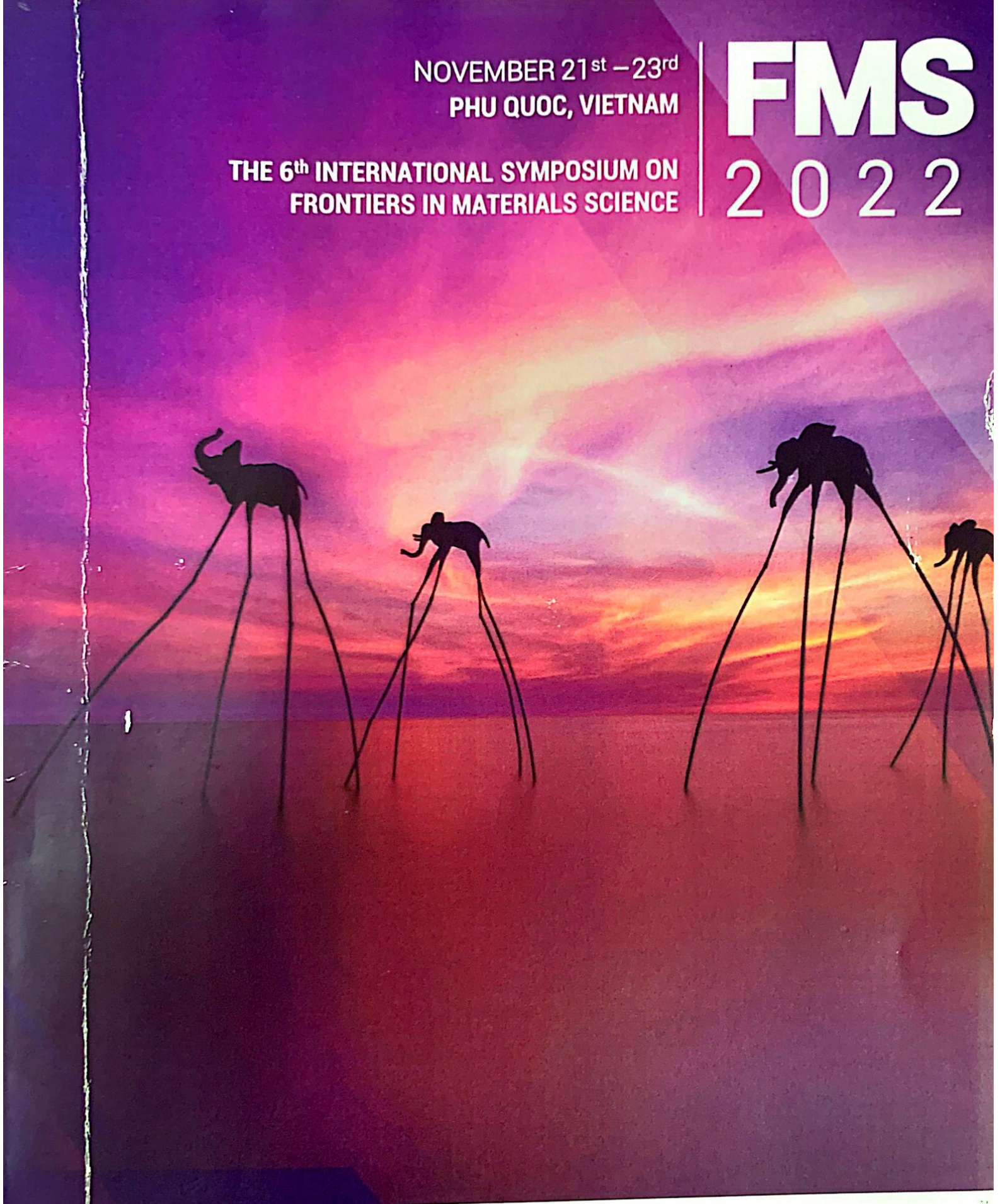


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**PII-P05 (Poster)**

**Effect piezo electric on surface enhanced Raman scattering from ZnO/Au nanorods**

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Surface-enhanced Raman spectroscopy (SERS) has emerged as a very potential tool for sensing toxicants at extremely low concentration. The sensitivity of the SERS substrates depends strongly on the design of noble metal nanostructures. However, optimization of morphology and size of noble metals can only offer a certain enhancement factor. Additional techniques for further boosting Raman signal were studied. In this research, ZnO/Au nanorods were synthesized by hydrothermal and sputtering techniques. The prepared materials can serve as good SERS substrates. Raman scattering can also be intensified efficiently by taking advantages of piezzo electricity of the ZnO/Au material.

**Keywords:** ZnO/Au nanorod; hydrothermal; galvanic; SERS; piezoelectric

**References**

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