Romeo Florin Susan-Resiga

List of Publications by Year
in descending order

62 papers	778 citations	687363 13 h-index	526287 27 g-index
62 all docs	62 docs citations	62 times ranked	337 citing authors

#	Article	IF	Citations
1	Analysis of the Swirling Flow Downstream a Francis Turbine Runner. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 177-189.	1.5	157
2	Unsteady Pressure Analysis of a Swirling Flow With Vortex Rope and Axial Water Injection in a Discharge Cone. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, .	1.5	105
3	Analysis and Prevention of Vortex Breakdown in the Simplified Discharge Cone of a Francis Turbine. Journal of Fluids Engineering, Transactions of the ASME, 2010, 132, .	1.5	55
4	Mathematical modelling of swirling flow in hydraulic turbines for the full operating range. Applied Mathematical Modelling, 2011, 35, 4759-4773.	4.2	51
5	Axisymmetric Swirling Flow Simulation of the Draft Tube Vortex in Francis Turbines at Partial Discharge. International Journal of Fluid Machinery and Systems, 2009, 2, 295-302.	0.2	36
6	Experimental and Numerical Investigation of the Precessing Helical Vortex in a Conical Diffuser, With Rotorâ€“Stator Interaction. Journal of Fluids Engineering, Transactions of the ASME, 2016, 138, .	1.5	33
7	Flow-Feedback Method for Mitigating the Vortex Rope in Decelerated Swirling Flows. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	1.5	32
8	Proper Orthogonal Decomposition of Self-Induced Instabilities in Decelerated Swirling Flows and Their Mitigation Through Axial Water Injection. Journal of Fluids Engineering, Transactions of the ASME, 2017, 139, .	1.5	27
9	Computation of stress distribution in a Francis turbine runner induced by fluid flow. Computational Materials Science, 2012, 64, 253-259.	3.0	20
10	Unsteady pressure measurements of decelerated swirling flow in a discharge cone at lower runner speeds. IOP Conference Series: Earth and Environmental Science, 2014, 22, 032008.	0.3	20
11	A Novel Passive Method to Control the Swirling Flow with Vortex Rope from the Conical Diffuser of Hydraulic Turbines with Fixed Blades. Applied Sciences (Switzerland), 2019, 9, 4910.	2.5	19
12	Modelling and optimization of the velocity profiles at the draft tube inlet of a Francis turbine within an operating range. Journal of Hydraulic Research/De Recherches Hydrauliques, 2016, 54, 74-89.	1.7	18
13	A Domain Decomposition Method for the Exterior Helmholtz Problem. Journal of Computational Physics, 1998, 147, 388-401.	3.8	17
14	Determination of the Mechanical Requirements for a Progressive Correction System of Pectus Excavatum in Children. Journal of Laparoendoscopic and Advanced Surgical Techniques - Part A, 2005, 15, 478-481.	1.0	12
15	Numerical Model for Cavitational Flow in Hydraulic Poppet Valves. Modelling and Simulation in Engineering, 2012, 2012, 1-10.	0.7	11
16	Velocity and pressure fluctuations induced by the precessing helical vortex in a conical diffuser. IOP Conference Series: Earth and Environmental Science, 2014, 22, 032009.	0.3	11
17	Weighted proper orthogonal decomposition of the swirling flow exiting the hydraulic turbine runner. Applied Mathematical Modelling, 2016, 40, 4057-4078.	4.2	10
18	CFD Simulation of Solid Suspension for a Liquidâ€“Solid Industrial Stirred Reactor. Applied Sciences (Switzerland), 2021, 11, 5705.	2.5	10

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19	Fluid dynamics in helical geometries with applications for by-pass grafts. Applied Mathematics and Computation, 2016, 272, 604-613.	2.2	9
20	A New Approach in Numerical Assessment of the Cavitation Behaviour of Centrifugal Pumps. International Journal of Fluid Machinery and Systems, 2011, 4, 104-113.	0.2	8
21	Influence of the velocity field at the inlet of a Francis turbine draft tube on performance over an operating range. IOP Conference Series: Earth and Environmental Science, 2012, 15, 032008.	0.3	8
22	A variational model for swirling flow states with stagnant region. European Journal of Mechanics, B/Fluids, 2016, 55, 104-115.	2.5	7
23	Competitive flow and anastomosis angle influence on bypass hemodynamics in unsteady flow conditions. AIP Conference Proceedings, 2017, , .	0.4	7
24	Decelerated Swirling Flow Control in the Discharge Cone of Francis Turbines. , 2009, , 89-96.		7
25	Surrogate runner model for draft tube losses computation within a wide range of operating points. IOP Conference Series: Earth and Environmental Science, 2014, 22, 012022.	0.3	6
26	Scenarios for refurbishment of a hydropower plant equipped with Francis turbines. Renewable Energy and Environmental Sustainability, 2016, 1, 30.	1.4	6
27	The Complex Dynamics of the Precessing Vortex Rope in a Straight Diffuser. IOP Conference Series: Earth and Environmental Science, 2016, 49, 082013.	0.3	6
28	CFD Assessment of the Hydrodynamic Performance of Two Impellers for a Baffled Stirred Reactor. Applied Sciences (Switzerland), 2021, 11, 4949.	2.5	6
29	Effects of different types of input waveforms in patient-specific right coronary atherosclerosis hemodynamics analysis. International Journal of Design and Nature and Ecodynamics, 2010, 5, 142-159.	0.5	6
30	Experimental investigations of the swirling flow in the conical diffuser using flow-feedback control technique with additional energy source. IOP Conference Series: Earth and Environmental Science, 2012, 15, 062043.	0.3	5
31	A model for precessing helical vortex in the turbine discharge cone. IOP Conference Series: Earth and Environmental Science, 2014, 22, 022024.	0.3	5
32	Numerical assessment of a novel concept for mitigating the unsteady pressure pulsations associated to decelerating swirling flow with precessing helical vortex. AIP Conference Proceedings, 2015, , .	0.4	5
33	Flow-Feedback for Pressure Fluctuation Mitigation and Pressure Recovery Improvement in a Conical Diffuser with Swirl. International Journal of Fluid Machinery and Systems, 2011, 4, 47-56.	0.2	5
34	A New Domain Decomposition Approach for the Gust Response Problem. , 2003, , .		4
35	Mathematical, numerical and experimental analysis of the swirling flow at a Kaplan runner outlet. IOP Conference Series: Earth and Environmental Science, 2012, 15, 032001.	0.3	4
36	Hydrodynamic Investigations in a Swirl Generator Using a Magneto-Rheological Brake. Advanced Structured Materials, 2017, , 209-218.	0.5	4

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37	Experimental Investigation of the Unsteady Pressure Field in Decelerated Swirling Flow with 74Â° Sharp Heel Elbow. Journal of Physics: Conference Series, 2017, 813, 012046.	0.4	4
38	A Mathematical Model for the Swirling Flow Ingested by the Draft Tube of Francis Turbines. Wasserwirtschaft, 2015, 105, 23-27.	0.3	3
39	3D Numerical Simulation versus Experimental Assessment of Pressure Pulsations Using a Passive Method for Swirling Flow Control in Conical Diffusers of Hydraulic Turbines. IOP Conference Series: Earth and Environmental Science, 2016, 49, 082018.	0.3	3
40	Parallel computing using Schwarz Domain Decomposition method for aeroacoustic problems. , 1998, , .		2
41	Methodology to assess integrity with application to collector copper lamellas. Theoretical and Applied Fracture Mechanics, 2010, 53, 136-144.	4.7	2
42	Proper orthogonal decomposition method in swirling flows applications. , 2013, , .		2
43	Numerical simulation of the swirl generator discharge cone at lower runner speeds. , 2013, , .		2
44	LATTICE BOLTZMANN APPROACH TO VISCOUS FLOWS BETWEEN PARALLEL PLATES. International Journal of Modern Physics C, 1995, 06, 345-358.	1.7	1
45	Domain-Decomposition Method for Time-Harmonic Aeroacoustic Problems. AIAA Journal, 2001, 39, 802-809.	2.6	1
46	Finite Element Implementation of Nonreflecting Far-field Conditions for Unsteady Aerodynamics and Aeroacoustics. , 2002, , .		1
47	3D numerical analysis of pulsating water jet in the draft tube cone of hydraulic machinery. AIP Conference Proceedings, 2019, , .	0.4	1
48	Vortex Breakdown in Decelerated Swirling Flows. , 2019, , .		1
49	Improving the Homogenization of the Liquid-Solid Mixture Using a Tandem of Impellers in a Baffled Industrial Reactor. Applied Sciences (Switzerland), 2021, 11, 5492.	2.5	1
50	Investigations on Fracture of Collector Copper Lamellas. , 2009, , 261-273.		1
51	Particle motion in coronary serial stenoses. , 2013, , .		1
52	A domain decomposition algorithm on unstructured mesh for aerodynamic-aeroacoustic applications. , 2000, , .		0
53	The influence of number of turns to helicity variations at the outlet sections in helical geometries with applications for by-pass graft. AIP Conference Proceedings, 2015, , .	0.4	0
54	Numerical analysis of the temperature field in a magneto-rheological brake. AIP Conference Proceedings, 2015, , .	0.4	0

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55	A helical pipe investigation from a cardiovascular perspective. AIP Conference Proceedings, 2015, , .	0.4	0
56	Swirling Flow Computation at the Trailing Edge of Radial-Axial Hydraulic Turbines. IOP Conference Series: Earth and Environmental Science, 2016, 49, 082012.	0.3	0
57	Efficient proper orthogonal decomposition for parameter dependent problems with applications to hydraulic turbines. AIP Conference Proceedings, 2016, , .	0.4	0
58	The influence of stenosis degrees and graft suture position on local hemodynamics of coronary bypass. AIP Conference Proceedings, 2016, , .	0.4	0
59	Numerical analysis of temperature and torque in a Magneto-rheological clutch. AIP Conference Proceedings, 2017, , .	0.4	0
60	Numerical Analysis of Pulsating Water Jet Method for Mitigating the Vortex Rope. , 2019, , .		0
61	Design and Optimization of an Axial Expansion Turbine for Energy Recovery. , 2019, , .		0
62	Computational hemodynamics analysis in realistic 3D geometries of the human coronary atherosclerosis. WIT Transactions on Biomedicine and Health, 2009, , .	0.0	0