

## CONTENTS

### Chemical Sciences

- Exploring the topological effect of linear and cyclic macroCTAs during polymerization-induced self-assembly (PISA)  
..... *Depeng Yin, Wen Xu, Hualong Zhang, et al.* (1)

### Mathematical Sciences

- Pancyclicity of randomly perturbed digraph  
..... *Zelin Ren, Xinmin Hou* (2)
- An empirical Bayes method for genetic association analysis using case-control mother-child pair data  
..... *Yanan Zhao, Weiqi Yang, Hong Zhang* (3)
- Worst-case conditional value-at-risk and conditional expected shortfall based on covariance information  
..... *Tiantian Mao, Qi Zhao, Qinyu Wu* (4)

### Earth and Space Sciences

- An analytical study on early kick detection and well control considerations for casing while drilling technology  
..... *Said K. Elsayed, Hany M. Azab, Adel M. Salem* (5)
- Petroleum-contaminated soil extent recorded by  $\delta^{15}\text{N}$  and  $\delta^{13}\text{C}$  of plants and soils  
..... *Zhoufeng Wang, Ruijuan Hao, Juan Wang, et al.* (6)
- Deployable boom for Mars Orbiter Magnetometer onboard Tianwen-1  
..... *Manming Chen, Zonghao Pan, Tielong Zhang, et al.* (7)

