Laser, Plasmons, Nickel and Hydrogen leading to obvious transmutation.

Experiment by Vittorio Violante et. al. (ENEA), yes the same guy in that photo with Bill Gates at the same Italian nuclear research institution that appears to have part benefitted from the former MicroSoft founder's generosity.

Deposition of thin film of Nickel on polymer substrate on two samples. One sample is converted to black Ni-hydride film

"by a short electrolysis with 1 M Li2SO4 electrolyte in light water (40 minutes, current ranging between 10 to 30 mA). Ni-hydride film has been obtained by a short electrolysis with 1 M Li2SO4 electrolyte in light water (40 minutes, current ranging between 10 to 30 mA)."

Both samples are exposed to

"He-Ne laser beam at the reflectance minimum angle... ...for about three hours."

TOF-SIMS analysis expected to show massive discrepancy in 65Cu from natural abundance compared to blank.

Criticism

Three hours of laser illumination was sufficient. The experiment clearly describes the changes between the active sample and and the blank. However, no mention of the coupled laser power is given. I think the experimental electric field strength and the plasmon formation will be strongly related to the optical power The magnitude of the transmutation effect would likely seem related to the optical power properly delivered to the film. I believe a second data point could have been determined with 6 more hours of laser light on the on the same two sample films. The data collection effort ended prematurely and now lacks a powerful internal control/reproduction affect. If more light generated more Cu isotopes, the results would be difficult to ignore.

Questions

What polymer used
What make of laser used
What SME used
Types of lenses / prisms used