

## Supplementary Information

### Three-dimensional label-free imaging and quantification of lipid droplets in live hepatocytes

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#### Descriptions for supplementary movies

##### Supplementary movies:

###### Supplementary Movie 1

The 3-D rendered isosurface image of 3-D RI distribution of a Huh-7 cell from various viewing angles.

###### Supplementary Movie 2

The 3-D rendered isosurface image of 3-D RI distribution of an untreated Huh-7 cell from various viewing angles.

###### Supplementary Movie 3

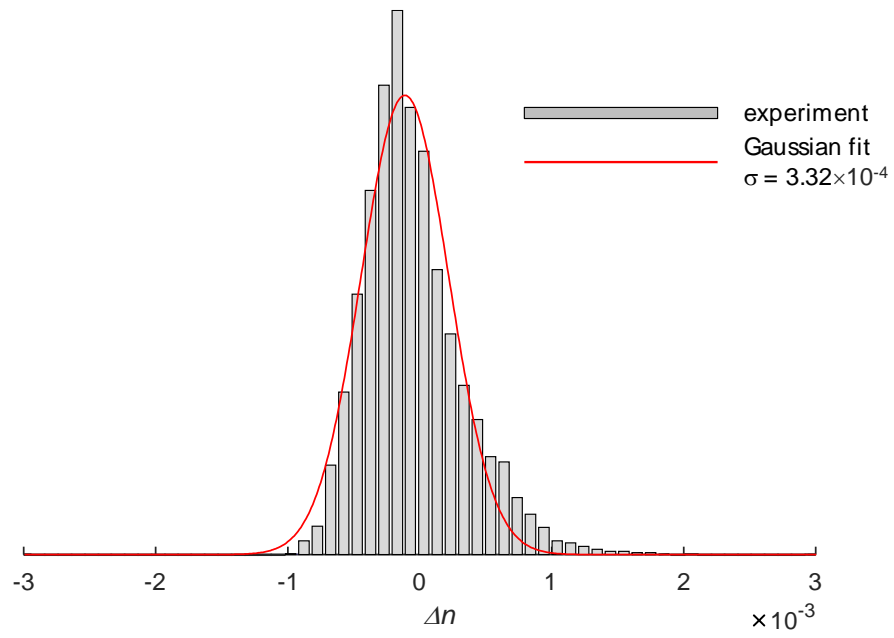
The 3-D rendered isosurface image of 3-D RI distribution of an oleic acid treated Huh-7 cell from various viewing angles.

###### Supplementary Movie 4

The time-lapse 3-D rendered isosurface images of 3-D RI distribution of a hepatocyte. Each frame of 3-D RI distribution was measured every 3 seconds for 93 seconds.

###### Supplementary Figure 1

The distribution of RI contrast values in the background region.



Supplementary Figure 1. The distribution of RI contrast values in the background region. The solid red line indicates a Gaussian fit with the standard deviation of  $3.32 \times 10^{-4}$ .