Robert D Deegan

List of Publications by Year
in descending order

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31 papers	9,644 citations	331670 21 h-index	434195 31 g-index
32 all docs	32 docs citations	32 times ranked	9166 citing authors

#	Article	IF	Citations
1	Capillary flow as the cause of ring stains from dried liquid drops. Nature, 1997, 389, 827-829.	27.8	5,383
2	Contact line deposits in an evaporating drop. Physical Review E, 2000, 62, 756-765.	2.1	1,872
3	Pattern formation in drying drops. Physical Review E, 2000, 61, 475-485.	2.1	1,098
4	Vibration-Induced Climbing of Drops. Physical Review Letters, 2007, 99, 144501.	7.8	162
5	Wavelength selection in the crown splash. Physics of Fluids, 2010, 22, .	4.0	118
6	Complexities of splashing. Nonlinearity, 2008, 21, C1-C11.	1.4	113
7	Evolution of the ejecta sheet from the impact of a drop with a deep pool. Journal of Fluid Mechanics, 2012, 690, 5-15.	3.4	81
8	Persistent Holes in a Fluid. Physical Review Letters, 2004, 92, 184501.	7.8	78
9	Drop impact into a deep pool: vortex shedding and jet formation. Journal of Fluid Mechanics, 2015, 764, .	3.4	70
10	Dynamic Shear Modulus of Tricresyl Phosphate and Squalane. Journal of Physical Chemistry B, 1999, 103, 4066-4070.	2.6	64
11	Motion of a drop driven by substrate vibrations. European Physical Journal: Special Topics, 2009, 166, 11-14.	2.6	64
12	Wavy and rough cracks in silicon. Physical Review E, 2003, 67, 066209.	2.1	62
13	Dielectric susceptibility measurements of the primary and secondary relaxation in polybutadiene. Physical Review B, 1995, 52, 5653-5656.	3.2	59
14	Cracks in Rubber under Tension Exceed the Shear Wave Speed. Physical Review Letters, 2004, 93, .	7.8	57
15	Oscillating Fracture Paths in Rubber. Physical Review Letters, 2001, 88, 014304.	7.8	51
16	Growth and instability of the liquid rim in the crown splash regime. Journal of Fluid Mechanics, 2014, 752, 485-496.	3.4	51
17	Crumpling, buckling, and cracking: Elasticity of thin sheets. Physics Today, 2007, 60, 33-38.	0.3	42
18	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.	3.4	37

#	Article	IF	Citations
19	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.	7.1	36
20	Ring formation on an inclined surface. Journal of Fluid Mechanics, 2015, 775, .	3.4	33
21	Stress hysteresis as the cause of persistent holes in particulate suspensions. Physical Review E, 2010, 81, 036319.	2.1	32
22	Self-Oscillating Membranes: Chemomechanical Sheets Show Autonomous Periodic Shape Transformation. Physical Review Letters, 2020, 125, 178001.	7.8	18
23	Weakly and strongly coupled Belousov-Zhabotinsky patterns. Physical Review E, 2017, 95, 022215.	2.1	13
24	Strip waves in vibrated shear-thickening wormlike micellar solutions. Physical Review E, 2010, 81, 066310.	2.1	9
25	Droplet Translation Actuated by Photoelectrowetting. Langmuir, 2018, 34, 3177-3185.	3.5	9
26	Localized structures in vibrated emulsions. Europhysics Letters, 2012, 98, 24002.	2.0	7
27	Electrowetting on semiconductors. Applied Physics Letters, 2015, 106, .	3.3	7
28	Semi-implicit methods for the dynamics of elastic sheets. Journal of Computational Physics, 2019, 399, 108952.	3.8	6
29	Quantized orbits in weakly coupled Belousov-Zhabotinsky reactors. Europhysics Letters, 2015, 110, 60004.	2.0	3
30	Climbing a slippery slope. Journal of Fluid Mechanics, 2020, 882, .	3.4	2
31	Inverse design of self-oscillatory gels through deep learning. Neural Computing and Applications, 2022, 34, 6879.	5.6	0