J-M Vanden-Broeck

List of Publications by Year
in descending order

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76 papers	1,522 citations	331670 21 h-index	330143 37 g-index
76 all docs	76 docs citations	76 times ranked	453 citing authors

#	Article	IF	Citations
1	Solitary and periodic gravityâ€"capillary waves of finite amplitude. Journal of Fluid Mechanics, 1983, 134, 205.	3.4	127
2	Nonlinear three-dimensional gravityâ€"capillary solitary waves. Journal of Fluid Mechanics, 2005, 536, 99-105.	3.4	77
3	Steep solitary waves in water of finite depth with constant vorticity. Journal of Fluid Mechanics, 1994, 274, 339-348.	3.4	68
4	Hydroelastic solitary waves in deep water. Journal of Fluid Mechanics, 2011, 679, 628-640.	3.4	66
5	Trapped waves between submerged obstacles. Journal of Fluid Mechanics, 2004, 509, 93-102.	3.4	64
6	Accurate computations for steep solitary waves. Journal of Fluid Mechanics, 1983, 136, 63.	3.4	62
7	Dynamics of steep two-dimensional gravityâ€"capillary solitary waves. Journal of Fluid Mechanics, 2010, 664, 466-477.	3.4	61
8	Electrified viscous thin film flow over topography. Journal of Fluid Mechanics, 2008, 597, 449-475.	3.4	60
9	Forced solitary waves and fronts past submerged obstacles. Chaos, 2005, 15, 037106.	2.5	52
10	Numerical calculations of the free-surface flow under a sluice gate. Journal of Fluid Mechanics, 1997, 330, 339-347.	3.4	48
11	Numerical computation of steep gravity waves in shallow water. Physics of Fluids, 1979, 22, 1868.	1.4	45
12	Do true elevation gravityâ€"capillary solitary waves exist? A numerical investigation. Journal of Fluid Mechanics, 2002, 454, 403-417.	3.4	44
13	Effect of an electric field on film flow down a corrugated wall at zero Reynolds number. Physics of Fluids, 2008, 20, .	4.0	37
14	Antisymmetric capillary waves in electrified fluid sheets. European Journal of Applied Mathematics, 2004, 15, 609-623.	2.9	35
15	Two-dimensional flexural-gravity waves of finite amplitude in deep water. IMA Journal of Applied Mathematics, 2013, 78, 750-761.	1.6	32
16	A new application of the Kortewegâ€"de Vries Benjamin-Ono equation in interfacial electrohydrodynamics. Physics of Fluids, 2007, 19, 031703.	4.0	31
17	Time dependent gravity-capillary flows past an obstacle. Wave Motion, 1999, 29, 63-79.	2.0	28
18	Three-dimensional gravity-capillary solitary waves in water of finite depth and related problems. Physics of Fluids, 2005, 17, 122101.	4.0	28

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19	Influence of rapid changes in a channel bottom on free-surface flows. IMA Journal of Applied Mathematics, 2007, 73, 254-273.	1.6	25
20	Free-surface flows past a surface-piercing object of finite length. Journal of Fluid Mechanics, 1994, 273, 109-124.	3.4	24
21	The effect of disturbances on the flows under a sluice gate and past an inclined plate. Journal of Fluid Mechanics, 2007, 576, 475-490.	3.4	23
22	On internal fronts. Journal of Fluid Mechanics, 2003, 479, 145-154.	3.4	22
23	Free surface flows past surfboards and sluice gates. European Journal of Applied Mathematics, 2005, 16, 601.	2.9	22
24	Non-wetting impact of a sphere onto a bath and its application to bouncing droplets. Journal of Fluid Mechanics, 2017, 826, 97-127.	3.4	21
25	Wilton ripples generated by a moving pressure distribution. Journal of Fluid Mechanics, 2002, 451, 193-201.	3.4	20
26	Nonlinear three-dimensional interfacial flows with a free surface. Journal of Fluid Mechanics, 2007, 591, 481-494.	3.4	20
27	Hydroelastic waves on fluid sheets. Journal of Fluid Mechanics, 2011, 689, 541-551.	3.4	20
28	New hydroelastic solitary waves in deep water and their dynamics. Journal of Fluid Mechanics, 2016, 788, 469-491.	3.4	20
29	Stationary solitons and stabilization of the collapse described by KdV-type equations with high nonlinearities and dispersion. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 200, 423-428.	2.1	19
30	Three-dimensional capillary-gravity waves generated by a moving disturbance. Physics of Fluids, 2007, 19, .	4.0	18
31	Asymmetric gravityâ€“capillary solitary waves on deep water. Journal of Fluid Mechanics, 2014, 759, .	3.4	18
32	An axisymmetric free surface with a 120 degree angle along a circle. Journal of Fluid Mechanics, 1997, 342, 403-409.	3.4	17
33	Dynamics of fully nonlinear capillaryâ€“gravity solitary waves under normal electric fields. Journal of Engineering Mathematics, 2018, 108, 107-122.	1.2	17
34	A note on withdrawal from a fluid of finite depth through a point sink. ANZIAM Journal, 2002, 44, 181-191.	0.2	15
35	Quasi-normal free-surface impacts, capillary rebounds and application to Faraday walkers. Journal of Fluid Mechanics, 2019, 873, 856-888.	3.4	14
36	New solutions for capillary waves on fluid sheets. Journal of Fluid Mechanics, 2004, 507, 255-264.	3.4	13

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37	Viscous Electrified Film Flow over Step Topography. SIAM Journal on Applied Mathematics, 2009, 70, 845-865.	1.8	13
38	Nonlinear capillary free-surface flows. Journal of Engineering Mathematics, 2004, 50, 415-426.	1.2	12
39	Electrified film flow over step topography at zero Reynolds number: an analytical and computational study. Journal of Engineering Mathematics, 2011, 69, 169-183.	1.2	12
40	Benjaminâ€“Ono Kadomtsevâ€“Petviashviliâ€™s models in interfacial electro-hydrodynamics. European Journal of Mechanics, B/Fluids, 2017, 65, 459-463.	2.5	11
41	Steady inviscid rotational flows with free surfaces. Journal of Fluid Mechanics, 1994, 258, 105-113.	3.4	10
42	Internal solitary waves with stratification in density. Journal of the Australian Mathematical Society Series B Applied Mathematics, 1997, 38, 563-580.	0.2	10
43	On satisfying the radiation condition in free-surface flows. Journal of Fluid Mechanics, 2009, 624, 179-189.	3.4	10
44	Electrified falling-film flow over topography in the presence of a finite electrode. Journal of Engineering Mathematics, 2010, 68, 339-353.	1.2	10
45	On asymmetric generalized solitary gravityâ€“capillary waves in finite depth. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160454.	2.1	8
46	Potential-flow studies of steady two-dimensional jets, waterfalls, weirs and sprays. Journal of Engineering Mathematics, 2011, 70, 165-174.	1.2	7
47	On the motion of unsteady translating bubbles in an unbounded Hele-Shaw cell. Physics of Fluids, 2015, 27, .	4.0	7
48	Solution selection of axisymmetric TaylorÂbubbles. Journal of Fluid Mechanics, 2018, 843, 518-535.	3.4	7
49	Progressive flexuralâ€“gravity waves with constant vorticity. Journal of Fluid Mechanics, 2020, 905, .	3.4	7
50	The influence of a layer of mud on the train of waves generated by a moving pressure distribution. Journal of Engineering Mathematics, 1996, 30, 387-400.	1.2	6
51	Waves and singularities in nonlinear capillary free-surface flows. Journal of Engineering Mathematics, 2002, 43, 89-99.	1.2	6
52	Surface tension effects on interaction between two fluids near a wall. Quarterly Journal of Mechanics and Applied Mathematics, 2008, 61, 117-128.	1.3	6
53	Travelling wave solutions on anÂaxisymmetricÂferrofluid jet. Journal of Fluid Mechanics, 2019, 865, 414-439.	3.4	6
54	Waves generated by a source below a free surface in water of finite depth. Journal of Engineering Mathematics, 1996, 30, 603-609.	1.2	5

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55	A model for the free-surface flow due to a submerged source in water of infinite depth. Journal of the Australian Mathematical Society Series B Applied Mathematics, 1998, 39, 528-538.	0.2	5
56	Stern waves with vorticity. ANZIAM Journal, 2002, 43, 321-332.	0.2	5
57	On periodic and solitary pure gravity waves in water of infinite depth. Journal of Engineering Mathematics, 2014, 84, 173-180.	1.2	5
58	Investigation of symmetry breaking in periodic gravityâ€“capillary waves. Journal of Fluid Mechanics, 2017, 811, 622-641.	3.4	5
59	Solitary waves in water: numerical methods and results. WIT Transactions on State-of-the-art in Science and Engineering, 2007, , 55-84.	0.0	5
60	Ploughing flows. European Journal of Applied Mathematics, 1998, 9, 463-483.	2.9	4
61	The distortion of a bubble in a corner flow. European Journal of Applied Mathematics, 2000, 11, 171-179.	2.9	4
62	A study of the effects of electric field on two-dimensional inviscid nonlinear free surface flows generated by moving disturbances. Journal of Engineering Mathematics, 2015, 92, 1-13.	1.2	4
63	A local model for the limiting configuration of interfacial solitary waves. Journal of Fluid Mechanics, 2021, 921, .	3.4	4
64	On explicit solutions of the free-surface Euler equations in the presence of gravity. Physics of Fluids, 1997, 9, 2828-2834.	4.0	3
65	New solutions for periodic interfacial gravity waves. Journal of Fluid Mechanics, 2021, 928, .	3.4	3
66	Free-surface flows with two stagnation points. Journal of Fluid Mechanics, 1996, 324, 393-406.	3.4	2
67	Free-surface supercritical splashless flows past a two-dimensional symmetrical rectilinear body. European Journal of Mechanics, B/Fluids, 1998, 17, 811-822.	2.5	2
68	Hele-Shaw flow driven by an electric field. European Journal of Applied Mathematics, 2014, 25, 425-447.	2.9	2
69	The influence of variable surface tension on capillary-gravity waves. Journal of Engineering Mathematics, 2001, 40, 269-282.	1.2	1
70	A note on solitary waves with variable surface tension in water of infinite depth. ANZIAM Journal, 2006, 48, 225-235.	0.2	1
71	New exotic capillary free-surface flows. Journal of Fluid Mechanics, 2020, 899, .	3.4	1
72	Free-surface film flow over topography under electric fields. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 2100043-2100044.	0.2	0

#	ARTICLE	IF	CITATIONS
73	Nonlinear Free Surface Flows with Gravity and Surface Tension. , 2016, , 109-134.		0
74	Waves, Bubbles and Jets. , 2004, , 221-238.		0
75	STUDIES OF NONLINEAR THREE-DIMENSIONAL FREE SURFACE FLOWS. , 2008, , .		0
76	Improved calculations of waterfalls and weir flows. Journal of Fluid Mechanics, 2022, 941, .	3.4	0