Vasileios Bontozoglou

List of Publications by Year
in descending order

68	1,917	218677	254184
papers	citations	26 h-index	43 g-index

71	71	71	981
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Corrosion-induced hydrogen embrittlement in aluminum alloy 2024. Corrosion Science, 2006, 48, 1209-1224.	6.6	119
2	Experiments on laminar film flow along a periodic wall. Journal of Fluid Mechanics, 2002, 457, 133-156.	3.4	118
3	Airâ€“water two-phase flow and heat transfer in a plate heat exchanger. International Journal of Multiphase Flow, 2002, 28, 757-772.	3.4	113
4	Solitary waves on inclined films: Flow structure and binary interactions. Physics of Fluids, 2002, 14, 1082-1094.	4.0	102
5	Decomposition of NH3 on Pd and Ir Comparison with Pt and Rh. Journal of Molecular Catalysis A, 1997, 120, 165-171.	4.8	101
6	Experimental study of inclined film flow along periodic corrugations: The effect of wall steepness. Physics of Fluids, 2006, 18, 012102.	4.0	81
7	Observations of solitary wave dynamics of film flows. Journal of Fluid Mechanics, 2001, 435, 191-215.	3.4	78
8	Laminar film flow down a wavy incline. International Journal of Multiphase Flow, 1997, 23, 69-79.	3.4	72
9	Nonlinear resonance in viscous films on inclined wavy planes. International Journal of Multiphase Flow, 2009, 35, 78-90.	3.4	63
10	Linear resonance in viscous films on inclined wavy planes. International Journal of Multiphase Flow, 2008, 34, 580-589.	3.4	54
11	Solitary waves on inclined films: their characteristics and the effects on wall shear stress. Experiments in Fluids, 2006, 41, 79-89.	2.4	52
12	Decolorization kinetics of Procion H-exl dyes from textile dyeing using Fenton-like reactions. Journal of Hazardous Materials, 2006, 136, 75-84.	12.4	50
13	Computer Aided Analysis of Viscous Film Flow along an Inclined Wavy Wall. Journal of Computational Physics, 1999, 154, 372-392.	3.8	49
14	Capillaryâ€“gravity Kelvinâ€“Helmholtz waves close to resonance. Journal of Fluid Mechanics, 1990, 217, 71-91.	3.4	46
15	Effect of prior deformation and heat treatment on the corrosion-induced hydrogen trapping in aluminium alloy 2024. Corrosion Science, 2014, 80, 139-142.	6.6	45
16	Characterization of trapped hydrogen in exfoliation corroded aluminium alloy 2024. Scripta Materialia, 1999, 41, 1327-1332.	5.2	39
17	Evidence on the corrosion-induced hydrogen embrittlement of the 2024 aluminium alloy. Fatigue and Fracture of Engineering Materials and Structures, 2005, 28, 565-574.	3.4	32
18	Experimental evidence for a short-wave global mode in film flow along periodic corrugations. Journal of Fluid Mechanics, 2013, 718, 304-320.	3.4	31

#	Article	IF	Citations
19	Desalination by mechanical compression of humid air. Desalination, 1999, 122, 35-42.	8.2	30
20	Transient flow and heat transfer phenomena in inclined wavy films. International Journal of Thermal Sciences, 2004, 43, 761-767.	4.9	30
21	The primary instability of falling films in the presence of soluble surfactants. Journal of Fluid Mechanics, 2013, 729, 123-150.	3.4	30
22	Bubbles growing in supersaturated solutions at reduced gravity. AICHE Journal, 2004, 50, 2369-2382.	3.6	29
23	Falling film flow along steep two-dimensional topography: The effect of inertia. International Journal of Multiphase Flow, 2008, 34, 734-747.	3.4	29
24	Effect of Fluid Properties on Flow Patterns in Two-Phase Gasâ^'Liquid Flow in Horizontal and Downward Pipes^{â€}. Industrial & Engineering Chemistry Research, 2011, 50, 645-655.	3.7	29
25	Effect of channel width on the primary instability of inclined film flow. Physics of Fluids, 2010, 22, .	4.0	26
26	Measurements of liquid film flow as a function of fluid properties and channel width: Evidence for surface-tension-induced long-range transverse coherence. Physical Review E, 2011, 84, 026325.	2.1	26
27	The role of surfactants on the mechanism of the long-wave instability in liquid film flows. Journal of Fluid Mechanics, 2014, 741, 139-155.	3.4	25
28	Extreme solitary waves on falling liquid films. Journal of Fluid Mechanics, 2014, 745, 564-591.	3.4	25
29	Mass transfer in gas-liquid flow in small-diameter tubes. Chemical Engineering Science, 1997, 52, 2231-2237.	3.8	24
30	Nonlinear dynamics of inclined films under low-frequency forcing. Physics of Fluids, 2004, 16, 2457-2468.	4.0	24
31	Wave height estimation in stratified gas-liquid flows. AICHE Journal, 1989, 35, 1346-1350.	3.6	22
32	Hydrogen Absorption into Aluminum Alloy 2024-T3 During Exfoliation and Alternate Immersion Testing. Corrosion, 1998, 54, 73-78.	1.1	21
33	Nominally two-dimensional waves in inclined film flow in channels of finite width. Physics of Fluids, 2010, 22, .	4.0	21
34	Measurements of the stabilisation of liquid film flow by the soluble surfactant sodium dodecyl sulfate (SDS). International Journal of Multiphase Flow, 2016, 86, 28-34.	3.4	20
35	Steady solutions of inertial film flow along strongly undulated substrates. Physics of Fluids, 2011, 23, 052103.	4.0	19
36	Direct-contact steam condensation with simultaneous noncondensable gas absorption. AICHE Journal, 1995, 41, 241-250.	3.6	18

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37	A numerical study of interfacial transport to a gas-sheared wavy liquid. International Journal of Heat and Mass Transfer, 1998, 41, 2297-2305.	4.8	18
38	Weakly nonlinear Kelvin-Helmholtz waves between fluids of finite depth. International Journal of Multiphase Flow, 1991, 17, 509-518.	3.4	17
39	Simultaneous absorption of hydrogen sulfide and carbon dioxide in sodium hydroxide solutions: experimental and numerical study of the performance of a short-time contactor. Industrial & Engineering Chemistry Research, 1993, 32, 165-172.	3.7	17
40	Bubble dynamics during degassing of liquids at microgravity conditions. AICHE Journal, 2006, 52, 3029-3040.	3.6	17
41	Effects of finite depth and current velocity on large amplitude Kelvin-Helmholtz waves. Journal of Fluid Mechanics, 1988, 196, 187-204.	3.4	13
42	Self-similar growth of a gas bubble induced by localized heating: the effect of temperature-dependent transport properties. Chemical Engineering Science, 2005, 60, 1673-1683.	3.8	13
43	Bound-state formation in interfacial turbulence: direct numerical simulations and theory. Journal of Fluid Mechanics, 2013, 716, .	3.4	12
44	Numerical calculation of simultaneous absorption of hydrogen sulfide and carbon dioxide in aqueous hydroxide solutions. Industrial & Engineering Chemistry Research, 1991, 30, 2598-2603.	3.7	11
45	Inviscid free-surface flow over a periodic wall. Journal of Fluid Mechanics, 1991, 226, 189-203.	3.4	11
46	Nucleation, growth and detachment of neighboring bubbles over miniature heaters. Chemical Engineering Science, 2008, 63, 3438-3448.	3.8	9
47	Infrared Heating of Greenhouses Revisited: An Experimental and Modeling Study. Transactions of the ASABE, 2009, 52, 2055-2065.	1.1	9
48	Large-amplitude interfacial waves on a linear shear flow in the presence of a current. Journal of Fluid Mechanics, 1993, 249, 499.	3.4	8
49	Wall-triggered interfacial resonance in laminar gas-liquid flow. International Journal of Multiphase Flow, 1998, 24, 131-143.	3.4	8
50	Lateral motion and interaction of gas bubbles growing over spherical and plate heaters. Microgravity Science and Technology, 2006, 18, 204-209.	1.4	8
51	Experimental Investigation of the Energy Needs for a Conventionally and an Infrared-Heated Greenhouse. Advances in Mechanical Engineering, 2012, 4, 789515.	1.6	8
52	TRANSITION TO SLUG FLOW IN HORIZONTAL PIPES. Chemical Engineering Communications, 1992, 118, 361-385.	2.6	7
53	Non-linear dynamics of a viscoelastic film subjected to a spatially periodic electric field. Journal of Non-Newtonian Fluid Mechanics, 2015, 217, 1-13.	2.4	7
54	Prediction of particle deposition in the lungs based on simple modeling of alveolar mixing. Respiratory Physiology and Neurobiology, 2016, 225, 8-18.	1.6	7

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55	Stability of liquid film flow laden with the soluble surfactant sodium dodecyl sulphate: predictions versus experimental data. Journal of Fluid Mechanics, 2020, 894, .	3.4	6
56	INVESTIGATION OF THE POTENTIAL OF LONG WAVE RADIATION HEATING TO REDUCE ENERGY CONSUMPTION FOR GREENHOUSE HEATING. Acta Horticulturae, 2008, , 741-748.	0.2	5
57	The effect of soluble surfactants on liquid film flow. Journal of Physics: Conference Series, 2012, 395, 012165.	0.4	5
58	Application of a One-Dimensional Computational Model for the Prediction of Deposition from a Dry Powder Inhaler. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2017, 30, 435-443.	1.4	2
59	The effect of adsorption modeling on the stability of surfactant-laden liquid film flow. Acta Mechanica, 2018, 229, 535-547.	2.1	2
60	Large-amplitude Kelvin-Helmholtz waves in gas-liquid flows. International Journal of Multiphase Flow, 1992, 18, 307-311.	3.4	1
61	An inviscid investigation of the initiation of roll waves in horizontal gasâ€"liquid flows. International Journal of Multiphase Flow, 1994, 20, 957-967.	3.4	1
62	A model of lung surfactant dynamics based on intrinsic interfacial compressibility. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 624, 126839.	4.7	1
63	Resonance in viscous film flow over topography. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 3020001-3020002.	0.2	0
64	Resonance in viscous film flow over topography. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4100025-4100026.	0.2	0
65	The effect of alveolar mixing on particle retention and deposition investigated by a dynamic single-path model. Aerosol Science and Technology, 2020, 54, 1102-1115.	3.1	0
66	EXPERIMENTAL INVESTIGATION OF THE ENERGY NEEDS FOR A CONVENTIONALLY AND AN INFRARED (IR)-HEATED GREENHOUSE. Acta Horticulturae, 2011, , 461-468.	0.2	0
67	Bound State Formation and Self-organization in Interfacial Turbulence. Springer Proceedings in Complexity, 2013, , 1011-1016.	0.3	0
68	Surfactant-laden film lining an oscillating cap: problem formulation and weakly nonlinear analysis. Journal of Fluid Mechanics, 2022, 944, .	3.4	0