Supporting Information

On the Precise Tuning of Optical Filtering Features in Nanoporous Anodic Alumina Distributed Bragg Reflectors

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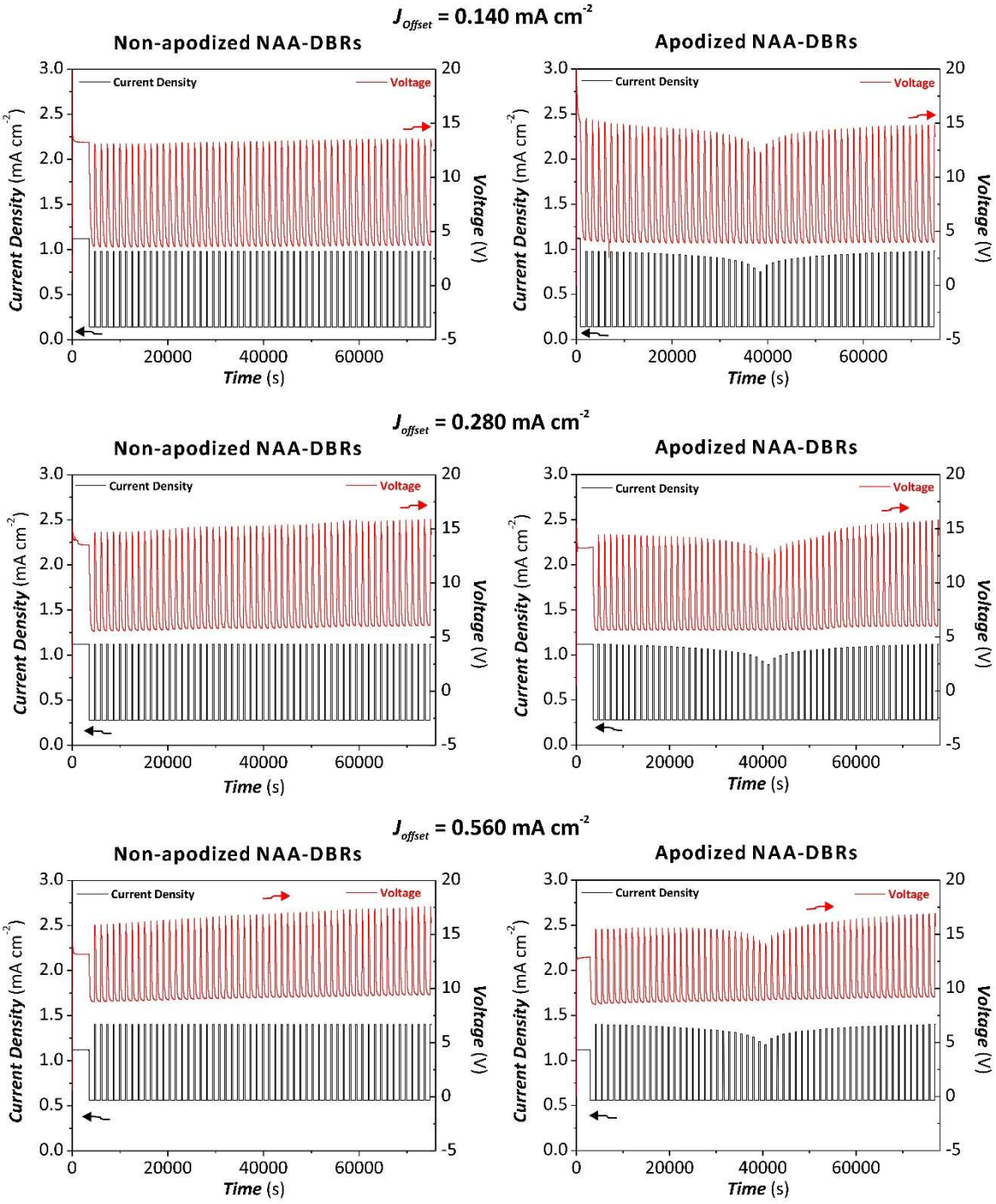

Figure S1. Anodization profiles of non-apodized and logarithmic negative apodized NAA-DBRs as a function of J_{Offset}.

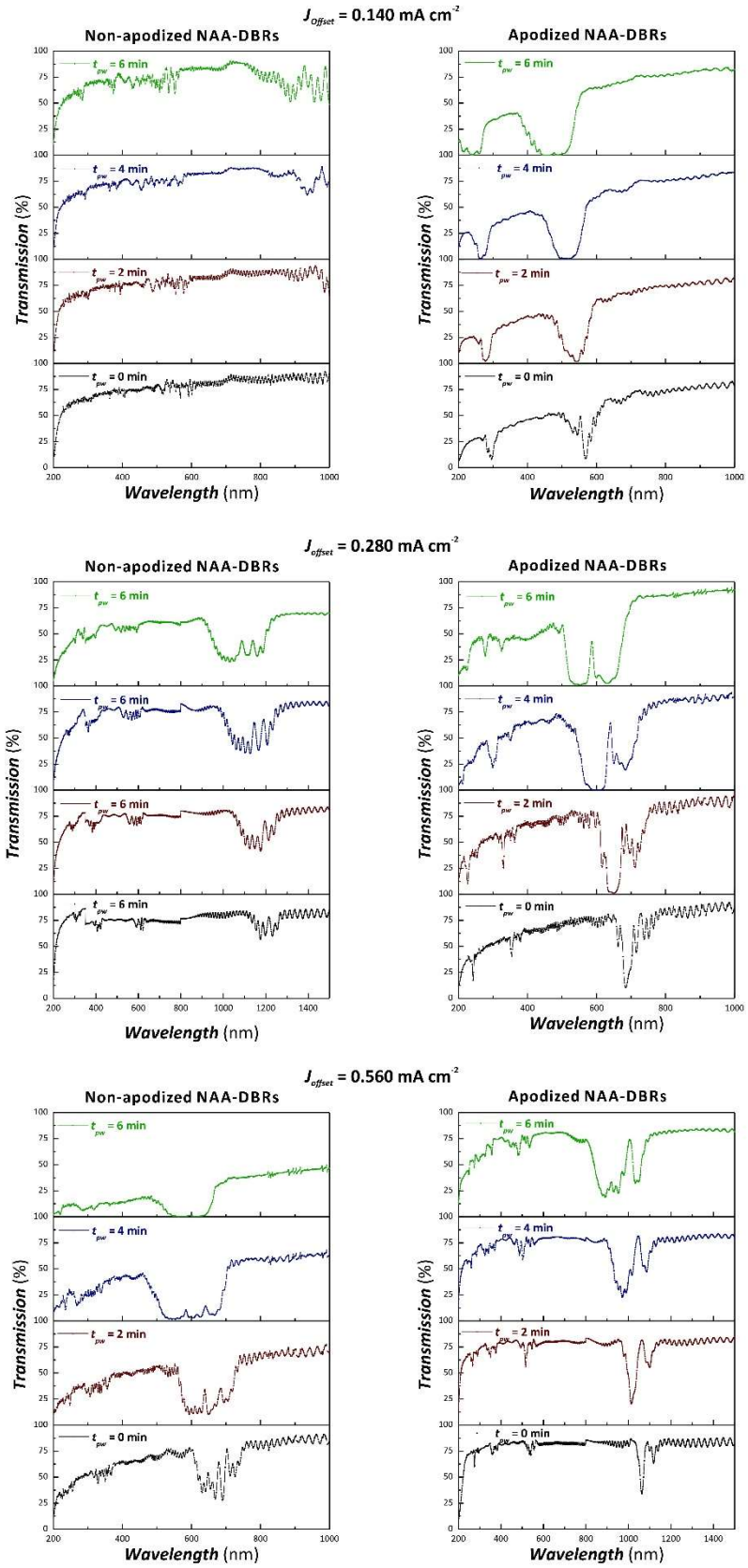

Figure S2. Transmission spectra of non-apodized and logarithmic negative apodized NAA-DBRs as a function of J_{Offset} and t_{pw}.

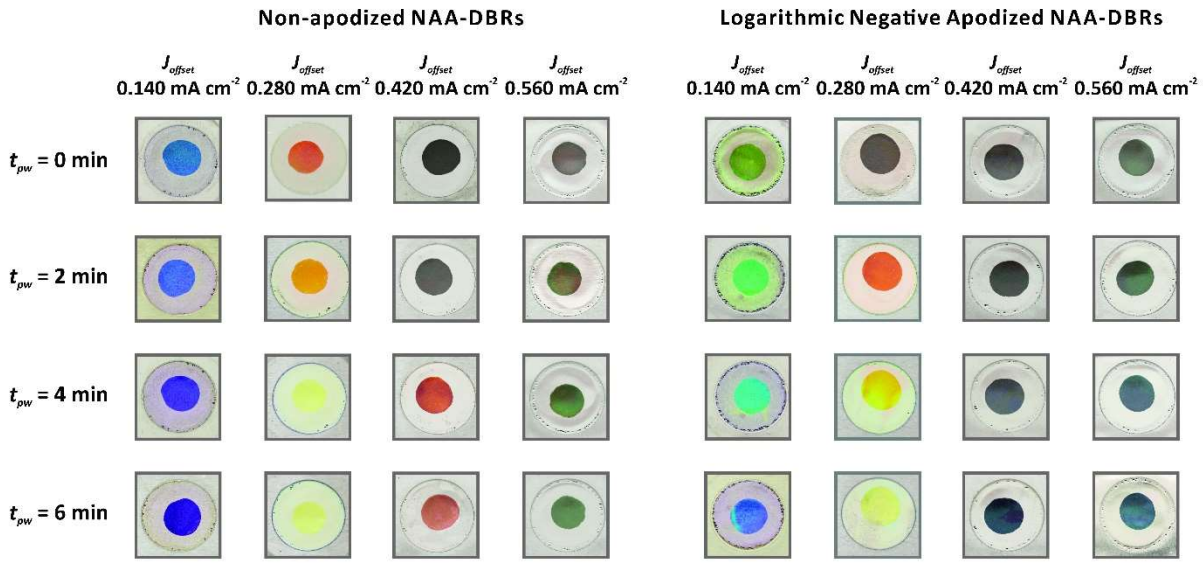

Figure S3. Digital pictures of non-apodized and logarithmic negative apodized NAA-DBRs as a function of J_{Offset} and t_{pw}.

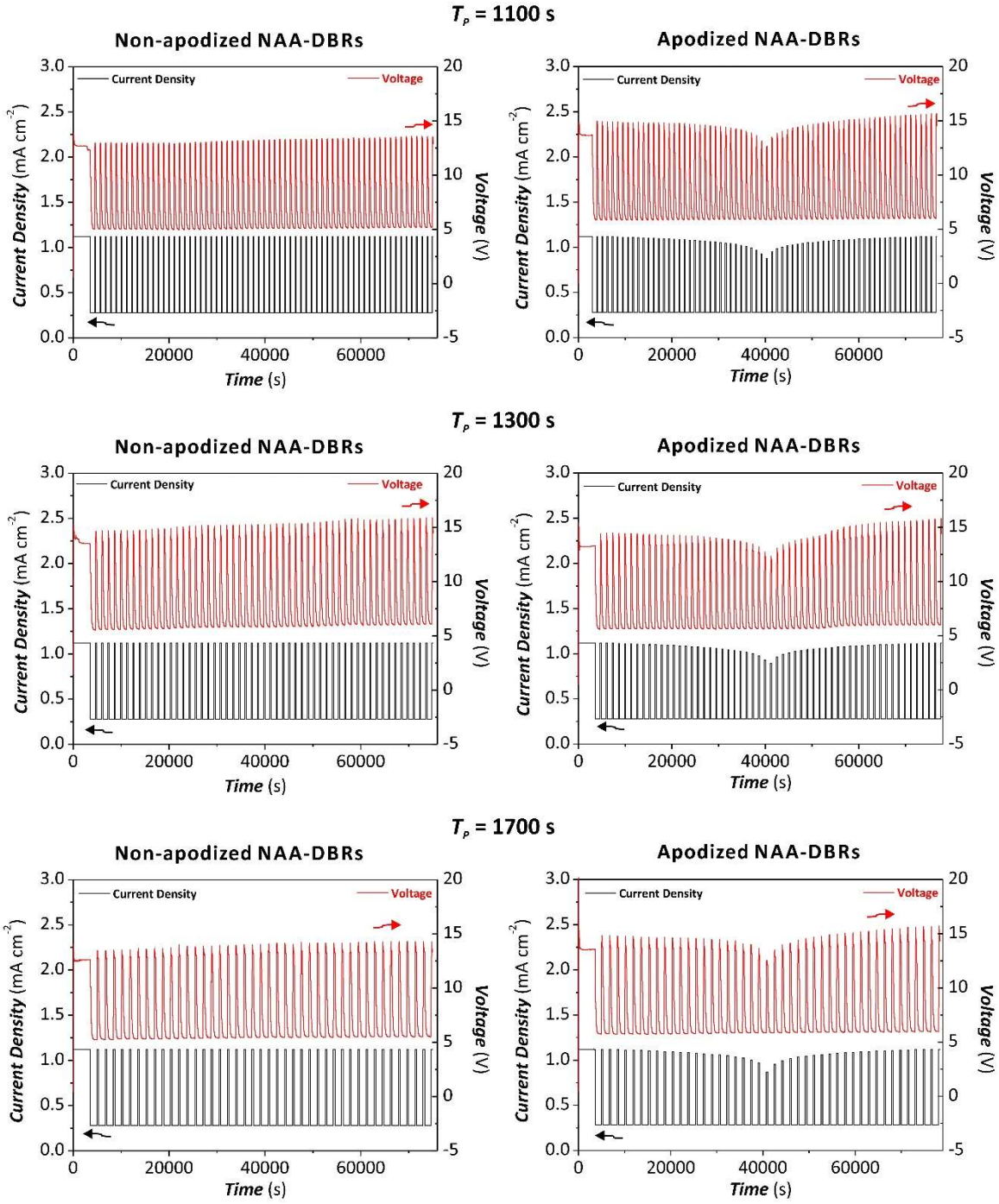

Figure S4. Anodization profiles of non-apodized and logarithmic negative apodized NAA-DBRs as a function of T_P.

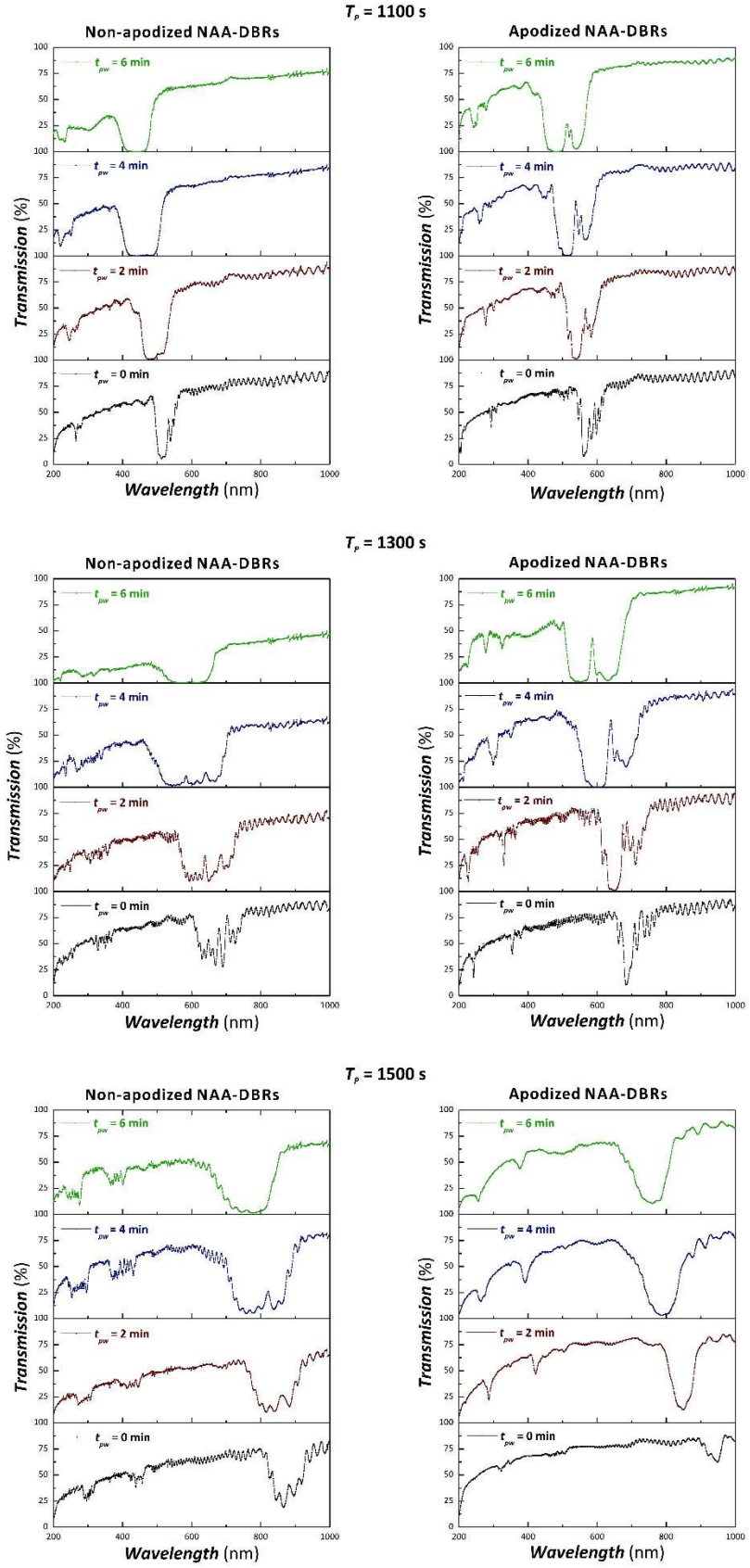

Figure S5. Transmission spectra of non-apodized and logarithmic negative apodized NAA-DBRs as a function of T_P and t_{pw}.

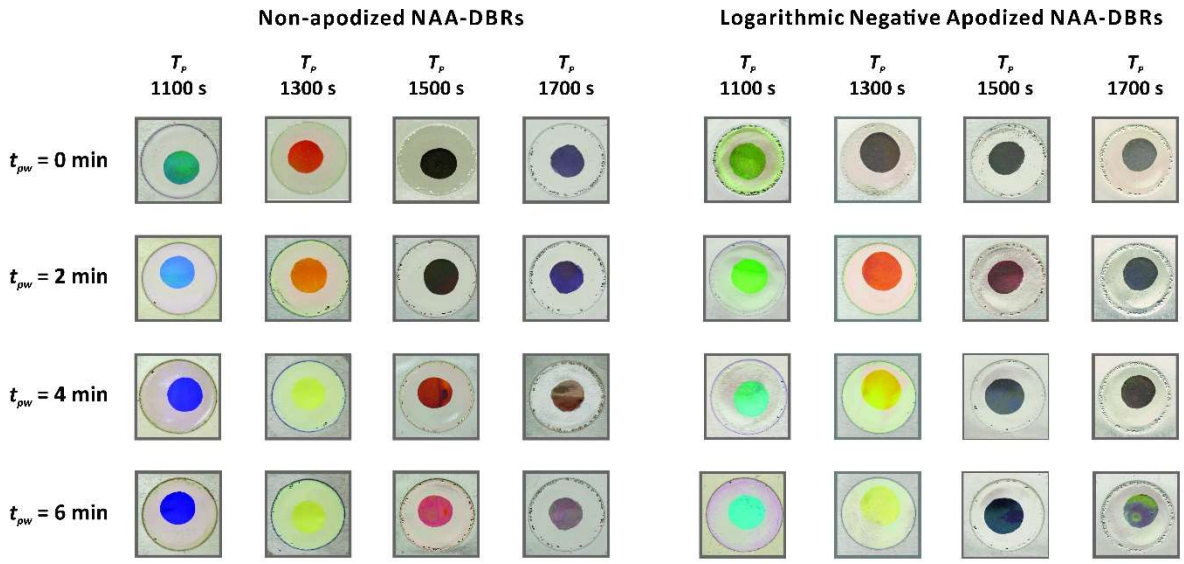

Figure S6. Digital pictures of non-apodized and logarithmic negative apodized NAA-DBRs as a function of T_P and t_{pw}.

The amplitudes as a function of time for the corresponding apodization functions applied in this study are given as **Equations S1 - S8:**

(i) Linear positive apodization

For $t \leq t_{an}/2$

$$A(t)_J = A_{min} + \left(\frac{A_{max} - A_{min}}{\frac{t_{an}}{2}}\right).t \qquad \textbf{Eq. S1}$$

For $t > t_{an}/2$

$$A(t)_J = A_{min} + \left(\frac{A_{max} - A_{min}}{t_{an} - \frac{t_{an}}{2}}\right).(t_{an} - t) \qquad \textbf{Eq. S2}$$

(ii) Linear negative apodization

For $t \leq t_{an}/2$

$$A(t)_J = A_{max} - \left(\frac{A_{max} - A_{min}}{\frac{t_{an}}{2}}\right).t \qquad \textbf{Eq. S3}$$

For $t > t_{an}/2$

$$A(t)_J = A_{max} + \left(\frac{A_{min} - A_{max}}{t_{an} - \frac{t_{an}}{2}}\right).(t - t_{an}) \qquad \textbf{Eq. S4}$$

(iii) Logarithmic positive apodization

For $t \leq t_{an}/2$

$$A(t)_J = A_{min} + \left(\frac{A_{max} - A_{min}}{\log\left(\frac{t_{an}}{2}+10\right)-1}\right).(\log(t+10)-1) \quad \textbf{Eq. S5}$$

For $t > t_{an}/2$

$$A(t)_J = \left(\frac{A_{min} - A_{max}}{\log(t_{an}+10)-\log\left(\frac{t_{an}}{2}+1\right)}\right).\left(\log(t+10) - \log\left(\frac{t_{an}}{2}+10\right)\right) + A_{max} \quad \textbf{Eq. S6}$$

(iv) Logarithmic negative apodization

For $t \leq t_{an}/2$

$$A(t)_J = A_{max} + \left(\frac{A_{min} - A_{max}}{\log\left(\frac{t_{an}}{2}+10\right)-1}\right).(\log(t+10)-1) \quad \textbf{Eq. S7}$$

For $t > t_{an}/2$

$$A(t)_J = \left(\frac{A_{max} - A_{min}}{\log(t_{an}+10)-\log\left(\frac{t_{an}}{2}+10\right)}\right).\left(\log(t+10) - \log\left(\frac{t_{an}}{2}+10\right)\right) + A_{min} \quad \textbf{Eq. S8}$$