## **Supplementary Information**

## Highly Selective and Flexible Silver Nanoparticles-Based Paper Sensor for on-site Colorimetric Detection of Paraquat Pesticide

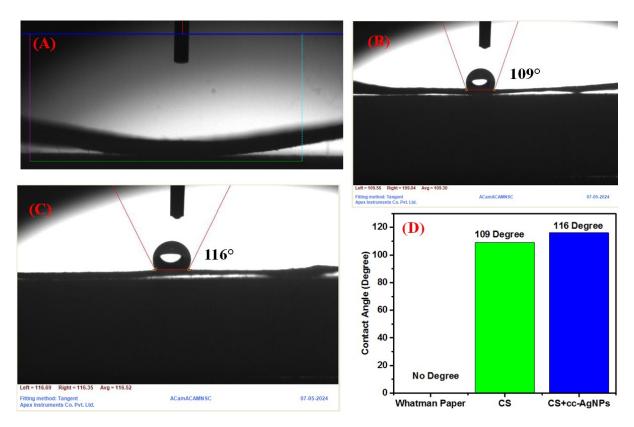
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**Table S1:** Peak assignments of the composite film.

S.No.	Peak (cm-1)	Peak assignment	References
1.	1020	C-O-C stretching	34
2.	2920	C-H stretching	35
3.	750	N-H bending	33
4.	3627	O-H stretching	37
5.	1582	Asymmetric C=O stretching	38
6.	1405	Symmetric C=O stretching	39
7.	3393	O-H stretching	38
8.	882	C=O stretching	39
9.	2355	C-N stretching	40



**Fig. S1:** (A) Contact angle measurements on Whatman paper, (B) CS film on Whatman paper, (C) CS+cc-AgNPs film on Whatman paper.

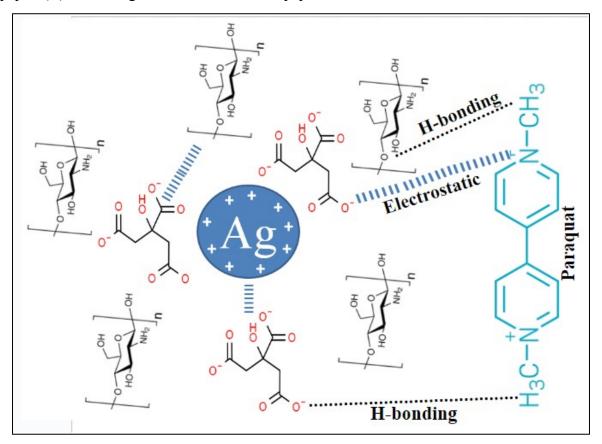


Fig. S2: Schematic diagram for sensing mechanism of paraquat pesticide.

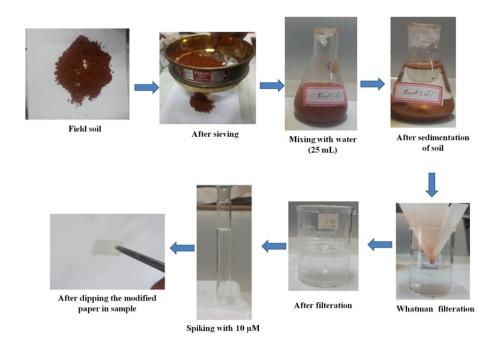


Fig. S3: Scheme for preparing soil samples