## **Supplementary Information**

## Effect of paclitaxel in the water dynamics of MCF-7 breast cancer cells revealed by dielectric spectroscopy

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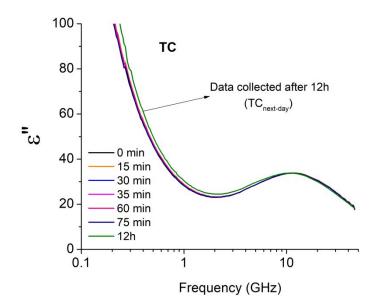


Figure S1. Imaginary part of the dielectric response for the TC exposed to room temperature after 0, 15, 30, 45, 60, and 75min and after 12h. The latter was named  $TC_{next-day}$ .

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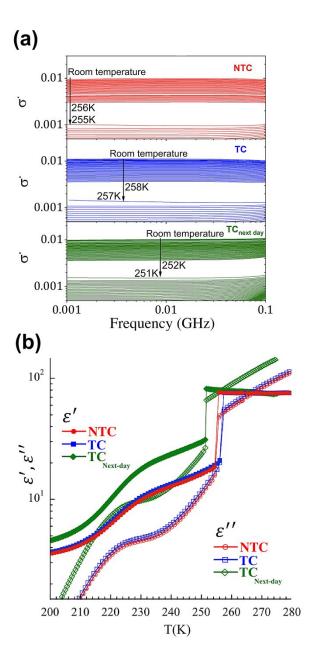


Figure S2. In (a), the real part of the conductivity measured at the radiofrequency range for the NTC, TC, and TC<sub>next-day</sub> on cooling. The monotonic decrease in conductivity ( $\sigma' = \varepsilon''/2\pi f$ ) is broken at around 256K in the NTC, 258 K in the TC, and 252 K in the TC<sub>next-day</sub>. The temperatures where the conductivities abruptly drop are indicated for each sample. Panel (b) shows an isochronal representation of the complex permittivity at 0.1 GHz for the three samples; filled symbols correspond to the real parts and empty symbols to the losses.

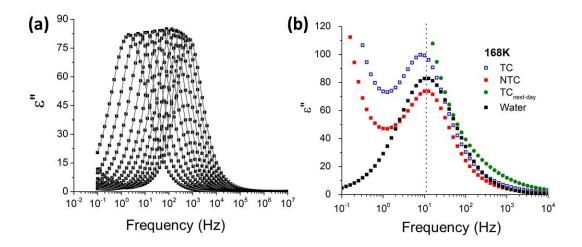


Figure S3. In (a), data collected with the broadband spectrometer for a sample of pure water between 205K and 145K highlighting the relaxations related to motions of protons in ice Ih. In (b), the relaxations related to motions of protons in ice Ih at 168K from the NTC and the TC are compared to that in pure water. Data from  $TC_{next-day}$  is also presented but such relaxation is not observed in the used scale due to the higher DC conductivity contribution. The vertical dotted line is a guide for the eyes and indicates the frequency where the relaxations in the NTC and water reach their maximum.