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Research on Full-Text Retrieval Based on Lucene in Enterprise Content Management System L.X. Xu, X.L. Fu and C.H. Zhang	1950
Combined Forecasting Model Based on BP Improved by Particle Swarm Optimization and its Application R.Y. Li and X.N. Liu	1954
An Algorithm of 0-1 Knapsack Problem Based on Greedy Degree Determination and Dynamic Expectation Efficiency L.L. Zhang, H. Zhang and M.G. Wang	1957
An Improved Routing Node Selection Algorithm Based on Trust Evaluation L. Shi, Q.F. Hou and J.H. Lv	1961
Research on Feasible Direction Variation of Multi-Objective Genetic Algorithms and Simulation Y.L. Li and C. Wang	1965
Study of Non-Recursive Transformation Algorithms of Recursive Problems C.F. Ye, Y.Z. Li and W.Q. Zeng	1969
Ontology Self-Perfect Based Lexical Chain for IE R. Gao, Y. Zhang, H. Deng, J. Si and X. Meng	1972
Research and Application of Data Mining Technology Based on the Genetic Algorithm C. Wang and Y.J. Lian	1976
Effective Analysis Method of Mobile Cloud Computing J.Z. Ping, L.L. Yu, Q. Wang and X.F. Wu	1980
A Preconditioned AOR Iterative Method for an H-Matrix S.G. Zhang	1984
Convergence Analysis of Preconditioned SSOR Iterative Method for Linear Systems T. Zhou	1988
The General Digital Forensics Technologies Based on Linux W. Liu, W.L. Duan, Z.H. Tian and D. Lan	1992
Calculation and Optimization of Soil Slope Stability on One Iron Mine S.Q. Nan, J.X. Zhang, X.Z. Guo and T.H. Yang	1998
The Research and Implementation of Keyword Extraction Technology Y.M. Li and X.H. Zhang	2003
A Novel Model-Based Approach in Classification Using Extension Distance H.T. Zhang and B.J. Wang	2009
Parameters Calculation and Application of Preisach Hysteresis Model Based on Combination of Genetic Algorithms and Neural Networks J.S. Li, Q.X. Yang, C.G. Zhang and Y.J. Li	2013
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