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(57) Abstract:

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The present invention provides a non-invasive body constituents monitoring system (100) for a subject, comprising: a body-conformable support (6) constructed to be mounted on the skin of the subject; a light source capable to emit light to a tissue of interest of the subject; a light detector (4) capable to capture reflected light through the tissue of interest of the subject; and a processor including circuitry configured to controlling emitting light from the light source (2,3) to a tissue of interest of the subject by general-purpose input/output (GPIOs); controlling detection of reflected light from the tissue of interest of subject by the light detector (4); receiving a wavelength specific detection signal from the detector (4), converting analog detection signal to digital data by an analog-to-digital converter (8); and refining and processing the data generated for model training(14), evaluating (15) and determining the specific erythrocyte constituents. Fig. 1

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