

# George Papadakis

## List of Publications by Year in descending order

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66  
papers

1,272  
citations

361045

20  
h-index

377514

34  
g-index

66  
all docs

66  
docs citations

66  
times ranked

962  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of turbulent coagulation in a jet with discretised population balance and DNS. Journal of Fluid Mechanics, 2022, 937, .	1.4	6
2	Analysis of wall mass transfer in turbulent pipe flow combining extended proper orthogonal decomposition and Fukagata-Iwamoto-Kasagi identity. Physical Review Fluids, 2022, 7, .	1.0	3
3	Analysis of interscale energy transfer in a boundary layer undergoing bypass transition. Journal of Fluid Mechanics, 2022, 941, .	1.4	10
4	On the interaction of turbulence with nucleation and growth in reaction crystallisation. Journal of Fluid Mechanics, 2022, 944, .	1.4	8
5	Reconstruction of large-scale flow structures in a stirred tank from limited sensor data. AIChE Journal, 2021, 67, e17348.	1.8	15
6	A methodology for coupling DNS and discretised population balance for modelling turbulent precipitation. International Journal of Heat and Fluid Flow, 2020, 86, 108689.	1.1	6
7	The role of coherent structures and inhomogeneity in near-field interscale turbulent energy transfers. Journal of Fluid Mechanics, 2020, 896, .	1.4	20
8	Uncertainty quantification of sensitivities of time-average quantities in chaotic systems. Physical Review E, 2020, 101, 022223.	0.8	7
9	Application of Generalized Polynomial Chaos for Quantification of Uncertainties of Time Averages and Their Sensitivities in Chaotic Systems. Algorithms, 2020, 13, 90.	1.2	1
10	Evolution of conditionally averaged second-order structure functions in a transitional boundary layer. Physical Review Fluids, 2020, 5, .	1.0	5
11	Feedback control of chaotic systems using multiple shooting shadowing and application to Kuramoto-Sivashinsky equation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200322.	1.0	1
12	DSMC simulations of turbulent flows at moderate Reynolds numbers. AIP Conference Proceedings, 2019, , .	0.3	0
13	A preconditioned Multiple Shooting Shadowing algorithm for the sensitivity analysis of chaotic systems. Journal of Computational Physics, 2019, 398, 108861.	1.9	9
14	Wave propagation in stenotic vessels; theoretical analysis and comparison between 3D and 1D fluid-structure-interaction models. Journal of Fluids and Structures, 2019, 88, 352-366.	1.5	9
15	Nonlinear optimal control of transition due to a pair of vortical perturbations using a receding horizon approach. Journal of Fluid Mechanics, 2019, 861, 524-555.	1.4	16
16	Data-based, reduced-order, dynamic estimator for reconstruction of nonlinear flows exhibiting limit-cycle oscillations. Physical Review Fluids, 2019, 4, .	1.0	6
17	Reduced power consumption in stirred vessels by means of fractal impellers. AIChE Journal, 2018, 64, 1485-1499.	1.8	36
18	Direct numerical simulation of heat transfer from a cylinder immersed in the production and decay regions of grid-element turbulence. Journal of Fluid Mechanics, 2018, 847, 452-488.	1.4	10

#	ARTICLE	IF	CITATIONS
19	Evolution of passive scalar statistics in a spatially developing turbulence. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	4
20	Gas-kinetic simulation of sustained turbulence in minimal Couette flow. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	12
21	Resolvent analysis of separated and attached flows around an airfoil at transitional Reynolds number. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	17
22	Reduced mixing time in stirred vessels by means of irregular impellers. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	15
23	Turbulence dissipation and the role of coherent structures in the near wake of a square prism. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	11
24	Molecular-Level Simulations of Turbulence and Its Decay. <i>Physical Review Letters</i> , 2017, 118, 064501.	2.9	72
25	Effect of trailing edge shape on the separated flow characteristics around an airfoil at low Reynolds number: A numerical study. <i>Physics of Fluids</i> , 2017, 29, .	1.6	49
26	Genesis and evolution of velocity gradients in near-field spatially developing turbulence. <i>Journal of Fluid Mechanics</i> , 2017, 815, 295-332.	1.4	33
27	DNS investigation of the dynamical behaviour of trailing vortices in unbaffled stirred vessels at transitional Reynolds numbers. <i>Physics of Fluids</i> , 2017, 29, .	1.6	13
28	Nonlinear optimal control of bypass transition in a boundary layer flow. <i>Physics of Fluids</i> , 2017, 29, .	1.6	22
29	The turbulence cascade in the near wake of a square prism. <i>Journal of Fluid Mechanics</i> , 2017, 825, 315-352.	1.4	67
30	Closed-loop control of boundary layer streaks induced by free-stream turbulence. <i>Physical Review Fluids</i> , 2016, 1, .	1.0	9
31	An iterative method for the computation of the response of linearised Navier–Stokes equations to harmonic forcing and application to forced cylinder wakes. <i>International Journal for Numerical Methods in Fluids</i> , 2014, 74, 794-817.	0.9	9
32	Optimal state feedback control of streaks and g&#x00F6;rtler vortices induced by free-stream vortical disturbances. , 2014, , .		1
33	Wave Propagation in Tapered Vessels: New Analytic Solutions That Account for Vessel Distensibility and Fluid Compressibility. <i>Journal of Pressure Vessel Technology, Transactions of the ASME</i> , 2014, 136, .	0.4	2
34	Performance Limits for Control of Boundary Layer Streaks Induced by Free Stream Turbulence. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7007-7012.	0.4	0
35	Wave Propagation in Tapered Vessels: New Analytic Solutions That Account for Vessel Distensibility and Fluid Compressibility. , 2013, , .		0
36	Investigation of the effect of external periodic flow pulsation on a cylinder wake using linear stability analysis. <i>Physics of Fluids</i> , 2011, 23, .	1.6	6

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37	New analytic solutions for wave propagation in flexible, tapered vessels with reference to mammalian arteries. <i>Journal of Fluid Mechanics</i> , 2011, 689, 465-488.	1.4	8
38	Linear Stability Analysis and Buckling of Two-Layered Shells Under External Circumferential Loading: A Numerical Investigation. <i>Journal of Pressure Vessel Technology</i> , <i>Transactions of the ASME</i> , 2010, 132, .	0.4	1
39	Computational analysis of flow structure and particle deposition in a single asthmatic human airway bifurcation. <i>Journal of Biomechanics</i> , 2010, 43, 2453-2459.	0.9	16
40	Fractional fourier-based filter for denoising elastograms. , 2010, 2010, 4028-31.		4
41	Coupling 3D and 1D fluid-structure interaction models for wave propagation in flexible vessels using a finite volume pressure-correction scheme. <i>Communications in Numerical Methods in Engineering</i> , 2009, 25, 533-551.	1.3	17
42	Linear and non-linear simulations of feedback control in plane Poiseuille flow. <i>International Journal for Numerical Methods in Fluids</i> , 2009, 59, 907-925.	0.9	3
43	Effect of tube spacing on the vortex shedding characteristics of laminar flow past an inline tube array: A numerical study. <i>Computers and Fluids</i> , 2009, 38, 950-964.	1.3	50
44	Design of poiseuille flow controllers using the method of inequalities. <i>International Journal of Automation and Computing</i> , 2009, 6, 14-21.	4.5	1
45	Linear Stability Analysis and Buckling of Two-Layered Shells Under External Circumferential Loading: A Numerical Investigation. , 2009, , .		0
46	A novel pressure-velocity formulation and solution method for fluid-structure interaction problems. <i>Journal of Computational Physics</i> , 2008, 227, 3383-3404.	1.9	20
47	Buckling of thick cylindrical shells under external pressure: A new analytical expression for the critical load and comparison with elasticity solutions. <i>International Journal of Solids and Structures</i> , 2008, 45, 5308-5321.	1.3	37
48	Linear Stability Analysis and Application of a New Solution Method of the Elastodynamic Equations Suitable for a Unified Fluid-Structure-Interaction Approach. <i>Journal of Pressure Vessel Technology</i> , <i>Transactions of the ASME</i> , 2008, 130, .	0.4	2
49	Minimizing transient energy growth in plane Poiseuille flow. <i>Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering</i> , 2008, 222, 323-331.	0.7	9
50	Simulations of Feedback Control of Early Transition in Poiseuille Flow. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2008, , 345-348.	0.1	0
51	Linear quadratic control of plane Poiseuille flow-the transient behaviour. <i>International Journal of Control</i> , 2007, 80, 1912-1930.	1.2	22
52	Large eddy simulation of pulsating flow over a circular cylinder at subcritical Reynolds number. <i>Computers and Fluids</i> , 2007, 36, 299-312.	1.3	44
53	Large eddy simulation of cross-flow through a staggered tube bundle at subcritical Reynolds number. <i>Journal of Fluids and Structures</i> , 2007, 23, 1215-1230.	1.5	50
54	A linear state-space representation of plane Poiseuille flow for control design: a tutorial. <i>International Journal of Modelling, Identification and Control</i> , 2006, 1, 272.	0.2	25

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55	Near-Wall Modification of an Explicit Algebraic Reynolds Stress Model Using Elliptic Blending. Flow, Turbulence and Combustion, 2006, 77, 257-275.	1.4	1
56	Investigation of laminar flow in a stirred vessel at low Reynolds numbers. Chemical Engineering Science, 2006, 61, 2762-2770.	1.9	33
57	Determination of mixing time and degree of homogeneity in stirred vessels with large eddy simulation. Chemical Engineering Science, 2005, 60, 2293-2302.	1.9	89
58	Study of the Effect of Flow Pulsation on the Flow Field and Heat Transfer Over an Inline Cylinder Array Using LES. , 2005, , 813-822.		6
59	Numerical Simulation of Turbulent Flow Characteristics in a Stirred Vessel Using the LES and RANS Approaches with the Sliding/Deforming Mesh Methodology. Chemical Engineering Research and Design, 2004, 82, 834-848.	2.7	109
60	On Spatial and Temporal Variations and Estimates of Energy Dissipation in Stirred Reactors. Chemical Engineering Research and Design, 2004, 82, 1188-1198.	2.7	40
61	Large Eddy Simulation of Turbulent Flow in a Rushton Impeller Stirred Reactor with Sliding-Deforming Mesh Methodology. Chemical Engineering and Technology, 2004, 27, 257-263.	0.9	32
62	Numerical simulation of the flow and heat transfer around a cylinder with a pulsating approaching flow at a low Reynolds number. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2001, 215, 105-119.	1.1	8
63	Numerical evaluation of alternate tube configurations for particle deposition rate reduction in heat exchanger tube bundles. International Journal of Heat and Fluid Flow, 2001, 22, 525-536.	1.1	57
64	An experimental and numerical study of the flow past elliptic cylinder arrays. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2001, 215, 1287-1301.	1.1	21
65	A local grid refinement method for three-dimensional turbulent recirculating flows. International Journal for Numerical Methods in Fluids, 1999, 31, 1157-1172.	0.9	11
66	A locally modified second order upwind scheme for convection terms discretization. International Journal of Numerical Methods for Heat and Fluid Flow, 1995, 5, 49-62.	1.6	46