Daniel Garcia-Vallejo

List of Publications by Year
in descending order

43 papers	961 citations	567144 15 h-index	454834 30 g-index
46 all docs	46 docs citations	46 times ranked	589 citing authors

#	Article	IF	Citations
1	Nonlinear solutions for the steady state oscillations of a clampedâ€“free rotating beam. European Journal of Mechanics, A/Solids, 2022, 91, 104413.	2.1	5
2	Linear Stability Analysis of a Bicycle Multibody Model with Toroidal Wheels. , 2022, , 477-487.		2
3	Experimental validation of a constant-force mechanism and analysis of its performance with a calibrated multibody model. Mechanism and Machine Theory, 2022, 173, 104819.	2.7	4
4	On the theory and application of absolute coordinates-based multibody modelling of the rigidâ€“flexible coupled dynamics of a deep-sea ROV-TMS (tether management system) integrated model. Ocean Engineering, 2022, 258, 111748.	1.9	14
5	Analytical and numerical study of the influence of different support types in the nonlinear vibrations of beams. European Journal of Mechanics, A/Solids, 2021, 85, 104113.	2.1	10
6	Using simple estimates for the flexural stiffness of thick FDM beams based on sandwich beam models. Rapid Prototyping Journal, 2021, 27, 120-130.	1.6	1
7	Design of trajectories and torques by parameter optimization for the bench press exercise on a Smith machine. Mechanism and Machine Theory, 2021, 155, 104089.	2.7	3
8	Linearization approaches for general multibody systems validated through stability analysis of a benchmark bicycle model. Nonlinear Dynamics, 2021, 103, 557-580.	2.7	15
9	Stability analysis of a waveboard multibody model with toroidal wheels. Multibody System Dynamics, 2021, 53, 173-203.	1.7	2
10	Linear stability analysis of nonholonomic multibody systems. International Journal of Mechanical Sciences, 2021, 198, 106392.	3.6	5
11	Thermo-mechanical assessment of the JT-60SA fast-ion loss detector. Fusion Engineering and Design, 2021, 167, 112304.	1.0	4
12	A New Electromechanical Analogy Approach Based on Electrostatic Coupling for Vertical Dynamic Analysis of Planar Vehicle Models. IEEE Access, 2021, 9, 119492-119502.	2.6	8
13	Dynamic modeling of a radially multilayered tether cable for a remotely-operated underwater vehicle (ROV) based on the absolute nodal coordinate formulation (ANCF). Mechanism and Machine Theory, 2020, 153, 103961.	2.7	42
14	Study of the forward locomotion of a three-dimensional multibody model of a Waveboard by inverse dynamics. Mechanism and Machine Theory, 2020, 149, 103826.	2.7	6
15	Design and analysis of a constant-force bench press. Mechanism and Machine Theory, 2019, 142, 103612.	2.7	10
16	A fast model to resolve the velocity-space of fast-ion losses detected in ASDEX Upgrade and MAST Upgrade. Journal of Instrumentation, 2019, 14, C09015-C09015.	0.5	3
17	Detection of Communities within the Multibody System Dynamics Network and Analysis of Their Relations. Symmetry, 2019, 11, 1525.	1.1	6
18	Nonlinear modelling and simulation of vibrocompaction processes. International Journal of Non-Linear Mechanics, 2018, 102, 101-111.	1.4	6

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19	A rotary and reciprocating scintillator based fast-ion loss detector for the MAST-U tokamak. Review of Scientific Instruments, 2018, 89, 10I112.	0.6	11
20	Design of Three New Cam-Based Constant-Force Mechanisms. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	1.7	16
21	Direct sensitivity analysis of multibody systems with holonomic and nonholonomic constraints via an index-3 augmented Lagrangian formulation with projections. Nonlinear Dynamics, 2018, 93, 2039-2056.	2.7	29
22	On the design of a scaled railroad vehicle for the validation of computational models. Mechanism and Machine Theory, 2017, 115, 60-76.	2.7	16
23	Study of the Contribution of Nonlinear Normal Modes (NNMs) in Large Amplitude Oscillations of Simply Supported Beams. Procedia Engineering, 2017, 199, 625-630.	1.2	0
24	A fast feedback controlled magnetic drive for the ASDEX Upgrade fast-ion loss detectors. Review of Scientific Instruments, 2016, 87, 11E705.	0.6	8
25	Dynamical analysis and design of active orthoses for spinal cord injured subjects by aesthetic and energetic optimization. Nonlinear Dynamics, 2016, 84, 559-581.	2.7	13
26	Design and analysis of a flexible linkage for robot safe operation in collaborative scenarios. Mechanism and Machine Theory, 2015, 92, 1-16.	2.7	23
27	A Flexible Multibody Model of a Safety Robot Arm for Experimental Validation and Analysis of Design Parameters. Journal of Computational and Nonlinear Dynamics, 2014, 9, .	0.7	11
28	Role of Link Flexibility and Variable Stiffness Actuator on Collision Safety for Service Robots. Mechanisms and Machine Science, 2013, , 499-507.	0.3	2
29	Simple formulations of imposing moments and evaluating joint reaction forces for rigid-flexible multibody systems. Nonlinear Dynamics, 2012, 69, 127-147.	2.7	27
30	3D-Simulation of human walking by parameter optimization. Archive of Applied Mechanics, 2012, 82, 533-556.	1.2	20
31	Walking dynamics from mechanism models to parameter optimization. Procedia IUTAM, 2011, 2, 199-211.	1.2	5
32	Stability and Bifurcation Analysis of a Rotating Beam Substructured Model. , 2009, , .		1
33	Stability analysis of a substructured model of the rotating beam. Nonlinear Dynamics, 2009, 55, 355-372.	2.7	25
34	Three-dimensional formulation of rigid-flexible multibody systems with flexible beam elements. Multibody System Dynamics, 2008, 20, 1-28.	1.7	60
35	Formulation of Three-Dimensional Rigid-Flexible Multibody Systems. , 2007, , 1091.		0
36	A new locking-free shear deformable finite element based on absolute nodal coordinates. Nonlinear Dynamics, 2007, 50, 249-264.	2.7	90

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37	Modeling of Belt-Drives Using a Large Deformation Finite Element Formulation. Nonlinear Dynamics, 2006, 43, 239-256.	2.7	105
38	An Internal Damping Model for the Absolute Nodal Coordinate Formulation. Nonlinear Dynamics, 2005, 42, 347-369.	2.7	82
39	Finite element analysis of the geometric stiffening effect. Part 1: A correction in the floating frame of reference formulation. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2005, 219, 187-202.	0.5	9
40	Finite element analysis of the geometric stiffening effect. Part 2: Non-linear elasticity. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2005, 219, 203-211.	0.5	8
41	Study of the Geometric Stiffening Effect: Comparison of Different Formulations. Multibody System Dynamics, 2004, 11, 321-341.	1.7	53
42	Efficient Evaluation of the Elastic Forces and the Jacobian in the Absolute Nodal Coordinate Formulation. Nonlinear Dynamics, 2004, 35, 313-329.	2.7	118
43	Describing Rigid-Flexible Multibody Systems Using Absolute Coordinates. Nonlinear Dynamics, 2003, 34, 75-94.	2.7	76