Ory Schnitzer

List of Publications by Year
in descending order

60	958	471509 17	501196 28
papers	citations	h-index	g-index

61	61	61	734
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Leidenfrost levitation of a spherical particle above a liquid bath: Evolution of the vapour-film morphology with particle size. European Journal of Applied Mathematics, 2022, 33, 1117-1169.	2.9	1
2	Plasmonic resonances of slender nanometallic rings. Physical Review B, 2022, 105, .	3.2	6
3	Absorption characteristics of large acoustic metasurfaces. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, .	3.4	3
4	Isotropically active colloids under uniform force fields: from forced to spontaneous motion. Journal of Fluid Mechanics, 2021, 916, .	3.4	13
5	Asymptotic approximations for the plasmon resonances of nearly touching spheres. European Journal of Applied Mathematics, 2020, 31, 246-276.	2.9	7
6	Rolling of non-wetting droplets down a gently inclined plane. Journal of Fluid Mechanics, 2020, 903, .	3.4	5
7	Asymptotic modeling of Helmholtz resonators including thermoviscous effects. Wave Motion, 2020, 97, 102583.	2.0	5
8	Acoustic impedance of a cylindrical orifice. Journal of Fluid Mechanics, 2020, 892, .	3.4	10
9	Boundary-layer effects on electromagnetic and acoustic extraordinary transmission through narrow slits. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200444.	2.1	4
10	Spontaneous dynamics of two-dimensional Leidenfrost wheels. Physical Review Fluids, 2020, 5, .	2.5	4
11	Extraordinary transmission through a narrow slit. Wave Motion, 2019, 91, 102381.	2.0	9
12	Geometric quantization of localized surface plasmons. IMA Journal of Applied Mathematics, 2019, 84, 813-832.	1.6	5
13	Slender-body theory for plasmonic resonance. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190294.	2.1	8
14	Acoustics of bubbles trapped in microgrooves: From isolated subwavelength resonators to superhydrophobic metasurfaces. Physical Review B, 2019, 99, .	3.2	7
15	Asymptotic Modeling of Phononic Box Crystals. SIAM Journal on Applied Mathematics, 2019, 79, 506-524.	1.8	2
16	Stokes resistance of a solid cylinder near a superhydrophobic surface. Part 1. Grooves perpendicular to cylinder axis. Journal of Fluid Mechanics, 2019, 868, 212-243.	3.4	6
17	Speed of rolling droplets. Physical Review Fluids, 2019, 4, .	2.5	5
18	Pressure-driven plug flows between superhydrophobic surfaces of closely spaced circular bubbles. Journal of Engineering Mathematics, 2018, 111, 15-22.	1.2	6

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19	Small-solid-fraction approximations for the slip-length tensor of micropillared superhydrophobic surfaces. Journal of Fluid Mechanics, 2018, 843, 637-652.	3.4	8
20	Resistive-force theory for mesh-like superhydrophobic surfaces. Physical Review Fluids, 2018, 3, .	2.5	3
21	Slip length for longitudinal shear flow over an arbitrary-protrusion-angle bubble mattress: theÂsmall-solid-fraction singularity. Journal of Fluid Mechanics, 2017, 820, 580-603.	3.4	17
22	Spoof surface plasmons guided by narrow grooves. Physical Review B, 2017, 96, .	3.2	17
23	Waves in Slowly Varying Band-Gap Media. SIAM Journal on Applied Mathematics, 2017, 77, 1516-1535.	1.8	12
24	Bloch Waves in an Arbitrary Two-Dimensional Lattice of Subwavelength Dirichlet Scatterers. SIAM Journal on Applied Mathematics, 2017, 77, 2119-2135.	1.8	12
25	Asymptotic network models of subwavelength metamaterials formed by closely packed photonic and phononic crystals. Europhysics Letters, 2017, 119, 64002.	2.0	13
26	Radiation from Structured-Ring Resonators. SIAM Journal on Applied Mathematics, 2017, 77, 1047-1067.	1.8	3
27	Longitudinal pressure-driven flows between superhydrophobic grooved surfaces: Large effective slip in the narrow-channel limit. Physical Review Fluids, 2017, 2, .	2.5	11
28	Surface plasmon resonances of arbitrarily shaped nanometallic structures in the small-screening-length limit. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160258.	2.1	20
29	Streaming-potential phenomena in the thin-Debye-layer limit. PartÂ3. Shear-induced electroviscous repulsion. Journal of Fluid Mechanics, 2016, 786, 84-109.	3.4	9
30	Asymptotics of surface-plasmon redshift saturation at subnanometric separations. Physical Review B, 2016, 93, .	3.2	18
31	Singular effective slip length for longitudinal flow over a dense bubble mattress. Physical Review Fluids, 2016, 1, .	2.5	19
32	The Taylorâ€“Melcher leaky dielectric model as a macroscale electrokinetic description. Journal of Fluid Mechanics, 2015, 773, 1-33.	3.4	89
33	Singular perturbations approach to localized surface-plasmon resonance: Nearly touching metal nanospheres. Physical Review B, 2015, 92, .	3.2	12
34	A generalized Derjaguin approximation for electrical-double-layer interactions at arbitrary separations. Journal of Chemical Physics, 2015, 142, 244102.	3.0	8
35	Ray-theory approach to electrical-double-layer interactions. Physical Review E, 2015, 91, 022307.	2.1	2
36	Osmotic self-propulsion of slender particles. Physics of Fluids, 2015, 27, 031701.	4.0	44

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37	Slender-body approximations for advectionâ€“diffusion problems. Journal of Fluid Mechanics, 2015, 768, .	3.4	6
38	Nonlinear electrophoresis at arbitrary field strengths: small-Dukhin-number analysis. Physics of Fluids, 2014, 26, .	4.0	50
39	Strong electro-osmotic flows about dielectric surfaces of zero surface charge. Physical Review E, 2014, 89, 043005.	2.1	21
40	Fast penetration of megagauss fields into metallic conductors. Physics of Plasmas, 2014, 21, .	1.9	12
41	Nonlinear oscillations in an electrolyte solution under ac voltage. Physical Review E, 2014, 89, 032302.	2.1	16
42	Ratcheting of Brownian swimmers in periodically corrugated channels: A reduced Fokker-Planck approach. Physical Review E, 2014, 90, 032115.	2.1	23
43	Electrophoresis of bubbles. Journal of Fluid Mechanics, 2014, 753, 49-79.	3.4	32
44	Electrokinetic flows about conducting drops. Journal of Fluid Mechanics, 2013, 722, 394-423.	3.4	39
45	The electrophoretic mobility of rod-like particles. Journal of Fluid Mechanics, 2013, 719, .	3.4	7
46	Weakly nonlinear electrophoresis of a highly charged colloidal particle. Physics of Fluids, 2013, 25, .	4.0	55
47	Electrokinetic particle-electrode interactions at high frequencies. Physical Review E, 2013, 87, 012310.	2.1	6
48	Nonlinear electrokinetic flow about a polarized conducting drop. Physical Review E, 2013, 87, 041002.	2.1	10
49	Electric conductance of highly selective nanochannels. Physical Review E, 2013, 87, 054301.	2.1	10
50	Comment on â€œOn the flow field about an electrophoretic particleâ€•[Phys. Fluids 24, 102001 (2012)]. Physics of Fluids, 2013, 25, 049102.	4.0	2
51	Asymptotic analysis of double-carrier, space-charge-limited transport in organic light-emitting diodes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130263.	2.1	2
52	Deformation of leaky-dielectric fluid globules under strong electric fields: boundary layers and jets at large Reynolds numbers. Journal of Fluid Mechanics, 2013, 734, .	3.4	2
53	Dielectric-solid polarization at strong fields: Breakdown of Smoluchowski's electrophoresis formula. Physics of Fluids, 2012, 24, .	4.0	28
54	Induced-charge electro-osmosis beyond weak fields. Physical Review E, 2012, 86, 061506.	2.1	49

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55	Macroscale description of electrokinetic flows at large zeta potentials: Nonlinear surface conduction. Physical Review E, 2012, 86, 021503.	2.1	68
56	Shear-induced Electrokinetic Lift at Large PÃ©clet Numbers. Mathematical Modelling of Natural Phenomena, 2012, 7, 64-81.	2.4	7
57	Streaming-potential phenomena in the thin-Debye-layer limit. Part 2. Moderate PÃ©clet numbers. Journal of Fluid Mechanics, 2012, 704, 109-136.	3.4	15
58	Strong-field electrophoresis. Journal of Fluid Mechanics, 2012, 701, 333-351.	3.4	30
59	Streaming-potential phenomena in the thin-Debye-layer limit. Part 1. General theory. Journal of Fluid Mechanics, 2011, 685, 306-334.	3.4	36
60	Irreversible Electrokinetic Repulsion at Zero-Reynolds-Number Sedimentation. Physical Review Letters, 2011, 107, 278301.	7.8	5