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PhD 2018, Purdue University

MS 2012, New Jersey Institute of Technology

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Teaches ABE 460 Sensors and Process Control

Recent Papers

L Chen, L Shang, Z Liu, S Mukherjee, Y Cai, B Wang. 2022. Effects of chevron micro-textures on tribological and lubricating performance of cylinder block/valve plate interface in axial piston pumps. *Journal of Tribology* 145 (3), 032201.

S Sarode, L Shang, A Vacca, SD Sudhoff. 2022. Flux Weakening Operation Based Design of an Integrated Electrohydraulic Axial Piston Unit. Proceedings of the BATH/ASME 2022 Symposium on Fluid Power and Motion Control (FPMC), V001T01A034.

S Sarode, L Shang, A Vacca. 2022. Numerical Investigation of the Influence of Part Geometric Tolerances on Piston/Cylinder Interface Performance. *International Journal of Fluid Power* 23 (3), 343-362.

N Hess, L Shang. 2022. Development of a Machine Learning Model for Elastohydrodynamic Pressure Prediction in Journal Bearings. *Journal of Tribology* 144 (8), 081603.

T Ransegnola, L Shang, A Vacca. 2022. A study of piston and slipper spin in swashplate type axial piston machines. *Tribology International* 167, 107420.

S Mukherjee, A Masia, M Bronson, L Shang, A Vacca. 2021. A Novel Positive Displacement Axial Piston Machine With Bent Cylinder Sleeves. Proceedings of the ASME/BATH 2021 FPMC, V001T01A024.

N Hess, L Shang. 2021. Machine Learning Prediction of Journal Bearing Pressure Distributions, Considering Elastic Deformation and Cavitation. Proceedings of the ASME/BATH 2021 FPMC, V001T01A010.

S Mukherjee, L Shang, A Vacca. 2020. A fast approach for coupled fluid-thermal modeling of the lubricating interfaces of axial piston machines.

Proceedings of the 12th IFK International Fluid Power Conference, 327-340.

AA Darbani, L Shang, JR Beale, M Ivantysynova. 2019. Slipper Surface Geometry Optimization of the Slipper/Swashplate Interface of Swashplate-Type Axial Piston Machines. *International Journal of Fluid Power*, 245–270-245–270.

S Sarode, L Shang. 2019. Novel Pressure Adaptive Piston Cylinder Interface Design for Axial Piston Machines. Proceedings of the ASME/BATH 2019 FPMC, V001T01A018.

D Hasko, L Shang, E Noppe, E Lefrançois. 2019. Virtual assessment and experimental validation of power loss contributions in swash plate type axial piston pumps. *Energies* 12 (16), 3096.

L Shang, M Ivantysynova. 2019. Thermodynamic analysis on compressible viscous flow and numerical modeling study on piston/cylinder interface in axial piston machine. *JFPS International Journal of Fluid Power System* 11 (3), 117-123.

L Shang, M Ivantysynova. 2018. Scaling criteria for axial piston machines based on thermo-elastohydrodynamic effects in the tribological interfaces. *Energies* 11 (11), 3210.

Recent Patents

L Shang, S Sarode, A Vacca. 2021. Piston-type positive displacement machine with a pressure-adaptive piston-cylinder interface. US Patent 11,118,681.

L Shang, M Ivantysynova. 2021. Displacement control hydrostatic propulsion system for multirotor vertical take off and landing aircraft. US Patent App. 16/755,526.

L Shang, M Ivantysynova. 2020. Aviation hydraulic propulsion system utilizing secondary controlled drives. US Patent App. 16/755,527.