

# Alex C. Hannon

## Publication List

September 2024

- [1] A.C. Wright, A.C. Hannon, R.N. Sinclair, W.L. Johnson, M. Atzmon, *The neutron diffraction double null isotopic substitution technique*, J. Phys. F 14 (1984) L201-205.
- [2] A.C. Wright, A.C. Hannon, R.N. Sinclair, A.G. Clare, W.L. Johnson, M. Atzmon, P. Mangin, *A neutron diffraction investigation of the atomic and magnetic structure of amorphous Dy<sub>7</sub>Ni<sub>3</sub>*, J. de Phys. Coll. C8 suppl. 46 (1985) 299-303.
- [3] A.C. Wright, A.C. Hannon, D.I. Grimley, R.N. Sinclair, F.L. Galeener, S.R. Elliott, L.F. Gladden, *Neutron scattering studies of the structure and dynamics of vitreous B<sub>2</sub>O<sub>3</sub>*, Ceramic Bulletin 65 (1986) 1372.
- [4] A.C. Hannon, R.N. Sinclair, J.A. Blackman, A.C. Wright, F.L. Galeener, *Phonon spectra of vitreous B<sub>2</sub>O<sub>3</sub>*, J. Non-Cryst. Solids 106 (1988) 116-119.
- [5] S.H. Kilcoyne, A.C. Hannon, R. Cywinski, *Magnetic correlations in Y(Co<sub>1-x</sub>Mn<sub>x</sub>)<sub>2</sub> alloys*, J. de Phys. Coll. C8 suppl. 49 (1988) 259-260.
- [6] S.H. Kilcoyne, A.C. Hannon, R. Cywinski, *The onset of ferromagnetism in HCP CoCr alloys*, J. de Phys. Coll. C8 suppl. 49 (1988) 223-224.
- [7] M.T. Weller, J.R. Grasmeyer, P.C. Lanchester, P.A.J. de Groot, G.P. Rapson, A.C. Hannon, *The structure and superconducting properties of Ba<sub>0.7</sub>K<sub>0.3</sub>BiO<sub>2.91</sub>*, Physica C 156 (1988) 265-268.
- [8] A.C. Hannon, R. Cywinski, R.N. Sinclair, D.I. Grimley, A.C. Wright, *A small angle neutron scattering study of the magnetic correlations in amorphous Dy<sub>7</sub>Ni<sub>3</sub>*, Physica B 156 & 157 (1989) 210-212.
- [9] A.K. Soper, W.S. Howells, A.C. Hannon, *ATLAS - Analysis of Time-of-flight diffraction data from Liquid and Amorphous Samples.*, Rutherford Appleton Laboratory Report RAL-89-046, 1989.
- [10] A.C. Wright, T.M. Brunier, A.G. Clare, D.I. Grimley, R.A. Hulme, R.N. Sinclair, A.C. Hannon, L.F. Gladden, S.R. Elliott, *Neutron scattering studies of amorphous semiconductors*, Ceramic Bulletin 68 (1989) 1296.
- [11] I. Iordanova, K.S. Forcey, D.K. Ross, J. Mayers, A.C. Hannon, *Investigation using neutron diffraction of changes of deformation texture in low carbon cold rolled steel during recrystallisation annealing*, Materials Science and Technology 5 (1989) 665-673.
- [12] J. Mayers, G. Baciocco, A.C. Hannon, *Temperature measurement by neutron resonance radiography*, Nucl. Instrum. Meth. A 275 (1989) 453-459.
- [13] J. Mayers, A.C. Hannon, W.G. Williams, *Samarium polarising filters at ISIS*, Rutherford Appleton Laboratory Report RAL-89-122, 1989.
- [14] G.R. Mitchell, F.J. Davis, R. Cywinski, A.C. Hannon, *Structural studies of electrically conducting films of polypyrrole using neutron scattering*, Polymer Communications 30 (1989) 98-101.
- [15] A.D. Taylor, Z.A. Bowden, C.J. Carlile, M.E. Hagen, A.C. Hannon, R.S. Holt, J. Mayers, R. Osborn, M.P. Paoli, S.T. Robertson, A. Smith, U. Steigenberger, J. Tomkinson, W.G. Williams, *Developments in inelastic instrumentation at ISIS*, IOP Conf. Series 97 (1989) 271-295.
- [16] A.C. Hannon, W.S. Howells, A.K. Soper, *ATLAS: A suite of programs for the analysis of time-of-flight neutron diffraction data from liquid and amorphous samples*, Inst. Phys. Conf. Ser. 107 (1990) 193-211.
- [17] A.C. Hannon, A.C. Wright, R.N. Sinclair, *The atomic and magnetic structure of melt-spun amorphous Dy<sub>7</sub>Ni<sub>3</sub>*, Mat. Sci. Eng. A 134 (1991) 883-887.
- [18] A.C. Hannon, J.M. Parker, B. Vessal, *A neutron diffraction study of the mixed-alkali effect*, Trans. Am. Cryst. Assoc. 27 (1991) 293-299.
- [19] M. Arai, A.C. Hannon, A.D. Taylor, A.C. Wright, R.N. Sinclair, D.L. Price, *Neutron scattering law measurements for vitreous silica*, Trans. Am. Cryst. Assoc. 27 (1991) 113-131.
- [20] A.C. Wright, B. Bachra, T.M. Brunier, R.N. Sinclair, A.G. Clare, A.C. Hannon, B. Vessal, *Neutron diffraction studies of silicate glasses*, ACA Abstracts Series 2 19 (1991) 25.
- [21] A.C. Wright, B. Bachra, A.G. Clare, R.N. Sinclair, A.C. Hannon, *The structure of alkali silicate glasses by neutron diffraction*, Ceramic Bulletin 70 (1991) 1369.
- [22] A.C. Wright, T.M. Brunier, D.I. Grimley, R.N. Sinclair, A.C. Hannon, F. Jansen, *Neutron scattering studies of amorphous electronic materials*, in: M. Borissov, et al. (Eds.), Proceedings of the 6th International School on Condensed Matter Physics 'New Physical Problems in Electronic Materials', Varna, Bulgaria, 1990, World Scientific, Singapore, 1991, p. 199-219.
- [23] A.C. Wright, A.G. Clare, B. Bachra, R.N. Sinclair, A.C. Hannon, B. Vessal, *Neutron diffraction studies of silicate glasses*, Trans. Am. Cryst. Assoc. 27 (1991) 239-253.
- [24] A.C. Hannon, M. Arai, J.M. Parker, B. Vessal, *Neutron scattering studies of the structure of glasses*, ACA Abstracts Series 2 20 (1992) 57.

- [25] A.C. Hannon, M. Arai, R.N. Sinclair, A.C. Wright, *A dynamic correlation function for amorphous solids*, J. Non-Cryst. Solids 150 (1992) 239-244.
- [26] A.C. Hannon, M. Hagen, R.A. Cowley, H.B. Stanley, N. Cowlam, *A SANS study of the magnetic phase transition in amorphous  $(Fe_xNi_{1-x})_{78}B_{10}Si_{12}$* , Physica B 180 & 181 (1992) 230-232.
- [27] A.C. Hannon, R.K. Heenan, M. Atzmon, M.S. Boldrick, C.N.J. Wagner, *Amorphisation by mechanical alloying: a small angle neutron scattering study*, ACA Abstracts Series 2 20 (1992) 76.
- [28] A.C. Hannon, R.N. Sinclair, A.C. Wright, *Inelastic neutron scattering studies of the vibrational modes of vitreous  $B_2O_3$* , in: L. David Pye, W.C. LaCourse, and H.J. Stevens (Eds.), *The Physics of Non-Crystalline Solids*, Taylor and Francis, London, 1992, p. 67-71.
- [29] A.C. Hannon, B. Vessal, J.M. Parker, *The structure of alkali silicate glasses*, J. Non-Cryst. Solids 150 (1992) 97-102.
- [30] M. Arai, A.C. Hannon, A.D. Taylor, A.C. Wright, R.N. Sinclair, D.L. Price, *High resolution  $S(Q,E)$  measurement on  $g-SiO_2$* , Physica B 180-181 (1992) 779-781.
- [31] M. Arai, A.C. Hannon, A.D. Taylor, A.C. Wright, R.N. Sinclair, D.L. Price, *Neutron scattering law measurements on vitreous silica*, in: L. David Pye, W.C. LaCourse, and H.J. Stevens (Eds.), *The Physics of Non-Crystalline Solids*, Taylor and Francis, London, 1992, p. 479-483.
- [32] A.J.G. Ellison, D.L. Price, J.E. Dickinson Jr., A.C. Hannon, *Effects of the addition of alkali cations on intermediate-range order in alkali silicate glasses*, ACA Abstracts Series 2 20 (1992) 58.
- [33] L.F. Gladden, M. Vignaux, P. Chiaranussati, R.W. Griffiths, S.D. Jackson, J.R. Jones, A.P. Sharratt, F.J. Robertson, G. Webb, P. Chieux, A.C. Hannon, *Structural studies of high surface area silicas*, J. Non-Cryst. Solids 139 (1992) 47-59.
- [34] S. Hull, R.I. Smith, W.I.F. David, A.C. Hannon, J. Mayers, R. Cywinski, *The polaris powder diffractometer at ISIS*, Physica B 180-181 (1992) 1000-1002.
- [35] R.N. Sinclair, A.C. Wright, T.M. Brunier, R.A. Hulme, C.A. Guy, A.C. Hannon, M. Arai, *Inelastic neutron scattering studies of amorphous network solids*, J. Non-Cryst. Solids 150 (1992) 219-230.
- [36] A.C. Wright, A.G. Clare, B. Bachra, A.C. Hannon, R.N. Sinclair, B. Vessal, *A neutron diffraction study of the structure of alkali silicate glasses*, Bol. Soc. Esp. Ceram. V. 31-C,3 (1992) 77-82.
- [37] A.C. Hannon, *XTAL: A program for calculating interatomic distances and coordination numbers for model structures*, Rutherford Appleton Laboratory Report RAL-93-063, 1993.
- [38] A.C. Hannon, R.N. Sinclair, A.C. Wright, *The vibrational modes of vitreous  $B_2O_3$* , Physica A 201 (1993) 375-380.
- [39] A.C. Hannon, B. Vessal, J.M. Parker, *A neutron diffraction study of the structure of alkali silicate glasses*, Topical Issues in Glass 1 (1993) 47-48.
- [40] A.C. Hannon, A.C. Wright, R.N. Sinclair, *Inelastic neutron scattering and modelling studies of vitreous  $B_2O_3$* , suppl. Riv. della Staz. Sper. del Vetro XXIII (1993) 479-482.
- [41] M. Arai, K. Yamada, S. Hosoya, A.C. Hannon, Y. Hidaka, A.D. Taylor, Y. Endoh, *Lattice instability of high- $T_c$  oxide superconductors studied by inelastic neutron scattering*, in: Proceedings of the Fifth International Symposium on Advanced Nuclear Energy Research - Neutrons as Microscopic Probes, (JAERI-M 93-228), vol. 2, JAERI, Tokaimura, 1993, p. 208-212.
- [42] S.M. Bennington, A.C. Hannon, J.B. Forsyth, *A practical neutron training course : course notes*, Rutherford Appleton Laboratory Report RAL-93-083, 1993.
- [43] N. Umesaki, T.M. Brunier, A.C. Wright, A.C. Hannon, R.N. Sinclair, *Neutron diffraction from lead germanate glasses*, in: H. Takahashi, et al. (Eds.), Proceedings of the Fifth International Symposium on Advanced Nuclear Energy Research - Neutrons as Microscopic Probes, (JAERI-M 93-228), vol. 2, JAERI, Tokaimura, 1993, p. 555-562.
- [44] A.C. Wright, B. Bachra, B. Vessal, A.G. Clare, R.N. Sinclair, A.C. Hannon, *A combined neutron diffraction and molecular dynamics study of the structure of alkali silicate glasses and of the mixed alkali effect*, suppl. Riv. della Staz. Sper. del Vetro XXIII (1993) 211.
- [45] A.C. Wright, T.M. Brunier, C.A. Guy, R.N. Sinclair, A.C. Hannon, F. Jansen, *An inelastic neutron scattering study of the dynamics of hydrogenated and deuterated amorphous silicon*, Physica A 201 (1993) 395-401.
- [46] A.C. Hannon, D.I. Grimley, R.A. Hulme, A.C. Wright, R.N. Sinclair, *Boroxol groups in vitreous boron oxide : New evidence from neutron diffraction and inelastic neutron scattering studies*, J. Non-Cryst. Solids 177 (1994) 299-316.
- [47] A.C. Hannon, A.K. Soper, R.J. Newport, W.S. Howells, *SPIDA - a special intense diffractometer for amorphous materials*, in: U. Steigenberger, et al. (Eds.), ICANS-XII (Rutherford Appleton Laboratory Report RAL-94-025), vol. 1, 1994, p. 152-157.
- [48] M. Arai, A.C. Hannon, *Dynamics of disordered systems*, in: H. Ikeda and U. Steigenberger (Eds.), Report of Japan-UK Collaboration on Neutron Scattering, KEK, Tsukuba, 1994, p. 68-80.

- [49] R.G. Delaplane, T. Lundström, A.C. Hannon, S.M. Bennington, M. Arai, *The scattering function of amorphous boron*, Japanese Journal of Applied Physics Series 10 (1994) 27-28.
- [50] M. Arai, A.C. Hannon, T. Ohtomo, *A dynamical labelling method for extracting partial structure factors*, in: U. Steigenberger, et al. (Eds.), ICANS-XII (Rutherford Appleton Laboratory Report RAL-94-025), vol. 1, 1994, p. 283-290.
- [51] M. Arai, K. Yamada, S. Hosoya, A.C. Hannon, Y. Hidaka, A.D. Taylor, Y. Endoh, *Lattice anomalies in high  $T_c$  superconductors*, Bulletin of the Electrotechnical Laboratory 58 (1994) 22-24.
- [52] M. Arai, K. Yamada, S. Hosoya, A.C. Hannon, Y. Hidaka, A.D. Taylor, Y. Endoh, *Local structural instability of high- $T_c$  oxide superconductors studied by inelastic neutron scattering*, Journal of Superconductivity 7 (1994) 415-518.
- [53] Y. Cao, A.N. Cormack, A.G. Clare, B. Bachra, A.C. Wright, R.N. Sinclair, A.C. Hannon, *Points of contact between theory and experiment: a comparison of molecular dynamics and neutron diffraction results*, J. Non-Cryst. Solids 177 (1994) 317-323.
- [54] A.C. Wright, A.C. Hannon, B. Vessal, R.N. Sinclair, D.I. Grimley, B. Bachra, A.G. Clare, *Neutron scattering studies of glasses*, Glastechn. Ber. Glass Sci. Technol. 67C (1994) 173-178.
- [55] A.C. Hannon, *ISIS course trains newcomers*, Neutron News 6 (1995) 40.
- [56] A.C. Hannon, M. Arai, R.G. Delaplane, *A dynamic correlation function from inelastic neutron scattering data*, Nucl. Instrum. Meth. A 354 (1995) 96-103.
- [57] A.C. Hannon, A.C. Wright, J.A. Blackman, R.N. Sinclair, *The vibrational modes of vitreous  $B_2O_3$ : inelastic neutron scattering and modelling studies*, J. Non-Cryst. Solids 182 (1995) 78-89.
- [58] M. Arai, A.C. Hannon, T. Otomo, A. Hiramatsu, T. Nishijima, *Dynamic correlation function studies of the medium-range order in materials*, J. Non-Cryst. Solids 192-193 (1995) 230-237.
- [59] A.J.G. Ellison, D.L. Price, J.E. Dickinson Jr., A.C. Hannon, *The effect of phase separation on short- and intermediate-range order in high-silica  $Li_2O-SiO_2$* , J. Chem. Phys. 102 (1995) 9647-9652.
- [60] S.J. Hibble, D.M. Pickup, A.C. Hannon, *The Structures of the New Amorphous Transition Metal Chalcogenides  $CrS_3$ ,  $CrSe_3$ ,  $MoS_4$ ,  $MoSe_5$ ,  $WS_5$* , Physica Scripta T57 (1995) 94-97.
- [61] U. Hoppe, G. Walter, D. Stachel, A.C. Hannon, *Short-range order details of metaphosphate glasses studied by pulsed neutron scattering*, Z. Naturforsch. 50a (1995) 684-692.
- [62] J.H. Lee, A.P. Owens, A. Pradel, A.C. Hannon, M. Ribes, S.R. Elliott, *Structure determination of Ag-Ge-S glasses by isotopic substitution diffraction*, J. Non-Cryst. Solids 192-193 (1995) 57-60.
- [63] R.N. Sinclair, A.C. Wright, T.M. Brunier, A.C. Hannon, S.M. Bennington, F. Jansen, *Inelastic neutron scattering studies of the structural role of hydrogen in hydrogenated amorphous silicon*, J. Non-Cryst. Solids 192-193 (1995) 243-248.
- [64] N. Umesaki, T.M. Brunier, A.C. Wright, A.C. Hannon, R.N. Sinclair, *Neutron scattering study of  $PbO-GeO_2$  glasses*, Physica B 213-214 (1995) 490-492.
- [65] N.M. Vedishcheva, B.A. Shakhmatkin, M.M. Schultz, B. Vessal, A.C. Wright, B. Bachra, A.G. Clare, A.C. Hannon, R.N. Sinclair, *A thermodynamic, molecular dynamics and neutron diffraction investigation of the distribution of tetrahedral  $\{Si^{(iv)}\}$  species and the network modifying cation environment in alkali silicate glasses*, J. Non-Cryst. Solids 192-193 (1995) 292-297.
- [66] B. Vessal, A.C. Wright, A.C. Hannon, *A combined molecular dynamics and neutron diffraction study of the structure of alkali silicate glasses*, Abstracts of Papers of the American Chemical Society 209 (1995) 180.
- [67] A.C. Hannon, *The correction of time-of-flight neutron scattering spectra for time-independent backgrounds*, Rutherford Appleton Laboratory Report RAL-TR-96-077, 1996.
- [68] A.C. Hannon, J.M. Parker, B. Vessal, *The Effect of Composition in Lead Gallate Glasses: A Structural Study*, J. Non-Cryst. Solids 196 (1996) 187-192.
- [69] O.I. Barkalov, A.I. Kolesnikov, V.E. Antonov, E.G. Ponyatovsky, M. Dahlborg, U. Dahlborg, A.C. Hannon, *Bulk amorphous Ga-Sb semiconductors prepared by thermobaric treatment: formation and properties*, Phys. Status Solidi B 198 (1996) 491-496.
- [70] A. Hiramatsu, M. Arai, H. Shibazaki, M. Tsunekawa, T. Otomo, A.C. Hannon, S.M. Bennington, N. Kitamura, A. Onodera, *Investigation on permanently densified vitreous silica by means of neutron scattering*, Physica B 219-220 (1996) 287-289.
- [71] U. Hoppe, G. Walter, D. Stachel, A.C. Hannon, *Short-range order in  $KPO_3$  glass studied by neutron and X-ray diffraction*, Z. Naturforsch. 51a (1996) 179-186.
- [72] U. Hoppe, G. Walter, D. Stachel, A.C. Hannon, *Structure of vitreous  $KPO_3$  studied by neutron and X-ray diffraction*, Berichte der Bunsen-Gesellschaft für Physikalische Chemie 100 (1996) 1569-1573.
- [73] M.C. Jermy, G.N. Greaves, M.E. Smith, G. Bushnell-Wye, A.C. Hannon, R.L. McGreevy, G. Derst, B. Tilley, *Evidence for the compensated continuous random network model for spodumene glass and analogs*, Mat. Sci. Forum 228 (1996) 537-542.
- [74] J.H. Lee, A.P. Owens, A. Pradel, A.C. Hannon, M. Ribes, S.R. Elliott, *Structure determination of Ag-Ge-S glasses using neutron diffraction*, Phys. Rev. B 54 (1996) 3895-3909.

- [75] T. Nishijima, M. Arai, K. Yamaya, Y. Okajima, A.C. Hannon, T. Otomo, *Phonon anomaly of under-doped  $YBa_2Cu_3O_{0.6}$  studied by neutron scattering*, Physica B 219-220 (1996) 204-206.
- [76] T. Nishijima, M. Arai, K. Yamaya, Y. Okajima, A.C. Hannon, T. Otomo, *Investigation for the dynamical and local structure of the  $YBa_2Cu_3O_{6.6}$* , Czechoslovak Journal of Physics 46 suppl. S3 (1996) 1241-1242.
- [77] T. Nishijima, M. Arai, K. Yamaya, Y. Okajima, A.C. Hannon, T. Otomo, *Dynamical structural instability in  $YBa_2Cu_3O_{6.6}$* , J. Low Temp. Phys. 105 (1996) 837-842.
- [78] B. Vessal, A.C. Wright, A.C. Hannon, *Alkali silicate glasses: Interpreting neutron diffraction results using the molecular dynamics simulation technique*, J. Non-Cryst. Solids 196 (1996) 233-238.
- [79] A.C. Wright, R.N. Sinclair, D.I. Grimley, R.A. Hulme, N.M. Vedishcheva, B.A. Shakhmatkin, A.C. Hannon, S.A. Feller, B.M. Meyer, M.L. Royle, D.L. Wilkerson, *Borate glasses, superstructural units and the random network theory*, Fiz. Khim. Stekla 22 (1996) 268-278.
- [80] N. Zotov, H. Keppler, A.C. Hannon, A.K. Soper, *The effect of water on the structure of silicate glasses - neutron diffraction study*, J. Non-Cryst. Solids 202 (1996) 153-163.
- [81] P.S.R. Krishna, B.A. Dasannacharya, A.C. Hannon, *Neutron diffraction studies on  $(1-X)Pb(PO_3)_2-XFe_2O_3$  glasses*, Solid State Physics (India) 39C (1996) 231-231.
- [82] M.T. Dove, M.J. Harris, A.C. Hannon, J.M. Parker, I.P. Swainson, M. Gambhir, *Floppy modes in crystalline and amorphous silicates*, Phys. Rev. Lett. 78 (1997) 1070-1073.
- [83] M.T. Dove, D. Keen, A.C. Hannon, I.P. Swainson, *Direct measurement of the Si-O bond length and orientational disorder in the high-temperature phase of cristobalite*, Phys. Chem. Min. 24 (1997) 311-317.
- [84] S.J. Hibble, I.D. Fawcett, A.C. Hannon, *The Structure of Two Disordered Molybdates -  $Li_2Mo^{IV}O_3$  and  $Li_4Mo_3^{IV}O_8$  - from Total Neutron Scattering*, Acta Cryst. B 53 (1997) 604-612.
- [85] S.J. Hibble, I.D. Fawcett, A.C. Hannon, *The True Structure and Metal-metal Bonded Framework of  $LiMo^{III}O_2$  Determined from Total Neutron Scattering*, Inorg. Chem. 36 (1997) 1749-1753.
- [86] U. Hoppe, G. Walter, R. Kranold, D. Stachel, A. Barz, A.C. Hannon, *Short-range order in ultraphosphate glasses*, Physica B 234-236 (1997) 388-390.
- [87] U. Hoppe, G. Walter, D. Stachel, A. Barz, A.C. Hannon, *Neutron and X-ray diffraction study on the structure of ultraphosphate glasses*, Z. Naturforsch. 52a (1997) 259-269.
- [88] R.N. Sinclair, A.C. Wright, A.J. Wanless, A.C. Hannon, S.A. Feller, M.T. Mayhew, B.M. Meyer, M.L. Royle, D.L. Wilkerson, R.B. Williams, B.C. Johanson, *Inelastic neutron scattering techniques for studying superstructural units in borate glasses*, in: A.C. Wright, S.A. Feller, and A.C. Hannon (Eds.), Borate Glasses, Crystals and Melts, The Society of Glass Technology, Sheffield, 1997, p. 140-147.
- [89] B. Vessal, A.C. Wright, A.C. Hannon, *Molecular dynamics simulation and neutron diffraction study of alkali silicate glasses*, Ceramics Transactions 69 (1997) 27.
- [90] A.C. Wright, S.A. Feller, A.C. Hannon, eds. Borate glasses, crystals and melts. 1997, The Society of Glass Technology: Sheffield.
- [91] A.C. Wright, R.N. Sinclair, A.G. Clare, N. Umesaki, A.C. Hannon, S.A. Feller, *Neutron scattering studies of multicomponent glasses*, in: B. Samuneva and Y. Dimitriev (Eds.), Proceedings of the 12<sup>th</sup> international conference on glass and ceramics, Science Invest, Sofia, 1997, p. 94-99.
- [92] N. Zotov, F. Bellido, M. Dominguez, R. Jimenez-Garay, A.C. Hannon, R. Sonntag, *Effect of copper on the structure and other physical properties of Cu-As-Te chalcogenide glasses*, J. Phys. Chem. Solids 58 (1997) 1625-1630.
- [93] N. Zotov, R. Jimenez-Garay, F. Bellido, M. Dominguez, A.C. Hannon, R. Sonntag, *Structure of Cu-As-Te glasses - neutron diffraction and reverse Monte Carlo simulations*, Physica B 234-236 (1997) 424-425.
- [94] A.C. Hannon, J.M. Parker, B. Vessal, *Neutron diffraction analysis of the atomic short range order in lead gallate glasses*, J. Non-Cryst. Solids 232-234 (1998) 51-58.
- [95] J.F. Bent, A.C. Hannon, D. Holland, M.M.A. Karim, *The Structure of Tin Silicate Glasses*, J. Non-Cryst. Solids 232-234 (1998) 300-308.
- [96] S.J. Hibble, S.P. Cooper, A.C. Hannon, S. Patat, W.H. McCarroll, *Structure of  $LaMo_2O_5$  containing both isolated  $Mo_6O_{18}$  clusters and sheets of fused triangular  $Mo_3$  clusters*, Inorg. Chem. 37 (1998) 6839-6846.
- [97] U. Hoppe, G. Walter, R. Kranold, A. Barz, D. Stachel, A.C. Hannon, *A diffraction study of the structure of vitreous  $P_2O_5$* , Glastechn. Ber. Glass Sci. Technol. 71C (1998) 192.
- [98] U. Hoppe, G. Walter, A. Barz, D. Stachel, A.C. Hannon, *The P-O bond lengths in vitreous  $P_2O_5$  probed by neutron diffraction with high real-space resolution*, J. Phys.: Condens. Matter 10 (1998) 261-270.
- [99] U. Hoppe, R. Kranold, A. Barz, D. Stachel, A.C. Hannon, *A neutron and X-ray diffraction study of the structure of the  $LaP_3O_9$  Glass*, J. Non-Cryst. Solids 232-234 (1998) 44-50.
- [100] S.J. Hibble, R.I. Walton, D.M. Pickup, A.C. Hannon, *Amorphous  $MoS_3$ : Clusters or Chains? The Structural Evidence*, J. Non-Cryst. Solids 232-234 (1998) 434-439.
- [101] Y. Inamura, M. Arai, N. Kitamura, S.M. Bennington, A.C. Hannon, *Intermediate range structure and low energy dynamics of densified  $SiO_2$  glass*, Physica B 241-243 (1998) 903-905.

- [102] A.C. Wright, J. Cho, A.G. Clare, S.A. Feller, A.C. Hannon, B.C. Johanson, S.W. Martin, I.G. Polyakova, M.L. Royle, U. Senapati, B.A. Shakhmatkin, R.N. Sinclair, N.M. Vedishcheva, P. Venhuizen, R.B. Williams, *Neutron scattering studies of oxide and chalcogenide glasses*, *Glastech. Ber. Glass Sci. Technol.* 71C (1998) 186-191.
- [103] A.C. Wright, R.N. Sinclair, A.C. Hannon, A.G. Clare, S.W. Martin, *Neutron scattering studies of non-oxide glasses*, *ACA Abstracts*, Ser. 2 25 (1998) 48.
- [104] A.C. Hannon, ed. *LAD, 1982 - 1998: the first ISIS diffractometer*. volume 11, issue 47 of *Journal of Physics: Condensed Matter*. 1999.
- [105] A.C. Hannon, B.G. Aitken, *Neutron diffraction studies of the structure of Ge-based multicomponent sulphide glasses*, *J. Non-Cryst. Solids* 256-257 (1999) 73-77.
- [106] A.C. Hannon, B.G. Aitken, *Pulsed neutron diffraction from GeS<sub>2</sub>-based sulphide glasses*, *J. Phys. Chem. Solids* 60 (1999) 1473-1477.
- [107] R. Akagi, K. Handa, N. Ohtori, A.C. Hannon, M. Tatsumisago, N. Umesaki, *Structure of K<sub>2</sub>O-TeO<sub>2</sub> glasses*, *Jap. J. Appl. Phys.* 38S1 (1999) 160-163.
- [108] R. Akagi, K. Handa, N. Ohtori, A.C. Hannon, M. Tatsumisago, N. Umesaki, *High temperature structure of K<sub>2</sub>O-TeO<sub>2</sub> glasses*, *J. Non-Cryst. Solids* 256-257 (1999) 111-118.
- [109] M. Arai, Y. Inamura, T. Otomo, N. Kitamura, S.M. Bennington, A.C. Hannon, *Novel coexistence of collective propagating mode and strongly localized mode in vitreous silica*, *Physica B* 263-264 (1999) 268-272.
- [110] M. Calvo-Dahlborg, U. Dahlborg, O.I. Barkalov, A.I. Kolesnikov, E.G. Ponyatovsky, A.C. Hannon, *Neutron scattering study of bulk amorphous GaSb*, *J. Non-Cryst. Solids* 244 (1999) 250-259.
- [111] L. Cormier, G. Calas, S. Creux, P.H. Gaskell, B. Bouchet-Fabre, A.C. Hannon, *Environment around strontium in silicate and aluminosilicate glasses*, *Phys. Rev. B* 59 (1999) 13517-13520.
- [112] F. Fillaux, S. Menu, J. Conard, H. Fuzellier, S.W. Parker, A.C. Hannon, J. Tomkinson, *Inelastic neutron scattering study of the proton dynamics in HNO<sub>3</sub> graphite intercalation compounds*, *Chemical Physics* 242 (1999) 273-281.
- [113] S.J. Hibble, S.P. Cooper, A.C. Hannon, I.D. Fawcett, M. Greenblatt, *Local Distortions In The Colossal Magnetoresistive Manganates, La<sub>0.70</sub>Ca<sub>0.30</sub>MnO<sub>3</sub>, La<sub>0.80</sub>Ca<sub>0.20</sub>MnO<sub>3</sub>, And La<sub>0.70</sub>Sr<sub>0.30</sub>MnO<sub>3</sub>, Revealed By Total Neutron Diffraction.*, *J. Phys.: Condens. Matter* 11 (1999) 9221-9238.
- [114] S.J. Hibble, S.P. Cooper, S. Patat, A.C. Hannon, *Total Neutron Diffraction: A Route to the Correct Local Structure of Disordered LaMo<sub>2</sub>O<sub>5</sub>, and its Application to the Model Compound Zn<sub>2</sub>Mo<sub>3</sub>O<sub>8</sub>*, *Acta Cryst. B* 55 (1999) 683-697.
- [115] S.J. Hibble, A.C. Hannon, I.D. Fawcett, *Total neutron diffraction: The correct way to determine the true structure of crystalline materials?*, *J. Phys.: Condens. Matter* 11 (1999) 9203-9219.
- [116] S.J. Hibble, R.I. Walton, A.C. Hannon, G. Bushnell-Wye, *The structure of amorphous CrS<sub>3</sub> containing [Cr<sup>III</sup><sub>2</sub>(S<sup>I</sup>)<sub>2</sub>]<sub>3</sub> chains: an X-ray diffraction modelling study*, *J. Solid State Chem.* 145 (1999) 573-579.
- [117] U. Hoppe, R. Kranold, H.-J. Weber, A.C. Hannon, *The change of the Ge-O coordination number in potassium germanate glasses probed by neutron diffraction with high real-space resolution*, *J. Non-Cryst. Solids* 248 (1999) 1-10.
- [118] W.S. Howells, A.C. Hannon, *LAD, 1982-1998: The first ISIS diffractometer*, *J. Phys.: Condens. Matter* 11 (1999) 9127-9138.
- [119] Y. Inamura, M. Arai, O. Yamamuro, A. Inaba, N. Kitamura, T. Otomo, T. Matsuo, S.M. Bennington, A.C. Hannon, *Peculiar suppression of the specific heat and boson peak intensity of densified SiO<sub>2</sub> glass*, *Physica B* 263-264 (1999) 299-302.
- [120] A.C. Wright, J. Cho, S.A. Feller, A.C. Hannon, B.C. Johanson, N. Kitamura, S.W. Martin, N. Ohtori, I.G. Polyakova, M.L. Royle, B.A. Shakhmatkin, R.N. Sinclair, C.E. Stone, N. Umesaki, K. Ura, N.M. Vedishcheva, P. Venhuizen, R.B. Williams, *Neutron scattering studies of network glasses*, in: B. Samuneva, et al. (Eds.), *Proceedings of the 13<sup>th</sup> conference on glass and ceramics*, Science Invest, Sofia, 1999, p. 66-73.
- [121] A.C. Hannon, *Neutron Diffraction, Instrumentation*, in: J. Lindon, G. Tranter, and J. Holmes (Eds.), *Encyclopedia of Spectroscopy and Spectrometry*, vol. 2, Academic Press, London, 2010, p. 1479-1492.
- [122] A.C. Hannon, *Neutron Diffraction, Theory*, in: J. Lindon, G. Tranter, and J. Holmes (Eds.), *Encyclopedia of Spectroscopy and Spectrometry*, vol. 2, Academic Press, London, 2010, p. 1493-1503.
- [123] A.C. Hannon, *ISIS ends an era and starts something new*, *Neutron News* 11 (2000) 39.
- [124] A.C. Hannon, J.M. Parker, *The structure of aluminate glasses by neutron diffraction*, *J. Non-Cryst. Solids* 274 (2000) 102-109.
- [125] H.L.M. Hatharasinghe, M.V. Smalley, J. Swenson, A.C. Hannon, S.M. King, *Freezing experiments on clay gels*, *Langmuir* 16 (2000) 5562-5567.
- [126] U. Hoppe, R. Kranold, D. Stachel, A. Barz, A.C. Hannon, *Variation in P-O bonding in phosphate glasses - a neutron diffraction study*, *Z. Naturforsch.* 55a (2000) 369-380.

- [127] U. Hoppe, R. Kranold, H.-J. Weber, J. Neuefeind, A.C. Hannon, *The structure of potassium germanate glasses a combined x-ray and neutron diffraction study*, J. Non-Cryst. Solids 278 (2000) 99-114.
- [128] J.A. Johnson, C.E. Johnson, D. Holland, A. Sears, J.F. Bent, P.G. Appleyard, M.F. Thomas, A.C. Hannon, *Ternary alkali stannosilicate glasses: a Mössbauer and neutron diffraction study*, J. Phys.: Condens. Matter 12 (2000) 213-230.
- [129] R.N. Sinclair, C.E. Stone, A.C. Wright, I.G. Polyakova, N.M. Vedishcheva, B.A. Shakhmatkin, S.A. Feller, B.C. Johanson, P. Venhuizen, R.B. Williams, A.C. Hannon, *Inelastic neutron scattering studies of superstructural units in borate glasses and crystalline phases*, Phys. Chem. Glasses 41 (2000) 286-289.
- [130] N.T. Skipper, J.K. Walters, C. Lobban, J. McKewn, R. Mukerji, G.J. Martin, M. de Podesta, A.C. Hannon, *Neutron diffraction studies of graphite-potassium-methylamine: staging transitions and structure of new graphite intercalation compounds*, J. Phys. Chem. B 104 (2000) 10969-10972.
- [131] A.C. Wright, C.E. Stone, R.N. Sinclair, N. Umesaki, N. Kitamura, K. Ura, N. Ohtori, A.C. Hannon, *The structure of pressure-compacted vitreous boron oxide*, Phys. Chem. Glasses 41 (2000) 296-299.
- [132] N. Zotov, F. Bellido, M. Dominguez, A.C. Hannon, R. Sonntag, *Continuous random network models of Cu-As-Te glasses*, Physica B 276-278 (2000) 463-464.
- [133] R.N. Sinclair, C.E. Stone, A.C. Wright, S.W. Martin, M.L. Royle, A.C. Hannon, *The structure of vitreous boron sulphide*, J. Non-Cryst. Solids 293-295 (2001) 383-388.
- [134] C.E. Stone, A.C. Hannon, T. Ishihara, N. Kitamura, Y. Shirakawa, R.N. Sinclair, N. Umesaki, A.C. Wright, *The Structure of Pressure-compacted Vitreous Germania*, J. Non-Cryst. Solids 293-295 (2001) 769-775.
- [135] U. Hoppe, R. Kranold, H.-J. Weber, J. Neuefeind, A.C. Hannon, *Erratum to: the structure of potassium germanate glasses a combined x-ray and neutron diffraction study*, J. Non-Cryst. Solids 286 (2001) 139-140.
- [136] Y. Inamura, M. Arai, M. Nakamura, T. Otomo, N. Kitamura, S.M. Bennington, A.C. Hannon, U. Buchenau, *Intermediate range structure and low-energy dynamics of densified vitreous silica*, J. Non-Cryst. Solids 293-295 (2001) 389-393.
- [137] D.-Q. Wang, S.S. Babu, E.A. Payzant, P.G. Radaelli, A.C. Hannon, *In-situ characterization of  $\gamma/\gamma'$  lattice stability in a nickel-base superalloy by neutron diffraction*, Metall. and Mat. Trans. A 32 (2001) 1551-1556.
- [138] A.C. Hannon, *What can neutron diffraction and chemical crystallography tell us about glass structure?*, Acta Crystallogr. A 58 (2002) C47.
- [139] A.C. Hannon, S.M. Bennington, *Carbon Polymorphs Workshop*, Rutherford Appleton Laboratory Report RAL-CONF-2002-001, 2002.
- [140] A.C. Hannon, J.M. Parker, *The use of bond-valence parameters in interpreting glass diffraction results*, Phys. Chem. Glasses 43C (2002) 6-12.
- [141] H. Brequel, S. Enzo, G. Gregori, H.-J. Kleebe, A.C. Hannon, *Structural investigation of silicon carbonitride glasses by neutron diffraction*, Mat. Sci. Forum 386-388 (2002) 365-370.
- [142] S.J. Hibble, S.M. Cheyne, A.C. Hannon, S.G. Eversfield, *Beyond Bragg scattering: The structure of AgCN determined from total neutron diffraction*, Inorg. Chem. 41 (2002) 1042-1044.
- [143] S.J. Hibble, S.M. Cheyne, A.C. Hannon, S.G. Eversfield, *CuCN: A polymorphic material. Structure of one form determined from total neutron diffraction*, Inorg. Chem. 41 (2002) 4990-4992.
- [144] S.J. Hibble, A.C. Hannon, *Local structure: the realm of the chemist?*, in: S.J.L. Billinge and M.F. Thorpe (Eds.), *From semiconductors to proteins: beyond the average structure*, Kluwer Academic/Plenum Publishers, New York, 2002, p. 129-152.
- [145] D. Holland, A.P. Howes, M.E. Smith, A.C. Hannon, *Lone pair effects and structural trends in  $x\text{SnO} \cdot (1-x)\text{P}_2\text{O}_5$  glasses deduced from  $^{31}\text{P}$  and  $^{119}\text{Sn}$  NMR*, J. Phys.: Condens. Matter 14 (2002) 13609-13621.
- [146] U. Hoppe, E. Yousef, C. Rüssel, J. Neuefeind, A.C. Hannon, *Structure of vanadium tellurite glasses studied by neutron and X-ray diffraction*, Solid State Commun. 123 (2002) 273-278.
- [147] E. Bychkov, D.L. Price, C.J. Benmore, A.C. Hannon, *Ion transport regimes in chalcogenide and chalcohalide glasses: from the host to the cation-related network connectivity*, Solid State Ionics 154-155 (2002) 349-359.
- [148] C.E. Stone, A.C. Wright, R.N. Sinclair, A.C. Hannon, A. Musinu, T.P. Seward III, H.A. Feller, *Neutron diffraction studies of network glasses*, Phys. Chem. Glasses 43C (2002) 63-67.
- [149] R.N. Sinclair, A.C. Wright, A.G. Clare, A.C. Hannon, *An inelastic neutron scattering study of tetrahedral connectivity in vitreous  $\text{Ge}_x\text{Se}_{1-x}$* , Phys. Chem. Glasses 43C (2002) 191-194.
- [150] U. Hoppe, R. Kranold, J.M. Lewis, C.P. O'Brien, H. Feller, S. Feller, M. Affatigato, J. Neuefeind, A.C. Hannon, *Structure of binary alkaline earth vanadate glasses - a diffraction study*, Glass Sci. Technol. 75 (2002) 191-196.
- [151] S.J. Hibble, A.C. Hannon, S.M. Cheyne, *The structure of AuCN determined from total neutron diffraction*, Inorg. Chem. 42 (2003) 4724-4730.
- [152] A.C. Hannon, *Amorphous materials and glasses*, IUCr Newsletter 11 (2003) 12.
- [153] P.G. Radaelli, A.C. Hannon, L.C. Chapon, *GEM: A shining light in the ISIS crown*, Notiz. Neut. Luce. Sinc. 8 (2003) 19-26.

- [154] U. Hoppe, R. Kranold, J.M. Lewis, C.P. O'Brien, H. Feller, S. Feller, M. Affatigato, J. Neufeind, A.C. Hannon, *Structure of binary alkaline earth vanadate glasses: An X-ray and neutron diffraction investigation*, Phys. Chem. Glasses 44 (2003) 272-279.
- [155] A. Szczygielska, A. Burian, J.C. Dore, S. Duber, A.C. Hannon, *Paracrystalline nature of saccharose- and anthracene-based carbons studied by wide-angle neutron scattering*, Proc. SPIE 5136 (2003) 288-294.
- [156] U. Hoppe, E. Yousef, C. Rüssel, J. Neufeind, A.C. Hannon, *Structure of zinc and niobium tellurite glasses by neutron and X-ray diffraction*, J. Phys.: Condens. Matter 16 (2004) 1645-1663.
- [157] P. Day, J.E. Enderby, W.G. Williams, L.C. Chapon, A.C. Hannon, P.G. Radaelli, A.K. Soper, *GEM: The General Materials Diffractometer at ISIS - multibank capabilities for studying crystalline and disordered materials*, Neutron News 15 (2004) 19-23.
- [158] J. Koloczek, A. Burian, J.C. Dore, A.C. Hannon, *Model-based computation of powder diffraction patterns for carbon nanotubes*, Diamond Relat. Mater. 13 (2004) 1218-1221.
- [159] A. Burian, J. Koloczek, J.C. Dore, A.C. Hannon, J.B. Nagy, A. Fonseca, *Radial distribution function analysis of spatial atomic correlations in carbon nanotubes*, Diamond Relat. Mater. 13 (2004) 1261-1265.
- [160] H. Yang, R.I. Walton, S. Antonijevic, S. Wimperis, A.C. Hannon, *Local order of amorphous zeolite precursors from  $^{29}\text{Si}\{^1\text{H}\}$  CPMAS and  $^{27}\text{Al}$  and  $^{23}\text{Na}$  MQMAS NMR and evidence for the nature of medium-range order from neutron diffraction*, J. Phys. Chem. B 108 (2004) 8208-8217.
- [161] D. Holland, A.C. Hannon, M.E. Smith, C.E. Johnson, M.F. Thomas, A.M. Beesley, *The role of  $\text{Sb}^{5+}$  in the structure of  $\text{Sb}_2\text{O}_3\text{-B}_2\text{O}_3$  binary glasses - a NMR and Mössbauer spectroscopy study*, Solid State Nucl. Mag. 26 (2004) 172-179.
- [162] U. Hoppe, I. Gugov, H. Bürger, P. Jóvári, A.C. Hannon, *Structure of tellurite glasses-effects of  $\text{K}_2\text{O}$  or  $\text{P}_2\text{O}_5$  additions studied by diffraction*, J. Phys.: Condens. Matter 17 (2005) 2365-2386.
- [163] U. Hoppe, G. Walter, G. Carl, J. Neufeind, A.C. Hannon, *Structure of zinc phosphate glasses probed by neutron and X-ray diffraction of high resolving power and by Reverse Monte Carlo simulations*, J. Non-Cryst. Solids 351 (2005) 1020-1031.
- [164] A.C. Hannon, *Results on disordered materials from the General Materials diffractometer, GEM, at ISIS*, Nucl. Instrum. Meth. A 551 (2005) 88-107.
- [165] A. Burian, J.C. Dore, A.C. Hannon, V. Honkimaki, *Complementary studies of structural characteristics for carbon materials with X-rays and neutrons*, J. Alloys Comp. 401 (2005) 18-23.
- [166] U. Hoppe, R.K. Brow, D. Ilieva, P. Jóvári, A.C. Hannon, *Structure of rare-earth phosphate glasses by X-ray and neutron diffraction*, J. Non-Cryst. Solids 351 (2005) 3179-3190.
- [167] U. Hoppe, R.K. Brow, B.C. Tischendorf, P. Jóvári, A.C. Hannon, *Structure of  $\text{GeO}_2\text{-P}_2\text{O}_5$  glasses studied by x-ray and neutron diffraction*, J. Phys.: Condens. Matter 18 (2006) 1847-1860.
- [168] J.M. Cole, A.C. Hannon, R.A. Martin, R.J. Newport, *Direct observation of R...R distances in rare-earth (R) phosphate glasses by magnetic difference neutron diffraction*, Phys. Rev. B 73 (2006) 104210.
- [169] E.-T. Kang, S.-J. Lee, A.C. Hannon, *Molecular dynamics simulation of calcium aluminate glasses*, J. Non-Cryst. Solids 352 (2006) 725-736.
- [170] T. Fukunaga, K. Itoh, T. Otomo, K. Mori, M. Sugiyama, H. Kato, M. Hasegawa, A. Hirata, Y. Hirotsu, A.C. Hannon, *Voronoi analysis of the structure of Cu-Zr and Ni-Zr metallic glasses*, Intermetallics 14 (2006) 893-897.
- [171] A.C. Hannon, D. Holland, *A parameterisation for the composition-dependence of  $N_4$  in binary borate glasses*, Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B 47 (2006) 449-454.
- [172] F. Garrido, A.C. Hannon, R.M. Ibberson, L. Nowicki, B.T.M. Willis, *Neutron diffraction studies of  $\text{U}_4\text{O}_9$ : Comparison with EXAFS results*, Inorg. Chem. 45 (2006) 8408-8413.
- [173] A. Burian, A. Brodka, J. Koloczek, J.C. Dore, A.C. Hannon, A. Fonseca, *Energy relaxation and pulsed neutron diffraction studies of carbon nanotubes*, Diamond Relat. Mater. 15 (2006) 1090-1093.
- [174] A. Bródka, J. Koloczek, A. Burian, J.C. Dore, A.C. Hannon, A. Fonseca, *Molecular dynamics simulation of carbon nanotube structure*, J. Mol. Struct. 792-793 (2006) 78-81.
- [175] A.C. Hannon, D. Di Martino, L.F. Santos, R.M. Almeida, *Ge-O coordination in cesium germanate glasses*, J. Phys. Chem. B 111 (2007) 3342-3354.
- [176] U. Hoppe, G. Walter, R.K. Brow, N.P. Wyckoff, A. Schöps, A.C. Hannon, *Structure of a potassium germanophosphate glass by x-ray and neutron diffraction*, Solid State Commun. 143 (2007) 403-407.
- [177] U. Hoppe, R.K. Brow, B.C. Tischendorf, A. Kriltz, P. Jóvári, A. Schöps, A.C. Hannon, *Structure of titanophosphate glasses studied by X-ray and neutron diffraction*, J. Non-Cryst. Solids 353 (2007) 1802-1807.
- [178] S.J. Hibble, A.M. Chippindale, A.H. Pohl, A.C. Hannon, *Surprises from a simple material - the structure and properties of nickel cyanide*, Angew. Chem. Int. Ed. Engl. 46 (2007) 7116-7118.
- [179] A.C. Hannon, D. Di Martino, L.F. Santos, R.M. Almeida, *A model for the Ge-O coordination in germanate glasses*, J. Non-Cryst. Solids 353 (2007) 1688-1694.
- [180] E.R. Barney, A.C. Hannon, D. Holland, S.A. Feller, D. Winslow, R. Biswas, *Structural studies of lead aluminate glasses*, J. Non-Cryst. Solids 353 (2007) 1741-1747.

- [181] T. Fukunaga, K. Itoh, T. Otomo, K. Mori, A. Sugiyama, H. Kato, A. Hasegawa, A. Hirata, Y. Hirotsu, A.C. Hannon, *Voronoi analysis of the structure of Ni-Zr-Al ternary metallic glass*, *Materials Transactions* 48 (2007) 1698-1702.
- [182] A.C. Hannon, P.S. Salmon, A.K. Soper, *Proceedings of the International Workshop on Current Challenges in Liquid and Glass Science, (The Cosener's House, Abingdon 10-12 January 2007)*, *J. Phys.: Condens. Matter* 19 (2007)
- [183] U. Hoppe, R. Kranold, A. Barz, D. Stachel, A. Schöps, A.C. Hannon, *X-ray and neutron scattering studies of the structure of copper phosphate glasses*, *Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B* 48 (2007) 188-194.
- [184] R.A. Martin, P.S. Salmon, D.L. Carroll, M.E. Smith, A.C. Hannon, *Structure and thermal properties of yttrium alumino-phosphate glasses*, *J. Phys.: Condens. Matter* 20 (2008) 115204.
- [185] A.C. Wright, A.C. Hannon, R.N. Sinclair, T.M. Brunier, C.A. Guy, R.J. Stewart, M.B. Strobel, F. Jansen, *Neutron scattering studies of hydrogenated, deuterated and fluorinated amorphous silicon*, *J. Phys.: Condens. Matter* 19 (2007) 415109.
- [186] A.C. Hannon, E.R. Barney, D. Holland, K.S. Knight, *Local structure and disorder in crystalline  $Pb_9Al_8O_{21}$* , *J. Solid State Chem.* 181 (2008) 1087-1102.
- [187] F. Hindle, M. Miloshova, E. Bychkov, C.J. Benmore, A.C. Hannon, *Structural analysis of  $xCsCl(1-x)Ga_2S_3$  glasses*, *J. Non-Cryst. Solids* 354 (2008) 134-137.
- [188] U. Hoppe, R.K. Brow, N.P. Wyckoff, A. Schöps, A.C. Hannon, *Structure of potassium germanophosphate glasses by X-ray and neutron diffraction. Part 1: Short-range order*, *J. Non-Cryst. Solids* 354 (2008) 3572-3579.
- [189] R.G. Orman, D. Holland, A.C. Hannon, *Antimony oxychloride glass and its relation to crystalline onoratoite,  $Sb_8O_{11}Cl_2$* , *Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B* 49 (2008) 15-18.
- [190] T.A. Steriotis, K.L. Stefanopoulos, F.K. Katsaros, R. Gläser, A.C. Hannon, J.D.F. Ramsay, *In situ neutron diffraction study of adsorbed carbon dioxide in a nanoporous material: Monitoring the adsorption mechanism and the structural characteristics of the confined phase*, *Phys. Rev. B* 78 (2008) 115424.
- [191] E.R. Barney, A.C. Hannon, D. Holland, *A multi-technique structural study of the tellurium borate glass system*, *Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B* 50 (2009) 156-164.
- [192] A. Chiba, M. Tomomasa, T. Hayakawa, S.M. Bennington, A.C. Hannon, K. Tsuji, *Pressure-induced suppression of the Peierls distortion of liquid As and  $GeX$  ( $X = S, Se, Te$ )*, *Phys. Rev. B* 80 (2009) 060201-060204.
- [193] A.L. Goodwin, M.T. Dove, A.M. Chippindale, S.J. Hibble, A.H. Pohl, A.C. Hannon, *Aperiodicity, structure, and dynamics in  $Ni(CN)_2$* , *Phys. Rev. B* 80 (2009) 054101-054107.
- [194] M. Guignard, L. Cormier, V. Montouillout, N. Menguy, D. Massiot, A.C. Hannon, *Environment of titanium and aluminum in a magnesium alumino-silicate glass*, *J. Phys.: Condens. Matter* 21 (2009) 375107.
- [195] A.C. Hannon, E.R. Barney, D. Holland, *The structure of tin borate based glasses*, *Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B* 50 (2009) 271-283.
- [196] A. Zeidler, J.W.E. Drewitt, P.S. Salmon, A.C. Barnes, W.A. Crichton, S. Klotz, H.E. Fischer, C.J. Benmore, S. Ramos, A.C. Hannon, *Establishing the structure of  $GeS_2$  at high pressures and temperatures: a combined approach using x-ray and neutron diffraction*, *J. Phys.: Condens. Matter* 21 (2009) 474217.
- [197] E.R. Barney, A.C. Hannon, N. Laorodphan, R. Dupree, D. Holland, *A neutron diffraction and  $^{205}Tl$  NMR study of the thallium germanate glass system*, *J. Non-Cryst. Solids* 356 (2010) 2517-2523.
- [198] M. Guignard, L. Cormier, V. Montouillout, N. Menguy, D. Massiot, A.C. Hannon, B. Beuneu, *Rearrangement of the structure during nucleation of a cordierite glass doped with  $TiO_2$* , *J. Phys.: Condens. Matter* 22 (2010) 185401.
- [199] A.C. Hannon, *Adrian C. Wright: Glasses, Neutrons, Borates!*, *Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B* 51 (2010) 40-51.
- [200] S.J. Hibble, G.B. Wood, E.J. Bilbé, A.H. Pohl, M.G. Tucker, A.C. Hannon, A.M. Chippindale, *Structures and negative thermal expansion properties of the one-dimensional cyanides,  $CuCN$ ,  $AgCN$  and  $AuCN$* , *Z. Kristallogr.* 225 (2010) 457-462.
- [201] R.M. Moss, E.A. Abou, D.M. Pickup, H.L. Twyman, R.A. Martin, M.D. Henson, E.R. Barney, A.C. Hannon, J.C. Knowles, R.J. Newport, *The effect of zinc and titanium on the structure of calcium-sodium phosphate based glass*, *J. Non-Cryst. Solids* 356 (2010) 1319-1324.
- [202] S.F. Parker, K. Refson, A.C. Hannon, E.R. Barney, S.J. Robertson, P. Albers, *Characterisation of hydrous palladium oxide: implications for low temperature carbon monoxide oxidation*, *J. Phys. Chem. C* 114 (2010) 14164-14172.
- [203] K. Sardar, H.Y. Playford, R.J. Darton, E.R. Barney, A.C. Hannon, D. Tompsett, J. Fisher, R.J. Kashtiban, J. Sloan, S. Ramos, G. Cibin, R.I. Walton, *Nanocrystalline cerium-bismuth oxides: Synthesis, structural characterization, and redox properties*, *Chem. Mater.* 22 (2010) 6191-6201.



- [204] O.N. Senkov, D.B. Miracle, E.R. Barney, A.C. Hannon, Y.Q. Cheng, E. Ma, *Local atomic structure of Ca-Mg-Zn metallic glasses*, Phys. Rev. B 82 (2010) 104206-104201-104213.
- [205] N. Umesaki, A.C. Hannon, eds. *Borate Glasses, Crystals and Melts 2008*. 2010, The Society of Glass Technology: Sheffield.
- [206] S.J. Hibble, A.M. Chippindale, E.J. Bilbé, E. Marelli, P.J.F. Harris, A.C. Hannon, *Structures of Pd(CN)<sub>2</sub> and Pt(CN)<sub>2</sub>: Intrinsically Nanocrystalline Materials?*, Inorg. Chem. 50 (2011) 104-113.
- [207] L. Hawelek, W. Wrzalik, A. Brodka, J.C. Dore, A.C. Hannon, S. Iijima, M. Yudasaka, T. Ohba, K. Kaneko, A. Burian, *A pulsed neutron diffraction study of the topological defects presence in carbon nanohorns*, Chem. Phys. Lett. 502 (2011) 87-91.
- [208] E.R. Barney, A.C. Hannon, O.N. Senkov, J.M. Scott, D.B. Miracle, R.M. Moss, *A neutron and X-ray diffraction study of Ca-Mg-Cu metallic glasses*, Intermetallics 19 (2011) 860-870.
- [209] E.R. Barney, A.C. Hannon, N. Laorodphan, D. Holland, *The influence of lone-pair cations on the germanate anomaly in glass*, J. Phys. Chem. C 115 (2011) 14997-15007.
- [210] H.Y. Playford, D.R. Modeshia, E.R. Barney, A.C. Hannon, C.S. Wright, J.M. Fisher, A. Amieiro-Fonseca, D. Thompsett, L.A. O'Dell, G.J. Rees, M.E. Smith, J.V. Hanna, R.I. Walton, *Structural Characterization and Redox Catalytic Properties of Cerium(IV) Pyrochlore Oxides*, Chem. Mater. 23 (2011) 5464-5473.
- [211] Y. Onodera, K. Mori, T. Otomo, A.C. Hannon, M. Sugiyama, T. Fukunaga, *Reverse Monte Carlo modeling of atomic configuration for Li<sub>2</sub>S-P<sub>2</sub>S<sub>5</sub> superionic conductors*, IOP Conf. Ser.: Mat. Sci. Eng. 18 (2011) 022012.
- [212] U. Hoppe, N.P. Wyckoff, M.L. Schmitt, R.K. Brow, A. Schöps, A.C. Hannon, *Structure of V<sub>2</sub>O<sub>5</sub>-P<sub>2</sub>O<sub>5</sub> glasses by X-ray and neutron diffraction*, J. Non-Cryst. Solids 358 (2012) 328-336.
- [213] E.R. Barney, A.C. Hannon, D. Holland, *Short range order and dynamics in crystalline α-TeO<sub>2</sub>* J. Phys. Chem. C 116 (2012) 3707-3718.
- [214] A.C. Hannon, E.R. Barney, D. Holland, N. Laorodphan, D. Di Martino, L.F. Santos, R.M. Almeida, *The structure of germanate glasses and the germanate anomaly*, Sklář a Keramik 62 (2012) 6-12.
- [215] F.K. Katsaros, T.A. Steriotis, K.L. Stefanopoulos, N.K. Kanellopoulos, A.C. Hannon, J.D.F. Ramsay, *Structural characterisation of subcritical carbon dioxide confined in nanoporous carbon by in situ neutron diffraction*, J. Phys.: Conf. Ser. 340 (2012) 012046.
- [216] K.L. Stefanopoulos, T.A. Steriotis, F.K. Katsaros, N.K. Kanellopoulos, A.C. Hannon, J.D.F. Ramsay, *Structural study of supercritical carbon dioxide confined in nanoporous silica by in situ neutron diffraction*, J. Phys.: Conf. Ser. 340 (2012) 012049.
- [217] Y. Onodera, K. Mori, T. Otomo, A.C. Hannon, M. Sugiyama, T. Fukunaga, *Reverse Monte Carlo modeling of Li<sub>2</sub>S-P<sub>2</sub>S<sub>5</sub> superionic conductors*, J. Phys.: Conf. Ser. 340 (2012) 012058.
- [218] O.N. Senkov, Y.Q. Cheng, D.B. Miracle, E.R. Barney, A.C. Hannon, C.F. Woodward, *Atomic structure of Ca<sub>40+x</sub>Mg<sub>25</sub>Cu<sub>35-x</sub> metallic glasses*, J. Appl. Phys. 111 (2012) 123515-123519.
- [219] A.M. Chippindale, S.J. Hibble, E.J. Bilbé, E. Marelli, A.C. Hannon, C. Allain, R. Pansu, F. Hartl, *Mixed copper, silver and gold cyanides, (M<sub>x</sub>M'<sub>1-x</sub>)CN: Tailoring chain structures to influence physical properties*, J. Am. Chem. Soc. 134 (2012) 16387-16400.
- [220] H.Y. Playford, A.C. Hannon, E.R. Barney, R.I. Walton, *Structures of uncharacterised polymorphs of gallium oxide from total neutron diffraction*, Chem.-Eur. J. 19 (2013) 2803-2813.
- [221] O.L.G. Alderman, A.C. Hannon, D. Holland, S. Feller, G. Lehr, A. Vitale, U. Hoppe, M. v. Zimmerman, A. Watenphul, *Lone-pair distribution and plumbite network formation in high lead silicate glass, 80PbO.20SiO<sub>2</sub>*, Phys. Chem. Chem. Phys. 15 (2013) 8506-8519.
- [222] U. Hoppe, L. Delevoye, L. Montagne, M. von Zimmermann, A.C. Hannon, *Structure of Nb<sub>2</sub>O<sub>5</sub>-NaPO<sub>3</sub> glasses by X-ray and neutron diffraction*, Phys. Chem. Chem. Phys. 15 (2013) 8520-8528.
- [223] E.R. Barney, A.C. Hannon, D. Holland, N. Umesaki, M. Tatsumisago, R.G. Orman, S. Feller, *Terminal oxygens in amorphous TeO<sub>2</sub>*, J. Phys. Chem. Lett. 4 (2013) 2312-2316.
- [224] A. Masuno, S. Kohara, A.C. Hannon, E. Bychkov, H. Inoue, *Drastic connectivity change in high refractive index lanthanum niobate glasses*, Chem. Mater. 25 (2013) 3056-3061.
- [225] L. Hawelek, A. Brodka, J.C. Dore, A.C. Hannon, S. Iijima, M. Yudasaka, T. Ohba, K. Kaneko, A. Burian, *Structural modeling of dahlia-type single-walled carbon nanohorn aggregates by molecular dynamics*, J. Phys. Chem. A 117 (2013) 9057-9061.
- [226] H.Y. Playford, A.C. Hannon, M.G. Tucker, M.R. Lees, R.I. Walton, *Total neutron scattering investigation of the structure of a cobalt gallium oxide spinel prepared by solvothermal oxidation of gallium metal*, J. Phys.: Condens. Matter 25 (2013) 454212.
- [227] S.J. Hibble, A.M. Chippindale, E. Marelli, S. Kroeker, V.K. Michaelis, B.J. Greer, P.M. Aguiar, E.J. Bilbé, E.R. Barney, A.C. Hannon, *Local and average structure in zinc cyanide: towards an understanding of the atomistic origin of negative thermal expansion*, J. Am. Chem. Soc. 135 (2013) 16478-16489.
- [228] D.L. Burnett, M.H. Harunsani, R.J. Kashtiban, H.Y. Playford, J. Sloan, A.C. Hannon, R.I. Walton, *Investigation of some new hydro(solvo)thermal synthesis routes to nanostructured mixed-metal oxides*, J. Solid State Chem. 214 (2014) 30-37.

- [229] G. Cobourne, G. Mountjoy, J.D. Rodriguez-Blanco, L.G. Benning, A.C. Hannon, J.R. Plaisier, *Neutron and X-ray diffraction and empirical potential structure refinement modelling of magnesium stabilised amorphous calcium carbonate*, *J. Non-Cryst. Solids* 401 (2014) 154-158.
- [230] O.L.G. Alderman, A.C. Hannon, D. Holland, N. Umesaki, *On the germanium-oxygen coordination number in lead germanate glasses*, *J. Non-Cryst. Solids* 386 (2014) 56-60.
- [231] U. Hoppe, N.P. Wyckoff, R.K. Brow, M. von Zimmermann, A.C. Hannon, *Structure of Na<sub>2</sub>O-GeO<sub>2</sub>-P<sub>2</sub>O<sub>5</sub> glasses by X-ray and neutron diffraction*, *J. Non-Cryst. Solids* 390 (2014) 59-69.
- [232] L.M. Daniels, H.Y. Playford, J.-M. Grenèche, A.C. Hannon, R.I. Walton, *Metastable (Bi, M)<sub>2</sub>(Fe, Mn, Bi)<sub>2</sub>O<sub>6+x</sub> (M = Na or K) pyrochlores from hydrothermal synthesis*, *Inorg. Chem.* 53 (2014) 13197-13206.
- [233] A.C. Hannon, J.W. Zwanziger, S. Kroeker, L. Cormier, R.E. Youngman, eds. *Borate Glasses, Crystals and Melts: 7<sup>th</sup> International Conference. 2014*, The Society of Glass Technology: Sheffield.
- [234] H.Y. Playford, A.C. Hannon, M.G. Tucker, D.M. Dawson, S.E. Ashbrook, R.J. Kastiban, J. Sloan, R.I. Walton, *Characterisation of structural disorder in  $\gamma$ -Ga<sub>2</sub>O<sub>3</sub>*, *J. Phys. Chem. C* 118 (2014) 16188-16198.
- [235] E.R. Barney, A.C. Hannon, D. Holland, N. Umesaki, M. Tatsumisago, *Alkali environments in tellurite glasses*, *J. Non-Cryst. Solids* 414 (2015) 33-41.
- [236] E. Bennett, T. Wilson, P. Murphy, K. Refson, A.C. Hannon, S. Imberti, S.K. Callear, G.A. Chass, S.F. Parker, *How the surface structure determines the properties of CuH*, *Inorg. Chem.* 54 (2015) 2213-2220.
- [237] E.L. Bennett, T. Wilson, P.J. Murphy, K. Refson, A.C. Hannon, S. Imberti, S.K. Callear, G.A. Chass, S.F. Parker, *Structure and spectroscopy of CuH prepared via borohydride reduction*, *Acta Cryst. B* 71 (2015) 608-612.
- [238] A.M. Chippindale, S.J. Hibble, E. Marelli, E.J. Bilbé, A.C. Hannon, M. Zbiri, *Chemistry and structure by design: ordered CuNi(CN)<sub>4</sub> sheets with copper(II) in a square-planar environment*, *Dalton Trans.* 44 (2015) 12502-12506.
- [239] A.C. Hannon, *Neutron diffraction techniques for structural studies of glasses*, in: M. Affatigato (Ed.) *Modern glass characterization*, Wiley, New York, 2015, p. 158-240.
- [240] N. Kanwal, H. Toms, A.C. Hannon, F.A. Perras, D.L. Bryce, N. Karpukhina, I. Abrahams, *Structure and solubility behaviour of zinc containing phosphate glasses*, *J. Mat. Chem. B* 3 (2015) 8842-8855.
- [241] M. Kassem, A. Sokolov, A. Cuisset, T. Usuki, S. Khaoulani, P. Masselin, D. Le Coq, J.C. Neufeind, M. Feyngenson, A.C. Hannon, C.J. Benmore, E. Bychkov, *Mercury sulphide dimorphism in glasses*, *J. Phys. Chem. B* 120 (2016) 5278-5290.
- [242] J.M. Smith, R.A. Martin, D.T. Bowron, A.C. Hannon, R.J. Newport, *Probing crystallization of a fluorapatite - mullite system using neutron diffraction*, *J. Non-Cryst. Solids* 451 (2016) 84-88.
- [243] A.C. Hannon, *Bonding and structure in network glasses*, *J. Non-Cryst. Solids* 451 (2016) 56-67.
- [244] U. Patel, K.M.Z. Hossain, A. Kennedy, A. Hannon, E. Barney, I. Ahmed, *Calcium/strontium substituted phosphate based glasses for orthopaedic applications*, *Front. Bioeng. Biotechnol.* 4 (2016) doi: 10.3389/conf.FBIOE.2016.3301.01175.
- [245] A.C. Hannon, L. Koudelka, eds. *Borate Glasses, Crystals and Melts: 8<sup>th</sup> International Conference. Phosphate Glasses: 1<sup>st</sup> International Conference. 2016*, The Society of Glass Technology: Sheffield.
- [246] A. Gulenko, L.F. Chungong, J. Gao, I. Todd, A.C. Hannon, R.A. Martin, J.K. Christie, *Atomic structure of Mg-based metallic glasses from molecular dynamics and neutron diffraction*, *Phys. Chem. Chem. Phys.* 19 (2017) 8504-8515.
- [247] O.L.G. Alderman, A.C. Hannon, S. Feller, R. Beanland, D. Holland, *The germanate anomaly in alkaline earth germanate glasses*, *J. Phys. Chem. C* 121 (2017) 9462-9479.
- [248] U. Patel, K.M.Z. Hossain, A.R. Kennedy, E.R. Barney, I. Ahmed, R.M. Moss, A.C. Hannon, *Structural and physico-chemical analysis of calcium/ strontium substituted, near-invert phosphate based glasses for biomedical applications*, *Acta Biomater.* 60 (2017) 109-127.
- [249] J.W.E. Drewitt, P.S. Salmon, A. Zeidler, C.J. Benmore, A.C. Hannon, *Structure of rare-earth chalcogenide glasses by neutron and x-ray diffraction*, *J. Phys.: Condens. Matter* 29 (2017) 225703.
- [250] L.F. Chungong, L.A. Swansbury, G. Mountjoy, A.C. Hannon, A.F. Lee, R.A. Martin, *Atomic structure of chlorine containing calcium silicate glasses by neutron diffraction and <sup>29</sup>Si solid state NMR*, *Int. J. Appl. Glass Sci.* 8 (2017) 383-390.
- [251] L.M. Daniels, H.Y. Playford, A.C. Hannon, R.I. Walton, *Structural disorder in (Bi, M)<sub>2</sub>(Fe, Mn, Bi)<sub>2</sub>O<sub>6+x</sub> (M = Na or K) pyrochlores seen from Reverse Monte Carlo analysis of neutron total scattering*, *J. Phys. Chem. C* 121 (2017) 18120-18128.
- [252] A. Zeidler, P.S. Salmon, D.A.J. Whittaker, K.J. Pizzey, A.C. Hannon, *Topological ordering and viscosity in the glassy Ge-Se system: The search for a structural or dynamical signature of the intermediate phase*, *Front. Mater.* 4 (2017) 32.
- [253] A.C. Hannon, *Neutron Diffraction, Instrumentation*, in: J.C. Lindon, G.E. Tranter, and D.W. Koppenaal (Eds.), *Encyclopedia of Spectroscopy and Spectrometry (Third Edition)*, Academic Press, Oxford, 2017, p. 76-87.

- [254] A.C. Hannon, *Neutron Diffraction, Theory*, in: J.C. Lindon, G.E. Tranter, and D.W. Koppenaal (Eds.), *Encyclopedia of Spectroscopy and Spectrometry (Third Edition)*, Academic Press, Oxford, 2017, p. 88-97.
- [255] A.C. Hannon, A.S. Gibbs, H. Takagi, *Neutron scattering length determination by means of total scattering*, *J. Appl. Cryst.* 51 (2018) 854-866.
- [256] A.L. Paterson, A.C. Hannon, U. Werner-Zwanziger, J.W. Zwanziger, *Structural differences between the glass and crystal phases of LaBGeO<sub>5</sub>: Neutron diffraction and NMR spectroscopy*, *J. Phys. Chem. C* 122 (2018) 20963-20980.
- [257] U. Hoppe, A. Saitoh, G. Tricot, P. Freudenberger, A.C. Hannon, H. Takebe, R.K. Brow, *The structure and properties of  $x\text{ZnO}-(67-x)\text{SnO}-33\text{P}_2\text{O}_5$  glasses: (II) Diffraction, NMR, and chromatographic studies*, *J. Non-Cryst. Solids* 492 (2018) 68-76.
- [258] A.C. Hannon, *Uwe Hoppe: Neutrons, X-rays and phosphate glasses*, *Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B* 60 (2019) 187-202.
- [259] L.F. Chungong, M.A. Isaacs, A.P. Morrell, L.A. Swansbury, A.C. Hannon, A.F. Lee, G. Mountjoy, R.A. Martin, *Insight into the atomic scale structure of  $\text{CaF}_2\text{-CaO-SiO}_2$  glasses using a combination of neutron diffraction, <sup>29</sup>Si solid state NMR, high energy X-ray diffraction, FTIR, and XPS*, *Biomed. Glasses* 5 (2019) 112-123.
- [260] S. d'Ambrumenil, M. Zbiri, A.M. Chippindale, S.J. Hibble, E. Marelli, A.C. Hannon, *Lattice dynamics and negative thermal expansion in the framework compound  $\text{ZnNi}(\text{CN})_4$  with two-dimensional and three-dimensional local environments*, *Phys. Rev. B* 99 (2019) 024309.
- [261] U. Hoppe, R.K. Brow, A.C. Hannon, M. von Zimmermann, *Structure of tin phosphate glasses by neutron and X-ray diffraction*, *J. Non-Cryst. Solids: X* 2 (2019) 100017.
- [262] M. Kassem, M. Bokova, A.S. Tverjanovich, D. Fontanari, D. Le Coq, A. Sokolov, P. Masselin, S. Kohara, T. Usuki, A.C. Hannon, C.J. Benmore, E. Bychkov, *Bent  $\text{HgI}_2$  molecules in the melt and sulfide glasses: Implications for non-linear optics*, *Chem. Mater.* 31 (2019) 4103-4112.
- [263] U. Patel, L. Macri-Pellizzeri, K.M. Zakir Hossain, B.E. Scammell, D.M. Grant, C.A. Scotchford, A.C. Hannon, A.R. Kennedy, E.R. Barney, I. Ahmed, V. Sottile, *In vitro cellular testing of strontium/calcium substituted phosphate glass discs and microspheres shows potential for bone regeneration*, *J. Tissue Eng. Regen. M.* 13 (2019) 1-10.
- [264] K. Itoh, Y. Yoshioka, E.R. Barney, A.C. Hannon, *Free volume distribution and structural inhomogeneity in  $\text{Ni}_{50}\text{V}_{50}$  amorphous alloy*, *J. Alloys Comp.* 770 (2019) 350-355.
- [265] T. Usuki, M. Bokova, M. Kassem, K. Ohara, A.C. Hannon, E. Bychkov, *Dimeric molecular structure of molten gallium trichloride and a hidden evolution toward a possible liquid-liquid transition*, *J. Phys. Chem B* 123 (2019) 10260-10266.
- [266] S. Vaishnav, A.C. Hannon, E.R. Barney, P.A. Bingham, *Neutron diffraction and Raman studies of the incorporation of sulfate in silicate glasses*, *J. Phys. Chem. C* 124 (2020) 5409-5424.
- [267] N. Barrow, M. Packard, S. Vaishnav, M.C. Wilding, P.A. Bingham, A.C. Hannon, M. Appler, S. Feller, *MAS-NMR studies of carbonate retention in a very wide range of  $\text{Na}_2\text{O-SiO}_2$  glasses*, *J. Non-Cryst. Solids* 534 (2020) 119958.
- [268] M. Jesuit, M. Packard, M. Boyd, N.S. Tagiara, E.I. Kamitsos, O. Alderman, C. Benmore, A. Hannon, M. Appler, S. Feller, *Analysis of physical and structural properties of alkali oxide-modified tellurite glasses*, *J. Undergrad. Rep. Phys.* 30 (2020) 100003.
- [269] M. Kassem, T. Bounazef, D. Fontanari, A. Sokolov, M. Bokova, A.C. Hannon, E. Bychkov, *Chemical and structural variety in sodium thioarsenate glasses studied by neutron diffraction and supported by first-principles simulations*, *Inorg. Chem.* 59 (2020) 16410-16420.
- [270] Y. Onodera, S. Kohara, P.S. Salmon, A. Hirata, N. Nishiyama, S. Kitani, A. Zeidler, M. Shiga, A. Masuno, H. Inoue, S. Tahara, A. Polidori, H.E. Fischer, T. Mori, S. Kojima, H. Kawaji, A.I. Kolesnikov, M.B. Stone, M.G. Tucker, M.T. McDonnell, A.C. Hannon, Y. Hiraoka, I. Obayashi, T. Nakamura, J. Akola, Y. Fujii, K. Ohara, T. Taniguchi, O. Sakata, *Structure and properties of densified silica glass: Characterizing the order within disorder*, *NPG Asia Materials* 12 (2020) 85.
- [271] A.C. Hannon, *2.1 Basic concepts of network glass structure*, in: P. Richet (Ed.) *Encyclopedia of glass science, technology, history and culture*, John Wiley & Sons Inc, 2021, p. 129-140.
- [272] A. Amon, M.E. Sener, A. Rosu-Finsen, A.C. Hannon, B. Slater, C.G. Salzmann, *Preparation and structure of the ion-conducting mixed molecular glass  $\text{Ga}_{23.17}$* , *Inorg. Chem.* 60 (2021) 6319-6326.
- [273] A.C. Hannon, S. Vaishnav, O.L.G. Alderman, P.A. Bingham, *The structure of sodium silicate glass from neutron diffraction and modelling of oxygen-oxygen correlations*, *J. Am. Ceram. Soc.* 104 (2021) 6155-6171.
- [274] U. Hoppe, A. Ghosh, S. Feller, A.C. Hannon, D.A. Keen, J. Neufeind, *Structural units of binary vanadate glasses by X-ray and neutron diffraction*, *J. Non-Cryst. Solids* 572 (2021) 121120.
- [275] U. Hoppe, A. Schöps, A.C. Hannon, A. Ghosh, *Structure of silver molybdate glasses by X-ray and neutron diffraction*, *J. Non-Cryst. Solids* 573 (2021) 121143.

- [276] N. Kaur, A. Khanna, A.C. Hannon, *Neutron diffraction investigation of copper tellurite glasses with high real-space resolution*, J. Appl. Cryst. 54 (2021) 1647-1655.
- [277] O.L.G. Alderman, A.C. Hannon, D. Holland, R. Dupree, G. Lehr, A. Vitale, S. Feller, *Lead silicate glass structure: New insights from diffraction and modelling of probable lone pair locations*, J. Am. Ceram. Soc. 105 (2022) 938-957.
- [278] O.L.G. Alderman, A.C. Hannon, D. Holland, R. Dupree, S. Feller, *Structural origin of the weak germanate anomaly in lead germanate glass properties*, J. Am. Ceram. Soc. 105 (2022) 1010-1030.
- [279] U. Hoppe, A. Schöps, A.C. Hannon, A. Barz, D. Stachel, *Structure of binary antimony phosphate glasses by diffraction methods*, J. Non-Cryst. Solids 583 (2022) 121476.
- [280] R. Zaiter, M. Kassem, D. Fontanari, A. Sokolov, T. Usuki, M. Bokova, A.C. Hannon, C.J. Benmore, F. Cousin, I. Ozheredov, E. Bychkov, *Unexpected role of metal halides in a chalcogenide glass network*, Materials & Design 216 (2022) 110547.
- [281] U. Hoppe, A. Saitoh, T. Shimizu, G. Tricot, A.C. Hannon, *Properties and structure of ternary BaO-SnO-P2O5 glasses*, J. Non-Cryst. Solids 597 (2022) 121909.
- [282] Y.X. Wang, G.G. Wang, D.T. Bowron, F.Y. Zhu, A.C. Hannon, Y.Q. Zhou, X. Liu, G.S. Shi, *Unveiling the structure of aqueous magnesium nitrate solutions by combining X-ray diffraction and theoretical calculations*, Phys. Chem. Chem. Phys. 24 (2022) 22939-22949.
- [283] M. Kassem, T. Bounazef, A. Sokolov, M. Bokova, D. Fontanari, A.C. Hannon, I. Alekseev, E. Bychkov, *Deciphering Fast Ion Transport in Glasses: A Case Study of Sodium and Silver Vitreous Sulfides*, Inorg. Chem. 61 (2022) 12870-12885.
- [284] L.V.D. Gammond, R. Mendes Da Silva, A. Zeidler, H. Mohammadi, R.E. Youngman, B.G. Aitken, P. Florian, D.R. Neuville, L. Hennet, H.E. Fischer, A.C. Hannon, C.J. Benmore, P.S. Salmon, *Structure and related properties of amorphous magnesium aluminosilicates*, Phys. Rev. Mater. 6 (2022) 125603.
- [285] I. Pethes, P. Jóvári, S. Michalik, T. Wagner, V. Prokop, I. Kaban, D. Száraz, A. Hannon, M. Krbal, *Short range order and topology of binary Ge-S glasses*, J. Alloys Comp. 936 (2023) 168170.
- [286] F. Zhu, D.T. Bowron, S. Gärtner, C. Fang, Y. Zhou, H. Liu, A.C. Hannon, *Structural analysis of potassium borate solutions*, Phys. Chem. Chem. Phys. 25 (2023) 12207-12219.
- [287] K. Itoh, J. Saida, E.R. Barney, A.C. Hannon, *Deuterium occupation of interatomic hole sites in Ni<sub>67</sub>Zr<sub>33</sub> amorphous alloy*, J. Alloys Comp. 961 (2023) 171094.
- [288] A.C. Hannon, *Adrian Carl Wright: The father of neutron diffraction studies of glass*, Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B 64 (2023) 84-85.
- [289] L. Song, Y. Wang, A.C. Hannon, S. Feller, W. Li, Y. Zhou, F. Zhu, *Structural investigation of lithium borate glasses by Raman spectroscopy: Quantitative evaluation of structural units and its correlation with density*, J. Non-Cryst. Solids 616 (2023) 122478.
- [290] R. Mendes Da Silva, A. Zeidler, H. Mohammadi, L.V.D. Gammond, E. Girón Lange, R.E. Youngman, B.G. Aitken, A.C. Hannon, C.J. Benmore, G.B.M. Vaughan, P.S. Salmon, *Mapping the structural trends in zinc aluminosilicate glasses*, J. Chem. Phys. 159 (2023) 064501.
- [291] L. Song, F. Zhu, A.C. Hannon, Y. Zhou, Y. Wang, W. Li, *Raman spectroscopy combined with quantitative calculation to establish B<sub>2</sub>O<sub>3</sub> glass structure model*, Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B 64 (2023) 178-189.
- [292] A.K. Varshneya, A.C. Hannon, C. Wilkinson, S. Bawa, J. Parker, S. Yoshida, G. Jose, S. Hakes, A. Seddon, B. McMillan, P. Bingham, *Highlights of the Society of Glass Technology Annual Conference*, Phys. Chem. Glasses Eur. J. Glass Sci. Technol. B 64 (2023) 145-154.
- [293] U. Hoppe, P.T. Freudenberger, R.K. Brow, J. Bednarčík, A.C. Hannon, *Study of the Structure of Zn and Na Borophosphate Glasses Using X-ray and Neutron Scattering Techniques*, Solids 5 (2024) 355-374.
- [294] L. Song, A.C. Hannon, S. Feller, R. Liu, P. McGuire, B. Zhang, Y. Zhou, W. Li, F. Zhu, *Deciphering the structure and potassium-ion transport mechanism of potassium borate glass*, Dalton Trans. 53 (2024) 10434-10445.
- [295] L. Song, S. Feller, H. Hawbaker, W. Yin, W. Li, A.C. Hannon, Y. Zhou, J. Xu, F. Zhu, *Unveiling the structure of calcium borate glass by neutron diffraction, MAS-NMR, Raman and first-principles calculations*, Ceram. Int. 50 (2024) 6634-6647.