

Detecting: Multiple Antigens

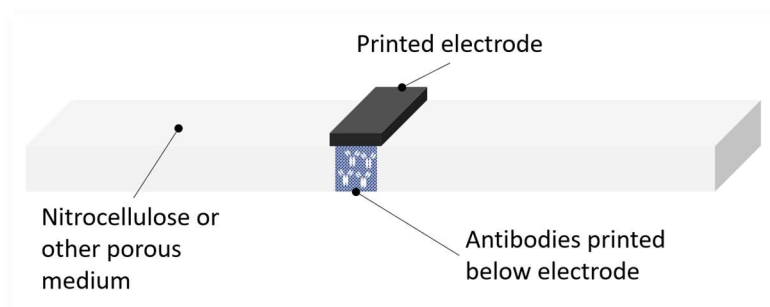
Issue: Basic optical readers of lateral flow assays can suffer from issues such as light interference, lens quality and distance control between the device and object.

More sophisticated readers do not have these problems, but they can be expensive.

Objective: Develop a technology that provides the accuracy of high-end optical readers – but at an affordable price point.

Sample: Various

Result: We set up a lateral flow test strip with a low-conductivity carbon band printed above the test line and pass an electrical current across it.

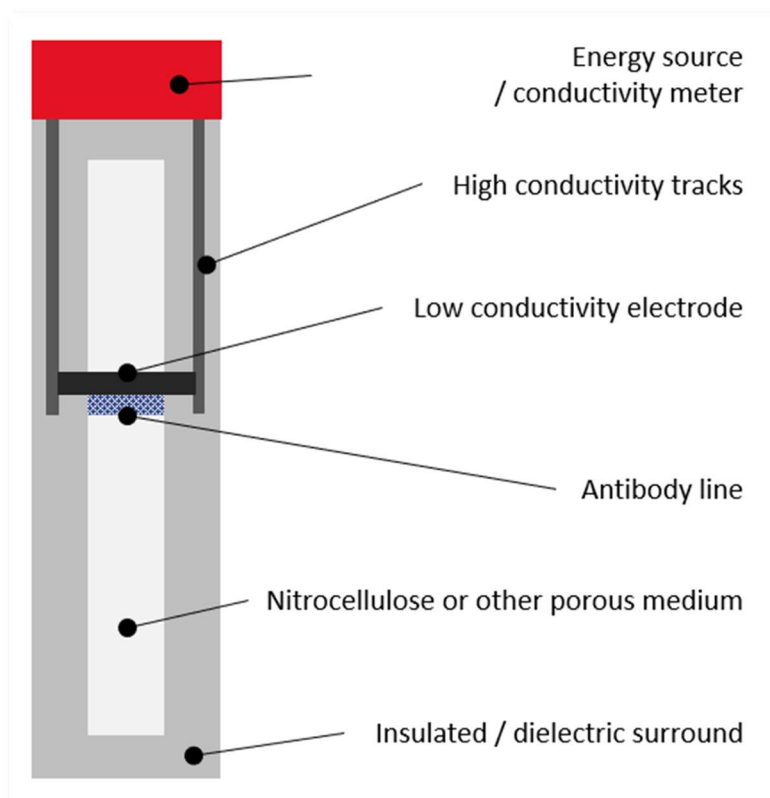


Rather than measuring the optical density of gold nanoparticles captured (or not) on the test line, we measure the change in conductivity/resistance of the current. The presence of gold will increase the flow of electrons, increasing conductivity / decreasing resistance.

This method of reading lateral flow assays is highly sensitive. Even miniscule quantities of gold captured on the test line will alter the flow of electrons across the strip.

Measurement is taken by a simple, low-cost conductivity meter. Readings can be configured to the requirements of the test.

- Yes-no / Positive-negative
- Low-medium-high
- Numerical reading



Applications: Multiple