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CORRECTION

Correction to: A review on nanomaterial-modified optical fiber sensors for gases, vapors and ions

Dnyandeo Pawar[1] · Sangeeta N. Kale[2]

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The published version of this article, unfortunately, contains error. Corrections in Figs. 1, 3 and 5 were incorrectly carried out. Given in this article are the correct figures.

The online version of the original article can be found at https://doi.org/10.1007/s00604-019-3351-7

✉ Dnyandeo Pawar
pawar.dnyandeo@gmail.com

[1] Advanced Materials and Sensors Division (V4), CSIR-Central Scientific Instruments Organisation, Chandigarh 160030, India

[2] Department of Applied Physics, Defence Institute of Advanced Technology, Girinagar, Pune 411025, India

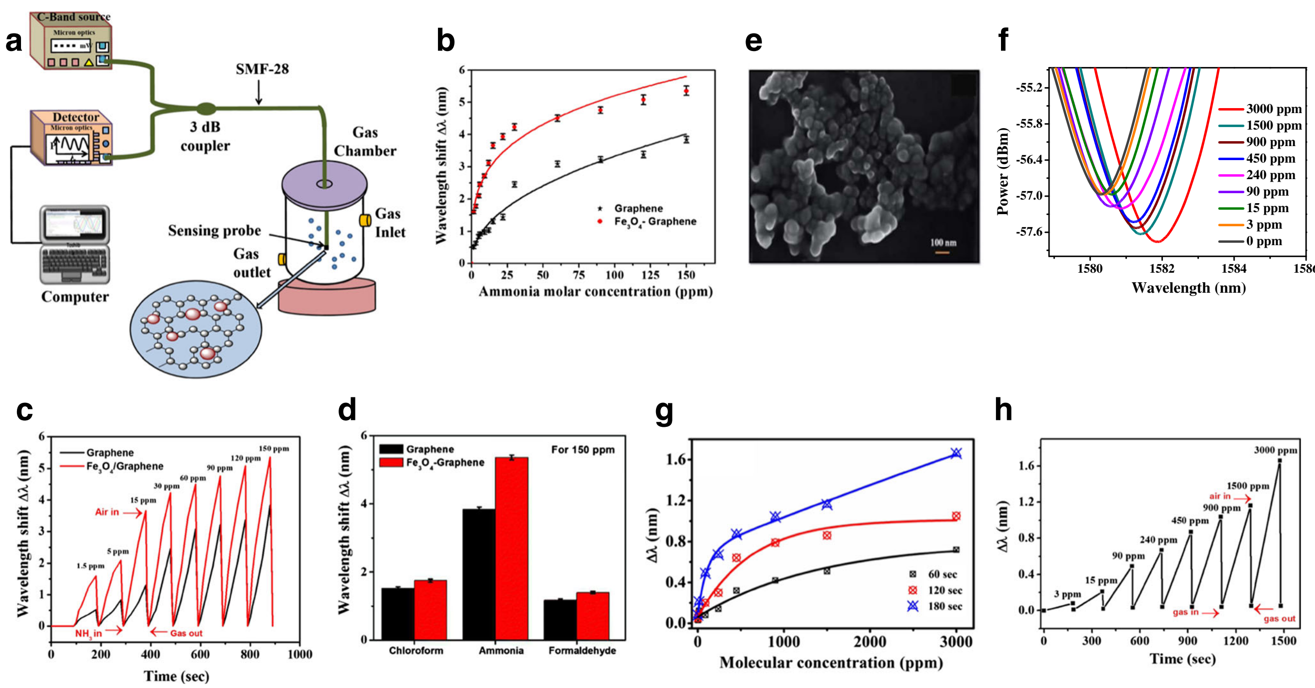

Fig. 1 **a** Experimental set up of an Fe_3O_4-graphene FPI for NH_3 sensing (sensing material is coated at the end of the fiber tip). **b** Dip wavelength shift of graphene coated FPI and Fe_3O_4-graphene coated FPI with NH_3 concentration ranging from 1.5-150 ppm. **c**. Time response curve of graphene coated FPI and Fe_3O_4-graphene coated FPI with NH_3 concentration from 1.5-150 ppm. **d** Cross-sensitivity study of graphene coated FPI and Fe_3O_4-graphene coated FPI at 150 ppm NH_3 gas. **e** FESEM image of nano-carbon. **f** Spectral response of nano-carbon coated FPI with NH_3 sensing concentration ranging from 3-3000 ppm. **g** Response function characteristics of nano-carbon FPI in terms of wavelength shift with NH_3 concentration from 3-3000 ppm at 60 secs, 120 secs, and 180 secs respectively. **h** Time response curve of nanocarbon FPI at different ppm levels for nano-carbon. Reprinted with permission from [103, 116]. Copyright of Royal Society of Chemistry

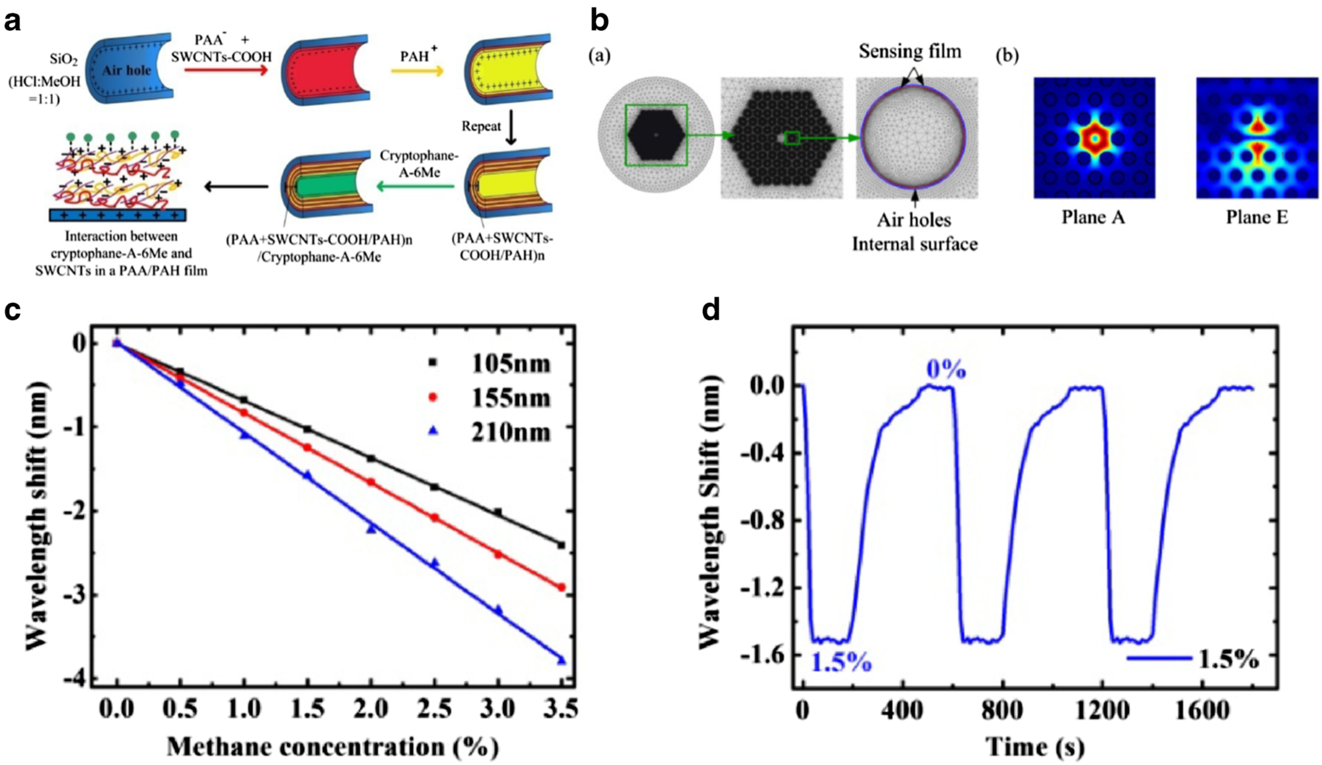

Fig. 3 **a** Coating process of PAA-CNTs/PAH nanofilms and cryptophane -A-6Me layer on to the inner surface of PCF cladding air holes. **b** Simulation model of PCF-LPG with sensing film coated on to the cladding air holes and its cladding mode LP_{11} in plane A and plane E. **c** Dip wavelength shift with respect to change in CH_4 concentration from 0%-3.5%. **d** Sensor time response graph for 210 nm thickness film for exposure of 1.5% CH_4 concentration. Reprint with permission from Ref. [176]. Copyright of The Optical Society

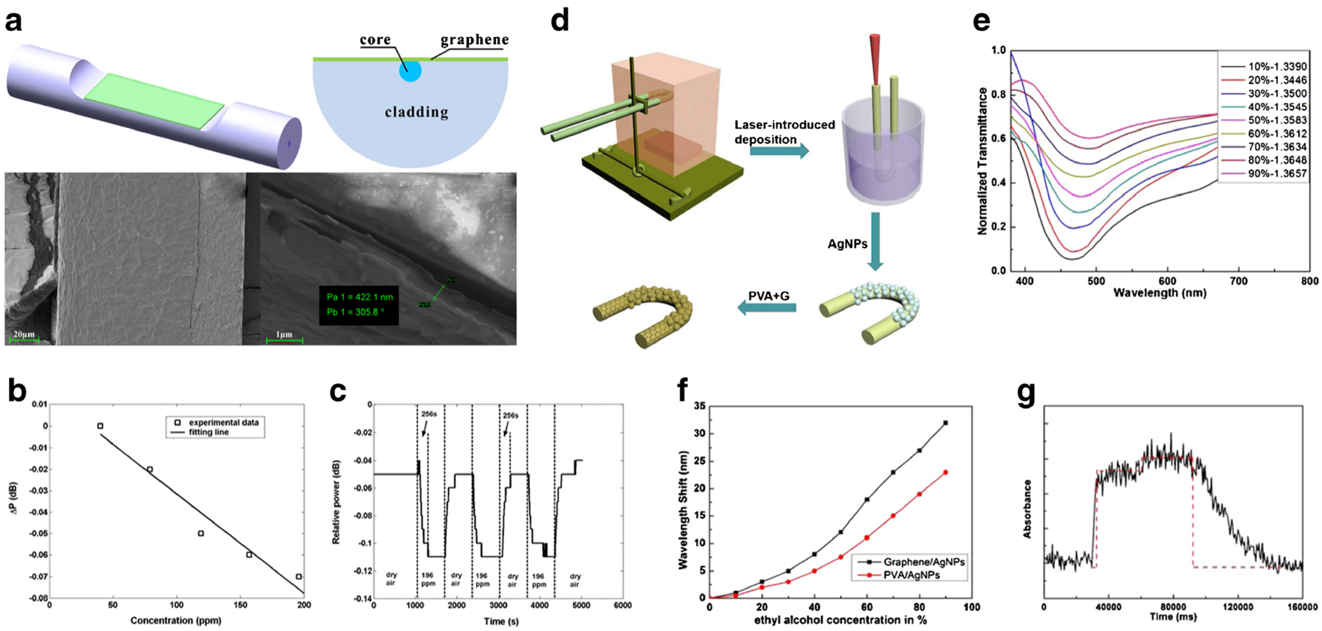

Fig. 5 **a** Sketch of rGO coated side polished optical fiber sensing probe with its cross section and its SEM images. **b** Optical power variation of rGO coated side polished optical fiber sensor with varied toluene concentration from 40 to 196 ppm. **c** Optical power variation of rGO coated side polished optical fiber sensor as a function of time with toluene concentration of 196 ppm. **d** Schematic diagram of the process for the fabrication of the U-bent SPR sensor. **e** Response of SPR spectrum of coated graphene/AgNPs U-bent sensor with different concentrations of aqueous ethanol. **f** Shift of the SPR sensor coated with graphene/AgNPs and PVA/AgNPs with different concentrations of aqueous ethanol. **g** Time response curve of graphene/AgNPs SPR sensor for aqueous ethanol concentration of 50%. Reprinted with permission from Ref. [85, 190]. Copyright of The Optical Society and Elsevier

The original article has been corrected.