

# Sofiane Khelladi

## List of Publications by Year in descending order

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117  
papers

1,397  
citations

361045

20  
h-index

414034

32  
g-index

121  
all docs

121  
docs citations

121  
times ranked

1094  
citing authors

#	ARTICLE	IF	CITATIONS
1	Predicting tonal noise from a high rotational speed centrifugal fan. Journal of Sound and Vibration, 2008, 313, 113-133.	2.1	81
2	On the miscibility of PVDF/PMMA polymer blends: Thermodynamics, experimental and numerical investigations. Polymer Testing, 2019, 73, 222-231.	2.3	60
3	Smoothed Particle Hydrodynamics: A consistent model for interfacial multiphase fluid flow simulations. Journal of Computational Physics, 2018, 358, 53-87.	1.9	56
4	Influence of process parameters on thermal and mechanical properties of poly(lactic acid) fabricated by fused filament fabrication. Polymer Engineering and Science, 2020, 60, 1822-1831.	1.5	55
5	Toward the understanding of temperature effect on bonding strength, dimensions and geometry of 3D-printed parts. Journal of Materials Science, 2020, 55, 14677-14689.	1.7	54
6	Experimental study of hydraulic transport of large particles in horizontal pipes. Experimental Thermal and Fluid Science, 2013, 45, 187-197.	1.5	53
7	Performance of hydrodynamic journal bearing under the combined influence of textured surface and journal misalignment: A numerical survey. Comptes Rendus - Mecanique, 2019, 347, 141-165.	2.1	49
8	Experimental study of aerated cavitation in a horizontal venturi nozzle. Experimental Thermal and Fluid Science, 2016, 70, 85-95.	1.5	48
9	New high-resolution-preserving sliding mesh techniques for higher-order finite volume schemes. Computers and Fluids, 2015, 118, 114-130.	1.3	37
10	Texture shape effects on hydrodynamic journal bearing performances using mass-conserving numerical approach. Tribology - Materials, Surfaces and Interfaces, 2020, 14, 33-50.	0.6	35
11	Experimental study of PLA thermal behavior during fused filament fabrication. Journal of Applied Polymer Science, 2021, 138, 49747.	1.3	35
12	Multi-scale damage analysis and fatigue behavior of PLA manufactured by fused deposition modeling (FDM). Rapid Prototyping Journal, 2021, 27, 371-378.	1.6	35
13	Flow Study in the Impeller-Diffuser Interface of a Vaned Centrifugal Fan. Journal of Fluids Engineering, Transactions of the ASME, 2005, 127, 495.	0.8	34
14	Numerical Prediction for Temperature Profile of Parts Manufactured using Fused Filament Fabrication. Journal of Manufacturing Processes, 2022, 76, 548-558.	2.8	32
15	A new higher-order finite volume method based on Moving Least Squares for the resolution of the incompressible Navier-Stokes equations on unstructured grids. Computer Methods in Applied Mechanics and Engineering, 2014, 278, 883-901.	3.4	28
16	In-Process Monitoring of Temperature Evolution during Fused Filament Fabrication: A Journey from Numerical to Experimental Approaches. Thermo, 2021, 1, 332-360.	0.6	28
17	On the simulation of wave propagation with a higher-order finite volume scheme based on Reproducing Kernel Methods. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 1471-1490.	3.4	27
18	Toward a higher order unsteady finite volume solver based on reproducing kernel methods. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 2348-2362.	3.4	27

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19	A Weighted Average Flux (WAF) scheme applied to shallow water equations for real-life applications. <i>Advances in Water Resources</i> , 2013, 62, 155-172.	1.7	22
20	Modelling of sintering during rotational moulding of the thermoplastic polymers. <i>International Journal of Material Forming</i> , 2016, 9, 519-530.	0.9	22
21	Accuracy assessment of a high-order moving least squares finite volume method for compressible flows. <i>Computers and Fluids</i> , 2013, 71, 41-53.	1.3	20
22	Numerical and experimental study of cavitating flow through an axial inducer considering tip clearance. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2013, 227, 858-868.	0.8	20
23	Experimental study on the effects of big particles physical characteristics on the hydraulic transport inside a horizontal pipe. <i>Chinese Journal of Chemical Engineering</i> , 2016, 24, 317-322.	1.7	20
24	Comparative study of mixing behaviors using non-Newtonian fluid flows in passive micromixers. <i>International Journal of Mechanical Sciences</i> , 2021, 201, 106472.	3.6	20
25	Resolution of computational aeroacoustics problems on unstructured grids with a higher-order finite volume scheme. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 2089-2097.	1.1	19
26	Influence of Humidity on the Apparent Thermal Conductivity of Concrete Pozzolan. <i>Physics Procedia</i> , 2014, 55, 150-156.	1.2	18
27	A Comparative Study of Mixed Resolvedâ€“Unresolved CFD-DEM and Unresolved CFD-DEM Methods for the Solution of Particle-Laden Liquid Flows. <i>Archives of Computational Methods in Engineering</i> , 2019, 26, 1239-1254.	6.0	18
28	A comparative inâ€“process monitoring of temperature profile in fused filament fabrication. <i>Polymer Engineering and Science</i> , 2021, 61, 68-76.	1.5	18
29	Numerical analysis of unsteady cavitating flow in an axial inducer. <i>Applied Thermal Engineering</i> , 2015, 75, 1302-1310.	3.0	17
30	A high-order density-based finite volume method for the computation of all-speed flows. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2016, 298, 229-251.	3.4	17
31	A Higher-Order Chimera Method for Finite Volume Schemes. <i>Archives of Computational Methods in Engineering</i> , 2018, 25, 691-706.	6.0	17
32	Characterization and modeling of sintering of polymer particles. <i>Journal of Applied Polymer Science</i> , 2011, 119, 2784-2792.	1.3	16
33	Multiphase smoothed particle hydrodynamics approach for modeling soilâ€“water interactions. <i>Advances in Water Resources</i> , 2018, 121, 189-205.	1.7	16
34	Influence of blade compactness and segmentation strategy on tonal noise prediction of an automotive engine cooling fan. <i>Applied Acoustics</i> , 2013, 74, 782-787.	1.7	15
35	Numerical analysis of unsteady cavitating flow in an axial inducer. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2010, 224, 223-238.	0.8	13
36	High-Resolution Finite Volume Methods on Unstructured Grids for Turbulence and Aeroacoustics. <i>Archives of Computational Methods in Engineering</i> , 2011, 18, 315-340.	6.0	13

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37	Isom's thickness noise for axial and centrifugal subsonic fans. Journal of Sound and Vibration, 2008, 313, 1-6.	2.1	12
38	Optimization of a Solar Photovoltaic Applied to Greenhouses. Physics Procedia, 2014, 55, 383-389.	1.2	12
39	A very accurate Arbitrary Lagrangian-Eulerian meshless method for Computational Aeroacoustics. Computer Methods in Applied Mechanics and Engineering, 2018, 342, 116-141.	3.4	12
40	Parametric study of the Crossing elongation effect on the mixing performances using short Two-Layer Crossing Channels Micromixer (TLCCM) geometry. Chemical Engineering Research and Design, 2020, 158, 33-43.	2.7	12
41	The Apparent Thermal Conductivity of Pozzolana Concrete. Physics Procedia, 2011, 21, 59-66.	1.2	11
42	Improved $\hat{\Gamma}$ -SPH Scheme with Automatic and Adaptive Numerical Dissipation. Water (Switzerland), 2020, 12, 2858.	1.2	11
43	3D model for powder compact densification in rotational molding. Polymer Engineering and Science, 2012, 52, 2033-2040.	1.5	10
44	An efficient reduced-order method with PGD for solving journal bearing hydrodynamic lubrication problems. Comptes Rendus - Mecanique, 2016, 344, 689-714.	2.1	10
45	Computational investigation on the performance of hydrodynamic micro-textured journal bearing lubricated with micropolar fluid using mass-conserving numerical approach. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020, 234, 1310-1331.	1.0	10
46	High hydrodynamic and thermal mixing performances of efficient chaotic micromixers: A comparative study. Chemical Engineering and Processing: Process Intensification, 2021, 164, 108394.	1.8	10
47	Moving Kriging reconstruction for high-order finite volume computation of compressible flows. Computer Methods in Applied Mechanics and Engineering, 2013, 253, 463-478.	3.4	9
48	Experimental investigation of an actively controlled automotive cooling fan using steady air injection in the leakage gap. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2017, 231, 59-67.	0.8	9
49	Pressure Fluctuations Reduction in Centrifugal Pumps: Influence of Impeller Geometry and Radial Gap. , 2009, , .		8
50	High accuracy volume flow rate measurement using vortex counting. Flow Measurement and Instrumentation, 2013, 33, 138-144.	1.0	8
51	Simulation of polymer flow using smoothed particle hydrodynamics method. Polymer Engineering and Science, 2013, 53, 2509-2518.	1.5	8
52	Epoxy/amine reactive systems for composites materials and their thermomechanical properties. , 2015, , 269-296.		8
53	Aerodynamic preliminary design optimization of a centrifugal compressor turbocharger based on one-dimensional mean-line model. Engineering Computations, 2021, 38, 3438-3469.	0.7	8
54	POD study of aerated cavitation in a venturi nozzle. Journal of Physics: Conference Series, 2015, 656, 012171.	0.3	7

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55	An a posteriori-implicit turbulent model with automatic dissipation adjustment for Large Eddy Simulation of compressible flows. <i>Computers and Fluids</i> , 2020, 197, 104371.	1.3	7
56	Numerical assessment of fan blades screen effect on fan/OGV interaction tonal noise. <i>Journal of Sound and Vibration</i> , 2020, 481, 115428.	2.1	7
57	Numerical Study on Pressure Fluctuations Reduction in Centrifugal Pumps: Influence of Radial Gap and Splitter Blades. <i>ISRN Mechanical Engineering</i> , 2011, 2011, 1-14.	0.9	7
58	Study of a high rotational speed shrouded centrifugal fan: Aerodynamics and effects of a shroud-associated cavity on the performance. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2010, 224, 691-700.	0.8	6
59	A naturally anti-diffusive compressible two phases Kapila model with boundedness preservation coupled to a high order finite volume solver. <i>Computers and Fluids</i> , 2015, 114, 265-273.	1.3	6
60	Efficiency of bio- and socio-inspired optimization algorithms for axial turbomachinery design. <i>Applied Soft Computing Journal</i> , 2018, 64, 282-306.	4.1	6
61	Coupling of inverse method and cuckoo search algorithm for multiobjective optimization design of an axial flow pump. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2019, 233, 988-1006.	0.8	6
62	Towards an Accurate Aerodynamic Performance Analysis Methodology of Cross-Flow Fans. <i>Energies</i> , 2022, 15, 5134.	1.6	6
63	Experimental study of yawed inflow around wind turbine rotor. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2012, 226, 664-673.	0.8	5
64	Mixing in turbulent compressible heated coaxial jets: A numerical study. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 16816-16837.	3.8	5
65	Modelling surface tension with smoothed particle hydrodynamics in reactive rotational moulding. <i>Computers and Fluids</i> , 2015, 118, 191-203.	1.3	4
66	Numerical Simulations of Shock-Wave Propagation in Turbofan Intakes. , 2016, , .		4
67	Investigation of the Rotor Wake of Horizontal Axis Wind Turbine under Yawed Condition. <i>Journal of Applied Fluid Mechanics</i> , 2016, 9, 2695-2705.	0.4	4
68	Experimental Study of the Hydraulic Performances of Two Three-Bladed Inducers in Water, Water With Dissolved CO <sub>2</sub> , and Jet Fuel. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2020, 142, .	0.8	4
69	Implicit large-Eddy simulation with a moving least squares-based finite volume method. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010, 10, 012235.	0.3	3
70	Aeroacoustic noise prediction for SRM. , 2014, , .		3
71	Numerical Modeling of Aerated Cavitation Using a Penalization Approach for Air Bubble Modeling Coupled to Homogeneous Equilibrium Model. , 2014, , .		3
72	EFFECT OF GAS CONTENT ON THE CAVITATING AND NON-CAVITATING PERFORMANCE OF AN AXIAL THREE-BLADED INDUCER. <i>Multiphase Science and Technology</i> , 2020, 32, 81-92.	0.2	3

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73	Numerical Simulation of Surface Roughness Effects on Dynamic Stall of Wind Turbine Blade. Journal of Power and Energy Systems, 2013, 7, 32-48.	0.5	2
74	Investigation of Two Mechanisms Governing Cloud Cavitation Shedding: Experimental Study and Numerical Highlight. , 2016, , .		2
75	Design And Behavioral Study Of EMI Filter Intended For Aeronautical Application. , 2019, , .		2
76	A high-order finite volume method with improved isotherms reconstruction for the computation of multiphase flows using the Navier-Stokes-Korteweg equations. Computers and Mathematics With Applications, 2020, 79, 673-696.	1.4	2
77	Development of Attached Cavitation at Very Low Reynolds Numbers from Partial to Super-Cavitation. Applied Sciences (Switzerland), 2020, 10, 7350.	1.3	2
78	Experimental study of a centrifugal compressor with two successive and counter-rotating impellers. Journal of Physics: Conference Series, 2021, 1909, 012023.	0.3	2
79	Towards Numerical Simulation of Snow Showers in Jet Engine Fuel Systems. Springer Water, 2016, , 613-624.	0.2	2
80	Study of the Hydraulic Performances of Two Inducers in Water-CO2 Mixture Toward Performance Improvement With Suppression of Prerotation. Journal of Fluids Engineering, Transactions of the ASME, 2022, 144, .	0.8	2
81	Dynamics of fingering convection: a numerical study. Environmental Fluid Mechanics, 2022, 22, 203-243.	0.7	2
82	Hydrodynamic and Kinematic Study to Analyze the Mixing Efficiency of Short Passive Micromixers. Industrial & Engineering Chemistry Research, 2022, 61, 5994-6009.	1.8	2
83	Unsteady Flow in Multistage Centrifugal Fans. , 2004, , 1255.		1
84	A Numerical Study on the Aeroacoustic of a Vaned Centrifugal Fan. , 2005, , 227.		1
85	A Consistency Test of Thickness and Loading Noise Codes Using Ffowcs Williams and Hawkings Equation. Advances in Acoustics and Vibration, 2010, 2010, 1-6.	0.5	1
86	Study of the Aerodynamics/Aeroacoustics of an Axial-Flow Fan: Experimental Validation of a LES/LPCE/Brinkman Penalization Method. , 2010, , .		1
87	Numerical and Experimental Study of Mass Transfer Through Cavitation in Turbomachinery. , 2011, , .		1
88	A Moving Least Squares-Based High-Order-Preserving Sliding Mesh Technique with No Intersections. Springer Tracts in Mechanical Engineering, 2015, , 27-36.	0.1	1
89	High-order aeroacoustics propagation solver with sliding-mesh capabilities for subsonic turbomachinery. , 2016, , .		1
90	Implementation of surface tension force in fluid flow during reactive rotational molding. International Journal of Material Forming, 2016, 9, 131-148.	0.9	1

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91	Effect of Computational Grid on Prediction of a Vertical axis Wind turbine Rotor Using Delayed Detached-Eddy Simulations. , 2018, , .		1
92	Experimental Validation of the Aerodynamic Performance of an Innovative Counter-Rotating Centrifugal Compressor. Energies, 2021, 14, 2582.	1.6	1
93	Experimental Study of a Novel Centrifugal Compressor with Two Successive and Independent Rotors. Journal of Engineering for Gas Turbines and Power, 2021, , .	0.5	1
94	Cavitation modeling using compressible Navier-Stokes and Korteweg equations. , 2015, , .		1
95	Motion of a Solid Particle in a Water Flow Inside a Pipe. Green Energy and Technology, 2018, , 217-231.	0.4	1
96	CFD Analysis to explain the Operating range extension observed during Operation in Co-rotating Mode of a Twin-impeller Centrifugal Compressor. E3S Web of Conferences, 2021, 321, 02011.	0.2	1
97	Numerical Analysis of a Novel Twin-Impeller Centrifugal Compressor. Computation, 2021, 9, 143.	1.0	1
98	Experimental and Numerical Analysis of the Flow Inside a Configuration Including an Axial Pump and a Tubular Exchanger. , 2010, , .		0
99	Higher-Order Preserving Methods for Unsteady Finite Volume Solvers Based on Reproducing Kernels: Application to Aeroacoustic Problems. , 2010, , .		0
100	A New High-Precision Solver to Predict Pressure Fluctuations in Centrifugal Pumps. , 2011, , .		0
101	Analysis and Study of the Aerodynamic Turbulent Flow Around a Blade of Wind Turbine. Physics Procedia, 2014, 55, 307-316.	1.2	0
102	Surge Limit Prediction of Centrifugal Compressor Using Semi Classical Signal Analysis. , 2014, , .		0
103	3D unsteady flow analysis around a rotor blade of horizontal axis wind turbine-Rutland 503. International Journal of Energy and Statistics, 2016, 04, 1650013.	0.5	0
104	Numerical Modeling of Aerated Cavitation Using Compressible Homogeneous Equilibrium Model. Springer Water, 2016, , 531-547.	0.2	0
105	Mastering of the Filling Stage in Low Pressure Sand Casting Process. Materials Science Forum, 2018, 941, 2306-2312.	0.3	0
106	Compte-rendu des Journées 'Machines hydrauliques, Cavitation' 2017. ENSAM, Campus de Paris 8 et 9 Novembre 2017. Houille Blanche, 2018, 104, 100-102.	0.3	0
107	A Higher-Order Chimera Method Based on Moving Least Squares. Springer Tracts in Mechanical Engineering, 2019, , 73-82.	0.1	0
108	Numerical Study of Development of Karman Vortex in Blade's Passage in Centrifugal Compressors and Pumps. , 2012, , .		0

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109	Estimation of a Turbulence Model in Cavitation Effect on the Reynolds Stress Equation with Rotor Vibrations. , 2012, , .		0
110	Aerodynamic and Aeroacoustic Study of a High Rotational Speed Centrifugal Fan. , 0, , .		0
111	On the use of moving least squares for pressure discretization in low mach number flows. , 2012, , 365-369.		0
112	Toward a near-field CAA-CFD coupling approach: Application to a centrifugal blower. , 2017, , .		0
113	Compte-rendu des Journées «Machines hydrauliques, Cavitation» 2019, Sion, HES-SO, 6 et 7 novembre 2019. Houille Blanche, 2020, 106, 95-97.	0.3	0
114	NUMERICAL INVESTIGATION OF THE BLADE PROFILE EFFECT ON THE AERODYNAMIC PERFORMANCE OF A VERTICAL-AXIS WIND TURBINE DARRIEUS H-ROTOR. Journal of Thermal Engineering, 0, , 388-402.	0.8	0
115	Behaviour of hydrodynamic journal bearing under the combined influence of textured surface and Non-Newtonian Rabinowitsch fluid model. E3S Web of Conferences, 2021, 321, 03006.	0.2	0
116	A reduced-order method with PGD for the analysis of misaligned journal bearing. E3S Web of Conferences, 2021, 321, 01012.	0.2	0
117	A POSTERIORI METHODS WITH AUTOMATIC DISSIPATION ADJUSTMENT FOR THE SIMULATION OF COMPRESSIBLE FLOWS. WIT Transactions on Engineering Sciences, 2020, , .	0.0	0