

Joe Goddard

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9183319/publications.pdf>

Version: 2024-02-01

63
papers

1,292
citations

331670

21
h-index

345221

36
g-index

64
all docs

64
docs citations

64
times ranked

682
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Asymptotic expansions for laminar forced-convection heat and mass transfer. <i>Journal of Fluid Mechanics</i> , 1965, 23, 273. | 3.4 | 146 |
| 2 | Collapse of Spherical Cavities in Viscoelastic Fluids. <i>Physics of Fluids</i> , 1970, 13, 1135. | 1.4 | 131 |
| 3 | Nonlinear effects in the rheology of dilute suspensions. <i>Journal of Fluid Mechanics</i> , 1967, 28, 657-673. | 3.4 | 97 |
| 4 | An inverse for the Jaumann derivative and some applications to the rheology of viscoelastic fluids. <i>Rheologica Acta</i> , 1966, 5, 177-184. | 2.4 | 83 |
| 5 | A novel simulation method for the quasi-static mechanics of granular assemblages. <i>Journal of Rheology</i> , 1991, 35, 849-885. | 2.6 | 80 |
| 6 | A dissipative anisotropic fluid model for non-colloidal particle dispersions. <i>Journal of Fluid Mechanics</i> , 2006, 568, 1. | 3.4 | 52 |
| 7 | MATERIAL INSTABILITY IN COMPLEX FLUIDS. <i>Annual Review of Fluid Mechanics</i> , 2003, 35, 113-133. | 25.0 | 50 |
| 8 | Simulation of the quasi-static mechanics and scalar transport properties of ideal granular assemblages. <i>Journal of Computational Physics</i> , 1995, 121, 331-346. | 3.8 | 41 |
| 9 | Dissipative materials as constitutive models for granular media. <i>Acta Mechanica</i> , 1986, 63, 3-13. | 2.1 | 40 |
| 10 | Continuum Modeling of Granular Media. <i>Applied Mechanics Reviews</i> , 2014, 66, . | 10.1 | 40 |
| 11 | The stress field of slender particles oriented by a non-Newtonian extensional flow. <i>Journal of Fluid Mechanics</i> , 1976, 78, 177-206. | 3.4 | 39 |
| 12 | SHEAR-FLOW AND MATERIAL INSTABILITIES IN PARTICULATE SUSPENSIONS AND GRANULAR MEDIA. <i>Particulate Science and Technology</i> , 1999, 17, 69-96. | 2.1 | 35 |
| 13 | Static multiplicity of stress states in granular heaps. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2000, 456, 2569-2588. | 2.1 | 32 |
| 14 | A solid-liquid phase-transfer catalysis in rotating-disk flow. <i>Industrial & Engineering Chemistry Research</i> , 1988, 27, 551-555. | 3.7 | 29 |
| 15 | Asymptotic expansions for laminar forced-convection heat and mass transfer Part 2. Boundary-layer flows. <i>Journal of Fluid Mechanics</i> , 1966, 24, 339-366. | 3.4 | 28 |
| 16 | Instability-induced ordering, universal unfolding and the role of gravity in granular Couette flow. <i>Journal of Fluid Mechanics</i> , 2005, 523, 277-306. | 3.4 | 27 |
| 17 | A fundamental model for carrier-mediated energy transduction in membranes. <i>The Journal of Physical Chemistry</i> , 1985, 89, 1825-1830. | 2.9 | 24 |
| 18 | Streaming birefringence in extensional flow of polymer solutions. <i>Rheologica Acta</i> , 1979, 18, 505-517. | 2.4 | 23 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | On entropy estimates of contact forces in static granular assemblies. <i>International Journal of Solids and Structures</i> , 2004, 41, 5851-5861. | 2.7 | 22 |
| 20 | Oscillations of a Gas Bubble in Viscoelastic Liquids Subject to Acoustic and Impulsive Pressure Variations. <i>Journal of Applied Physics</i> , 1971, 42, 259-263. | 2.5 | 21 |
| 21 | Edelen's dissipation potentials and the visco-plasticity of particulate media. <i>Acta Mechanica</i> , 2014, 225, 2239-2259. | 2.1 | 21 |
| 22 | On the stability of the $\mu(I)$ rheology for granular flow. <i>Journal of Fluid Mechanics</i> , 2017, 833, 302-331. | 3.4 | 21 |
| 23 | Experiments on the conductivity of suspensions of ionically-conductive spheres. <i>AIChE Journal</i> , 1990, 36, 387-396. | 3.6 | 18 |
| 24 | The dynamics of simple fluids in steady circular shear. <i>Quarterly of Applied Mathematics</i> , 1983, 41, 107-118. | 0.7 | 17 |
| 25 | Parametric hypoplasticity as continuum model for granular media: from Stokesian to Mohr-Coulombian and beyond. <i>Granular Matter</i> , 2010, 12, 145-150. | 2.2 | 15 |
| 26 | Regularization by compressibility of the $\mu(I)$ model of dense granular flow. <i>Physics of Fluids</i> , 2018, 30, . | 4.0 | 15 |
| 27 | Granular Dilatancy and the Plasticity of Glassy Lubricants. <i>Industrial & Engineering Chemistry Research</i> , 1999, 38, 820-822. | 3.7 | 14 |
| 28 | A weakly nonlocal anisotropic fluid model for inhomogeneous Stokesian suspensions. <i>Physics of Fluids</i> , 2008, 20, . | 4.0 | 13 |
| 29 | Similarity solutions for stratified rotating-disk flow. <i>Journal of Fluid Mechanics</i> , 1987, 182, 427. | 3.4 | 11 |
| 30 | A fluid-like model of vibrated granular layers: Linear stability, kinks, and oscillons. <i>Mechanics of Materials</i> , 2009, 41, 637-651. | 3.2 | 11 |
| 31 | Material instability with stress localization. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2002, 102, 251-261. | 2.4 | 10 |
| 32 | History effects in transient diffusion through heterogeneous media. <i>Industrial & Engineering Chemistry Research</i> , 1992, 31, 713-721. | 3.7 | 8 |
| 33 | On material velocities and non-locality in the thermo-mechanics of continua. <i>International Journal of Engineering Science</i> , 2010, 48, 1279-1288. | 5.0 | 8 |
| 34 | On the Thermoelectricity of W. Thomson: Towards a Theory of Thermoelastic Conductors. <i>Journal of Elasticity</i> , 2011, 104, 267-280. | 1.9 | 8 |
| 35 | Dissipation Potentials for Reaction-Diffusion Systems. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 4078-4083. | 3.7 | 8 |
| 36 | On the Spectral Representation of Stretch and Rotation. <i>Journal of Elasticity</i> , 1997, 47, 255-259. | 1.9 | 7 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | The viscous drag on solids moving through solids. <i>AICHE Journal</i> , 2014, 60, 1488-1498. | 3.6 | 7 |
| 38 | The Green's function for passive scalar diffusion in a homogeneously sheared continuum. <i>Physics of Fluids A, Fluid Dynamics</i> , 1993, 5, 2295-2297. | 1.6 | 5 |
| 39 | A note on Eringen's moment balances. <i>International Journal of Engineering Science</i> , 2011, 49, 1486-1493. | 5.0 | 5 |
| 40 | Symmetry relations in viscoplastic drag laws. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2014, 470, 20140434. | 2.1 | 5 |
| 41 | Remarks on isotropic extension of anisotropic constitutive functions via structural tensors. <i>Mathematics and Mechanics of Solids</i> , 2018, 23, 554-563. | 2.4 | 5 |
| 42 | A slender-body theory for interfacial failure in unidirectional fiber-reinforced composites. <i>Polymer Engineering and Science</i> , 1979, 19, 125-130. | 3.1 | 3 |
| 43 | Viscous interlayer structure and transport properties in von Kármán swirling flows. <i>Physics of Fluids A, Fluid Dynamics</i> , 1989, 1, 132-139. | 1.6 | 3 |
| 44 | Dissipation potentials from elastic collapse. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2019, 475, 20190144. | 2.1 | 3 |
| 45 | A note on a statistical-mechanical treatment of activation-limited surface diffusion. <i>Reaction Kinetics and Catalysis Letters</i> , 1974, 1, 57-66. | 0.6 | 2 |
| 46 | On linear non-local thermo-viscoelastic waves in fluids. <i>Mathematics and Mechanics of Complex Systems</i> , 2018, 6, 321-338. | 0.9 | 2 |
| 47 | Elongational Flows: Aspects of the Behavior of Model Viscoelastic Fluid. By C. J. S. PETRIE . Pitman, 1979. 254 pp. \$17.50.. <i>Journal of Fluid Mechanics</i> , 1979, 95, 787. | 3.4 | 1 |
| 48 | The influence of swirl and confinement on the stability of counterflowing streams. <i>Journal of Fluid Mechanics</i> , 1993, 251, 149-172. | 3.4 | 1 |
| 49 | A note on the generalized Rayleigh quotient for non-self-adjoint linear stability operators. <i>Physics of Fluids A, Fluid Dynamics</i> , 1993, 5, 1269-1271. | 1.6 | 1 |
| 50 | The second law of thermodynamics as variation on a theme of Carathéodory. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021, 477, 20210425. | 2.1 | 1 |
| 51 | On nonlinear Onsager symmetry and mass-action kinetics. <i>Combustion Science and Technology</i> , 2023, 195, 3627-3637. | 2.3 | 1 |
| 52 | Thermoelectricity: Thomson vs Onsager, with advice from Maxwell. <i>Physics of Fluids</i> , 2021, 33, . | 4.0 | 1 |
| 53 | Mechanics of Non-Newtonian Fluids. By W. R. S CHOWALTER . Pergamon Press, 1978. 300 pp. \$35.00 or £17.50.. <i>Journal of Fluid Mechanics</i> , 1980, 100, 671. | 3.4 | 0 |
| 54 | Theory of Structured Multiphase Mixtures. By F. D OBRAN . Springer, 1991. 223 pp. DM42.. <i>Journal of Fluid Mechanics</i> , 1992, 243, 722. | 3.4 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Experimental observations and marginal stability calculations for counterflowing streams with swirl. <i>Physics of Fluids</i> , 1994, 6, 1464-1471. | 4.0 | 0 |
| 56 | A note on path-dependent strain measures and strain jumps in Isotropic simple materials. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1994, 54, 195-199. | 2.4 | 0 |
| 57 | Material Instability in Rapid Granular Shear Flow. <i>Materials Research Society Symposia Proceedings</i> , 2000, 627, 1. | 0.1 | 0 |
| 58 | A Graphical Theoretical View of Chemical Transport and Reaction on Networks. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 473-477. | 3.7 | 0 |
| 59 | À la recherche des années perdues, or, my life is more interesting than formerly thought. <i>Acta Mechanica</i> , 2009, 205, 3-8. | 2.1 | 0 |
| 60 | Micromorphic Balances and Source-flux Duality. <i>AIP Conference Proceedings</i> , 2011, , . | 0.4 | 0 |
| 61 | Frictionless conveying of frictional materials. <i>Granular Matter</i> , 2012, 14, 145-149. | 2.2 | 0 |
| 62 | Tribute to Krzysztof Wilmanski. <i>Acta Mechanica</i> , 2014, 225, 2161-2162. | 2.1 | 0 |
| 63 | Radiative transfer and flux theory. <i>Mathematics and Mechanics of Solids</i> , 2015, 20, 327-344. | 2.4 | 0 |