

## Single-Molecule Identification of Quenched and Unquenched States of LHCII

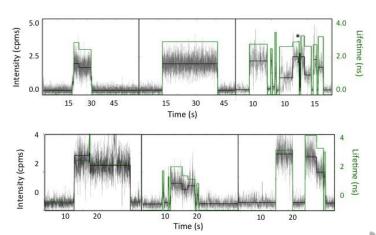


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Light-harvesting complex II (LHCII) is the primary antenna in higher plants & the site of initial photoabsorption & energy transfer steps

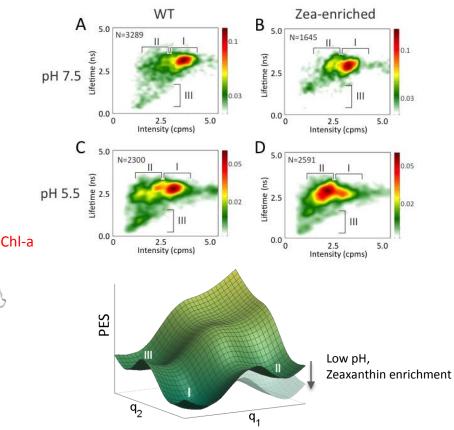
Chl-b

Single LHCIIs in the ABEL trap show correlated changes in fluorescence intensity & lifetime



Multiple dissipative pathways in single LHCII

Quenched (II, III) and unquenched (I) states are revealed in lifetime-intensity space and their relative populations change under conditions mimicking high light.



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