

Analysis of the Spectroscopic Algorithm for Light Sensors



Overview

The paper presents an overview of existing and new algorithms for the processing of spectroscopic data. These include algorithms for background elimination, for separation of peak containing regions from peak-free regions, deconvolution and identification of information. This special issue belongs to the section "Optical Sensors". Spectral sensors are at the forefront of this transformation. We review recent advancements in AI-driven spectral analysis, propose a methodology combining machine learning models with. Advanced spectroscopy plays a crucial role in the application of sensors across various industries, enabling precise and sensitive detection of substances based on their unique spectral signatures.



Article Content

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Molecular spectroscopic sensor | Yokogawa Electric

Vision for the future The molecular spectroscopic sensor is based on the principle of interaction between

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Spectroscopic Analysis

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Spectroscopic Gas Sensing Systems | Springer Nature Link

Practically, spectroscopic gas sensing with coherent light sources, for example, tunable lasers, ushered in a new era

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Advancements Spectral Sensors, Principles, Applications, and

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Integrated near-infrared spectral sensing

What are the minimal hardware requirements for a given class of sensing problems? Here, authors investigate this

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Spectral imaging with deep learning | Light: Science & Applications

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