for Investigating Osteoarthritis using Fast Field Cycling Nuclear Magnetic Resonance”, *Physica Medica*, 88, 142-147 (2021). DOI: [10.1016/j.ejmp.2021.05.034](https://doi.org/10.1016/j.ejmp.2021.05.034)
85. Geninatti Crich S., Di Gregorio E., Bitonto V., Baroni S., Stefania R., Aime S., Broche L.M., Senn N., Ross P.J., Lurie D.J. “Monitoring tissue implants by field-cycling <sup>1</sup>H-MRI via the detection of changes in the <sup>14</sup>N-quadrupolar-peak from Imidazole moieties incorporated in a “smart” scaffold material”, *J. Mater. Chem. B*, 9, 4863-4872 (2021). DOI: [10.1039/D1TB00775K](https://doi.org/10.1039/D1TB00775K)
86. Bitonto V., Ruggiero M.R., Pittaro A., Castellano I., Bussone R., Broche L.M., Lurie D.J., Aime S., Baroni S., Geninatti Crich S. “Low-Field NMR Relaxometry for Intraoperative Tumour Margin Assessment in Breast-Conserving Surgery”, *Cancers* 13, 4141 (2021) DOI: [10.3390/cancers13164141](https://doi.org/10.3390/cancers13164141)

---

#### PATENTS AND APPLICATIONS:

---

1. Lurie D.J., Bussell D.M. and Mallard J.R. “Methods of Obtaining Images Representing the Distribution of Paramagnetic Molecules in Solution” (PEDRI Imaging of Free Radicals) US Patent no. 4,891,593 (2/1/1990).
2. Lurie D.J., Mallard J.R. and Nicholson I. “Methods of Obtaining Images Representing the Distribution of Paramagnetic Material in Solution” (Snapshot PEDRI Imaging) US Patent no. 5,578,922 (26/11/1996).
3. Lurie D.J., McCallum S.J., Hutchison J.M.S. and Alecci M. “Magnetic Resonance Imaging” (Swept-Field MRI of Solids) UK Patent Application 9516687.2; US Patent no. 6,133,733 (17/10/2000).
4. Alecci M., Brivati A., Lurie D.J., Placidi G., Sotgiu A. and Testa L. “Magnetic Resonance Apparatus Having Reduced Dead Time” PCT International Patent Application 137614; US Patent no. 6,150,817 (21/11/2000).
5. Lurie D.J., Davies G.R. and Pine K.J. “Field-offset coil for use with an open MRI scanner” PCT/GB2013/051921 (Filed 18/07/2013).
6. Geninatti Crich S., Baroni S., Stefania R., Ruggiero M.R., Lurie D.J., Broche L.M. and Aime S. “Nuovi agenti di contrasto per risonanza magnetica per immagini” (Novel magnetic resonance imaging contrast agents). Italian patent 102019000007647 (Filed 30/05/2019, granted 16/04/2021).

---

**CONFERENCE PRESENTATIONS:**

---

1. Lurie D.J. "Optimisation of 180° Selective Pulses in NMR Imaging" Biological Engineering Society, 6th Nordic Meeting, Aberdeen, July 1984.
2. Lurie D.J. "A Systematic Approach to the Optimisation of 90° and 180° Selective Excitation" Society of Magnetic Resonance in Medicine, 3rd Annual Meeting, New York, 1984, p486.
3. Lurie D.J. "Nonselective 180° Pulses with Resonance-Offset Compensation" Society for Magnetic Resonance Imaging, 3rd Annual Meeting, San Diego, 1985, p43.
4. Lurie D.J. "Numerical Design of Composite RF Pulses" Society of Magnetic Resonance in Medicine, 4th Annual Meeting, London, 1985, p1019.
5. Lurie D.J. "Self Compensating Selective RF Pulses" Society of Magnetic Resonance in Medicine, 5th Annual Meeting, Montreal, 1986, p1400.
6. Lurie D.J. and Mallard J.R. "Composite Pulses for NMR Imaging" Third Congress, European Society of Magnetic Resonance in Medicine and Biology, Aberdeen, 1986, p145.
7. Lurie D.J. and Mallard J.R. "Complex and Pulse Width Modulated Pulses for Improved Selective Excitation" Society of Magnetic Resonance in Medicine, 6th Annual Meeting, New York, 1987, p938.
8. Bussell D.M., Lurie D.J. and Mallard J.R. "Antennas for ESR Excitation of Low-Field NMR Samples" Society of Magnetic Resonance in Medicine, 6th Annual Meeting, New York, 1987, p826.
9. Lurie D.J., Bussell D.M., Bell L.H. and Mallard J.R. "Proton Electron Double Resonance Imaging: A New Method for Imaging Free Radicals" Society of Magnetic Resonance in Medicine, 6th Annual Meeting, New York, 1987, Works in prog., p24.
10. Nicholson I., Lurie D.J., and Mallard J.R. "Practical Considerations for Double Resonance Imaging of Free Radicals" Society of Magnetic Resonance in Medicine, 7th Annual Meeting, San Francisco, 1988, p 380.
11. Lurie D.J., Nicholson I. and Mallard J.R. "Proton Electron Double Resonance Imaging of Free Radicals in Large Aqueous Samples" Society of Magnetic Resonance in Medicine, 7th Annual Meeting, San Francisco, 1988, p 1094.
12. Lurie D.J., Nicholson I. and Mallard J.R. "Imaging Free Radicals by PEDRI at 0.01T and 0.04T" Society for Magnetic Resonance Imaging, 7th Annual Meeting, Los Angeles, 1989, p88.
13. Lurie D.J., Hutchison J.M.S., Bell L.H., Nicholson, I, Bussell D.M. and Mallard J.R. "Field-Cycled Proton Electron Double Resonance Imaging of Free Radicals in Large Aqueous Samples" Society of Magnetic Resonance in Medicine, 8th Annual Meeting, Amsterdam, 1989, p329.
14. Nicholson I., Lurie D.J. and Mallard J.R. "A Method for Improving the Signal Enhancement in Proton Electron Double Resonance Imaging" Society of Magnetic Resonance in Medicine, 8th Annual Meeting, Amsterdam, 1989, p817.
15. Wiggins C.J., Lurie D.J., Hutchison J.M.S. and Mallard J.R. "A Comparison of Water Suppression Techniques on a Low-Field Resistive Imaging System" Society of Magnetic Resonance in Medicine, 8th Annual Meeting, Amsterdam, 1989, p853.
16. Lurie D.J., Hutchison J.M.S., Bell L.H., Nicholson, I, Bussell D.M. and Mallard J.R. "Field-Cycled Proton Electron Double Resonance Imaging of Free Radicals" International Workshop on In-Vivo ESR and ESR Imaging, L'Aquila, Italy, 1989.
17. Lurie D.J., Nicholson I. and Mallard J.R. "Image-Selected EPR Spectra from Proton-Electron Double-Resonance Images of Free Radicals" European Society of Magnetic Resonance in Medicine and Biology 7th Annual Congress, Strasbourg, France, 1990, p197.
18. Nicholson I., Lurie D.J., Foster M.A. and Mallard J.R. "In Vivo Proton Electron Double Resonance Imaging of Nitroxide Free Radicals" European Society of Magnetic Resonance in Medicine and Biology 7th Annual Congress, Strasbourg, France, 1990, p455.
19. Lurie D.J., Nicholson I. and Mallard J.R. "EPR Spectra Obtained from Field-Cycled PEDRI Images" 13th International EPR Symposium held as part of 32nd Rocky Mountain Conference on Analytical Chemistry, Denver, Colorado, USA, 1990, p111.
20. Lurie D.J., Nicholson I., Foster M.A. and Mallard J.R. "Free Radicals Imaged In-Vivo in the Rat using Proton-Electron Double-Resonance Imaging" Royal Society Discussion Meeting on NMR Imaging: Recent Developments and Future Prospects; June 5-6 1990.
21. Nicholson I., Lurie D.J., Foster M.A. and Mallard J.R. "In Vivo Proton Electron Double Resonance Imaging of Nitroxide Free Radicals" Society of Magnetic Resonance in Medicine, 9th Annual Meeting, New York, USA, 1990, p619.
22. Lurie D.J., McLay, J., Nicholson I. and Mallard J.R. "UV-Generated Spin-Trapped Hydroxyl Free Radicals Imaged by Proton-Electron Double-Resonance Imaging" European Society of Magnetic Resonance in Medicine and Biology 8th Annual Congress, Zurich, Switzerland, 1991, p236.
23. Lurie D.J., Nicholson I., Foster, M.A. and Mallard J.R. "Proton-Electron Double-Resonance Imaging of Free Radicals" Digest of the World Congress on Medical Physics and BioMedical Engineering, Kyoto, Japan, July 7-12 1991; Med. Biol. Eng. Comput. **29** Supplement Part 1, p210.

24. Lurie D.J., McLay, J., Nicholson I. and Mallard J.R. "Hydroxyl Free Radical Production Imaged by Proton-Electron Double-Resonance Imaging with Spin-Trapping" Society of Magnetic Resonance in Medicine, 10th Annual Meeting, San Francisco, USA, 1991, p478.
25. Lurie D.J., Nicholson I., McLay J. and Mallard J.R. "Spin-Trapped Hydroxyl Free Radicals Studied at Low Field by Field-Cycled Dynamic Nuclear Polarization" International Symposium on Recent Advances in ESR Spectroscopies, Padova, Italy, September 8-12, 1991, p110.
26. Lurie D.J., Nicholson I., McLay J. and Mallard J.R. "UV-Generated Spin-Trapped Hydroxyl Free Radicals Imaged by Proton-Electron Double-Resonance Imaging" Presented at: Progress in MRI: Scientific and Clinical Developments in the United Kingdom. British Institute of Radiology, 14 October 1991.
27. Lurie D.J., Nicholson I., McLay J. "Detection, Characterisation and Imaging of Short-Lived Free Radicals by Double-Resonance Techniques" British Radiofrequency Spectroscopy Group Meeting, Nottingham, 12-15 April 1992.
28. Lurie D.J., Nicholson I. and Mallard J.R. "Fast Imaging of Free Radical Distributions using Snapshot Field-Cycled Proton-Electron Double-Resonance Imaging" Society of Magnetic Resonance in Medicine, 11th Annual Meeting, Berlin, Germany, 8-14 August 1992, p72.
29. Lurie D.J., Nicholson I. and Mallard J.R. "Snapshot Double-Resonance Imaging of Free Radicals" 26th Congress Ampere on Magnetic Resonance, Athens, Greece, September 6-12 1992, Extended Abstracts, pp 25-26.
30. Robb, F.J.L., Lurie, D.J. and Nicholson, I. "Oximetry Using Dynamic Nuclear Polarization Techniques" Proc. SMRM 11th Annual meeting, Berlin, p 4101 (1992).
31. Nicholson I., Lurie D.J. and Mallard J.R. "The use of Proton-Electron Double-Resonance Imaging to study Proton Mobility" 11th European Experimental NMR Conference, Lisbon June 1992 (Abstract 158)
32. Lurie D.J., Nicholson I., Robb F.J.L., Foster M.A., Bussell D.M., Yeung D., Hutchison J.M.S. "Detection and Imaging of Free Radicals by Proton-Electron Double-Resonance Imaging (PEDRI). Workshop on EPR of Viable Biological Systems, Dartmouth College, Hanover, New Hampshire, USA, 17-21 October 1993.
33. Lurie D.J., McLay J.S., Partridge R.S., Robb F.J.L., Nicholson I. "The Use of NMR/EPR Double Resonance Techniques to Detect and Image Free Radicals" 4th International Symposium on Spin Trapping and Organic EPR Spectroscopy, Oklahoma Medical Research Foundation, Oklahoma City, USA, 24-28 October 1993.
34. Robb, F.J.L., Lurie, D.J. and Nicholson, I. "Proton Electron Double Resonance Imaging of Oxygen Concentrations" Proc. Royal Society of Chemistry ESR Group Meeting, Sheffield (1993).
35. Lurie D.J., Foster M.A., Partridge R.S., Nicholson I., Robb F.J.L. "EPRI and PEDRI Functional Imaging" Institution of Electrical Engineers, Colloquium on Functional Imaging, London, 5th January 1994, p5/1-5/3.
36. Lurie D.J., Foster M.A., Partridge R.S., Nicholson I., Robb F.J.L. "Proton Electron Double Resonance Imaging of Free Radical Contrast Agents" Joint MRC/SERC Workshop on Functional Imaging, University of Nottingham, 6-7 January 1994.
37. Lurie D.J., Foster M.A., Partridge R.S., Nicholson I. and Robb F.J.L. "Progress in Proton-Electron Double-Resonance Imaging of Free Radicals" First Nottingham Symposium on Magnetic Resonance in Medicine, University of Nottingham, 6-8 April 1994, p S13.
38. Lurie D.J., Foster M.A., Partridge R.S. and Seimenis I. "Imaging Free Radicals by EPRI and PEDRI" 52nd Annual Congress of the British Institute of Radiology, Harrogate, 23-25 May 1994, p1.
39. Lurie D.J. "Optimisation of Field-Cycled Proton-Electron Double-Resonance Imaging of Free Radicals" Society of Magnetic Resonance 2nd Meeting, San Francisco, 6-12 August 1994, p 751.
40. Nicholson I., Robb F.J.L. and Lurie D.J. "Detection and Imaging of free radicals using radiofrequency Longitudinally-Detected ESR (LODESR Imaging)" 2nd Annual Meeting of SMR, San Francisco August 1994, p385.
41. Yeung D., Hutchison J.M.S. and Lurie D.J. "An Improved Birdcage Design for Field-Cycled Proton-Electron Double-Resonance Imaging" Society of Magnetic Resonance 2nd Annual Meeting, San Francisco, August 1994, p736.
42. Foster M.A., Seimenis I., Nicholson I., Lurie D.J. and Hutchison J.M.S. "Proton Electron Double Resonance Imaging Study of Kidney Function in Rat Papillary Necrosis" BIR Rontgen Centenary Congress, Birmingham, June 1995, p47.
43. McCallum S.J., Alecci M. and Lurie D.J. "A Flexible Free Radical Detection System Capable of CW-ESR and PEDRI" BIR Rontgen Centenary Congress, Birmingham, June 1995, p471.
44. Nicholson I., Robb F.J.L. and Lurie D.J. "Detection and Imaging of Free Radicals Using Radiofrequency Longitudinally Detected ESR (LODESR Imaging)" BIR Rontgen Centenary Congress, Birmingham, June 1995, p471.
45. Foster M.A., Partridge R., Seimenis I. and Lurie D.J. "Passage of a Nitroxide Spin-Label through Rat Liver: Quantitative Inter-relationship of ESR and PEDRI Observations" Proc. Society of Magnetic Resonance 3rd Meeting, Nice, France, August 1995, p1213.
46. Seimenis I., Foster M.A., Lurie D.J., Hutchison J.M.S., Whiting P.H., Payne S. and Brown P. "In Vivo PEDRI Study of the Renal Excretion Mechanism of a Nitroxide Free Radical" Proc. Society of Magnetic Resonance 3rd Meeting, Nice, France, August 1995, p1214.
47. Seimenis I., Foster M.A., Lurie D.J., Hutchison J.M.S., Whiting P.H., Payne S. and Brown P. "The Severity and Progress of BEA-Induced Renal Papillary Necrosis Assessed by PEDRI" Proc. Society of Magnetic Resonance 3rd Meeting, Nice, France, August 1995, p1215.

48. Alecci M., McCallum S.J., Foster M.A., Lurie D.J. and Seimenis I. "Detection of Nitroxide Free Radicals in the Live Rat by 300 MHz EPR Spectroscopy" Proc. Society of Magnetic Resonance 3rd Meeting, Nice, France, August 1995, p1216.
49. McCallum S.J., Alecci M. and Lurie D.J. "Modification of a Whole Body MR Imager to Allow In Vivo EPR Spectroscopy" Proc. Society of Magnetic Resonance 3rd Meeting, Nice, France, August 1995, p1217.
50. Yeung D., Hutchison J.M.S. and Lurie D.J. "A 2.5 MHz Birdcage Resonator for Low-Field MRI" Proc. Society of Magnetic Resonance 3rd Meeting, Nice, France, August 1995, p965.
51. Baras P., Hutchison J.M.S. and Lurie D.J. "Development of a Resistive Field Cycled MRI System" Proc. Society of Magnetic Resonance 3rd Meeting, Nice, France, August 1995, p691.
52. Lurie D.J., Yeung D., Foster M.A. and Partridge R.S. "A Whole-Body Free Radical Imager Using Field-Cycled PEDRI" Proc. 3rd International Conference on Magnetic Resonance Microscopy, Wurzburg, Germany, August 1995, p13.
53. Lurie D.J., McCallum S.J., Hutchison J.M.S. and Alecci M. "A New Technique for Imaging Ultra-Short T2 Solids" Proc. 3rd International Conference on Magnetic Resonance Microscopy, Wurzburg, Germany, August 1995, p24.
54. McCallum S.J., Alecci M. and Lurie D.J. "Progress Towards a Combined PEDRI and CW EPR Instrument for Detecting Free Radicals In Vivo" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p.13.
55. Robb F.J.L., Hutchison J.M.S., Nicholson I., Lurie D.J. and Foster M.A. "A Small Bore FC-PEDRI Imaging System for Small Mammals" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p14.
56. Nicholson I., Robb F.J.L. and Lurie D.J. "Two-Dimensional Imaging of Free Radicals using Radiofrequency Longitudinally-Detected ESR (LODESR Imaging)" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p20.
57. Lurie D.J., Yeung D., Partridge R.S. and Hutchison J.M.S. "Design, Construction and Use of a Whole-Body Free Radical Imager using FC-PEDRI" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p29.
58. Alecci M., Lurie D.J. and Nicholson I. "A PEDRI Apparatus with Simultaneous EPR Irradiation" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p30.
59. Foster M.A., Seimenis I. and Lurie D.J. "Excretion of an Exogenous Free Radical in the Rat Monitored by Proton-Electron Double-Resonance Imaging" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p32.
60. Partridge R.S., Foster M.A., Seimenis I. and Lurie D.J. "Nitroxide Spin-Label Passage Through Rat Liver: Quantitative Comparison of X-Band and PEDRI Results" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p33.
61. Alecci M., Nicholson I. and Lurie D.J. "A Novel Multiple-Tuned RF Loop-Gap Resonator for use in PEDRI" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p34.
62. Alecci M., McCallum S.J., Foster M.A., Lurie D.J. and Seimenis I. "In Vivo Detection of a Nitroxide Free Radical by RF EPR and PEDRI: Preliminary Comparison" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p35.
63. Partridge R.S., Lurie D.J. and McLay J. "FCDNP and PEDRI of Endogenous Biological Free Radicals In-Vitro" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p42.
64. Nicholson I., Foster M.A., Robb F.J.L., Hutchison J.M.S. and Lurie D.J. "Two-Dimensional In-Vivo Imaging in the Rat using Radiofrequency Longitudinally-Detected ESR (LODESR Imaging)" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p76.
65. Seimenis I., Foster M.A., Lurie D.J., Hutchison J.M.S., Whiting P.H., Payne S. and Brown P. "BEA-Induced Damage to Renal Function in the Rat - a PEDRI Study" Proc. International Workshop on In Vivo ESR and ESR Imaging, L'Aquila, Italy, September 1995, p85.
66. Lurie D.J., Foster M.A., Hutchison J.M.S. and Yeung D. "Development and Use of a Whole-Body Free Radical Imager Using Field-Cycled PEDRI" Proc. Society of Magnetic Resonance 4th Meeting, New York, April 1996, p1382.
67. Alecci M., Lurie D.J., Nicholson I., Placidi G. and Sotgiu A. "Increasing PEDRI Sensitivity with Multiple Simultaneous EPR Irradiation of Nitroxide Free Radicals" Proc. Society of Magnetic Resonance 4th Meeting, New York, April 1996, p1384.
68. Yeung D., Hutchison J.M.S. and Lurie D.J. "A New Dual-Tuned Split-Solenoid for Double-Resonance Applications" Proc. Society of Magnetic Resonance 4th Meeting, New York, April 1996, p1424.
69. Lurie D.J., Fichtlscherer B., Seimenis I., Foster M.A. and Mülsch A. "Detection and Imaging of Spin-Trapped Nitric Oxide Using PEDRI" Proc. 19th Intl. EPR Symp. (38th Rocky Mountain Conf. on Analyt. Chem.), Denver, Colorado, July 1996, Abstract no. 74.
70. Lurie D.J., Foster M.A., Yeung D. and Hutchison J.M.S. "A Human-Scale Free Radical Imager Using Field-Cycled PEDRI" Proc. 19th Intl. EPR Symp. (38th Rocky Mountain Conf. on Analyt. Chem.), Denver, Colorado, July 1996, Abstract no. 117.

71. Nicholson I., Foster M.A., Robb F.J.L., Hutchison J.M.S. and Lurie D.J. "Two-Dimensional In-Vivo Imaging Using Longitudinally-Detected ESR (LODESR Imaging)" Proc. 19th Intl. EPR Symp. (38th Rocky Mountain Conf. on Analyt. Chem.), Denver, Colorado, July 1996, Abstract no. 133.
72. Robb F.J.L., Nicholson I. and Lurie D.J. "Modelling the PEDRI Enhancement as a Function of [O<sub>2</sub>]" Proc. 19th Intl. EPR Symp. (38th Rocky Mountain Conf. on Analyt. Chem.), Denver, Colorado, July 1996, Abstract no. 148.
73. Robb F.J.L., Hutchison J.M.S., Nicholson I. and Lurie D.J. "A Small-Bore FC-PEDRI System" Proc. 19th Intl. EPR Symp. (38th Rocky Mountain Conf. on Analyt. Chem.), Denver, Colorado, July 1996, Abstract no. 149.
74. Alecci M., Lurie D.J., Nicholson I., Placidi G. and Sotgiu A. "A PEDRI Apparatus with Simultaneous Multiple EPR Irradiation at 10 mT" Scientific Program and Book of Abstracts, ESMRMB 13<sup>th</sup> Annual Meeting, Prague, September 1996; MAG\*MA, Supplement to Vol. IV No. II, p72.
75. Nicholson I., Foster M.A., Lurie D.J. and Seimenis I. "Longitudinally-Detected ESR Imaging for Studying Exogenous Free Radical in the Living Rat" Scientific Program and Book of Abstracts, ESMRMB 13<sup>th</sup> Annual Meeting, Prague, September 1996; MAG\*MA, Supplement to Vol. IV No. II, p73.
76. Robb F.J.L., Nicholson I. and Lurie D.J. "Theoretical Aspects of PEDRI Oximetry" Scientific Program and Book of Abstracts, ESMRMB 13<sup>th</sup> Annual Meeting, Prague, September 1996; MAG\*MA, Supplement to Vol. IV No. II, p268.
77. Foster M.A., Seimenis I., Lurie D.J., Fichtlscherer B. and Mülsch A. "X-Band ESR, PEDRI and FC-DNP Detection of Naturally-Trapped Nitroxide Free Radicals" Scientific Program and Book of Abstracts, ESMRMB 13<sup>th</sup> Annual Meeting, Prague, September 1996; MAG\*MA, Supplement to Vol. IV No. II, p268.
78. Baras P., Hutchison J.M.S. and Lurie D.J. "Signal Response in Field-Cycled MRI Pulse Sequences" Scientific Program and Book of Abstracts, ESMRMB 13<sup>th</sup> Annual Meeting, Prague, September 1996; MAG\*MA, Supplement to Vol. IV No. II, p278.
79. Davies G.R., McCallum S.J., Nicholson I., Hutchison J.M.S. and Lurie D.J. "CW Acquisition Technique for MRI of Solids" Extended Abstracts, 28<sup>th</sup> Congress Ampere, Canterbury, UK, 1<sup>st</sup> - 6<sup>th</sup> September 1996, p409.
80. Fichtlscherer B., Seimenis I., Lurie D.J., Foster M. and Mülsch A. "Magnetic Resonance Imaging of Nitric Oxide" Deutsche Gesellschaft für experimentelle und klinische Pharmakologie und Toxikologie, 38th Spring Meeting, Mainz, Germany, published in Archives of Pharmacology, **355** (Suppl.), 146 (1997).
81. Yeung D., Hutchison J.M.S. and Lurie D.J. "A New Dual-Tuned Birdcage Resonator For Double Resonance Applications" Proc. Int. Society of Magnetic Resonance in Medicine 5<sup>th</sup> Meeting, Vancouver, April 1997, p1495.
82. Lurie D.J., Foster M.A., Seimenis I., Fichtlscherer B. and Mülsch A. "Naturally-Generated Nitric Oxide Complexes Detected by Overhauser Techniques" Proc. Int. Society of Magnetic Resonance in Medicine 5<sup>th</sup> Meeting, Vancouver, April 1997, p2128.
83. Robb F.J.L., Hutchison J.M.S., Nicholson I. and Lurie D.J. "Correcting for Eddy-Current Effects in a FC-PEDRI Instrument Using an Inductive Feedback Mechanism" Proc. Int. Society of Magnetic Resonance in Medicine 5<sup>th</sup> Meeting, Vancouver, April 1997, p2131.
84. Alecci M., Brivati J.A., Placidi G., Testa L., Lurie D.J. and Sotgiu A. "A Novel Transmitter/Receiver for Pulsed EPR" Proc. Int. Society of Magnetic Resonance 5<sup>th</sup> Meeting, Vancouver, April 1997, p2132.
85. Nicholson I., Robb F.J.L., Panagiotelis I. and Lurie D.J. "A Combined System for Proton NMR Imaging and Radiofrequency Longitudinally Detected ESR Imaging" Proc. Int. Society of Magnetic Resonance in Medicine 5<sup>th</sup> Meeting, Vancouver, April 1997, p2133.
86. Lurie D.J., Foster M.A. and Seimenis I. "Progress Towards the Detection and Imaging of Naturally-Detected Free Radicals in Biological Systems by Double Magnetic Resonance" Institute of Physics and Engineering in Medicine 3<sup>rd</sup> Annual Conference, Dundee, September 1997, p116.
87. Nicholson I., Robb F.J.L., Koptioug A., Foster M.A. and Lurie D.J. "Imaging Free Radicals using Radio Frequency Longitudinally Detected ESR (LODESR Imaging)" Institute of Physics and Engineering in Medicine 3<sup>rd</sup> Annual Conference, Dundee, September 1997, p117.
88. McCallum S.J. and Lurie D.J. "A Multimodal Magnetic Resonance Instrument for Detecting Free Radicals In-Vivo" Institute of Physics and Engineering in Medicine 3<sup>rd</sup> Annual Conference, Dundee, September 1997, p187.
89. Davies G.R., McCallum S.J., Nicholson I., Lurie D.J. and Hutchison J.M.S. "CW MRI of Short T<sub>2</sub> Materials" 4<sup>th</sup> International Conference on Magnetic Resonance Microscopy and Macroscopy, Albuquerque, USA, September 1997, p45.
90. Fichtlscherer B., Foster M.A., Lurie D.J., Seimenis I. and Mülsch A. "Overhauser Imaging of Nitric Oxide" 2<sup>nd</sup> Int. Conf. on Bioradicals and 5<sup>th</sup> Int. Workshop on ESR Imaging and in vivo ESR Spectroscopy, Yamagata, Japan, October 1997, p43.
91. Nicholson I., Robb F.J.L., Koptioug A., Hutchison J.M.S. and Lurie D.J. "RF Coils for a Combined System Capable of Proton NMR Imaging and Radiofrequency Longitudinally Detected ESR Imaging" 2<sup>nd</sup> Int. Conf. on Bioradicals and 5<sup>th</sup> Int. Workshop on ESR Imaging and in vivo ESR Spectroscopy, Yamagata, Japan, October 1997, p51.
92. Puwanich P. and Lurie D.J. "Development of a Loop-Gap Resonator for Field-Cycled Proton Electron Double Resonance Imaging" 2<sup>nd</sup> Int. Conf. on Bioradicals and 5<sup>th</sup> Int. Workshop on ESR Imaging and in vivo ESR Spectroscopy, Yamagata, Japan, October 1997, p55.

93. Foster M.A., Lurie D.J., Seimenis I., Nicholson I., McCallum S. and Alecci M. "In vivo Detection of an Exogenous Nitroxide Spin Label (PCA) - a Comparison of ESR-based Techniques" 2<sup>nd</sup> Int. Conf. on Bioradicals and 5<sup>th</sup> Int. Workshop on ESR Imaging and in vivo ESR Spectroscopy, Yamagata, Japan, October 1997, p77.
94. McCallum S.J. and Lurie D.J. "Free Radical Detection In Vivo using a Multimodality MR System Capable of Sequential NMR Imaging, PEDRI and RF CW-EPR Spectroscopy" 2<sup>nd</sup> Int. Conf. on Bioradicals and 5<sup>th</sup> Int. Workshop on ESR Imaging and in vivo ESR Spectroscopy, Yamagata, Japan, October 1997, p78.
95. Lurie D.J. "Detection and Imaging of Free Radicals In Vivo by Overhauser Techniques" 2<sup>nd</sup> Int. Conf. on Bioradicals and 5<sup>th</sup> Int. Workshop on ESR Imaging and in vivo ESR Spectroscopy, Yamagata, Japan, October 1997, p81.
96. Foster M.A., Seimenis I., Lurie D.J., Fichtlscherer B. and Mülsch A. "Ex- and In-vivo Detection of Nitric Oxide / Iron / Protein Compounds in Rat Liver using PEDRI" 2<sup>nd</sup> Int. Conf. on Bioradicals and 5<sup>th</sup> Int. Workshop on ESR Imaging and in vivo ESR Spectroscopy, Yamagata, Japan, October 1997, p81.
97. Alecci M. and Lurie D.J. "Low Field (10 mT) Pulsed Dynamic Nuclear Polarisation" Proc. Int. Society of Magnetic Resonance in Medicine 6<sup>th</sup> Meeting, Sydney, March 1998, p1920.
98. Lurie D.J., Foster M.A. and Hutchison J.M.S. "Overhauser Techniques for Imaging Free Radicals" 14<sup>th</sup> European Experimental NMR Conference, Bled, Slovenia, May 1998, p4.
99. Davies G.R., McCallum S.J., Hutchison J.M.S. and Lurie D.J. "Continuous-Wave NMR Imaging of Solids" 14<sup>th</sup> European Experimental NMR Conference, Bled, Slovenia, May 1998, p87.
100. Lurie D.J. "Field-Cycled Magnetic Resonance Imaging - Techniques and Applications" Symposium on Field-Cycling NMR Relaxometry, Berlin, August 1998, p5.
101. Lurie D.J. "Quadrupole-Dip Measurement in Humans by Whole-Body Field-Cycling NMR Relaxometry and Imaging" in "Magnetic Resonance and Related Phenomena", D. Ziessow and W. Lubitz, eds., ISBN 3-7983-1780-1, Proc. 29<sup>th</sup> Ampere and 13<sup>th</sup> ISMAR Conference, Berlin, August 1998, p254.
102. Davies G.R., McCallum S.J., Hutchison J.M.S. and Lurie D.J. "Continuous-Wave NMR Imaging of Solid Materials" in "Magnetic Resonance and Related Phenomena", D. Ziessow and W. Lubitz, eds., ISBN 3-7983-1780-1, Proc. 29<sup>th</sup> Ampere and 13<sup>th</sup> ISMAR Conference, Berlin, August 1998, p567.
103. Davies G.R., McCallum S.J., Hutchison J.M.S., Lurie D.J. and Nicholson I. "Continuous-Wave NMR Imaging of Solid Materials" Ampere Workshop on Porous Systems and Systems with Restricted Geometry, Delphi, Greece, August 1998, p64.
104. Foster M.A., Grigor'ev I.A., Lurie D.J., McCallum S., Panagiotelis I., Koptioug A., Hutchison J.M.S. and Nicholson I. "In Vivo Detection of a pH-Sensitive Nitroxide in the Rat Stomach by Low-Field ESR-Based Techniques" EPR Workshop on In Vivo EPR and Related Studies, Dartmouth College, Hanover, New Hampshire, September 1998, p21.
105. Lurie D.J. "Practical Aspects of PEDRI and Field-Cycled PEDRI Imaging of Free Radicals" EPR Workshop on In Vivo EPR and Related Studies, Dartmouth College, Hanover, New Hampshire, September 1998, p55.
106. Lurie D.J. "Techniques and Applications of Whole-Body Field-Cycling MRI" 4<sup>th</sup> Annual Meeting, British Chapter of ISMRM, Nottingham, December 1998, p.19.
107. Lurie D.J. "Quadrupole Dips Measured by Whole-Body Field-Cycling Relaxometry and Imaging" Proc. Int. Society of Magnetic Resonance in Medicine 7<sup>th</sup> Meeting, Philadelphia, May 1999, p653.
108. Puwanich P., Lurie D.J. and Foster M.A. "Rapid Imaging of Free Radicals In Vivo using Snapshot Field-Cycled PEDRI" Proc. Int. Society of Magnetic Resonance in Medicine 7<sup>th</sup> Meeting, Philadelphia, May 1999, p2108.
109. Foster M., Grigor'ev I., Lurie D.J., Khramtsov V., McCallum S., Panagiotelis I., Hutchison J., Koptioug A. and Nicholson I. "Low-Field ESR-Based Techniques in the in vivo Detection and in vitro Study of pH-Sensitive Imidazolidine Nitroxide Spin Probes" Proc. Int. Society of Magnetic Resonance in Medicine 7<sup>th</sup> Meeting, Philadelphia, May 1999, p2111.
110. Foster M.A., Khramtsov V.V., Hutchison J.M.S., Grigor'ev I.A., Lurie D.J., McCallum S., Panagiotelis I., Nicholson I., Puwanich P. "In Vivo and In Vitro Studies of pH-Sensitive Spin Probes by Low-Field ESR" Intl. Workshop on In Vivo EPR and PEDRI, Aberdeen, September 1999, p16.
111. Fichtlscherer B., Foster M.A., Lurie D.J., Mülsch A. "Proton-Electron Double-Resonance Imaging of Nitrosyl-Iron Complexes" Intl. Workshop on In Vivo EPR and PEDRI, Aberdeen, September 1999, p28.
112. Alecci M., Placidi G., Brivati J.A., Testa L., Lurie D.J. and Sotgiu A. "220 MHz Time-Domain EPR Spectroscopy and Imaging" Intl. Workshop on In Vivo EPR and PEDRI, Aberdeen, September 1999, p36.
113. Puwanich P., Lurie D.J. and Foster M.A. "Rapid Imaging of Free Radicals using Snapshot Field-Cycled PEDRI" Intl. Workshop on In Vivo EPR and PEDRI, Aberdeen, September 1999, p48.
114. Foster M.A., Grigor'ev I.A., Lurie D.J., Khramtsov V.V., Hutchison J.M.S., McCallum S., Panagiotelis I. and Nicholson I. "Further Low-Field ESR Studies with the pH-Sensitive Spin Probe HMI" Intl. Workshop on In Vivo EPR and PEDRI, Aberdeen, September 1999, p49.
115. Alecci M., Placidi G., Lurie D.J. and Sotgiu A. "Theoretical and Experimental Optimisation of the Dead Time of RF Coils" Proc. Int. Society of Magnetic Resonance in Medicine 8<sup>th</sup> Meeting, Denver, April 2000, p1401.
116. Lurie D.J., Foster M.A., Youngdee W., Khramtsov V.V. and Grigor'ev I.A. "Recent Progress in Field-Cycled PEDRI Imaging of Free Radicals" 23<sup>rd</sup> International EPR Symposium, Proc. 42<sup>nd</sup> Rocky Mountain Conference on Analytical Chemistry, Broomfield, Colorado, USA, August 2000, abstract #31.

117. Lurie D.J., Foster M.A., Puwanich P., Youngdee W., Khramtsov V.V., Grigor'ev I.A., Fichtlscherer B. and Mülsch A. "Imaging Free Radicals In Vivo by Overhauser Techniques" Proc. Royal Society of Chemistry ESR Group 33<sup>rd</sup> Annual Meeting, Norwich, September 2000, abstract #L25.
118. Lurie D.J. "Applications of Field-Cycling MRI" British Radiofrequency Spectroscopy Group Christmas Meeting 2000, Institute of Physics, London, November 2000.
119. Alecci M., Lurie D.J. and Sotgiu A. "Measurement of Longitudinal Relaxation Times of Free Radicals by Low-Field Pulsed Dynamic Nuclear Polarization" Proc. ISMRM 9<sup>th</sup> Scientific Meeting, Glasgow, April 2001, p935.
120. Foster M.A., Grigor'ev I.A., Hutchison J.M.S., Khramtsov V.V., Lurie D.J. and Nicholson I. "Comparative Sensitivity of a pH-sensitive Spin Probe in Natural and Isotopically-Substituted States" Proc. ISMRM 9<sup>th</sup> Scientific Meeting, Glasgow, April 2001, p937.
121. Zweier J.L., Li H., Deng Y., Kuppusamy P. and Lurie D.J. "Application of PEDRI to Measure the In vivo Distribution and Clearance of a Triaryl Methyl Radical in Mice" Proc. ISMRM 9<sup>th</sup> Scientific Meeting, Glasgow, April 2001, p938.
122. Lurie D.J., Li H. and Zweier J.L. "A Dual-Purpose 20 mT PEDRI and 0.38 T MR Imager based on a Resistive-Magnet Clinical MRI System" Proc. ISMRM 9<sup>th</sup> Scientific Meeting, Glasgow, April 2001, p939.
123. Youngdee W., Lurie D.J. and Foster M.A. "Rapid Imaging of Free Radicals In Vivo using Hybrid Fast Field Cycling PEDRI" Proc. ISMRM 9<sup>th</sup> Scientific Meeting, Glasgow, April 2001, p940.
124. Lurie D.J., Foster M.A. and Youngdee W. "Recent Developments in Field-Cycling MRI – Free Radicals and Quadrupole Dips" 2<sup>nd</sup> Conference on Field Cycling NMR Relaxometry, Torino, Italy, June 2001, p25-26.
125. Lurie D.J., Foster M.A., Youngdee W., Khramtsov V.V. and Grigor'ev I.A. "Recent Progress in PEDRI Imaging of Free Radicals" Joint Symposium on Bio-Sensing and Bio-Imaging, Yamagata, Japan, August 2001, abstract IA-6.
126. Lurie D.J., Foster M.A., Hutchison J., Youngdee W., Panagiotelis I., Davies G., Weir N., Khramtsov V. and Grigor'ev I. "Recent Progress in Techniques and Applications of Field-Cycled PEDRI" 9<sup>th</sup> International Meeting on EPR Studies of Viable Systems, Dartmouth College, Hanover, NH, USA, September 2001, page S-3.
127. Zweier J.L., Li H., Deng Y., Kuppusamy P. and Lurie D.J. "Application of PEDRI to Measure the In Vivo Distribution and Clearance of a Triaryl Methyl Radical in Mice" 9<sup>th</sup> International Meeting on EPR Studies of Viable Systems, Dartmouth College, Hanover, NH, USA, September 2001, page M-12(P).
128. Khramtsov V.V., Grigor'ev I.A., Foster M.A. and Lurie D.J. "In Vivo and In Vitro EPR Studies Using Imidazoline Nitroxide Spin Probes" 9<sup>th</sup> International Meeting on EPR Studies of Viable Systems, Dartmouth College, Hanover, NH, USA, September 2001, page T-3.
129. Lurie D.J., Li H. and Zweier J. "A 20 mT PEDRI Imager Based on a 0.38 T Resistive-Magnet Clinical MRI System" 9<sup>th</sup> International Meeting on EPR Studies of Viable Systems, Dartmouth College, Hanover, NH, USA, September 2001, page W-10(P).
130. Lurie D.J., Foster M.A., Youngdee W., Khramtsov V.V. and Grigor'ev I. "Recent Progress and Future Prospects of Free Radical Imaging by PEDRI" Third Asia-Pacific EPR/ESR Symposium, Kobe, Japan, October 2001, page S3-14.
131. Lurie D.J., Youngdee W., Curto C.A., Foster M.A. and Davies G.R. "Overhauser Techniques for the Detection and Imaging of Free Radicals In Vivo" Royal Society of Chemistry ESR Group, 35<sup>th</sup> International Meeting, Aberdeen, UK, April 2002, page L1.
132. Li H., Liebgott T., Deng Y., Lurie D.J. and Zweier J.L. "Proton Electron Double Resonance Imaging of the Isolated Beating Rat Heart" Proc. ISMRM 10<sup>th</sup> Scientific Meeting, Honolulu, USA, May 2002, p2541.
133. Lurie D.J., Foster M.A., Davies G.R. and Youngdee W. "Detection and Imaging of Free Radicals using Overhauser Techniques" VI Voevodsky Conference on Physics and Chemistry of Elementary Chemical Processes, Novosibirsk, Russia, July 2002, p46.
134. Foster M.A., Grigor'ev I.A., Kirilyuk I.A., Hutchison J.M.S., Lurie D.J. and Khramtsov V.V. "Monitoring Acidity in the Stomach in the Live Rat" VI Voevodsky Conference on Physics and Chemistry of Elementary Chemical Processes, Novosibirsk, Russia, July 2002, p22.
135. Fagan A.J., Lurie D.J., Davies G.R. and Hutchison J.M.S. "Continuous Wave MRI of Heterogeneous Materials" 6<sup>th</sup> International Conference on Magnetic Resonance in Porous Media, Ulm, Germany, September 2002, pO4.
136. Fagan A.J., Lurie D.J., Davies G.R. and Hutchison J.M.S. "Imaging Short T2 Materials - the Continuous Wave MR Technique", 13<sup>th</sup> NMR Symposium, Manchester, January 2003.
137. Lurie D.J., Davies G.R., Hutchison J.M.S. and Foster M.A. "Field-Cycled PEDRI – Effect of Detection Field Strength" 10<sup>th</sup> International Workshop on Bio-Medical ESR Spectroscopy and Imaging", Fukuoka, Japan, April 2003, pO-5.
138. Foster M.A., Grigor'ev I.A., Hutchison J.M.S., Lurie D.J., Kirilyuk I. and Khramtsov V.V. "Monitoring Antacids *In Vivo* by PEDRI and LODSR, Using Isotopically-Substituted Imidazolidine Spin Probes" 10<sup>th</sup> International Workshop on Bio-Medical ESR Spectroscopy and Imaging", Fukuoka, Japan, April 2003, pO-11.
139. Fagan A.J., Davies G.R., Hutchison J.M.S. and Lurie D.J. "Continuous Wave NMR Imaging of Solid Materials" BRSG Easter Meeting on "Applied Magnetic Resonance", University of Dundee, April 2003.
140. Lurie D.J., Davies G.R., Hutchison J.M.S. and Foster M.A. "Field-Cycling MRI with 0.5T Detection" 3<sup>rd</sup> Conference on Field-Cycling Relaxometry, Torino, Italy, May 2003, p13.

141. Lurie D.J., Davies G.R., Hutchison J.M.S. and Foster M.A. "DNP Detection and Imaging of Free Radicals" 10<sup>th</sup> Chianti Workshop on Magnetic Resonance, San Miniato, Italy, May 2003, p26.
142. Lurie D.J., Davies G.R., Hutchison J.M.S. and Foster M.A. "Field-Cycled Overhauser Techniques for the Study of Free Radicals In-Vivo" 5<sup>th</sup> Meeting of the European Federation of EPR Groups, Lisbon, Portugal, September 2003, p PI3.
143. Foster M.A., Grigor'ev I.A., Hutchison J.M.S., Lurie D.J. and Khramtsov V.V. "In Vivo Monitoring of Antacid Activity in the Rat Stomach" 5<sup>th</sup> Meeting of the European Federation of EPR Groups, Lisbon, Portugal, September 2003, p P24.
144. Fagan A.J., Davies G.R., Hutchinson J.M.S. and Lurie D.J. "Continuous Wave NMR Imaging of Short T<sub>2</sub> Materials" 7<sup>th</sup> International Conference on Magnetic Resonance Microscopy, Snowbird, Utah, USA, September 2003.
145. Lurie D.J., Hutchison J.M.S., Foster M.A., Davies G.R., Shet K., Khramtsov V.V., Grigor'ev I.A. and Nestle N. "Free Radical Imaging by PEDRI and LODESr" International Symposium on the Instrumentation of EPR Spectroscopy, Yonezawa, Yamagata, Japan, December 2003, p O-4.
146. Lurie D.J., Hutchison J.M.S., Foster M.A., Davies G.R., Shet K.V. and Nestle N. "Techniques and Applications of Field-Cycling Overhauser MRI" 7<sup>th</sup> International Conference on Magnetic Resonance in Porous Media, Palaiseau, France, July 2004, p 26.
147. Fagan A.J., Lurie D.J., Davies G.R., Hutchison J.M.S. and Nestle N. "Continuous-Wave Multi-Nuclei MRI of Porous Materials" 7<sup>th</sup> International Conference on Magnetic Resonance in Porous Media, Palaiseau, France, July 2004, p 65.
148. Lurie D.J., Davies G.R., Hutchison J.M.S. and Foster M.A. "Progress in Techniques and Applications of Overhauser-based Free Radical Imaging" 6<sup>th</sup> Workshop on EPR Applications in Biology and Medicine, Krakow, Poland, October 2004, p49.
149. Lurie D.J., Davies G.R. and Hutchison J.M.S. "A Field-Cycling MRI System with Detection at 0.45T" Proc. ISMRM 13<sup>th</sup> Meeting, Miami Beach, USA, May 2005, p903.
150. Davies G.R. and Lurie D.J. "Quantitative Field-Cycling T<sub>1</sub> Dispersion Imaging" Proc. ISMRM 13<sup>th</sup> Meeting, Miami Beach, USA, May 2005, p2187.
151. Modica A., Lurie D.J. and Alecci M. "Optimization of a RF Coil System for Sequential, Co-registered Fluorine and Proton Overhauser Imaging" Proc. ISMRM 13<sup>th</sup> Meeting, Miami Beach, USA, May 2005, p2569.
152. Davies G.R., Cameron G.C. and Lurie D.J. "Protein Quantification by Field-Cycling MRI" 4<sup>th</sup> Conference on Field Cycling NMR Relaxometry, Turin, Italy, May 2005, pO6.
153. Lurie D.J., Davies G.R., Hutchison J.M.S. and Polyon C. "Techniques and Applications of Overhauser Effect Imaging" 11<sup>th</sup> In Vivo EPR Spectroscopy and Imaging Conference, Columbus, Ohio, USA, September 2005, p134.
154. Lurie D.J. "Free Radical Imaging by Magnetic Resonance" 6<sup>th</sup> Symposium on Application of Molecular Spins: from Nanomagnets to Biological Spin Systems", Nagoya, Japan, March 2006, p26.
155. Lurie D.J., Fagan A.J., Davies G.R. and Hutchison J.M.S. "Continuous-Wave MRI of Short-T<sub>2</sub> Solid Materials", Proc. ISMRM 14<sup>th</sup> Meeting, Seattle, USA, May 2006, p777.
156. Lurie D.J. and Davies G.R. "Progress in Fast Field-Cycling MRI", 5<sup>th</sup> Conference on Field Cycling NMR Relaxometry, Turin, Italy, May 2007, pO16.
157. Choi C.H. and Lurie D.J. "Implementation of Magnetisation Transfer MRI at Low Field", Ampere NMR School, Poznan, Wierzba, Poland, June 2008, p52.
158. Lurie D.J., Choi C.H., Davies G.R., Ó hÓgáin, D. and Pine K.J., "Principles and Applications of Magnetic Field Cycling in MRI", 20<sup>th</sup> International Conference of the Society for Medical Innovation and Technology, Vienna, Austria, August 2008.
159. Pine K.J., Davies G.R. and Lurie D.J., "Spatially selective field-cycling NMR relaxometry", 25<sup>th</sup> Annual Scientific Meeting of the European Society for Magnetic Resonance in Medicine and Biology, Valencia, Spain, September 2008, p258.
160. Lurie D.J., Choi C., Davies G.R., Ó hÓgáin D. and Pine K.J., "Fast Field-Cycling Magnetic Resonance Imaging", 4<sup>th</sup> Meeting of the Saudi Physical Society, Riyadh, Saudi Arabia, November 2008, p xi.
161. Pine K.J., Davies G.R. and Lurie D.J., "Localized In Vivo Fast Field-Cycling Relaxometry", Proc. ISMRM 17<sup>th</sup> Meeting, Honolulu, HI, USA, April 2009, p2743.
162. Choi C-H., Davies G.R. and Lurie D.J., "Off-Resonance Magnetisation Transfer Contrast MRI Using Fast Field-Cycling Technique", Proc. ISMRM 17<sup>th</sup> Meeting, Honolulu, HI, USA, April 2009, p2747.
163. Lurie D.J., Broche L., Choi C-H., Davies G.R., Ismail S.R., Ó hÓgáin D. and Pine K.J., "Fast Field-Cycling MRI", 6<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, June 2009, pO10.
164. Choi C-H., Davies G.R. and Lurie D.J., "The use of Fast Field-Cycling technique with Magnetization Transfer Contrast MRI", 6<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, June 2009, p10.
165. Pine K.J., Davies G.R. and Lurie D.J., "Localised In Vivo Relaxometry with Fast Field-Cycling", 6<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, June 2009, p11.
166. Davies G.R., Pine K.J. and Lurie D.J., "Towards a single resistive magnet 0.5 T Fast Field Cycled Magnetic Resonance Imaging System", 6<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, June 2009, p12.
167. Ó hÓgáin D., Davies G.R. Lurie, D.J. and Baroni S., "Contrast Optimisation using Fast Field-Cycling MRI", 6<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, June 2009, p13.

168. Ismail S., Broche L., Booth N.A. and Lurie D.J., “Detection of fibrin by Fast Field-Cycling magnetic resonance techniques”, 6th Conference on Field-Cycling NMR Relaxometry, Turin, Italy, June 2009, p14.
169. Lurie D.J. Broche L., Choi Ch.H., Davies G.R., Ismail S.R., Ó hÓgáin D. and Pine K.J., “1000 field strengths in one scanner – Fast Field-cycling MRI”, AMPERE NMR School, Zakopane, Poland, June 2009, p19.
170. Lurie D.J., Broche L., Choi C.-H., Davies G.R., Ismail S.R., Ó hÓgáin D. and Pine K.J., “Polarisation Manipulation in MRI by Magnetic Field Cycling and DNP”, 10th International Conference on Magnetic Resonance Microscopy, West Yellowstone, Montana, USA, September 2009, pT41.
171. Ó hÓgáin D., Davies G.R., Baroni S., Ferrante G., Aime S. and Lurie D.J., “Use of Contrast Agents with Fast Field-Cycling MRI”, Italian Chapter of ISMRM, Milano, February 2010, pP56. (Winner of Prize for Best Hardware/Physics poster.)
172. Broche L.M., Ismail S., Booth N.A. and Lurie D.J., “Non-invasive Measurement of Fibrin Concentration by Fast Field-Cycling NMR Technique”, Proc. Joint Annual Meeting ISMRM-ESMRMB, Stockholm, Sweden, May 2010, p915.
173. Choi C.-H., Lavdas I., Hutchison J.M.S. and Lurie D.J., “Design and construction of an actively frequency-switchable RF coil for fast field-cycling magnetisation transfer contrast MRI”, Proc. Joint Annual Meeting ISMRM-ESMRMB, Stockholm, Sweden, May 2010, p3923.
174. Ó hÓgáin D., Baroni S., Aime S., Davies G.R. and Lurie D.J., “Use of Contrast Agents in Fast Field-Cycling MRI”, 12th Bi-Annual Conference on Contrast Agents and Multimodal Molecular Imaging, Mons, Belgium, May 2010, p60.
175. Lurie D.J. Broche L., Choi Ch.H., Davies G.R., Ismail S.R., Ó hÓgáin D. and Pine K.J., “Fast Field-Cycling Magnetic Resonance Imaging”, AMPERE NMR School, Wierzba, Poland, June 2010, p37.
176. Pine K.J., Goldie F. and Lurie D.J., “Methods for the Spatial Localisation of Field-Cycling Relaxometric Data”, British Chapter of ISMRM, Nottingham, September 2010, p66.
177. Ismail S.R., Broche L.M., Booth N.A. and Lurie D.J., “Thrombus Detection using Fast Field- Cycling NMR”, British Chapter of ISMRM, Nottingham, September 2010, p105.
178. Broche L.M., Ashcroft G.P., Lurie D.J., “Detection of Osteoarthritis in Cartilage by FFC NMR”, British Chapter of ISMRM, Nottingham, September 2010, p110.
179. Broche L.M., Ismail S., Booth N.A., Wackerhager H., Lurie D.J., “Molecular-Based Image Contrast Using Fast Field Cycling MRI”, World Molecular Imaging Congress, Kyoto, September 2010, presentation 0097.
180. Ó hÓgáin D., Broche L.M., Baroni S., Aime S., Lurie D.J., “Manganese Loaded Liposomes as Molecular Imaging Contrast Agents Using Fast Field-Cycling MRI”, World Molecular Imaging Congress, Kyoto, September 2010, poster 0922B.
181. Lurie D.J., Broche L.M., Davies G.R., Ismail S.R., Ó hÓgáin D. and Pine K.J., “Field-cycling MRI – from free radicals to protein dynamics”, Rank Prize Funds Symposium on Chemical Process Meets Medicine over MRI, Grasmere, UK, March 2011.
182. Broche L.M., Ismail S.R., Booth N.A., Wackerhage H., Ashcroft G.P. and Lurie D.J., “Fast field-cycling MRI for protein detection”, Rank Prize Funds Symposium on Chemical Process Meets Medicine over MRI, Grasmere, UK, March 2011.
183. Broche L.M., Wackerhage H. and Lurie D.J., “Detection of Changes in Quadrupolar Peaks by FFC-MRI in Skeletal Muscle”, Proc. ISMRM 19th Annual Meeting, Montreal, Canada, May 2011, p1168.
184. Davies G.R., Pine K.J., Lurie D.J. and Goldie F., “A Single Magnet Fast Field-Cycling MRI System with Detection at 0.5T”, Proc. ISMRM 19th Annual Meeting, Montreal, Canada, May 2011, p1832.
185. Pine K.J., Goldie F. and Lurie D.J., “A Field Offset Coil for Spatially Localised in Vivo Field-Cycling Relaxometry”, Proc. ISMRM 19th Annual Meeting, Montreal, Canada, May 2011, p1833.
186. Ismail S.R., Mustafa S., Miller S., Rasmussen T., Lurie D.J. and Teismann P., “Detection and quantification of alpha-synuclein using Fast Field- Cycling magnetic resonance techniques”, Proc. ISMRM 19th Annual Meeting, Montreal, Canada, May 2011, p2185.
187. Choi C.-H. and Lurie D.J., “Magnetic Field-Dependent Magnetisation Transfer Contrast MRI with Fast Field-Cycling”, Proc. ISMRM 19th Annual Meeting, Montreal, Canada, May 2011, p4499.
188. Lurie D.J., Broche L.M., Choi C.-H., Davies G.R., Ismail S.R., Ó hÓgáin D. and Pine K.J., “Fast Field-Cycling Magnetic Resonance Imaging”, 7th Conference on Field-Cycling NMR Relaxometry, Turin, Italy, June 2011, p19.
189. Pine K.J., Davies G.R., Goldie F. and Lurie D.J., “Use of an Insert Coil and Surface RF Coil for in vivo Whole-Body Relaxometry”, 7th Conference on Field-Cycling NMR Relaxometry, Turin, Italy, June 2011, p27.
190. Broche L.M., Ismail S., Wackerhage H., Booth N.A., Ashcroft G.P. and Lurie D.J., “Clinical Applications of FFC-MRI”, 7th Conference on Field-Cycling NMR Relaxometry, Turin, Italy, June 2011, p28.
191. Lurie D.J. Broche L., Choi Ch.H., Davies G.R., Ismail S.R., Ó hÓgáin D. and Pine K.J., “Field-Cycling MRI – Techniques and Applications”, AMPERE NMR School, Zakopane, Poland, June 2011.
192. Broche L.M., Pine K.J., Ismail S.R., Davies G.R. and Lurie D.J., “Nitrogen-proton cross-relaxation in Fast Field-Cycling MRI”, 19th JSPS Core-to-Core Seminar Winter School, Fukuoka, Japan, February 2012, p17.
193. Lurie D.J., Broche L.M., Davies G.R. and Pine K.J., “Techniques and biomedical applications of field-cycling MRI”, 20th JSPS Core-to-Core Seminar, International Redox Core Symposium on In Vivo Magnetic Resonance Imaging, February 2012, p27.

194. Lurie D.J., Broche L.M., Davies G.R., Pine K.J. and Ross P.J., “Human Relaxometry and MRI using Fast Field-Cycling”, AMPERE NMR School, Poznan, Poland, June 2012, p22.
195. Ross, P.J., Broche, L.M., Pine K.J. and Lurie D.J., “Fast Field-Cycled Fast Spin-Echo MRI”, AMPERE NMR School, Poznan, Poland, June 2012, p73.
196. Pine K.J., Davies G.R. and Lurie D.J., “Design and Construction of a 0.2 T System for Whole-Body Field-Cycling MRI”, ESMRMB 2012 Congress, Lisbon, Portugal, October 2012, p288.
197. Ross P.J., Broche L.M., Pine K.J. and Lurie D.J., “Rapid Field-Cycling Relaxometric Imaging Using Fast Spin-Echo”, Proc. ISMRM 21<sup>st</sup> Annual Meeting, Salt Lake City, USA, April 2013, p4217.
198. Davies G.R., Pine K.J. and Lurie D.J., “A Single-Magnet Fast Field-Cycling Whole-Body MRI System with Detection at 0.2 T”, Proc. ISMRM 21<sup>st</sup> Annual Meeting, Salt Lake City, USA, April 2013, p4341.
199. Lurie D.J., Broche L.M., Davies G.R., Kennedy B.W.C., Pine K.J. and Ross P.J., “Field Cycling Magnetic Resonance Imaging”, 8<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, May 2013, p O11.
200. Broche L.M., Ashcroft G.P., Boddie D., Dundas S., Gagliardi T., Heys S.D., Kennedy B.W.C., Lurie D.J., Maceachern C., McKenzie T., Miller I., Pine K.J. and Ross P.J., “Medical Applications of Fast Field Cycling MRI”, 8<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, May 2013, p O13.
201. Kennedy B.W.C., Broche L.M., Ashcroft G.P. and Lurie D.J., “Fast-field cycling NMR is sensitive to the method of cross-linking in BSA gels”, 8<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, May 2013, p P14.
202. Ross P.J., Broche L.M. and Lurie D.J., “Rapid field-cycling MRI using fast spin-echo”, 8<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, May 2013, p P16.
203. Pine K.J. and Lurie D.J., “Towards a quality framework for localized FC relaxometry”, 8<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Turin, Italy, May 2013, p P17.
204. Lurie D.J., Broche L.M., Davies G.R., Kennedy B.W.C., Pine K.J. and Ross P.J., “Techniques and Applications of Field-Cycling MRI”, AMPERE NMR School, Zakopane, Poland, June 2013, p18.
205. Broche L.M., Ashcroft G.P., Boddie D., Dundas S., Gagliardi T., Heys S.D., Lurie D.J., McKenzie T., Miller I. and Ross P.J., “Analysis of musculoskeletal and breast tumours by fast field-cycling MRI”, 30<sup>th</sup> Annual Scientific Meeting, ESMRMB, Toulouse, France, October 2013.
206. Broche L.M., Pine K.J., Davies G.R., Ross P.J. and Lurie D.J., “Translational studies with fast field-cycling MRI”, European Congress of Radiology, Vienna, Austria, March 2014, C-1067.
207. Broche L.M., Kennedy B.W.C., MacEachern C., Ashcroft G.P. and Lurie D.J., “Fast field-cycling NMR of cartilage: a way toward molecular imaging”, World Congress, Osteoarthritis Research Society International, Paris, France, May 2014, p P102.
208. Lurie D.J., Broche L.M., Davies G.R., Payne N., Pine K.J., Ross P.J. and Zampetoulas V., “Techniques and bio-medical applications of field-cycling magnetic resonance”, AMPERE NMR School, Zakopane, Poland, June 2014, p21.
209. Payne N.R., Broche L.M., Ross P.J. and Lurie D.J., “Development of a varactor-tuned RF coil to enable quadrupole double resonance experiments with fast field-cycling MRI”, AMPERE NMR School, Zakopane, Poland, June 2014, p74.
210. Zampetoulas V., Broche L.M. and Lurie D.J., “Calibration of a fast field cycling relaxometer for ultra-low Field Measurements of T<sub>1</sub>-dispersion”, AMPERE NMR School, Zakopane, Poland, June 2014, p92.
211. Broche L.M., Davies G.R., Koss D.J., Pine K.J., Ross P.J. and Lurie D.J., “Clinical applications of Fast Field-Cycling techniques”, British Chapter ISMRM 20<sup>th</sup> Annual Scientific Meeting, Edinburgh, September 2014, pPP1A.
212. Ross P.J. and Lurie D.J., “Accelerated Field-Cycling MRI using the Keyhole Technique”, British Chapter ISMRM 20<sup>th</sup> Annual Scientific Meeting, Edinburgh, September 2014, pPP1B.
213. Zampetoulas V., Broche L.M. and Lurie D.J., “Calibration of a Fast Field Cycling Relaxometer for Ultra-Low Field Measurements of T<sub>1</sub>-Dispersion”, British Chapter ISMRM 20<sup>th</sup> Annual Scientific Meeting, Edinburgh, September 2014, pP1B.
214. Payne N.R., Broche L.M., Ross P.J. and Lurie D.J., “Development of a voltage-tuneable RF coil to enable double resonance experiments with Fast Field-Cycling MRI”, British Chapter ISMRM 20<sup>th</sup> Annual Scientific Meeting, Edinburgh, September 2014, pP1C.
215. Lurie D.J., Broche L.M., Davies G.R., Payne N.R., Pine K.J., Ross P.J. and Zampetoulas V., “Field-Cycling MRI: A New Imaging Modality?”, 8<sup>th</sup> European Conference on Medical Physics, Athens, Greece, September 2014. Published as *Physica Medica* **30(S1)**, 8-9 (2014).
216. Lurie D.J., Broche L.M., Davies G.R., Payne N.R., Pine K.J., Ross P.J. and Zampetoulas V., “Fast Field-Cycling MRI: A New Imaging Modality”, European Congress of Radiology, Vienna, Austria, March 2015, abstract B-0315.
217. Zampetoulas V., Broche L.M. and Lurie D.J., “Ultra-Low Field NMR Relaxometry: Calibration Method and T<sub>1</sub>-Dispersion below 1000 Hz”, Proc. ISMRM 23<sup>rd</sup> Annual Meeting, Toronto, Canada, June 2015, p1681.
218. Pine K.J., Davies G.R. and Lurie D.J., “Spatial localization of relaxation dispersion by field-cycling with one-dimensional projection”, Proc. ISMRM 23<sup>rd</sup> Annual Meeting, Toronto, Canada, June 2015, p2470.
219. Ross P.J. and Lurie D.J., “Rapid Fast Field-Cycling MRI using Keyhole Imaging”, Proc. ISMRM 23<sup>rd</sup> Annual Meeting, Toronto, Canada, June 2015, p2454.

220. Ross P.J. and Lurie D.J., “Accelerated Field-Cycling MRI using the Keyhole Technique”, SINAPSE Annual Scientific Meeting, Aberdeen, UK, June 2015, pP02.
221. Payne N.R., Broche L.M. and Lurie D.J., “Equipping FFC MRI for Nuclear Quadrupole Double Resonance”, SINAPSE Annual Scientific Meeting, Aberdeen, UK, June 2015, pP12.
222. Davies G.R., Broche L.M., Lurie D.J., Pine K.J. and Ross P.J., “In vivo human brain imaging at 0.2 T with a whole body fast field-cycling system”, SINAPSE Annual Scientific Meeting, Aberdeen, UK, June 2015, pP18.
223. Zampetoulas V., Broche L.M. and Lurie D.J., “Ultra-low field NMR relaxometry on biological samples: calibration method and acquisition of T1-dispersion curves below 1000 Hz”, SINAPSE Annual Scientific Meeting, Aberdeen, UK, June 2015, pP22.
224. Yucel-Finn A., Broche L.M., Ross P.J. and Lurie D.J., “Fast Field-Cycling NMR (FFC-NMR) – A novel way to image thrombus in vivo?”, SINAPSE Annual Scientific Meeting, Aberdeen, UK, June 2015, pP34.
225. Lurie D.J., Broche L.M., Davies G.R., Payne N.R., Ross P.J. and Zampetoulas V., “Fast Field-Cycling MRI: A New Imaging Modality”, AMPERE NMR School, Zakopane, Poland, June 2015, p14.
226. Zampetoulas V., Broche L.M. and Lurie D.J., “Ultra-low field NMR relaxometry: calibration method and acquisition of T1-dispersion curves extended to the region of  $\mu\text{T}$ ”, 9<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Aberdeen, UK, July 2015, p19.
227. Broche L.M., Ross P.J., Davies G.R., Payne N.R., Zampetoulas V. and Lurie D.J., “Recent Progress in Fast Field-Cycling MRI”, 9<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Aberdeen, UK, July 2015, p20.
228. Lahrech H., Broche L.M., Fries P.H., Ashcroft G.P., Belorizky, E., Bouamrani, A., Mombrun A., Berger F. and Lurie D.J., “Analysis of human glioma by FFC NMR”, 9<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Aberdeen, UK, July 2015, p21.
229. Ross P.J. and Lurie D.J., “Rapid Fast Field-Cycling Imaging using the Keyhole Technique”, 9<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Aberdeen, UK, July 2015, p34.
230. Davies G.R., Broche L.M., Pine K.J., Ross P.J. and Lurie D.J., “In vivo human brain imaging at 0.2 T with a whole body fast field-cycling system”, 9<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Aberdeen, UK, July 2015, p46.
231. Payne N.R., Broche L.M. and Lurie D.J., “Development of an RF coil tuning system to enable Nuclear Quadrupole Double Resonance in Fast Field-Cycling MRI”, 9<sup>th</sup> Conference on Field-Cycling NMR Relaxometry, Aberdeen, UK, July 2015, p50.
232. Broche L.M., Ross P.J., Davies G.R. and Lurie D.J., “Molecular biomarkers in human pathologies from fast field-cycling MRI”, World Molecular Imaging Congress, Hawaii, USA, September 2015.
233. Broche L.M., Zampetoulas V., Ross P.J., Davies G.R. and Lurie D.J., “Detection of tissue remodelling by Fast Field-Cycling methods”, ESMRMB 32<sup>nd</sup> Annual Scientific Meeting, Edinburgh, UK, October 2015, abstract 57.
234. Broche L.M., Mombrun A., Stephanov O., Bouamrani A., Berger F., Lurie D.J., Fries P.H. and Lahrech H., “Characterisation of human glioma resections by Fast Field-Cycling NMR”, ESMRMB 32<sup>nd</sup> Annual Scientific Meeting, Edinburgh, UK, October 2015, abstract 58.
235. Ross P.J. and Lurie D.J., “Accelerated Field-Cycling MRI using Keyhole Imaging”, ESMRMB 32<sup>nd</sup> Annual Scientific Meeting, Edinburgh, UK, October 2015, abstract 59.
236. Zampetoulas V., Broche L.M. and Lurie D.J., “Ultra-low field NMR relaxometry: calibration method and acquisition of T1-dispersion curves from biological samples extended below 1000 Hz”, ESMRMB 32<sup>nd</sup> Annual Scientific Meeting, Edinburgh, UK, October 2015, abstract 60.
237. Payne N.R., Broche L.M. and Lurie D.J., “Enabling Nuclear Quadrupole Double Resonance capabilities for Fast Field-Cycling MRI”, ESMRMB 32<sup>nd</sup> Annual Scientific Meeting, Edinburgh, UK, October 2015, abstract 508.
238. Davies G.R., Broche L.M., Lurie D.J., Pine K.J. and Ross P.J. “In vivo human brain imaging at 0.2 T with a whole body fast field-cycling system”, ESMRMB 32<sup>nd</sup> Annual Scientific Meeting, Edinburgh, UK, October 2015, abstract 596.
239. Lurie D.J., Broche L.M., Davies G.R., Payne N.R., Ross P.J. and Zampetoulas V. “Fast Field-Cycling MRI: Demonstration of New Technology for T1-Dispersion Contrast”, Radiological Society of North America (RSNA) 101<sup>st</sup> Annual Meeting, Chicago, USA, December 2015, abstract SSJ23-02.
240. Zampetoulas V., Broche L.M. and Lurie D.J. “Fast Field-Cycling NMR Relaxometry Extended in the Ultra-Low Field Region: Calibration Method and Acquisition of T1-Dispersion Curves that reach 2.3  $\mu\text{T}$ ”, ISMRM 24<sup>th</sup> Annual Meeting, Singapore, May 2016, abstract 1535.
241. Payne N.R., Broche L.M. and Lurie D.J., “A Q-switch system for an MRI RF coil operating at 2.5 MHz”, ISMRM 24<sup>th</sup> Annual Meeting, Singapore, May 2016, abstract 2174.
242. Lurie D.J., Broche L.M., Davies G.R., Payne N.R., Ross P.J. and Zampetoulas V., “Field-cycling MRI – a curiosity or the next big thing?”, AMPERE NMR School, Zakopane, Poland, June 2016, p11.
243. Zampetoulas V., Broche L.M. and Lurie D.J., “Calibration of a Fast Field-Cycling NMR Relaxometer for Measurements on Biological Samples that Extend to Ultra-Low Magnetic Field”, 8<sup>th</sup> SINAPSE Annual Scientific Meeting, Stirling, UK, June 2016.

244. Payne N.R., Broche L.M. and Lurie D.J., “A Q-switch system for an MRI RF coil operating at 2.5 MHz”, 8<sup>th</sup> SINAPSE Annual Scientific Meeting, Stirling, UK, June 2016.
245. Lurie D.J., “Basic MRI physics for radiotherapy physicists”, 1<sup>st</sup> European Congress on Medical Physics, Athens, Greece, September 2016.
246. Zampetoulas V., Broche L.M. and Lurie D.J., “Calibration of a Fast Field-Cycling NMR Relaxometer for Measurements on Biological Samples that Extend to the Ultra-Low Field Region”, ESMRMB 33<sup>rd</sup> Annual Meeting, Vienna, Austria, September 2016, p41.
247. Zampetoulas V., Broche L.M., Davies G.R. and Lurie D.J. “The T1-Dispersion Curve as a Biomarker of Colorectal Cancer”, ISMRM 25<sup>th</sup> Annual Meeting, Honolulu, Hawaii, USA, April 2017, abstract 1000.
248. Ross P.J., Broche L.M., Davies G.R. and Lurie D.J. “A new human-scale fast field-cycling MRI system for clinical applications”, ISMRM 25<sup>th</sup> Annual Meeting, Honolulu, Hawaii, USA, April 2017, abstract 2677.
249. Broche L.M., Huang Y., Pierre S., Berger F., Lurie D.J., Fries P.H. and Lahrech H. “Fast Field-Cycling NMR of human glioma resections: characterization of heterogeneity”, ISMRM 25<sup>th</sup> Annual Meeting, Honolulu, Hawaii, USA, April 2017, abstract 3790.
250. Payne N.R., Broche L.M. and Lurie D.J. “Optimisation of Fast Field-Cycling MRI pulse sequences by numerical simulation”, ISMRM 25<sup>th</sup> Annual Meeting, Honolulu, Hawaii, USA, April 2017, abstract 3791.
251. Lurie D.J., Broche L.M., Davies G.R., Payne N.R., Ross P.J. and Zampetoulas V., “Fast Field-Cycling Magnetic Resonance Imaging”, 10<sup>th</sup> Conference on Fast Field-Cycling NMR Relaxometry, Mikolajki, Poland, June 2017, p6.
252. Broche L.M., Ross P.J., Davies G.R. and Lurie D.J., “Design and commissioning of a whole-body 0.2 T fast field-cycling MRI magnet”, 10<sup>th</sup> Conference on Fast Field-Cycling NMR Relaxometry, Mikolajki, Poland, June 2017, p7.
253. Ross P.J., Broche L.M., Davies G.R. and Lurie D.J., “Progress on imaging using a 0.2 T whole-body Fast Field-Cycling system”, 10<sup>th</sup> Conference on Fast Field-Cycling NMR Relaxometry, Mikolajki, Poland, June 2017, p8.
254. Baroni S., Geninatti Crich S., Broche L.M., Lurie D.J. and Aime S., “Evolution of the Quadrupole Peak determinants in the NMRD profile of biological tissue. A relaxometric study of model samples”, 10<sup>th</sup> Conference on Fast Field-Cycling NMR Relaxometry, Mikolajki, Poland, June 2017, p35.
255. Ross P.J., Broche L.M., Davies G.R. and Lurie D.J., “A Fast Field-Cycling MRI system for clinical applications”, SINAPSE Annual Scientific Meeting, Glasgow, 16<sup>th</sup> June 2017, p57.
256. Zampetoulas V., Broche L.M., Murray G.I. and Lurie D.J., “The T1-Dispersion Curve as a Biomarker of Colorectal Cancer”, SINAPSE Annual Scientific Meeting, Glasgow, 16<sup>th</sup> June 2017, p58.
257. Payne N.R., Broche L.M. and Lurie D.J., “Simulation of Fast Field-Cycling MRI inversion-recovery pulse sequences to inform experimental parameters”, SINAPSE Annual Scientific Meeting, Glasgow, 16<sup>th</sup> June 2017, p59.
258. Lurie D.J., Broche L.M., Davies G.R., Payne N.R., Ross P.J. and Zampetoulas V., “Fast Field-cycling MRI: T1-Dispersion for Enhanced Medical Diagnosis”, AMPERE NMR School, Zakopane, Poland, June 2017, p19.
259. Lurie D.J., Broche L.M., Davies G.R., Payne N.R., Ross P.J. and Zampetoulas V., “Fast Field-cycling Magnetic Resonance Imaging”, EUROMAR Congress, Warsaw, Poland, July 2017, 378.
260. Lurie D.J., “Overhauser MRI of free radicals”, International Conference on Electron Paramagnetic Resonance Spectroscopy and Imaging of Biological Systems, Morgantown, West Virginia, USA, July 2017, p47.
261. Lurie D.J., Broche L.M., Davies G.R. Payne N.R., Ross P.J. and Zampetoulas V., “Fast Field-cycling Magnetic Resonance Imaging”, Italian Magnetic Resonance Group (GIDRM) XLVI National Congress, Fisciano, Italy, September 2017, p11.
262. Ross P.J., Broche L.M., Davies G.R. and Lurie D.J., “A Fast Field-Cycling MRI system for clinical applications”, ESMRMB 34<sup>th</sup> Annual Meeting, Barcelona, Spain, October 2017, p56.
263. Lurie D.J., “MR imaging basic concepts: how to turn signals into images”, European Congress of Radiology, Vienna, Austria, February 2018, pA-845.
264. Broche L.M., Ross P.J., Davies G.R. and Lurie D.J., “Fast field-cycling MRI for medical applications”, European Congress of Radiology, Vienna, Austria, February 2018, pB-0547.
265. Lurie D.J., Broche L.M., Davies G.R., MacLeod M.J. and Ross P.J., “Fast Field-Cycling (FFC) MRI: Biomarkers through T1-Dispersion”, Images and Networks of the Brain 2018, Hamburg, Germany, April 2018, p7.
266. Lurie D.J., Broche L.M., Davies G.R., MacLeod M.J. and Ross P.J., “Exploiting T1-dispersion using human-scale fast field-cycling MRP”, EMBO Workshop on Challenges for magnetic resonance in life sciences, Grosseto, Italy, May 2018, p33.
267. Lurie D.J. Broche L.M., Davies G.R. and Ross P.J., “Fast Field-Cycling MRI: a new diagnostic modality?”, World Congress on Medical Physics & Biomedical Engineering, Prague, Czech Republic, June 2018.
268. Lurie D.J., Broche L.M., Davies G.R., MacLeod M.J. and Ross P.J., “MRI Basics and Research on Fast Field-Cycling MRI”, AMPERE NMR School, Zakopane, Poland, June 2018, p22.
269. Ross P.J., Broche L.M. and Lurie D.J., “Simple algorithm for the correction of MRI image artefacts due to random phase fluctuations”, Joint Annual Meeting, ISMRM-ESMRMB, Paris, France, June 2018, p2710.
270. Broche L.M., Zampetoulas V. and Lurie D.J., “Data processing methods for the extraction of novel FFC-MRI biomarkers”, Joint Annual Meeting, ISMRM-ESMRMB, Paris, France, June 2018, p2863.

271. Ross P.J., Broche L.M., MacLeod M.J., Davies G.R. and Lurie D.J., “Fast field-cycling MRI: Novel contrast changes through switched magnetic fields”, 2<sup>nd</sup> European Congress of Medical Physics, Copenhagen, Denmark, August 2018, pOA020.
272. MacLeod M.J., Broche L.M., Ross P.J., Guzman-Gutierrez G., Murray A.D. and Lurie D.J., “Fast Field-Cycling MRI identifies ischaemic stroke at ultra-low magnetic field strength”, British Chapter of ISMRM, Oxford, UK, September 2018, pO33.
273. Ross P.J., Broche L.M., Davies G.R. and Lurie D.J., “A Fast Field-Cycling MRI system for clinical applications”, British Chapter of ISMRM, Oxford, UK, September 2018.
274. Lurie D.J., Broche L.M., Davies G.R., Guzman-Gutierrez G., MacLeod M.J. and Ross P.J., “Fast Field-Cycling MRI technology: prototype human scanner and first clinical results”, Radiological Society of North America (RSNA) 104<sup>th</sup> Annual Meeting, Chicago, USA, December 2018, abstract SSC12-05.
275. MacLeod M.-J., Ross J.P., Guzman-Gutierrez G., Lurie D.J., Broche L.M., “Imaging of acute stroke by FFC-MRI: the PUFFINS study”, COST Action AC15209 2nd Workshop of Nuclear Magnetic Resonance Relaxometry, Prague, Czech Republic, February 2019.
276. Davies G.R., Broche L.M., Gagliardi T., Lurie D.J., Ross P.J., “Bilateral breast coil for Fast Field-Cycling relaxometric MRI”, ISMRM 27<sup>th</sup> Annual Meeting, Montreal, Canada, May 2019.
277. Ross P.J., Broche M., MacLeod M.J., Guzman-Gutierrez G., Murray A.D., Lurie D.J., “Fast Field-Cycling MRI identifies ischaemic stroke at ultra-low field strength”, ISMRM 27<sup>th</sup> Annual Meeting, Montreal, Canada, May 2019.
278. Ross P.J., Broche L.M., MacLeod M.J., Guzman-Gutierrez G., Murray A.D., Lurie D.J., “Fast Field-Cycling MRI identifies ischaemic stroke at ultra-low magnetic field strength”, 11<sup>th</sup> Conference on Fast Field-Cycling NMR Relaxometry, Pisa, Italy, June 2019.
279. Broche L.M., Ross P.J., Davies G.R., MacLeod M.J., Masannat Y., Leslie S., Bhatt P., Berger F., Lahrech H., Lurie D.J., “First clinical studies with FFC-MRI: Early results”, 11<sup>th</sup> Conference on Fast Field-Cycling NMR Relaxometry, Pisa, Italy, June 2019.
280. Kruk D., Masiewicz E., Borowska A., Broche L.M., Lurie D.J., “What do we know about <sup>14</sup>N quadrupole relaxation enhancement?”, 11<sup>th</sup> Conference on Fast Field-Cycling NMR Relaxometry, Pisa, Italy, June 2019.
281. Lurie D.J., Broche L.M., Davies G.R., MacLeod M.J., Ross P.J., “MRI basics and research on Fast Field-Cycling MRI”, AMPERE NMR School, Zakopane, Poland, June 2019.
282. Broche L.M., Ross P.J., Davies G.R., Macleod M.J., Lurie D.J., “Imaging molecular dynamics using Fast Field-Cycling MRI”, World Molecular Imaging Congress, Montreal, Canada, September 2019.
283. Broche L.M., Ross P.J., Davies G.R., Lurie D.J., “Fast Field-Cycling MRI for molecular dynamics imaging”, ESMRMB 36<sup>th</sup> Annual Meeting, Rotterdam, Netherlands, October 2019.
284. Ross P.J., Broche L.M., MacLeod M.J., Lurie D.J., “Fast field-cycling MRI identifies ischaemic stroke at ultra-low magnetic field strength”, ESMRMB 36<sup>th</sup> Annual Meeting, Rotterdam, Netherlands, October 2019.
285. Lurie D.J., Broche L.M., Davies G.R., Macleod M.J., Ross P.J., Stormont R., “Fast field-cycling magnetic resonance imaging”, 18<sup>th</sup> International School-Conference on Magnetic Resonance and its Applications (SPINUS 2021), online meeting, 29<sup>th</sup> March – 2<sup>nd</sup> April 2021.
286. Lurie D.J., Broche L.M., Davies G.R., Macleod M.J., Ross P.J., Stormont R., “Basics of MRI and Research on Fast Field-Cycling MRI”, AMPERE NMR School, online meeting, 21<sup>st</sup>-23<sup>rd</sup> June 2021.
287. Lurie D.J., Broche L.M., Davies G.R., Macleod M.J., Ross P.J., Stormont R., “Fast field-cycling magnetic resonance imaging”, 17<sup>th</sup> European Conference on Magnetic Resonance (EUROMAR 2021), online meeting, 5<sup>th</sup>-8<sup>th</sup> July 2021.
288. Lurie D.J., Broche L.M., Davies G.R., Macleod M.J., Ross P.J., Stormont R., “Fast field-cycling magnetic resonance imaging”, Joint Conference of 22<sup>nd</sup> International Society of Magnetic Resonance (ISMAR) and 9<sup>th</sup> Asia-Pacific NMR Symposium (APNMR), online meeting, 22<sup>nd</sup>-27<sup>th</sup> August 2021.