

# Paolo Tiso

## List of Publications by Year in descending order

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56  
papers

1,074  
citations

471509

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434195

31  
g-index

57  
all docs

57  
docs citations

57  
times ranked

564  
citing authors

#	ARTICLE	IF	CITATIONS
1	A consistency analysis of phase-locked-loop testing and control-based continuation for a geometrically nonlinear frictional system. <i>Mechanical Systems and Signal Processing</i> , 2022, 170, 108820.	8.0	10
2	A non-intrusive model-order reduction of geometrically nonlinear structural dynamics using modal derivatives. <i>Mechanical Systems and Signal Processing</i> , 2021, 147, 107126.	8.0	21
3	Concurrent Design and Flight Mission Optimization of Morphing Airborne Wind Energy Wings. <i>AIAA Journal</i> , 2021, 59, 1254-1268.	2.6	6
4	A higher-order parametric nonlinear reduced-order model for imperfect structures using Neumann expansion. <i>Nonlinear Dynamics</i> , 2021, 104, 3039-3063.	5.2	11
5	Model order reduction for temperature-dependent nonlinear mechanical systems: A multiple scales approach. <i>Journal of Sound and Vibration</i> , 2020, 465, 115022.	3.9	12
6	Substructuring in Engineering Dynamics. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2020, , .	0.6	40
7	Preliminaries: Primal and Dual Assembly of Dynamic Models. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2020, , 5-24.	0.6	0
8	Model Reduction Concepts and Substructuring Approaches for Linear Systems. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2020, , 25-73.	0.6	1
9	Industrial Applications & Related Concepts. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2020, , 183-231.	0.6	0
10	Model Reduction Concepts and Substructuring Approaches for Nonlinear Systems. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2020, , 233-267.	0.6	1
11	Weakly Nonlinear Systems: Modeling and Experimental Methods. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2020, , 269-277.	0.6	1
12	Predictive Modeling of Bolted Assemblies with Surface Irregularities. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2020, , 247-258.	0.5	2
13	A nonlinear reduced order model with parametrized shape defects. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 360, 112785.	6.6	16
14	Numerical Assessment of Polynomial Nonlinear State-Space and Nonlinear-Mode Models for Near-Resonant Vibrations. <i>Vibration</i> , 2020, 3, 320-342.	1.9	2
15	Interface reduction for Hurty/Craig-Bampton substructured models: Review and improvements. <i>Mechanical Systems and Signal Processing</i> , 2019, 114, 579-603.	8.0	67
16	Reduced-Order Dynamic Model of a Morphing Airborne Wind Energy Aircraft. <i>AIAA Journal</i> , 2019, 57, 3586-3598.	2.6	13
17	An augmented free-interface-based modal substructuring for nonlinear structural dynamics including interface reduction. <i>Journal of Sound and Vibration</i> , 2019, 462, 114915.	3.9	6
18	Hyper-Reduction Over Nonlinear Manifolds for Large Nonlinear Mechanical Systems. <i>Journal of Computational and Nonlinear Dynamics</i> , 2019, 14, .	1.2	9

#	ARTICLE	IF	CITATIONS
19	A modal derivatives enhanced Rubin substructuring method for geometrically nonlinear multibody systems. <i>Multibody System Dynamics</i> , 2019, 45, 57-85.	2.7	29
20	Interface Reduction on Hurty/Craig-Bampton Substructures with Frictionless Contact. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2019, , 1-16.	0.5	1
21	Interface Reduction with Multilevel Craig-Bampton Substructuring for Component Mode Synthesis. <i>AAAA Journal</i> , 2018, 56, 2030-2044.	2.6	13
22	Exact nonlinear model reduction for a von Kármán beam: Slow-fast decomposition and spectral submanifolds. <i>Journal of Sound and Vibration</i> , 2018, 423, 195-211.	3.9	42
23	Numerical computation of nonlinear normal modes in a modal derivative subspace. <i>Computers and Structures</i> , 2018, 195, 34-46.	4.4	41
24	Simulation-Free Hyper-Reduction for Geometrically Nonlinear Structural Dynamics: A Quadratic Manifold Lifting Approach. <i>Journal of Computational and Nonlinear Dynamics</i> , 2018, 13, .	1.2	13
25	A quadratic manifold for model order reduction of nonlinear structural dynamics. <i>Computers and Structures</i> , 2017, 188, 80-94.	4.4	76
26	Reduced basis methods for structurally nonlinear Joined Wings. <i>Aerospace Science and Technology</i> , 2017, 68, 486-495.	4.8	5
27	POD-DEIM model order reduction for strain-softening viscoplasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 317, 458-479.	6.6	59
28	Generalization of quadratic manifolds for reduced order modeling of nonlinear structural dynamics. <i>Computers and Structures</i> , 2017, 192, 196-209.	4.4	43
29	A new, challenging benchmark for nonlinear system identification. <i>Mechanical Systems and Signal Processing</i> , 2017, 84, 185-193.	8.0	7
30	Nonlinear model order reduction for flexible multibody dynamics: a modal derivatives approach. <i>Multibody System Dynamics</i> , 2016, 36, 405-425.	2.7	77
31	Bridging the Gap Between Nonlinear Normal Modes and Modal Derivatives. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2016, , 349-361.	0.5	4
32	Reduced Order Methods and Algorithms for Structurally Nonlinear Joined Wings. , 2015, , .		9
33	A modal-based approach for optimal active modifications of resonance modes. <i>Journal of Sound and Vibration</i> , 2015, 334, 151-163.	3.9	2
34	A Computational Method for Structurally Nonlinear Joined Wings Based on Modal Derivatives. , 2014, , .		8
35	Dynamic Nonlinear Aeroelastic Model of a Kite for Power Generation. <i>Journal of Guidance, Control, and Dynamics</i> , 2014, 37, 1426-1436.	2.8	44
36	A Substructuring Method for Geometrically Nonlinear Structures. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2014, , 157-165.	0.5	11

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37	CONTROL OF THE EIGENSOLUTIONS OF A HARMONICALLY DRIVEN COMPLIANT STRUCTURE. , 2014, , .		1
38	A Modified Discrete Empirical Interpolation Method for Reducing Non-Linear Structural Finite Element Models. , 2013, , .		8
39	Discrete Empirical Interpolation Method for Finite Element Structural Dynamics. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 203-212.	0.5	19
40	Nonlinear Aeroelasticity, Flight Dynamics and Control of a Flexible Membrane Traction Kite. Green Energy and Technology, 2013, , 307-323.	0.6	15
41	Reduction Method for Finite Element Nonlinear Dynamic Analysis of Shells. AIAA Journal, 2011, 49, 2295-2304.	2.6	38
42	A FINITE ELEMENT-BASED PERTURBATION METHOD FOR NONLINEAR FREE VIBRATION ANALYSIS OF COMPOSITE CYLINDRICAL SHELLS. International Journal of Structural Stability and Dynamics, 2011, 11, 717-734.	2.4	11
43	Effective Modal Derivatives Based Reduction Method for Geometrically Nonlinear Structures. , 2011, , .		1
44	Optimal second order reduction basis selection for nonlinear transient analysis. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 27-39.	0.5	17
45	Reduction methods for MEMS nonlinear dynamic analysis. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 53-65.	0.5	9
46	A Finite Element Based Perturbation Method for Nonlinear Free Vibration of Composite Cylindrical Shells. , 2009, , .		0
47	Post-buckled precompressed elements: a new class of control actuators for morphing wing UAVs. Smart Materials and Structures, 2007, 16, 919-926.	3.5	68
48	A Finite Element Based Perturbation Method for Nonlinear Free Vibration of Structures. , 2007, , .		2
49	Morphing Wing Flight Control Via Postbuckled Precompressed Piezoelectric Actuators. Journal of Aircraft, 2007, 44, 1060-1068.	2.4	87
50	A Reduction Method for Finite Elements Nonlinear Dynamic Analysis of Shells. , 2006, , .		13
51	(Student paper) Nonlinear Semi-Analytical Modeling of Post-Buckled Precompressed (PBP) Piezoelectric Actuators for UAV Flight Control. , 2006, , .		4
52	Post-buckled precompressed piezoelectric flight control actuator design, development and demonstration. Smart Materials and Structures, 2006, 15, 1323-1331.	3.5	33
53	Post-buckled precompressed (PBP) elements: a new class of flight control actuators enhancing high-speed autonomous VTOL MAVs. , 2005, , .		10
54	A Finite Element Based Reduction Method for Nonlinear Dynamics of Structures. , 2005, , .		12

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55	Post-Buckled Precompressed (PBP) Actuators: Enhancing VTOL Autonomous High Speed MAVs. , 2005, , .		23
56	Effective Response Modifications of Non-Proportionally Damped Resonating Structures. Applied Mechanics and Materials, 0, 704, 143-147.	0.2	0