

Showcasing research on fast photochromic naphthopyrans of Katsutoshi Arai, Dr Yoichi Kobayashi and Prof. Jiro Abe, Aoyama Gakuin University, Japan

Rational molecular designs for drastic acceleration of the color-fading speed of photochromic naphthopyrans

We report rational molecular designs for acceleration of the color-fading speed of photochromic 3*H*-naphthopyrans. By using steric and electrostatic repulsions induced by substituents on the 2- and 10-positions of 3*H*-naphthopyrans, the color-fading speed accelerates from tens of minutes to microsecond time scales. The long-lived residual color, which is an important problem to be solved for industrial applications, can be also suppressed by these strategies.

As featured in:



See Jiro Abe et al., Chem. Commun., 2015, **51**, 3057.

