Lab on a Chip

CORRECTION

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Cite this: *Lab Chip*, 2017, **17**, 2022

Correction: Optofluidic time-stretch imaging – an emerging tool for high-throughput imaging flow cytometry

Andy K. S. Lau,[a] Ho Cheung Shum,[b] Kenneth K. Y. Wong[a] and Kevin K. Tsia*[a]

DOI: 10.1039/c7lc90052j

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Correction for 'Optofluidic time-stretch imaging – an emerging tool for high-throughput imaging flow cytometry' by Andy K. S. Lau *et al.*, *Lab Chip*, 2016, **16**, 1743–1756.

The authors regret that subfigures reproduced in this *Lab on a Chip* Critical Review from journals published by other publishers did not contain credit lines in their captions. They would also like to indicate that Fig. 3(d), 5(c), and 5(d) all show original data that was not previously published elsewhere.

The updated captions are reproduced below.

Fig. 3 (a) Microfluidic channel design used for time-stretch imaging that relies on an inertial focusing scheme to constrain the position of flowing cells into a straight stream at the imaging region.[27,29] (b) Ultrafast time-stretch images of red blood cells and leukemic monocytes flowing up to 10 m s^{-1}, which are captured with a line-scan rate of 26 MHz.[29] Ultrafast time-stretch images of a human osteoblast and a chondrocyte flowing up to 3 m s^{-1} captured at 11 MHz. (c) Schematics of a 3D, sheathless single-cell focusing channel.[92] Copyright 2012 John Wiley and Sons, reproduced with permission. (d) Ultrafast emulsion generation monitoring by time-stretch imaging at an 11 MHz line-scan rate. Top image shows only a jet can be imaged by a CMOS camera at 1 kfps in this new experiment. (e) White blood cell and stained MCF7 cell images captured by CMOS and time-stretch cameras, respectively. Again, only a blurred cell image can be captured by a CMOS camera.[27] Scale bars represent 10 μm.

Fig. 4 (a) Nomarski time-stretch imaging (left four images of white blood cells) provides contrast enhancement. Compared to BF timestretch imaging (right four images), the enhancement is >15 times. Scale bars represent 10 μm.[26] Copyright 2011 The Optical Society, reproduced with permission. (b) Improvement in image contrast of ATOM compared with BF time-stretch imaging. The bottom inset shows the line-scan of the yellow dashed line.[29] (c) ATOM images of a hepatocyte with opposite shadows are shown in (i) and (ii). The linescans of the yellow dashed line are shown in (iii) and (iv) to illustrate the opposite shadow effects. (v) and (vi) show the sum and difference images from images (i) and (ii).[29] (d) Images of SW480 cells and OTII cells captured by quantitative phase-contrast time-stretch imaging operating at a line-scan rate of 36 MHz.[106] Copyright 2013 The Optical Society, reproduced with permission. (e) Images of HeLa cells and MIHA cells flowing at 8 m s^{-1} and 0.4 m s^{-1}, respectively, which are captured by quantitative phase-contrast time-stretch imaging operating at a line-scan rate of 26 MHz. White arrows indicate the flow direction.[30] Color bars show the quantitative phase value in radians. It should be noted that a line-scan can be captured within 4 ns.

Fig. 5 (a)–(b) Comprehensive cellular analysis based on cell size, optical density and protein concentration in quantitative phase contrast time stretch imaging.[106] Copyright 2013 The Optical Society, reproduced with permission. (c) (i)–(iii): Scatter plots of light intensity density *versus* dry mass surface density for the three cell types, all are newly extracted from our recent quantitative phase contrast time-stretch imaging. (iv)–(vi): FSC *versus* SSC scatter plots of the three cell types obtained by conventional nonimaging flow cytometry. (d) Angular light scattering analysis of the three cell types as in (c). (i)–(iii) Insets show the zoom-in observation in the angle range of 0–4°, indicating a significant difference for these three cell types. (iv) Principal component analysis of the ALS curves of the three cell types in (c), which shows 3T3 can be easily separated from the others. OAC: chondrocytes; OST: osteoblasts; 3T3: fibroblasts. FSC: forward scattering; SSC: side scattering. PC: principal component.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

[a] *Department of Electrical and Electronic Engineering, The University of Hong Kong, Pokfulam Road, Pokfulam, Hong Kong, China. E-mail: tsia@hku.hk*
[b] *Department of Mechanical Engineering, The University of Hong Kong, Pokfulam Road, Pokfulam, Hong Kong, China*