

## Contents

**227** An improved Gmapping algorithm based map construction method for indoor mobile robot

*Tao Yong (陶永), Jiang Shan, Ren Fan, Wang Tianmiao, Gao He*

**238** Theoretical investigation on self-recovery regulation method for diesel engine misalignment through co-simulation

*Jiang Zhinong(江志农), Wang Zijia, Mao Zhiwei, Zhang Jinjie, Wang Chenguang, Huang Yifei*

**249** Analysis of asymptotically tight approximation SER for cooperative NOMA systems

*Xu Lei(徐磊), Cai Jing, Yao Yijing, Zhu Dingcheng, Fang Hongyu, Li Xiaohui*

**256** A neutral point potential drift control method for NPC three-level inverter

*Wu Lin (吴琳), Qi Xin, Shi Xiangyang, Su Tao, Tao Yong*

**262** Research on gas leakage through suction valves of reciprocating compressor under varying load conditions

*Zhang Jinjie (张进杰), Wang Yao, Zhang Chun, Jiang Zhinong, Sun Xu*

**272** Numerical simulation and experimental study on the leakage of continuous rotary electro-hydraulic servo motor

*Wang Xiaojing (王晓晶), Peng Yiwen, Li Chunhui*

**282** Towards consistent machine translation of abbreviated terms in scientific literature

*He Yanqing (何彦青), Sun Yueying, Wu Zhenfeng, Pan You, Zhang Junsheng*

**294** A brief survey on deep learning based image super-resolution

*Zhu Xiaobin (祝晓斌), Li Shanshan, Wang Lei*

**303** Micro-expression recognition algorithm based on the combination of spatial and temporal domains

*Wu Jin (吴进), Xi Meng, Dai Wei, Wang Lei, Wang Xinran*

**310** Networked guaranteed cost PID attitude tracking control of a laboratory flight system

*Liu Yicai (刘义才), Liu Bin*

**320** Study on the fusion emotion classification of multiple characteristics based on attention mechanism

*Li Ying (李颖), Shao Qing, Hao Weichen*

**329** Research on status quo of global graphene technology based on bibliometrics

*Xiong Shuling (熊书玲), Wang Luohan*