

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241032960 A

(19) INDIA

(22) Date of filing of Application :09/06/2022

(43) Publication Date : 17/06/2022

(54) Title of the invention : Metal-Free Hydrogen Sensor and Method of Fabrication Thereof

(51) International classification :G01N0033000000, G01N0027120000, G01N0027407000, G01N0021770000, G01N0021780000
(86) International Application No Filing Date :PCT// / :01/01/1900
(87) International Publication No : NA
(61) Patent of Addition to Application Number Filing Date :NA :NA
(62) Divisional to Application Number Filing Date :NA :NA

(71)Name of Applicant :

1)Andhra University

Address of Applicant :Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam --

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr.Suresh Babu Kalidindi

Address of Applicant :UGC- Assistant Professor, Department of Chemistry, Andhra University, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam -----

2)Ms.Thokala Nany

Address of Applicant :Research Scholar, Department of Chemistry, Andhra University, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam -----

3)Ms.Valle Krishnaveni

Address of Applicant :Project Fellow, Department of Chemistry, Andhra University, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam -----

4)Prof.Basavaiah Keloth

Address of Applicant :Professor, Department of Chemistry, Andhra University, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam -----

(57) Abstract :

ABSTRACT: Title: Metal-Free Hydrogen Sensor and Method of Fabrication Thereof The present disclosure proposes a metal-free hydrogen sensor. The metal-free hydrogen sensor 100 comprises a thin film 102 and an interdigitated electrode 104. The proposed cost effective hydrogen gas sensor is simple, environmental friendly and feasible for mass production. The proposed polyvinyl based hydrogen sensor does not require any precious metal doping. The proposed metal-free hydrogen gas sensor fabricated does not involve usage of toxic chemicals or release of harmful gases. The proposed polyvinyl based hydrogen gas sensor is easily fabricated and provides good stability and precision.

No. of Pages : 16 No. of Claims : 9