

# Geng Liu

## List of Publications by Year in descending order

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Version: 2024-02-01

59  
papers

925  
citations

567281

15  
h-index

501196

28  
g-index

59  
all docs

59  
docs citations

59  
times ranked

629  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of electromechanical actuators for More/All Electric aircraft systems. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2018, 232, 4128-4151.	2.1	138
2	A robust model for determining the mesh stiffness of cylindrical gears. Mechanism and Machine Theory, 2015, 87, 93-114.	4.5	120
3	Lightweight Deep Residual CNN for Fault Diagnosis of Rotating Machinery Based on Depthwise Separable Convolutions. IEEE Access, 2019, 7, 57023-57036.	4.2	61
4	A Lighted Deep Convolutional Neural Network Based Fault Diagnosis of Rotating Machinery. Sensors, 2019, 19, 2381.	3.8	50
5	A Frictional Heat Model of Planetary Roller Screw Mechanism Considering Load Distribution. Mechanics Based Design of Structures and Machines, 2015, 43, 164-182.	4.7	48
6	A Comprehensive Contact Analysis of Planetary Roller Screw Mechanism. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	46
7	Knee Joint Biomechanics in Physiological Conditions and How Pathologies Can Affect It: A Systematic Review. Applied Bionics and Biomechanics, 2020, 2020, 1-22.	1.1	33
8	Assistive devices of human knee joint: A review. Robotics and Autonomous Systems, 2020, 125, 103394.	5.1	32
9	Load distribution over threads of planetary roller screw mechanism with pitch deviation. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 4653-4666.	2.1	29
10	Local contact characteristics of threaded surfaces in a planetary roller screw mechanism. Mechanics Based Design of Structures and Machines, 2020, 48, 1-26.	4.7	26
11	Kinematics of Planetary Roller Screw Mechanism considering Helical Directions of Screw and Roller Threads. Mathematical Problems in Engineering, 2015, 2015, 1-11.	1.1	25
12	sEMG Based Human Motion Intention Recognition. Journal of Robotics, 2019, 2019, 1-12.	0.9	25
13	Load-related dynamic behaviors of a helical gear pair with tooth flank errors. Journal of Mechanical Science and Technology, 2018, 32, 1473-1487.	1.5	23
14	Effects of restitution coefficient and material characteristics on dynamic response of planar multi-body systems with revolute clearance joint. Journal of Mechanical Science and Technology, 2017, 31, 587-597.	1.5	20
15	Optimal rib layout design for noise reduction based on topology optimization and acoustic contribution analysis. Structural and Multidisciplinary Optimization, 2017, 56, 1093-1108.	3.5	17
16	Transient thermal analysis of standard planetary roller screw mechanism based on finite element method. Advances in Mechanical Engineering, 2018, 10, 168781401881230.	1.6	15
17	Study on Contact Characteristic of Nanoscale Asperities by Using Molecular Dynamics Simulations. Journal of Tribology, 2009, 131, .	1.9	13
18	Design of a Human Lower Limbs Exoskeleton for Biomechanical Energy Harvesting and Assist Walking. Energy Technology, 2021, 9, .	3.8	12

#	ARTICLE	IF	CITATIONS
19	sEMG-Based Continuous Estimation of Knee Joint Angle Using Deep Learning with Convolutional Neural Network. , 2019, , .		11
20	Influence of Nanoscale Textured Surfaces and Subsurface Defects on Friction Behaviors by Molecular Dynamics Simulation. Nanomaterials, 2019, 9, 1617.	4.1	11
21	Investigation on the uncertain factors of the elasticâ€“plastic contact characteristics of the planetary roller screw mechanism. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 1795-1806.	2.1	10
22	An improved thermal estimation model of the inverted planetary roller screw mechanism. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2018, 232, 4430-4446.	2.1	9
23	Bond graph-based dynamic model of planetary roller screw mechanism with consideration of axial clearance and friction. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2018, 232, 2899-2911.	2.1	9
24	Numerical and experimental investigation on electromechanical aileron actuation system with joint clearance. Journal of Mechanical Science and Technology, 2019, 33, 525-535.	1.5	9
25	Friction Property of Impact Sliding Contact under Vacuum and Microgravity. Microgravity Science and Technology, 2019, 31, 85-94.	1.4	9
26	Vibratory Power Flow Analysis of a Gear-Housing-Foundation Coupled System. Shock and Vibration, 2018, 2018, 1-13.	0.6	8
27	Different kinds of energy harvesters from human activities. International Journal of Energy Research, 2021, 45, 4841-4870.	4.5	8
28	Two-Dimensional Adaptive-Surface Elasto-Plastic Asperity Contact Model. Journal of Tribology, 2006, 128, 898-903.	1.9	7
29	AN ADAPTIVE MESHLESS COMPUTATIONAL SYSTEM FOR ELASTOPLASTIC CONTACT PROBLEMS. International Journal of Computational Methods, 2008, 05, 433-447.	1.3	7
30	Impedance Synthesis Based Vibration Analysis of Geared Transmission System. Shock and Vibration, 2017, 2017, 1-14.	0.6	7
31	Collaborative Simulation Environment Framework Based on SOA. , 2008, , .		6
32	Study on the dynamic interaction of multiple clearance joints for flap actuation system with a modified contact force model. Journal of Mechanical Science and Technology, 2020, 34, 2701-2713.	1.5	6
33	Cross-Domain Intelligent Fault Diagnosis Method of Rotating Machinery Using Multi-Scale Transfer Fuzzy Entropy. IEEE Access, 2021, 9, 95481-95492.	4.2	6
34	Dynamic Modeling of the Double-Nut Planetary Roller Screw Mechanism Considering Elastic Deformations. Journal of Computational and Nonlinear Dynamics, 2021, 16, .	1.2	6
35	Molecular Dynamics Simulation on Collision Frictional Properties of a Molybdenum Disulfide (MoS <sub>2</sub> ) Film in Microgravity Environment. Microgravity Science and Technology, 2021, 33, 1.	1.4	6
36	Molecular Dynamics Simulation on Friction Properties of Textured Surfaces in Nanoscale Rolling Contacts. Journal of Materials Engineering and Performance, 2022, 31, 5736-5746.	2.5	6

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37	Different Prevention and Treatment Strategies for Knee Osteoarthritis (KOA) with Various Lower Limb Exoskeletons – A Comprehensive Review. <i>Robotica</i> , 2021, 39, 1345-1367.	1.9	5
38	Gear fault diagnosis based on SVM. , 2010, , .		4
39	Modelling of Unidirectional Reciprocating Sliding Contacts of Nanoscale Textured Surfaces Considering the Impact Effects in Microgravity Environment. <i>Microgravity Science and Technology</i> , 2020, 32, 155-166.	1.4	4
40	Dimensional and Layout Optimization Design of Multistage Gear Drives Using Genetic Algorithms. <i>Mathematical Problems in Engineering</i> , 2020, 2020, 1-19.	1.1	4
41	A review of planetary roller screw mechanism for development and new trends. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2022, 236, 10822-10840.	2.1	4
42	Vibration Induced Reciprocating Sliding Contacts between Nanoscale Multi-Asperity Tips and a Textured Surface. <i>Microgravity Science and Technology</i> , 2020, 32, 79-88.	1.4	3
43	Kinematic & Dynamic Models of Human Lower Extremity during the Gait Cycle. , 2020, , .		3
44	RESEARCH ON LOAD BEARING CHARACTERISTICS OF PLANETARY ROLLER SCREW MECHANISM. <i>The Proceedings of the JSME International Conference on Motion and Power Transmissions</i> , 2017, 2017, 10-13.	0.0	3
45	A Comparison of Dynamic and Static Hip-Knee-Ankle Angle during Gait in Knee Osteoarthritis Patients and Healthy Individuals. <i>Applied Bionics and Biomechanics</i> , 2021, 2021, 1-11.	1.1	3
46	Comparative Analysis of Rub-Impact Dynamics of Shrouded Blades Based on the Bilinear Hysteresis Model and the Coulomb Friction Model. <i>Lubricants</i> , 2022, 10, 31.	2.9	3
47	A dynamic separable convolution RCNN for lubrication condition identification of planetary roller screw mechanism. <i>Advances in Mechanical Engineering</i> , 2022, 14, 168781322210910.	1.6	3
48	Biomechanical Effect of Valgus Knee Braces on the Treatment of Medial Gonarthrosis: A Systematic Review. <i>Applied Bionics and Biomechanics</i> , 2022, 2022, 1-15.	1.1	3
49	Study on low vibration isolator arrangement of marine gearboxes based on an impedance model. <i>Transactions of the Canadian Society for Mechanical Engineering</i> , 2020, 44, 580-591.	0.8	2
50	Numerical Noise Transfer Analysis of a Flexible Supported Gearbox Based on Impedance Model and Noise Transfer Function. <i>Mathematical Problems in Engineering</i> , 2020, 2020, 1-15.	1.1	2
51	STUDY ON THE PLANETARY ROLLER SCREW MECHANISM - A REVIEW. <i>The Proceedings of the JSME International Conference on Motion and Power Transmissions</i> , 2017, 2017, 10-12.	0.0	2
52	RESEARCH ON PATTERN SYSTEM DESIGN IN PRODUCT DEVELOPMENT. <i>Journal of Advanced Manufacturing Systems</i> , 2008, 07, 291-295.	1.0	1
53	Design and Research of Lower Limb Exoskeleton Based on a Hill-Type Muscle Model for Assisting People to Walk. , 2020, , .		1
54	Review article: Research on coupled vibration of multi-engine multi-gearbox marine gearing. <i>Mechanical Sciences</i> , 2021, 12, 393-404.	1.0	1

#	ARTICLE	IF	CITATIONS
55	Automatic Modeling System for Skeleton Model of Aircraft with Complex Surfaces. , 2020, , .		0
56	INFLUENCE OF CAR RIER POSITION ERROR ON THE KINEMATIC CHARACTERISTICS OF PLANETARY ROLLER SCREW MECHANISM. The Proceedings of the JSME International Conference on Motion and Power Transmissions, 2017, 2017, 10-15.	0.0	0
57	Mechanical Performance Analysis and Experimental Study of Flat Spiral Spring. , 2020, , .		0
58	Coupled dynamics characteristics analysis of the marine multi-gearbox system under multi-source excitation. Advances in Mechanical Engineering, 2022, 14, 168781322210929.	1.6	0
59	Research on Meshing Characteristics of Trochoidal Roller Pinion Rack Transmission. Applied Sciences (Switzerland), 2022, 12, 5620.	2.5	0