Cheng Liu

List of Publications by Year
in descending order

25 papers	1,020 citations	567281 15 h-index	610901 24 g-index
26 all docs	26 docs citations	26 times ranked	413 citing authors

#	Article	IF	Citations
1	A new model for dry and lubricated cylindrical joints withÂclearance in spatial flexible multibody systems. Nonlinear Dynamics, 2011, 64, 25-47.	5.2	180
2	Dynamics of a large scale rigidâ€"flexible multibody system composed of composite laminated plates. Multibody System Dynamics, 2011, 26, 283-305.	2.7	134
3	ElastoHydroDynamic lubricated cylindrical joints for rigid-flexible multibody dynamics. Computers and Structures, 2013, 114-115, 106-120.	4.4	124
4	Dynamics and control of a spatial rigid-flexible multibody system with multiple cylindrical clearance joints. Mechanism and Machine Theory, 2012, 52, 106-129.	4.5	104
5	New spatial curved beam and cylindrical shell elements of gradient-deficient Absolute Nodal Coordinate Formulation. Nonlinear Dynamics, 2012, 70, 1903-1918.	5.2	72
6	Dynamic analysis of membrane systems undergoing overall motions, large deformations and wrinkles via thin shell elements of ANCF. Computer Methods in Applied Mechanics and Engineering, 2013, 258, 81-95.	6.6	71
7	Nonlinear static and dynamic analysis of hyper-elastic thin shells via the absolute nodal coordinate formulation. Nonlinear Dynamics, 2016, 85, 949-971.	5.2	37
8	Dynamics of a Deployable Mesh Reflector of Satellite Antenna: Form-Finding and Modal Analysis. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	36
9	Dynamics of a Deployable Mesh Reflector of Satellite Antenna: Parallel Computation and Deployment Simulation1. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	33
10	Model order reduction for dynamic simulation of a flexible multibody system via absolute nodal coordinate formulation. Computer Methods in Applied Mechanics and Engineering, 2017, 324, 573-594.	6.6	30
11	Simple formulations of imposing moments and evaluating joint reaction forces for rigid-flexible multibody systems. Nonlinear Dynamics, 2012, 69, 127-147.	5.2	27
12	An efficient model reduction method for buckling analyses of thin shells based on IGA. Computer Methods in Applied Mechanics and Engineering, 2016, 309, 243-268.	6.6	26
13	Three new triangular shell elements of ANCF represented by BÃ©zier triangles. Multibody System Dynamics, 2015, 35, 321-351.	2.7	24
14	Geometrically exact thin-walled beam including warping formulated on the special Euclidean group $SE(3$. Computer Methods in Applied Mechanics and Engineering, 2020, 369, 113062.	6.6	21
15	Viscoelastic analysis of bistable composite shells via absolute nodal coordinate formulation. Composite Structures, 2020, 248, 112537.	5.8	19
16	Dynamic computation of 2D segment-to-segment frictionless contact for a flexible multibody system subject to large deformation. Mechanism and Machine Theory, 2019, 140, 350-376.	4.5	14
17	Component-level proper orthogonal decomposition for flexible multibody systems. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112690.	6.6	13
18	Dynamic computation of a tether-net system capturing a space target via discrete elastic rods and an energy-conserving integrator. Acta Astronautica, 2021, 186, 118-134.	3.2	12

#	Article	IF	Citations
19	Computational dynamics of soft machines. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 516-528.	3.4	11
20	Dynamic computation of 2D segment-to-segment frictional contact for a flexible multibody system subject to large deformations. Mechanism and Machine Theory, 2021, 158, 104197.	4.5	10
21	Analysis of elasto-plastic thin-shell structures using layered plastic modeling and absolute nodal coordinate formulation. Nonlinear Dynamics, 2021, 105, 2899-2920.	5.2	7
22	Soft Machines: Challenges to Computational Dynamics. Procedia IUTAM, 2017, 20, 10-17.	1.2	6
23	Dynamic Analysis of Spatial Truss Structures Including Sliding Joint Based on the Geometrically Exact Beam Theory and Isogeometric Analysis. Applied Sciences (Switzerland), 2020, 10, 1231.	2.5	5
24	Geometrically exact shell with drilling rotations formulated on the special Euclidean group SE(3). International Journal for Numerical Methods in Engineering, 2021, 122, 4886-4921.	2.8	2
25	Continuum damage dynamics of a large-scale flexible multibody system comprised of composite beams. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 0, , 146441932110631.	0.8	2