Design of a Quadruped Wall-Climbing Robot (WCR) with a Three-Row Opposed Gripping Mechanism

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- A quadruped climbing robot with a three-row opposed gripping mechanism is designed.
- The degree of freedom of the robot is demonstrated and adopting the trotting gait as the climbing mode.
- The feasibility of the mechanical structure and gait scheme is verified.
- The prototype of the robot is made and a preliminary experiment is carried out.



The robot can attach to the wall with four feet equipped with three-row opposed grippers