

Scientists create cockroach robots that run super fast, step back and die, and weigh a million times more

Studying cockroach species - the world's most resilient little insects, researchers from the University of California have created a robot model that runs super fast, trampling to die.

Studying cockroach species - the world's most resilient little insects, researchers from the University of California have created a robot model that runs super fast, trampling to die.

According to Liwei Lin, a researcher from the University of California, this robot model is made of polyvinylidene-coated polymer materials. The robot is very small, only about 10mm long, but can move very fast at speeds of up to 20 cm / s, 20 times the length of the body.



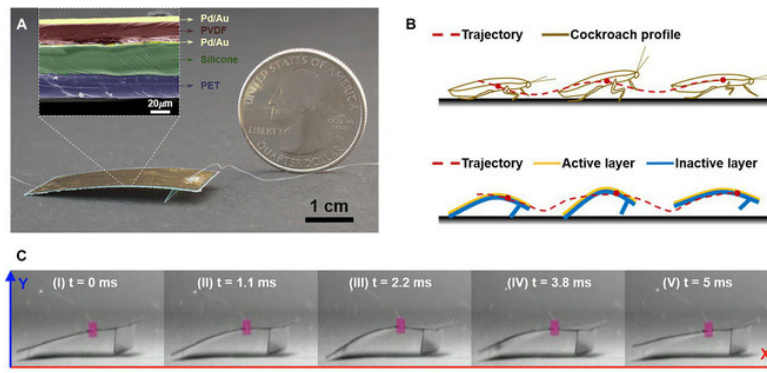
The movement mechanism of this robot is based on voltage fluctuation in the wires attached to the body. The robot's body is constantly bent and stretched when the AC voltage fluctuates, which makes it possible to push forward at an incredible speed.

Below is a video recording the motion phase of the "cockroach robot" that has been slowed down to 200 times. Please follow us to know how it moves.

The robot also inherited the toughness of cockroaches, though it was forced into an extremely large weight, it still worked well. The robot can withstand the compression of a 60kg man's foot, nearly 1 million times its own weight.

The robot also successfully completed a steep climb test, which can climb a 7.5 degree inclined pipe at 7 times the body length per second. Even, it can still move freely if you have to carry a weight 6 times your body.

Unlike most other robots that are currently only strong or agile, cockroach robots are the only robot model with a strong frame that is still flexible.



This robot simulates the movement of cockroaches.

With the above characteristics, cockroach robot is a potential candidate to help people in environmental exploration and disaster rescue activities.

For example, when an earthquake happens, a small, agile yet powerful robot will be helpful in finding people living beneath the rubble, where large machines or dogs are hard to find.

1. Watch the robot decode the 3x3 rubik block in just 0.38 seconds

You finished reading the article "**Scientists create cockroach robots that run super fast, step back and die, and weigh a million times more**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.