

# Sung-Ki Lyu

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

612  
citations

686830

13  
h-index

752256

20  
g-index

70  
all docs

70  
docs citations

70  
times ranked

424  
citing authors

#	ARTICLE	IF	CITATIONS
1	A study on cutting and tribology performances of TiN and TiAlN coated tools. International Journal of Precision Engineering and Manufacturing, 2015, 16, 781-786.	1.1	36
2	A study on improvement of ball screw system positioning error with liquid-cooling. International Journal of Precision Engineering and Manufacturing, 2012, 13, 2173-2181.	1.1	30
3	Study on dynamic characteristics and load sharing of a herringbone planetary gear with manufacturing errors. International Journal of Precision Engineering and Manufacturing, 2014, 15, 1925-1934.	1.1	29
4	A Review of Recent Advances in Design Optimization of Gearbox. International Journal of Precision Engineering and Manufacturing, 2018, 19, 1753-1762.	1.1	29
5	A study on the evaluation of bending fatigue strength for 20CrMoH gear. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1339-1343.	1.1	28
6	Shifting process control for two-speed automated mechanical transmission of pure electric vehicles. International Journal of Precision Engineering and Manufacturing, 2016, 17, 623-629.	1.1	24
7	A study on tooth modification and radiation noise of a manual transaxle. International Journal of Precision Engineering and Manufacturing, 2012, 13, 1013-1020.	1.1	23
8	Study on a novel thermal error compensation system for high-precision ball screw feed drive (1st) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Manufacturing, 2015, 16, 2005-2011.	1.1	22
9	Effect of MoS2-based composite coatings on tribological behavior and efficiency of gear. International Journal of Precision Engineering and Manufacturing, 2010, 11, 937-943.	1.1	21
10	Study on positioning accuracy of nut/shaft air cooling ball screw for high-precision feed drive. International Journal of Precision Engineering and Manufacturing, 2014, 15, 111-116.	1.1	20
11	Study on a novel thermal error compensation system for high-precision ball screw feed drive (2nd) Tj ETQq1 1 0.784314 rgBT /Overlock 2015, 16, 2139-2145.	1.1	18
12	Study on thermal behavior analysis of nut/shaft air cooling ball screw for high-precision feed drive. International Journal of Precision Engineering and Manufacturing, 2014, 15, 123-128.	1.1	16
13	A study on major factors influencing dry cutting temperature of AISI 304 stainless steel. International Journal of Precision Engineering and Manufacturing, 2017, 18, 1387-1392.	1.1	16
14	Effect of Dome Curvature on Failure Mode of Type4 Composite Pressure Vessel. International Journal of Precision Engineering and Manufacturing, 2018, 19, 405-410.	1.1	15
15	The evaluation of contact fatigue strength for 20MnCr5 carburized gear. International Journal of Precision Engineering and Manufacturing, 2014, 15, 117-121.	1.1	14
16	Design and evaluation of two-stage planetary gearbox for special-purpose industrial machinery. Journal of Mechanical Science and Technology, 2019, 33, 5943-5950.	0.7	14
17	Evaluation on dry sliding wear behavior of (TiB+TiC)/Ti-6Al-4V matrix composite. International Journal of Precision Engineering and Manufacturing, 2017, 18, 1139-1146.	1.1	13
18	Advancement of Mechanical Engineering in Extreme Environments. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 1767-1782.	2.7	13

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19	Characteristic evaluation of friction and wear in the C-N and TiN coated gear. International Journal of Precision Engineering and Manufacturing, 2010, 11, 107-111.	1.1	12
20	A study on modeling and optimization of tooth microgeometry for a helical gear pair. International Journal of Precision Engineering and Manufacturing, 2013, 14, 423-427.	1.1	12
21	Design of anti-vibration mounting for 140A class alternator for vehicles. Journal of Mechanical Science and Technology, 2018, 32, 5233-5239.	0.7	12
22	Experimentally Validated Geometry Modification Simulation for Improving Noise Performance of CVT Gearbox for Vehicles. International Journal of Precision Engineering and Manufacturing, 2019, 20, 1969-1977.	1.1	10
23	The calculation and experiment for measurements over pins of the external helical gears with an odd number of teeth. International Journal of Precision Engineering and Manufacturing, 2012, 13, 2203-2208.	1.1	9
24	Theoretical Design of a Novel Vibration Energy Absorbing Mechanism for Cables. Applied Sciences (Switzerland), 2020, 10, 5309.	1.3	9
25	Effect of surface treatments on the strength of carburized gears. Journal of Mechanical Science and Technology, 1998, 12, 206-214.	0.4	8
26	Experimental application of pitting formation for 20MnCr5 carburized gear tooth. International Journal of Precision Engineering and Manufacturing, 2014, 15, 899-903.	1.1	8
27	A simulation analysis and experimental research on T groove end face seal under mid-and-low speed. International Journal of Precision Engineering and Manufacturing, 2017, 18, 537-543.	1.1	8
28	A Study on Simulation Based Validation of Optimized Design of High Precision Rotating Unit for Processing Machinery. International Journal of Precision Engineering and Manufacturing, 2019, 20, 1601-1609.	1.1	8
29	Optimal design of a tilling machine reduction gearbox using Matlab. International Journal of Precision Engineering and Manufacturing, 2009, 10, 63-66.	1.1	7
30	A novel high speed/high precision ball screw. International Journal of Precision Engineering and Manufacturing, 2013, 14, 165-167.	1.1	7
31	Optimization scheme of genetic algorithm and its application on aeroengine fault diagnosis. International Journal of Precision Engineering and Manufacturing, 2015, 16, 735-741.	1.1	7
32	A Novel Trunk Rehabilitation Robot Based Evaluation of Seated Balance Under Varying Seat Surface and Visual Conditions. IEEE Access, 2020, 8, 204902-204913.	2.6	7
33	Design and Numerical Simulation-Based Optimization of a Novel Flat-Face Coupling System for Hydraulic Power Equipment. Applied Sciences (Switzerland), 2021, 11, 388.	1.3	7
34	Quasi-Steady-State scheme and application on prewhirl flow and heat transfer in aeroengine. International Journal of Precision Engineering and Manufacturing, 2015, 16, 343-350.	1.1	6
35	Research on Meshfree method for analyzing seal behavior of a T-DGS. International Journal of Precision Engineering and Manufacturing, 2017, 18, 529-536.	1.1	6
36	Improvement on the Structure Design of a Kind of Linear Piezoelectric Motor with Flexible Drive-Foot. International Journal of Precision Engineering and Manufacturing, 2020, 21, 81-89.	1.1	6

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37	Numerical Investigation of Flow Characteristics in a Viscous Damping System with Symmetrical Hydraulic Cylinders. International Journal of Precision Engineering and Manufacturing, 2021, 22, 579-597.	1.1	6
38	Effective strut-based design approach of multi-shaped lattices using equivalent material properties. Journal of Mechanical Science and Technology, 2021, 35, 1609-1622.	0.7	6
39	Atomization characteristics of gelled hypergolic propellant simulants. International Journal of Precision Engineering and Manufacturing, 2015, 16, 743-747.	1.1	5
40	Study on flow and heat transfer of small scale gas flow for air cooling system. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2491-2498.	1.1	5
41	Level Set Based Path Planning Using a Novel Path Optimization Algorithm for Robots. International Journal of Precision Engineering and Manufacturing, 2018, 19, 1331-1338.	1.1	5
42	Numerical investigation of the mechanical component design of a hexacopter drone for real-time fine dust monitoring. Journal of Mechanical Science and Technology, 2021, 35, 3101-3111.	0.7	5
43	Effect of Al content on structure and properties of TiAlN hard film prepared by multi-arc ion plating. International Journal of Precision Engineering and Manufacturing, 2013, 14, 161-164.	1.1	4
44	Study on modular modeling and performance evaluation of a conical gear for marine transmission system. International Journal of Precision Engineering and Manufacturing, 2015, 16, 1123-1128.	1.1	4
45	Experimental research on a hypersonic configuration with blunt forebody edges. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2115-2120.	1.1	4
46	Three-dimensional building-cube method for inviscid compressible flow computations. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2673-2681.	1.1	4
47	A study on cycling life and failure mode of type3 cylinder treated with autofrettage pressure. International Journal of Precision Engineering and Manufacturing, 2016, 17, 1685-1691.	1.1	4
48	A Study on the Development of a Hybrid Fiber Reinforced Composite for a Type 4 CNG Vessel. Journal of the Korean Society of Manufacturing Process Engineers, 2017, 16, 97-103.	0.1	4
49	A Study on the Design of a Gear Transmission Error Test Rig. Journal of the Korean Society of Manufacturing Process Engineers, 2016, 15, 14-19.	0.1	4
50	Elongation of contact length on the line of action in roll forming of gears. Journal of Mechanical Science and Technology, 2003, 17, 321-328.	0.4	3
51	Numerical study of shock/vortex interaction in diatomic gas flows. International Journal of Precision Engineering and Manufacturing, 2016, 17, 27-34.	1.1	3
52	Calibration algorithm of mobile robot vision camera. International Journal of Precision Engineering and Manufacturing, 2016, 17, 51-57.	1.1	3
53	High-Speed Spiral Bevel GEAR Dynamic Rules Considering the Impact of Web Thicknesses and Angles. Applied Sciences (Switzerland), 2022, 12, 3084.	1.3	3
54	Mathematical model and analysis on cycloid planetary gear. , 2011, , .		2

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55	Performance of ion plating TiAlN coating on YG8. International Journal of Precision Engineering and Manufacturing, 2016, 17, 195-201.	1.1	2
56	A Wearable Reaction Wheel based Kinesthetic Biofeedback Device for Delivery of Balance Cues. , 2019, , .		2
57	Characteristic of quenching refrigerant for heat treatment deformation control of SM45C steel. Journal of Mechanical Science and Technology, 2002, 16, 647-654.	0.4	1
58	Immersed boundary-finite difference lattice Boltzmann method using the feedback forcing scheme to simulate the incompressible flows. International Journal of Precision Engineering and Manufacturing, 2016, 17, 1049-1057.	1.1	1
59	Grid independence in the study of boundary layer and its application in Hypersonic Propellants. International Journal of Precision Engineering and Manufacturing, 2016, 17, 887-895.	1.1	1
60	Research on Identification Method for Interface Flange in Automatic Docking System of Fluid Loading and Unloading Arm for Bottom Loading. Applied Sciences (Switzerland), 2022, 12, 3037.	1.3	1
61	Temperature of air pocket in Type3 composite vessel during ambient hydraulic cycling test. International Journal of Precision Engineering and Manufacturing, 2014, 15, 2559-2563.	1.1	0
62	The research of platform vibration characteristics based on numerical wave simulation. International Journal of Precision Engineering and Manufacturing, 2014, 15, 471-475.	1.1	0
63	The combination bounce back model for Lattice Boltzmann Method and its application on gas flow in micro machinery. International Journal of Precision Engineering and Manufacturing, 2017, 18, 203-209.	1.1	0
64	A study on the fracture characteristics of tapered double cantilever beams made of heterogeneous composites with adhesive interfaces. Journal of Mechanical Science and Technology, 2021, 35, 99-105.	0.7	0
65	3107 Study on Positioning Accuracy and Thermal Behavior of Nut/Shaft Air Cooling Ball Screw for High-precision Feed Drive. The Proceedings of the Symposium on Motion and Power Transmission, 2013, 2013, 183-187.	0.0	0
66	Parametric modeling and simulation of crank-rocker transplanting mechanism. , 2014, , .		0
67	A Study on the Optimal Design of Drive Gear for Transfer Gearbox. Journal of the Korean Society for Precision Engineering, 2019, 36, 121-126.	0.1	0
68	A Study on the Design and Simulation of a 600 dpi Master F-Theta Lens. Journal of the Korean Society for Precision Engineering, 2020, 37, 399-405.	0.1	0
69	Fatigue Life Analysis and Experimental Study of the Input Shaft of 6-Speed Automatic Transmission. Journal of the Korean Society for Precision Engineering, 2020, 37, 607-613.	0.1	0
70	Study on design and processing performance verification of a 600 dpi f-theta lens. Journal of Mechanical Science and Technology, 2021, 35, 5643-5653.	0.7	0