

# Sharon O Stephen

## List of Publications by Year in descending order

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41  
papers

539  
citations

623734

14  
h-index

677142

22  
g-index

43  
all docs

43  
docs citations

43  
times ranked

217  
citing authors

#	ARTICLE	IF	CITATIONS
1	On the receptivity problem for Görtler vortices: vortex motions induced by wall roughness. <i>Philosophical Transactions of the Royal Society: Physical and Engineering Sciences</i> , 1991, 335, 51-85.	1.0	83
2	The cross-flow instability of the boundary layer on a rotating cone. <i>Journal of Fluid Mechanics</i> , 2009, 622, 209-232.	3.4	60
3	Boundary-Layer Transition on Broad Cones rotating in an Imposed Axial Flow. <i>AIAA Journal</i> , 2010, 48, 1184-1194.	2.6	33
4	The instability of the boundary layer over a disk rotating in an enforced axial flow. <i>Physics of Fluids</i> , 2011, 23, .	4.0	26
5	On the onset of three-dimensionality and time-dependence in Görtler vortices. <i>Journal of Fluid Mechanics</i> , 1989, 204, 405.	3.4	24
6	Stability of the boundary layer on a rotating disk for power-law fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2014, 207, 1-6.	2.4	24
7	The centrifugal instability of the boundary-layer flow over slender rotating cones. <i>Journal of Fluid Mechanics</i> , 2014, 755, 274-293.	3.4	22
8	The centrifugal instability of the boundary-layer flow over a slender rotating cone in an enforced axial free stream. <i>Journal of Fluid Mechanics</i> , 2016, 788, 70-94.	3.4	20
9	The compressible Görtler problem in two-dimensional boundary layers. <i>IMA Journal of Applied Mathematics</i> , 1993, 51, 27-67.	1.6	19
10	The neutral curve for stationary disturbances in rotating disk flow for power-law fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2014, 213, 73-81.	2.4	19
11	A nonlinear, asymptotic investigation of the stationary modes of instability of the three-dimensional boundary layer on a rotating disc. <i>Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences</i> , 1987, 413, 497-513.	1.4	18
12	Stability of Bédewadt flow. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2005, 363, 1181-1187.	3.4	18
13	Receptivity mechanisms for Görtler vortex modes. <i>Theoretical and Computational Fluid Dynamics</i> , 1995, 7, 317-339.	2.2	16
14	Wave interactions in a three-dimensional attachment-line boundary layer. <i>Journal of Fluid Mechanics</i> , 1990, 217, 367-390.	3.4	15
15	A NONLINEAR INVESTIGATION OF THE STATIONARY MODES OF INSTABILITY OF THE THREE-DIMENSIONAL COMPRESSIBLE BOUNDARY LAYER DUE TO A ROTATING DISC. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 1990, 43, 467-497.	1.3	13
16	Instability of hypersonic flow over a cone. <i>Journal of Fluid Mechanics</i> , 1997, 345, 383-411.	3.4	12
17	The effects of suction on the nonlinear stability of the three-dimensional boundary layer above a rotating disc. <i>Proceedings of the Royal Society A</i> , 1992, 436, 405-415.	0.9	11
18	Nonlinear stability of hypersonic flow over a cone with passive porous walls. <i>Journal of Fluid Mechanics</i> , 2012, 713, 528-563.	3.4	11

#	ARTICLE	IF	CITATIONS
19	Effects of partial slip on the local-global linear stability of the infinite rotating disk boundary layer. <i>Physics of Fluids</i> , 2020, 32, .	4.0	11
20	The Centrifugal Instability of a Slender Rotating Cone. <i>Journal of Algorithms and Computational Technology</i> , 2012, 6, 113-128.	0.7	10
21	The effect of non-Newtonian viscosity on the stability of the Blasius boundary layer. <i>Physics of Fluids</i> , 2016, 28, .	4.0	10
22	The effects of suction on the nonlinear stability of a three-dimensional compressible boundary layer. <i>IMA Journal of Applied Mathematics</i> , 1996, 56, 183-206.	1.6	9
23	Görtler vortices in the Rayleigh layer on an impulsively started cylinder. <i>Physics of Fluids</i> , 2002, 14, 2948-2956.	4.0	8
24	Effects of Porous Walls on Hypersonic Boundary Layers over a Sharp Cone. <i>AIAA Journal</i> , 2013, 51, 1234-1244.	2.6	7
25	The onset of three-dimensionality and time-dependence in Görtler vortices: neutrally stable wavy modes. <i>Journal of Fluid Mechanics</i> , 1990, 220, 661-672.	3.4	6
26	The linear evolution of centrifugal instabilities in curved, compressible mixing layers. <i>Physics of Fluids</i> , 1997, 9, 2506-2518.	4.0	6
27	Stability of the flow due to a linear stretching sheet. <i>Physics of Fluids</i> , 2021, 33, 084106.	4.0	5
28	NONLINEAR INSTABILITY OF VISCOUS MODES IN HYPERSONIC FLOW PAST A WEDGE. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 1994, 47, 557-582.	1.3	4
29	The nonlinear evolution of centrifugal instabilities in curved, compressible mixing layers. <i>Physics of Fluids</i> , 1998, 10, 2080-2090.	4.0	4
30	Nonlinear instability of hypersonic flow over a cone. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2006, 59, 301-319.	1.3	4
31	Effects of Porous Walls on Hypersonic Boundary Layers over a Sharp Cone. , 2010, , .		3
32	On the Instability of Görtler Vortices to Nonlinear Travelling Waves. <i>IMA Journal of Applied Mathematics</i> , 1991, 46, 269-296.	1.6	2
33	Stability of a Stretching Boundary-layer Flow. , 2020, , .		2
34	Boundary-Layer Transition on Broad Cones Rotating in an Imposed Axial Flow. , 2009, , .		1
35	Eigensolutions of the unsteady boundary-layer equations revisited (with extensions to) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 10	3.4	1
36	The stability of the boundary layer on a compliant rotating disc. <i>IMA Journal of Applied Mathematics</i> , 2007, 72, 761-784.	1.6	0

#	ARTICLE	IF	CITATIONS
37	Centrifugal instabilities in curved compressible wakes. <i>Physics of Fluids</i> , 2009, 21, 104103.	4.0	0
38	Transition mechanisms within the boundary-layer flow over slender vs. broad rotating cones. , 2010, , .		0
39	Effects of regular and random microstructures on hypersonic boundary layers. , 2011, , .		0
40	Delaying transition in rotating boundary-layer flows. , 2015, , .		0
41	Effects of Partial Slip on Viscous Instabilities in Rotating-Disc Boundary-Layer Flows. , 2017, , .		0