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Mechanical differences of sickle cell trait (SCT) and normal red

blood cells

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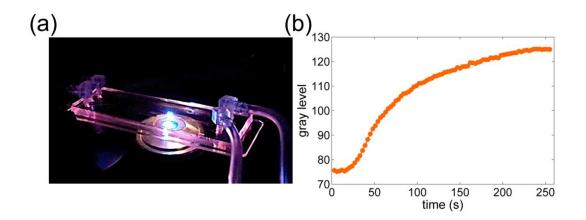
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Supplementary Figure 1: Oxygen diffusion validation. (a) Tris (4,7-diphenyl-1,10-phenanthroline)ruthenium(II) dichloride complex dissolved in PBS was injected into the central channel of the device. Luminescent intensity was measured under illumination at 488 nm. (b) Gray-level intensity of an area (20 μ m \times 20 μ m) near the midline of the central channel was analyzed via image processing. At 0 s, air (20% O_2 + 80% N_2) was switched to N_2 . Luminescence saturated after around 200 seconds.