

# Karin Nachbagauer

## List of Publications by Year in descending order

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Version: 2024-02-01

23  
papers

445  
citations

840585

11  
h-index

794469

19  
g-index

23  
all docs

23  
docs citations

23  
times ranked

202  
citing authors

#	ARTICLE	IF	CITATIONS
1	A new locking-free formulation for planar, shear deformable, linear and quadratic beam finite elements based on the absolute nodal coordinate formulation. <i>Multibody System Dynamics</i> , 2011, 26, 245-263.	1.7	94
2	State of the Art of ANCF Elements Regarding Geometric Description, Interpolation Strategies, Definition of Elastic Forces, Validation and the Locking Phenomenon in Comparison with Proposed Beam Finite Elements. <i>Archives of Computational Methods in Engineering</i> , 2014, 21, 293-319.	6.0	71
3	The Use of the Adjoint Method for Solving Typical Optimization Problems in Multibody Dynamics. <i>Journal of Computational and Nonlinear Dynamics</i> , 2015, 10, .	0.7	46
4	Structural and Continuum Mechanics Approaches for a 3D Shear Deformable ANCF Beam Finite Element: Application to Static and Linearized Dynamic Examples. <i>Journal of Computational and Nonlinear Dynamics</i> , 2013, 8, .	0.7	39
5	Structural and Continuum Mechanics Approaches for a 3D Shear Deformable ANCF Beam Finite Element: Application to Buckling and Nonlinear Dynamic Examples. <i>Journal of Computational and Nonlinear Dynamics</i> , 2014, 9, .	0.7	23
6	On the rotational equations of motion in rigid body dynamics when using Euler parameters. <i>Nonlinear Dynamics</i> , 2015, 81, 343-352.	2.7	23
7	A 3D Shear Deformable Finite Element Based on the Absolute Nodal Coordinate Formulation. <i>Computational Methods in Applied Sciences (Springer)</i> , 2013, , 77-96.	0.1	20
8	HOTINT: A Script Language Based Framework for the Simulation of Multibody Dynamics Systems. , 2013, , .		20
9	The Discrete Adjoint Gradient Computation for Optimization Problems in Multibody Dynamics. <i>Journal of Computational and Nonlinear Dynamics</i> , 2017, 12, .	0.7	18
10	A Detailed Derivation of the Velocity-Dependent Inertia Forces in the Floating Frame of Reference Formulation. <i>Journal of Computational and Nonlinear Dynamics</i> , 2014, 9, .	0.7	15
11	The discrete adjoint method for parameter identification in multibody system dynamics. <i>Multibody System Dynamics</i> , 2018, 42, 397-410.	1.7	15
12	Optimal input design for multibody systems by using an extended adjoint approach. <i>Multibody System Dynamics</i> , 2017, 40, 43-54.	1.7	13
13	A Spatial Thin Beam Finite Element Based on the Absolute Nodal Coordinate Formulation Without Singularities. , 2011, , .		11
14	The Adjoint Method for Time-Optimal Control Problems. <i>Journal of Computational and Nonlinear Dynamics</i> , 2021, 16, .	0.7	9
15	A modified HHT method for the numerical simulation of rigid body rotations with Euler parameters. <i>Multibody System Dynamics</i> , 2019, 46, 181-202.	1.7	8
16	Enhancement of the Adjoint Method by Error Control of Accelerations for Parameter Identification in Multibody Dynamics. <i>Universal Journal of Control and Automation</i> , 2015, 3, 47-52.	0.5	6
17	A frequency domain approach for parameter identification in multibody dynamics. <i>Multibody System Dynamics</i> , 2018, 43, 175-191.	1.7	5
18	The Absolute Nodal Coordinate Formulation. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , 2016, , 159-200.	0.3	4

#	ARTICLE	IF	CITATIONS
19	A spatial shear deformable beam finite element based on the absolute nodal coordinate formulation. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 59-60.	0.2	2
20	Refined Zigzag Theory: an appropriate tool for the analysis of CLT-plates and other shear-elastic timber structures. European Journal of Wood and Wood Products, 2020, 78, 1125-1135.	1.3	2
21	Identification of System Properties in a Square Frame Undergoing Large Deformations: Numerical and Experimental Investigations. International Journal of Structural Stability and Dynamics, 2014, 14, 1450017.	1.5	1
22	On the Numerical Identification of System Properties in a Square Frame. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 91-92.	0.2	0
23	An Efficient Treatment of Parameter Identification in the Context of Multibody System Dynamics Using the Adjoint Method. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 1-8.	0.3	0