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Supplementary information

Norovirus detection in water samples at the level of single virus copies per microliter using a smartphone-based fluorescence microscope

In the format provided by the authors and unedited

SUPPLEMENTARY FIGURES

Single virus copy per µL level detection of norovirus in water samples on paper microfluidic chip with smartphone based fluorescence microscope

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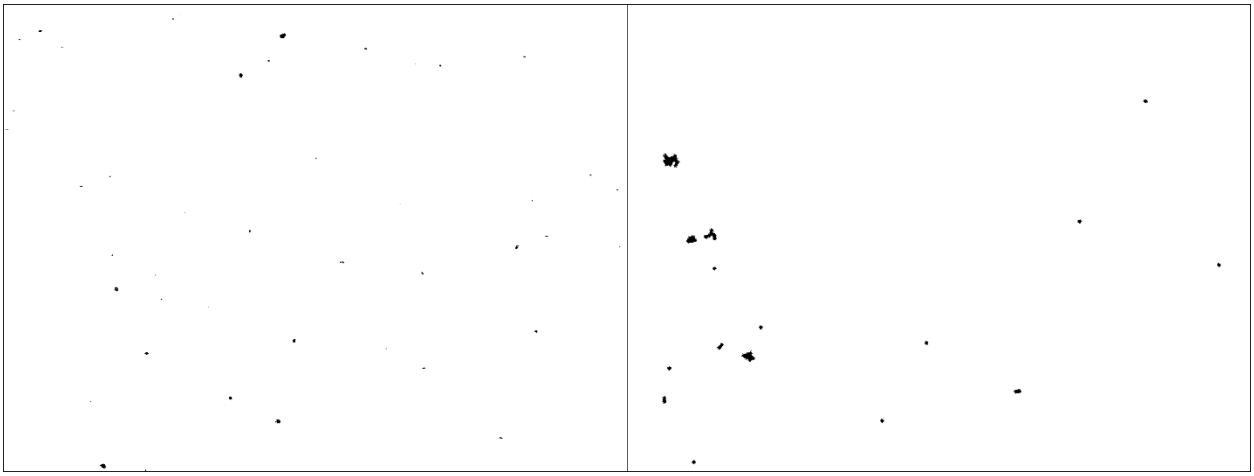
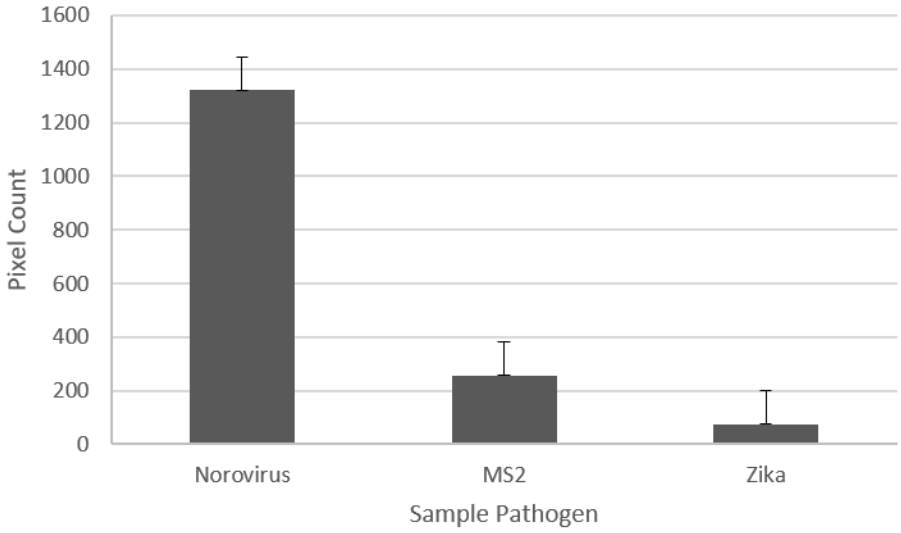
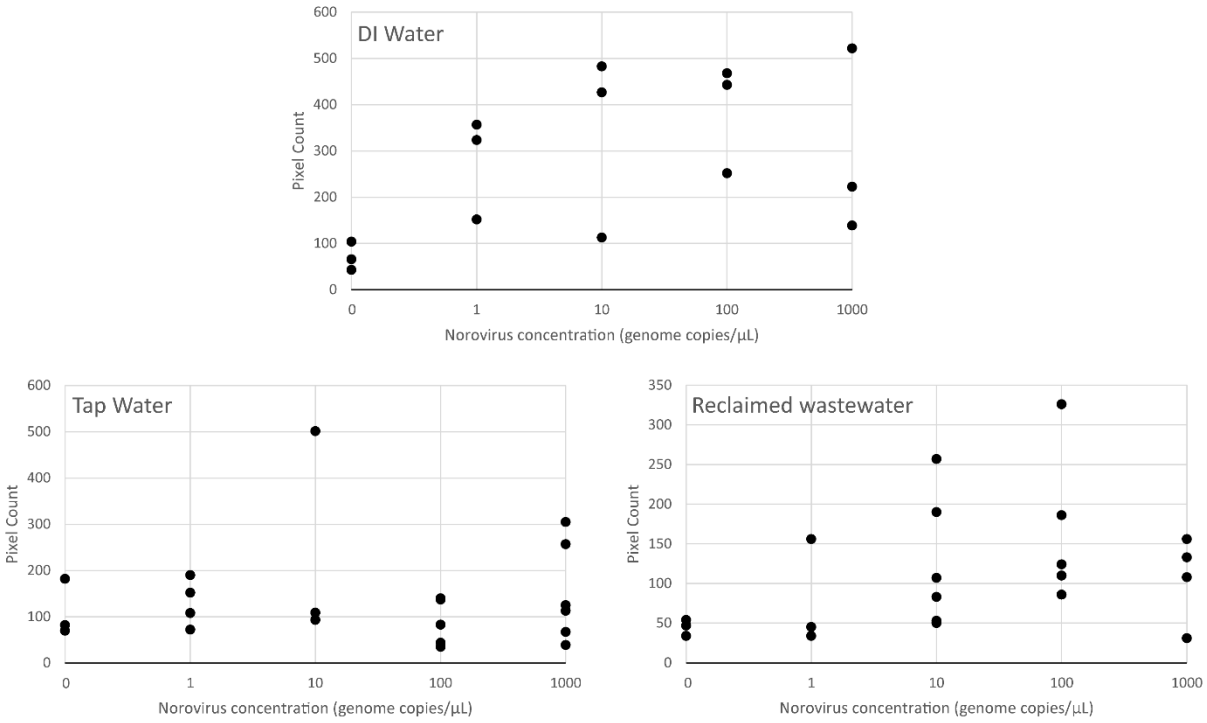


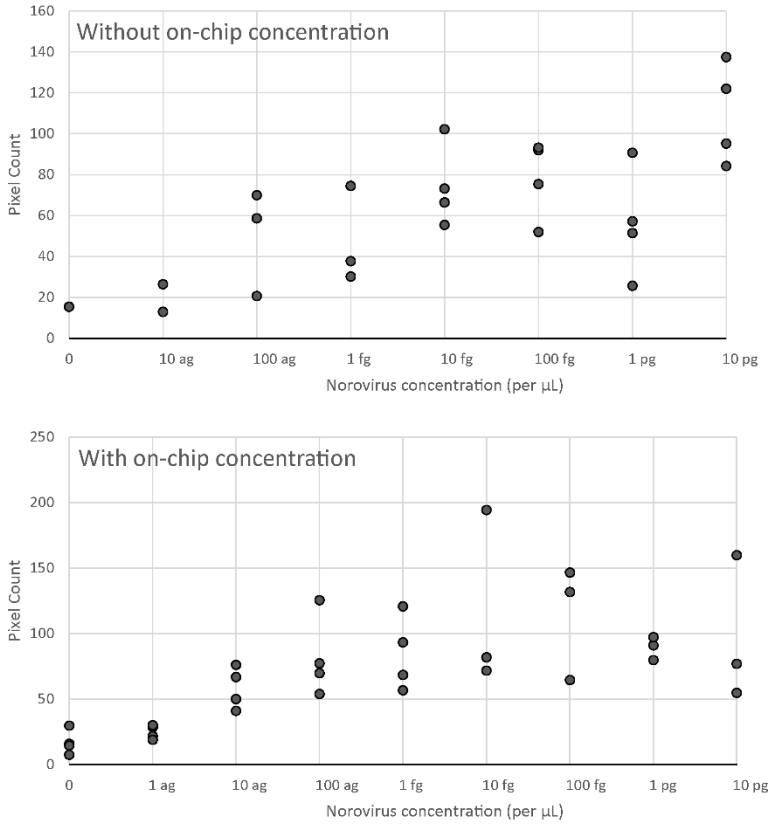
Supplementary Figure S1. Binarized fluorescence images of antibody-conjugated particles to assess the extent of self-aggregation, where PDI < 0.5 is used to determine minimum self-aggregation and its usability. Left: minimum self-aggregation and usable for the assays, with PDI = 0.421. Right: substantial self-aggregation and not usable for the assays, with PDI = 0.698.



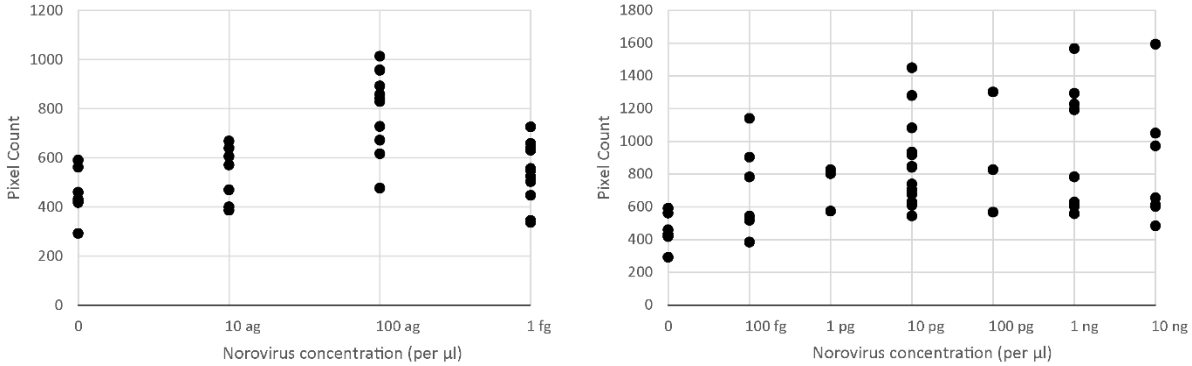
Supplementary Figure S2. Specificity assay results with Zika and MS2 viruses, normalized to the negative control data. All results with Zika and MS2 viruses are significantly different from those with norovirus ($p < 0.05$), indicating 100% specificity.



Supplementary Figure S3. Plot of individual data points shown in Figure 7.



Supplementary Figure S4. Plot of individual data points shown in Figure 8.



Supplementary Figure S5. Plot of individual data points shown in Figure 9.