Ivette RodrÃ-guez

List of Publications by Year
in descending order

76	2,010	218677	243625
papers	citations	26 h-index	44 g-index

79	79	79	1678
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Heat transfer analysis and numerical simulation of a parabolic trough solar collector. Applied Energy, 2013, 111, 581-592.	10.1	218
2	Direct numerical simulation of the flow over a sphere at Re = 3700. Journal of Fluid Mechanics, 2011, 679, 263-287.	3.4	127
3	Low-frequency unsteadiness in the vortex formation region of a circular cylinder. Physics of Fluids, 2013, 25, .	4.0	106
4	Multi-layered solid-PCM thermocline thermal storage concept for CSP plants. Numerical analysis and perspectives. Applied Energy, 2015, 142, 337-351.	10.1	81
5	Numerical Study of Plane and Round Impinging Jets using RANS Models. Numerical Heat Transfer, Part B: Fundamentals, 2008, 54, 213-237.	0.9	78
6	On the flow past a circular cylinder from critical to super-critical Reynolds numbers: Wake topology and vortex shedding. International Journal of Heat and Fluid Flow, 2015, 55, 91-103.	2.4	78
7	Unsteady forces on a circular cylinder at critical Reynolds numbers. Physics of Fluids, 2014, 26, .	4.0	77
8	A review study on the modeling of high-temperature solar thermal collector systems. Renewable and Sustainable Energy Reviews, 2019, 112, 280-298.	16.4	77
9	Flow and turbulent structures around simplified car models. Computers and Fluids, 2014, 96, 122-135.	2.5	63
10	Numerical simulation of wind flow around a parabolic trough solar collector. Applied Energy, 2013, 107, 426-437.	10.1	60
11	A low-dissipation finite element scheme for scale resolving simulations of turbulent flows. Journal of Computational Physics, 2019, 390, 51-65.	3.8	60
12	Direct numerical simulation of a NACA0012 in full stall. International Journal of Heat and Fluid Flow, 2013, 43, 194-203.	2.4	59
13	Unsteady numerical simulation of the cooling process of vertical storage tanks under laminar natural convection. International Journal of Thermal Sciences, 2009, 48, 708-721.	4.9	54
14	Virtual prototyping of storage tanks by means of three-dimensional CFD and heat transfer numerical simulations. Solar Energy, 2004, 77, 179-191.	6.1	53
15	Multi-layered solid-PCM thermocline thermal storage for CSP. Numerical evaluation of its application in a 50MWe plant. Solar Energy, 2015, 119, 134-150.	6.1	49
16	Modular object-oriented methodology for the resolution of molten salt storage tanks for CSP plants. Applied Energy, 2013, 109, 402-414.	10.1	41
17	Flow dynamics in the turbulent wake of a sphere at sub-critical Reynolds numbers. Computers and Fluids, 2013, 80, 233-243.	2.5	41
18	Large-eddy simulations of the vortex-induced vibration of a low mass ratio two-degree-of-freedom circular cylinder at subcritical Reynolds numbers. Computers and Fluids, 2018, 173, 118-132.	2.5	40

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19	Thermo-hydraulic analysis and numerical simulation of a parabolic trough solar collector for direct steam generation. Applied Energy, 2018, 214, 152-165.	10.1	40
20	On the large-eddy simulations for the flow around aerodynamic profiles using unstructured grids. Computers and Fluids, 2013, 84, 176-189.	2.5	37
21	Limits of the Oberbeckâ€“Boussinesq approximation in a tall differentially heated cavity filled with water. International Journal of Heat and Mass Transfer, 2014, 68, 489-499.	4.8	36
22	Three dimensionality in the wake of the flow around a circular cylinder at Reynolds number 5000. Computers and Fluids, 2017, 147, 102-118.	2.5	33
23	Comparison of the performance of falling film and bubble absorbers for air-cooled absorption systems. International Journal of Thermal Sciences, 2009, 48, 1355-1366.	4.9	31
24	Influence of rotation on the flow over a cylinder at Re = 5000. International Journal of Heat and Fluid Flow, 2015, 55, 76-90.	2.4	31
25	Parallel algorithms for transport sweeps on unstructured meshes. Journal of Computational Physics, 2013, 232, 118-135.	3.8	29
26	A New Thermocline-PCM Thermal Storage Concept for CSP Plants. Numerical Analysis and Perspectives. Energy Procedia, 2014, 49, 790-799.	1.8	28
27	Wind speed effect on the flow field and heat transfer around a parabolic trough solar collector. Applied Energy, 2014, 130, 200-211.	10.1	25
28	Numerical resolution of the liquidâ€“vapour two-phase flow by means of the two-fluid model and a pressure based method. International Journal of Multiphase Flow, 2012, 43, 118-130.	3.4	24
29	Parametric Study of Two-tank TES Systems for CSP Plants. Energy Procedia, 2015, 69, 1049-1058.	1.8	23
30	Large eddy and direct numerical simulations of a turbulent water-filled differentially heated cavity of aspect ratio 5. International Journal of Heat and Mass Transfer, 2014, 77, 1084-1094.	4.8	21
31	Perspective on integration of concentrated solar power plants. International Journal of Low-Carbon Technologies, 2021, 16, 1098-1125.	2.6	20
32	Improved semi-analytical method for air curtains prediction. Energy and Buildings, 2013, 66, 258-266.	6.7	19
33	On the CFD&HT of the Flow around a Parabolic Trough Solar Collector under Real Working Conditions. Energy Procedia, 2014, 49, 1379-1390.	1.8	19
34	Fluid dynamics and heat transfer in the wake of a sphere. International Journal of Heat and Fluid Flow, 2019, 76, 141-153.	2.4	19
35	Numerical Evaluation of Multi-layered Solid-PCM Thermocline-like Tanks as Thermal Energy Storage Systems for CSP Applications. Energy Procedia, 2015, 69, 832-841.	1.8	18
36	Assessment of the symmetry-preserving regularization model on complex flows using unstructured grids. Computers and Fluids, 2012, 60, 108-116.	2.5	17

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37	Thermo-economic and environmental analysis of integrating renewable energy sources in a district heating and cooling network. Energy Efficiency, 2020, 13, 79-100.	2.8	17
38	LES-based Study of the Roughness Effects on the Wake of a Circular Cylinder from Subcritical to Transcritical Reynolds Numbers. Flow, Turbulence and Combustion, 2017, 99, 729-763.	2.6	16
39	High Performance Computing of the Flow Past a Circular Cylinder at Critical and Supercritical Reynolds Numbers. Procedia Engineering, 2013, 61, 166-172.	1.2	15
40	Effects of the Actuation on the Boundary Layer of an Airfoil at Reynolds Number Re = 60000. Flow, Turbulence and Combustion, 2020, 105, 607-626.	2.6	14
41	Numerical Study of the Transient Cooling Process of Water Storage Tanks under Heat Losses to the Environment. Numerical Heat Transfer; Part A: Applications, 2009, 55, 1051-1074.	2.1	12
42	Optimising the Termofluids CFD code for petascale simulations. International Journal of Computational Fluid Dynamics, 2016, 30, 425-430.	1.2	10
43	Numerical study of heat transfer from a synthetic impinging jet with a detailed model of the actuator membrane. International Journal of Thermal Sciences, 2019, 136, 287-298.	4.9	10
44	On the effects of the free-stream turbulence on the heat transfer from a sphere. International Journal of Heat and Mass Transfer, 2021, 164, 120579.	4.8	9
45	Unsteady natural convection cooling of a water storage tank with an internal gas flue. International Journal of Thermal Sciences, 2010, 49, 36-47.	4.9	8
46	Flow topology and heat transfer analysis of slotted and axisymmetric synthetic impinging jets. International Journal of Thermal Sciences, 2021, 164, 106847.	4.9	7
47	Numerical simulation of roughness effects on the flow past a circular cylinder. Journal of Physics: Conference Series, 2016, 745, 032043.	0.4	6
48	Vortex induced vibrations of a pivoted finite height cylinder at low Reynolds number. Physics of Fluids, 2021, 33, .	4.0	6
49	Active flow control for external aerodynamics: from micro air vehicles to a full aircraft in stall. Journal of Physics: Conference Series, 2020, 1522, 012017.	0.4	5
50	Low-frequency variations in the wake of a circular cylinder atRe= 3900. Journal of Physics: Conference Series, 2011, 318, 042038.	0.4	4
51	Techno-economic performance evaluation of solar tower plants with integrated multi-layered PCM thermocline thermal energy storage â€“ A comparative study to conventional two-tank storage systems. AIP Conference Proceedings, 2016, , .	0.4	4
52	On the formation of Taylor-GÃ¶rtler structures in the vortex induced vibration phenomenon. International Journal of Heat and Fluid Flow, 2020, 83, 108573.	2.4	4
53	Energy Simulation of Buildings with a Modular Object-Oriented Tool. , 2011, , .		4
54	Thermal Analysis of a Receiver for Linear Fresnel Reflectors. Energy Procedia, 2015, 69, 405-414.	1.8	3

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55	Analyzing the Performance of a Miniature 3D Wind Sensor for Mars. Sensors, 2020, 20, 5912.	3.8	3
56	Large-Eddy Simulations of Wind Turbine Dedicated Airfoils at High Reynolds Numbers. Research Topics in Wind Energy, 2014, , 147-152.	0.2	3
57	On DNS and LES of natural convection of wall-confined flows: Rayleigh-BÃ©nard convection. ERCOFTAC Series, 2011, , 389-394.	0.1	3
58	Direct Numerical Simulation of the flow over a sphere at Re = 3700. , 2009, , .		3
59	On the Characteristics of the Super-Critical Wake behind a Circular Cylinder. Fluids, 2021, 6, 396.	1.7	3
60	On the Large-Eddy Simulation modelling of wind turbine dedicated airfoils at high Reynolds numbers. , 2012, , .		2
61	On the validity of the Oberbeck-Boussinesq approximation in a tall differentially heated cavity with water. Progress in Computational Fluid Dynamics, 2012, 12, 251.	0.2	1
62	Parallel sweep-based preconditioner for the solution of the linear Boltzmann transport equation. Computers and Fluids, 2013, 88, 884-890.	2.5	1
63	On the Flow and Passive Noise Control of an Open Cavity at Re = 5000. Flow, Turbulence and Combustion, 2022, 108, 123-148.	2.6	1
64	Direct numerical simulation of the flow over a sphere at Re = 3700Ââ€“ÂCORRIGENDUM. Journal of Fluid Mechanics, 2011, 687, 606-606.	3.4	0
65	Corrigendum to â€œThree dimensionality in the wake of the flow around a circular cylinder at Reynolds number 5000â€•[Computers and Fluids 147 (2017) 102â€“118]. Computers and Fluids, 2017, 156, 545.	2.5	0
66	Coherent Structures in a Flow Past a Circular Cylinder at Critical and Super-Critical Reynolds Numbers. ERCOFTAC Series, 2018, , 257-262.	0.1	0
67	Landing Mechanics During Sidestepping and Crossover Maneuvers in Non-Injured Women and Women With ACL Reconstruction. Medicine and Science in Sports and Exercise, 2008, 40, S446.	0.4	0
68	Neuromuscular Control During Sidestepping and Cross- Over Maneuvers Among Noninjured Women and Women With ACL Reconstruction. Medicine and Science in Sports and Exercise, 2008, 40, S445.	0.4	0
69	Development of a Multi-Functional Ventilated FaÃ§ade with an Integrated Collector-Storage: Numerical Model and Experimental Facility. , 2011, , .		0
70	Numerical Simulation of a Parabolic Trough Solar Collector Considering the Concentrated Energy Flux Distribution. , 2011, , .		0
71	Low-frequency unsteadiness in the vortex formation region of a circular cylinder. , 2012, , .		0
72	Solid-liquid phase change with turbulent flow. , 2012, , .		0

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73	A dynamic wall model for large eddy simulation on unstructured meshes. Application to wind turbine dedicated airfoils. , 2015, , .		0
74	Non-Oberbeck-Boussinesq effects in a turbulent tall water-filled differentially heated cavity. , 2015, , .		0
75	Effect of the Actuation on the Boundary Layer of an Airfoil at Moderate Reynolds Number. ERCOFTAC Series, 2020, , 313-319.	0.1	0
76	Wakes and Instabilities of Static and Freely Vibrating Cylinders. ERCOFTAC Series, 2020, , 49-59.	0.1	0