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(A) 期刊論文

1. Pi, HK; Guo, MH; Chen, RB; Huang, SF. *ECOPICA: empirical copula-based independent component analysis*. *STATISTICS AND COMPUTING*. 34(1), 2024. [SCIE, NSYSU].
2. Su, GV; Chen, MR; Guo, MH; Huang, HW. *Limiting spectral distribution of stochastic block model*. *RANDOM MATRICES-THEORY AND APPLICATIONS*. 12(4), 2023. [SCIE, NSYSU].
3. Wang, HK; Guo, MH; Lee, S; Chua, CH. *Forecasting and change point test for nonlinear heteroscedastic time series based on support vector regression*. *PLOS ONE*. 17(12), 2022. [SCIE, NSYSU].
4. Huang, PK; Yang, MC; Wang, ZX; Huang, YJ; Lin, WC; Pan, CL; Guo, MH. *Augmented detection of septal defects using advanced optical coherence tomography network-processed phonocardiogram*. *FRONTIERS IN CARDIOVASCULAR MEDICINE*. 9, 2022. [SCIE, NSYSU].
5. Lin, LC; Guo, MH; Lee, S. *Monitoring photochemical pollutants based on symbolic interval-valued data analysis*. *ADVANCES IN DATA ANALYSIS AND CLASSIFICATION*. 2022. [SCIE, NSYSU].
6. Chua, CH; Guo, MH; Huang, SF. *Using the Kriging Correlation for unsupervised feature selection problems*. *SCIENTIFIC REPORTS*. 12(1), 2022. [SCIE, NSYSU].
7. Liu, JY; Wang, DF; Yu, CM; Jiang, JH; Guo, MH; Hantoko, D; Yan, M. *A two-step process for energy-efficient conversion of food waste via supercritical water gasification: Process design, products analysis, and electricity evaluation*. *SCIENCE OF THE TOTAL ENVIRONMENT*. 752, 2021. [SCIE, NSYSU].
8. Lin, LC; Chen, RB; Huang, MNL; Guo, MH. *Huber-type principal expectile component analysis*. *COMPUTATIONAL STATISTICS & DATA ANALYSIS*, 151, 2020. [SCIE, NSYSU].
9. Chiou, HT; Guo, MH; Ing, CK. *Variable selection for high-dimensional regression models with time series and heteroscedastic errors*. *JOURNAL OF ECONOMETRICS*, 216(1):118-136, 2020. [SCIE, NSYSU].
10. Huang, Shih-Feng; Guo, Meihui; Chen, May-Ru. *Stock market trend prediction using a functional time series approach*. *QUANTITATIVE FINANCE*, 2019. [SCIE, NSYSU].
11. Huang, Yu-Jung; Pan, Chung-Long; Lin, Shin-Chun; Guo, Mei-Hui. *Machine-learning approach in detection and classification for defects in TSV-based 3-D IC*. *IEEE TRANSACTIONS ON COMPONENTS PACKAGING AND MANUFACTURING TECHNOLOGY*, 8(4):699-706, 2018. [SCIE, NSYSU].
12. Huang, Yu-Jung; Guo, Mei-Hui; Chua, Cheng-Han. *Differential pad placement design of a capacitive coupling-based stacked die package*. *IEEE TRANSACTIONS ON COMPONENTS PACKAGING AND MANUFACTURING TECHNOLOGY*, 7(7):1035-1042, 2017. [SCIE, NSYSU].
13. Ing, Ching-Kang; Chiou, Hai-Tang; Guo, Meihui. *Estimation of inverse autocovariance matrices for long memory processes*. *BERNOULLI*, 22(3):1301-1330, 2016. [SCIE, NSYSU].
14. Lin, Liang-Ching; Lee, Sangyeol; Guo, Meihui. *Goodness-of-fit test for the svm based on noisy observations*. *STATISTICA SINICA*, 26(3):1305-1329, 2016. [SCIE, NSYSU].
15. Lin, Liang-Ching; Guo, Meihui. *Optimal restricted quadratic estimator of integrated volatility*. *ANNALS OF THE INSTITUTE OF STATISTICAL MATHEMATICS*, 68(3):673-703, 2016. [SCIE, NSYSU].
16. Lee, Sangyeol; Guo, Meihui. *Monitoring change point for diffusion parameter based on discretely observed sample from stochastic differential equation models*. *APPLIED STOCHASTIC MODELS IN BUSINESS AND INDUSTRY*, 31(5):609-625, 2015. [SCIE, NSYSU].
17. Guo, Meihui; Guo, Yi-Ting; Wang, Chi-Jeng; Lin, Liang-Ching. *Assessing influential trade effects via high-frequency market reactions*. *JOURNAL OF APPLIED STATISTICS*, 42(7):1458-1471, 2015. [SCIE, NSYSU].
18. Chen, Ray-Bing; Guo, Meihui; Hardle, Wolfgang K.; Huang, Shih-Feng. *COPICA-independent component analysis via copula techniques*. *STATISTICS AND COMPUTING*, 25(2):273-288, 2015. [SCIE, NSYSU].
19. Sangyeol Lee, Mei-Hui Guo, Wolfgang K. Haerdle, and Shih-Feng Huang. *Monitoring change point for diffusion parameter based on discretely observed sample from sde models*. *APPLIED STOCHASTIC MODELS IN BUSINESS AND INDUSTRY*, 31(5):609-625, 2014. [SCI, NSYSU]
20. Shih-Feng Huang and Mei-Hui Guo. *Model risk of the implied garch-normal model*. *QUANTITATIVE FINANCE*, 14:2215-2224, 2014. [SCI, SSCI, NSYSU]
21. Ray-Bing Chen, Mei-Hui Guo, Wolfgang K. Haerdle, and Shih-Feng Huang. *COPICA - independent component analysis via copula techniques*. *STATISTICS AND COMPUTING*, 25:273-288, 2015. [SCI, NSYSU]
22. Liang-Ching Lin, Sangyeol Lee, and Mei-Hui Guo. *The Bickel-Rosenblatt test for continuous time stochastic volatility models*. *TEST*, 23:195-218, 2014. [SCI, NSYSU]
23. Liang-Ching Lin, Sangyeol Lee, and Mei-Hui Guo. *Goodness-of-fit test for stochastic volatility models*. *JOURNAL OF MULTIVARIATE ANALYSIS*, 116:473-498, 2013. [SCI, NSYSU]
24. Shih-Feng Huang and Mei-Hui Guo. *Optimal multi-period quadratic risk-adjusted hedging strategy*. *JOURNAL OF THE KOREAN STATISTICAL SOCIETY*, 42:37-49, 2012. [SCI, NSYSU]

25. Mei-Hui Guo and Gen-Liang Li. Estimation of MA(1) model based on rounded data. *TATRA MOUNTAINS MATHEMATICAL PUBLICATION*, 51:45–53, 2012. [SCI, NSYSU].
26. Chao-Kai Wen, Guangming Pan, Kai-Kit Wong, Mei-Hui Guo, and Jung-Chieh Chen. A deterministic equivalent for the analysis of non-Gaussian correlated MIMO multiple access channels. *IEEE TRANSACTIONS ON INFORMATION THEORY*, 59:329–352, 2013. [SCI, NSYSU]
27. Shih-Feng Huang and Mei-Hui Guo. Dynamic programming and hedging strategies in discrete time. IN *HANDBOOK OF COMPUTATIONAL FINANCE*. (Edited by Jin-Chuan Duan and Wolfgang Härdle and James E. Gentle), pages 605–632. Springer, Berlin Heidelberg, 2012. [NSYSU].
28. Mei-Hui Guo, Ching-An Liu, and Shih-Feng Huang. Dynamic co-movement detection of high frequency financial data. *JOURNAL OF DATA SCIENCE*, 10:345–362, 2012. [NSYSU].
29. Cheng-Siang Wang, Mei-Hui Guo, Kainam Thomas Wong, and Vladimir I. Piterbarg. Fourth-order spatial correlation-coefficient across the uplink receiver's spatial aperture - analytically derived in closed form. *IEEE TRANSACTIONS ON COMMUNICATIONS*, 60:724–734, 2012. [SCI, NSYSU]
30. Liang-Ching Lin, Mei-Hui Guo, and Kainam Thomas Wong. Two-branch selection in wireless space-diversity reception: An upper bound for its output power. *IEEE TRANSACTIONS ON COMMUNICATIONS*, 60:537–546, 2012. [SCI, NSYSU]
31. Sangyeol Lee and Mei-Hui Guo. Test for dispersion constancy in sde models. *APPLIED STOCHASTIC MODELS IN BUSINESS AND INDUSTRY*, 28:342–353, 2012. [SCI, NSYSU]
32. Shi-Feng Huang and Mei-Hui Guo. Financial derivative valuation - a dynamic semiparametric approach. *STATISTICA SINICA*, 19:1037–1054, 2008. [SCI, NSYSU]
33. Shi-Feng Huang, Mei-Hui Guo, and Ying-Chang Liang. Valuation of multidimensional Bermudan options. In *Applied Quantitative Finance, 2nd Edition*. (Edited by W. Hardle, N. Hautsch and L. Overbeck), pages 295–308. Springer, Berlin, 2009. [NSYSU].
34. Guangming Pan, Mei-Hui Guo, and Ying-Chang Liang. Asymptotic performance of reduced-rank linear receivers with principal component filter. *IEEE TRANSACTIONS ON INFORMATION THEORY*, 53(3): 1148–1151, 2007. [SCI, NSYSU].
35. Mei-Hui Guo and 應廣儀 and 王琛瑤. 十二音列樂曲的方與模型研究 - 以 Webern 和 Schonberg 的樂曲為例. *中國統計學報*, 45:170–188, 2007. NSC 91-2118-M-110-003. [NSYSU].
36. G. M. Pan, Mei-Hui Guo, and W. Zhou. Asymptotic distributions of the signal-to-interference ratios of LMMSE detection in multiuser communications. *ANNALS OF APPLIED PROBABILITY*, 17(1):181–206, 2007. [SCI, NSYSU].
37. Ching-Mai Ko, Yu-Jung Huang, Shen-Li Fu, and Mei-Hui Guo. Multi-objective design optimization of MCM placement. *WSEAS Transactions on circuits and systems*, 5(5):753–758, 2006. [EI, NSYSU].
38. Mei-Hui Guo and C. C. Shen. LM test for the constancy of regression coefficient. *Sankhyā B*, 64:214–233, 2002. [NSYSU].
39. Yu-Jung Huang, Mei-Hui Guo, and Shen-Li Fu. Reliability and routability consideration for MCM placement. *MICROELECTRONICS RELIABILITY*, 42:83–91, 2002. [SCI, NSYSU].
40. Yu-Jung Huang, Shen-Li Fu, Sun-Lon Jen, and Mei-Hui Guo. Fuzzy thermal modeling for MCM placement. *MICROELECTRONICS JOURNAL*, 32:863–868, 2001. [SCIE, NSYSU].
41. Mei-Hui Guo and Shi-Fong Huang. Power approximations for test statistics with dominant components. *STATISTICA SINICA*, 11:675–689, 2001. [SCI, NSYSU].
42. Mei-Hui Guo, Mong-Na Lo Huang, Z. D. Bai, and K. S. Hsieh. Important ECG diagnosis indices of ventricular defect children with or without congestive heart failure. *STATISTICS IN MEDICINE*, 20:1125–1141, 2001. [SCI, NSYSU].
43. Y. J. Huang and Mei-Hui Guo. Fuzzy thermal placement for multichip module applications. *FUZZY SETS & SYSTEMS*, 122:185–194, 2001. [SCI, SSCI, NSYSU].
44. Z. D. Bai and Mei-Hui Guo. A paradox in least squares estimation of linear regression models. *STATISTICS AND PROBABILITY LETTERS*, 42:167–174, 1999. [SCIE, NSYSU].
45. Mei-Hui Guo, Zhidong Bai, and Hong Zhi An. Multi-step prediction for nonlinear autoregressive models based on empirical distribution. *STATISTICA SINICA*, 9(2):559–570, 1999. [SCI, SSCI, NSYSU].
46. 郭美惠, 沈志強. 虛無假設為平穩, 對立假設為單根的拉格朗日乘子檢定統計量. *中國統計學報*, 35:227–247, 1997. [NSYSU].
47. 郭美惠, 羅夢娜, 白志東, 陳宏天, 謝凱生. 心電圖中 P-R 區間的統計分析與模型的建立. *中國統計學報*, 35:1–25, 1997. [NSYSU].
48. Mei-Hui Guo and Y. K. Tseng. A comparison between linear and nonlinear forecasts for nonlinear AR models. *JOURNAL OF FORECASTING*, 16:491–508, 1997. [SSCI, NSYSU].
49. Mei-Hui Guo and Ching-Zong Wei. A lower bound for expectation of a convex functional. *STATISTICS AND PROBABILITY LETTERS*, 18:191–194, 1993. [NSYSU].

50. Mei-Hui Guo and Joseph D. Petrucci. *On the null recurrence and transience of a first order SETAR model.* *JOURNAL OF APPLIED PROBABILITY*, 28:584–592, 1991. [SCI].

(B) 專書及其他著作

1. Inchi Hu, Mei-Hui Guo, and Shih-Feng Huang. *Efficient importance sampling for expected shortfall and value at risk.* 2012. Submitted.
2. Sangyeol Lee and Mei-Hui Guo. *A control chart for diffusion parameter of sde models.* 2011. Submitted.
3. Wan-Ping Hung, Mong-Na Lo Huang, and Mei-Hui Guo. *Surgical operating time modeling and combinations for scheduling with mixture lognormal distributions.* 2011. Submitted.
4. Liang-Ching Lin and Mei-Hui Guo. *Minimum variance unbiased estimator of integrated volatility in stochastic volatility models.* 2011.
5. Mei-Hui Guo. *Inference for nonlinear time series.* Ph. D. thesis, Dept. of Mathematics, Univ. of Maryland, U.S.A., 1989.