Kyoungyoun Kim

List of Publications by Year
in descending order

36 papers	1,042 citations	471061 17 h-index	433756 31 g-index
37 all docs	37 docs citations	37 times ranked	637 citing authors

#	Article	IF	Citations
1	Similarity between the turbulent transports of heat and momentum in viscoelastic channel flows. International Journal of Heat and Mass Transfer, 2022, 189, 122748.	2.5	1
2	Synergy in the organization of near-wall and bulk turbulence structures in viscoelastic turbulent channel flow in the high drag reduction regime. Physics of Fluids, 2020, 32, 031703.	1.6	5
3	Liquid Water Transport in Porous Metal Foam Flow-Field Fuel Cells: A Two-Phase Numerical Modelling and Ex-Situ Experimental Study. Energies, 2019, 12, 1186.	1.6	13
4	Fully decoupled monolithic projection method for natural convection problems. Journal of Computational Physics, 2017, 334, 582-606.	1.9	25
5	PEMFC modeling based on characterization of effective diffusivity in simulated cathode catalyst layer. International Journal of Hydrogen Energy, 2017, 42, 13226-13233.	3.8	28
6	Transient behaviors of wall turbulence in temporally accelerating channel flows. International Journal of Heat and Fluid Flow, 2017, 67, 13-26.	1.1	18
7	A decoupled monolithic projection method for natural convection problems. Journal of Computational Physics, 2016, 314, 160-166.	1.9	19
8	A RANS model for heat transfer reduction in viscoelastic turbulent flow. International Journal of Heat and Mass Transfer, 2016, 100, 332-346.	2.5	18
9	Numerical study on the effects of gas humidity on proton-exchange membrane fuel cell performance. International Journal of Hydrogen Energy, 2016, 41, 11776-11783.	3.8	33
10	Analysis of velocity-components decoupled projection method for the incompressible Navierâ€“Stokes equations. Computers and Mathematics With Applications, 2016, 71, 1722-1743.	1.4	17
11	Effects of the Temporal Increase Rate of Reynolds Number on Turbulent Channel Flows. Transactions of the Korean Society of Mechanical Engineers, B, 2016, 40, 435-440.	0.0	1
12	Numerical Analysis on Water Transport in Alkaline Anion Exchange Membrane Fuel Cells. Electrochemistry, 2015, 83, 80-83.	0.6	15
13	A Reynolds stress model for turbulent flow of homogeneous polymer solutions. International Journal of Heat and Fluid Flow, 2015, 54, 220-235.	1.1	14
14	Numerical simulations of water droplet dynamics in hydrogen fuel cell gas channel. Journal of Power Sources, 2014, 246, 679-695.	4.0	42
15	Effects of hydrophilic/hydrophobic properties of gas flow channels on liquid water transport in a serpentine polymer electrolyte membrane fuel cell. International Journal of Hydrogen Energy, 2014, 39, 19714-19721.	3.8	37
16	A viscoelastic turbulent flow model valid up to the maximum drag reduction limit. Journal of Non-Newtonian Fluid Mechanics, 2013, 202, 99-111.	1.0	35
17	Development of a Low-Reynolds-number k-Ï‰ Model for FENE-P Fluids. Flow, Turbulence and Combustion, 2013, 90, 69-94.	1.4	19
18	Spatiotemporal evolution of hairpin eddies, Reynolds stress, and polymer torque in polymer drag-reduced turbulent channel flows. Physical Review E, 2013, 87, 063002.	0.8	24

#	Article	IF	Citations
19	Numerical analysis of convective and diffusive fuel transports in high-temperature proton-exchange membrane fuel cells. International Journal of Hydrogen Energy, 2011, 36, 15273-15282.	3.8	13
20	Numerical simulations of the combustor for waste insulating oil containing polychlorinated biphenyls. Journal of Mechanical Science and Technology, 2011, 25, 1853-1859.	0.7	1
21	A FENE-P kâ€“Îµ turbulence model for low and intermediate regimes of polymer-induced drag reduction. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 639-660.	1.0	43
22	Structure of the turbulent boundary layer over a rod-roughened wall. International Journal of Heat and Fluid Flow, 2009, 30, 1087-1098.	1.1	22
23	Hairpin Vortex Dynamics and Polymer-Induced Turbulent Drag Reduction. AIP Conference Proceedings, 2008, , .	0.3	0
24	Effects of background noise on generating coherent packets of hairpin vortices. Physics of Fluids, 2008, 20, .	1.6	30
25	Dynamics of Hairpin Vortices and Polymer-Induced Turbulent Drag Reduction. Physical Review Letters, 2008, 100, 134504.	2.9	73
26	Design of a Double-Ejector Oxygen Recirculated System for Large-Scale Submarine Fuel Cell. , 2008, , .		0
27	A Study on the Bypass Flow in a Gas Diffusion Layer of a PEMFC With Serpentine Flow Channels. , 2008, , .		0
28	Effects of polymer stresses on eddy structures in drag-reduced turbulent channel flow. Journal of Fluid Mechanics, 2007, 584, 281-299.	1.4	110
29	Effects of unsteady blowing through a spanwise slot on a turbulent boundary layer. Journal of Fluid Mechanics, 2006, 557, 423.	1.4	34
30	Effects of local blowing from a slot on a laminar boundary layer. Fluid Dynamics Research, 2006, 38, 539-549.	0.6	4
31	Tensorial time scale in turbulent gradient transport of Reynolds stresses. Physics of Fluids, 2005, 17, 071701.	1.6	4
32	Tensorial Time Scales for Turbulent Gradient Transport of Reynolds Stresses. Transactions of the Korean Society of Mechanical Engineers, B, 2005, 29, 687-695.	0.0	0
33	Effects of Periodic Blowing from Spanwise Slot on a Turbulent Boundary Layer. AIAA Journal, 2003, 41, 1916-1924.	1.5	29
34	Wall Pressure Fluctuations in a Turbulent Boundary Layer After Blowing or Suction. AIAA Journal, 2003, 41, 1697-1704.	1.5	22
35	Assessment of Local Blowing and Suction in a Turbulent Boundary Layer. AIAA Journal, 2002, 40, 175-177.	1.5	18
36	An implicit velocity decoupling procedure for the incompressible Navier-Stokes equations. International Journal for Numerical Methods in Fluids, 2002, 38, 125-138.	0.9	275