

Demetrios Papageorgiou

List of Publications by Citations

Source: <https://exaly.com/author-pdf/4595764/demetrios-papageorgiou-publications-by-citations.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

128
papers

2,820
citations

29
h-index

47
g-index

130
ext. papers

3,159
ext. citations

3.2
avg, IF

5.51
L-index

#	Paper	IF	Citations
128	On the breakup of viscous liquid threads. <i>Physics of Fluids</i> , 1995 , 7, 1529-1544	4.4	433
127	Nonlinear interfacial stability of core-annular film flows. <i>Physics of Fluids A, Fluid Dynamics</i> , 1990 , 2, 340-352		94
126	Pinchoff and satellite formation in surfactant covered viscous threads. <i>Physics of Fluids</i> , 2002 , 14, 1364-1376	4.4	74
125	Wave evolution on electrified falling films. <i>Journal of Fluid Mechanics</i> , 2006 , 556, 361	3.7	72
124	Analytical description of the breakup of liquid jets. <i>Journal of Fluid Mechanics</i> , 1995 , 301, 109-132	3.7	70
123	Linear stability of a two-fluid interface for electrohydrodynamic mixing in a channel. <i>Journal of Fluid Mechanics</i> , 2007 , 583, 347-377	3.7	66
122	Monodisperse drop formation in square microchannels. <i>Physical Review Letters</i> , 2006 , 96, 144501	7.4	66
121	Theory and experiments on the stagnant cap regime in the motion of spherical surfactant-laden bubbles. <i>Journal of Fluid Mechanics</i> , 2006 , 559, 1	3.7	66
120	Temporal instability of compound threads and jets. <i>Journal of Fluid Mechanics</i> , 2000 , 420, 1-25	3.7	58
119	Electrified viscous thin film flow over topography. <i>Journal of Fluid Mechanics</i> , 2008 , 597, 449-475	3.7	56
118	Large-amplitude capillary waves in electrified fluid sheets. <i>Journal of Fluid Mechanics</i> , 2004 , 508, 71-88	3.7	56
117	Dynamics and rupture of planar electrified liquid sheets. <i>Physics of Fluids</i> , 2001 , 13, 3547-3563	4.4	56
116	Predicting chaos for infinite dimensional dynamical systems: the Kuramoto-Sivashinsky equation, a case study. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1991 , 88, 11129-32	11.5	50
115	On the control and suppression of the Rayleigh-Taylor instability using electric fields. <i>Physics of Fluids</i> , 2014 , 26, 022105	4.4	40
114	Linear instability of the wake behind a flat plate placed parallel to a uniform stream. <i>Journal of Fluid Mechanics</i> , 1989 , 208, 67-89	3.7	40
113	Noise induced state transitions, intermittency, and universality in the noisy Kuramoto-Sivashinsky equation. <i>Physical Review Letters</i> , 2011 , 106, 060602	7.4	39
112	Increased mobility of a surfactant-retarded bubble at high bulk concentrations. <i>Journal of Fluid Mechanics</i> , 1999 , 390, 251-270	3.7	39

111	Electrostatic suppression of the "coffee stain effect". <i>Langmuir</i> , 2014 , 30, 5849-58	4	38
110	Numerical study of electric field effects on the deformation of two-dimensional liquid drops in simple shear flow at arbitrary Reynolds number. <i>Journal of Fluid Mechanics</i> , 2009 , 626, 367-393	3.7	37
109	Stability of film flow over inclined topography based on a long-wave nonlinear model. <i>Journal of Fluid Mechanics</i> , 2013 , 729, 638-671	3.7	35
108	Effect of an electric field on film flow down a corrugated wall at zero Reynolds number. <i>Physics of Fluids</i> , 2008 , 20, 042103	4.4	34
107	Influence of insoluble surfactant on the deformation and breakup of a bubble or thread in a viscous fluid. <i>Journal of Fluid Mechanics</i> , 2008 , 594, 307-340	3.7	32
106	Suppression of Rayleigh-Taylor instability using electric fields. <i>Mathematics and Computers in Simulation</i> , 2012 , 82, 1008-1016	3.3	31
105	Breakup of surfactant-laden jets above the critical micelle concentration. <i>Journal of Fluid Mechanics</i> , 2009 , 629, 195-219	3.7	31
104	Film Flows in the Presence of Electric Fields. <i>Annual Review of Fluid Mechanics</i> , 2019 , 51, 155-187	2.2	31
103	The effect of electric fields on the rupture of thin viscous films by van der Waals forces. <i>Physics of Fluids</i> , 2003 , 15, 641-652	4.4	30
102	Dynamics of liquid jets and threads under the action of radial electric fields: Microthread formation and touchdown singularities. <i>Physics of Fluids</i> , 2009 , 21, 032109	4.4	29
101	A global attracting set for nonlocal Kuramoto-Sivashinsky equations arising in interfacial electrohydrodynamics. <i>European Journal of Applied Mathematics</i> , 2006 , 17, 677	1	29
100	Temporal and spatial instability of an inviscid compound jet. <i>Rheologica Acta</i> , 1996 , 35, 567-583	2.3	29
99	An asymptotic theory for the linear stability of a core-annular flow in the thin annular limit. <i>Journal of Fluid Mechanics</i> , 1992 , 243, 653	3.7	29
98	Antisymmetric capillary waves in electrified fluid sheets. <i>European Journal of Applied Mathematics</i> , 2004 , 15, 609-623	1	28
97	Generation of interfacial instabilities in charged electrified viscous liquid films. <i>Journal of Engineering Mathematics</i> , 2004 , 50, 223-240	1.2	28
96	Gravity capillary waves in fluid layers under normal electric fields. <i>Physical Review E</i> , 2005 , 72, 051601	2.4	28
95	Dynamics of a viscous thread surrounded by another viscous fluid in a cylindrical tube under the action of a radial electric field: breakup and touchdown singularities. <i>Journal of Fluid Mechanics</i> , 2011 , 683, 27-56	3.7	27
94	Breakup of an electrified viscous thread with charged surfactants. <i>Physics of Fluids</i> , 2011 , 23, 022103	4.4	27

- 93 Nonlinear Dynamics of Electrified Thin Liquid Films. *SIAM Journal on Applied Mathematics*, **2007**, 67, 1310-1329 27
- 92 Linear instability of the supersonic wake behind a flat plate aligned with a uniform stream. *Theoretical and Computational Fluid Dynamics*, **1990**, 1, 327-348 2.3 27
- 91 A new application of the Korteweg-de Vries Benjamin-Ono equation in interfacial electrohydrodynamics. *Physics of Fluids*, **2007**, 19, 031703 4.4 26
- 90 On compound liquid threads with large viscosity contrasts. *Journal of Fluid Mechanics*, **2005**, 533, 3-7 23
- 89 Dynamics and stability of an annular electrolyte film. *Journal of Fluid Mechanics*, **2010**, 656, 481-506 3.7 22
- 88 Interfacial capillary waves in the presence of electric fields. *European Journal of Mechanics, B/Fluids*, **2007**, 26, 404-421 2.4 22
- 87 The onset of chaos in a class of Navier-Stokes solutions. *Journal of Fluid Mechanics*, **1999**, 393, 59-87 3.7 21
- 86 Stabilizing non-trivial solutions of the generalized Kuramoto-Sivashinsky equation using feedback and optimal control. *IMA Journal of Applied Mathematics*, **2017**, 82, 158-194 1 20
- 85 Nusselt numbers for Poiseuille flow over isoflux parallel ridges accounting for meniscus curvature. *Journal of Fluid Mechanics*, **2017**, 811, 315-349 3.7 20
- 84 Nonlinear stability of a charged electrified viscous liquid sheet under the action of a horizontal electric field. *Physics of Fluids*, **2006**, 18, 042102 4.4 20
- 83 Stabilising falling liquid film flows using feedback control. *Physics of Fluids*, **2016**, 28, 012107 4.4 18
- 82 Nonlinear development of two-layer Couette-Poiseuille flow in the presence of surfactant. *Physics of Fluids*, **2010**, 22, 102102 4.4 17
- 81 An experimental investigation of the convective instability of a jet. *Chemical Engineering Science*, **2003**, 58, 2421-2432 4.4 17
- 80 Stability of oscillatory two-phase Couette flow. *IMA Journal of Applied Mathematics*, **1994**, 53, 75-93 1 17
- 79 Three-dimensional high speed drop impact onto solid surfaces at arbitrary angles. *International Journal of Multiphase Flow*, **2018**, 107, 192-207 3.6 17
- 78 Computational Study of the Dispersively Modified Kuramoto-Sivashinsky Equation. *SIAM Journal of Scientific Computing*, **2012**, 34, A792-A813 2.6 16
- 77 Using surfactants to stabilize two-phase pipe flows of core-annular type. *Journal of Fluid Mechanics*, **2012**, 704, 333-359 3.7 16
- 76 The absolute instability of an inviscid compound jet. *Journal of Fluid Mechanics*, **2006**, 549, 81 3.7 16

75	Study of Cylindrical Jet Breakup Using One-Dimensional Approximations of the Euler Equations. <i>SIAM Journal on Applied Mathematics</i> , 1998 , 59, 286-317	1.8	15
74	Accurate Calculation and Instability of Supersonic Wake Flows. <i>Advances in Soil Science</i> , 1990 , 216-229		15
73	An in-depth numerical study of the two-dimensional Kuramoto-Sivashinsky equation. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015 , 471, 20140932	2.4	14
72	Nonlinear dynamics of surfactant-laden two-fluid Couette flows in the presence of inertia. <i>Journal of Fluid Mechanics</i> , 2016 , 802, 5-36	3.7	14
71	Controlling spatiotemporal chaos in active dissipative-dispersive nonlinear systems. <i>Physical Review E</i> , 2015 , 92, 022912	2.4	14
70	Electrified coating flows on vertical fibres: enhancement or suppression of interfacial dynamics. <i>Journal of Fluid Mechanics</i> , 2013 , 735, 427-456	3.7	14
69	Linearly implicit methods for a semilinear parabolic system arising in two-phase flows. <i>IMA Journal of Numerical Analysis</i> , 2011 , 31, 299-321	1.8	14
68	Buoyancy-driven motion of a two-dimensional bubble or drop through a viscous liquid in the presence of a vertical electric field. <i>Theoretical and Computational Fluid Dynamics</i> , 2009 , 23, 375-399	2.3	13
67	Non-linear waves in electrified viscous film flow down a vertical cylinder. <i>IMA Journal of Applied Mathematics</i> , 2012 , 77, 430-440	1	13
66	Viscous Electrified Film Flow over Step Topography. <i>SIAM Journal on Applied Mathematics</i> , 2009 , 70, 845-865	1.8	13
65	Dynamics of fully nonlinear capillary-gravity solitary waves under normal electric fields. <i>Journal of Engineering Mathematics</i> , 2018 , 108, 107-122	1.2	12
64	Interfacial instability in electrified plane Couette flow. <i>Journal of Fluid Mechanics</i> , 2011 , 666, 155-188	3.7	12
63	Electrified film flow over step topography at zero Reynolds number: an analytical and computational study. <i>Journal of Engineering Mathematics</i> , 2011 , 69, 169-183	1.2	12
62	Nonlinear dynamics of core-annular film flows in the presence of surfactant. <i>Journal of Fluid Mechanics</i> , 2009 , 626, 415-448	3.7	12
61	Numerical and analytical studies of non-linear gravity capillary waves in fluid layers under normal electric fields. <i>IMA Journal of Applied Mathematics</i> , 2007 , 72, 832-853	1	12
60	Pinchoff and satellite formation in compound viscous threads. <i>Physics of Fluids</i> , 2003 , 15, 3409-3428	4.4	12
59	Dynamics of an electrostatically modified Kuramoto-Sivashinsky-Korteweg-de Vries equation arising in falling film flows. <i>Physical Review E</i> , 2010 , 82, 016322	2.4	11
58	The double layer capillary stability of an annular electrolyte fluid surrounding a dielectric-fluid core in a tube. <i>Journal of Fluid Mechanics</i> , 1991 , 226, 149-174	3.7	11

57	Falling liquid films with blowing and suction. <i>Journal of Fluid Mechanics</i> , 2016 , 787, 292-330	3.7	11
56	Three-dimensional wave evolution on electrified falling films. <i>Journal of Fluid Mechanics</i> , 2017 , 822, 54-79	3.7	10
55	Surfactant destabilization and non-linear phenomena in two-fluid shear flows at small Reynolds numbers. <i>IMA Journal of Applied Mathematics</i> , 2012 , 77, 351-360	1	10
54	Absolute and Convective Instability for Evolution PDEs on the Half-Line. <i>Studies in Applied Mathematics</i> , 2005 , 114, 95-114	2.1	10
53	Two-layer electrified pressure-driven flow in topographically structured channels. <i>Journal of Fluid Mechanics</i> , 2017 , 814, 222-248	3.7	9
52	On the analyticity of certain dissipative-dispersive systems. <i>Bulletin of the London Mathematical Society</i> , 2013 , 45, 52-60	0.9	9
51	Nonlinear interfacial dynamics in stratified multilayer channel flows. <i>Journal of Fluid Mechanics</i> , 2013 , 734, 114-143	3.7	9
50	Breakup of an electrified, perfectly conducting, viscous thread in an AC field. <i>Physical Review E</i> , 2011 , 83, 066314	2.4	9
49	Electrified falling-film flow over topography in the presence of a finite electrode. <i>Journal of Engineering Mathematics</i> , 2010 , 68, 339-353	1.2	9
48	Chaotic flows in pulsating cylindrical tubes: a class of exact Navier-Stokes solutions. <i>Journal of Fluid Mechanics</i> , 2003 , 481, 187-213	3.7	9
47	The stability of two-dimensional wakes and shear layers at high Mach numbers. <i>Physics of Fluids A, Fluid Dynamics</i> , 1991 , 3, 793-802		9
46	Using surfactants to control the formation and size of wakes behind moving bubbles at order-one Reynolds numbers. <i>Journal of Fluid Mechanics</i> , 2002 , 453, 1-19	3.7	8
45	Ice formation within a thin film flowing over a flat plate. <i>Journal of Fluid Mechanics</i> , 2017 , 817, 455-489	3.7	7
44	Nonlinear Dynamics and Wall Touch-Up in Unstably Stratified Multilayer Flows in Horizontal Channels under the Action of Electric Fields. <i>SIAM Journal on Applied Mathematics</i> , 2015 , 75, 92-113	1.8	7
43	Nusselt Numbers for Poiseuille Flow Over Isoflux Parallel Ridges for Arbitrary Meniscus Curvature. <i>Journal of Heat Transfer</i> , 2018 , 140,	1.8	7
42	The influence of electric fields and surface tension on Kelvin-Helmholtz instability in two-dimensional jets. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2012 , 63, 125-144	1.6	7
41	Flow in a channel with accelerating or decelerating wall velocity: A comparison between self-similar solutions and Navier-Stokes computations in finite domains. <i>Physics of Fluids</i> , 2009 , 21, 113601	4.4	7
40	Axisymmetric waves in electrohydrodynamic flows. <i>Journal of Engineering Mathematics</i> , 2008 , 62, 133-148	2	7

39	Accurate and Efficient Boundary Integral Methods for Electrified Liquid Bridge Problems. <i>SIAM Journal of Scientific Computing</i> , 2005 , 26, 2102-2132	2.6	7
38	Fully nonlinear gravity-capillary solitary waves in a two-fluid system of finite depth. <i>Journal of Engineering Mathematics</i> , 2002 , 42, 321-339	1.2	7
37	Instability and dripping of electrified liquid films flowing down inverted substrates. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	7
36	Capturing nonlinear dynamics of two-fluid Couette flows with asymptotic models. <i>Journal of Fluid Mechanics</i> , 2016 , 806,	3.7	7
35	Coherent Structures in Nonlocal Dispersive Active-Dissipative Systems. <i>SIAM Journal on Applied Mathematics</i> , 2015 , 75, 538-563	1.8	6
34	Viscous pressure-driven flows and their stability in channels with vertically oscillating walls. <i>Physics of Fluids</i> , 2012 , 24, 023604	4.4	6
33	Compound viscous thread with electrostatic and electrokinetic effects. <i>Journal of Fluid Mechanics</i> , 2012 , 701, 171-200	3.7	6
32	Accurate low-order modeling of electrified falling films at moderate Reynolds number. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	6
31	Nonlinear stability in three-layer channel flows. <i>Journal of Fluid Mechanics</i> , 2017 , 829,	3.7	5
30	Nonlinear dynamics of a dispersive anisotropic Kuramoto-Sivashinsky equation in two space dimensions. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2018 , 474, 20170687	2.4	5
29	On the generation of nonlinear travelling waves in confined geometries using electric fields. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014 , 372,	3	5
28	Electrostatically controlled large-amplitude, non-axisymmetric waves in thin film flows down a cylinder. <i>Journal of Fluid Mechanics</i> , 2013 , 736,	3.7	5
27	Long-wave equations and direct simulations for the breakup of a viscous fluid thread surrounded by an immiscible viscous fluid. <i>IMA Journal of Applied Mathematics</i> , 2013 , 78, 851-867	1	5
26	The onset of particle segregation in plane Couette flows of concentrated suspensions. <i>International Journal of Multiphase Flow</i> , 2002 , 28, 127-136	3.6	5
25	Electric field stabilization of viscous liquid layers coating the underside of a surface. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	5
24	Physical mechanisms relevant to flow resistance in textured microchannels. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	5
23	Effects of slowly varying meniscus curvature on internal flows in the Cassie state. <i>Journal of Fluid Mechanics</i> , 2019 , 872, 272-307	3.7	4
22	Optimal Control of Thin Liquid Films and Transverse Mode Effects. <i>SIAM Journal on Applied Dynamical Systems</i> , 2019 , 18, 117-149	2.8	4

21	Electrostatically induced mixing in confined stratified multi-fluid systems. <i>International Journal of Multiphase Flow</i> , 2015 , 75, 194-204	3.6	4
20	Nonlinear interfacial instability in two-fluid viscoelastic Couette flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2018 , 251, 17-27	2.7	4
19	Dynamics of gravity-driven viscoelastic films on wavy walls. <i>Physical Review Fluids</i> , 2019 , 4,	2.8	4
18	Spontaneous onset of convection in a uniform phoretic channel. <i>Soft Matter</i> , 2020 , 16, 1259-1269	3.6	4
17	Stability of falling liquid films on flexible substrates. <i>Journal of Fluid Mechanics</i> , 2020 , 900,	3.7	4
16	Analysis and computations of a non-local thin-film model for two-fluid shear driven flows. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2019 , 475, 20190367 ^{2.4}	2.4	3
15	The Modulational Stability of Taylor Vortices in a Curved Channel. <i>SIAM Journal on Applied Mathematics</i> , 2000 , 60, 1543-1564	1.8	3
14	Reduced Models for Thick Liquid Layers with Inertia on Highly Curved Substrates. <i>SIAM Journal on Applied Mathematics</i> , 2017 , 77, 881-904	1.8	2
13	Solution of the Graetz-Nusselt Problem for Liquid Flow Over Isothermal Parallel Ridges. <i>Journal of Heat Transfer</i> , 2017 , 139,	1.8	2
12	Vanishing viscosity limits of mixed hyperbolic-elliptic systems arising in multilayer channel flows. <i>Nonlinearity</i> , 2015 , 28, 1607-1631	1.7	2
11	Linearly implicit schemes for multi-dimensional Kuramoto-Sivashinsky type equations arising in falling film flows. <i>IMA Journal of Numerical Analysis</i> , 2015 , drv011	1.8	2
10	Using electric fields to induce patterning in leaky dielectric fluids in a rod-annular geometry. <i>IMA Journal of Applied Mathematics</i> , 2016 , hxw017	1	2
9	Electrostatic Suppression of the "Coffee-stain Effect" <i>Procedia IUTAM</i> , 2015 , 15, 172-177		2
8	Solution of the Extended Graetz-Nusselt Problem for Liquid Flow Over Isothermal Parallel Ridges. <i>Journal of Heat Transfer</i> , 2018 , 140,	1.8	1
7	On the Modulational Instability of O(1) Amplitude Waves in Supersonic Boundary Layers. <i>SIAM Journal on Applied Mathematics</i> , 1997 , 57, 929-958	1.8	1
6	Breakup of Cylindrical Jets Governed by the Navier-Stokes Equations. <i>ICASE/LaRC Interdisciplinary Series in Science and Engineering</i> , 1994 , 225-234		1
5	Modulational stability of periodic solutions of the Kuramoto-Sivashinsky equation 1993 , 255-263		1
4	Mathematical study of a system of multi-dimensional non-local evolution equations describing surfactant-laden two-fluid shear flows. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021 , 477, 20210307	2.4	1

- 3 Active control of liquid film flows: beyond reduced-order models. *Nonlinear Dynamics*, **2021**, 104, 267-283 ○
- 2 Nonlinear gravity electro-capillary waves in two-fluid systems: solitary and periodic waves and their stability.. *Journal of Engineering Mathematics*, **2022**, 133, 6 1.2 ○
- 1 Korteweg-de Vries solitons on electrified liquid jets. *Physical Review E*, **2015**, 91, 063012 2.4