

## INDEX

- BENJAMIN, T. BROOKE. The threefold classification of unstable disturbances in flexible surfaces bounding inviscid flows, 436
- BOEDEKER, LAURENCE R. and COVERT, EUGENE E. Measurements of helical flow of a strong electrolyte with and without a transverse magnetic field, 197
- CHEN, W. S. *See* KISTLER
- COVERT, EUGENE E. *See* BOEDEKER
- DANCKWERTS, P. V. and WILSON, R. A. M. Flow-visualization by means of a time-reaction, 412
- DONALDSON, C. DUP. *See* SULLIVAN
- DOUGHERTY, J. P. The conductivity of a partially ionized gas in alternating electric fields, 126
- EAST, L. F. *See* MAULL
- GIBSON, C. H. and SCHWARZ, W. H. Detection of conductivity fluctuations in a turbulent flow field, 357
- GIBSON, C. H. and SCHWARZ, W. H. The universal equilibrium spectra of turbulent velocity and scalar fields, 365
- GREWAL, M. S. and TALBOT, L. Shock wave structure in a partially ionized gas, 573
- HARLEMAN, D. R. F. and RUMER, R. R. Longitudinal and lateral dispersion in an isotropic porous medium, 385
- HAYES, W. D. *See* SULLIVAN
- HELLIWELL, J. B. Magnetogasdynamic deflagration and detonation waves with ionization, 243
- HOFFMANN, E. R. and JOUBERT, P. N. Turbulent line vortices, 395
- HORLOCK, J. H. Some two-dimensional magneto-fluid-dynamic flows at low magnetic Reynolds number, 17
- HOWARD, L. N. Neutral curves and stability boundaries in stratified flow, 333
- JOUBERT, P. N. *See* HOFFMANN
- JUKES, J. D. On the Rayleigh-Taylor problem in magnetohydrodynamics with finite resistivity, 177
- KATZ, E. J. A ray theory for wave propagation in a non-uniform medium, 343
- KENNEDY, JOHN F. The mechanics of dunes and antidunes in erodible-bed channels, 521
- KESTIN, J. *See* SUTERA
- KHOSLA, P. K. and MURGAI, M. P. A study of the combined effect of thermal radiative transfer and rotation on the gravitational stability of a hot fluid, 97
- KISTLER, A. L. and CHEN, W. S. A fluctuating pressure field in a supersonic turbulent boundary layer, 41
- LONGUET-HIGGINS, M. S. The generation of capillary waves by steep gravity waves, 138
- MAEDER, P. F. *See* SUTERA
- MALLICK, D. D. Instability of a surface of discontinuity of velocity in a parallel uniform magnetic field, 187
- MAULL, D. J. and EAST, L. F. Three-dimensional flow in cavities, 620
- MEYER, R. E. *See* SHEN
- MILES, JOHN W. On the stability of heterogeneous shear flow. Part 2, 209
- MOORE, D. W. The boundary layer on a spherical gas bubble, 161
- MURGAI, M. P. *See* KHOSLA

- OGILVIE, T. FRANCIS. First- and second-order forces on a cylinder submerged under a free surface, 451
- OGURA, YOSHIMITSU. A consequence of the zero-fourth-cumulant approximation in the decay of isotropic turbulence, 33
- PHILLIPS, O. M. On the attenuation of long gravity waves by short breaking waves, 321
- RUMER, R. R. *See* HARLEMAN
- SAFFMAN, P. G. On the fine-scale structure of vector fields convected by a turbulent fluid, 545
- SCHWARTZ, W. H. *See* GIBSON
- SEN, A. R. Surface waves due to blasts on and above liquids, 65
- SHEN, M. C. and MEYER, R. E. Climb of a bore on a beach. Part 2. Non-uniform beach slope, 108
- SHEN, M. C. and MEYER, R. E. Climb of a bore on a beach. Part 3. Run-up, 113
- SULLIVAN, R. D., DONALDSON, C. DUP. and HAYES, W. D. Linearized pressure distributions with strong supersonic entropy layers, 481
- SUTERA, S. P., MAEDER, P. F. and KESTIN, J. On the sensitivity of heat transfer in the stagnation-point boundary layer to stream-free vorticity, 497
- TALBOT, L. *See* GREWAL
- TAYLOR, G. I. Cavitation of a viscous fluid in narrow passages, 595
- THOMAS, R. H. and WALTERS, K. On the flow of an elasto-viscous liquid in a curved pipe under a pressure gradient, 228
- TRITTON, D. J. The use of a fibre anemometer in turbulent flows, 269
- TRITTON, D. J. Turbulent free convection above a heated plate inclined at a small angle to the horizontal, 282
- TRITTON, D. J. Transition to turbulence in the free convection boundary layers on an inclined heated plate, 417
- TURNER, J. S. The motion of buoyant elements in turbulent surroundings, 1
- VLASES, G. C. Experiments in a cylindrical magnetic shock tube, 82
- WALTERS, K. *See* THOMAS
- WILLIAMS, W. E. Magnetohydrodynamic flow in a rectangular tube at high Hartmann number, 262
- WILSON, R. A. M. *See* DANCKWERTS

## REVIEWS

- Vorlesungen über theoretische Gasdynamik*, 160
- Principles of Classical Mechanics and Field Theory*, 313
- An Elementary Treatise on the Mechanics of Fluids*, 318
- Atmospheric Diffusion*, 319
- The Theory of Electromagnetic Flow-Measurement*, 473
- Theory of Ion Flow Dynamics*, 474
- Introduction to Plasma Physics*, 475
- Proceedings of the 10th International Congress of Applied Mechanics*, 477
- Les Principes de l'Analyse Dimensionnelle. Similarity and Dimensional Methods in Mechanics*, 633
- Mechanics of Solids and Fluids. Fluid Dynamics*, 635
- Journal of the Atmospheric Sciences. Journal de Mécanique*, 638