SCIENCE CHINA Technological Sciences



Article

https://doi.org/10.1007/s11431-022-2147-3

Multi-objective evolutionary optimization and thermodynamics performance assessment of a novel time-dependent solar Li-Br absorption refrigeration cycle

MOHTARAM Soheil¹, WU WeiDong^{1*}, ARYANFAR Yashar², ABRISHAMI Arya³, OMIDI Mohammad⁴, YANG QiGuo¹, GARCÍA ALCARAZ Jorge Luis⁵ & CHEN YongBao¹

School of Energy and Power Engineering, University of Shanghai for Science and Technology, Shanghai 200093, China;
 Department of Electric Engineering and Computation, Autonomous University of Ciudad Juárez, Juárez, Chihuahua, México;
 School of Aerospace Engineering, Tsinghua University, Beijing 100084, China;
 School of Energy and Power Engineering, Dalian University of Technology, Dalian 116024, China;
 Department of Industrial Engineering and Manufacturing, Autonomous University of Ciudad Juárez, Juárez, Chihuahua, México

Received April 17, 2022; accepted July 11, 2022; published online September 22, 2022

solar absorption refrigeration, water-lithium bromide, thermodynamics performance, exergy analysis, multi-objective optimization

Citation: Mohtaram S, Wu W D, Aryanfar Y, et al. Multi-objective evolutionary optimization and thermodynamics performance assessment of a novel time-dependent solar Li-Br absorption refrigeration cycle. Sci China Tech Sci, 2022, 65, https://doi.org/10.1007/s11431-022-2147-3

1 Introduction

^{*}Corresponding author (email: usstwwd@usst.edu.cn)