

TABLE OF CONTENTS

目 录

Investigation of the Influence of Nozzle Install Angles to Spay Cooling Effect in Industrial Pipe by Numerical Simulation
(喷嘴安装角对管道喷雾降温影响的研究)

J. C. CHEN, W. L. WU.....1

Research on Space Moving Trajectory Planning of the Industrial Robot
(工业机器人的空间运行轨迹规划研究)

X. X. WANG, L. J. LI, M. GUO, Z. LI, X. L. LIU, J. J. ZHAO.....11

Dynamic Measurement Research of Ultra-Short Baseline Transducer Axis Rotation Angle
(超短基线换能器轴转角动态测量方法研究)

Z. L. DING, Y. S. CHAI, M. JIANG, J. ZHOU, L. L. MU, Y. L. YUE.....17

Study on Indentation Fracture Mechanics of Sintered NdFeB Material
(烧结钕铁硼材料压痕断裂力学机理研究)

L. J. LI, J. H. LI, J. CAO, S. ZHANG, M. L. XI.....25

Damping Measurement of Thin Coating Plate Based on Half Power Method
(基于半功率带宽法的薄板涂层结构阻尼特性测试)

Q. J. ZHU, X. Y. FAN, M. G. CAO, Q. P. HAN, J. X. REN.....34

The Programmed Design of Worm Based on Pro/Engineer
(基于 Pro/Engineer 的蜗杆程序化设计)

C. DAI, X. L. XU, T. ZHAO, J. S. XU.....39

Effect of Surface Treatment on the Fatigue Crack Growth Rate of A7N01 Aluminum Alloy MIG Welding Joints
(表面处理对 A7N01 铝合金 MIG 焊接头疲劳裂纹扩展速率的影响)

Q. J. GUO, C. P. MA, S. B. CEN.....45

Effect of Line Energy on the Microstructure and Property of A7N01 Aluminum Alloy Joint
(线能量对 A7N01 铝合金焊接接头组织及性能的影响)

H. ZHOU, T. LI, C. P. MA, Z. H. FU.....53

Optimum Design of Transmission Box for Hand-Held Transplanter Based on Geomagic Spark
(基于 Geomagic spark 的手扶式插秧机变速箱箱体重构)

W. L. CAO, Y. P. WANG, S. Q. DU, C. H. CHEN, J. T. WU.....60

Kinematic Calculation and Simulation of a Low Scattering Metal Pylon
(一种低散射金属支架的运动学计算及仿真)

J. X. HOU, W. Y. CHEN.....68

**Study on the Critical Technology of Finite Element Simulation of Serrated Chip
(45 钢高速切削锯齿形切屑关键技术的有限元模拟)**

Y. Q. SHEN, Q. G. MENG, G. H. LI..... 78

**Research and Implementation of High Precision Push-Type Pipeline Length Measurement System
(高精度推动式管线测长系统研究与实现)**

C. G. DENG, C. F. DING, D. TANG, X. Y. JIANG..... 85