Laser induced transmutation in palladium thin films in hydrogen atmosphere

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Ubaldo Mastromatteo [1], published in 2016 a very simple experiment where he directed a laser beam on a thin film of palladium deposited on a silicon oxide substrate in H_2 and D_2 atmospheres. By SEM he showed formation of many new elements. Recently we did the same experiment with identical samples in H_2 and D_2. Both experiments in H_2 and D_2atmosphere lasted 3 months. We used a 5mW laser at 650nm. In this presentation, we will show the formation of hot spots detected by SEM and analyzed by EDX. Also, we did look for neutron formation with CR39 detectors. Finally, a TOF-SIMS analysis showed some isotopic anomalies.

References:

[1] U. Mastromatteo, J. Condensed Matter Nucl. Sci. 19 (2016) 173–182 .