A Possibility for Construction of Iodine Cleaning System Based on Doping for $\pi$-Conjugated Polymers

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Figure S1. Quartz micro-balance measurement with readout microscopy for in-situ vapor phase doping of iodine for the PANI/pulp sample.
Scheme S1. General formula of \( \beta \)-decay (1), and \(^{131}\text{I}\) decay as an example (2).

\[
\begin{align*}
\overset{A}{Z}X \rightarrow & \quad \beta^- + \bar{\nu} + \overset{A}{Z+1}Y + E \quad (1) \\
^{131}_{53}\text{I} \rightarrow & \quad \beta^- + \bar{\nu} + ^{131}_{54}\text{Xe} + E \quad (2)
\end{align*}
\]

Gamma-decay of \(^{131}\text{Xe}\) occurs following after beta-decay. Half life time of \(^{131}\text{I}\) is 8.02 days, and half life time of \(^{131}\text{Xe}\) is 11.84 days [1,2]. \( \bar{\nu} = \) antineutrino, \( E = \) energy.

References