

Author Index to Volume 45

- Aitken, D. K.—
 Observations of magnetic fields 569
- Al-Dhafiri, A. M.—
 Improvement of CdS–Cu_xS solar cell
 performance by CdS etching under
 illumination 99
- Alurkar, S. K.—
 See Janardhan, P. 115
- Amy, S. W., and Large, M. I.—
 A simple microstrip phase shifter 105
- Argyriou, D. N., and Howard, C. J.—
 Evaluation of electrostatic potentials and
 Madelung constants in ionic crystals
 by the method of spherically
 symmetric equivalent charges 239
- Barker, F. C.—
 See Hinds, S. 749
- Bettens, R. P. A.—
 The gas-phase chemical evolution of dark
 clouds 451
- Bhattacharya, R.—
 Structure of the super neutronised
 doubly closed shell nucleus ¹³²Sn 39
- Bicknell, G. V.—
 Mechanisms for the production of bipolar
 flows and jets in star formation
 regions 513
- Blevin, H. A.—
 See Fletcher, J. 375
- Bobra, A. D.—
 See Janardhan, P. 115
- Bonham, R. A., and Bruce, M. R.—
 Dissociative ionisation and neutral
 dissociation: CF₄, a case study 317
- Brajamani, S.—
 See Singh, N. R. 757
- Brennan, M. J.—
 See Elford, M. T. 671
- Brown, K. L.—
 See Dall'armi, G. 185
- Bruce, M. R.—
 See Bonham, R. A. 317
- Burton, M. G.—
 Excitation of molecular clouds and the
 emission from molecular
 hydrogen 463
- Černák, M., and Hosokawa, T.—
 Negative corona current pulses and
 cathode sheath instabilities in a short
 point-plane gap in CO₂ 193
- Chakraborty, B.—
 See Kashyapi, P. K. 683
- Chin, V. W. L., and Newbury, S. M.—
 Determination of barrier height and
 doping density of a Schottky diode
 from infrared photoresponse
 measurements 781
- Choudhury, K. B., Mazumdar, P. S., and
 Brajamani, S.—
 Positronium formation in e⁺-Na
 scattering 757
- Chowdhury, A. R.—
 See Pakira, G. 761
- Comer, J.—
 Studies of autoionising states by photon
 and electron impact 309
- Dall'armi, G., Brown, K. L., Purdie, P. H.,
 and Fletcher, J.—
 Electron swarm transport through low
 pressure noble gases 185
- Dawe, R. L., and Hines, K. C.—
 The physics of tachyons. I. Tachyon
 kinematics 591
- Delbourgo, R., and Jones, L. M.—
 The physics of tachyons. II. Tachyon
 dynamics 725
- Elcombe, M. M.—
 See Kim, K. K. 221
- Elford, M. T., Brennan, M. J., and Ness,
 K. F.—
 The ratio D_T/μ for electrons in a 0.5%
 hydrogen-krypton mixture 671
- Fletcher, J.—
 See Blevin, H. A. 375
- Freedman, K. C.—
 Young star clusters in the LMC 407
- Fry, J. L.—
 See Zhao, Y. 789
- Griffin, C. J.—
 See Hollenberg, L. C. L. 717
- Hassan, M. A., and Hassan, S. S. A.—
 pp Coulomb phase shift for different
 proton charge distributions 635
- Hassan, S. S. A.—
 See Hassan, M. A. 635

- Hinds, S., and Barker, F. C.—
 The $^{12}\text{C}(\text{p}, \gamma)^{13}\text{N}$ cross section near the
 $E_{\text{p}} = 0.46$ MeV peak 749
- Hines, K. C.—
 See Dawe, R. L. 591, 725
- Hipes, P. G.—
 See Winstead, C. 325
- Hollenberg, L. C. L., and Griffin, C. J.—
 Hamiltonian moments and the Lanczos
 method in the Heisenberg model 717
- Hosokawa, T.—
 See Černák, M. 193
- Hotop, H.—
 See Klar, D. 263
- Howard, C. J.—
 See Argyriou, D. N. 239
- Hu, Y. D., and Fraser, B. J.—
 Group travel time of EM waves with
 frequencies near the ion cyclotron
 frequency in the two-ion
 magnetosphere 695
- Hutton, D. R., Pilbrow, J. R., Troup,
 G. J., and Warne, J. O.—
 Electron spin resonance of Ti^{3+} in
 synthetic beryl 253
- Janardhan, P., Alurkar, S. K., Bobra, A.
 D., Slee, O. B., and Waldron, D.—
 Power spectral analysis of enhanced
 scintillation of quasar 3C459 due to
 Comet Halley 115
- Jones, L. M.—
 See Delbourgo, R. 621
- Jones, P. A.—
 Observations of southern radio galaxies
 at 1415 MHz 797
- Kashyapi, P. K., Paul, S. N., and
 Chakraborty, B.—
 Nonlinear shifts of refractive indices from
 obliquely propagating waves in a
 magnetised plasma in the presence of
 Coriolis rotation 683
- Klar, D., Ruf, M.-W., and Hotop, H.—
 Attachment of electrons to molecules at
 MeV resolution 263
- Large, M. I.—
 See Amy, S. W. 105
- Lattanzio, J. C., and Monaghan, J. J.—
 Numerical modelling of star formation in
 giant molecular clouds 559
- Lima, M. A. P.—
 See Winstead, C. 325
- McCurdy, C. W.—
 Low-energy electron scattering from
 polyatomic molecules: The role of
 electron correlation 337
- MacDonald, R. J.—
 See Shen, Y. G. 85
- McGregor, P. J.—
 Star formation in the galaxy 411
- McKoy, V.—
 See Winstead, C. 325
- Mazumdar, P. S.—
 See Choudhury, K. B. 757
- Mestel, L.—
 Magnetic effects in clouds 531
- Mohan, M.—
 See Sharma, B. 47
- Monaghan, J. J.—
 See Lattanzio, J. C. 559
- Mukhopadhyay, J., Pakira, G., and
 Chowdhury, A. R.—
 Nonlinear wave number shift and
 modulational instability for large
 amplitude waves in a relativistic
 magnetised plasma 761
- Mustafa, M. M.—
 Nonlocality and the D-state probability
 of the deuteron 643
- Nanchang, Z., Stevenson, A. W., and
 Runshen, L.—
 Determination of the unit cell for an
 epitaxial layer of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$
 deposited on GaAs 773
- Ness, K. F.—
 See Elford, M. T. 671
- Newbury, S. M.—
 See Chin, V. W. L. 781
- Norman, C. A.—
 Star formation at high redshift 389
- Nulsen, P. E. J.—
 Star formation in cooling flows 501
- O'Connor, D. T.—
 See Shen, Y. G. 85
- Oitmaa, J.—
 See Yim, K. K. 221
- Padden, W. E. P.—
 Relativistic quantum response of a
 strongly magnetised plasma.
- I. Mildly relativistic electron gas 131
- II. Ultrarelativistic pair plasma 165
- Pakira, G.—
 See Mukhopadhyay, J. 761
- Paul, S. N.—
 See Kashyapi, P. K. 683

- Peterson, J. R.—
Ca⁻ and its elusive properties 293
- Pilbrow, J. R.—
See Hutton, D. R. 253
- Purdie, P. H., and Fletcher, J.—
Charged particle transport in gaseous nitrogen at intermediate E/N using the voltage transient method 75
See Dall'armi, G. 185
- Roncossek, M.—
See Schmidt, B. 351
- Rowe, E. T.—
Particle motion in longitudinal waves.
 I. Subluminal waves 1
 II. Superluminal and luminal waves 21
- Rowe, G. W.—
General dispersion relation for surface waves on a plasma-vacuum interface: Application to magnetised plasmas 55
- Ruf, M.-W.—
See Klar, D. 263
- Runshen, L.—
See Nanchang, Z. 773
- Ryder, S.—
Optical studies of star formation in normal spiral galaxies: Radial characteristics 395
- Schmidt, B., and Roncossek, M.—
Drift velocity, longitudinal and transverse diffusion in hydrocarbons derived from distributions of single electrons 351
- Sharma, B., and Mohan, M.—
Excitation of atomic hydrogen by proton impact in the presence of a resonant laser field using the first order Magnus approximation 47
- Shen, Y. G., O'Connor, D. J., and MacDonald, R. J.—
Atomic arrangement of the clean Si(110) 5×1 surface derived by low energy scattering spectroscopy 85
- Silk, J.—
The rate of star formation in galactic disks 437
- Singh, N. R., Choudhury, K. B., Mazumdar, P. S., and Brajamani, S.—
Positronium formation in e⁺-Na scattering 757
- Slee, O. B.—
See Janardhan, P. 115
- Snow, T. P.—
The transition from diffuse to dense clouds 543
- Stevenson, A. W.—
See Nanchang, Z. 773
- Sun, Q.—
See Winstead, C. 325
- Tagashira, H.—
Some recent studies of electron swarms in gases 365
- Troup, G. J.—
See Hutton, D. R. 253
- Vlachynsky, E. J.—
Generation via limiting procedures of new solutions in a nonsymmetric gravitational theory 739
- von Nagy-Felsobuki, E. I.—
See Wang, F. 651
- Waldron, D.—
See Janardhan, P. 115
- Wang, F., and von Nagy-Felsobuki, E. I.—
Ab initio ro-vibrational structure of the C_{2v} isotopes of H₂O⁺ 651
- Warne, J. O.—
See Hutton, D. R. 253
- Winstead, C., Sun, Q., Hipes, P. G., Lima, M. A. P., and McKoy, V.—
Studies of electron-molecule collisions on distributed-memory parallel computers 325
- Wright, C. M.—
8–13 μm spectropolarimetry of star formation regions 581
- Yim, K. K., Oitmaa, J., and Elcombe, M. M.—
Lattice dynamics of YBa₂Cu₃O_{6+x} (x = 0, 1) 221
- Yuanjie, L.—
Boson bound states near a Kerr-Newman naked singularity 127
- Zealey, W. J.—
Young stellar objects and Herbig-Haro objects 487
- Zhao, Y., and Fry, J. L.—
Magnetic susceptibility of V, Cr, Mn and Mo and magnetism in Cr and Mn 789

