

Supporting Information: calculation details

$y = I_A / (I_A + I_B)$ with $I_A = x_A \cdot m_A$ and $I_B = x_B \cdot m_B$ with $x_A = 0.72$ and $x_B = 0.82$

hence, $y = x_A \cdot m_A / (x_A \cdot m_A + x_B \cdot m_B)$

Simplifying its expression by posing $m_A + m_B = 1$, we also have:

$y = x_A \cdot m_A / (x_A \cdot m_A + x_B \cdot (1 - x_A)) = x_A \cdot m_A / ((x_A - x_B) \cdot m_A + x_B)$ and $x = \% \text{anatase} = m_A / (m_A + m_B) = m_A$;

hence, with $k_E = x_A / x_B$, the expression becomes $y = x_A \cdot x / ((x_A - x_B) \cdot x + x_B) = k_E \cdot x_B \cdot x / (k_E \cdot x_B - x_B) \cdot x + x_B = k_E \cdot x / ((k_E - 1) \cdot x + 1)$

And finally, $y = k_E \times \% \text{anatase} / (1 + (k_E - 1) \times \% \text{anatase})$