

Abstract

A microfluidic paper-based chip, a microfluidic test system, a liquid test method, and the use. The chip comprises a paper-based layer (2). The paper-based layer (2) is provided with a test cell (21). A first contact angle region (211) and a second contact angle region (212) are provided in the test cell (21). The contact angle of a liquid in the test cell (21) in the first contact angle region (211) is greater than the contact angle thereof in the second contact angle region (212). According to the mechanism of chroma migration on a paper chip, the surface tension of the liquid is regulated and controlled, so that the liquid has a driving force pointing to the inside of the liquid drop, and thus contracts from the first contact angle region (211) to the second contact angle region (212) having the smaller contact angle, so as to drive the chroma to migrate to the second contact angle region (212) to be enriched, thereby increasing the chromaticity and uniformity of a unit area while the concentrations of target objects to be tested are the same, improving the test sensitivity and lowering a detection limit, and additionally enlarging the point taking range and improving the point taking operability and the test repeatability.

[Fig. 1]