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	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
2	Geometrically exact shell with drilling rotations formulated on the special Euclidean group <scp><i>SE</i></scp>(3). International Journal for Numerical Methods in Engineering, 2021, 122, 4886-4921.	2.8	2
3	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
4	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
5	Geometrically exact thin-walled beam including warping formulated on the special Euclidean group <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1556" altimg="si6.svg"><mml:mrow><mml:mi>S</mml:mi><mml:mi>E</mml:mi></mml:mrow><mml:mo>(</mml:mo><mml:mn>3</mml:mn> Computer Methods in Applied Mechanics and Engineering, 2020, 369, 113062.	6.6	21
6	Viscoelastic analysis of bistable composite shells via absolute nodal coordinate formulation. Composite Structures, 2020, 248, 112537.	5.8	19
7	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
8	Component-level proper orthogonal decomposition for flexible multibody systems. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112690.	6.6	13
9	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
10	Computational dynamics of soft machines. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 516-528.	3.4	11
11	Soft Machines: Challenges to Computational Dynamics. Procedia IUTAM, 2017, 20, 10-17.	1.2	6
12	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
13	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
14	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
15	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
16	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
17	Three new triangular shell elements of ANCF represented by BÃ©zier triangles. Multibody System Dynamics, 2015, 35, 321-351.	2.7	24
18	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

#	Article	IF	Citations
19	ElastoHydroDynamic lubricated cylindrical joints for rigid-flexible multibody dynamics. Computers and Structures, 2013, 114-115, 106-120.	4.4	124
20	New spatial curved beam and cylindrical shell elements of gradient-deficient Absolute Nodal Coordinate Formulation. Nonlinear Dynamics, 2012, 70, 1903-1918.	5.2	72
21	Simple formulations of imposing moments and evaluating joint reaction forces for rigid-flexible multibody systems. Nonlinear Dynamics, 2012, 69, 127-147.	5.2	27
22	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
23	A new model for dry and lubricated cylindrical joints withÂclearance in spatial flexible multibody systems. Nonlinear Dynamics, 2011, 64, 25-47.	5.2	180
24	Dynamics of a large scale rigidâ€"flexible multibody system composed of composite laminated plates. Multibody System Dynamics, 2011, 26, 283-305.	2.7	134
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