

INDEXES TO VOLUME 350 (A)

Author index

- Ananthakrishna, G. *See* Gopal, Chandra Sekhar, Ananthakrishna, Ramachandra & Subramanyam.
- Asaad, W. N. & Petrini, D. Relativistic calculation of the K-LL Auger spectrum, 381.
- Budden, K. G. Radio caustics and cusps in the ionosphere, 143.
- Budden, K. G. & Smith, M. S. Phase memory and additional memory in W.K.B. solutions for wave propagation in stratified media, 27.
- Burge, R. E., Fiddy, M. A., Greenaway, A. H. & Ross, G. The phase problem, 191.
- Buxton, B. F. Bloch waves and higher order Laue zone effects in high energy electron diffraction, 335.
- Byatt-Smith, J. G. B. & Longuet-Higgins, M. S. On the speed and profile of steep solitary waves, 175.
- Cannell, P. A. Acoustic edge scattering by a heavily loaded elastic half-plane, 71.
- Carpenter, G. F., Coe, M. J., Engel, A. R. & Quenby, J. J. Ariel 5 hard X-ray measurements of galactic and extragalactic X-ray sources, 521.
- Cassell, A. C., Henderson, J. C. de C. & Ramachandran, K. Cycle bases of minimal measure for the structural analysis of skeletal structures by the flexibility method, 61.
- Chandra Sekhar, P. *See* Gopal, Chandra Sekhar, Ananthakrishna, Ramachandra & Subramanyam.
- Chandrasekhar, S. & Detweiler, S. On the equations governing the gravitational perturbations of the Kerr black hole, 165.
- Coe, M. J. *See* Carpenter, Coe, Engel & Quenby.
- Cokelet, E. D. *See* Longuet-Higgins & Cokelet.
- Connerade, J. P., Garton, W. R. S., Mansfield, M. W. D. & Martin, M. A. P. The $Tl\ I$ absorption spectrum in the vacuum ultraviolet, 47.
- Connerade, J. P., Mansfield, M. W. D. & Martin, M. A. P. Observation of a 'giant resonance' in the 3p absorption spectrum of $Mn\ I$, 405.
- Courtier, G. M. *See* Smith & Courtier.
- Derrick, P. J. *See* Martinussen-Runde, Melrose & Derrick.
- Detweiler, S. *See* Chandrasekhar & Detweiler.
- Engel, R. *See* Carpenter, Coe, Engel & Quenby.
- Fiddy, M. A. *See* Burge, Fiddy, Greenaway & Ross.
- Garton, W. R. S. *See* Connerade, Garton, Mansfield & Martin.
- Gerratt, J. The calculation of intermolecular potential energy surfaces. I. Basic theory, 363.
- Gopal, E. S. R., Chandra Sekhar, P., Ananthakrishna, G., Ramachandra, R. & Subramanyam, S. V. Two-phase asymmetry in the phase diagram of critical binary liquid systems: carbon disulphide + nitromethane and cyclohexane + acetic anhydride, 91.

- Greenaway, A. H. *See* Burge, Fiddy, Greenaway & Ross.
- Gull, T. R., York, D. G., Snow, Jr, P. & Henize, K. G. On the distance to the candidate star coincident with A0620-00, 487.
- Hall, P. *See* Seminara & Hall.
- Harris, S. C. Microwave studies of superconducting two-phase In-Sn, 267.
- Henderson, J. C. de C. *See* Cassell, Henderson & Ramachandran.
- Henize, K. G. *See* Gull, York, Snow & Henize.
- Holt, S. S. Results from the Ariel 5 All-Sky Monitor, 505.
- Irvine, H. M. The linear theory of free vibrations of suspended membranes, 317.
- Ives, J. C. *See* Sanford & Ives.
- Joyner, R. W. & Roberts, M. W. Photoelectron spectroscopic investigation of the adsorption and catalytic decomposition of formic acid by copper, nickel and gold, 107.
- King-Hele, D. G. & Walker, Doreen M. C. The effects of atmospheric winds on satellite orbits of high eccentricity, 251.
- Krause, J. T. *See* Simpkins & Krause.
- Longuet-Higgins, M. S. & Cokelet, E. D. The deformation of steep surface waves on water. I. A numerical method of computation, 1.
- Longuet-Higgins, M. S. *See* Byatt-Smith & Longuet-Higgins.
- Mansfield, M. W. D. *See* Connerade, Garton, Mansfield & Martin; *also* Connerade, Mansfield & Martin.
- Martin, M. A. P. *See* Connerade, Garton, Mansfield & Martin; *also* Connerade, Mansfield & Martin.
- Martinussen-Runde, O. J., Melrose, M. P. & Derrick, P. J. Molecular orbital theory in mass spectrometry. *Ab initio* calculations on 2-methylpropene and the 2-methylpropene radical-cation, 553.
- Melrose, M. P. *See* Martinussen-Runde, Melrose & Derrick.
- Papadopoulos, G. J. Functional integrals for Fermi systems without quaternions, 547.
- Petrini, D. *See* Asaad & Petrini.
- Pollock, M. D. The interaction between a weak magnetic field and a slowly rotating black hole, 239.
- Pounds, K. A. Observations of binary X-ray sources with Ariel 5, 441.
- Pringle, J. E. The nature of transient X-ray sources, 481.
- Quenby, J. J. *See* Carpenter, Coe, Engel & Quenby.
- Ramachandran, K. *See* Cassell, Henderson & Ramachandran.
- Ramachandra, R. *See* Gopal, Chandra Sekhar, Ananthakrishna, Ramachandra & Subramanyam.
- Roberts, M. W. *See* Joyner & Roberts.
- Ross, G. *See* Burge, Fiddy, Greenaway & Ross.
- Sanford, P. W. & Ives, J. C. Ariel results on extragalactic X-ray sources, 491.
- Seminara, G. & Hall, P. Centrifugal instability of a Stokes layer: linear theory, 299.

- Simpkins, P. G. & Krause, J. T. Dynamic response of glass fibres during tensile fracture, 253.
- Smith, J. F. & Courtier, G. M. The Ariel 5 programme, 421.
- Smith, M. S. *See* Budden & Smith.
- Snow, P. *See* Gull, York, Snow & Henize.
- Subramanyam, S. V. Gopal, Chandra Sekhar, Ananthakrishna, Ramachandra & Subramanyam.
- Vail, J. R. Outline of the geochronology and tectonic units of the basement complex of northeast Africa, 127.
- Walker, Doreen M. C. *See* King-Hele & Walker.
- Warren, F. W. On the method of Hermitian forms and its application to some problems of hydrodynamic stability, 213.
- Willmore, A. P. Transient X-ray sources, 463.
- York, D. G. *See* Gull, York, Snow & Henize.

Subject index

- Acoustic edge scattering by a heavily loaded elastic half-plane, 71.
Additional memory for waves in stratified media, 27.
Atmospheric winds, 281.
Auger spectrum, relativistic calculation of the K-LL, 381.
- Black hole, interaction with external magnetic field, 239.
Black hole, slowly rotating; interaction with weak external magnetic field, 239.
- Carbon disulphide + nitromethane system, 91.
Catalytic decomposition of formic acid by Cu, Ni and Au, 107.
Caustics and cusps in the ionosphere, 143.
Centrifugal instability of Stokes layers, 299.
Computation of steep surface waves, 1.
Critical phenomena in binary liquid systems, 91.
Cycle basis selection for skeletal structures, 61.
Cyclohexane + acetic anhydride system, 91.
- Discussion on the scientific results from the Ariel 5 satellite, 419.
- Electron diffraction Bloch waves and Laue zone effects, 335.
Electron spectroscopic study of the catalytic decomposition of formic acid by Cu, Ni and Au, 107.
- Flexibility analysis of skeletal structures, 61.
Flexural waves in glass rods, 253.
Functional integrals for Fermi systems, 547.
- Geochronology of basement complex of northeast Africa, 127.
Gravitational perturbations of the Kerr black hole, on the equations over, 165.
- Hermitian forms and applications to some problems of hydrodynamic stability, 213.
Hilbert transforms, 191.
Hydrodynamic stability problems and Hermitian forms, 213.
- Intermolecular potential energy surfaces, calculation of, 363.
Ionosphere, radio caustics and cusps, 143.
- K-LL auger spectrum, relativistic calculation of the, 381.
- Laue zone effects in high energy electron diffraction, 335.
Linear theory of free vibrations of suspended membranes, 317.
- Manganese 3p absorption spectrum observation of a 'giant resonance', 405.
Memory for waves in stratified media, 27.
Microwave studies of superconducting two-phase In-Sn, 267.
Molecular orbital theory in mass spectrometry, 553.
- Northeast Africa, geochronology and tectonic units, 127.

Optical fibre fracture, 253.

Orbital symmetry rules in mass spectrometry, 553.

Phase problem, 191.

Potential energy surfaces, intermolecular, calculation of, 363.

Satellite – Ariel 5, scientific results from, 419.

Satellite orbits, 281.

Solitary waves, speed of, 175.

Spectrum absorption of Tl I in the vacuum ultraviolet, 47.

Spectrum 3p absorption of Mn I observation of a 'giant resonance', 405.

Stability of periodic flows, 299.

Superconducting two-phase In–Sn, microwave studies of, 267.

Thallium absorption spectrum of Tl I in the vacuum ultraviolet, 47.

Waves, deformation of, 1.

Waves, steep solitary, 175.

X-ray astronomy satellite, Ariel 5, 419.

END OF THE THREE HUNDRED AND FIFTIETH VOLUME (SERIES A)