Weipeng Hu

List of Publications by Year
in descending order

50	1,166	394421	414414
papers	citations	19	32
		h-index	g-index

50	50	50	203
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Generalized multi-symplectic integrators for a class of Hamiltonian nonlinear wave PDEs. Journal of Computational Physics, 2013, 235, 394-406.	3.8	109
2	Symmetry breaking of infinite-dimensional dynamic system. Applied Mathematics Letters, 2020, 103, 106207.	2.7	95
3	Vibration and elastic wave propagation in spatial flexible damping panel attached to four special springs. Communications in Nonlinear Science and Numerical Simulation, 2020, 84, 105199.	3.3	86
4	Internal resonance of a flexible beam in a spatial tethered system. Journal of Sound and Vibration, 2020, 475, 115286.	3.9	78
5	Coupling dynamic behaviors of flexible stretching hub-beam system. Mechanical Systems and Signal Processing, 2021, 151, 107389.	8.0	70
6	Mechanoelectrical flexible hub-beam model of ionic-type solvent-free nanofluids. Mechanical Systems and Signal Processing, 2021, 159, 107833.	8.0	58
7	Chaos in an embedded single-walled carbon nanotube. Nonlinear Dynamics, 2013, 72, 389-398.	5.2	53
8	Minimum Control Energy of Spatial Beam with Assumed Attitude Adjustment Target. Acta Mechanica Solida Sinica, 2020, 33, 51-60.	1.9	51
9	Almost structure-preserving analysis for weakly linear damping nonlinear Schrödinger equation with periodic perturbation. Communications in Nonlinear Science and Numerical Simulation, 2017, 42, 298-312.	3.3	49
10	Chaos in embedded fluid-conveying single-walled carbon nanotube under transverse harmonic load series. Nonlinear Dynamics, 2015, 79, 325-333.	5.2	40
11	Coupling dynamic characteristics of simplified model for tethered satellite system. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 1245-1254.	3.4	37
12	Energy dissipation/transfer and stable attitude of spatial on-orbit tethered system. Journal of Sound and Vibration, 2018, 412, 58-73.	3.9	35
13	Coupling dynamic behaviors of spatial flexible beam with weak damping. International Journal for Numerical Methods in Engineering, 2017, 111, 660-675.	2.8	31
14	Dynamic analysis on flexible hub-beam with step-variable cross-section. Mechanical Systems and Signal Processing, 2022, 180, 109423.	8.0	29
15	Axial dynamic buckling analysis of embedded single-walled carbon nanotube by complex structure-preserving method. Applied Mathematical Modelling, 2017, 52, 15-27.	4.2	27
16	Non-sphere perturbation on dynamic behaviors of spatial flexible damping beam. Acta Astronautica, 2018, 152, 196-200.	3.2	26
17	Interaction effects of DNA, RNA-polymerase, and cellular fluid on the local dynamic behaviors of DNA. Applied Mathematics and Mechanics (English Edition), 2020, 41, 623-636.	3.6	24
18	Symplectic analysis on orbit-attitude coupling dynamic problem of spatial rigid rod. JVC/Journal of Vibration and Control, 2020, 26, 1614-1624.	2.6	24

#	ARTICLE	IF	CITATIONS
19	Multi-symplectic Runge-Kutta methods for Landau-Ginzburg-Higgs equation. Applied Mathematics and Mechanics (English Edition), 2009, 30, 1027-1034.	3.6	22
20	Symplectic analysis on dynamic behaviors of tethered tug–debris system. Acta Astronautica, 2022, 192, 182-189.	3.2	22
21	Multi-symplectic method for peakon–antipeakon collision of quasi-Degasperis–Procesi equation. Computer Physics Communications, 2014, 185, 2020-2028.	7.5	21
22	Wave propagation in non-homogeneous asymmetric circular plate. International Journal of Mechanics and Materials in Design, 2021, 17, 885-898.	3.0	21
23	Chaotic region of elastically restrained single-walled carbon nanotube. Chaos, 2017, 27, 023118.	2.5	20
24	Energy dissipation of damping cantilevered single-walled carbon nanotube oscillator. Nonlinear Dynamics, 2018, 91, 767-776.	5.2	20
25	Symplectic Analysis on Coupling Behaviors of Spatial Flexible Damping Beam. Acta Mechanica Solida Sinica, 2022, 35, 541-551.	1.9	16
26	GENERALIZED MULTI-SYMPLECTIC METHOD FOR DYNAMIC RESPONSES OF CONTINUOUS BEAM UNDER MOVING LOAD. International Journal of Applied Mechanics, 2013, 05, 1350033.	2.2	12
27	AN IMPLICIT DIFFERENCE SCHEME FOCUSING ON THE LOCAL CONSERVATION PROPERTIES FOR BURGERS EQUATION. International Journal of Computational Methods, 2012, 09, 1240028.	1.3	11
28	Multi-symplectic method to simulate Soliton resonance of (2+1)-dimensional Boussinesq equation. Journal of Geometric Mechanics, 2013, 5, 295-318.	0.8	9
29	Competition between geometric dispersion and viscous dissipation in wave propagation of KdV-Burgers equation. JVC/Journal of Vibration and Control, 2015, 21, 2937-2945.	2.6	8
30	Energy dissipation of an infinite damping beam supported by saturated poroelastic halfspace. Physica Scripta, 2021, 96, 055220.	2.5	7
31	Multi-symplectic method to analyze the mixed state of II-superconductors. Science in China Series G: Physics, Mechanics and Astronomy, 2008, 51, 1835-1844.	0.2	5
32	Dynamic modeling and simulation of deploying process for space solar power satellite receiver. Applied Mathematics and Mechanics (English Edition), 2018, 39, 261-274.	3.6	5
33	Wave Propagation in Non-homogeneous Centrosymmetric Damping Plate Subjected to Impact Series. Journal of Vibration Engineering and Technologies, 0, , 1.	2.2	5
34	A review of dynamic analysis on space solar power station. Astrodynamics, 2023, 7, 115-130.	2.4	5
35	Generalized Multi-Symplectic Integrator for Vibration of a Damping String with the Driving Force. International Journal of Applied Mechanics, 2017, 09, 1750004.	2.2	4
36	Local dynamic behaviors of long 0-Ï€ Josephson junction. Physica Scripta, 2020, 95, 085221.	2.5	4

#	Article	IF	Citations
37	Effects of Tow Parameters on Dynamic Behaviors of Beam-type Orbital Debris. Journal of the Astronautical Sciences, 2022, 69, 80-94.	1.5	4
38	The complex multi-symplectic scheme for the generalized sinh-Gordon equation. Science in China Series G: Physics, Mechanics and Astronomy, 2009, 52, 1618-1623.	0.2	3
39	Structure-preserving properties of StÃ¶rmer-Verlet scheme for mathematical pendulum. Applied Mathematics and Mechanics (English Edition), 2017, 38, 1225-1232.	3.6	3
40	Energy Loss in Pulse Detonation Engine due to Fuel Viscosity. Mathematical Problems in Engineering, 2014, 2014, 1-5.	1.1	2
41	Structure-preserving Analysis on Folding and Unfolding Process of Undercarriage. Acta Mechanica Solida Sinica, 2016, 29, 631-641.	1.9	2
42	Structure-preserving approach for infinite dimensional nonconservative system. Theoretical and Applied Mechanics Letters, 2018, 8, 404-407.	2.8	2
43	Resonance analysis of a single-walled carbon nanotube. Chaos, Solitons and Fractals, 2021, 142, 110498.	5.1	2
44	Chaos of a Single-Walled Carbon Nanotube Resulting from Periodic Parameter Perturbation. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2021, 31, 2150130.	1.7	2
45	Coupling Dynamic Behavior of Space Flexible Hollow Beam. International Journal of Applied Mechanics, 2021, 13, .	2.2	2
46	Flexural Wave Propagation in Square Damping Plate Bonded with Two Cylinders Symmetrically. Journal of Vibration Engineering and Technologies, 2022, 10, 1851-1863.	2.2	2
47	Temperature Effect on Dynamic Behaviors of Cis-Polyisoprene Chain. International Journal of Applied Mechanics, 2016, 08, 1650012.	2.2	1
48	Structure-preserving analysis on Gaussian solitary wave solution of logarithmic-KdV equation. Physica Scripta, 0, , .	2.5	1
49	Dynamic symmetry breaking and structure-preserving analysis on the longitudinal wave in an elastic rod with a variable cross-section. Applied Mathematics and Mechanics (English Edition), 2022, 43, 81-92.	3.6	1
50	Analysis on Existence of New Stable Attitude of Spatial Flexible Damping Beam. Journal of Physics: Conference Series, 2020, 1545, 012009.	0.4	0