Jiliang Mo

List of Publications by Year
in descending order

74 papers	1,901 citations	257450 24 h-index	289244 40 g-index
75 all docs	75 docs citations	75 times ranked	1259 citing authors

#	Article	IF	Citations
1	Comparison of tribological behaviours of AlCrN and TiAlN coatingsâ€"Deposited by physical vapor deposition. Wear, 2007, 263, 1423-1429.	3.1	170
2	Robust micro-nanoscale flowerlike ZnO/epoxy resin superhydrophobic coating with rapid healing ability. Chemical Engineering Journal, 2017, 313, 1152-1159.	12.7	136
3	Impact wear and abrasion resistance of CrN, AlCrN and AlTiN PVD coatings. Surface and Coatings Technology, 2013, 215, 170-177.	4.8	122
4	Tribological oxidation behaviour of PVD hard coatings. Tribology International, 2009, 42, 1758-1764.	5.9	86
5	The effect of groove-textured surface on friction and wear and friction-induced vibration and noise. Wear, 2013, 301, 671-681.	3.1	84
6	Experimental and numerical investigations of the piezoelectric energy harvesting via friction-induced vibration. Energy Conversion and Management, 2018, 171, 1134-1149.	9.2	68
7	Sliding tribological behaviors of PVD CrN and AlCrN coatings against Si3N4 ceramic and pure titanium. Wear, 2009, 267, 874-881.	3.1	59
8	Sliding tribological behavior of AlCrN coating. Tribology International, 2008, 41, 1161-1168.	5.9	56
9	Fabrication of superhydrophobic aluminum surface by droplet etching and chemical modification. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 567, 205-212.	4.7	55
10	Preparation of mechanically durable superhydrophobic aluminum surface by sandblasting and chemical modification. Progress in Organic Coatings, 2019, 133, 77-84.	3.9	53
11	Experimental and numerical studies of friction-induced vibration and noise and the effects of groove-textured surfaces. Mechanical Systems and Signal Processing, 2014, 46, 191-208.	8.0	49
12	Contact behaviour and vibrational response of a high-speed train brake friction block. Tribology International, 2020, 152, 106540.	5.9	41
13	Study on rotational fretting wear of 7075 aluminum alloy. Tribology International, 2010, 43, 912-917.	5.9	38
14	Noise performance improvements and tribological consequences of a pad-on-disc system through groove-textured disc surface. Tribology International, 2016, 102, 222-236.	5.9	38
15	Effect of perforated structure of friction block on the wear, thermal distribution and noise characteristics of railway brake systems. Wear, 2019, 426-427, 1176-1186.	3.1	36
16	Improving tribological behaviours and noise performance of railway disc brake by grooved surface texturing. Wear, 2017, 376-377, 1586-1600.	3.1	33
17	Effect of surface roughness on friction-induced noise: Exploring the generation of squeal at sliding friction interface. Wear, 2018, 402-403, 80-90.	3.1	33
18	Tribological characterization of chromium nitride coating deposited by filtered cathodic vacuum arc. Applied Surface Science, 2009, 255, 7627-7634.	6.1	32

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19	How does substrate roughness affect the service life of a superhydrophobic coating?. Applied Surface Science, 2018, 441, 491-499.	6.1	29
20	The effect of the grooved elastic damping component in reducing friction-induced vibration. Tribology International, 2017, 110, 264-277.	5.9	28
21	The effects of the friction block shape on the tribological and dynamical behaviours of high-speed train brakes. International Journal of Mechanical Sciences, 2021, 194, 106184.	6.7	28
22	How do grooves on friction interface affect tribological and vibration and squeal noise performance. Tribology International, 2017, 109, 192-205.	5.9	27
23	Numerical study of friction-induced vibration and noise on groove-textured surface. Tribology International, 2013, 64, 1-7.	5.9	26
24	Tribological investigation of WC/C coating under dry sliding conditions. Wear, 2011, 271, 1998-2005.	3.1	25
25	Debris trapping and space-varying contact via surface texturing for enhanced noise performance. Wear, 2018, 396-397, 86-97.	3.1	25
26	Tuneable gradient Helmholtz-resonator-based acoustic metasurface for acoustic focusing. Journal Physics D: Applied Physics, 2019, 52, 385303.	2.8	25
27	Nonlinear behaviors of the disc brake system under the effect of wheelâˆ'rail adhesion. Tribology International, 2022, 165, 107263.	5.9	23
28	Correlation between tactile perception and tribological and dynamical properties for human finger under different sliding speeds. Tribology International, 2018, 123, 286-295.	5.9	21
29	Friction-induced vibration energy harvesting of a high-speed train brake system via a piezoelectric cantilever beam. Tribology International, 2021, 162, 107126.	5.9	21
30	Improvement of dynamical and tribological properties of friction systems by introducing parallel-grooved structures in elastic damping components. Composite Structures, 2018, 192, 8-19.	5.8	20
31	An investigation of stick-slip oscillation of Mnâ€"Cu damping alloy as a friction material. Tribology International, 2020, 146, 106024.	5.9	20
32	Squeal Noise of Friction Material With Groove-Textured Surface: An Experimental and Numerical Analysis. Journal of Tribology, 2016, 138, .	1.9	18
33	Effect of Surface Modification on the Tribological Properties of Friction Blocks in High-Speed Train Brake Systems. Tribology Letters, 2021, 69, 1.	2.6	18
34	Reducing friction-induced vibration and noise by clearing wear debris from contact surface by blowing air and adding magnetic field. Wear, 2018, 408-409, 238-247.	3.1	17
35	Research on diagnosis algorithm of mechanical equipment brake friction fault based on MCNN-SVM. Measurement: Journal of the International Measurement Confederation, 2021, 186, 110065.	5.0	17
36	Brake uneven wear of high-speed train intelligent monitoring using an ensemble model based on multi-sensor feature fusion and deep learning. Engineering Failure Analysis, 2022, 137, 106219.	4.0	17

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37	Improving Dynamic and Tribological Behaviours by Means of a Mnâ€“Cu Damping Alloy with Grooved Surface Features. Tribology Letters, 2018, 66, 1.	2.6	16
38	The Influence of Friction Blocks Connection Configuration on High-Speed Railway Brake Systems Performance. Tribology Letters, 2021, 69, 1.	2.6	16
39	Model reduction for friction-induced vibration of multi-degree-of-freedom systems and experimental validation. International Journal of Mechanical Sciences, 2018, 145, 106-119.	6.7	15
40	Effect of Finger Sliding Direction on Tactile Perception, Friction and Dynamics. Tribology Letters, 2020, 68, 1.	2.6	15
41	Disc surface modifications for enhanced performance against friction noise. Applied Surface Science, 2016, 382, 101-110.	6.1	13
42	A novel dynamics model of a trailer bogie brake system and its application in stability analysis. Mechanical Systems and Signal Processing, 2022, 172, 108966.	8.0	13
43	The Effect of Changing Fingerprinting Directions on Finger Friction. Tribology Letters, 2017, 65, 1.	2.6	12
44	Suppression of Friction-Induced Stickâ€“Slip Behavior and Improvement of Tribological Characteristics of Sliding Systems by Introducing Damping Materials. Tribology Transactions, 2020, 63, 222-234.	2.0	12
45	The effect of the macroscopic surface morphology caused by the uneven wear on friction induced vibration. Tribology International, 2021, 154, 106672.	5.9	12
46	Numerical and Experimental Studies on the Effects of the TBM Cutter Profile on Rock Cutting. KSCE Journal of Civil Engineering, 2022, 26, 416-432.	1.9	12
47	Improving the tribological behavior of the brake interface of high-speed trains via a cantilever beam structure. Tribology International, 2021, 155, 106783.	5.9	11
48	Overview of finger friction and tactile perception. Biosurface and Biotribology, 2018, 4, 99-111.	1.5	10
49	Energy harvesting and vibration reduction by sandwiching piezoelectric elements into elastic damping components with parallel-grooved structures. Composite Structures, 2020, 241, 112105.	5.8	10
50	Impact-sliding wear properties of PVD CrN and WC/C coatings. Surface Engineering, 2021, 37, 12-23.	2.2	9
51	The effect of damping components on the interfacial dynamics and tribological behavior of high-speed train brakes. Applied Acoustics, 2021, 178, 107962.	3.3	9
52	Guided deep subdomain adaptation network for fault diagnosis of different types of rolling bearings. Journal of Intelligent Manufacturing, 2023, 34, 2225-2240.	7.3	9
53	Experimental study on the evolution of friction and wear behaviours of railway friction block during temperature rise under extreme braking conditions. Engineering Failure Analysis, 2022, 141, 106621.	4.0	9
54	Experimental investigation of the squeal characteristics in railway disc brakes. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2018, 232, 1437-1449.	1.8	8

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55	Effects of a horizontal magnetic field on unstable vibration and noise of a friction interface with different magnetic properties. Tribology International, 2018, 120, 47-57.	5.9	8
56	Aggregate micro tribological properties of sponge city permeable pavement base layer under vehicle loading. Construction and Building Materials, 2020, 261, 120424.	7.2	8
57	Continuous manipulation of acoustic wavefront using a programmable acoustic metasurface. Journal Physics D: Applied Physics, 2021, 54, 305302.	2.8	8
58	Grooved-structure design for improved component damping ability. Tribology International, 2018, 123, 50-60.	5.9	7
59	Influence of the Friction Block Shape and Installation Angle of High-Speed Train Brakes on Brake Noise. Journal of Tribology, 2020, 142, .	1.9	7
60	Tribological and dynamical analysis of a brake pad with multiple blocks for a high-speed train. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020, 234, 1771-1788.	1.8	6
61	Investigation into Multiaxial Character of Thermomechanical Fatigue Damage on High-Speed Railway Brake Disc. Vehicles, 2021, 3, 287-299.	3.1	6
62	A new concept of frequency-excitation-up conversion to improve the yield of linear piezoelectric generators. Sensors and Actuators A: Physical, 2021, 325, 112712.	4.1	6
63	The effect of the friction block installation direction on the tribological behavior and vibrational response of the high-speed train brake interface. Wear, 2021, 484-485, 204049.	3.1	6
64	Study on the Correlation Between Dynamical Behavior and Friction/Wear Mechanism Under the Effect of Grooves. Journal of Materials Engineering and Performance, 2018, 27, 2875-2884.	2.5	5
65	The effects of grooved rubber blocks on stickâ€"slip and wear behaviours. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2019, 233, 2939-2954.	1.9	5
66	Simultaneous energy harvesting and tribological property improvement. Friction, 2021, 9, 1275-1291.	6.4	5
67	The effects of the structural stiffness of vibration transfer path on friction-induced vibration and noise. Tribology International, 2022, 173, 107687.	5.9	5
68	The influence of the angular distribution of a grooved surface texturing on the generation of friction-induced vibration and noise. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2018, 232, 1036-1045.	1.8	4
69	Facile Fabrication of Durable Superhydrophobic Aluminum Alloy Surfaces by HS-WEDM and Chemical Modification. Nano, 0, , .	1.0	3
70	Accumulated wear degradation prediction of railway friction block considering the evolution of contact status. Wear, 2022, 494-495, 204251.	3.1	3
71	Effect of structural stiffness on impact-sliding wear behavior of aluminium alloy. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2019, 233, 1844-1856.	1.8	2
72	Effect of damping components having slotted-structures on the instability induced by sliding friction. Tribology Transactions, 0, , 1-17.	2.0	2

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73	The effect of a time-varying contact surface on interfacial tribological behaviour via a surface groove and filler. Wear, 2021, 478-479, 203905.	3.1	0
74	The effect of the macroscopic contact surface status caused by the uneven wear on friction induced vibration. , 2020, , .		0