

NONINVASIVE DETECTION OF BILIRUBIN USING PULSATILE ABSORPTION.

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Bilirubin, the yellow substance usually responsible for neonatal jaundice, is currently monitored invasively or by observing/measuring skin colour. This paper investigates the feasibility of monitoring serum bilirubin concentration using light absorbance in a similar fashion to pulse oximetry. The light absorbance of bilirubin is shown to be sufficiently different to haemoglobin to in theory allow direct noninvasive serum bilirubin monitoring using light absorbance around 480nm.

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