Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics. This journal is © the Owner Societies 2015



Figure 1s. Fluorescence quenching in steady-state and time-resolved experiment, on the basis of Stern-Volmer relations for C5ID⁺ causing by H⁺; correlation coefficients (R²) 0.986 for steady-state measurements; 0.995 for time-resolved measurement. Lifetime measurement were performed using $\lambda_{exc} = 375$ nm and observed at $\lambda_{em} = 420$ nm.



Figure 2s. Fluorescence quenching in steady-state and time-resolved experiment for N5D causing by H⁺; correlation coefficients (R²) 1 for steady-state measurements; 0.996 for time-resolved measurement. Lifetime measurement were performed using $\lambda_{exc} = 375$ nm and observed at $\lambda_{em} = 420$ nm.



Figure 3s. Fluorescence quenching in steady-state and time-resolved experiment for NMe5D causing by H⁺; correlation coefficients (R²) 0.994 for steady-state measurements; 0.982 for time-resolved measurement. Lifetime measurement were performed using $\lambda_{exc} = 375$ nm and observed at $\lambda_{em} = 430$ nm.



Figure 4s. A plot of lifetime of alloxazinic cation of 5-DAll (**C5D**⁺), vs. – log [H⁺] can be seen on Figure 4s.