

Accepted Manuscript

Underresolved absorption spectroscopy of OH radicals in flames using broadband UV LEDs

Logan White, Mirko Gamba

PII: S0022-4073(17)30662-3
DOI: [10.1016/j.jqsrt.2018.01.011](https://doi.org/10.1016/j.jqsrt.2018.01.011)
Reference: JQSRT 5957



To appear in: *Journal of Quantitative Spectroscopy & Radiative Transfer*

Received date: 15 September 2017
Revised date: 21 December 2017
Accepted date: 8 January 2018

Please cite this article as: Logan White, Mirko Gamba, Underresolved absorption spectroscopy of OH radicals in flames using broadband UV LEDs, *Journal of Quantitative Spectroscopy & Radiative Transfer* (2018), doi: [10.1016/j.jqsrt.2018.01.011](https://doi.org/10.1016/j.jqsrt.2018.01.011)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- A broadband UV LED absorption diagnostic has been developed and described.
- The technique uses underresolved spectral measurements.
- It is demonstrated for combustion applications in premixed methane/air flames.
- An uncertainty model for underresolved spectroscopy is applied.
- The correlated nature of simultaneous property measurements is discussed.

Download English Version:

<https://daneshyari.com/en/article/7846110>

Download Persian Version:

<https://daneshyari.com/article/7846110>

[Daneshyari.com](https://daneshyari.com)