CLAIMS

[Claim 1]

An analysis device comprising:

an optical scanning unit configured to optically scan a surface of a substrate to which analytes and particles for labeling the analytes are fixed;

a pulse detector configured to detect a pulse wave and a pulse width of the pulse wave included in a detection signal obtained from the optical scanning unit when the optical scanning unit scans the substrate; and

a counting unit configured to count the analytes and determine that an analyte count is one when the pulse detector consecutively detects two pulse waves each having a pulse width less than a first reference value, the first reference value being determined depending on the pulse width of the pulse wave,

wherein, when the pulse detector detects a first pulse wave having a pulse width less than the first reference value, detects a second pulse wave after the first pulse wave, and a pulse interval between the first pulse wave and the second pulse wave is greater than or equal to a third reference value, the third reference value being determined depending on a pulse interval when the optical scanning unit scans two adjacent particles, the counting unit does not implement counting processing with regard to both the first pulse wave and the second pulse wave.

[Claim 2]

The analysis device according to claim 1, wherein the counting unit determines that the analyte count is one when the pulse detector detects a pulse wave having a pulse width greater than or equal to the first reference value and less than a second reference value, the second reference value being determined depending on a second pulse width, the second pulse width being a pulse width when the optical scanning unit scans a particle isolated from other particles.

[Claim 3]

The analysis device according to claim 2, wherein, when the

pulse detector detects a first pulse wave having a pulse width less than the first reference value and subsequently detects the pulse wave having the pulse width greater than or equal to the first reference value and less than the second reference value, the counting unit does not implement counting processing with regard to the first pulse wave.

[Claim 4]

The analysis device according to claim 2 or 3, wherein, when the pulse detector detects a pulse wave having a pulse width greater than or equal to the second reference value, the counting unit does not implement counting processing with regard to the pulse wave having the pulse width greater than or equal to the second reference value.

[Claim 5]

The analysis device according to any one of claims 1 to 4, wherein the first reference value is a sum of a first pulse width and a predetermined value included in the detection signal.

[Claim 6]

The analysis device according to any one of claims 2 to 4, wherein the second reference value is a sum of the second pulse width and a predetermined value included in the detection signal.

[Claim 7]

An analysis method comprising:

optically scanning a surface of a substrate to which analytes and particles for labeling the analytes are fixed;

detecting a pulse wave and a pulse width of the pulse wave included in a detection signal obtained by scanning the substrate; and

counting the analytes and determining that an analyte count is one when consecutively detecting two pulse waves each having a pulse width less than a first reference value in the detection signal, the first reference value being determined depending on the pulse width of the pulse wave,

wherein, when a first pulse wave having a pulse width less than the first reference value is detected, a second pulse wave after the first pulse wave is detected, and a pulse interval

between the first pulse wave and the second pulse wave is greater than or equal to a third reference value, the third reference value being determined depending on a pulse interval when two adjacent articles are scanned, both the first pulse wave and the second pulse wave are not counted as the analyte count.