

## **Method for remote sensing of pollutant molecules using ultra-short intense lasers**

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There is described a method for identifying at least one molecule in a substantially transparent medium, the method comprising: transmitting high-power, ultra-short laser pulses into the medium so as to generate filaments in which a spontaneous fluorescence signal propagating along an axis of the filament is amplified by stimulated emission; detecting the amplified spontaneous fluorescence signal; and analyzing the fluorescence signal to identify said molecule.

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