

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**

681 Non-normality in combustion–acoustic interaction in diffusion flames: a critical revision
L. Magri, K. Balasubramanian, R. I. Sujith & M. P. Juniper

684 Bending of elastic fibres in viscous flows: the influence of confinement – CORRIGENDUM
J. S. Wexler, P. H. Trinh, H. Berthet, N. Quennouz, O. du Roure, H. E. Huppert, A. Linder & H. A. Stone

JFM Rapids (online only)

R1 Steady water waves with vorticity: spatial Hamiltonian structure
V. Kozlov & N. Kuznetsov

R4 Levitation of a drop over a moving surface
H. Lhuissier, Y. Tagawa, T. Tran & C. Sun

R2 The dissipation and shear dispersion of entropy waves in combustor thermoacoustics
A. S. Morgans, C. S. Goh & J. A. Dahan

S R5 Unsteady pitching flat plates
K. O. Granlund, M. V. Ol & L. P. Bernal

S R3 Nucleating bubble clouds with a pair of laser-induced shocks and bubbles
P. A. Quinto-Su & K. Ando

R6 On the rotation of porous ellipsoids in simple shear flows
H. Masoud, H. A. Stone & M. J. Shelley

S indicates supplementary data or movies available online.

- 1 Scaling of streamwise boundary layer streaks and their ability to reduce skin-friction drag
S. Shahinfar, J. H. M. Fransson, S. S. Sattarzadeh & A. Talamelli
- 33 Instabilities of natural convection in a periodically heated layer
M. Z. Hossain & J. M. Floryan
- 68 Temporal stability of eccentric Taylor–Couette–Poiseuille flow
C. Leclercq, B. Pier & J. F. Scott
- 100 Efficient kinematics for jet-propelled swimming
S. Alben, L. A. Miller & J. Peng
- 134 A bathtub vortex under the influence of a protruding cylinder in a rotating tank
Y.-C. Chen, S.-L. Huang, Z.-Y. Li, C.-C. Chang & C.-C. Chu
- 158 On the strength of the nonlinearity in isotropic turbulence
W. J. T. Bos & R. Rubinstein
- 171 Particle capture by a circular cylinder in the vortex-shedding regime
A. Espinosa-Gayosso, M. Ghisalberti, G. N. Ivey & N. L. Jones
- 189 Optimal control of dissimilar heat and momentum transfer in a fully developed turbulent channel flow
A. Yamamoto, Y. Hasegawa & N. Kasagi
- 221 Fluctuations of thermodynamic variables in stationary compressible turbulence
D. A. Donzis & S. Jagannathan
- S 245 Gyrotactic bioconvection at pycnoclines
A. Karimi & A. M. Ardekani
- 268 A nonlinear model for indirect combustion noise through a compact nozzle
M. Huet & A. Giaquie
- 302 Impulsively started planar actuator surfaces in high-Reynolds-number steady flow
P. B. Johnson, A. Wojcik, K. R. Drake & I. Eames
- 325 Toward second-moment closure modelling of compressible shear flows
C. A. Gomez & S. S. Girimaji
- 370 On the formation of streamwise vortices by plasma vortex generators
T. N. Jukes & K.-S. Choi
- 394 Nonlinear waves on the surface of a fluid covered by an elastic sheet
L. Deike, J.-C. Bacri & E. Falcon
- 414 Topological evolution in compressible turbulent boundary layers
Y.-B. Chu & X.-Y. Lu
- 439 Stall onset on aerofoils at low to moderately high Reynolds number flows
W. J. Morris II & Z. Rusak
- 473 Optimal mode decomposition for unsteady flows
A. Wynn, D. S. Pearson, B. Ganapathisubramani & P. J. Goulart
- 504 Linear shape oscillations and polymeric time scales of viscoelastic drops
G. Brenn & S. Teichtmeister
- 528 Active suspensions in thin films: nutrient uptake and swimmer motion
R. A. Lambert, F. Picano, W.-P. Breugem & L. Brandt
- 558 Numerical study of the effect of surface waves on turbulence underneath. Part 1. Mean flow and turbulence vorticity
X. Guo & L. Shen
- S 588 Air–water gas transfer and near-surface motions
D. E. Turney & S. Banerjee
- 625 Global stability of flow in symmetric wavy channels
A. Rivera-Alvarez & J. C. Ordonez
- 650 Influence of aspect ratio on tumbling plates
W. B. Wang, R. F. Hu, S. J. Xu & Z. N. Wu
- 680 Non-normality and nonlinearity in combustion–acoustic interaction in diffusion flames – CORRIGENDUM
K. Balasubramanian & R. I. Sujith

Contents continued on inside back cover.