Robert D Deegan

List of Publications by Year
in descending order

31 papers	9,644 citations	331259 21 h-index	433756 31 g-index
32 all docs	32 docs citations	32 times ranked	9166 citing authors

#	Article	IF	Citations
1	Inverse design of self-oscillatory gels through deep learning. Neural Computing and Applications, 2022, 34, 6879.	3.2	0
2	Climbing a slippery slope. Journal of Fluid Mechanics, 2020, 882, .	1.4	2
3	Self-Oscillating Membranes: Chemomechanical Sheets Show Autonomous Periodic Shape Transformation. Physical Review Letters, 2020, 125, 178001.	2.9	18
4	Semi-implicit methods for the dynamics of elastic sheets. Journal of Computational Physics, 2019, 399, 108952.	1.9	6
5	Droplet Translation Actuated by Photoelectrowetting. Langmuir, 2018, 34, 3177-3185.	1.6	9
6	Weakly and strongly coupled Belousov-Zhabotinsky patterns. Physical Review E, 2017, 95, 022215.	0.8	13
7	Ring formation on an inclined surface. Journal of Fluid Mechanics, 2015, 775, .	1.4	33
8	Electrowetting on semiconductors. Applied Physics Letters, 2015, 106, .	1.5	7
9	Quantized orbits in weakly coupled Belousov-Zhabotinsky reactors. Europhysics Letters, 2015, 110, 60004.	0.7	3
10	Drop impact into a deep pool: vortex shedding and jet formation. Journal of Fluid Mechanics, 2015, 764, .	1.4	70
11	Growth and instability of the liquid rim in the crown splash regime. Journal of Fluid Mechanics, 2014, 752, 485-496.	1.4	51
12	Finessing the fracture energy barrier in ballistic seed dispersal. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5166-5169.	3.3	36
13	Evolution of the ejecta sheet from the impact of a drop with a deep pool. Journal of Fluid Mechanics, 2012, 690, 5-15.	1.4	81
14	Splashing from drop impact into a deep pool: multiplicity of jets and the failure of conventional scaling. Journal of Fluid Mechanics, 2012, 703, 402-413.	1.4	37
15	Localized structures in vibrated emulsions. Europhysics Letters, 2012, 98, 24002.	0.7	7
16	Stress hysteresis as the cause of persistent holes in particulate suspensions. Physical Review E, 2010, 81, 036319.	0.8	32
17	Strip waves in vibrated shear-thickening wormlike micellar solutions. Physical Review E, 2010, 81, 066310.	0.8	9
18	Wavelength selection in the crown splash. Physics of Fluids, 2010, 22, .	1.6	118

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19	Motion of a drop driven by substrate vibrations. European Physical Journal: Special Topics, 2009, 166, 11-14.	1.2	64
20	Complexities of splashing. Nonlinearity, 2008, 21, C1-C11.	0.6	113
21	Vibration-Induced Climbing of Drops. Physical Review Letters, 2007, 99, 144501.	2.9	162
22	Crumpling, buckling, and cracking: Elasticity of thin sheets. Physics Today, 2007, 60, 33-38.	0.3	42
23	Persistent Holes in a Fluid. Physical Review Letters, 2004, 92, 184501.	2.9	78
24	Cracks in Rubber under Tension Exceed the Shear Wave Speed. Physical Review Letters, 2004, 93, .	2.9	57
25	Wavy and rough cracks in silicon. Physical Review E, 2003, 67, 066209.	0.8	62
26	Oscillating Fracture Paths in Rubber. Physical Review Letters, 2001, 88, 014304.	2.9	51
27	Contact line deposits in an evaporating drop. Physical Review E, 2000, 62, 756-765.	0.8	1,872
28	Pattern formation in drying drops. Physical Review E, 2000, 61, 475-485.	0.8	1,098
29	Dynamic Shear Modulus of Tricresyl Phosphate and Squalane. Journal of Physical Chemistry B, 1999, 103, 4066-4070.	1.2	64
30	Capillary flow as the cause of ring stains from dried liquid drops. Nature, 1997, 389, 827-829.	13.7	5,383
31	Dielectric susceptibility measurements of the primary and secondary relaxation in polybutadiene. Physical Review B, 1995, 52, 5653-5656.	1.1	59