

Supplementary Information

Fluorescent Nanocellulose Derived from *Plectranthus barbatus* for the Selective Detection of Pb (II) Ions in Aqueous Solutions

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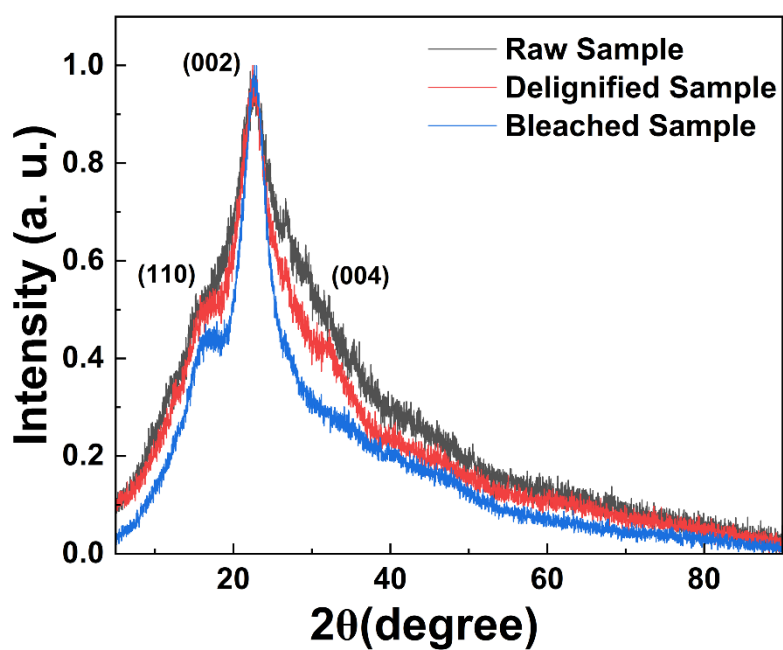


Fig. S1. XRD plot of the different synthesis stages of PBNC.

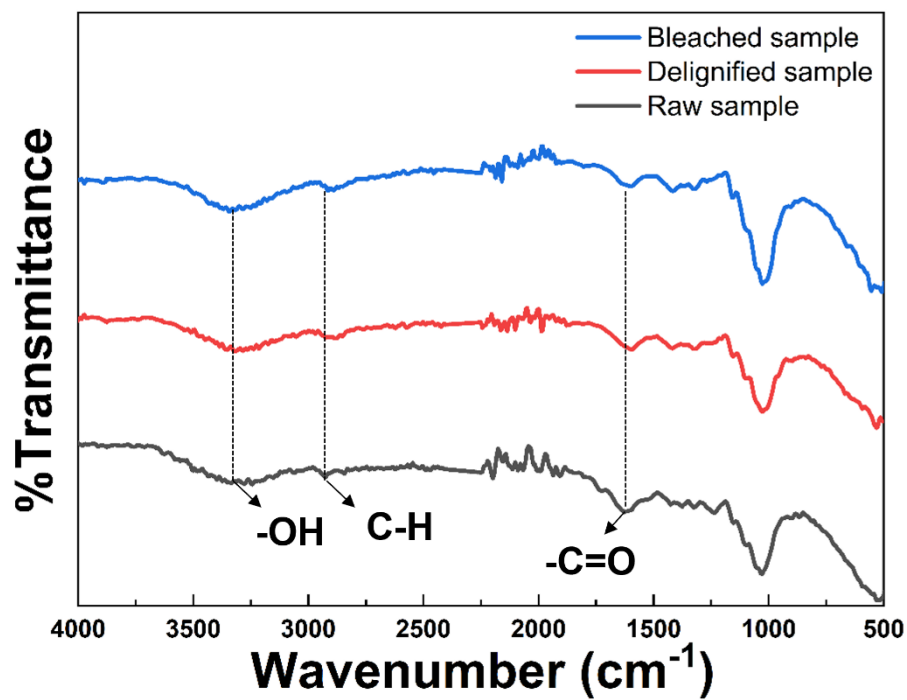


Fig. S2. FTIR plot of different synthesis stages of PBNC.

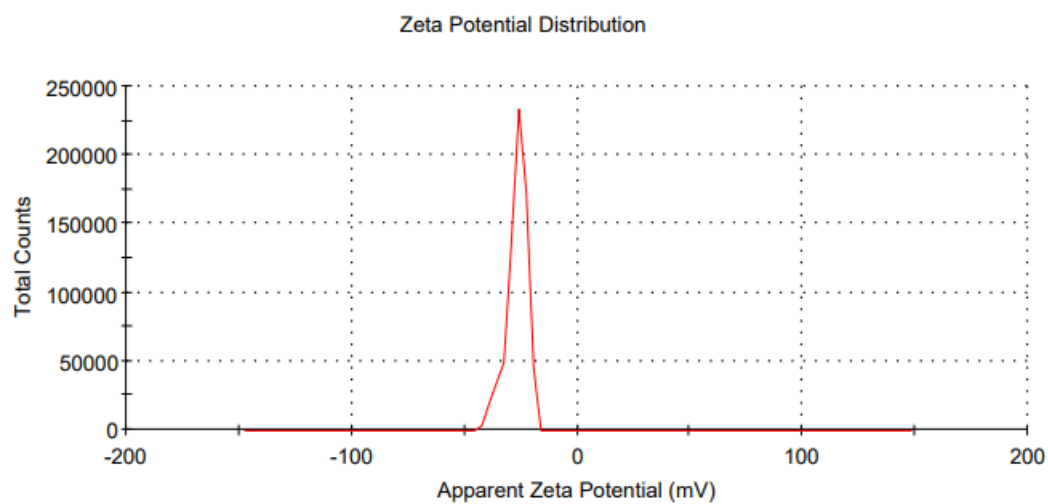


Fig. S3. Zeta potential graph of PBNC.

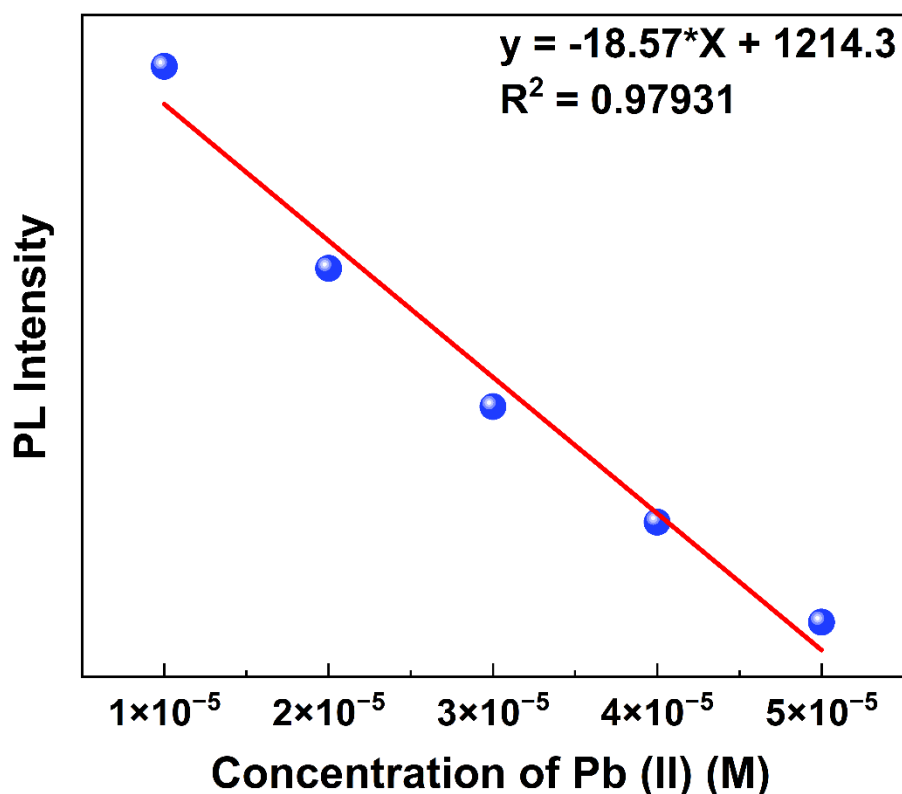


Fig. S4. Linear fit graph of concentration of Pb(II) versus PL intensity for tap water. For PL measurement, 20 μL of Pb(II) solution of different concentrations (10, 20, 30, 40, and 50 μL) was added to the 3 mL of the water samples.

Table S1. List of nanocellulose based sensing platforms.

Sl. No.	Sensing platform	Sensing function	Metal ion detected	Role of Nanocellulose	Sensor material	LOD	Reference
1.	AANI-labelled TOCNC	Optical	Pb	Carrier	AANI	0.15 μM	[1]
2.	Py-CNC	Optical	Fe	Matrix	Py	1 μM	[2]
3.	TOCNF-CQD	Optical	Fe	Substrate	CQD	10 μM	[3]

4.	SnO ₂ -BC	Electrochemical	Ni	Matrix	SnO ₂	-	[4]
5.	PA6/CNW/rGO	Electrochemical	Hg	Reducing agent	PA6	0.0052 μM	[5]
6.	PBNC	Optical	Pb	Sensor	NC	2.7 nM	This work

References

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