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| <b>The Optimum Arrangement of Working Face Ventilation System for Coal Mine</b><br>N. He, Q.J. Ma and Y.Z. Shi                                                    | 1691 |
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| <b>Experimental Study for Equipment Energy Consumption of Bag Filter Causing by the Dust Layer Structure on Filter Bag Surface</b><br>R. Zhou and H.G. Shen           | 1763 |
| <b>Design of an Automatic In-Out Oil Controlling and Management System Based on RF Technology</b><br>Q.F. Niu, Z.G. Zhang, Y.B. Hui and L. Wang                       | 1768 |
| <b>Analysis and Study of the Steel Plate Surface Defects Image Processing and the Fractal Dimension Characteristics</b><br>X. Wang, W. Liu, H. Cao and D.P. Ma        | 1773 |
| <b>Unmanned Monitoring System of Three Gorges Basin for Water Environment Based on WSN</b><br>J. Wang and Q. Wu                                                       | 1777 |
| <b>Study on PROFIBUS-DP Field Bus in Mine Hoists Control System</b><br>H.Z. Chen                                                                                      | 1781 |
| <b>Design of Programming Electronic Delay Detonator</b><br>H.Y. Li, Z.Q. Chen, F. Liu and S.L. Yan                                                                    | 1785 |
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| <b>Study on the Asymmetric Sharp Feature Construct Method in Combined Subdivision Surface</b><br>G. He, D.L. Zhu, G. He and Z.Y. Pan                                  | 1793 |
| <b>Fuel Consumption Instrument for Diesel Locomotive Test Based on Siphon Principle</b><br>L.G. Cun, B.X. Zhang, H.M. Zhang, Z.C. Miao and Y.X. An                    | 1797 |
| <b>Fault Control for a Class of Nonlinear System with Input Delay</b><br>Y. Yu and W. Wang                                                                            | 1801 |
| <b>Research on Intelligent Control of the Dust in Coal Mining</b><br>Z.R. Zhang, G.Q. Liu, X.S. Bai and G.L. Yang                                                     | 1805 |
| <b>Variable Structure Control Based Wavelet Transforms for Linear Time-Invariant Distributed Parameter Systems</b><br>G.G. Gao and X.W. Zeng                          | 1809 |
| <b>PLC Automatic Controlling System of Flushing Toilet</b><br>C.Y. Zhong                                                                                              | 1816 |
| <b>Study on the Method of Error Identification and Compensation for Gear Measuring Center</b><br>P. Wan, J.J. Guo and H.T. Li                                         | 1821 |
| <b>Integration of OT and IRS to Explore Structure of Statistics Concepts</b><br>Y.H. Lin, J.M. Yih and J.Y. Ko                                                        | 1829 |
| <b>Application Study on Hot Wire Type Air Flow Meter Used in Portable Exhaust Analyzer</b><br>Y.Q. Lu and Z.H. Xu                                                     | 1835 |
| <b>Observable State Space Realization of Networked MIMO System for a Novel Virtual Observer-Based Delay Compensation</b><br>X.Y. Meng, S.D. Xiao and H.P. Huang       | 1840 |

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| <b>Design and Optimization of Rotating Mechanism for Wind Load Test-Bed of Aerodynamic Brake</b> |      |
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| <b>Integrated Drilling Engineering Design System Based on Web Services</b>                                                                         |      |
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## Chapter 9: Processing and Manufacturing, Properties and Performance

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| <b>Experiment on Deformation Process of Magnetic Fluid Coated Inside Orthogonal Ducting</b>                  |      |
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| <b>Pilot Protection Applied in Distribution Network with DG</b><br>Y.S. Zhou, Y. Yang, P. Zheng and J.W. Zheng                                                                            | 2021 |
| <b>Study on Recrystallization Behaviour of Hot Medium Plate Rolling</b><br>Y.Q. Tian, F. Tian, Y.L. Wei, J.Y. Song and L.S. Chen                                                          | 2028 |
| <b>Reserch of Dislocation Theory in Micro Cutting</b><br>H.J. Ding, X.B. Wang, Z.Q. Liang and Q. Jia                                                                                      | 2033 |
| <b>The Design of Mechanism for Electric Shuttle Based on MATLAB/ADAMS</b><br>J.Q. Wang, J.Y. Zhu and L.S. Chen                                                                            | 2037 |
| <b>Research on the Selection of Innovative Organization of Generic Technology for Manufacturing Industry</b><br>X. Wen, Y. Zhang and H. Zou                                               | 2042 |
| <b>Study on the Balancing Analysis of Assembling Line for a Type of Server</b><br>W.X. Yao                                                                                                | 2046 |
| <b>Experimental Study on Application of Cold-Welding Technology in Engine Remanufacturing Field</b><br>Q.Z. Xu, F.Y. Li, T. Ding and J.Z. Chen                                            | 2051 |
| <b>The Research and Development of Digital Platform Supporting Gun Virtual Prototype Design</b><br>H.Z. Liu, H.S. Cao, W.N. Yang, D.S. Zhuang, G.J. Shen, Y.P. Bai, M.G. Chen and M.M. Fu | 2055 |
| <b>Research on a Method of Cutting Tool Angle Conversion</b><br>Y. Wang, J. Cong, H.P. Jing and X.X. Ning                                                                                 | 2060 |
| <b>Principal Factors Preventing CER: Behavior Angle</b><br>C.Q. Liu                                                                                                                       | 2065 |
| <b>Research on the Model of the Internet of Things Servers Group Automatic Expandability Management and Control</b><br>H.Y. Ju and X. Wang                                                | 2070 |
| <b>Study on Compensation of Guide Track Error in Cylindrical Grinding</b><br>J.L. Guo, Z.H. Zhang, L.Q. Chen, J. Chi and X. Yang                                                          | 2076 |

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| <b>Information Service Platform for Region Oriented to Ceramic Industry Cluster</b><br>H.Y. Li                                                                                        | 2081 |
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| <b>Intermittent Microwave Drying of Litchi: Drying Kinetics and Quality Formation in Color Difference</b><br>F.Y. Xu, Z. Chen, C.Y. Li, J.Y. Liao, H. Zhang and C.X. Chen             | 2090 |
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