

Stanford



Pu Xie

Research Engineer
Aeronautics and Astronautics

Bio

ACADEMIC APPOINTMENTS

- Research Engineer, Aeronautics and Astronautics

PROFESSIONAL EDUCATION

- PhD, Tsinghua University (2016)

Publications

PUBLICATIONS

- **Effect of multi-stage heat treatment on the microstructure and mechanical properties of Ti-6Al-4V alloy deposited by high-power laser melting deposition** *MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING*
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- **Study on the Forming Process and Properties of AlSi60 Alloy by Selective Laser Melting** *COATINGS*
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- **A Reversible Residual Network-Aided Canonical Correlation Analysis to Fault Detection and Diagnosis in Electrical Drive Systems** *IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT*
Wang, S., Ju, Y., Fu, C., Xie, P., Cheng, C.
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- **Fault detection using generalized autoencoder with neighborhood restriction for electrical drive systems of high-speed trains** *CONTROL ENGINEERING PRACTICE*
Wang, S., Jub, Y., Xie, P., Cheng, C.
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- **Numerical simulation and mechanism analysis of thermal fatigue crack for low-alloy steel brake disc of high-speed train** *INTERNATIONAL JOURNAL OF RAIL TRANSPORTATION*
Wang, J., Zafar, M., Chen, Y., Zuo, L., Zhang, X., Xie, P., Zhao, H.
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- **Machine Learning-Based Prediction of Mechanical Properties and Performance of Nickel-Graphene Nanocomposites Using Molecular Dynamics Simulation Data** *ACS APPLIED NANO MATERIALS*
Jin, W., Pei, J., Xie, P., Chen, J., Zhao, H.
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- **A Novel Data-Driven Fault Detection Method Based on Stable Kernel Representation for Dynamic Systems.** *Sensors (Basel, Switzerland)*
Wang, Q., Peng, B., Xie, P., Cheng, C.
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- **Surface morphologies of intra-layer printing process in electron beam powder bed fusion: A high-fidelity modeling study with experimental validation** *ADDITIVE MANUFACTURING*
Wu, C., Zhao, H., Li, Y., Xie, P., Lin, F.
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- **Key Parameters and Optimal Design of a Split Induction Coil for T-Shaped Pipe Brazing** *COATINGS*
Zhang, Z., Yang, Z., Xie, P., Zhao, Y., Shan, J., Liu, Y., Wu, A., Ma, S., Zhang, L., Chen, H.
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- **Slow feature analysis-aided detection and diagnosis of incipient faults for running gear systems of high-speed trains** *ISA TRANSACTIONS*
Cheng, C., Liu, M., Chen, H., Xie, P., Zhou, Y.
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- **A Review of Intelligent Fault Diagnosis for High-Speed Trains: Qualitative Approaches** *ENTROPY*
Cheng, C., Wang, J., Chen, H., Chen, Z., Luo, H., Xie, P.
2021; 23 (1)
- **A Novel Fault Detection Method for Running Gear Systems Based on Dynamic Inner Slow Feature Analysis** *IEEE ACCESS*
Song, Y., Yang, S., Cheng, C., Xie, P.
2020; 8: 211371-211379
- **Residual Stress, Microstructure and Mechanical Properties in Thick 6005A-T6 Aluminium Alloy Friction Stir Welds** *METALS*
Liu, X., Xie, P., Wimpory, R., Li, W., Lai, R., Li, M., Chen, D., Liu, Y., Zhao, H.
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- **Evaluation on Residual Stresses in Thick Titanium Welded Alloys**
Zhao, H., Xie, P., Shabadi, R., Ionescu, M., Jeandin, M., Richard, C., Chandra, T.
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- **Measuring residual stresses in linear friction welded joints composed by dissimilar titanium** *SCIENCE AND TECHNOLOGY OF WELDING AND JOINING*
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- **Evaluation of Residual Stresses Relaxation by Post Weld Heat Treatment Using Contour Method and X-ray Diffraction Method** *EXPERIMENTAL MECHANICS*
Xie, P., Zhao, H., Wu, B., Gong, S.
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- **Using Finite Element and Contour Method to Evaluate Residual Stress in Thick Ti-6Al-4V Alloy Welded by Electron Beam Welding** *ACTA METALLURGICA SINICA-ENGLISH LETTERS*
Xie, P., Zhao, H., Wu, B., Gong, S.
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- **Simulation Study on the Dynamic Roll Response of a Partially-Filled Liquid Tank Vehicles**
Li Song, Jiang Liyong, Zong Changfu, Qin Shuo, Xie Pu, Song Limin, IEEE
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- **Research on Algorithm of Stability Control for Tractor Semi-trailer**
Mai, L., Xie, P., Zong, C., Guo, S., Fukuda, T., Yo, Y., Yu, H.
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