

Publications (a-international Journals)

(*) co-first-authorship

Pinnola A, Alboresi A, Nosek L, Rameez A, Trotta A, Barozzi F, Kouřil R, Dall'Osto L, Aro EM, Boekema EJ, Bassi R (2018). A LHCB9-dependent Photosystem I megacomplex induced under low light in *Physcomitrella patens*. **Nature plant**. *In the press*.

Dikaios I, Schiphorst C, Dall'Osto L, Alboresi A, Bassi R and **Pinnola A** (2018). Functional analysis of the LHCSR1 protein, catalyzing Excess Energy Dissipation in mosses, by heterologous expression in *Arabidopsis thaliana*. **J Ex Botany**. *Submitted*.

Son M, **Pinnola A**, Bassi R and Schlau-Cohen G. The electronic structure of lutein 2 is optimized for light harvesting in plants. **Chem**. *Submitted*.

Girolomoni L, Cazzaniga S, **Pinnola A**, Ballottari M and Bassi R. Non-Photochemical Quenching of Photosystem I and Photosystem II in *Chlamydomonas reinhardtii*. **PNAS**. *In revision*.

Pinnola A and Bassi R (2018). Molecular Mechanisms Involved In Plant Photoprotection. **Biochem Soc Trans**. 2018 Apr 17;46(2):467-482. Review.

Pinnola A, Ballottari M, Bargigia I, Alcocer M, D'Andrea C, Cerullo G and Bassi R (2017). Functional modulation of LHCSR1 protein from *Physcomitrella patens* by zeaxanthin binding and low pH. **Scientific Reports** 7, article number: 11158

Kondo T, **Pinnola A**, Chen WJ, Dall'Osto L, Bassi R and Schlau-Cohen G (2017). Single-molecule spectroscopy of LHCSR1 protein dynamics identifies two distinct states responsible for multi-time scale photosynthetic photoprotection. **Nature Chemistry** 9(8):772-778

Pinnola A, Staleva-Musto H, Capaldi S, Ballottari M, Bassi R and Polívka T (2016) Electron transfer between carotenoid and chlorophyll contributes to quenching in the LHCSR1 protein from *Physcomitrella patens*. **Biochim Biophys Acta** 1857(12):1870-1878

Pinnola A, Ghin L, Gecchele E, Merlin M, Alboresi A, Avesani L, Pezzotti M, Capaldi S, Cazzaniga S, Bassi R. (2015). Heterologous Expression of Moss Light-harvesting Complex Stress-related 1 (LHCSR1), the Chlorophyll a-Xanthophyll Pigment-protein Complex Catalyzing Non-Photochemical Quenching, in *Nicotiana* sp. **J Biol Chem** 290(40):24340-54

Pinnola A, Cazzaniga S, Alboresi A, Nevo R, Levin-Zaidman S, Reich Z, Bassi R. (2015). Light-Harvesting Complex Stress-Related Proteins Catalyze Excess Energy Dissipation in Both Photosystems of *Physcomitrella patens*. **Plant Cell** 27(11):3213-27

Pinnola A, Dall'Osto L, Gerotto C, Morosinotto T, Bassi R, Alboresi A. (2013) Zeaxanthin Binds to Light-Harvesting Complex Stress-Related Protein to Enhance Non-photochemical Quenching in *Physcomitrella patens*. **Plant Cell**. 25(9): 3519-33

Azzabi G, **Pinnola A***, Betterle N, Bassi R and Alboresi A. (2012). Enhancement of Non-Photochemical Quenching in the Bryophyte *Physcomitrella patens* during Acclimation to Salt and Osmotic stress. **Plant Cell Physiol** 53(10):1815-25

Publications (b-book Chapters)

Pinnola A and Bassi R. (2018). Chapter 8: Fotosintesi in “BIOCHIMICA” textbook. EDI.ERMES publisher, *in press*

Pinnola A, Kirilovsky D and Bassi R (2018). Chapter 11: Photoprotective Excess Energy in Dissipation in Light-Harvesting in Photosynthesis book. Edited by Croce R, van Grondelle R, van Amerongen H, van Stokkum I. CRC Press publisher

Pinnola A, Formighieri C and Bassi R. (2017). Chapter: Algae, a New Biomass Resource in Encyclopedia of Sustainability Science and Technology. Springer publisher

Pinnola A (2014). “*Physcomitrella patens* at the crossroad between algal and plant photosynthesis: a tool for studying the regulation of light harvesting”. PhD Thesis, University of Verona

Pinnola A. (1998) “Ruolo funzionale dell’adrenocettore $\beta 3$ nel cuore di *Rana esculenta*”. Master’s degree Thesis, University of Calabria

Publications (c-congress papers)

Pinnola A. LHCSR: a molecular switch for regulation of photosynthetic light use efficiency in mosses and unicellular algae. Sfphi2018: Meeting of the French Photosynthesis Society. Paris, France, April 5-6, 2018

Bassi R, **Pinnola A**, Cazzaniga S, Ballottari M, Dall’Osto L. A comparative analysis of Photosynthetic Light use efficiency Regulation Mechanisms from unicellular algae to higher plants through mosses. Light Harvesting Satellite Meeting of the 17th International Congress on Photosynthesis Research. Maastricht, The Netherlands, August 4-7, 2016

Pinnola A, Ballottari M, Alcocer M, Cerullo G and Bassi R. Binding of the second messenger Zeaxanthin upon high light stress changes the functional properties of the LHCSR1 protein from *Physcomitrella patens*. 4th International Symposium on Plant Signaling and Behavior. Saint Petersburg, Russia, June 19-23, 2016

Pinnola A, Cazzaniga S, Ballottari M, Dall’Osto L and Bassi R. A comparative analysis of Photosynthetic Light use efficiency Regulation Mechanisms from unicellular algae to higher plants through mosses. 4th International Symposium on Plant Signaling and Behavior Saint Petersburg, Russia, June 19-23, 2016

Pinnola A, Alboresi A and Bassi R. The Triggers of Excess Energy Dissipation, PSBS and LHCSR Proteins, Are Localized in Distinct Thylakoid Protein Domains in *Physcomitrella patens*. Proceedings of the 16th International Congress on Photobiology. Cordoba, September 8-12, 2014

Dall’Osto L, Cazzaniga S, **Pinnola A**, Alboresi A, and Bassi R. Photoprotection of the Chloroplast is Provided by both Photoreceptor-Dependent And -Independent Mechanisms. Proceedings of the 16th International Congress on Photobiology. Cordoba, September 8-12, 2014

Pinnola A, Gecchele E, Capaldi S, Ballottari M, Pezzotti M and Bassi R. Properties of the LHCSR1 protein, essential for excess energy dissipation in *Physcomitrella patens* overexpressed in *Nicotiana tabacum*. Proceedings of the International Symposium on the Regulation of Photosynthetic Function. Guilin, China, August 16-20, 2014

Pinnola A, Gerotto C, Morosinotto T, Dall'Osto L, Bassi R and Alboresi A. A new unrecognized binding site on LHCSR proteins explains Enhanced Zeaxanthin-dependence of excess energy dissipation in *Physcomitrella patens*. St. Louis: Proceedings of 16th International Congress on Photosynthesis Research. St. Louis, MO, USA, August 11-16, 2013