

RF- GD-OES

HORIBA JOBIN YVON GD-PROFILER 2TM

Pulsed RF Glow discharge optical emission spectroscopy provides a direct chemical composition analysis of bulk solids, elemental surface analysis and the depth profiling of thin films and industrial coatings. The method is based on the controlled sputtering of the examined material using the glow discharge. The sputtered material is being excited due to the stable low pressure plasma (the glow discharge). The resulting light emission is used to characterize and quantify the sample's composition. The glow discharge provides an improved excitation source for fast, economical, accurate, and reliable sample characterization.

APPLICATION

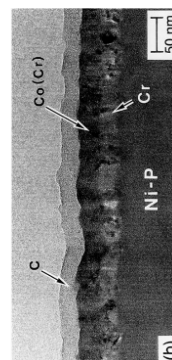
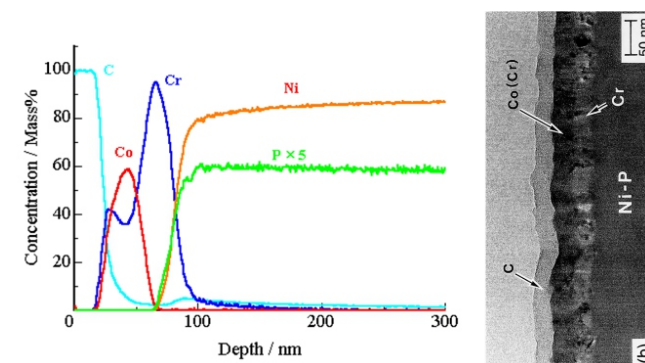
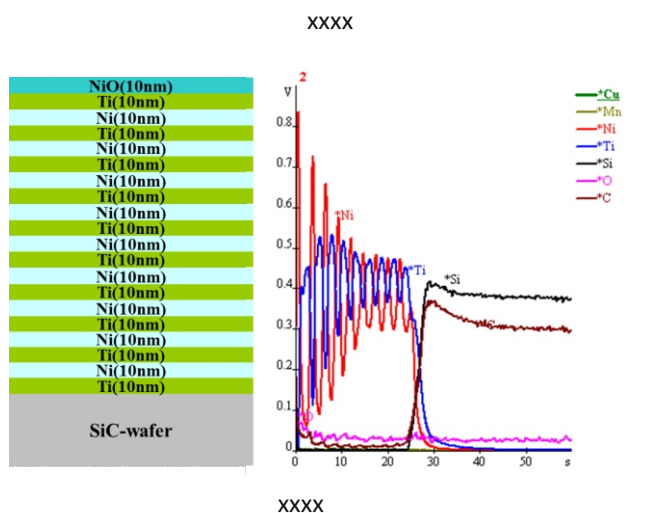
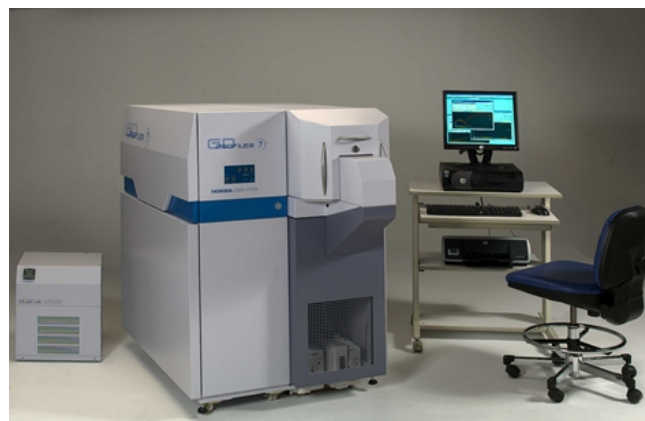
- > Pulsed RF GD-OES is the only technique that can provide both surface, depth profile and bulk composition
- > High sensitivity simultaneous analysis of all elements of interest including nitrogen, oxygen, hydrogen and chlorine

MATERIAL/SUBSTRATE TYPES

- > Thin films, bulk materials
- > Almost all solid electrically conductive and dielectric materials: metals, alloys, semiconductors, polymers, glasses

MODES, CONDITIONS AND PRECISION

- > Patented RF coupler for thick nonconductive layers
- > The depth profiling with the sputtering rate of $3\mu\text{m}/\text{min}$
- > GD Profiles 2 is equipped with a patented High Dynamic Detection (HDD) system with the dynamic range of 1010 – Reliable detection of trace elements in the samples (monolayers, impurities, diffusion of elements, etc.)
- > Polychromator contains detectors for these elements: Si, Mo, Al, Mg, V, Pb, Zr, Cr, Mn, Cu, Zn, Fe, Ni, Ru, Au, Pt, P, B, Ag, Ta, Co, W, Be, Ca, Mo, Ba, In, Ti, Ga, Se, S, Sr, Sn
- > The device is equipped by additional scanning monochromatic working in the spectral region between 180 and 800 nm for analyzing various analytical spectral lines
- > The pulsing mode enables analyzes of thermally sensitive substrates including glasses and polymers



DETAILED INFORMATION ON REQUEST



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