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The relatively short integration time (1 minute) of our device should enable studies of kinetic processes at interfaces on short time scales. Recent developments in the generation of broadband IR pulses at high repetition rates [41,51] have the potential to decrease the integration times even further without sacrificing the SNR. Additionally, if the IR pulses are corrected for their angular dispersion and the chirp, our spectrometer should have the potential to probe ultrafast dynamic processes involving interfacial species occurring on the time scale of tens of femtoseconds.

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