

Author contributions:

Demin Huang: The project organizer and leader. Proposer of Zero-Carbon emission reverse osmosis clean energy technology. Nanoscale one-way valve concept and principle, proposer. The technical principle and method of reverse osmosis without energy consumption, spontaneous water lifting, direct use of heat energy of water does work without temperature difference, proposer. Charge-type electrostatic field method of water level difference and water lifting experiment and experiments designer, experimenter. Paper writer.

Qizhao Luo: The first user of the experimental apparatus, the operator of power-source based electrostatic field water level difference experiment. The proofreader of the paper. Main contributor to the submission.

Weigang Li: The proposer and explorer of the early concepts, principles and methods, the designer. Experimenter of the power-source based electrostatic field water level difference experiment. The proofreader of the paper.

Bin Wu: The experiment leader and operator.

Yu Cheng: Paper translator, assistant contributor.

Rui Zhang: Project participant, proofreader.

Jie Wu: Project participant.

Zhuangfei Wu :Experimental Operator.

Zhuochao Ren :Experimental Operator.

There is no conflict of interest in this manuscript!