

2026 年度青岛市自然科学奖拟提名项目公示材料

项目名称：海洋油气勘探开发深水装备智能运维理论及方法

提名者：中国石油大学（华东）

主要完成人（完成单位）：蔡宝平、杨超、孔祥地、邵筱焱、高春坦

代表性论文专著目录（不超过 5 篇）

序号	论文专著名称	刊名（出版社）	Doi/ISSN（ISBN）	发表（出版）时间	作者（按刊物发表顺序）	通讯作者（含共同）	第一作者（含共同）	他引总次数	检索数据库	通讯/一作（主编）是否为第一完成人
1	Digital twin-driven fault diagnosis method for composite faults by combining virtual and real data	Journal of Industrial Information Integration	10.1016/j.jii.2023.100469	2023.06	Chao Yang, Baoping Cai, Qibing Wu, Chenyushu Wang, Weifeng Ge, Zhiming Hu, Wei Zhu, Lei Zhang, Longting Wang	Baoping Cai	Chao Yang	201	Google Scholar	是
2	Optimal sensor placement methodology of hydraulic control system for fault diagnosis	Mechanical Systems and Signal Processing	10.1016/j.ymssp.2022.109069	2022.07	Xiangdi Kong, Baoping Cai, Yonghong Liu, Hongmin Zhu, Yiqi Liu, Haidong Shao, Chao Yang, Haojie Li, Tianyang Mo	Baoping Cai	Xiangdi Kong	120	Google Scholar	是
3	Remaining useful life estimation of structure systems under the influence of multiple causes: Subsea pipelines as a case study	IEEE Transactions on Industrial Electronics	10.1109/TIE.2019.2931491	2020.07	Baoping Cai, Xiaoyan Shao, Yonghong Liu, Xiangdi Kong, Haifeng Wang, Hongqi Xu, Weifeng Ge	Baoping Cai	Baoping Cai	203	Google Scholar	是
4	Application of Bayesian networks in reliability evaluation	IEEE Transactions on Industrial	10.1109/TII.2018.28	2019.04	Baoping Cai, Xiangdi Kong, Yonghong Liu, Jing Lin, Xiaobing	Baoping Cai	Baoping Cai	321	Google Scholar	是
5	Resilience evaluation methodology of engineering systems with dynamic-Bayesian-network-based degradation and maintenance	Reliability Engineering & System Safety	10.1016/j.ress.2021.107464	2021.05	Baoping Cai, Yanping Zhang, Haifeng Wang, Yonghong Liu, Renjie Ji, Chuntan Gao, Xiangdi Kong, Jing Liu	Baoping Cai	Baoping Cai	181	Google Scholar	是
合计								1026		