Ole Gunnar Dahlhaug

List of Publications by Year
in descending order

50 papers	1,247 citations	331259 21 h-index	377514 34 g-index
52 all docs	52 docs citations	52 times ranked	545 citing authors

#	Article	IF	Citations
1	Numerical and experimental investigation of erosive wear in Francis runner blade optimized for sediment laden hydropower projects in Nepal. Sustainable Energy Technologies and Assessments, 2022, 51, 101954.	1.7	1
2	Development of simplified model for prediction of sediment induced erosion in Francis turbineâ€™s sidewall gaps. IOP Conference Series: Earth and Environmental Science, 2022, 1037, 012016.	0.2	0
3	Recent developments in the optimization of Francis turbine components for minimizing sediment erosion. IOP Conference Series: Earth and Environmental Science, 2022, 1037, 012009.	0.2	0
4	Sediment erosion in the labyrinths of Francis turbine: A numerical study. IOP Conference Series: Earth and Environmental Science, 2022, 1037, 012032.	0.2	1
5	Constraints of Parametrically Defined Guide Vanes for a High-Head Francis Turbine. Energies, 2021, 14, 2667.	1.6	3
6	Leakage Vortex Progression through a Guide Vaneâ€™s Clearance Gap and the Resulting Pressure Fluctuation in a Francis Turbine. Energies, 2021, 14, 4244.	1.6	4
7	Investigation of a Francis turbine during speed variation: Inception of cavitation. Renewable Energy, 2020, 166, 147-162.	4.3	23
8	Review on numerical techniques applied in impulse hydro turbines. Renewable Energy, 2020, 159, 843-859.	4.3	25
9	Numerical Study of a Francis Turbine over Wide Operating Range: Some Practical Aspects of Verification. Sustainability, 2020, 12, 4301.	1.6	7
10	Experimental Study of Flow Structure in Convergingâ€“Diverging Axisymmetric Geometry. Journal of Fluids Engineering, Transactions of the ASME, 2020, 142, .	0.8	0
11	Signature analysis of characteristic frequencies in a Francis turbine. IOP Conference Series: Earth and Environmental Science, 2019, 240, 072008.	0.2	2
12	Development of a test rig for investigating the flow field around guide vanes of Francis turbines. Flow Measurement and Instrumentation, 2019, 70, 101648.	1.0	9
13	Numerical prediction of hill charts of Francis turbines. Journal of Physics: Conference Series, 2019, 1266, 012011.	0.3	3
14	Francis-99 Workshop 3: Fluid structure interaction. Journal of Physics: Conference Series, 2019, 1296, 011001.	0.3	2
15	The numerical and experimental investigation of erosion induced leakage flow through guide vanes of Francis turbine. IOP Conference Series: Earth and Environmental Science, 2019, 240, 072002.	0.2	1
16	Study of flow structure in erosion prone complex geometries. IOP Conference Series: Earth and Environmental Science, 2019, 240, 092005.	0.2	1
17	Role of Turbine Testing Lab for overcoming the challenges related to hydropower development in Nepal. IOP Conference Series: Earth and Environmental Science, 2019, 240, 042012.	0.2	1
18	Variable-speed operation of Francis turbines: A review of the perspectives and challenges. Renewable and Sustainable Energy Reviews, 2019, 103, 109-121.	8.2	60

#	Article	IF	Citations
19	A Comprehensive Review of Verification and Validation Techniques Applied to Hydraulic Turbines. International Journal of Fluid Machinery and Systems, 2019, 12, 345-367.	0.5	14
20	Investigation of the unsteady pressure pulsations in the prototype Francis turbines â€“ Part 1: Steady state operating conditions. Mechanical Systems and Signal Processing, 2018, 108, 188-202.	4.4	34
21	Experimental Investigation of a Francis Turbine during Exigent Ramping and Transition into Total Load Rejection. Journal of Hydraulic Engineering, 2018, 144, .	0.7	18
22	Experimental study of a Francis turbine under variable-speed and discharge conditions. Renewable Energy, 2018, 119, 447-458.	4.3	38
23	Flow measurements around guide vanes of Francis turbine: A PIV approach. Renewable Energy, 2018, 126, 177-188.	4.3	22
24	Numerical investigation of the effect of leakage flow through erosion-induced clearance gaps of guide vanes on the performance of Francis turbines. Engineering Applications of Computational Fluid Mechanics, 2018, 12, 662-678.	1.5	22
25	Interaction between trailing edge wake and vortex rings in a Francis turbine at runaway condition: Compressible large eddy simulation. Physics of Fluids, 2018, 30, .	1.6	37
26	Literature review relevant to particle erosion in complex geometries. Journal of Physics: Conference Series, 2018, 1042, 012002.	0.3	1
27	Sediment erosion induced leakage flow from guide vane clearance gap in a low specific speed Francis turbine. Renewable Energy, 2017, 107, 253-261.	4.3	41
28	Particle Image Velocimetry Investigation of the Leakage Flow Through Clearance Gaps in Cambered Hydrofoils. Journal of Fluids Engineering, Transactions of the ASME, 2017, 139, .	0.8	11
29	Investigations of unsteady pressure loading in a Francis turbine during variable-speed operation. Renewable Energy, 2017, 113, 397-410.	4.3	39
30	Numerical and experimental study of the leakage flow in guide vanes with different hydrofoils. Journal of Computational Design and Engineering, 2017, 4, 218-230.	1.5	27
31	Effects of sediment erosion in guide vanes of Francis turbine. Wear, 2017, 390-391, 104-112.	1.5	14
32	Investigation of the unsteady pressure pulsations in the prototype Francis turbines during load variation and startup. Journal of Renewable and Sustainable Energy, 2017, 9, .	0.8	31
33	On the relation between friction losses and pressure pulsations caused by Rotor Stator interaction on the Francis-99 turbine. Journal of Physics: Conference Series, 2017, 782, 012010.	0.3	2
34	Experimental and Numerical Studies of a High-Head Francis Turbine: A Review of the Francis-99 Test Case. Energies, 2016, 9, 74.	1.6	57
35	Numerical investigation of the flow phenomena around a low specific speed Francis turbine's guide vane cascade. IOP Conference Series: Earth and Environmental Science, 2016, 49, 062016.	0.2	7
36	Evaluation of runner cone extension to dampen pressure pulsations in a Francis model turbine. IOP Conference Series: Earth and Environmental Science, 2016, 49, 082019.	0.2	11

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37	Design and development of guide vane cascade for a low speed number Francis turbine. Journal of Hydrodynamics, 2016, 28, 676-689.	1.3	27
38	Study of the simultaneous effects of secondary flow and sediment erosion in Francis turbines. Renewable Energy, 2016, 97, 881-891.	4.3	48
39	Numerical Techniques Applied to Hydraulic Turbines: A Perspective Review. Applied Mechanics Reviews, 2016, 68, .	4.5	65
40	Sediment erosion in hydro turbines and its effect on the flow around guide vanes of Francis turbine. Renewable and Sustainable Energy Reviews, 2015, 49, 1100-1113.	8.2	75
41	Experimental investigations of a model Francis turbine during shutdown at synchronous speed. Renewable Energy, 2015, 83, 828-836.	4.3	67
42	CFD Analysis of Wave-Induced Loads on Tidal Turbine Blades. IEEE Journal of Oceanic Engineering, 2015, 40, 506-521.	2.1	22
43	University cooperation as a development tool in poor countries. , 2014, , .		0
44	Pressure measurements on a high-head Francis turbine during load acceptance and rejection. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 283-297.	0.7	70
45	Prediction of Wave Loads on Tidal Turbine Blades. Energy Procedia, 2012, 20, 116-133.	1.8	41
46	Current research in hydraulic turbines for handling sediments. Energy, 2012, 47, 62-69.	4.5	64
47	Empirical modelling of sediment erosion in Francis turbines. Energy, 2012, 41, 386-391.	4.5	86
48	Sand erosion of Pelton turbine nozzles and buckets: A case study of Chilime Hydropower Plant. Wear, 2008, 264, 177-184.	1.5	102
49	A Review on Sediment Erosion Challenges in Hydraulic Turbines. , 0, , .		7
50	Current research in hydraulic turbines against sediment erosion: International partnership and collaborations. IOP Conference Series: Earth and Environmental Science, 0, 627, 012019.	0.2	1