

Frontiers of Mechanical Engineering

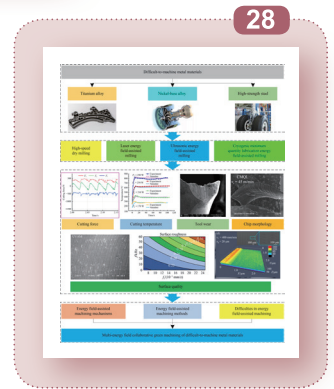
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REVIEW ARTICLE

- 33** Review on flexible perovskite photodetector: processing and applications
Xuning ZHANG, Xingyue LIU, Yifan HUANG, Bo SUN, Zhiyong LIU, Guanglan LIAO, Tielin SHI



- 28** Energy field-assisted high-speed dry milling green machining technology for difficult-to-machine metal materials
Jin ZHANG, Xuefeng HUANG, Xinzhen KANG, Hao YI, Qianyue WANG, Huajun CAO

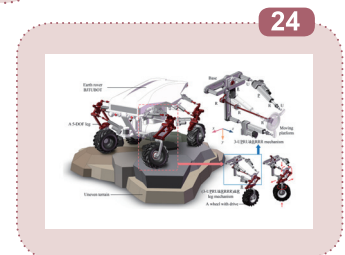


RESEARCH ARTICLE

- 26** Footholds optimization for legged robots walking on complex terrain
Yunpeng YIN, Yue ZHAO, Yuguang XIAO, Feng GAO



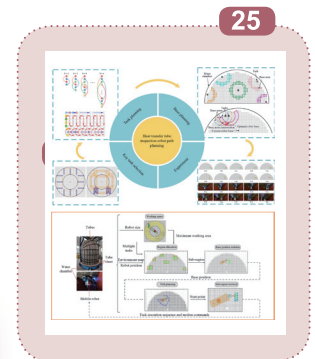
- 24** Design of a novel side-mounted leg mechanism with high flexibility for a multi-mission quadruped earth rover BJTUBOT
Yifan WU, Sheng GUO, Luquan LI, Lianzheng NIU, Xiao LI



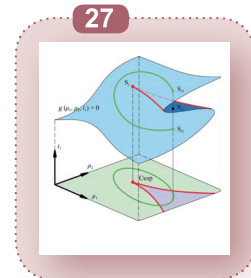
- 23** Design and modeling of continuum robot based on virtual-center of motion mechanism
Guoxin LI, Jingjun YU, Yichao TANG, Jie PAN, Shengge CAO, Xu PEI

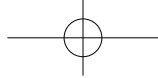


- 25** High-efficiency inspecting method for mobile robots based on task planning for heat transfer tubes in a steam generator
Biyang XU, Xuehe ZHANG, Yue OU, Kuan ZHANG, Zhenming XING, Hegao CAI, Jie ZHAO, Jizhuang FAN

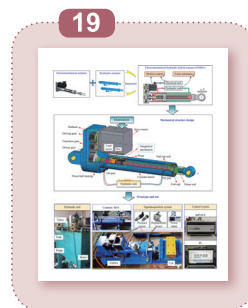


- 27** Cusp points and assembly changing motions in the PRR-PR-PRR planar parallel manipulator
Chengwei SHEN, Jingjun YU, Xu PEI

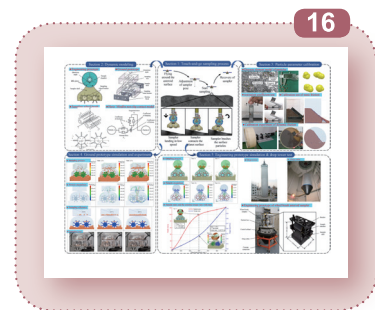




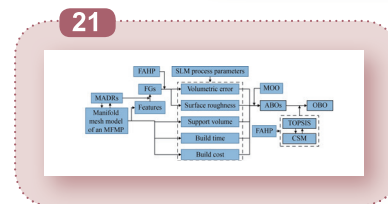
- 19** Design and characteristic research of a novel electromechanical-hydraulic hybrid actuator with two transmission mechanisms
Shufei QIAO, Long QUAN, Yunxiao HAO, Lei GE, Lianpeng XIA



- 16** Numerical simulation and experimental research on the wheel brush sampling process of an asteroid sampler
Haitao LUO, Qiming WEI, Yuxin LI, Junlin LI, Wei ZHANG, Weijia ZHOU



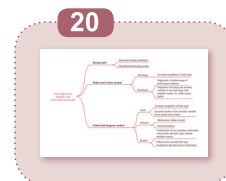
- 21** Build orientation determination of multi-feature mechanical parts in selective laser melting via multi-objective decision making
Hongsheng SHENG, Jinghua XU, Shuyou ZHANG, Jianrong TAN, Kang WANG



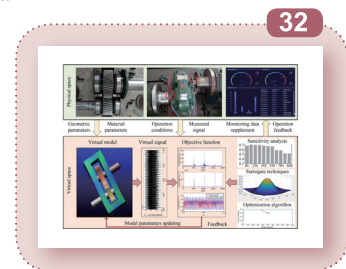
- 29** Development of lunar regolith-based composite for *in-situ* 3D printing via high-pressure extrusion system
Hua ZHAO, Jihong ZHU, Shangqin YUAN, Shaoying LI, Weihong ZHANG



- 20** A multi-sensor relation model for recognizing and localizing faults of machines based on network analysis
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- 32** Digital twin-assisted gearbox dynamic model updating toward fault diagnosis
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- 31** A bionic approach for the mechanical and electrical decoupling of an MEMS capacitive sensor in ultralow force measurement
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- 22** Design and evaluation of a novel biopsy needle with hemostatic function
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