Marco Evangelos Biancolini

List of Publications by Year
in descending order

84	1,213	430874	434195
papers	citations	18 h-index	31 g-index

89	89	89	738
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evaluation of equivalent stiffness properties of corrugated board. Composite Structures, 2005, 69, 322-328.	5.8	125
2	Progress in the design of the superconducting magnets for the EU DEMO. Fusion Engineering and Design, 2018, 136, 1597-1604.	1.9	67
3	Fatigue cracks nucleation on steel, acoustic emission and fractal analysis. International Journal of Fatigue, 2006, 28, 1820-1825.	5.7	61
4	Sails trim optimisation using CFD and RBF mesh morphing. Computers and Fluids, 2014, 93, 46-60.	2.5	56
5	Approximate solution for free vibrations of thin orthotropic rectangular plates. Journal of Sound and Vibration, 2005, 288, 321-344.	3.9	51
6	Computational Fluid Dynamic Study for aTAA Hemodynamics: An Integrated Image-Based and Radial Basis Functions Mesh Morphing Approach. Journal of Biomechanical Engineering, 2018, 140, .	1.3	50
7	Fast Radial Basis Functions for Engineering Applications. , 2017, , .		49
8	Aeroelastic Analysis of Aircraft Wind-Tunnel Model Coupling Structural and Fluid Dynamic Codes. Journal of Aircraft, 2012, 49, 407-414.	2.4	45
9	The DEMO magnet system â€“ Status and future challenges. Fusion Engineering and Design, 2022, 174, 112971.	1.9	37
10	Static Aeroelastic Analysis of an Aircraft Wind-Tunnel Model by Means of Modal RBF Mesh Updating. Journal of Aerospace Engineering, 2016, 29, .	1.4	36
11	Mesh Morphing and Smoothing by Means of Radial Basis Functions (RBF). Advances in Computer and Electrical Engineering Book Series, 2012, , 347-380.	0.3	35
12	Shape optimization using structural adjoint and RBF mesh morphing. Procedia Structural Integrity, 2018, 8, 379-389.	0.8	30
13	Glider fuselage-wing junction optimization using CFD and RBF mesh morphing. Aircraft Engineering and Aerospace Technology, 2016, 88, 740-752.	1.2	26
14	A balanced load mapping method based on radial basis functions and fuzzy sets. International Journal for Numerical Methods in Engineering, 2018, 115, 1411-1429.	2.8	26
15	Fast interactive CFD evaluation of hemodynamics assisted by RBF mesh morphing and reduced order models: the case of aTAA modelling. International Journal on Interactive Design and Manufacturing, 2020, 14, 1227-1238.	2.2	23
16	Fluid structure interaction analysis: vortex shedding induced vibrations. Procedia Structural Integrity, 2018, 8, 422-432.	0.8	22
17	Spew formation in a single lap joint. International Journal of Adhesion and Adhesives, 2007, 27, 458-468.	2.9	21
18	DTT device: Conceptual design of the superconducting magnet system. Fusion Engineering and Design, 2017, 122, 299-312.	1.9	21

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19	Fast high fidelity CFD/CSM fluid structure interaction using RBF mesh morphing and modal superposition method. Aircraft Engineering and Aerospace Technology, 2019, 91, 893-904.	1.2	21
20	Corrugated board containers design methods. International Journal of Computational Materials Science and Surface Engineering, 2010, 3, 143.	0.2	20
21	Interactive Sculpting Using Augmented-Reality, Mesh Morphing, and Force Feedback: Force-Feedback Capabilities in an Augmented Reality Environment. IEEE Consumer Electronics Magazine, 2018, 7, 83-90.	2.3	19
22	High fidelity fluid-structure interaction by radial basis functions mesh adaption of moving walls: A workflow applied to an aortic valve. Journal of Computational Science, 2021, 51, 101327.	2.9	19
23	Synthetic dataset generation for the analysis and the evaluation of image-based hemodynamics of the human aorta. Medical and Biological Engineering and Computing, 2012, 50, 145-154.	2.8	18
24	RBF-based mesh morphing approach to perform icing simulations in the aviation sector. Aircraft Engineering and Aerospace Technology, 2019, 91, 620-633.	1.2	18
25	A novel formulation for the study of the ascending aortic fluid dynamics with in vivo data. Medical Engineering and Physics, 2020, 91, 68-78.	1.7	18
26	Radial basis functions mesh morphing for the analysis of cracks propagation. Procedia Structural Integrity, 2018, 8, 433-443.	0.8	17
27	Automatic shape optimization of structural components with manufacturing constraints. Procedia Structural Integrity, 2018, 12, 416-428.	0.8	14
28	Virtual human bone modelling by interactive sculpting, mesh morphing and force-feedback. International Journal on Interactive Design and Manufacturing, 2018, 12, 1223-1234.	2.2	14
29	Upscaling 2D finite element analysis stress results using radial basis functions. Computers and Structures, 2019, 220, 131-143.	4.4	13
30	Automatic shape optimisation of structural parts driven by BGM and RBF mesh morphing. International Journal of Mechanical Sciences, 2021, 189, 105976.	6.7	13
31	Dynamic, mechanical efficiency, and fatigue analysis of the double Cardan homokinetic joint. International Journal of Vehicle Design, 2003, 32, 231.	0.3	12
32	A new meshless approach to map electromagnetic loads for FEM analysis on DEMO TF coil system. Fusion Engineering and Design, 2015, 100, 226-238.	1.9	11
33	A MESH MORPHING BASED FSI METHOD USED IN AERONAUTICAL OPTIMIZATION APPLICATIONS. , 2016, , .		11
34	Radial Basis Functions Update of Digital Models on Actual Manufactured Shapes. Journal of Computational and Nonlinear Dynamics, 2019, 14, .	1.2	10
35	A stress recovery procedure for laminated composite plates based on strong-form equilibrium enforced via the RBF Kansa method. Composite Structures, 2020, 244, 112292.	5.8	10
36	Assessment and development of a ROM for linearized aeroelastic analyses of aerospace vehicles. CEAS Aeronautical Journal, 2017, 8, 353-369.	1.7	9

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37	Crack Propagation Analysis of Near-Surface Defects with Radial Basis Functions Mesh Morphing. Procedia Structural Integrity, 2018, 12, 471-478.	0.8	9
38	The Hemodynamic Effect of Modified Blalockâ€“Taussig Shunt Morphologies: A Computational Analysis Based on Reduced Order Modeling. Electronics (Switzerland), 2022, 11, 1930.	3.1	9
39	COMBINING AN RBF-BASED MORPHER WITH CONTINUOUS ADJOINT FOR LOW-SPEED AERONAUTICAL OPTIMIZATION APPLICATIONS. , 2016, , .		8
40	Analysis of corrugated board panels under compression load. Steel and Composite Structures, 2009, 9, 1-17.	1.3	7
41	Parametric numerical study of wind barrier shelter. Wind and Structures, an International Journal, 2015, 20, 75-93.	0.8	7
42	A numerical technique to study arbitrary shaped cracks growing in notched elements. International Journal of Computer Applications in Technology, 2002, 15, 176.	0.5	6
43	Structural validation of a realistic wing structure: the RIBES test article. Procedia Structural Integrity, 2018, 12, 448-456.	0.8	6
44	Radial Basis Functions Vector Fields Interpolation for Complex Fluid Structure Interaction Problems. Fluids, 2021, 6, 314.	1.7	6
45	Design of a lightweight chassis for the land speed record vehicle Buckeye Bullet 2. International Journal of Vehicle Design, 2007, 44, 379.	0.3	5
46	Design of a tuned sandwich chassis for competition go-kart. International Journal of Vehicle Design, 2007, 44, 360.	0.3	5
47	Comparison of numerical models for Acoustic Emission propagation. Procedia Structural Integrity, 2018, 12, 353-369.	0.8	5
48	Optimal airfoilâ€™s shapes by high fidelity CFD. Aircraft Engineering and Aerospace Technology, 2018, 90, 1000-1011.	0.8	5
49	Optimisation of industrial parts by mesh morphing enabled automatic shape sculpting. Procedia Structural Integrity, 2019, 24, 724-737.	0.8	5
50	Validation of High Fidelity Computational Methods for Aeronautical FSI Analyses. Lecture Notes in Applied and Computational Mechanics, 2020, , 29-48.	2.2	5
51	Unsteady FSI Analysis of a Square Array of Tubes in Water Crossflow. Lecture Notes in Applied and Computational Mechanics, 2020, , 129-152.	2.2	5
52	Radial Basis Functions Mesh Morphing. Lecture Notes in Computer Science, 2020, , 294-308.	1.3	5
53	EVOLUTIONARY AERODYNAMIC SHAPE OPTIMIZATION THROUGH THE RBF4AERO PLATFORM. , 2016, , .		5
54	Online quality control of corrugated board panel by image processing. International Journal of Computer Applications in Technology, 2005, 23, 157.	0.5	4

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55	Mechanical Analysis of the ENEA TF Coil Proposal for the EU DEMO Fusion Reactor. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	4
56	High fidelity numerical fracture mechanics assisted by RBF mesh morphing. Procedia Structural Integrity, 2020, 25, 136-148.	0.8	4
57	CAE - Update of CAE models on actual manufactured shapes. Procedia Structural Integrity, 2019, 24, 775-787.	0.8	3
58	Structural integrity assessment of pressure equipment by Acoustic Emission and data fractal analysis. Procedia Structural Integrity, 2020, 25, 246-253.	0.8	3
59	Wind Tunnel Model Design and Aeroelastic Measurements of the RIBES Wing. Journal of Aerospace Engineering, 2021, 34, .	1.4	3
60	An analytical benchmark for a 2D problem of elastic wave propagation in a solid. Engineering Structures, 2021, 229, 111655.	5.3	3
61	Flying Shape Sails Analysis by Radial Basis Functions Mesh Morphing. Lecture Notes in Mechanical Engineering, 2020, , 24-36.	0.4	3
62	Engine/Vehicle Matching for a FSAE Race Car. , 2007, , .		2
63	Non-linear models of reed valve dynamics. International Journal of Vehicle Systems Modelling and Testing, 2009, 4, 150.	0.1	2
64	Multiphysics numerical investigation on the aeroelastic stability of a Le Mans Prototype car. Procedia Structural Integrity, 2019, 24, 875-887.	0.8	2
65	Structural assessment of TF superconducting magnet of the DTT device. Procedia Structural Integrity, 2019, 24, 898-905.	0.8	2
66	Validation of Structural Modeling for Realistic Wing Topologies Involved in FSI Analyses: RIBES Test Case. Journal of Aerospace Engineering, 2021, 34, .	1.4	2
67	Advanced Radial Basis Functions Mesh Morphing for High Fidelity Fluid-Structure Interaction with Known Movement of the Walls: Simulation of an Aortic Valve. Lecture Notes in Computer Science, 2020, , 280-293.	1.3	2
68	Multi-objective Optimization of A-Class Catamaran Foils Adopting a Geometric Parameterization Based on RBF Mesh Morphing. Computational Methods in Applied Sciences (Springer), 2019, , 467-482.	0.3	2
69	Progresses in Fluid-Structure Interaction and Structural Optimization Numerical Tools Within the EU CS RIBES Project. Computational Methods in Applied Sciences (Springer), 2019, , 529-544.	0.3	2
70	FSI Workflow Using AdvancedÂRBF Mesh Morphing. , 2017, , 225-256.		2
71	Evaluation of go-kart aerodynamic efficiency using CFD, RBF mesh morphing and lap time simulation. International Journal of Aerodynamics, 2016, 5, 146.	0.1	1
72	Analysis of Vortex Induced Vibration of a Thermowell by High Fidelity FSI Numerical Analysis Based on RBF Structural Modes Embedding. Lecture Notes in Computer Science, 2021, , 465-478.	1.3	1

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73	VPP Coupling High-Fidelity Analyses and Analytical Formulations for Multihulls Sails and Appendages Optimization. Journal of Marine Science and Engineering, 2021, 9, 607.	2.6	1
74	Fluid Structure Modelling of Ground Excited Vibrations by Mesh Morphing and Modal Superposition. Lecture Notes in Applied and Computational Mechanics, 2020, , 111-127.	2.2	1
75	Optimization Workflows Assisted by RBF Surrogate Models. , 2017, , 257-287.		1
76	THE RBF4AERO BENCHMARK TECHNOLOGY PLATFORM. , 2016, , .		1
77	Three Dimensional Dynamic Model For a Quick Simulation of Vehicle Collisions. , 0, , .		0
78	Load transfers evaluation in competition go-kart. International Journal of Vehicle Systems Modelling and Testing, 2007, 2, 208.	0.1	0
79	AE fatigue experiments on tanks test samples with artificial pre-cracking. Procedia Structural Integrity, 2020, 25, 128-135.	0.8	0
80	Automatic Optimization Method Based on Mesh Morphing Surface Sculpting Driven by Biological Growth Method: An Application to the Coiled Spring Section Shape. Lecture Notes in Computer Science, 2021, , 479-491.	1.3	0
81	Evaluation of go-kart aerodynamic efficiency using CFD, RBF mesh morphing and lap time simulation. International Journal of Aerodynamics, 2016, 5, 146.	0.1	0
82	Fast RBF. , 2017, , 35-62.		0
83	Data Mapping Using RBF. , 2017, , 329-358.		0
84	Adjoint Sensitivities and RBF Mesh Morphing. , 2017, , 137-174.		0