

Content A

PART A Mathematical and Computer Modelling		
Wensheng Wang, Feng Zhang, Huifeng Xue, Yongheng Zhang	Geological spatial database and visualization modeling methods for mining groundwater	7
Chunyan Zhang, Yinhu Qiao, Liang Sun, Lizhong Wang	Method of NC processing for the cover of auto gearbox	13
Dongwen Zhang, Wei Zhang, Chenxi Zhang	Robust model predictive control for descriptor systems with time-delay via dynamic output feedback	17
Xu Hui, Gu Hong	A new algorithm of SAR target recognition based on advance deep learning neural network	25
Yang Wang, Xingdong Xue, Yongjie Lu, Chundi Si	Flexible road and tyre modeling based on ADAMS	31
Ke Su, Xiaoli Lu	Global convergence of a predictor-corrector smoothing newton method for generalized nonlinear complementarity problem	36
Man Li, ZhiGang Zhang	The problem of birthdays distribution by computer simulation	44
Mingxue Bi	Frame synchronization algorithm of adaptive frame length system	50
Zhaorui Ma, Cheng Gan, Na Li, Xia Li, Ruiqi Wang, Junwei Lei	The backstepping control of a class of random uncertain linear second order system with single known control direction	59
Haining Zhang	Research on the calculation method of the penetration probability of projectile fragments based on Monte Carlo	66
Keming Chen, Chunping Wang	Artificial bee colony algorithm improved by centroid strategy	71
Hong Wang, Zicheng Wang, Yanfeng Wang, Guangzhao Cui	3D DNA self-assembly for maximum weighted independent set problem	79
Yu Xiao, Zhigang Yan	Truncated aggregate homotopy algorithm for the least trimmed squares estimation in nonlinear regression	86
Zhiqiang Chen, Jiang Yun, Xudong Chen	Real-coded genetic algorithm with oriented evolution towards promising region for parameter optimization	93
Liang Hao, Yunfeng Ai	Research for concurrent program data race checking algorithm in control system	102
Zhenghua Yao, Zihui Ren	An adaptive artificial fish swarm algorithm with elimination and clone mechanism	110
Dawei Sun	C^0 -topology of Hamiltonian homeomorphisms on Poisson manifold	117
Hongzhang Wang, Conggang Liang	Constructing Theta function solutions to the MEW equation based on symbolic computation	125
Pinchao Meng, Weishi Yin, Yanzhong Li	Data fitting based on improved genetic programming	129
Zhaoyin Zhang	An improved rule mining technology based on swarm intelligence computation	137
Zhang Qian, Huang Jifeng	Analysis of M/Mk/1 queuing model in AVS real-time transmission system	143
Yingchun Liu	Random forest algorithm in big data environment	147
Xueming Qian, Baotong Cui	H_∞ control for a class of distributed parameter systems with leakage delay and Markovian jumping	152
Jiang Fei	Application of hybrid ant colony algorithm in wireless sensor network coverage	161
Minghua Jiang	Voltage control strategy based on immune particle swarm optimization algorithm	167
Anhong Tian, Chengbiao Fu	The research of filter tracking algorithm based on novel hybrid navigation positioning system	172
Yaguang Xiang	Quantitative analysis of stadium operation management and spatial layout optimization based on computer placement algorithm	177
Bingchen Zhao, Junying Huang, Bin Zhang, Shaofang Xia	Application of optimized ant colony algorithm in network routing	181
Wenjie Xu, Xiyu Liu	Network coverage optimization strategy of ant colony optimization algorithm	186
Yifei Chen, Sen Xu	Local search ability of frog leaping algorithm in fuzzy controller parameters optimization	192
Wenxin Li	Precision optimization of node localization centroid algorithm for WSN	197
Jinda Zhu, Libing Liu	A collaboration ontology modeling method for high level architecture	202
Hongbo Xu, Nianmin Yao, Qilong Han, Haiwei Pan	DPQR: an improved parallel DBSCAN algorithm based on data partition and QR*-tree	209
Yan Li, Lihai Wang, Yanqiu Xing	Extraction model of forest features based on mutation and bidirectional particle swarm optimization	215
Guozhu Zhao, Liang Ma, Ruibin Zhao	A cloud task scheduling algorithm based on QK-mean clustering	221
Chenchen Liu, Gao Ya	Existence and multiplicity of the solutions for singular fourth-order boundary value problem	228
Xiaochuan Ai, Jianhua Chen, Hua Chen, Silan Zhang	Explicit formulas for the fourth power mean of certain two-term exponential sums	232
Man Yan, Defa Hu	Nonlinear Kalman filter phase unwrapping algorithm based on the terrain	240
Yingying Peng, Xuegang Ren, Defa Hu	Multibit-flipping decoding algorithm for Low-density parity-check codes	245
Kun Liu, Xiaogao Yu, Weifeng Pan	A coherence-checking algorithm for ontology integration	250
Wenhao Zhu, Qiyi Guo	A fault detection model for microgrid detection based on Bayesian network and association rule mining	255
Yinju Lu, Guoquan Shan	An AM-MCMC cleaning algorithm for multi-reader RFID redundant data	260
Hong Yang	Sufficiency of the solution for multi-objective semi-infinite programming with $K - (F_b, \rho) -$ convexity	270
Hao Liang, Yunfeng Ai, Huairong Shen, Yongchao Zhao	Dynamic model checking for concurrent programs in control system	275
Liming Huang, Jinling Song, Yan Gao, Qianying Cai	Semantic integrity and K-anonymity	282
Xiaoping Xu, Feng Wang, Fang Dai	A modeling approach for a class of static nonlinear systems	289
Nada Wu	The application of MuPAD in the plotting of analytic geometry	295
Yongman Zhao, Weijiang Mei	A new bivariate control chart for monitoring the mean vector and covariance matrix simultaneously	301
Yubo Yang, Wei Huang, Wenqin Fan, Zhengming Hu	Pre-obfuscation model based on COIL intermediate language	308
Ying Ni	Localization algorithm of preferred beacon nodes based on ZigBee network	316
Shuguang Li, Shuying Chen, Mengtian Cui	On the theoretical properties of bipartition dissimilarity measure	322
Li-Tao Zhang, Hui-Li Meng	A note on generalized stationary iterative method for solving saddle point problems	328
Shaohua Cheng, Litao Zhang	Comparisons of numerical experiments about GRNMM methods	333
Wenbo Yu	Consistency analysis of Clough-Tocher macro-elements	338
Deling Zou, Haibin Cong	An empirical analysis on the trade structure and trade competitiveness of Chinese creative industry: 1996-2010	344

Yangping Wang, Bing Wang, Xiaogang Du	An improved viscous fluid elastic registration algorithm of medical images based on parallel computation	354
Han Yu	Application of ActionScript3 language algorithm in animation image design	360
Jiao Guilan	Application of cloud model theory to construct an evaluation model for network courses on College English	365
Meijuan Liu, Shicai Yang	Construction and application of a Web text-oriented integrated sentiment feature library mined by a big corpus	370
Cheng Zhou, Jian Shi	Design on role-based multi-area access control method in electric power unified application platform system	377
Hao Xu	Ecological quality assessment of urban green spaces based on landscape metrics: A case of Nanjing, China	384
Yuan-Yuan Zhang	Choice of emergency logistics center location based on particle swarm optimization	392
Guohai Zhang, Mingxin Zhang	Energy management system (EMS) based on WebGIS	396
Ying Nie, Ke Li, Yun Xia Wang	Farmland scale develop benefit evaluation in ecologically vulnerable areas—taking Songyuan land consolidation project as example	402
Jing Nie, Wei Weng, Linan Sun	K-nearest neighbor skyline queries in mobile environment	412
Bo Li, Jianping Wei, Peng Li	Numerical simulation on gas drainage of boreholes in coal seam based on gas-solid coupling model	418
Jiaxiang Hu, Jian Li	Research on emergency facilities location problem and its greedy dropping heuristic algorithm response to public health emergency	425
Xingyi Chen, Zhongming Yuan, Ying Xie, Shuhua Wang	Research on liquefaction process of FLNG unit with propane precooling device and double nitrogen expander	431
Yi Zhong, Jian Xu, Jing Zhong, Fengyu Liu	Research on rejuvenation analytical models for a virtualized system with live VM migration	439
Jingyi Cheng, Yidong Zhang, Peng Zhang	Research on the characteristics of overlying strata movement in downward and upward mining longwall panel in steeply inclined seam by similar physical simulation	446
Yuping Zhou, Rufeng Huang, Dongmei Yu	Research on training mode of information security application-oriented personnel on the basis of engineering practice in China	453
Yuhua Zhu, Yujuan Chen	Risk forewarning mechanism of ship investment: model and numerical analysis	462
Li Li, Qiang Yao	Search results optimization approach based on semantics	466
Gang Wei, Jian-jian Xing, Hui-jie Qiu, Ze-fei Yang, Dong-di Wang	Study of the influencing factors of compressive characteristics for the foundation layer of undersea immersed tube tunnels	473
Guimei Gu, Zheng Wang	Study on identification of structural damage to wind turbine blade based on modified fruit fly optimization algorithm	485
Li Fang, Jin Cong	Study on the financing mode selection of overseas investment for coal mining projects	491
Jie He, Hui Guo	Super-sampling method during decoding for fractal image compression	501
Haibin Cong, Deling Zou	Technological structure determination of Chinese creative cultural product export	507
Menglong Li, Jingsong Nie, Yujia Ren	The correlation analysis between exercise dependence and exercise motivation	513
Junshu Du, Yi Guo	The coupling mechanism between key resources acquisition capabilities and technologies innovation capabilities under open innovation pattern	517
Wenhua Liu, Licheng Ren, Tiangang Jiang	The empirical research of the relationship between knowledge integration and service capability in service outsourcing	525
Peng Xing, Lin Hua, Song Deng, Songze Du	The subjective evaluation on sound quality for interior noise based on customer satisfaction	533
Fengjuan Gu, Shouzhen Zeng	A method for probabilistic decision making with distance measures under 2-tuple linguistic environment	541
Zhaoxia Si, Xiangjun Chen	Effect of coal price on the economy in China	547
Bingyun Zheng, Sui Li	Multivariable panel data cluster analysis and its application	553
Jing Li, Mengyao Li, Wentan Li	On echo signal of complex cloud background based on narrow pulse laser detector	558
Lei Che, Wenlei Sun, Yong Huang, Yongsheng Chao	Laser cladding technology in the repair of shearer picks	563
Zhimin Mu, Linyun Zhang, Shouzhen Zeng	A hybrid method for intuitionistic linguistic decision making with distance measure and aggregation operator	566
Mengling Zhao, Hongwei Liu	A kernel vector quantization codebook designing for image compression based on simulated annealing into genetic algorithm	572
Junwei Yuan, Gaowei Yue	Non-Darcy properties of gas flow in different metamorphic grade coals	578
Hai Wang, Wenbo Qu, Qunli Shen	Table tennis video data mining based on performance optimization of artificial fish swarm algorithm	584
Fuhuai Ding, Jinyi Chang	Instantaneous overload optimization of scheduling algorithm for real-time systems of Linux operating system	589
Wei Feng, Yurong Ma, Bojiang Zhu	Performance optimization of wavelength conversion ADMH algorithm in WDM optical network	595
Authors' Index		600
Cumulative Index		601