

## **PHYSICS**

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## **Standard Edit**

LIBS is an elemental analysis technique that is based on the excitation of atoms located on thea samplematerial's surface; this excitation is induced by focusing a pulsed laser beam on the surface. The Mmaterial can be ablated in concentrations ranging from ngnanograms to ugmicrograms can be ablated by using this technique, producing generating a microplasma that which can be characterized by several-of parameters. After the creation generation of the micro plasma, electromagnetic radiation is emitted owing tounder several processes, namely, the bremsstrahlung process, recombination, and de-excitation of atoms and ions occurring insidein the laser plume [1]. The Dde-excitation of atoms and ions leads to light emission atwith a characteristic frequency, which can be used for in both the qualitative and the quantitative determinations.

**Comment [A1]:** Please provide the full form of this abbreviation, since it appears to be its first mention in the

