Table S4. Table of symbols used in the equations.

Symbol	Description
X	Set of N modeled structures $\{X_k\}$.
X_k	Individual conformation of multiple donors and acceptors in a sample.
w_k	Proportion of an individual conformation, *k*, in the total population.
k_{da}	Ratio of the excitation rates of donor to acceptor at the excitation wavelength of donor.
I_{da}	Ratio of CFP and YFP fluorescence intensities in the FRET channel when each is expressed at equal levels in separate cells at the excitation wavelength of donor.
I_{da}^{exp}	Measured value of I_{da}.
$\sigma_{I_{da}^{exp}}$	Standard deviation of the measured I_{da}^{exp}.
k_{ij}^{ET}	Rate of energy transfer between donor *i* and acceptor *j.*
k^F	Rates of fluorescence. Subscripts “d” or “a” refer to donor or acceptor.
k^X	Rates of excitation. Subscripts “d” or “a” refer to donor or acceptor.
F_i	Term that quantifies the energy transferred from donor *i* to all the acceptors.
R_0	Forster radius.
R_{ij}	Distance between donor *i* and acceptor *j.*
$g(X)$	A function describing the impact of energy transfer on donor fluorescence.
[*D*]	Concentration of donor.
[*A*]	Concentration of acceptor.
k_d^{XF}	Ratio of the rate of donor excitation to the rate of donor fluorescence at the excitation wavelength of donor.
Q	Quantum yield. Subscripts “d” or “a” refer to donor or acceptor.
I^F	Fluorescence intensity. Subscripts “d” or “a” refer to donor or acceptor.
d_n	Data point *n.*
σ_n	Uncertainty for data point *n.*
σ_0	Typical uncertainty of dataset $\{d_n\}$.
S	Spillover factor. Subscripts “d” or “a” refer to donor or acceptor.