Artur Tyliszczak

List of Publications by Year
in descending order

51 papers	763 citations	516710 16 h-index	552781 26 g-index
52 all docs	52 docs citations	52 times ranked	410 citing authors

#	Article	IF	Citations
1	LES/CMC of Blow-off in a Liquid Fueled Swirl Burner. Flow, Turbulence and Combustion, 2014, 92, 237-267.	2.6	70
2	Large Eddy Simulation of Spark Ignition in a Gas Turbine Combustor. Flow, Turbulence and Combustion, 2010, 85, 711-734.	2.6	62
3	A high-order compact difference algorithm for half-staggered grids for laminar and turbulent incompressible flows. Journal of Computational Physics, 2014, 276, 438-467.	3.8	53
4	High-order compact difference algorithm on half-staggered meshes for low Mach number flows. Computers and Fluids, 2016, 127, 131-145.	2.5	42
5	Parametric Analysis of Excited Round Jets - Numerical Study. Flow, Turbulence and Combustion, 2014, 93, 221-247.	2.6	40
6	A new approach to sub-grid surface tension for LES of two-phase flows. Journal of Computational Physics, 2012, 231, 7368-7397.	3.8	39
7	LES–CMC study of an excited hydrogen flame. Combustion and Flame, 2015, 162, 3864-3883.	5.2	29
8	Numerical simulations of combustion process in a gas turbine with a single and multi-point fuel injection system. Applied Energy, 2016, 174, 153-165.	10.1	28
9	Parametric study of multi-armed jets. International Journal of Heat and Fluid Flow, 2018, 73, 82-100.	2.4	28
10	Multi-armed jets: A subset of the blooming jets. Physics of Fluids, 2015, 27, .	4.0	27
11	Self-sustained oscillations in a homogeneous-density round jet. Journal of Turbulence, 2013, 14, 25-52.	1.4	26
12	LES Predictions of Self-Sustained Oscillations in Homogeneous Density Round Free Jet. Flow, Turbulence and Combustion, 2015, 95, 437-459.	2.6	24
13	Controlled mixing enhancement in turbulent rectangular jets responding to periodically forced inflow conditions. Journal of Turbulence, 2015, 16, 742-771.	1.4	22
14	A 3D-CFD study of a γ-type Stirling engine. Energy, 2019, 169, 142-159.	8.8	20
15	LES modeling of converging-diverging turbulent channel flow. Journal of Turbulence, 2012, 13, N11.	1.4	19
16	A spark ignition scenario in a temporally evolving mixing layer. Combustion and Flame, 2019, 209, 353-356.	5.2	18
17	Large eddy simulation predictions of absolutely unstable round hot jet. Physics of Fluids, 2016, 28, .	4.0	16
18	LES-CMC simulations of a turbulent hydrogen jet in oxy-combustion regimes. International Journal of Hydrogen Energy, 2016, 41, 9705-9717.	7.1	15

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19	Implicit LES study of spark parameters impact on ignition in a temporally evolving mixing layer between H2/N2 mixture and air. International Journal of Hydrogen Energy, 2018, 43, 9815-9828.	7.1	15
20	Numerical simulation of free jets. International Journal of Numerical Methods for Heat and Fluid Flow, 2017, 27, 1056-1063.	2.8	14
21	LES study of global instability in annular jets. International Journal of Heat and Fluid Flow, 2019, 79, 108460.	2.4	14
22	A new insight into understanding the Crow and Champagne preferred mode: a numerical study. Journal of Fluid Mechanics, 2019, 869, 385-416.	3.4	13
23	Projection method for high-order compact schemes for low Mach number flows in enclosures. International Journal of Numerical Methods for Heat and Fluid Flow, 2014, 24, 1141-1174.	2.8	11
24	Controlling spatio-temporal evolution of natural and excited square jets via inlet conditions. International Journal of Heat and Fluid Flow, 2019, 80, 108488.	2.4	11
25	LES of Variable Density Bifurcating Jets. , 2007, , 273-288.		11
26	Application of time preconditioning and high€order compact discretization method for low Mach number flows. International Journal for Numerical Methods in Fluids, 2013, 72, 650-670.	1.6	10
27	Large eddy simulation of incompressible free round jet with discontinuous Galerkin method. International Journal for Numerical Methods in Fluids, 2015, 79, 164-182.	1.6	10
28	Modeling of heat and fluid flow in granular layers using high-order compact schemes and volume penalization method. Numerical Heat Transfer; Part A: Applications, 2019, 76, 737-759.	2.1	10
29	Large eddy simulations of wall€bounded flows using a simplified immersed boundary method and high€order compact schemes. International Journal for Numerical Methods in Fluids, 2018, 87, 358-381.	1.6	9
30	Study of a Flame Kernel Evolution in a Turbulent Mixing Layer Using LES with a Laminar Chemistry Model. Flow, Turbulence and Combustion, 2020, 105, 807-835.	2.6	9
31	High-order compact difference schemes on wide computational stencils with a spectral-like accuracy. Computers and Mathematics With Applications, 2022, 108, 123-140.	2.7	6
32	Numerical analysis of non-excited and excited jets issuing from non-circular nozzles. International Journal of Heat and Fluid Flow, 2022, 94, 108944.	2.4	5
33	Numerical Study of Hydrogen Auto-Ignition Process in an Isotropic and Anisotropic Turbulent Field. Energies, 2021, 14, 1869.	3.1	4
34	LES/CMC Predictions of Spark Ignition Probability in a Liquid Fuelled Swirl Combustor. , 2013, , .		3
35	Hybrid MPI/Open-MP acceleration approach for high-order schemes for CFD. Journal of Physics: Conference Series, 2018, 1101, 012031.	0.4	3
36	Numerical Analysis of the Combustion Dynamics of Passively Controlled Jets Issuing from Polygonal Nozzles. Energies, 2021, 14, 554.	3.1	3

#	Article	IF	Citations
37	A Numerical Study of the Global Instability in Counter-Current Homogeneous Density Incompressible Round Jets. Flow, Turbulence and Combustion, 2021, 107, 901-935.	2.6	3
38	A numerical study of a lifted $\hbox{H}_2/\hbox{N}_2$ flame excited by an axial and flapping forcing. Scientific Reports, 2022, 12, 2753.	3.3	3
39	Numerical Analysis of a Flow over Spheres Embedded on a Flat Wall. Processes, 2021, 9, 277.	2.8	2
40	Experimental and numerical studies of turbulent flows over two-dimensional and three-dimensional rough surfaces under an adverse pressure gradient. Applied Mathematical Modelling, 2022, 106, 549-566.	4.2	2
41	Numerical analysis of an impact of spray characteristics and co-flow temperature on a flame lift-off height. Journal of Physics: Conference Series, 2018, 1101, 012039.	0.4	1
42	Experimental and numerical research on heat and air flow through a granular material. Journal of Physics: Conference Series, 2018, 1101, 012043.	0.4	1
43	Impact of Evaporation Models and Droplet Size on Auto-ignition and Lift-off Height in a Spray Jet Flame. Combustion Science and Technology, 2022, 194, 175-194.	2.3	1
44	Application of High-Order Compact Difference Schemes for Solving Partial Differential Equations with High-Order Derivatives. Applied Sciences (Switzerland), 2022, 12, 2203.	2.5	1
45	LES - IB analysis of a flow in channel with an adverse pressure gradient.. Journal of Physics: Conference Series, 2016, 760, 012012.	0.4	0
46	Impact of numerical method on auto-ignition in a temporally evolving mixing layer at various initial conditions. Journal of Physics: Conference Series, 2016, 760, 012027.	0.4	0
47	Modelling of hydrogen flame in perfectly clean combustion regimes using LES-CMC. Journal of Physics: Conference Series, 2019, 1398, 012016.	0.4	0
48	Numerical Predictions of Absolutely Unstable Round Hot Jet. ERCOFTAC Series, 2018, , 529-535.	0.1	0
49	LES-IB Study of Mixing Enhancement by Polygonal Orifices and Wavy Walls. ERCOFTAC Series, 2018, , 367-372.	0.1	0
50	LES analysis of the actuation impact on the two-phase jet flame structure and stabilisation region. AIP Conference Proceedings, 2020, , .	0.4	0
51	Dynamics of transitional jets emanating from a non-circular nozzle. Experimental Thermal and Fluid Science, 2022, , 110720.	2.7	0