Andreas Acrivos

List of Publications by Citations

52 papers	6,602 citations	37 h-index	52 g-index
52 ext. papers	7,092 ext. citations	3.6 avg, IF	5.31 L-index

#	Paper	IF	Citations
52	The shear-induced migration of particles in concentrated suspensions. *Journal of Fluid Mechanics*, **1987**, 181, 415	3.7	879
51	On the viscosity of a concentrated suspension of solid spheres. *Chemical Engineering Science*, **1967**, 22, 847-853	4.4	569
50	The rheological properties of suspensions of rigid particles. *AICHE Journal*, **1976**, 22, 417-432	3.6	403
49	Shear-Induced Structure in a Concentrated Suspension of Solid Spheres. *Journal of Rheology*, **1980**, 24, 799-814	4.1	395
48	Measurement of shear-induced self-diffusion in concentrated suspensions of spheres. *Journal of Fluid Mechanics*, **1987**, 177, 109-131	3.7	374
47	Steady flows in rectangular cavities. *Journal of Fluid Mechanics*, **1967**, 28, 643-655	3.7	338
46	On the deformation and drag of a falling viscous drop at low Reynolds number. *Journal of Fluid Mechanics*, **1964**, 18, 466	3.7	319
45	Heat and Mass Transfer from Single Spheres in Stokes Flow. *Physics of Fluids*, **1962**, 5, 387		303
44	Solitary internal waves in deep water. *Journal of Fluid Mechanics*, **1967**, 29, 593-607	3.7	297
43	The constitutive equation for a dilute emulsion. *Journal of Fluid Mechanics*, **1970**, 44, 65-78	3.7	266
42	Viscous resuspension. *Chemical Engineering Science*, **1986**, 41, 1377-1384	4.4	213
41	Deformation and breakup of a single slender drop in an extensional flow. *Journal of Fluid Mechanics* , **1978**, 86, 641-672	3.7	188
40	Enhanced sedimentation in settling tanks with inclined walls. *Journal of Fluid Mechanics*, **1979**, 92, 435-457	3.7	152
39	Asymptotic expansions for laminar forced-convection heat and mass transfer. *Journal of Fluid Mechanics*, **1965**, 23, 273	3.7	114
38	The influence of surfactants on the creeping motion of bubbles. *Chemical Engineering Science*, **1966** , 21, 681-685	4.4	110
37	On the creeping motion of two arbitrary-sized touching spheres in a linear shear field. *Journal of Fluid Mechanics*, **1973**, 59, 209-223	3.7	96
36	A method for integrating the boundary-layer equations through a region of reverse flow. *Journal of Fluid Mechanics*, **1972**, 53, 177	3.7	94

35	On the combined effect of forced and free convection heat transfer in laminar boundary layer flows. *Chemical Engineering Science*, **1966**, 21, 343-352	4.4	93
34	Deterministic and stochastic behaviour of non-Brownian spheres in sheared suspensions. *Journal of Fluid Mechanics*, **2002**, 460, 307-335	3.7	92
33	The measurement of the shear-induced particle and fluid tracer diffusivities in concentrated suspensions by a novel method. *Journal of Fluid Mechanics*, **1998**, 375, 297-318	3.7	87
32	The formation and expansion of a toroidal drop moving in a viscous fluid. *Physics of Fluids*, **1984**, 27, 19		87
31	The stability of oscillatory internal waves. *Journal of Fluid Mechanics*, **1967**, 30, 723-736	3.7	79
30	Further experiments on steady separated flows past bluff objects. *Journal of Fluid Mechanics*, **1968**, 34, 25-48	3.7	69
29	Particle segregation in monodisperse sheared suspensions. *Physics of Fluids*, **1999**, 11, 507-509	4.4	66
28	Buoyancy-driven convection in cylindrical geometries. *Journal of Fluid Mechanics*, **1969**, 36, 239-258	3.7	64
27	A moving-wall boundary layer with reverse flow. *Journal of Fluid Mechanics*, **1976**, 76, 363-381	3.7	62
26	The rheology of suspensions and its relation to phenomenological theories for non-newtonian fluids. *International Journal of Multiphase Flow*, **1973**, 1, 1-24	3.6	62
25	Closed-streamline flows past rotating single cylinders and spheres: inertia effects. *Journal of Fluid Mechanics*, **1975**, 72, 605-623	3.7	58
24	The asymptotic form of the laminar boundary-layer mass-transfer rate for large interfacial velocities. *Journal of Fluid Mechanics*, **1962**, 12, 337-357	3.7	58
23	Shear-induced particle diffusivities from numerical simulations. *Journal of Fluid Mechanics*, **2001**, 443, 101-128	3.7	55
22	Solution of the Laminar Boundary Layer Energy Equation at High Prandtl Numbers. *Physics of Fluids*, **1960**, 3, 657		54
21	Particle segregation in monodisperse sheared suspensions in a partially filled rotating horizontal cylinder. *Physics of Fluids*, **2000**, 12, 1615-1618	4.4	47
20	The steady separated flow past a circular cylinder at large Reynolds numbers. *Journal of Fluid Mechanics*, **1965**, 21, 737-760	3.7	46
19	The effective thermal conductivity of sheared suspensions. *Journal of Fluid Mechanics*, **1976**, 78, 33-48	3.7	44
18	A note on the laminar mixing of two uniform parallel semi-infinite streams. *Journal of Fluid Mechanics*, **1972**, 55, 25-30	3.7	41

17	A note on the rate of heat or mass transfer from a small particle freely suspended in a linear shear field. *Journal of Fluid Mechanics*, **1980**, 98, 299-304	3.7	38
16	Heat transfer at high Péclet number from a small sphere freely rotating in a simple shear field. *Journal of Fluid Mechanics*, **1971**, 46, 233-240	3.7	38
15	Steady simple shear flow past a circular cylinder at moderate Reynolds numbers: a numerical solution. *Journal of Fluid Mechanics*, **1974**, 66, 353-376	3.7	37
14	Enhanced sedimentation in narrow tilted channels. *Journal of Fluid Mechanics*, **1981**, 108, 485-499	3.7	35
13	On the measurement of the relative viscosity of suspensions. *Journal of Rheology*, **1994**, 38, 1285-1296	4.1	29
12	Asymptotic expansions for laminar forced-convection heat and mass transfer Part 2. Boundary-layer flows. *Journal of Fluid Mechanics*, **1966**, 24, 339-366	3.7	27
11	Mass transfer in laminar boundary-layer flows with finite interfacial velocities. *AICHE Journal*, **1960**, 6, 410-414	3.6	26
10	The influence of Coriolis force on surface-tension-driven convection. *Journal of Fluid Mechanics*, **1966**, 26, 807-818	3.7	23
9	Closed streamline flows past small rotating particles: Heat transfer at high péclet numbers. *International Journal of Multiphase Flow*, **1976**, 2, 365-377	3.6	16
8	Viscous resuspension in a bidensity suspension. *International Journal of Multiphase Flow*, **1999**, 25, 1-14	3.6	15
7	Rate of heat conduction from a heated sphere to a matrix containing passive spheres of a different conductivity. *Journal of Applied Physics*, **1986**, 59, 3375-3382	2.5	9
6	Conduction of heat from a planar wall with uniform surface temperature to a monodispersed suspension of spheres. *Journal of Applied Physics*, **1987**, 62, 771-776	2.5	7
5	On computer generated analytic solutions to the equations of fluid mechanics. The case of creeping flows. *Journal of Computational Physics*, **1973**, 12, 403-411	4.1	7
4	Experiments on the effective viscosity of concentrated suspensions of solid spheres. *International Journal of Multiphase Flow*, **1974**, 1, 373-381	3.6	6
3	AN ANALYSIS OF LAMINAR FORCED-CONVECTION MASS TRANSFER WITH HOMOGENEOUS CHEMICAL REACTION. *Quarterly Journal of Mechanics and Applied Mathematics*, **1967**, 20, 471-497	1	6
2	On the Rate of Heat Transfer in Liquids with Gas Injection through the Boundary Layer. *Journal of Applied Physics*, **1957**, 28, 1509-1509	2.5	5
1	High Reynolds number steady separated flow past a wedge of negative angle. *Journal of Fluid Mechanics*, **1972**, 56, 577	3.7	4