A Wide-Range Photoacoustic Aerosol Absorption Spectrometer

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Supporting Information

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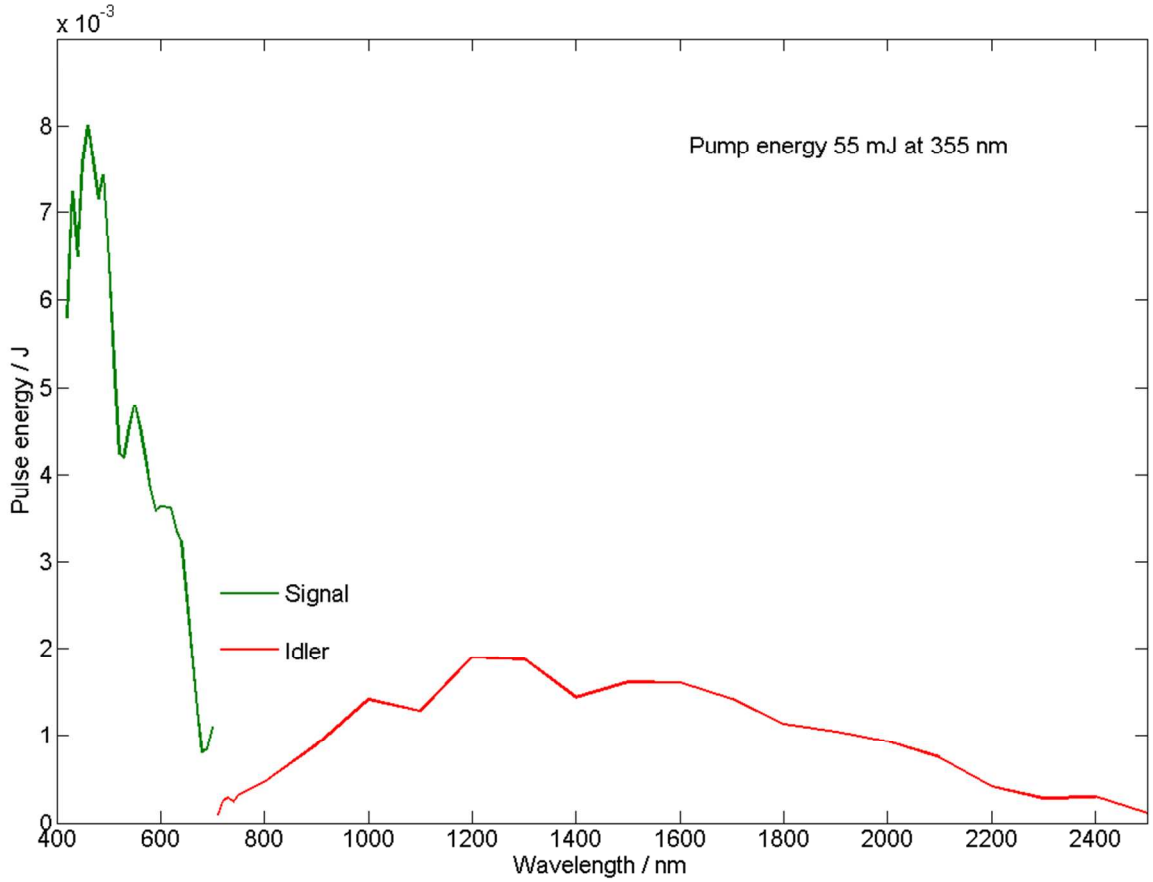

Figure S-1 Wavelength dependency of the OPO laser system.

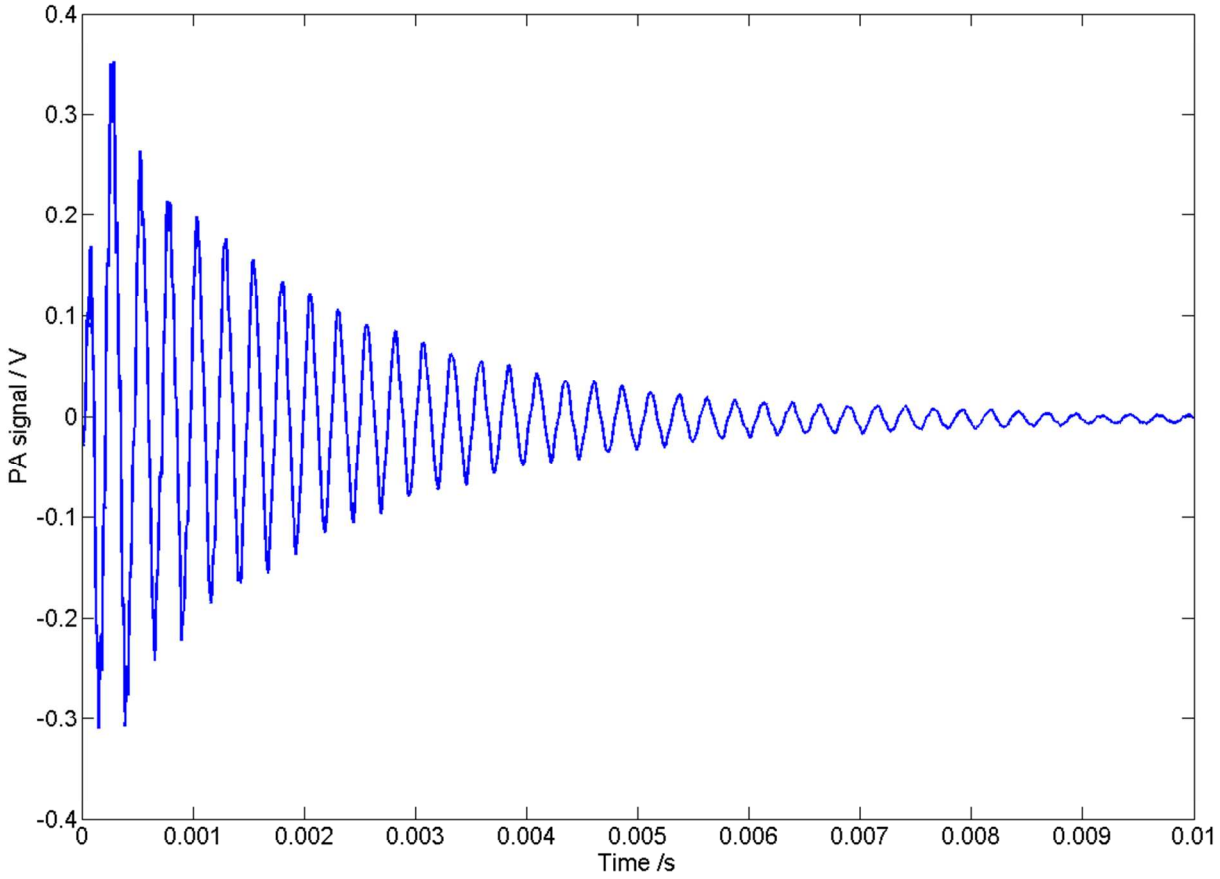

Figure S-2 Typical PA signal of the pulsed PA system.

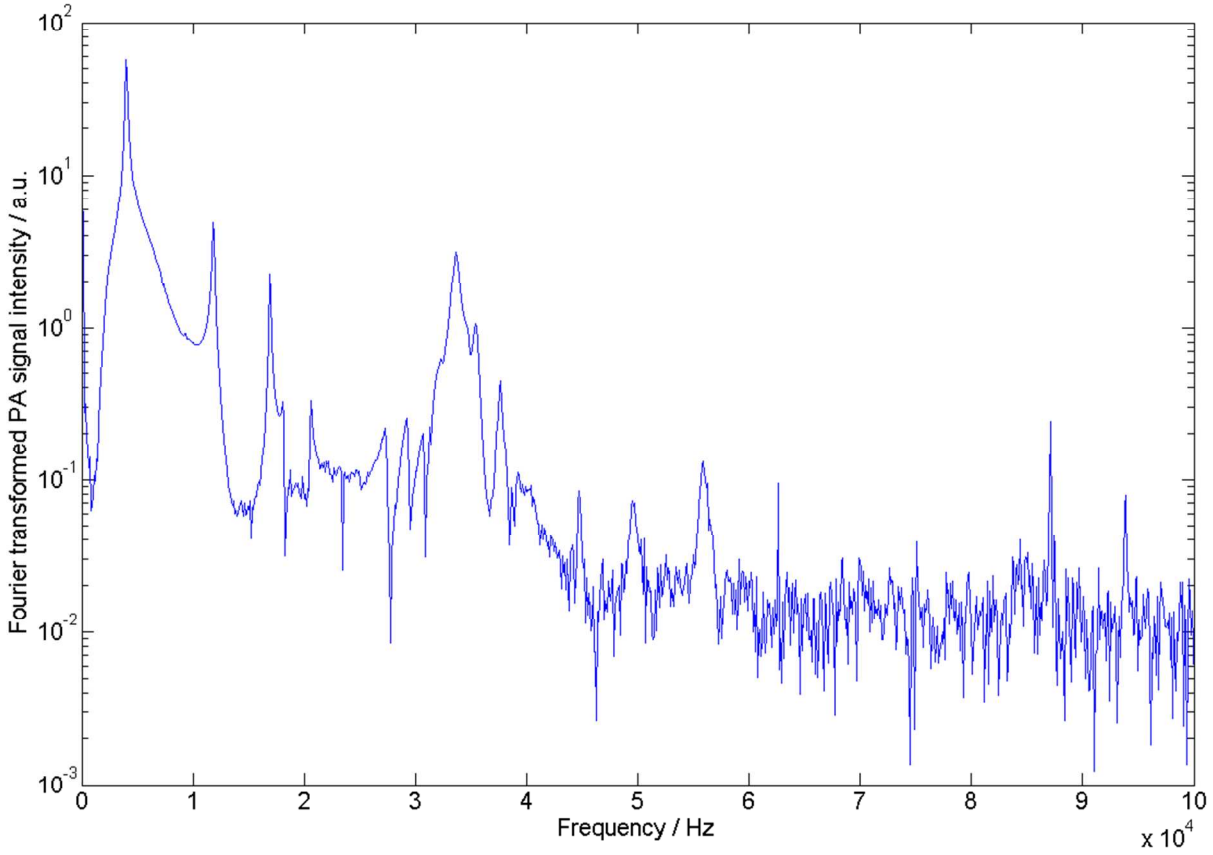

Figure S-3 FFT spectrum of a typical PA signal as employed for data evaluation.

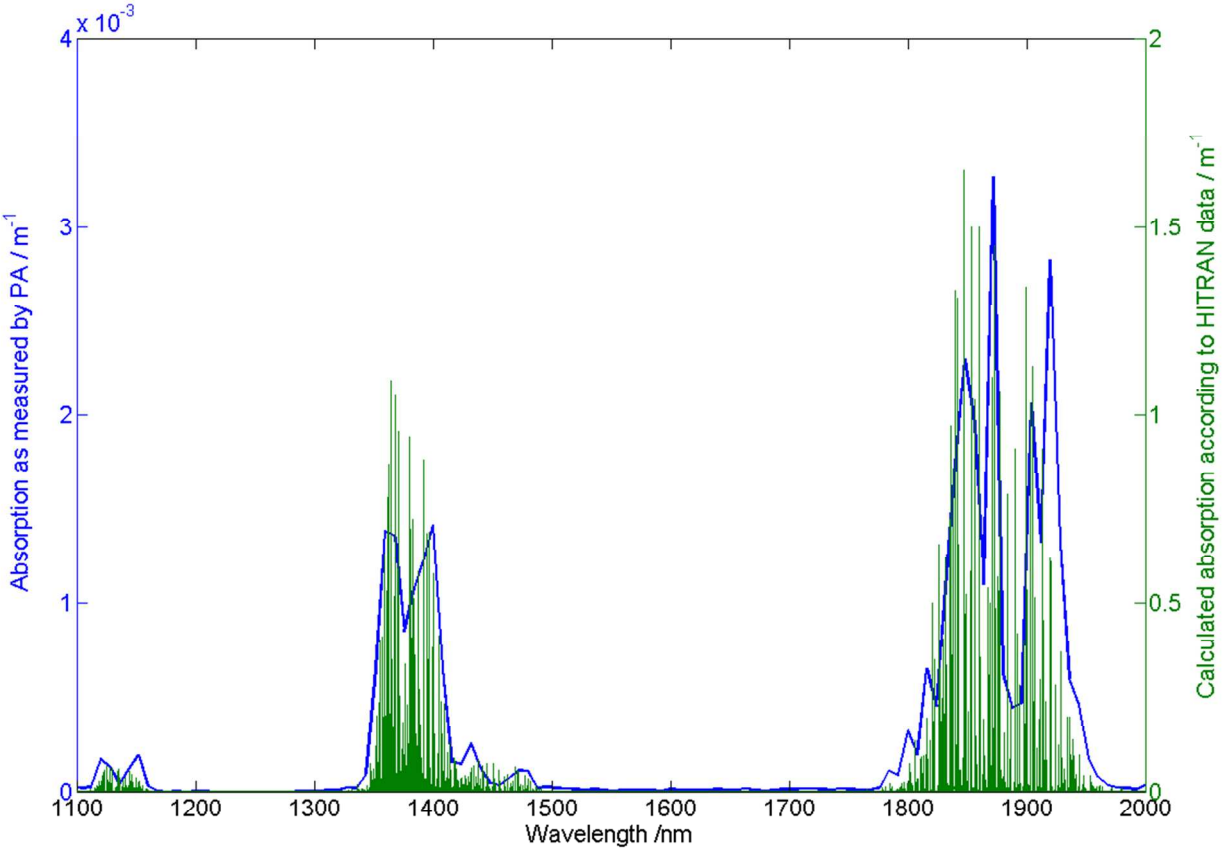

Figure S-4 Comparison of the infrared absorption of saturated water vapour (T = 23 °C, p = 1013 hPa) as measured by the PA system with the corresponding HITRAN data.

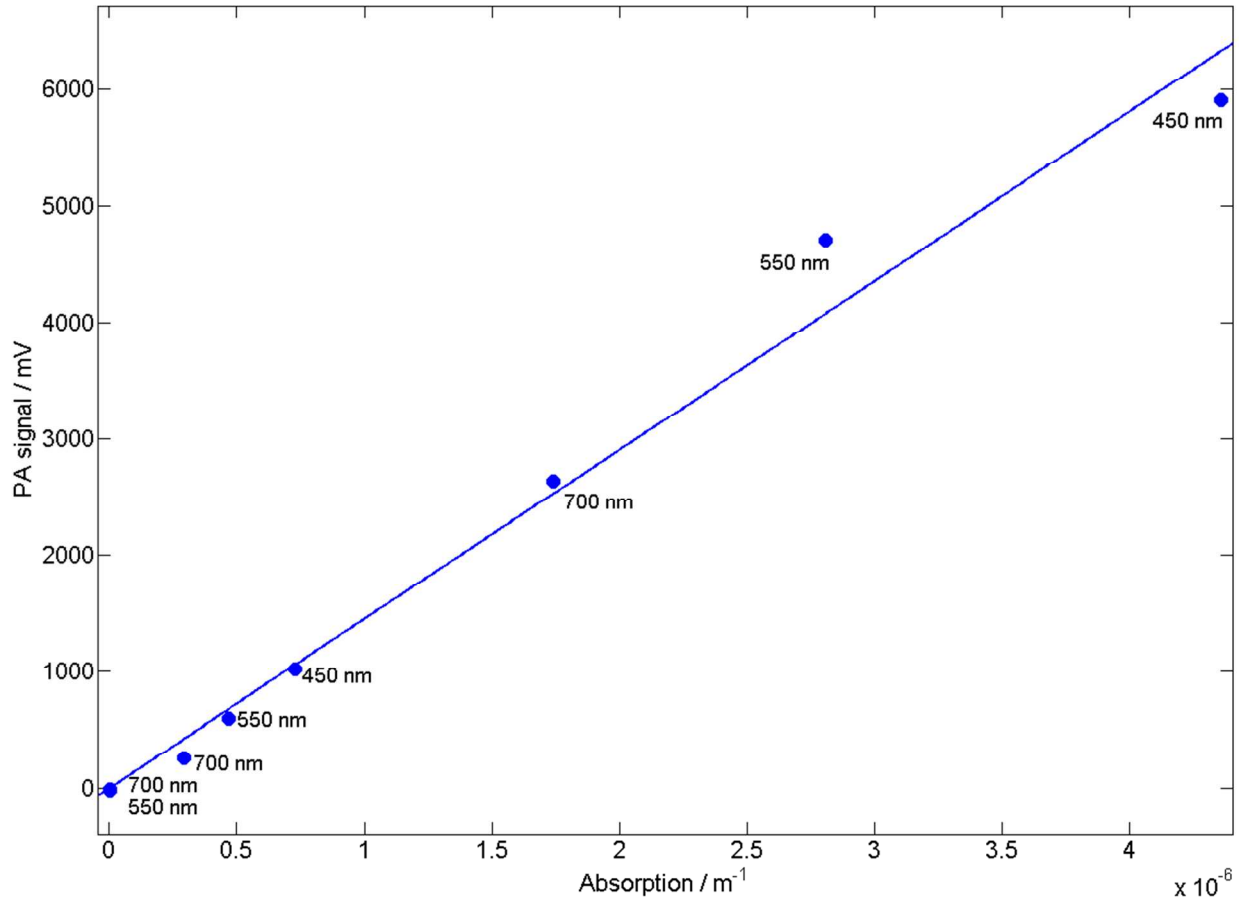

Figure S-5 Calibration of the PA aerosol spectrometer with the wavelength where each data point was determined. Each data point represents a mean value of 3 individual measurements.

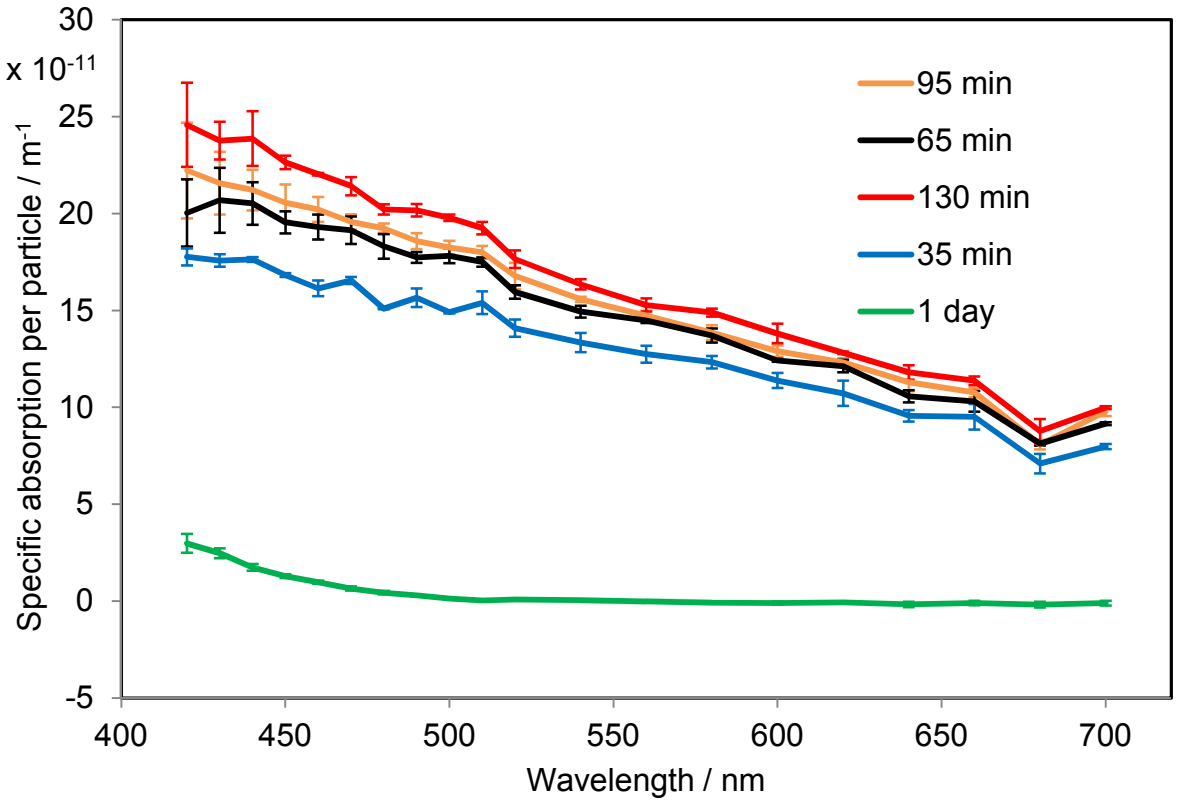

Figure S-6 Temporal behavior of the optical absorption spectra of propane soot.

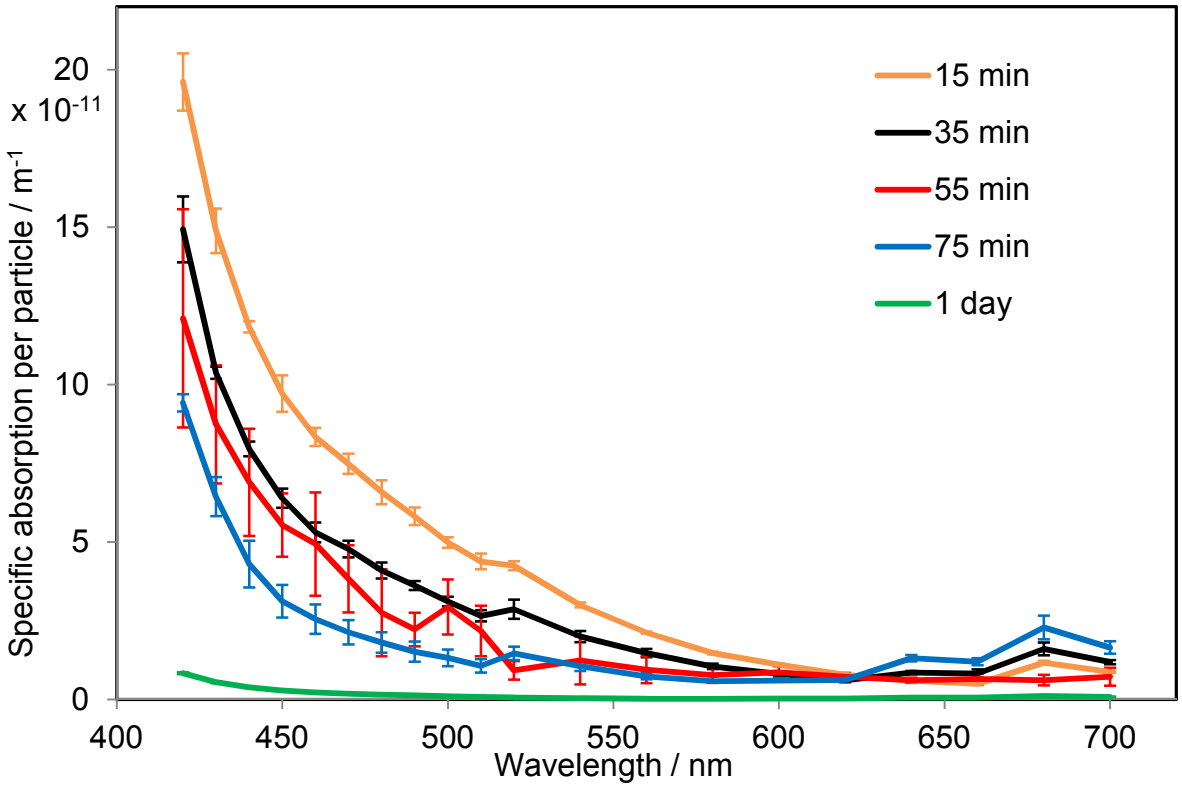

Figure S-7 Temporal behavior of the specific optical absorption spectra of propane soot with 50% (m/m) iron content.