

Author Index to Volume 41

- Ahmed, M. A., El-Desoky, M. M., and Radwan, F. A.—
Experimental study of the phase transition in $(\text{CH}_2)_8(\text{NH}_3)_2\text{FeCl}_{4-x}\text{Br}_x$ ($x = 0, 1$ and 2) 83
- Amos, K., Chen, X. J., Dieperink, A. E. L., and Morrison, I.—
Renormalisation of g-boson effects in an s-d-g boson model 633
- Ando, M.—
See Uno, R. 133
- Andriopoulos, N., and von Nagy Felsobuki, E. I.—
Pseudopotential calculations for Li_2 , Na_2 and NaLi 563
- Baerlocher, Ch.—
See Hepp, A. 229
- Barker, F. C.—
Consistent description of unbound states observed in scattering and reactions 743
See Woods, C. L. 525
- Beesham, A.—
FLRW cosmological models in Lyra's manifold with time dependent displacement field 833
- Bertram, W. K.—
An investigation of r.f. travelling wave current drive using the $\langle \mathbf{\hat{J}} \times \mathbf{\hat{B}} \rangle$ model 587
- Brahde, R.—
Lunisolar atmospheric tides: A new approach 807
- Brajamani, S.—
See Mukherjee, K. K. 693
- Bridwell, L. B., Hay, H. J., Pender, L. F., Sofield, C. J., and Treacy, P. B.—
Excitation of swift heavy ions in foil targets. IV. Preequilibrium energy losses and mean charge states 681
- Briggs, K.—
On the radiation from a rotating dipole 629
- Cahill, R. T., Roberts, C. D., and Praschifka, J.—
Why baryons are not Skyrmiions 11
- Catford, W. N.—
See Woods, C. L. 525
- Chakraborty, B., Sur, A. K., and Paul, S. N.—
Corrigendum to: Nonlinear instability of ion-cyclotron whistlers in the ionosphere 99
- Chen, X. J.—
See Amos, K. 633
- Clay, R. W.—
A search for tachyons in cosmic ray showers 91
The knee of the cosmic ray energy spectrum 729
- Cohen, J. B.—
See Winholtz, R. A. 189
- Cox, D. E., Toby, B. H., and Eddy, M. M.—
Acquisition of powder diffraction data with synchrotron radiation 117
- Craig, B. I., and Smith, P. V.—
Parametrisation of the LCAO band-structure of BCC transition metals 797
- Creagh, D. C.—
Investigation of the structural and magnetic properties of the light rare earth elements and their intermetallic compounds 155
Recent advances in the calculation and measurement of the X-ray dispersion corrections 487
- Crompton, R. W.—
See England, J. P. 573
- Cummings, S., and Hart, M.—
Redetermination of absolute structure factors for silicon at room and liquid nitrogen temperatures 423
- Das, J. N.—
A least squares computational method for the scattering amplitude 47
- de Keijser, Th. H.—
See Delhez, R. 213, 261
Langford, J. I. 173
- Delapalme, A.—
Use of extinction corrections in neutron diffraction experiments 383
- Delhez, R.—
See Langford, J. I. 173
- Delhez, R., de Keijser, Th. H., Mittemeijer, E. J., and Langford, J. I.—
Size and strain parameters from peak profiles: Sense and nonsense 213
- Delhez, R., de Keijser, Th. H., Mittemeijer, E. J., Thijssse, B. J., Hollanders, M. A., Loopstra, O. B., and Sloof, W. G.—
Structure and properties of surface layers: X-ray diffraction studies 261

- Destro, R.—
 Experimental determination of scan-truncation losses from low-temperature (16 K) single crystal X-ray measurements 503
- Dieperink, A. E. L.—
See Amos, K. 633
- Eddy, M. M.—
See Cox, D. E. 117
- El-Desoky, M. M.—
See Ahmed, M. A. 83
- Elford, M. T.—
See England, J. P. 573, 701
- England, J. P., and Elford, M. T.—
 Momentum transfer cross section for electrons in krypton derived from measurements of the drift velocity in H₂-Kr mixtures 701
- England, J. P., Elford, M. T., and Crompton, R. W.—
 A study of the vibrational excitation of the drift velocity of electrons in H₂-Ne mixtures 573
- Fewell, M. P., Gyapong, G. J., and Spear, R. H.—
 Coulomb excitation of the 4⁺₁ states of 194,196,198Pt 37
- Fifield, L. K.—
See Woods, C. L. 525
- Finlayson, T. R.—
See Miles, J. R. 781
- Fisher, R. M.—
See Fox, A. G. 461
- Fox, A. G., and Fisher, R. M.—
 A summary of low-angle X-ray atomic scattering factors measured by the critical voltage effect in high energy electron diffraction 461
- Francey, J. L. A.—
See O'Keefe, M. J. 623
- Gjønnes, J.—
See Marthinsen, K. 449
- Graham, R. A.—
See Morosin, B. 251
- Gyapong, G. J.—
See Fewell, M. P. 37
- Harada, J.—
 Validity of the structure factor formalism 351
- Harland, P. W., Maclagan, R. G. A. R., and Simpson, R. W.—
 Dependence of zero-field ion mobilities on well depth and minimum position in the ion-neutral interaction potential 545
- Hart, M.—
See Cummings, S. 423
 Parrish, W. 403
- Hay, H. J.—
See Bridwell, L. B. 681
- Hepp, A., and Baerlocher, Ch.—
 Learned peak shape functions for powder diffraction data 229
- Højér, R.—
See Marthinsen, K. 449
- Hollanders, M. A.—
See Delhez, R. 261
- Huang, T. C.—
 Precision peak determination in X-ray powder diffraction 201
- Hubbard, C. R.—
See Morosin, B. 251
- Hugrass, W. N.—
 A general physical model for RMF current drive 765
- infeld, E.—
See Murawski, K. 1
- Jenkins, R.—
 Profile data acquisition for the JCPDS-ICDD database 145
- Johnson, G. G., Jr—
See Smith, D. K. 311
- Juretschke, H. J., and Wagenfeld, H. K.—
 Simple method for estimating the contribution of neighbouring *n*-beam interactions to two-beam structure factors 469
- Kaiser, A. B., and Uher, C.—
 High-*T_c* superconductors: Evidence on the electron-phonon interaction from transport measurements 597
- Kato, N.—
 Accurate charge density—Pendellösung methods 337
- Kawasaki, T.—
See Uno, R. 133
- Kimmel, G., and Schreiner, W. N.—
 Accuracy in temperature factor determination in powder diffractometry 719
- Kuhs, W. F.—
 The anharmonic temperature factor in crystallographic structure analysis 369
- Langford, J. I.—
See Delhez, R. 213
- Langford, J. I., Delhez, R., de Keijser, Th. H., and Mittemeijer, E. J.—
 Profile analysis for microcrystalline properties by the Fourier and other methods 173
- Loopstra, O. B.—

- Lopez, J. M.—
See Murphy, J. O. 63
- McKellar, B. H. J.—
See Tupper, N. E. 19
- MacLagan, R. G. A. R.—
See Harland, P. W. 545
- Marthinsen, K., Matsuhata, H., Høier, R., and Gjønnes, J.—
 Non-systematic three-beam effects in dynamical electron diffraction and their use in determination of amplitude and phase of structure factors 449
- Mathieson, A. McL.—
 Concerning single crystal reflectivity curves 393
- Matsuhata, H.—
See Marthinsen, K. 449
- Mazumdar, P. S.—
See Mukherjee, K. K. 693
- Miles, J. R., Smith, T. F., and Finlayson, T. R.—
 Thermal expansion of Fe_2MnSi 781
- Mittermeier, E. J.—
See Delhez, R. 213, 261
- Langford, J. I. 173
- Morikawa, H.—
See Uno, R. 133
- Morosin, B., Graham, R. A., Zhang, Y., Stewart, J. M., and Hubbard, C. R.—
 X-ray line broadening study on shock-modified zirconia 251
- Morrison, I.—
See Amos, K. 633
- Mrityunjoy De—
See Roy Chowdhury, A. 735
- Mukherjee, K. K., Mazumdar, P. S., and Brajamani, S.—
 Electron impact ionisation of the ground state of He^+ 693
- Murawski, K., and Infeld, E.—
 Stability of mKdV-KdV waves 1
- Murphy, J. O.—
See Lopez, J. M. 633
- Niskanen, J. A., and Thomas, A. W.—
 Charge symmetry breaking in neutron-proton scattering above pion production threshold 31
- Nukui, A.—
See Uno, R. 133
- Ohe, H.—
See Okazaki, A. 511
- Ohsumi, K.—
See Uno, R. 133
- Okazaki, A., Ohe, H., and Soejima, Y.—
 Effect of n -beam interaction 511
- O'Keefe, M. J., and Francey, J. L. A.—
 Thermal performance of solar collectors with EPDM absorber plates 623
- Olekhovich, N. M.—
 Determination of structure factors by the Pendellösung effect for imperfect crystals 519
- Orr, N. A.—
See Woods, C. L. 525
- Ozawa, H.—
See Uno, R. 133
- Parrish, W.—
 Advances in synchrotron X-ray polycrystalline diffraction 101
- Parrish, W., and Hart, M.—
 Accurate measurement of powder diffraction intensities using synchrotron radiation 403
- Paul, S. N.—
See Chakraborty, B. 99
- Pecover, S. R.—
See Taylor, J. C. 323
- Pender, L. F.—
See Bridwell, L. B. 681
- Praschifka, J.—
See Cahill, R. T. 11
- Radwan, F. A.—
See Ahmed, M. A. 83
- Rietveld, H. M.—
 The Rietveld method—A historical perspective 113
- Roberts, C. D.—
See Cahill, R. T. 11
- Roberts, R. B.—
See White, G. K. 791
- Robinson, I. K.—
 Structure factor determination in surface X-ray diffraction 359
- Roy Chowdhury, A., and Mrityunjoy De—
 Riemann-Hilbert problem with higher order poles for self-induced transparency with degenerate energy levels 735
- Runciman, W. A., and Srinivasan, B.—
 Effects of X-irradiation on the principal uranium centre in alkali fluorides 611
- Sabine, T. M.—
 Accurate structure factor measurements by powder methods 413
- Sato, S.—
See Takama, T. 433
- Schreiner, W. N.—
See Kimmel, G. 719

- Simpson, R. W.—
See Harland, P. W. 545
- Sloof, W. G.—
See Delhez, R. 261
- Smith, D. K., Johnson, G. G., Jr, and
 Wims, A. M.—
 Use of full diffraction spectra, both
 experimental and calculated, in
 quantitative powder diffraction
 analysis 311
- Smith, P. V.—
See Craig, B. I. 797
- Smith, T. F.—
See Miles, J. R. 781
- Soejima, Y.—
See Okazaki, A. 511
- Sofield, C. J.—
See Bridwell, L. B. 681
- Spear, R.H.—
See Fewell, M. P. 37
- Srinivasan, B.—
See Runciman, W. A. 611
- Stewart, J. M.—
See Morosin, B. 251
- Sur, A. K.—
See Chakraborty, B. 99
- Tajalli, H.—
 Spectroscopic studies of the energy levels of
 the Nd³⁺ ion in single crystals of
 $\text{SrO}_6\text{Al}_2\text{O}_3$ 549
- Takama, T., and Sato, S.—
 Accurate determination of structure factors
 by Pendellösung methods using white
 radiation 433
- Taylor, J. C., and Pecover, S. R.—
 Quantitative analysis of phases in zeolite
 bearing rocks from full X-ray
 diffraction profiles 323
- Thijssse, B. J.—
See Delhez, R. 261
- Thomas, A. W.—
See Niskanen, J. A. 31
- Toby, B. H.—
See Cox, D. E. 117
- Treacy, P. B.—
See Bridwell, L. B. 681
- Tupper, N. E., McKellar, B. H. J., and
 Warner, R. C.—
 Magnetic moments of baryons in a
 relativistic constituent quark model 19
- Uno, R., Ozawa, H., Yamanaka, T.,
 Morikawa, H., Ando, M., Ohsumi, K.,
 Nukui, A., Yukino, K., and Kawasaki, T.—
 Powder diffractometry at the Tsukuba
 photon factory 133
- von Nagy Felsobuki, E. I.—
See Andriopoulos, N. 563
- Wagenfeld, H. K.—
See Juretschke, H. J. 469
- Warner, R. C.—
See Tupper, N. E. 19
- Weighhofer, W.—
 A formal time-domain approach to cold
 magnetised plasmas 55
- White, G. K., and Roberts, R. B.—
 Thermal expansion of willemite,
 Zn_2SiO_4 791
- Will, G.—
 Crystal structure analysis and refinement
 using integrated intensities from accurate
 profile fits 283
- Willis, B. T. M.—
 Measurement of thermal diffuse scattering
 using pulsed neutron diffraction 477
- Wims, A. M.—
See Smith, D. K. 311
- Winholz, R. A., and Cohen, J. B.—
 Generalised least-squares determination of
 triaxial stress states by X-ray diffraction
 and the associated errors 189
- Woods, C. L., Barker, F. C., Catford, W. N.,
 Fifield, L. K., and Orr, N. A.—
 Experimental investigation and *R*-matrix
 analysis of low-lying levels in ⁵He and
⁵Li 525
- Yamanaka, T.—
See Uno, R. 133
- Young, R. A.—
 Pressing the limits of Rietveld
 refinement 297
- Yukino, K.—
See Uno, R. 133
- Zhang, Y.—
See Morosin, B. 251
- Zorn, G.—
 Pitfalls in the evaluation of X-ray
 diffraction line shape 237
- Uher, C.—
See Kaiser, A. B. 597