Selective Recognition of Hydrogen Sulfide using Template and Catalyst Free Grown ZnO Nanorods

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Supplementary Files

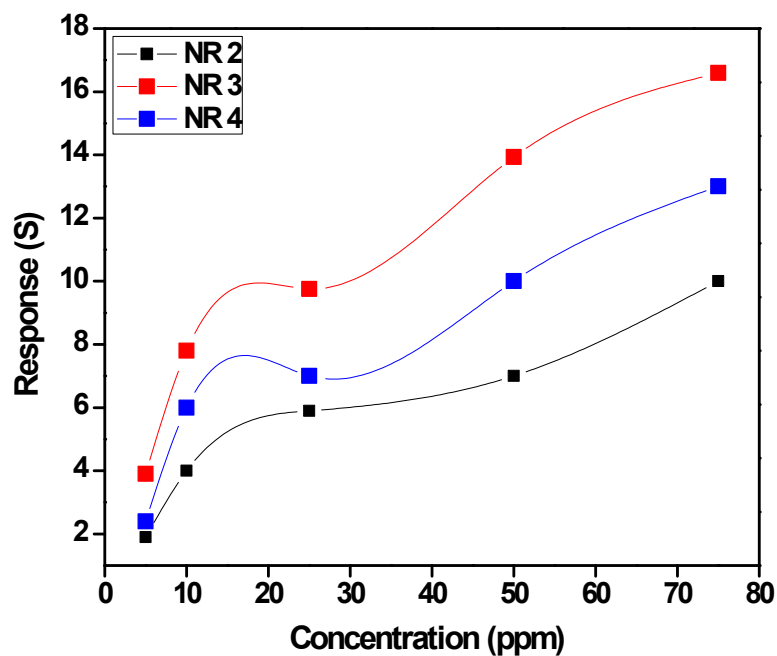**Figure S1** Enlarged view of lower concentration sensing response,

Figure S2: a) Response and b) recovery time characteristics of NR 3 sample with respect to various concentration levels.
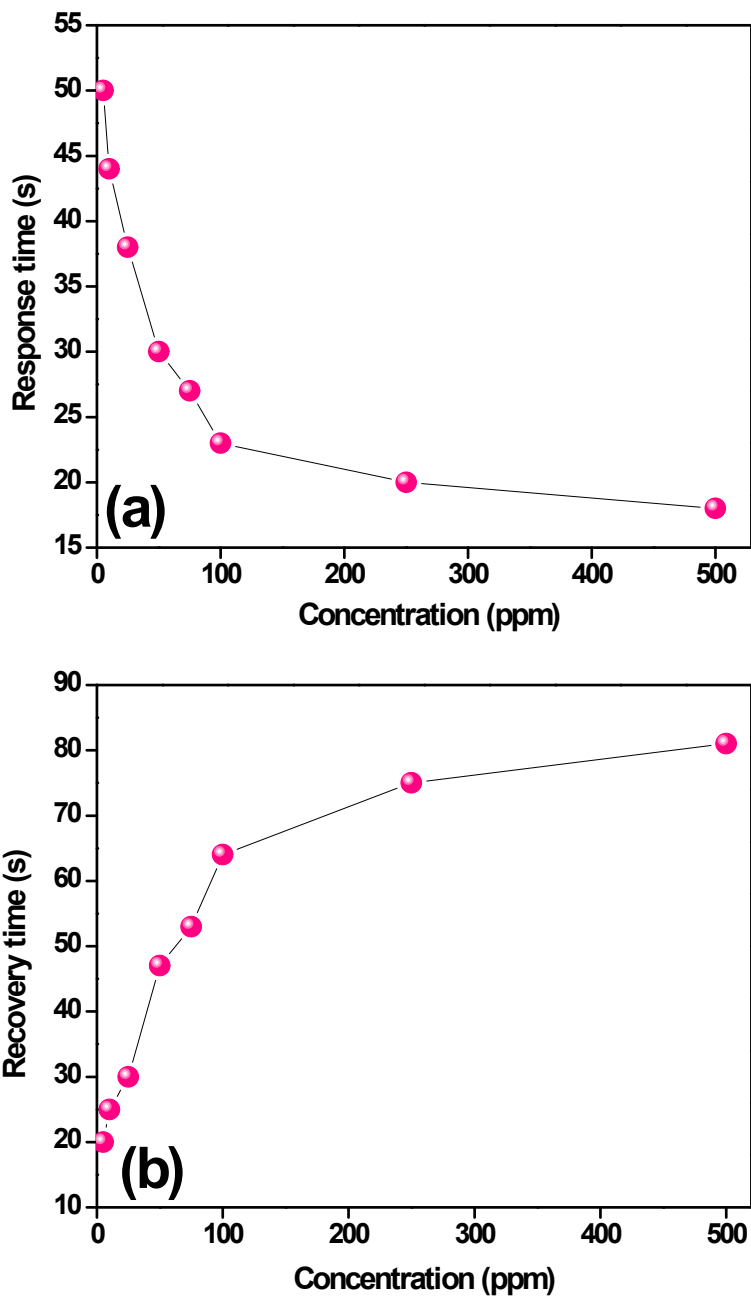
Table S1

Material	Structure	Operating temperature (°C)	Concentration (ppm)	Response	Response time (s)	Recovery time (s)	Ref.
CuO-SnO$_2$	Thin film	150	20	7341	14	118	(Chowdhuri et al., 2002)
ZnO	Single nanowire	RT	300	10	-	-	(Liao et al., 2007)
ZnO	Dendrites	RT	100	17.3	15	30	(Zhang et al., 2008)
ZnO	Porous	332	50	~ 200	6	10	(Liu et al., 2009)
In-doped ZnO	Thin film	250	1000	13000	2	240	(Badadhe and Mulla, 2009)
β-AgVO$_3$	Nanowire	250	300	1.10	3	17	(Mai et al., 2010)
CuO-ZnO	Hollow spheres	336	5	32.4	47	-	(S. J. Kim et al., 2012)
α-Fe$_2$O$_3$	Nanochain	285	5	4.7	8	65	(Ma et al., 2013)
CuO functionalized SnO$_2$	Nanowire	300	10	15	9	8	(S. S. Kim et al., 2012)
Zn$_2$SnO$_4$	Microcrystals	270	50	45	10	25	(Ma et al., 2012)

PVA-In₂O₃	Nanocrystals	38	10	3	25	410	(Singhal et al., 2012)
NiO@ZnO heterostructure	Nanotubes	215	50	474	50	124	(Xu et al., 2012)
ZnO	Thin film	200	50	0.85	13	24	(Shewale et al., 2013)
Pt doped Tungsten oxide	Nanoneedles	250	30	33	200	480	(Vallejos et al., 2014)
In₂O₃ @ WO₃	Nanoplates	150	5	63	5.5 min	16 min	(Yin et al., 2014)
In₂O₃/ZnO	Nanowire	RT	700	935	100	12 h	(Zang et al., 2014)
Cu doped SnO₂	Nanoporous	180	100	25.3%	10	42	(Zhang et al., 2014)
Mo-doped ZnO	Nanowire	300	5	14.11	-	-	(Woo et al., 2014)
CuO-functionalized ZnO	Nanotetrapods	250	50	17	-	400	(Kaur et al., 2014)
ZnO	Nanoflower	RT	1	296	320	3592	(Hosseini et al., 2015)
ZnO	**Nanorods**	**RT**	**100**	**111.42**	**23**	**64**	**Present Work**

Supplementary Table References

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