

CAMBRIDGE

JOURNALS

# JFM ARCHIVE

## Journal of Fluid Mechanics Digital Archive 1956–1996

*Vital research from  
the definitive source*

The JFM Digital Archive contains every article from the first 40 years of the journal, scanned and digitised to the highest standards.

Please speak to your librarian about gaining access.

**journals.cambridge.org/jfm**



CAMBRIDGE  
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS



**JFM FAST  
TRACK HAS  
EVOLVED**

# **JFM RAPIDS**

.....

- Faster publication
- Greater visibility for papers
- Freely available to all for the first year

For more information visit

**journals.cambridge.org/rapids**



**CAMBRIDGE**  
UNIVERSITY PRESS

- 1 The fluid mechanics of dissolution trapping in geologic storage of CO<sub>2</sub>  
**D. Bolster**
- 5 Quantum vortex dynamics under the tangent representation of the local induction approximation  
**R. A. Van Gorder**
- 17 Stokes waves in water with a non-flat bed  
**A. Constantin**
- 28 Heat transport properties of plates with smooth and rough surfaces in turbulent thermal convection  
**P. Wei, T.-S. Chan, R. Ni, X.-Z. Zhao & K.-Q. Xia**
- 47 The influence of Reynolds number on the triple point trajectories at shock reflection off cylindrical surfaces  
**H. Kleine, E. Timofeev, A. Hakkaki-Fard & B. Skews**
- 61 Pinch-off of non-axisymmetric vortex rings  
**C. O'Farrell & J. O. Dabiri**
- 97 Two-layer gap-leaping oceanic boundary currents: experimental investigation  
**J. J. Kuehl & V. A. Sheremet**
- 114 Diagnosing mixing in stratified turbulent flows with a locally defined available potential energy  
**A. Scotti & B. White**
- 136 Dynamics of large-scale circulation of turbulent thermal convection in a horizontal cylinder  
**H. Song, E. Brown, R. Hawkins & P. Tong**
- 168 Influence of the enclosed fluid on the flow over a microstructured surface in the Cassie state  
**C. Schönecker, T. Baier & S. Hardt**
- 196 Approach to transverse uniformity of concentration distribution of a solute in a solvent flowing along a straight pipe  
**Z. Wu & G. Q. Chen**
- 214 Experimental studies of aero-optical properties of subsonic turbulent boundary layers  
**S. Gordelyev, A. E. Smith, J. A. Cress & E. J. Jumper**
- 254 The Zakharov equation with separate mean flow and mean surface  
**O. Gramstad**
- 278 Global linear stability analysis of the wake and path of buoyancy-driven disks and thin cylinders  
**J. Tchoufag, D. Fabre & J. Magnaudet**
- 312 A theory for the emergence of coherent structures in beta-plane turbulence  
**N. A. Bakas & P. J. Ioannou**
- 342 Flow-induced vibrations of a rotating cylinder  
**R. Bourguet & D. Lo Jacono**
- JFM Rapids (online only)**
- R1 Self-similar behaviour of a rotor wake vortex core  
**M. Ali & M. Abid**

S indicates supplementary data or movies available online.