

Skin-remitted light as a tool for health monitoring

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A brief overview on optical technologies suitable for non-invasive monitoring and diagnostics of human health condition will be presented, focusing at information that can be extracted from the skin back-reflected (remitted) signals. The techniques to be surveyed are diffuse reflectance spectroscopy and imaging, laser Doppler flowmetry, contact and remote photoplethysmography, and reflectance pulse oximetry. Laboratory-developed prototype designs will be discussed, as well as examples of clinical measurement results. Existing shortcomings and bottlenecks to be managed in future will be also considered.

REFERENCES

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