# Sung-Ki Lyu

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 70 papers | 612 citations | 687363 13 h-index | 752698 20 g-index |
| 70 all docs | 70 docs citations | 70 times ranked | 424 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | High-Speed Spiral Bevel GEAR Dynamic Rules Considering the Impact of Web Thicknesses and Angles. Applied Sciences (Switzerland), 2022, 12, 3084. | 2.5 | 3 |
| 2 | 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. | 2.5 | 1 |
| 3 | 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. | 1.5 | 0 |
| 4 | Design and Numerical Simulation-Based Optimization of a Novel Flat-Face Coupling System for Hydraulic Power Equipment. Applied Sciences (Switzerland), 2021, 11, 388. | 2.5 | 7 |
| 5 | Advancement of Mechanical Engineering in Extreme Environments. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 1767-1782. | 4.9 | 13 |
| 6 | 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. | 2.2 | 6 |
| 7 | Effective strut-based design approach of multi-shaped lattices using equivalent material properties. Journal of Mechanical Science and Technology, 2021, 35, 1609-1622. | 1.5 | 6 |
| 8 | 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. | 1.5 | 5 |
| 9 | Study on design and processing performance verification of a 600 dpi f-theta lens. Journal of Mechanical Science and Technology, 2021, 35, 5643-5653. | 1.5 | 0 |
| 10 | 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. | 2.2 | 6 |
| 11 | Theoretical Design of a Novel Vibration Energy Absorbing Mechanism for Cables. Applied Sciences (Switzerland), 2020, 10, 5309. | 2.5 | 9 |
| 12 | A Novel Trunk Rehabilitation Robot Based Evaluation of Seated Balance Under Varying Seat Surface and Visual Conditions. IEEE Access, 2020, 8, 204902-204913. | 4.2 | 7 |
| 13 | 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. | 0.2 | 0 |
| 14 | 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. | 0.2 | 0 |
| 15 | 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. | 2.2 | 10 |
| 16 | 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. | 2.2 | 8 |
| 17 | Design and evaluation of two-stage planetary gearbox for special-purpose industrial machinery. Journal of Mechanical Science and Technology, 2019, 33, 5943-5950. | 1.5 | 14 |
| 18 | A Study on the Optimal Design of Drive Gear for Transfer Gearbox. Journal of the Korean Society for Precision Engineering, 2019, 36, 121-126. | 0.2 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | A Wearable Reaction Wheel based Kinesthetic Biofeedback Device for Delivery of Balance Cues. , 2019, , . | | 2 |
| 20 | Effect of Dome Curvature on Failure Mode of Type4 Composite Pressure Vessel. International Journal of Precision Engineering and Manufacturing, 2018, 19, 405-410. | 2.2 | 15 |
| 21 | Design of anti-vibration mounting for 140A class alternator for vehicles. Journal of Mechanical Science and Technology, 2018, 32, 5233-5239. | 1.5 | 12 |
| 22 | A Review of Recent Advances in Design Optimization of Gearbox. International Journal of Precision Engineering and Manufacturing, 2018, 19, 1753-1762. | 2.2 | 29 |
| 23 | Level Set Based Path Planning Using a Novel Path Optimization Algorithm for Robots. International Journal of Precision Engineering and Manufacturing, 2018, 19, 1331-1338. | 2.2 | 5 |
| 24 | Research on Meshfree method for analyzing seal behavior of a T-DGS. International Journal of Precision Engineering and Manufacturing, 2017, 18, 529-536. | 2.2 | 6 |
| 25 | 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. | 2.2 | 0 |
| 26 | 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. | 2.2 | 8 |
| 27 | 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. | 2.2 | 13 |
| 28 | 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. | 2.2 | 16 |
| 29 | 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. | 0.2 | 4 |
| 30 | 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. | 2.2 | 4 |
| 31 | 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. | 2.2 | 1 |
| 32 | Grid independence in the study of boundary layer and its application in Hypergolic Propellants. International Journal of Precision Engineering and Manufacturing, 2016, 17, 887-895. | 2.2 | 1 |
| 33 | Performance of ion plating TiAlN coating on YG8. International Journal of Precision Engineering and Manufacturing, 2016, 17, 195-201. | 2.2 | 2 |
| 34 | Shifting process control for two-speed automated mechanical transmission of pure electric vehicles. International Journal of Precision Engineering and Manufacturing, 2016, 17, 623-629. | 2.2 | 24 |
| 35 | Numerical study of shock/vortex interaction in diatomic gas flows. International Journal of Precision Engineering and Manufacturing, 2016, 17, 27-34. | 2.2 | 3 |
| 36 | Calibration algorithm of mobile robot vision camera. International Journal of Precision Engineering and Manufacturing, 2016, 17, 51-57. | 2.2 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | 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. | 0.2 | 4 |
| 38 | 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. | 2.2 | 4 |
| 39 | Experimental research on a hypersonic configuration with blunt forebody edges. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2115-2120. | 2.2 | 4 |
| 40 | Three-dimensional building-cube method for inviscid compressible flow computations. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2673-2681. | 2.2 | 4 |
| 41 | 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. | 2.2 | 6 |
| 42 | Optimization scheme of genetic algorithm and its application on aeroengine fault diagnosis. International Journal of Precision Engineering and Manufacturing, 2015, 16, 735-741. | 2.2 | 7 |
| 43 | Atomization characteristics of gelled hypergolic propellant simulants. International Journal of Precision Engineering and Manufacturing, 2015, 16, 743-747. | 2.2 | 5 |
| 44 | A study on cutting and tribology performances of TiN and TiAlN coated tools. International Journal of Precision Engineering and Manufacturing, 2015, 16, 781-786. | 2.2 | 36 |
| 45 | Study on a novel thermal error compensation system for high-precision ball screw feed drive (1st) Tj ETQq1 1 0.784314 rgBT /Overlock Manufacturing, 2015, 16, 2005-2011. | 2.2 | 22 |
| 46 | Study on a novel thermal error compensation system for high-precision ball screw feed drive (2nd) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2015, 16, 2139-2145. | 2.2 | 18 |
| 47 | 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. | 2.2 | 5 |
| 48 | Temperature of air pocket in Type3 composite vessel during ambient hydraulic cycling test. International Journal of Precision Engineering and Manufacturing, 2014, 15, 2559-2563. | 2.2 | 0 |
| 49 | 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. | 2.2 | 16 |
| 50 | The evaluation of contact fatigue strength for 20MnCr5 carburized gear. International Journal of Precision Engineering and Manufacturing, 2014, 15, 117-121. | 2.2 | 14 |
| 51 | 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. | 2.2 | 20 |
| 52 | 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. | 2.2 | 29 |
| 53 | The research of platform vibration characteristics based on numerical wave simulation. International Journal of Precision Engineering and Manufacturing, 2014, 15, 471-475. | 2.2 | 0 |
| 54 | Experimental application of pitting formation for 20MnCr5 carburized gear tooth. International Journal of Precision Engineering and Manufacturing, 2014, 15, 899-903. | 2.2 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Parametric modeling and simulation of crank-rocker transplanting mechanism. , 2014, , . | | 0 |
| 56 | 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. | 2.2 | 12 |
| 57 | Effect of Al content on structure and properties of Ti1âˆ’xAlxN hard film prepared by multi-arc ion plating. International Journal of Precision Engineering and Manufacturing, 2013, 14, 161-164. | 2.2 | 4 |
| 58 | A novel high speed/high precision ball screw. International Journal of Precision Engineering and Manufacturing, 2013, 14, 165-167. | 2.2 | 7 |
| 59 | A study on the evaluation of bending fatigue strength for 20CrMoH gear. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1339-1343. | 2.2 | 28 |
| 60 | 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 |
| 61 | A study on improvement of ball screw system positioning error with liquid-cooling. International Journal of Precision Engineering and Manufacturing, 2012, 13, 2173-2181. | 2.2 | 30 |
| 62 | 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. | 2.2 | 9 |
| 63 | A study on tooth modification and radiation noise of a manual transaxle. International Journal of Precision Engineering and Manufacturing, 2012, 13, 1013-1020. | 2.2 | 23 |
| 64 | Mathematical model and analysis on cycloid planetary gear. , 2011, , . | | 2 |
| 65 | 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. | 2.2 | 12 |
| 66 | Effect of MoS2-based composite coatings on tribological behavior and efficiency of gear. International Journal of Precision Engineering and Manufacturing, 2010, 11, 937-943. | 2.2 | 21 |
| 67 | Optimal design of a tilling machine reduction gearbox using Matlab. International Journal of Precision Engineering and Manufacturing, 2009, 10, 63-66. | 2.2 | 7 |
| 68 | 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 |
| 69 | 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 |
| 70 | Effect of surface treatments on the strength of carburized gears. Journal of Mechanical Science and Technology, 1998, 12, 206-214. | 0.4 | 8 |