### CAMBRIDGE

## JOURNALS

JFM ARCHIVE



Journal of Fluid Mechanics Digital Archive 1956–1996 CrossMa

# *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

- 495 Dynamics and equilibria of thin viscous coating films on a rotating sphereD. Kang, A. Nadim & M. Chugunova
- 519 The contact line of an evaporating droplet over a solid wedge and the pinned–unpinned transitionS. H. Hong, M. A. Fontelos & H. J. Hwang
- 539 Ship waves on uniform shear current at finite depth: wave resistance and critical velocityY. Li & S. Å. Ellingsen
- 568 Flux expulsion with dynamics A. D. Gilbert, J. Mason & S. M. Tobias
- 589 The effect of a salinity gradient on the dissolution of a vertical ice faceC. D. McConnochie & R. C. Kerr

#### JFM Rapids (online only)

- R1 Critical torsional modes of convection in rotating fluid spheres at high Taylor numbersJ. Sánchez, F. Garcia & M. Net
- R2 Moment generating functions and scaling laws in the inertial layer of turbulent wall-bounded flows

#### X. I. A. Yang, I. Marusic & C. Meneveau

R3 Azimuthal diffusion of the large-scale-circulation plane, and absence of significant non-Boussinesq effects, in turbulent convection near the ultimate-state transition

#### X. He, E. Bodenschatz & G. Ahlers

- S R4 The eruptive regime of mass-transfer-driven Rayleigh–Marangoni convection
  T. Köllner, K. Schwarzenberger, K. Eckert
  & T. Boeck
- S indicates supplementary data or movies available online.

- 608 Using stratification to mitigate end effects in quasi-Keplerian Taylor–Couette flow
  C. Leclercq, J. L. Partridge, P. Augier,
  S. B. Dalziel & R. R. Kerswell
- 631 The effect of inertia on the orientation dynamics of anisotropic particles in simple shear flow
  V. Dabade, N. K. Marath & G. Subramanian
- 704 Effect of wall suction on rotating disk absolute instabilityJ. Ho, T. C. Corke & E. Matlis
- S 738 Stable equilibrium configurations of an oblate capsule in simple shear flow
  C. Dupont, F. Delahaye, D. Barthès-Biesel & A.-V. Salsac
  - R5 On a suspension of nearly spherical colloidal particles under large-amplitude oscillatory shear flow
     A. S. Khair
- *S* R6 Penetrative internally heated convection in two and three dimensionsD. Goluskin & E. P. van der Poel
  - R7 Analytical formulae for longitudinal slip lengths over unidirectional superhydrophobic surfaces with curved menisciD. G. Crowdy
  - R8 Turbulent–laminar patterns in shear flows without walls
     M. Chantry, L. S. Tuckerman & D. Barkley

#### ISSN 0022-1120

## Journal of Fluid Mechanics

#### 25 March 2016

- S 1 Experimental and computational studies of the aerodynamic performance of a flapping and passively rotating insect wing
  Y. Chen, N. Gravish, A. L. Desbiens,
  R. Malka & R. J. Wood
- 34 Rarefaction-driven Rayleigh–Taylor instability. Part 1. Diffuse-interface linear stability measurements and theory
  R. V. Morgan, O. A. Likhachev & J. W. Jacobs
- 61 Helical mode interactions and spectral transfer processes in magnetohydrodynamic turbulence
  M. Linkmann, A. Berera, M. McKay & J. Jäger
- 97 Localized vortex/Tollmien–Schlichting wave interaction states in plane Poiseuille flow
  L. J. Dempsey, K. Deguchi, P. Hall &
  A. G. Walton
- 122 Drag reduction in a thermally modulated channelM. Z. Hossain & J. M. Floryan
- 154 Scale interactions in a mixing layer the role of the large-scale gradients
  D. Fiscaletti, A. Attili, F. Bisetti & G. E. Elsinga
- 174 Energy spectra in turbulent bubbly flows
  V. N. Prakash, J. Martínez Mercado,
  L. van Wijngaarden, E. Mancilla,
  Y. Tagawa, D. Lohse & C. Sun
- 191 Experiments in rotating plane Couette flow

   momentum transport by coherent roll-cell structure and zero-absolute-vorticity state
   T. Kawata & P. H. Alfredsson

Contents continued on inside back cover.

- 214 Uncertainty propagation in model extraction by system identification and its implication for control design
   N. Dovetta, P. J. Schmid & D. Sipp
- 237 Short-time self-diffusion, collective diffusion and effective viscosity of dilute hard sphere magnetic suspensions
   K. A. Mizerski & E. Wajnryb
- 260 Characteristics of bolus formation and propagation from breaking internal waves on shelf slopes
  C. D. Moore, J. R. Koseff & E. L. Hult
- 284 Travelling wave states in pipe flowO. Ozcakir, S. Tanveer, P. Hall &E. A. Overman II
- *S* 329 Stratified gravity currents in porous media **S. S. Pegler, H. E. Huppert & J. A. Neufeld**
- 358 Film deposition and transition on a partially wetting plate in dip coatingP. Gao, L. Li, J. J. Feng, H. Ding & X.-Y. Lu
- 384 Stability of wall bounded, shear flows of dense granular materials: the role of the Couette gap, the wall velocity and the initial concentration C. Varsakelis & M. V. Papalexandris
- 414 Acoustic scattering by a finite rigid plate with a poroelastic extensionL. J. Ayton
- 439 The Zeldovich spontaneous reaction wave propagation concept in the fast/modest heating limitsD. R. Kassoy
- 464 Influence of surface viscosity on droplets in shear flowJ. Gounley, G. Boedec, M. Jaeger & M. Leonetti

Cambridge Journals Online For further information about this journal please go to the journal web site at journals.cambridge.org/flm



MIX Paper from responsible sources FSC® C007785

