Claims:

1. A method, comprising:

receiving one or more light signals at a point in time, wherein each light signal is captured by a respective pixel of at least one single-photon avalanche diode (SPAD) array, wherein a pixel is activated for a reset time after capturing a light signal;

determining a number of activated pixels of the at least one SPAD array during the point in time;

based on the number of activated pixels of the at least one SPAD array for the point in time, adjusting a count of light signals captured by the at least one SPAD array for the point in time; and

optionally relating the count of light signals to a property of a particle from which the light signals were emitted, the particle optionally being a cell.

2. The method of claim 1, further comprising:

storing the adjusted count in memory.

3. The method of any one of claims 1 and 2, wherein the at least one SPAD array is comprised in at least one SPAD detector.

4. The method of any one of claims 1-3, wherein the SPAD array comprises a 32 x 32 array of pixels.

5. The method of any one of claims 1-4, comprising receiving a plurality of light signals, wherein each light signal is captured by a respective pixel of a different one of a plurality of single-photon avalanche diode (SPAD) array.

6. The method of any one of claims 1-5, wherein the reset time is about 10 ns.

7. The method of claim 1, wherein the reset time is unique to each respective pixel.

8. The method of claim 1, further comprising:

determining a correction factor for the received one or more light signals based on the number of activated pixels for the point in time; and

adjusting the count of light signals based on the correction factor.

9. The method of claim 8, wherein determining the correction factor comprises retrieving the correction factor from a lookup table.

10. The method of claim 8, wherein the correction factor is determined according to:

$$CorrectedValue = \frac{PhotonsCounted}{\left(\frac{(DetectionPeriod\ x\ TotalPixels)-(PixelResetTime\ x\ PhotonsCounted)}{DetectionPeriod\ x\ TotalPixels}\right)},$$

wherein CorrectedValue comprises the correction factor, PhotonsCounted comprises a number of pixels activated on a previous detection cycle, PixelResetTime comprises a time period for resetting a pixel to an active state; Detection Period comprises a time period of a detection cycle; and TotalPixels comprises a total number of pixels for the SPAD array.

11. The method of claim 8, wherein the count of light signals is defined as FinalCorrectedValue in the following equation:

$$FinalCorrectedValue = \frac{CorrectedValue}{1-\left(\frac{PreviousPixelCount}{TotalPixels}\ x\ \frac{PixelResetTime}{DetectionPeriod}\right)}$$

wherein CorrectedValue comprises the correction factor, TotalPixels comprises a total number of pixels of the SPAD array, PreviousPixelCount comprises a number of previously activated pixels of the SPAD array at a previous time period, PixelResetTime comprises a reset time for a pixel of the SPAD array, and Detection Period comprises a detection cycle for a respective pixel of the SPAD array.

12. The method of claim 1, wherein a light signal comprises a photon.

13. The method of claim 1, further comprising relating the count of light signals to a property of a particle from which the light signals were emitted, the particle being a cell.

14. A flow cytometry system comprising a controller configured to perform the method of claim 1.

15. A non-transitory computer-readable medium comprising:

a processor;

memory; and

computer-executable instructions stored in the memory that, when executed, cause the processor to perform the computer-implemented method of claim 1.