Yongyun Hwang

List of Publications by Year
in descending order

44	1,529	331670 21	302126 39
papers	citations	h-index	g-index

44	44	44	600
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Linear non-normal energy amplification of harmonic and stochastic forcing in the turbulent channel flow. Journal of Fluid Mechanics, 2010, 664, 51-73.	3.4	155
2	Statistical structure of self-sustaining attached eddies in turbulent channel flow. Journal of Fluid Mechanics, 2015, 767, 254-289.	3.4	150
3	Self-Sustained Process at Large Scales in Turbulent Channel Flow. Physical Review Letters, 2010, 105, 044505.	7.8	130
4	Amplification of coherent streaks in the turbulent Couette flow: an inputâ€“output analysis at low Reynolds number. Journal of Fluid Mechanics, 2010, 643, 333-348.	3.4	108
5	Near-wall turbulent fluctuations in the absence of wide outer motions. Journal of Fluid Mechanics, 2013, 723, 264-288.	3.4	90
6	Self-sustaining process of minimal attached eddies in turbulent channel flow. Journal of Fluid Mechanics, 2016, 795, 708-738.	3.4	87
7	Scale interactions and spectral energy transfer in turbulent channel flow. Journal of Fluid Mechanics, 2018, 854, 474-504.	3.4	74
8	Skin-friction generation by attached eddies in turbulent channel flow. Journal of Fluid Mechanics, 2016, 808, 511-538.	3.4	72
9	Self-sustained processes in the logarithmic layer of turbulent channel flows. Physics of Fluids, 2011, 23, .	4.0	63
10	Stabilization of absolute instability in spanwise wavy two-dimensional wakes. Journal of Fluid Mechanics, 2013, 727, 346-378.	3.4	45
11	On the self-sustained nature of large-scale motions in turbulent Couette flow. Journal of Fluid Mechanics, 2015, 782, 515-540.	3.4	43
12	Invariant solutions of minimal large-scale structures in turbulent channel flow for upÂtoÂ1000. Journal of Fluid Mechanics, 2016, 802, .	3.4	40
13	Streak instability in turbulent channel flow: the seeding mechanism of large-scale motions. Journal of Fluid Mechanics, 2017, 832, 483-513.	3.4	37
14	Bioconvection under uniform shear: linear stability analysis. Journal of Fluid Mechanics, 2014, 738, 522-562.	3.4	36
15	Mesolayer of attached eddies in turbulent channel flow. Physical Review Fluids, 2016, 1, .	2.5	35
16	On the stability of large-scale streaks in turbulent Couette and Poiseulle flows. Comptes Rendus - Mecanique, 2011, 339, 1-5.	2.1	33
17	Stability of downflowing gyrotactic microorganism suspensions in a two-dimensional vertical channel. Journal of Fluid Mechanics, 2014, 749, 750-777.	3.4	32
18	Streak instability in near-wall turbulence revisited. Journal of Turbulence, 2017, 18, 443-464.	1.4	32

#	Article	IF	Citations
19	Optimally amplified large-scale streaks and drag reduction in turbulent pipe flow. Physical Review E, 2010, 82, 036321.	2.1	31
20	Exact coherent states of attached eddies in channel flow. Journal of Fluid Mechanics, 2019, 862, 1029-1059.	3.4	31
21	Attached eddy model revisited using a minimal quasi-linear approximation. Journal of Fluid Mechanics, 2020, 894, .	3.4	22
22	Shear stress-driven flow: the state space of near-wall turbulence as. Journal of Fluid Mechanics, 2019, 874, 606-638.	3.4	18
23	Quasilinear approximation for exact coherent states in parallel shear flows. Fluid Dynamics Research, 2019, 51, 011402.	1.3	18
24	Minimal multi-scale dynamics of near-wall turbulence. Journal of Fluid Mechanics, 2021, 913, .	3.4	17
25	Scaling of turbulence intensities up to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mtext>Re</mml:mtext><mml:mi>Ï„</mml:mi> with a resolvent-based quasilinear approximation. Physical Review Fluids, 2021, 6, .	2.5	12
26	A local approximation model for macroscale transport of biased active Brownian particles in a flowing suspension. Journal of Fluid Mechanics, 2022, 935, .	3.4	12
27	Energy production and self-sustained turbulence at the Kolmogorov scale in Couette flow. Journal of Fluid Mechanics, 2018, 834, 531-554.	3.4	11
28	The mean logarithm emerges with self-similar energy balance. Journal of Fluid Mechanics, 2020, 903, .	3.4	11
29	Orr mechanism in transition of parallel shear flow. Physical Review Fluids, 2021, 6, .	2.5	10
30	Generalised quasilinear approximations of turbulent channel flow. Part 1. Streamwise nonlinear energy transfer. Journal of Fluid Mechanics, 2022, 936, .	3.4	10
31	Bifurcation and stability of downflowing gyrotactic micro-organism suspensions in a vertical pipe. Journal of Fluid Mechanics, 2020, 902, .	3.4	9
32	Generalised quasilinear approximations of turbulent channel flow. Part 2. Spanwise triadic scale interactions. Journal of Fluid Mechanics, 2022, 944, .	3.4	9
33	Phase-space dynamics of opposition control in wall-bounded turbulent flows. Journal of Fluid Mechanics, 2019, 861, 29-54.	3.4	6
34	Spectral energetics of a quasilinear approximation in uniform shear turbulence. Journal of Fluid Mechanics, 2020, 904, .	3.4	6
35	The logarithmic variance of streamwise velocity and conundrum in wall turbulence. Journal of Fluid Mechanics, 2022, 933, .	3.4	6
36	Intracellular regulation of cell signaling cascades: how location makes a difference. Journal of Mathematical Biology, 2014, 69, 213-242.	1.9	5

#	Article	IF	Citations
37	The instability of gyrotactically trapped cellÂlayers. Journal of Fluid Mechanics, 2019, 868, .	3.4	5
38	A driving mechanism of near-wall turbulence subject to adverse pressure gradient in a plane Couette flow. Journal of Fluid Mechanics, 2022, 941, .	3.4	5
39	A sequence of transcritical bifurcations in a suspension of gyrotactic microswimmers in vertical pipe. Journal of Fluid Mechanics, 2020, 902, .	3.4	4
40	A sparse optimal closure for a reduced-order model of wall-bounded turbulence. Journal of Fluid Mechanics, 2022, 939, .	3.4	4
41	Structural sensitivities of soft and steep nonlinear global modes in spatially developing media. European Journal of Mechanics, B/Fluids, 2015, 49, 322-334.	2.5	2
42	Instabilities and sensitivities in a flow over a rotationally flexible cylinder with a rigid splitter plate. Journal of Fluid Mechanics, 2021, 928, .	3.4	2
43	Linear instability of tilted parallel shear flow in a strongly stratified and viscous medium. JMST Advances, 2020, 2, 37-51.	1.9	1
44	Spectral Energetics of a Quasilinear Approximation in Uniform Shear Turbulence. Springer Proceedings in Physics, 2021, , 245-251.	0.2	0