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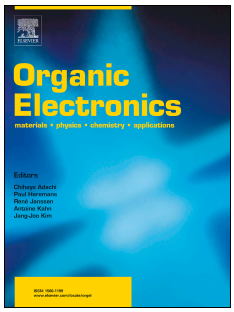

Soft computing techniques in prediction gas sensor based 2D material

Elnaz Akbari, Mehrbakhsh Nilashi, Azar Alizadeh, Zolkafle Buntat

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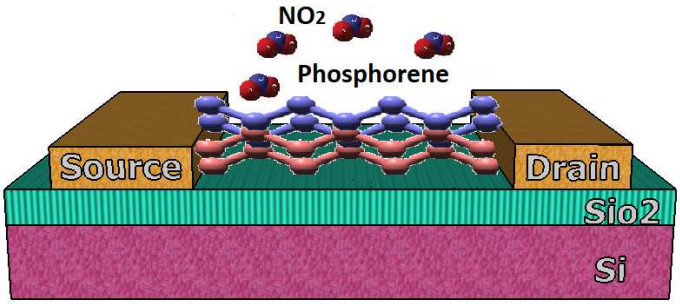

Figure 2. Schematic of FET based sensor

The Sensing mechanism in FET- based phosphorene sensor is based on the change of conductance of the channel upon exposure to NO_2 gas. When sensor is upon NO_2 exposure, gas molecules adsorb on the phosphorene surface and change the initial conductance of the device.