PROBLEM OF THE MONTH — MARCH 2023

Let $a, b, c, d > 0$ and $a + b + c + d = 1$. Show that
$$\frac{1}{a^2 + 1} + \frac{1}{b^2 + 1} + \frac{1}{c^2 + 1} + \frac{1}{d^2 + 1} \geq 7/2.$$

.