Research Publications

1. ***Kumar**, N., Haviar, S., Zeman P., Baroch P.,*
   - *Three-Layer PdO/$CuWO_4$/CuO Humidity on Hydrogen Gas Detection with reduced humidity interference. Nanomaterials 2021, 11(12), 3456.* https://doi.org/10.3390/nano11123456.
     Impact Factor- 5.076

2. *Haviar, S., **Kumar, N.**, Batkova, S., Capek, J.,*
   Nanostructured Materials Based on Thin Films and Nanoclusters for Hydrogen Gas Sensing. Proceedings MDPI, 4th International Conference nanoFIS 2020—Functional Integrated nano Systems, Graz, Austria, 2–4 November 2020. https://doi.org/10.3390/proceedings2020056038. ***Impact Factor- 3.623***

3. *Rezek, J., Kozak, T., **Kumar**, N., Haviar, S.,*
   - *Synergy of experiment and model for reactive HiPIMS: Effect of discharge parameters on WO_x composition and deposition rate. JOURNAL of PHYSICS D: APPLIED PHYSICS 2020.* https://doi.org/10.1088/1361-6463/abd1a3
     Impact Factor- 3.207

4. ***Kumar, N.**, Haviar, S., Rezek, J., Baroch P., Zeman, P.,*
   - *Tuning stoichiometry and structure of Pd-WO_{3-x} thin films for hydrogen gas sensing by High-Power Impulse Magnetron Sputtering. MATERIALS 2020 13, 5101.* https://doi.org/10.3390/ma13225101
     *Impact Factor- **3.623***

5. ***Kumar, N**., Haviar, S., Capek, J.,*
   - *Nanostructured CuWO4/WO3-x films prepared by reactive magnetron sputtering for hydrogen gas sensing. INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, 2020, vol. 45(35), 35, pp. 18066 – 18074. ISSN: 0360-3199.* https://doi.org/10.1016/j.ijhydene.2020.04.203
     Impact Factor- 5.816

6. *Haviar, S., Capek, J., Batkova, S., **Kumar, N.**, Dvorak, F., Duchon, T., Fialova, M., Zeman, P.*
   - *Hydrogen gas sensing properties of WO3 sputter-deposited thin films enhanced by on-top deposited CuO nanoclusters. INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, 2018, vol. 43(50), pp. 22756 – 2764. ISSN: 0360-3199.* https://doi.org/10.1016/j.ijhydene.2018.10.127
     Impact Factor- 5.816