



TITLE: Virusensing: a new SARS-CoV2 Biosensor

Principal investigator: Prof. Daniele Di Marino, d.dimarino@univpm.it, tel: 071 220 4687

UNIVPM Research Group: Biologia Molecolare/ MaSBiC

Research activity description: Our project consists of the realization of a biosensor (Virusensing) able to specifically detect the whole SARS-CoV-2, by using an engineered version of the human ACE2 receptor, as a “magnet” for the virus particle. The biosensor will be composed of a graphene-based chip device. To specifically detect SARS-CoV-2 particle we are going to functionalize the graphene-based biosensor with the optimal portion of human receptor ACE2, that specifically interacts with high affinity with SARS-CoV-2 spike protein. We want to replicate into a biosensor what normally happens in nature between the virus and its receptor.

Link: www.virusensing.com

Collaborators: The Information Engineering Department (DII) - UNIVPM

