

Publications R. Lindsay Davis from HIFAR, 1968 and 1977-2000

Paramagnetic neutron scattering in an equiatomic Fe-Mn alloy

E.R. Vance and **R.L. Davis**

J Phys. Soc. Japan **25** (1968) 367

The magnetic structure of ErFe_3

R.L. Davis, R.K. Day and J.B. Dunlop

J Phys. F **7** (1977) 1885-1890

A neutron diffraction study of the penetration of water into phospholipid membranes

B.A. Cornell, **R.L. Davis** and K.M. Easton

Proc. Aust. Soc. Biophysics **3** (1979) 21A

A neutron diffraction study of water in membranes

B.A. Cornell, **R.L. Davis**, and K.M. Easton

Proc. Aust. Biochem. Soc. **13** (1980) 111

The Australian high resolution neutron powder diffractometer

C.J. Howard, C.J. Ball, M.M. Elcombe and **R.L. Davis**

Australian Journal of Physics **36** (1983) 507-518

Zirconium dodecaboride ZrB_{12} : confirmation of the B_{12} cubooctahedral unit

C. Kennard and **R.L. Davis**

J. Sol. State Chem. **47** (1983) 103

Spin reorientation in $\text{Tm}_2\text{Fe}_{14}\text{B}$

R.L. Davis, R.K. Day and J.B. Dunlop

Sol. State Commun. **56(2)** (1985) 181-183

Structure of sodium tetradeuteroborate, NaBD_4

R.L. Davis and C.H.L. Kennard

J. Sol. State Chem. **59** (1985) 393-396

The bifurcated hydrogen bond in 4-chloropyridinium hexachlorostannate(IV):
confirmation via neutron powder diffraction

B.D. James and **R.L. Davis**

Inorg. Chim. Acta **100** (1985) L31-32

Thermal parameters for Li halides

R.L. Davis and C.H.L. Kennard

J. Sol State Chem. **64** (1986) 217-219

Metal chelation versus internal hydrogen bonding of the α -hydroxy carboxylate group

H.L. Carrell, J.P. Kluster, E.A. Percy, W.C. Stallings, D.E. Zacharias, **R.L. Davis**, C. Astbury
and C.H.L. Kennard

J. Am. Chem. Soc. **109** (1987) 8067-8071

Structure (neutron) of Er_3Al_2

R.L. Davis, R.K. Day, J.B. Dunlop and B. Barbara

Acta. Cryst. **C43** (1987) 1675-1677

Magnetic structures of Er₃Al₂

R.L. Davis, R.K. Day, J.B. Dunlop and B. Barbara
Materials Science Forum **27/28** (1988) 249-252

Organolanthanoids XIII. Bis(pentadeuterocyclopentadienyl) ytterbium(II)

G.B. Deacon, D.L. Wilkinson and **R.L. Davis**
Inorg. Chim. Acta. **142(2)** (1988) 329-331

Structure confirmation of ZrB₁₂ using powder neutron data,

C.H.L. Kennard and **R.L. Davis**
Materials Science Forum **27/28** (1988) 81-82

The distribution of magnetic moment in Fe_{3-x}Mn_xSi alloys

H. Kepa, T.J. Hicks and **R.L. Davis**
Materials Science Forum **27/28** (1988) 267-272

Structure of calomel, Hg₂Cl₂, derived from neutron powder data

N.J. Calos, C.H.L. Kennard and **R.L. Davis**
Z. Krist. **187** (1989) 305-309

Neutron scattering study of the structure of Y₂BaCuO₅ at 294 and 77 K

B.A. Hunter, S.L. Town, **R.L. Davis**, G.J. Russell and K.N.R. Taylor
Physica C **161** (1989) 594

Al-Si substitution in α -phase AlMnSi

J.E. Tibballs, **R.L. Davis** and B.A. Parker
J. Mat. Science **24(6)** (1989) 2177-2182

Ether donors – a comparative neutron and X-ray diffraction study of an O₂N₃

donor macrocycle: 6,7,8,9,10,11,12,13,19,20- decahydro-5H-dibenzo[e,p] [1,4,8,11,14]
dioxatriazacycloheptadecine

K.R. Adam, **R.L. Davis**, C.H.L. Kennard, N.J. Calos, L.F. Lindoy and B.J. McCool
J. Chem. Soc. Chem. Commun. Vol. N/A (1990) 1784-1785

Crystal structure of mimetite, Pb₅(AsO₄)₃Cl

N.J. Calos, C.H.L. Kennard and **R.L. Davis**
Z. Krist. **191** (1990) 125-129

Giant enhancement of oxygen mobility in high-T_c superconductors by atomic substitution

J.L. Tallon, D.M. Poole, M.P. Staines, M.E. Bowden, N.E. Fowler, R.G. Buckley, M.R. Presland and
R.L. Davis
Physica C **171(1-2)** (1990) 61-68

Characterisation of large single crystals of YBa₂Cu₃O_{7- δ} using neutron scattering

S.L. Town, B.A. Hunter, S. Bosi, **R.L. Davis** and K.N.R. Taylor
Physica C **165** (1990) 298-304

Preparation and properties of Fe-rich Nd-Fe-Ti intermetallic compounds and their nitrides

S.J. Collocott, R.K. Day, J.B. Dunlop and **R.L. Davis**
Proc. Seventh Int. Symp. on Magnetic Anisotropy and Coercivity in Rare-Earth Transition Metal Alloys,
Canberra July (1992) pp 437-444

The structure of $C_{60}H_{36}$

L.E. Hall, D.R. McKenzie, M.I. Attalla, A.M. Vassallo, **R.L. Davis**, J.B. Dunlop and D.H.J. Cockayne
Journal of Physical Chemistry **97** (1993) 5741-5744

On the nature of the host guest interaction between cyclam and tert-butylbenzoic acid
- a system pre-assembled for metal complex formation

K.R. Adam, M. Antolovich, I.M. Atkinson, A.J. Leong, L.F. Lindoy, B.J. McCool, **R.L. Davis**,
C.H.L. Kennard and P.A. Tasker

Chemical Communications vol. N/A (1994) 1539-1540

The structure of $Li_{0.43}Na_{0.35}CO_{1.96}$ using neutron powder diffraction

R.J. Balsys and **R.L. Davis**

Solid State Ionics **69** (1994) 69-74

New rare-earth intermetallic phases $R_3(Fe,M)_{29}X_n$: (R=Ce, Pr, Nd, Sm, Gd; M=Ti, V, Cr, Mn; and X=H, N, C)

J.M. Cadogan, Hong-Shuo Li, A. Margarian, J.B. Dunlop, D.H. Ryan, S.J. Collocott and **R.L. Davis**

Journal of Applied Physics **76** (1994) 6138-6143

Structural and magnetic-properties of $Nd_2(FeTi)_{19}$

J. M. Cadogan, H. S. Li, **R. L. Davis**, A. Margarian, J. B. Dunlop, and P.B. Gwan

J. Appl. Phys. **75(10)** (1994) 7114-7116

Structural properties of a novel magnetic ternary phase: $Nd_3(Fe_{1-x}Ti_x)_{29}$ ($0.04 \leq x \leq 0.06$)

H.S. Li, J.M. Cadogan, **R.L. Davis**, A. Magarian and J.B. Dunlop

Solid State Communications **90** (1994) 487-492

Structure of calcium aluminate sulphate $Ca_4Al_6O_{16}S$

N.J. Calos, C.H.L. Kennard, A.K. Whittaker and **R.L. Davis**

J. Solid State Chem. **119** (1995) 1-7

Refinement of the structure of $Na_{0.74}CoO_2$ using neutron powder diffraction

Ronald J. Balsys and **R. Lindsay Davis**

Solid State Ionics **93** (1996) 279-282

Structural characterisation of the new fullerene-rare gas compound Ar_1C_{60}

G.E. Gadd, M. James, S. Moricca, P.J. Evans and **R.L. Davis**

Fullerene Science and Technology **4(5)** (1996) 853-862

The formation and structural characterisation of the novel rare gas fullerene compound Ar_1C_{60}

G.E. Gadd, M. James, S. Moricca, P.J. Evans and **R.L. Davis**

2nd International Colloq on the Science and Technology of the Fullerenes July 1996

Self-assembly directed by NH...O hydrogen bonding: a neutron study of a trilayered supramolecular array formed between 1,2-diaminoethane and benzoic acid

K.R. Adam, I.M. Atkinson, **R.L. Davis**, L.F. Lindoy, M.S. Mahinay, B.J. McCool,
B.W. Skelton and A.H. White

Chemical Communications, vol N/A (1997) 467-468

The structural determination of the hydrofullerene $C_{60}D_{36}$ by neutron diffraction

L.E. Hall, D.R. Mckenzie, **R.L. Davis**, M.I. Attalla and A.M. Vassallo

Acta Cryst. **B54** (1998) 345-350

Structure and decomposition of ceramic $\text{Ba}_3\text{Y}_4\text{O}_9$
B. Szymanik, R.G. Buckley, H.J. Trodahl and **R.L. Davis**
Solid State Ionics **107** (1998) 223-228

Intermediate cubic phase crystallised from synroc alkoxy precursor at 800°C
E.R. Vance, B.A. Hunter, **R.L. Davis** and K.D. Hawkins
J. Solid State Chem. **150(1)** (2000) 209-212

Conference presentations

Magnetic properties of $\text{Tm}_2\text{Fe}_{14}\text{B}$
R.K. Day, J.B. Dunlop, D.C. Price and **R.L. Davis**
Condensed Matter Physics Meeting Wagga TM3 (1985)

Growth and properties of large single crystals of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$
S. Bosi, T. Puzzer, B Hunter, S.L. Town, G.J. Russell, K.N.R. Taylor and **R.L. Davis**
AIP Condensed Matter Physics Meeting Wagga TM7 (1989)

LONGPOL Rebuilt
Tao Fang, A. Eleftherakis, **R.L. Davis**, B. Maguire, and T.J. Hicks
AIP condensed Matter Physics Meeting Wagga WP15 (1989)

AUSANS instrument. The new Australian Small Angle Neutron Scattering instrument
M.M. Elcombe, R.B. Knott, and **R.L. Davis**
AIP condensed Matter Physics Meeting Wagga WP49 (1989)

Neutron powder diffraction study of high temperature superconductors
B.A. Hunter, S.L. Town, **R.L. Davis**, K.N.R. Taylor and G.J. Russell
AIP Condensed Matter Physics Meeting Wagga WP66 (1989)

Development of a neutron texture diffractometer using the existing 2TANB
single crystal four circle diffractometer
S.L. Town, **R.L. Davis**, B A. Hunter and K.N.R. Taylor
AIP Condensed Matter Physics Meeting Wagga TP27 (1989)

Magnetic Order in Fe_2MnSi
R.L. Davis, T.R. Finlayson, S.J. Kennedy and J.R. Miles
AIP Condensed Matter Physics Meeting Wagga TP33 (1990)

An Application of neutrons for residual stress measurements
M. Kijek, T.R. Finlayson and **R.L. Davis**
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A new research reactor review
J. Boldeman, **R.L. Davis**, M.M. Elcombe, C.J. Howard, S.J. Kennedy and S.L. Town
AIP Condensed Matter Physics Meeting Wagga WE3 (1993)

Electron and X-ray diffraction studies of fullerenes
L. Hall, D.R. McKenzie, A.M. Vassallo, M. Atalla, **R.L. Davis**, J. Dunlop and D.J.H. Cockayne
AIP Condensed Matter Physics Meeting Wagga WP18 (1993)

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M.G. Fee, B. Szymanik, G.J. Gainsford, **R.L. Davis**, J.F. Clare, H.J. Trodahl,
R.G. Buckley and J.L. Tallon
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Structural properties of novel magnetic ternary rare-earth iron-rich intermetallic
phase: $Nd_3(Fe_{1-x}Ti_x)_{29}$ ($0.04 \leq x \leq 0.06$)
Hong-Shuo Li, J.M. Cadogan, **R.L. Davis**, A. Margarian, J. Dunlop and P.B. Gwan
Workshop on Rare-Earth Magnets and Applications, Charles Sturt University, Wagga Wagga TM3
(1994)

A high temporal resolution solid state thermal neutron detector
E.N. Bakshi, N.N. McKean, **R.L. Davis** and A. Bartel
A&NZIP Proc. of 18th Cond Matt Phys. Meeting Wagga WP63 (1994)

Structural and electronic properties of $C_{60}H_{36}$
L.E. Hall, D.R. McKenzie, A.M. Vassallo, **R.L. Davis** and D.J.H. Cockayne
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D. Li, H. Wang, C.W. Mackinnon, I.M. Low and **R.L. Davis**
Proceedings of the International Ceramics Conference Sydney July 1994 pp1181-1187

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A.G. Bartel, **R.L. Davis** and E.N. Bakshi
A&NZIP Proc. of 19th Cond Matt Phys. Meeting Wagga TP37 (1995)

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L.E. Hall, D.R. McKenzie, A.M. Vassallo, **R.L. Davis**, D.J.H. Cockayne and M.I. Attalla
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Neutron diffraction determination of the structures of the hydrofullerenes $C_{60}H_{36}$ and $C_{60}D_{36}$
L.E. Hall, D.R. McKenzie, A.M. Vassallo, M.I. Attalla and **R.L. Davis**
The Third Australian Fullerenes Symposium Dec (1996)