Bouncing off the Walls: The Influence of Gas-Kinetic an Impact

Physical Review Letters

124, 084501

DOI: 10.1103/physrevlett.124.084501

Citation Report

#	Article	IF	Citations
1	Capillary-scale solid rebounds: experiments, modelling and simulations. Journal of Fluid Mechanics, 2021, 912, .	3.4	10
2	Thin film instability driven dimple mode of air film failure during drop impact on smooth surfaces. Physical Review Fluids, 2021, 6, .	2.5	9
3	The role of drop shape in impact and splash. Nature Communications, 2021, 12, 3068.	12.8	35
4	Efficient simulation of non-classical liquidâ€“vapour phase-transition flows: a method of fundamental solutions. Journal of Fluid Mechanics, 2021, 919, .	3.4	10
5	Bouncing and coalescence dynamics during the impact of a falling drop with a sessile drop on different solid surfaces. Physics of Fluids, 2021, 33, .	4.0	28
6	Air film contact modes of drop impact on lubricated surfaces under reduced pressures. Physics of Fluids, 2021, 33, .	4.0	4
7	Effects of the surface wettability of nanoparticles on the impact dynamics of droplets. Chemical Engineering Science, 2021, 246, 116977.	3.8	13
8	Impact Dynamics of Nanodroplets on V-Shaped Substrates: Asymmetrical Behavior and Fast-Rebound Dynamics. Langmuir, 2021, 37, 13170-13178.	3.5	6
9	Transitions of bouncing and coalescence in binary droplet collisions. Journal of Fluid Mechanics, 2021, 928, .	3.4	9
10	One-step fabrication of soft calcium superhydrophobic surfaces by a simple electrodeposition process. RSC Advances, 2021, 12, 297-308.	3.6	5
11	Computational modelling of Leidenfrost drops. Journal of Fluid Mechanics, 2022, 936, .	3.4	14
12	Impact regimes of nanodroplets impacting nanopillared surfaces. Physical Review Fluids, 2022, 7, .	2.5	13
13	Capillary imbibition depth in particle-bed 3D printing â€“ Physical frame and one-dimensional experiments. Cement and Concrete Research, 2022, 156, 106740.	11.0	5
14	Viscous droplet impingement on soft substrates. Soft Matter, 2022, 18, 5474-5482.	2.7	1
15	Droplet Impact on a Micro-structured Hydrophilic Surface: Maximum Spreading, Jetting, and Partial Rebound. International Journal of Multiphase Flow, 2022, 157, 104235.	3.4	10
16	Modelling andÂNumerical Simulation ofÂBinary Droplet Collisions Under Extreme Conditions. Fluid Mechanics and Its Applications, 2022, , 127-147.	0.2	0
17	Postcontact droplet spreading and bubble entrapment on a smooth surface. Physical Review Fluids, 2022, 7, .	2.5	2
18	High Resolution Interferometric Imaging of Liquid-Solid Interfaces with HOTNNET. Experimental Mechanics, 0, , .	2.0	3

#	Article	IF	Citations
19	Air entrainment dynamics of aqueous polymeric droplets from dilute to semidilute unentangled regimes. Physics of Fluids, 0, , .	4.0	3
20	Drop impact on a sticky porous surface with gas discharge: transformation of drops into bubbles. Journal of Fluid Mechanics, 2022, 953, .	3.4	0
21	Dual nature of volatility on drop wetting dynamics of acetone-isopropanol mixtures on ultrathin smooth oil films. Physics of Fluids, 0, , .	4.0	0
22	Drop impact on viscous liquid films. Journal of Fluid Mechanics, 2023, 958, .	3.4	12
23	Drop impact on superheated surfaces: from capillary dominance to nonlinear advection dominance. Journal of Fluid Mechanics, 2023, 963, .	3.4	1
24	Finding the point of no return: Dynamical systems theory applied to the moving contact-line instability. Current Opinion in Colloid and Interface Science, 2023, 67, 101724.	7.4	0
25	Re-spreading behavior of droplet impact on superhydrophobic surfaces at low Weber numbers. Applied Physics Letters, 2023, 123, .	3.3	2
26	Couette flow at high Knudsen number between wall and liquid boundaries. Physics of Fluids, 2023, 35, .	4.0	3
27	Multiscale modeling of lubrication flows under rarefied gas conditions. Microfluidics and Nanofluidics, 2023, 27, .	2.2	0
28	Gas Microfilms in Droplet Dynamics: When Do Drops Bounce?. Annual Review of Fluid Mechanics, 2024, 56, .	25.0	2
29	Droplet impact on a microhole through a partially wetting surface. Physics of Fluids, 2023, 35, .	4.0	1
30	Modeling Leidenfrost Levitation of Soft Elastic Solids. Physical Review Letters, 2023, 131, .	7.8	0
31	Rolling and Sliding Modes of Nanodroplet Spreading: Molecular Simulations and a Continuum Approach. Physical Review Letters, 2023, 131, .	7.8	0
32	On the bubble trapped underneath a droplet impacting a moving hydrophilic surface: From perfect slip to no slip. Physics of Fluids, 2023, 35, .	4.0	0
33	Numerical investigation on heat transfer and vapour layer geometry of a droplet impacting on a spherical particle in Leidenfrost regime. Chemical Engineering Journal, 2024, 479, 147521.	12.7	1
34	Characteristic rupture height of the mediating air film beneath an impacting drop on atomically smooth mica. Physical Review Fluids, 2023, 8, .	2.5	1
35	The skating of drops impacting over gas or vapour layers. Journal of Fluid Mechanics, 2024, 980, .	3.4	0
36	Outcomes from water drop impact on hydrophobic meshes. Physics of Fluids, 2024, 36, .	4.0	0

#	Article	IF	Citations
37	Inertia and slip effects on the instability of a liquid film coated on a fibre. Journal of Fluid Mechanics, 2024, 982, .	3.4	0