Xiaoting Rui

List of Publications by Year
in descending order

88 papers	1,296 citations	394421 19 h-index	434195 31 g-index
91 all docs	91 docs citations	91 times ranked	451 citing authors

#	ARTICLE	IF	CITATIONS
1	A simplified dynamic model and control for a multiple launch rocket system. JVC/Journal of Vibration and Control, 2022, 28, 2288-2300.	2.6	2
2	Design of multi-channel bypass magnetorheological damper with three working modes. International Journal of Mechanics and Materials in Design, 2022, 18, 155-167.	3.0	11
3	Study on the dynamic mechanical properties of magnetorheological elastomer (MRE) with Fe@C. Journal of Intelligent Material Systems and Structures, 2022, 33, 1115-1125.	2.5	1
4	Influences of the Random Stacking and Charge's Diameter on Compression and Fracture Process of Propellant Charge. Propellants, Explosives, Pyrotechnics, 2022, 47, .	1.6	2
5	Tracking control of a 3-dimensional piezo-driven micro-positioning system using a dynamic Prandtlâ€"Ishlinskii model. Journal of Intelligent Material Systems and Structures, 2022, 33, 1231-1243.	2.5	2
6	Control and experimental study of 6-DOF vibration isolation platform with magnetorheological damper. Mechatronics, 2022, 81, 102706.	3.3	5
7	Effect of coupling misalignment fault on vibration response and machined surface topography in ultra-precision lathe turning. International Journal of Advanced Manufacturing Technology, 2022, 120, 691-706.	3.0	3
8	Multibody system transfer matrix method: The past, the present, and the future. International Journal of Mechanical System Dynamics, 2022, 2, 3-26.	2.8	32
9	Optimal design of 6-DOF vibration isolation platform based on transfer matrix method for multibody systems. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 127-137.	3.4	17
10	Design and control of helicopter main reducer vibration isolation platform with magnetorheological dampers. International Journal of Mechanics and Materials in Design, 2021, 17, 345-366.	3.0	10
11	Current Driver Design for Electromagnetic Coil Using Adaptive Active Disturbance Rejection Control. Shock and Vibration, 2021, 2021, 1-12.	0.6	1
12	Contact dynamics analysis of the single-pin meshing pair of a tracked vehicle. Nonlinear Dynamics, 2021, 104, 1139-1155.	5.2	3
13	On modeling and dynamics of a multiple launch rocket system. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2021, 235, 1664-1686.	1.3	1
14	Dynamics modeling and simulation of tracked armored vehicle with planar clearance trunnion-bearing revolute joint. Journal of Mechanical Science and Technology, 2021, 35, 2285-2302.	1.5	3
15	Dynamic Simulation of Space Debris Cloud Capture Using the Tethered Net. Space: Science & Technology, 2021, 2021, .	2.5	13
16	Study on Transfer Matrix Method for the Planar Multibody System With Closed-Loops. Journal of Computational and Nonlinear Dynamics, 2021, 16, .	1.2	3
17	Dynamics Modelling and Simulating of Ultra-precision Fly-Cutting Machine Tool. International Journal of Precision Engineering and Manufacturing, 2020, 21, 189-202.	2.2	23
18	A new version of the Riccati transfer matrix method for multibody systems consisting of chain and branch bodies. Multibody System Dynamics, 2020, 49, 337-354.	2.7	15

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19	Dynamics modeling and control of active track tensioning system for tracked vehicle. JVC/Journal of Vibration and Control, 2020, 26, 989-1000.	2.6	1
20	Research on the dynamic characteristics of the ultra-precision fly cutting machine tool and its influence on the mid-frequency waviness of the surface. International Journal of Advanced Manufacturing Technology, 2020, 106, 441-454.	3.0	12
21	Mechanism and Characteristics of Global Varying Compliance Parametric Resonances in a Ball Bearing. Applied Sciences (Switzerland), 2020, 10, 7849.	2.5	7
22	Suppression of Complex Hysteretic Resonances in Varying Compliance Vibration of a Ball Bearing. Shock and Vibration, 2020, 2020, 1-11.	0.6	2
23	Water-Dispersible Hydrothermal Aramid Nanofibers Reinforced Styrene-Butadiene Rubber with Enhanced Mechanical Behaviour and Solvent Resistance. Fibers and Polymers, 2020, 21, 1808-1815.	2.1	4
24	Improved incremental transfer matrix method for nonlinear rotor-bearing system. Acta Mechanica Sinica/Lixue Xuebao, 2020, 36, 1119-1132.	3.4	5
25	A Hotspot Model for PBX Explosive Charge Ignition in a Launch Environment.. Combustion Science and Technology, 2020, , 1-19.	2.3	1
26	A calculation method of interior ballistic two-phase flow considering the compression and fracture process of propellant bed. International Communications in Heat and Mass Transfer, 2020, 115, 104601.	5.6	6
27	A Novel Vibration Control System Applying Annularly Arranged Thrusters for Multiple Launch Rocket System in Launching Process. Shock and Vibration, 2020, 2020, 1-14.	0.6	1
28	Control of Period-Doubling and Chaos in Varying Compliance Resonances for a Ball Bearing. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	11
29	Theoretical modeling and numerical solution methods for flexible multibody system dynamics. Nonlinear Dynamics, 2019, 98, 1519-1553.	5.2	56
30	Study on the geometrical nonlinearity and order reduction for the dynamics of a spatial curved beam. Multibody System Dynamics, 2019, 47, 183-202.	2.7	0
31	The study of natural rubber/polybutadiene rubber hybrid matrix-based magnetorheological elastomer. Journal of Thermoplastic Composite Materials, 2019, , 089270571987822.	4.2	4
32	Adaptive Control of a Piezo-Actuated Steering Mirror to Restrain Laser-Beam Jitter. IEEE Transactions on Industrial Electronics, 2019, 66, 7873-7881.	7.9	11
33	Dynamic mechanical properties of FeSi alloy particles-filled magnetorheological elastomers. Polymer-Plastics Technology and Materials, 2019, 58, 1625-1637.	1.3	3
34	Propellant shelf-life prediction under temperature and relative humidity conditions based on DPA kinetics. Journal of Energetic Materials, 2019, 37, 407-419.	2.0	7
35	Transfer matrix method for multibody systems (Rui method) and its applications. Science China Technological Sciences, 2019, 62, 712-720.	4.0	44
36	Size effect of carbon black on the structure and mechanical properties of magnetorheological elastomers. Journal of Materials Science, 2019, 54, 1326-1340.	3.7	19

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37	Study on test dynamics method of non-full loading firing for multiple launch rocket system. Mechanical Systems and Signal Processing, 2019, 122, 463-479.	8.0	9
38	Vibration Characteristics Analysis of Multibody Systems With Random Parameters Based on MSTMM. , 2019, , .		0
39	A Novel Method for Prediction of Propellant Shelfâ€Life Based on Arrhenius Equation. Propellants, Explosives, Pyrotechnics, 2018, 43, 348-354.	1.6	11
40	Design and implementation of an adaptive Kalman filtering for the launcher of multiple launch rocket system. International Journal of Adaptive Control and Signal Processing, 2018, 32, 447-463.	4.1	4
41	Dynamics analysis and fuzzy anti-swing control design of overhead crane system based on Riccati discrete time transfer matrix method. Multibody System Dynamics, 2018, 43, 279-295.	2.7	24
42	Flapwise Vibration Computations of Coupled Helicopter Rotor/Fuselage: Application of Multibody System Dynamics. AIAA Journal, 2018, 56, 818-835.	2.6	13
43	Study on simulation and experiment of control for multiple launch rocket system by computed torque method. Nonlinear Dynamics, 2018, 91, 1639-1652.	5.2	8
44	Study on automatic deduction method of overall transfer equation for tree systems as well as closed-loop-and-branch-mixed systems. Advances in Mechanical Engineering, 2018, 10, 168781401878875.	1.6	3
45	A Novel Method for Gas Generation Law Calculation of Fractured Propellant Charge. Propellants, Explosives, Pyrotechnics, 2018, 43, 898-903.	1.6	4
46	A novel method for the dynamic modeling of Stewart parallel mechanism. Mechanism and Machine Theory, 2018, 126, 397-412.	4.5	23
47	Direct differentiation method for sensitivity analysis based on transfer matrix method for multibody systems. International Journal for Numerical Methods in Engineering, 2018, 115, 1601-1622.	2.8	3
48	Study on the Dynamics Response of Ultra-Precision Single-Point Diamond Fly-Cutting Machine Tool As Multi-Rigid-Flexible-Body System Based on Transfer Matrix Method for Multibody Systems. , 2018, , .		2
49	Active Vibration Control Design Method Based on Transfer Matrix Method for Multibody Systems. Journal of Engineering Mechanics - ASCE, 2017, 143, .	2.9	8
50	Study on Dynamic Burning Rate Equation of Propellant. Propellants, Explosives, Pyrotechnics, 2017, 42, 683-690.	1.6	1
51	New Developments in Multibody System Dynamics and Its Applications 2015. Advances in Mechanical Engineering, 2017, 9, 168781401769568.	1.6	0
52	Riccati Transfer Matrix Method for Linear Tree Multibody Systems. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	2.2	17
53	Substructuring technique for dynamics analysis of flexible beams with large deformation. Journal of Shanghai Jiaotong University (Science), 2017, 22, 562-569.	0.9	10
54	Visualized simulation and design method of mechanical system dynamics based on transfer matrix method for multibody systems. Advances in Mechanical Engineering, 2017, 9, 168781401771472.	1.6	18

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55	Research on the Adaptive Damping Method of Strap-Down Inertial Measurement Unit Based on the Magneto Rheological Technology. Shock and Vibration, 2017, 2017, 1-14.	0.6	1
56	Study on launch dynamics of the tank marching fire. Journal of Shanghai Jiaotong University (Science), 2016, 21, 443-449.	0.9	21
57	Study on automatic deduction method of overall transfer equation for branch multibody system. Advances in Mechanical Engineering, 2016, 8, 168781401665158.	1.6	14
58	Distributed parallel computing of the recursive eigenvalue search in the context of transfer matrix method for multibody systems. Advances in Mechanical Engineering, 2016, 8, 168781401668073.	1.6	2
59	A new version of transfer matrix method for multibody systems. Multibody System Dynamics, 2016, 38, 137-156.	2.7	57
60	Dynamics design for multiple launch rocket system using transfer matrix method for multibody system. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2016, 230, 2557-2568.	1.3	13
61	Deduction method of the overall transfer equation of linear controlled multibody systems. Multibody System Dynamics, 2016, 38, 263-295.	2.7	9
62	Study on the Natural Vibration Characteristics of Flexible Missile With Thrust by Using Riccati Transfer Matrix Method. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2.2	20
63	Discrete Time Transfer Matrix Method for Projectile Trajectory Prediction. Journal of Aerospace Engineering, 2015, 28, 04014057.	1.4	4
64	Transfer matrix method for determination of the natural vibration characteristics of elastically coupled launch vehicle boosters. Acta Mechanica Sinica/Lixue Xuebao, 2015, 31, 570-580.	3.4	24
65	Aerothermoelastic analysis of panel flutter based on the absolute nodal coordinate formulation. Multibody System Dynamics, 2015, 33, 163-178.	2.7	32
66	Numerical Calculation of Effect of Elastic Deformation on Aerodynamic Characteristics of a Rocket. International Journal of Aerospace Engineering, 2014, 2014, 1-11.	0.9	25
67	Recursive eigenvalue search algorithm for transfer matrix method of linear flexible multibody systems. Multibody System Dynamics, 2014, 32, 429-444.	2.7	61
68	Study on Launch Dynamics of Self-Propelled Artillery Based on Transfer Matrix Method of Multibody System. Advances in Mechanical Engineering, 2014, 6, 308049.	1.6	5
69	Automatic Deduction Theorem of Overall Transfer Equation of Multibody System. Advances in Mechanical Engineering, 2014, 6, 378047.	1.6	43
70	Free Vibration Characteristic of Multilevel Beam Based on Transfer Matrix Method of Linear Multibody Systems. Advances in Mechanical Engineering, 2014, 6, 792478.	1.6	8
71	Controller Parameters Tuning Based on Transfer Matrix Method for Multibody Systems. Advances in Mechanical Engineering, 2014, 6, 957684.	1.6	12
72	New Developments in Multibody System Dynamics and Its Applications. Advances in Mechanical Engineering, 2014, 6, 671604.	1.6	0

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73	Discrete Time Transfer Matrix Method for Launch Dynamics Modeling and Cosimulation of Self-Propelled Artillery System. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	8
74	Study on the Dynamics of Laser Gyro Strapdown Inertial Measurement Unit System Based on Transfer Matrix Method for Multibody System. Advances in Mechanical Engineering, 2013, 5, 854583.	1.6	9
75	Transfer Matrix Method for Natural Vibration Analysis of Tree System. Mathematical Problems in Engineering, 2012, 2012, 1-19.	1.1	11
76	Static/Dynamic Edge Movability Effect on Non-Linear Aerothermoelastic Behavior of Geometrically Imperfect Curved Skin Panel: Flutter and Post-Flutter Analysis. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	2.2	10
77	Perturbation Finite Element Transfer Matrix Method for Random Eigenvalue Problems of Uncertain Structures. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	2.2	27
78	Panel flutter analysis of plate element based on the absolute nodal coordinate formulation. Multibody System Dynamics, 2012, 27, 135-152.	2.7	17
79	A parametric study on supersonic/hypersonic flutter behavior of aero-thermo-elastic geometrically imperfect curved skin panel. Acta Mechanica, 2011, 222, 41-57.	2.1	36
80	Discrete time transfer matrix method for dynamics analysis of complex weapon systems. Science China Technological Sciences, 2011, 54, 1061-1071.	4.0	17
81	Dynamic modeling and H âˆž independent modal space vibration control of laminate plates. Science China: Physics, Mechanics and Astronomy, 2011, 54, 1638-1650.	5.1	5
82	Discrete Time Transfer Matrix Method for Dynamic Modeling of Complex Spacecraft With Flexible Appendages. Journal of Computational and Nonlinear Dynamics, 2011, 6, .	1.2	10
83	New efficient method for dynamic modeling andÂsimulation of flexible multibody systems moving inÂplane. Multibody System Dynamics, 2010, 24, 181-200.	2.7	19
84	Natural Vibrations of Open-Variable Thickness Circular Cylindrical Shells in High Temperature Field. Journal of Aerospace Engineering, 2010, 23, 205-212.	1.4	14
85	Transfer matrix method for linear multibody system. Multibody System Dynamics, 2008, 19, 179-207.	2.7	127
86	Riccati discrete time transfer matrix method for elastic beam undergoing large overall motion. Multibody System Dynamics, 2007, 18, 579-598.	2.7	44
87	Discrete Time Transfer Matrix Method for Multibody System Dynamics. Multibody System Dynamics, 2005, 14, 317-344.	2.7	90
88	Improved modeling and active disturbance rejection control of tank gun control system. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 0, , 095965182211045.	1.0	1