Xiao-Dong Yang

List of Publications by Year
in descending order

147	3,062	136940 32	206102 48
papers	citations	h-index	g-index
152	152	152	1176
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Resonant orbit search and stability analysis for elongated asteroids. Astrodynamics, 2023, 7, 51-67.	2.4	3
2	Belt Model. , 2022, , 173-219.		0
3	Control of Axially Moving Strings and Beams. , 2022, , 125-172.		0
4	Plate Model. , 2022, , 233-263.		0
5	Beam Model. , 2022, , 53-123.		0
6	String Model. , 2022, , 13-51.		0
7	Control of Axially Moving Systems. , 2022, , .		8
8	Dynamic Characteristics Analysis of a Rigid Body System with Spatial Multi-Point Supports. Applied Sciences (Switzerland), 2022, 12, 746.	2.5	1
9	Parametric amplification performance analysis of a vibrating beam micro-gyroscope with size-dependent and fringing field effects. Applied Mathematical Modelling, 2021, 91, 111-124.	4.2	14
10	Mathematical Analysis of Two Phase Saturated Nanofluid Influenced by Magnetic Field Gradient. Inventions, 2021, 6, 26.	2.5	3
11	Active tuning of elastic wave propagation in a piezoelectric metamaterial beam. AIP Advances, 2021, 11, .	1.3	5
12	Panel flutter mechanism of rectangular solar sails based on traveling mode analysis. Aerospace Science and Technology, 2021, 118, 107015.	4.8	8
13	Stability and bifurcation analyses for exterior resonant families in Earth-Moon system. Results in Physics, 2021, 31, 104961.	4.1	5
14	A Novel Type of Bi-Gyroscopic System Undergoing Both Rotating and Spinning Motions. Journal of Vibration and Acoustics, Transactions of the ASME, 2021, 143, .	1.6	4
15	Post-Buckling Spring Vibration Isolator Using Silicone Gel Column: A Theoretical and Experimental Study. Applied Sciences (Switzerland), 2021, 11, 10559.	2.5	3
16	A Hybrid Nonlinear Active Control Strategy Combining Dry Friction Control and Nonlinear Velocity Compensation Control. Applied Sciences (Switzerland), 2021, 11, 11670.	2.5	0
17	Modeling and Dynamic Analysis of Body-Fixed and Space-Fixed Flexible Rotors. Journal of Vibration Engineering and Technologies, 2020, 8, 59-66.	2.2	3
18	Dynamic analysis, active and passive vibration control of double-layer hourglass lattice truss structures. Journal of Sandwich Structures and Materials, 2020, 22, 1329-1356.	3.5	9

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19	Modeling and Stability Analysis of a Flexible Rotor Based on the Timoshenko Beam Theory. Acta Mechanica Solida Sinica, 2020, 33, 281-293.	1.9	5
20	Wave properties and band gap analysis of deploying pipes conveying fluid with periodic varying parameters. Applied Mathematical Modelling, 2020, 77, 522-538.	4.2	30
21	Spacecraft Vibration Control Based on Extended Modal Decoupling of Vernier-Gimballing Magnetically Suspension Flywheels. IEEE Transactions on Industrial Electronics, 2020, 67, 4066-4076.	7.9	21
22	Manipulating transverse waves through 1D metamaterial by longitudinal vibrations. International Journal of Mechanical Sciences, 2020, 168, 105296.	6.7	23
23	Dynamics of Structures with Distributed Gyroscopes: Modal Discretization Versus Spatial Discretization. Applied Sciences (Switzerland), 2020, 10, 160.	2.5	1
24	Elastic Wave Properties of an Adaptive Electromechanical Metamaterial Beam. Shock and Vibration, 2020, 2020, 1-14.	0.6	4
25	Dynamic analysis of a deployable/retractable damped cantilever beam. Applied Mathematics and Mechanics (English Edition), 2020, 41, 1321-1332.	3.6	11
26	Dynamical analysis of spinning functionally graded pipes conveying fluid with multiple spans. Applied Mathematical Modelling, 2020, 83, 454-469.	4.2	57
27	Wave Manipulation of Two-Dimensional Periodic Lattice by Parametric Excitation. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	9
28	Static Nodes of an Axially Moving String With Time-Varying Supports. Journal of Vibration and Acoustics, Transactions of the ASME, 2020, 142, .	1.6	3
29	Analytical Investigation of Vibration Characteristic about Spinning Cantilever Beam. , 2020, , .		0
30	Parametric resonance orbit analysis for irregular shaped asteroids based on the perturbed particle-linkage model. Research in Astronomy and Astrophysics, 2020, 20, 193.	1.7	5
31	Flexural waves in metamatrerial beam with mechanical and electromechnical resonators. , 2020, , .		0
32	Coupled Bi-Flexuralâ€"Torsional Vibration of Fluid-Conveying Pipes Spinning About an Eccentric Axis. International Journal of Structural Stability and Dynamics, 2019, 19, 1950003.	2.4	16
33	On the gyroscopic and centrifugal effects in the free vibration of rotating beams. JVC/Journal of Vibration and Control, 2019, 25, 219-227.	2.6	17
34	Novel Subharmonic Resonance Periodic Orbits of a Solar Sail in Earthâ€"Moon System. Journal of Guidance, Control, and Dynamics, 2019, 42, 2532-2540.	2.8	18
35	Transient nonlinear responses of an auxetic honeycomb sandwich plate under impact loads. International Journal of Impact Engineering, 2019, 134, 103383.	5.0	71
36	Modeling and Performance Investigation of a Piezoelectric Vibrating Gyroscope. IEEE Sensors Journal, 2019, 19, 9832-9840.	4.7	10

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37	A Unified Approach of Free Vibration Analysis for Stiffened Cylindrical Shell with General Boundary Conditions. Mathematical Problems in Engineering, 2019, 2019, 1-14.	1.1	3
38	Substitution method: A technique to study dynamics of both non-gyroscopic and gyroscopic systems. Journal of Sound and Vibration, 2019, 458, 510-521.	3.9	3
39	On Nonlinear Motions of Two-Degree-of-Freedom Nonlinear Systems with Repeated Linearized Natural Frequencies. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2019, 29, 1950132.	1.7	0
40	Coupled Bending–Bending–Axial–Torsional Vibrations of Rotating Blades. Acta Mechanica Solida Sinica, 2019, 32, 326-338.	1.9	8
41	The modeling and dynamic analysis of two jointed beams with clearance. Applied Mathematical Modelling, 2019, 74, 528-539.	4.2	6
42	Free vibration analysis of a spinning piezoelectric beam with geometric nonlinearities. Acta Mechanica Sinica/Lixue Xuebao, 2019, 35, 879-893.	3.4	17
43	Vibrations in 3D space of a spinning supported pipe exposed to internal and external annular flows. Journal of Fluids and Structures, 2019, 87, 247-262.	3.4	29
44	Free Vibrations and Energy Transfer Analysis of the Vibrating Piezoelectric Gyroscope Based on the Linear and Nonlinear Decoupling Methods. Journal of Vibration and Acoustics, Transactions of the ASME, 2019, 141, .	1.6	9
45	Flutter Mechanism of Timoshenko Beams in Supersonic Flow. Journal of Aerospace Engineering, 2019, 32, .	1.4	7
46	Initial Parameter Analysis about Resonant Orbits in Earth-Moon System. Advances in Astronomy, 2019, 2019, 1-17.	1.1	6
47	On Travelling Wave Modes of Axially Moving String and Beam. Shock and Vibration, 2019, 2019, 1-13.	0.6	8
48	Dynamic Characteristics of a Rotating Tapered Cantilevered Timoshenko Beam with Preset and Pre-Twist Angles. International Journal of Structural Stability and Dynamics, 2019, 19, 1950043.	2.4	9
49	Halo orbits construction based on invariant manifold technique. Acta Astronautica, 2019, 163, 24-37.	3.2	4
50	Saturation and stability in internal resonance of a rotating blade under thermal gradient. Journal of Sound and Vibration, 2019, 440, 34-50.	3.9	32
51	Planar periodic orbits' construction around libration points with invariant manifold technique. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2019, 233, 498-509.	1.3	4
52	Spacecraft Angular Rates and Angular Acceleration Estimation Using Single-Gimbal Magnetically Suspended Control Moment Gyros. IEEE Transactions on Industrial Electronics, 2019, 66, 440-450.	7.9	34
53	A series solution for free vibration of moderately thick cylindrical shell with general boundary conditions. Engineering Structures, 2018, 165, 422-440.	5.3	25
54	An improved numerical method for constructing Halo/Lissajous orbits in a full solar system model. Chinese Journal of Aeronautics, 2018, 31, 1362-1374.	5.3	18

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55	Gyroscopic modes decoupling method in parametric instability analysis of gyroscopic systems. Acta Mechanica Sinica/Lixue Xuebao, 2018, 34, 963-969.	3.4	4
56	Transverse free vibration and stability analysis of spinning pipes conveying fluid. International Journal of Mechanical Sciences, 2018, 137, 195-204.	6.7	96
57	Complex modes and traveling waves in axially moving Timoshenko beams. Applied Mathematics and Mechanics (English Edition), 2018, 39, 597-608.	3.6	16
58	Parametric stability analysis for planar bicircular restricted four-body problem. Astrodynamics, 2018, 2, 147-159.	2.4	13
59	Forced Response Analysis of Pipes Conveying Fluid by Nonlinear Normal Modes Method and Iterative Approach. Journal of Computational and Nonlinear Dynamics, 2018, 13, .	1.2	6
60	Periodic motion analysis around the libration points by polynomial expansion method in planar circular restricted three-body problem. Nonlinear Dynamics, 2018, 91, 39-54.	5.2	11
61	Dynamical modeling and free vibration analysis of spinning pipes conveying fluid with axial deployment. Journal of Sound and Vibration, 2018, 417, 65-79.	3.9	48
62	Global dynamics of a flexible asymmetrical rotor. Nonlinear Dynamics, 2018, 91, 1041-1060.	5.2	13
63	Linear, nonlinear dynamics, and sensitivity analysis of a vibratory ring gyroscope. Theoretical and Applied Mechanics Letters, 2018, 8, 393-403.	2.8	10
64	Model formulation and modal analysis of a rotating elastic uniform Timoshenko beam with setting angle. European Journal of Mechanics, A/Solids, 2018, 72, 209-222.	3.7	25
65	Free Vibrations and Nonlinear Responses for a Cantilever Honeycomb Sandwich Plate. Advances in Materials Science and Engineering, 2018, 2018, 1-12.	1.8	5
66	Modulating Band Gap Structure by Parametric Excitations. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	2.2	15
67	Nonlinear bending, buckling and vibration of bi-directional functionally graded nanobeams. Composite Structures, 2018, 204, 313-319.	5.8	89
68	Dynamics of a beam with both axial moving and spinning motion: An example of bi-gyroscopic continua. European Journal of Mechanics, A/Solids, 2018, 69, 231-237.	3.7	30
69	Nonlinear Free Vibration of Spinning Viscoelastic Pipes Conveying Fluid. International Journal of Applied Mechanics, 2018, 10, 1850076.	2.2	17
70	On Parametric Instability Boundaries of Axially Moving Beams with Internal Resonance. Acta Mechanica Solida Sinica, 2018, 31, 470-483.	1.9	14
71	Global dynamics of an autoparametric beam structure. Nonlinear Dynamics, 2017, 88, 1329-1343.	5.2	16
72	Nonlinear vibration analysis of axially moving strings based on gyroscopic modes decoupling. Journal of Sound and Vibration, 2017, 393, 308-320.	3.9	38

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73	Global dynamics of composite panels with free-layer damping treatment in subsonic flow. Composite Structures, 2017, 168, 247-258.	5.8	6
74	Nonlinear Dynamics of Flexible L-Shaped Beam Based on Exact Modes Truncation. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750035.	1.7	12
75	Wave propagation in functionally graded piezoelectric-piezomagnetic rectangular bars. Science and Engineering of Composite Materials, 2017, 24, 317-326.	1.4	6
76	Global Dynamics of Pipes Conveying Pulsating Fluid in the Supercritical Regime. International Journal of Applied Mechanics, 2017, 09, 1750029.	2.2	37
77	Continuous model and nonlinear dynamic responses of circular mesh antenna clamped at one side. Engineering Structures, 2017, 151, 115-135.	5.3	38
78	Analytical and numerical construction of vertical periodic orbits about triangular libration points based on polynomial expansion relations among directions. Astrophysics and Space Science, 2017, 362, 1.	1.4	7
79	Dynamic analysis of a rotating tapered cantilever Timoshenko beam based on the power series method. Applied Mathematics and Mechanics (English Edition), 2017, 38, 1425-1438.	3.6	27
80	Free Vibration Analysis of Pipes Conveying Fluid Based on Linear and Nonlinear Complex Modes Approach. International Journal of Applied Mechanics, 2017, 09, 1750112.	2.2	8
81	Global bifurcations and chaotic motions of a flexible multi-beam structure. International Journal of Non-Linear Mechanics, 2017, 95, 264-271.	2.6	10
82	Linear and nonlinear modal analysis of the axially moving continua based on the invariant manifold method. Acta Mechanica, 2017, 228, 465-474.	2.1	17
83	Homoclinic orbits and chaos of a supercritical composite panel with free-layer damping treatment in subsonic flow. Composite Structures, 2017, 159, 288-298.	5.8	7
84	Multi-pulse chaotic dynamics of an unbalanced Jeffcott rotor with gravity effect. Nonlinear Dynamics, 2017, 87, 647-664.	5.2	15
85	Approximate Analytical Methodology for the Restricted Three-Body and Four-Body Models Based on Polynomial Series. International Journal of Aerospace Engineering, 2016, 2016, 1-8.	0.9	4
86	Frequency Analysis of Functionally Graded Curved Pipes Conveying Fluid. Advances in Materials Science and Engineering, 2016, 2016, 1-9.	1.8	7
87	Elliptic Motions and Control of Rotors Suspending in Active Magnetic Bearings. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	22
88	Modal Analysis of the Gyroscopic Continua: Comparison of Continuous and Discretized Models. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2.2	32
89	Transient thermal camouflage and heat signature control. Applied Physics Letters, 2016, 109, 121905.	3.3	79
90	On the Perturbation Methods for Vibration Analysis of Linear Time-Varying Systems. International Journal of Applied Mechanics, 2016, 08, 1650035.	2.2	13

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91	Energy analysis and trajectory design for low-energy escaping orbit in Earth–Moon system. Nonlinear Dynamics, 2016, 85, 463-478.	5.2	13
92	The Nonlinear Dynamical Analysis of a Sandwich Plate with In-Plane Loading in Supersonic Flow. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1650144.	1.7	6
93	Invariant and energy analysis of an axially retracting beam. Chinese Journal of Aeronautics, 2016, 29, 952-961.	5.3	8
94	A comparative analysis of modal motions for the gyroscopic and non-gyroscopic two degree-of-freedom conservative systems. Journal of Sound and Vibration, 2016, 385, 300-309.	3.9	4
95	Energetics and Invariants of Axially Deploying Beam with Uniform Velocity. AIAA Journal, 2016, 54, 2183-2189.	2.6	22
96	Damping effect on supersonic panel flutter of composite plate with viscoelastic mid-layer. Composite Structures, 2016, 137, 105-113.	5.8	42
97	Stationkeeping strategy for quasi-periodic orbit around Earth–Moon L_2 point. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2016, 230, 760-775.	1.3	13
98	Liquid material identification by using electrical capacitance tomography. Materials Research Innovations, 2015, 19, S1-195-S1-198.	2.3	0
99	Passive and adaptive vibration suppression of pipes conveying fluid with variable velocity. JVC/Journal of Vibration and Control, 2014, 20, 1293-1300.	2.6	64
100	Analysis on nonlinear dynamics of a deploying composite laminated cantilever plate. Nonlinear Dynamics, 2014, 76, 69-93.	5.2	43
101	Microfluid-induced nonlinear free vibration of microtubes. International Journal of Engineering Science, 2014, 76, 47-55.	5.0	69
102	Nonlinear dynamics of axially moving beam with coupled longitudinal–transversal vibrations. Nonlinear Dynamics, 2014, 78, 2547-2556.	5.2	88
103	Nonlinear dynamic behaviors of a deploying-and-retreating wing with varying velocity. Journal of Sound and Vibration, 2013, 332, 6785-6797.	3.9	43
104	Exact solution of supercritical axially moving beams: symmetric and anti-symmetric configurations. Archive of Applied Mechanics, 2013, 83, 899-906.	2.2	7
105	Closed-form approximate solution for natural frequency of axially moving beams. International Journal of Mechanical Sciences, 2013, 74, 154-160.	6.7	19
106	Transverse Vibrations and Stability of Axially Traveling Sandwich Beam With Soft Core. Journal of Vibration and Acoustics, Transactions of the ASME, 2013, 135, .	1.6	9
107	Nonlinear Parametric Resonance of a Fractional Damped Axially Moving String. Journal of Vibration and Acoustics, Transactions of the ASME, 2013, 135, .	1.6	12
108	BIFURCATIONS AND CHAOS OF AN AXIALLY MOVING PLATE UNDER EXTERNAL AND PARAMETRIC EXCITATIONS. International Journal of Structural Stability and Dynamics, 2012, 12, 1250023.	2.4	7

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109	Dynamical analysis of axially moving plate by finite difference method. Nonlinear Dynamics, 2012, 67, 997-1006.	5.2	71
110	Stability Analysis of Fluid-Conveying Pipes with Supported Ends. Advanced Science Letters, 2012, 15, 133-138.	0.2	0
111	Stability and Natural Characteristics of a Supported Beam. Advanced Materials Research, 2011, 338, 467-472.	0.3	2
112	Vibrations and Stability of an Axially Moving Rectangular Composite Plate. Journal of Applied Mechanics, Transactions ASME, 2011, 78, .	2.2	55
113	A differential Quadrature out-of-plane vibration analysis of axially moving thin plates. , 2011, , .		0
114	Steady-State Response of a Trilinear Hysteretic System. Advanced Science Letters, 2011, 4, 1137-1142.	0.2	0
115	Dynamic stability of axially accelerating Timoshenko beam: Averaging method. European Journal of Mechanics, A/Solids, 2010, 29, 81-90.	3.7	48
116	Vibration and Stability of an Axially Moving Beam on Elastic Foundation. Advances in Structural Engineering, 2010, 13, 241-247.	2.4	19
117	Parametric resonance of axially moving Timoshenko beams with time-dependent speed. Nonlinear Dynamics, 2009, 58, 715-724.	5.2	41
118	Nonlinear vibrations of nano-beams accounting for nonlocal effect using a multiple scale method. Science in China Series D: Earth Sciences, 2009, 52, 617-621.	0.9	43
119	Nonlinear vibrations of axially moving Timoshenko beams under weak and strong external excitations. Journal of Sound and Vibration, 2009, 320, 1078-1099.	3.9	37
120	EFFECT OF INTERNAL VISCOSITY OF POLYMERIC FLUIDS UNDER STRONG EXTENSIONAL FLOWS. Chinese Journal of Polymer Science (English Edition), 2009, 27, 189.	3.8	5
121	Parametric Resonances of Clamped-clamped Pipes Conveying Fluid by Incremental Harmonic Balance Method. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2009, 45, 126.	0.5	1
122	Natural frequencies, modes and critical speeds of axially moving Timoshenko beams with different boundary conditions. International Journal of Mechanical Sciences, 2008, 50, 1448-1458.	6.7	51
123	Dynamic analysis of polymeric fluid in shear flow for dumbbell model with internal viscosity. Central South University, 2008, 15, 17-20.	0.5	1
124	A Clustering Model for Multicast on Hypercube Network. , 2008, , 211-221.		1
125	Simulation of RNA Silencing Pathway for Time-Dependent Transgene Transcription Rate. AIP Conference Proceedings, 2007, , .	0.4	2
126	Effect of internal viscosity on Brownian dynamics of DNA molecules in shear flow. Computational Biology and Chemistry, 2007, 31, 110-114.	2.3	13

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127	Nonlinear free transverse vibration of an axially moving beam: Comparison of two models. Journal of Sound and Vibration, 2007, 299, 348-354.	3.9	48
128	Dynamic stability of a beam-model viscoelastic pipe for conveying pulsative fluid. Acta Mechanica Solida Sinica, 2007, 20, 350-356.	1.9	42
129	Determination of the natural frequencies of axially moving beams by the method of multiple scales. Journal of Shanghai University, 2007, 11, 251-254.	0.1	8
130	A New Constitutive Model for the Analysis of Semi-flexible Polymers with Internal Viscosity. Lecture Notes in Computer Science, 2007, , 834-841.	1.3	2
131	Transverse nonlinear dynamics of axially accelerating viscoelastic beams based on 4-term Galerkin truncation. Chaos, Solitons and Fractals, 2006, 27, 748-757.	5.1	45
132	Vibration and stability of an axially moving viscoelastic beam with hybrid supports. European Journal of Mechanics, A/Solids, 2006, 25, 996-1008.	3.7	80
133	Stability in parametric resonance of axially accelerating beams constituted by Boltzmann's superposition principle. Journal of Sound and Vibration, 2006, 289, 54-65.	3.9	26
134	Non-linear forced vibration of axially moving viscoelastic beams. Acta Mechanica Solida Sinica, 2006, 19, 365-373.	1.9	31
135	DYNAMIC STABILITY OF AN AXIALLY ACCELERATING VISCOELASTIC BEAM WITH TWO FIXED SUPPORTS. International Journal of Structural Stability and Dynamics, 2006, 06, 31-42.	2.4	9
136	STABILITY AND CRITICAL FLOW VELOCITY OF SUPPORTED PIPES CONVEYING FLUID. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2006, 42, 131.	0.5	4
137	Stability in parametric resonance of axially moving viscoelastic beams with time-dependent speed. Journal of Sound and Vibration, 2005, 284, 879-891.	3.9	96
138	An investigation of lithium intercalation into the carbon nanotubes by a.c. impedance. Journal of Electroanalytical Chemistry, 2005, 580, 340-347.	3.8	28
139	Steady-state response of axially moving viscoelastic beams with pulsating speed: comparison of two nonlinear models. International Journal of Solids and Structures, 2005, 42, 37-50.	2.7	147
140	Bifurcation and chaos of an axially accelerating viscoelastic beam. Chaos, Solitons and Fractals, 2005, 23, 249-258.	5.1	89
141	Dynamic stability of axially moving viscoelastic beams with pulsating speed. Applied Mathematics and Mechanics (English Edition), 2005, 26, 989-995.	3.6	6
142	Design and fabrication of L5 photonic band gap nanocavities for stimulated raman amplification in monolithic silicon. , 2005, , .		0
143	Velocity-dependent symmetries and conserved quantities of the constrained dynamical systems. Chinese Physics B, 2004, 13, 287-291.	1.3	9
144	Transverse vibrations of an axially accelerating viscoelastic string with geometric nonlinearity. Journal of Engineering Mathematics, 2004, 48, 171-182.	1.2	27

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145	Dynamic stability of an axially accelerating viscoelastic beam. European Journal of Mechanics, A/Solids, 2004, 23, 659-666.	3.7	67
146	Lie symmetries and conserved quantities of controllable nonholonomic dynamical systems. Chinese Physics B, 2003, 12, 695-699.	1.3	34
147	Flutter Analysis of Viscoelastic Panels in Supersonic Flow. Advanced Materials Research, 0, 710, 256-259.	0.3	3