## Supplementary Materials

Table 1. Meteorological characteristics of an exposure in Arizona.

| Meteorological Characteristics | Parameters |
| :---: | :---: |
| Latitude | $33^{\circ} 23^{\prime}$ north |
| Longitude | $112^{\circ} 35^{\prime}$ west |
| Elevation | 321 m |
| \% Sunshine | $85 \%$ |
| Quantity of energy | $334 \mathrm{MJ} \mathrm{UV} / \mathrm{m}^{2} / \mathrm{year} \quad 8004 \mathrm{MJ} / \mathrm{m}^{2} / \mathrm{year}$ |
| Annual average max. | $30^{\circ} \mathrm{C}$ |
| Annual average min. | $13^{\circ} \mathrm{C}$ |
| Rainfall total by year | 186 mm |
| Annual average humidity | $35 \%$ |

Table 2. Quantum energy received by samples after exposure in Arizona.

| Parameters Measured | Lengths of Exposure |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 month | 2 months | 3 months | 4 months | 5 months | 6 months |
| MJ UV/m ${ }^{2}$ | 140 | 280 | 420 | 560 | 700 | 840 |
| MJ Visible $/ \mathrm{m}^{2}$ | 4405 | 8811 | 13216 | 17622 | 22027 | 26433 |
| MJ Total/m ${ }^{2}$ | 4545 | 9091 | 13636 | 18182 | 22727 | 27273 |

Table S3. Meteorological characteristics of an exposure in Florida.

| Meteorological Characteristics | Parameters |
| :---: | :---: |
| Latitude | $25^{\circ} 27^{\prime}$ north |
| Longitude | $80^{\circ} 20^{\prime}$ west |
| Elevation | 2 m |
| \% Sunshine | $69 \%$ |
| Quantity of energy | $280 \mathrm{MJ} \mathrm{UV} / \mathrm{m}^{2} / \mathrm{year} \quad 6588 \mathrm{MJ} / \mathrm{m}^{2} / \mathrm{year}$ |
| Annual average max. | $28^{\circ} \mathrm{C}$ |
| Annual average min. | $21^{\circ} \mathrm{C}$ |
| Rainfall total by year | 1420 mm |
| Annual average humidity | $70 \%$ |

Table S4. Quantum energy received by samples after exposure in Florida.

| Parameters Measured | Lengths of Exposure |  |
| :---: | :---: | :---: |
|  | $\mathbf{6}$ months | $\mathbf{1 2}$ months |
| MJ UV/m | 155 | 310 |
| MJ Visible $/ \mathrm{m}^{2}$ | 3025 | 5990 |
| MJ Total $/ \mathrm{m}^{2}$ | 3180 | 6300 |

Table S5. Meteorological characteristics of an exposure in Quebec.

| Meteorological Characteristics | Parameters |
| :---: | :---: |
| Latitude | $46^{\circ} 58^{\prime}$ north |
| Longitude | $69^{\circ} 47^{\prime}$ west |
| Elevation | $\approx 0$ |
| \% Sunshine | $44 \%$ |
| Quantity of energy | $180 \mathrm{MJ} \mathrm{UV} / \mathrm{m}^{2} / \mathrm{year} \quad 4280 \mathrm{MJ} / \mathrm{m}^{2} / \mathrm{year}$ |
| Annual average max. | $9.2^{\circ} \mathrm{C}$ |
| Annual average min. | $-0.8^{\circ} \mathrm{C}$ |
| Rainfall total by year | 923.8 mm |
| Annual average humidity | $69.9 \%$ |
| Snow total by year | 315.9 mm |

Table S6. Quantum energy received by samples after exposure in Quebec.

| Lengths of Exposure | Parameters Measured |  |  |
| :---: | :---: | :---: | :---: |
|  | MJ UV/m | MJ Visible/m $\mathbf{m}^{\mathbf{2}}$ | MJ Total/m² |
| 48 months | 506 | 11524 | 12030 |

Table S7. Quantum energy received by samples after exposure in a QUV.

| Lengths of Exposure | Parameters Measured |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | MJ UV/m | MJ Visible/m | MJ Total/m $\mathbf{m}^{\mathbf{2}}$ |  |
| 9 months | 588 | 0 | 588 |  |

