ZHIYUAN ZHANG

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I have solid professional knowledge and professional skills, and have a high interest in academic research. Consequently, my positive attitude and strong ability of learning led to my outstanding academic achievement. With a creative and dynamic mind, I'm keen on attending social practice and volunteer work with a quality of hardworking and rigor. Last but not least, I'm always honest by sticking to my promise and always willing to communicate with others or to help them with a great sense of teamwork.

EDUCATION

BEIJING INSTITUTE OF TECHNOLOGY *Beijing, CHINA*
Power Engineering and Engineering Thermophysics *September 2017-June 2022*
- Major: Advanced Internal Combustion Engines, Advanced Fluid Mechanics, Advanced Engineering Thermodynamics, Nonlinear Systems and Intelligent Control, New Energy Power System Technology
- Research: New Concept Linear Internal Combustion Power Generation System

BEIJING INSTITUTE OF TECHNOLOGY *Beijing, CHINA*
Mechanical Engineering *September 2013-June 2017*
- Major: Mechanical Principles, Mechanical Design, Internal Combustion Engine Principles, Internal Combustion Engine Design, Vehicle Dynamics, Thermodynamics, Fluid Mechanics

EXPERIENCE

BEIJING INSTITUTE OF TECHNOLOGY *Beijing, CHINA*
Post doctor *July 01-Present*
- New Concept Linear Internal Combustion Power System Design
- Clean Fuels and Clean Burning
- Electromechanical coupling dynamics and stability control

ACADEMIC ACHIEVEMENTS

PAPERS *The last three years*
- Feng H, **Zhang Z**, Jia B, et al. Investigation of the optimum operating condition of a dual piston type free piston engine generator during engine cold start-up process[J]. Applied Thermal Engineering, 2021, 182: 116124.
- **Zhang Z**, Feng H, Jia B, et al. Effect of the stroke-to-bore ratio on the performance of a dual-piston free piston engine generator[J]. Applied Thermal Engineering, 2021, 185: 116456.
- **Zhang Z**, Feng H, Jia B, et al. Identification and analysis on the variation sources of a dual-cylinder free piston engine generator and their influence on system operating characteristics[J]. Energy, 2022, 242: 123001.
- **Zhang Z**, Feng H, Jia B, et al. Sensitivity and effect of key operational parameters on performance of a dual-cylinder free-piston engine generator[J]. Journal of Central South University, 2022, 29(7): 2101-2111.
- Yan X, Feng H, **Zhang Z**, et al. Investigation research of gasoline direct injection on spray performance and combustion process for free piston linear generator with dual cylinder configuration[J]. Fuel, 2021, 288: 119657.
- Yan X, Feng H, Zuo Z, **Zhang Z**, et al. A study on the working characteristics of free piston linear generator with dual cylinder configuration by different secondary injection strategies[J]. Energy, 2021, 233: 121026.
- Li J, Zuo Z, Jia B, Feng H, **Zhang Z**, et al. Comparative analysis on friction characteristics between free-piston engine generator and traditional crankshaft engine[J]. Energy Conversion and Management, 2021, 245: 114630.
- **Zhang Z**, Feng H, Jia B, et al. Effect of mover assembly mass on the performance of a dual-piston type free piston engine generator [C]. International Conference on Applied Energy 2020.

ADDITIONAL INFORMATION

AWARDS: 2020 Beijing Institute of Technology Kistler Scholarship
CERTIFICATE: CET-4; CET-6; Driver's license
PROFESSIONAL SKILLS: Proficient in using MATLAB/Simulink、ABAQUS、GT-Power、CONVERGE
LANGUAGE PROFICIENCY: Chinese; English