Margaret Ahmad

List of Publications by Year
in descending order

76 papers	8,984 citations	47006 47 h-index	66911 78 g-index
79 all docs	79 docs citations	79 times ranked	5066 citing authors

#	Article	IF	Citations
1	Exposure to 1.8 GHz radiofrequency field modulates ROS in human HEK293 cells as a function of signal amplitude. Communicative and Integrative Biology, 2022, 15, 54-66.	1.4	6
2	Stop CRYing! Inhibition of cryptochrome function by small proteins. Biochemical Society Transactions, 2022, 50, 773-782.	3.4	4
3	Infrared light therapy relieves TLR-4 dependent hyper-inflammation of the type induced by COVID-19. Communicative and Integrative Biology, 2021, 14, 200-211.	1.4	8
4	Effect of temperature on the <i>Arabidopsis</i> cryptochrome photocycle. Physiologia Plantarum, 2021, 172, 1653-1661.	5.2	18
5	Therapeutic application of light and electromagnetic fields to reduce hyper-inflammation triggered by COVID-19. Communicative and Integrative Biology, 2021, 14, 66-77.	1.4	12
6	Arabidopsis cryptochrome and Quantum Biology: new insights for plant science and crop improvement. Journal of Plant Biochemistry and Biotechnology, 2020, 29, 636-651.	1.7	10
7	Arabidopsis cryptochrome is responsive to Radiofrequency (RF) electromagnetic fields. Scientific Reports, 2020, 10, 11260.	3.3	19
8	Cryptochrome mediated magnetic sensitivity in Arabidopsis occurs independently of light-induced electron transfer to the flavin. Photochemical and Photobiological Sciences, 2020, 19, 341-352.	2.9	46
9	HEK293 cell response to static magnetic fields via the radical pair mechanism may explain therapeutic effects of pulsed electromagnetic fields. PLoS ONE, 2020, 15, e0243038.	2.5	20
10	Overexpression of AtWRKY30 Transcription Factor Enhances Heat and Drought Stress Tolerance in Wheat (Triticum aestivum L.). Genes, 2019, 10, 163.	2.4	126
11	Magnetic sensitivity mediated by the Arabidopsis blue-light receptor cryptochrome occurs during flavin reoxidation in the dark. Planta, 2019, 249, 319-332.	3.2	63
12	Genetic Variation and Alleviation of Salinity Stress in Barley (Hordeum vulgare L.). Molecules, 2018, 23, 2488.	3.8	55
13	Low-intensity electromagnetic fields induce human cryptochrome to modulate intracellular reactive oxygen species. PLoS Biology, 2018, 16, e2006229.	5.6	75
14	Serratia liquefaciens KM4 Improves Salt Stress Tolerance in Maize by Regulating Redox Potential, Ion Homeostasis, Leaf Gas Exchange and Stress-Related Gene Expression. International Journal of Molecular Sciences, 2018, 19, 3310.	4.1	109
15	Analysis of the Genetic Diversity and Population Structure of Austrian and Belgian Wheat Germplasm within a Regional Context Based on DArT Markers. Genes, 2018, 9, 47.	2.4	26
16	Analysis of Genetic Variation and Enhancement of Salt Tolerance in French Pea (Pisum Sativum L.). International Journal of Molecular Sciences, 2018, 19, 2433.	4.1	45
17	Blue-light induced biosynthesis of ROS contributes to the signaling mechanism of Arabidopsis cryptochrome. Scientific Reports, 2017, 7, 13875.	3.3	91
18	Genetic Transformation and Hairy Root Induction Enhance the Antioxidant Potential of <i>Lactuca serriola</i> L.. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-8.	4.0	58

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19	Blue-light induced accumulation of reactive oxygen species is a consequence of the Drosophila cryptochrome photocycle. PLoS ONE, 2017, 12, e0171836.	2.5	38
20	The blue light-induced interaction of cryptochrome 1 with COP1 requires SPA proteins during Arabidopsis light signaling. PLoS Genetics, 2017, 13, e1007044.	3.5	51
21	The functional divergence between SPA1 and SPA2 in Arabidopsis photomorphogenesis maps primarily to the respective N-terminal kinase-like domain. BMC Plant Biology, 2016, 16, 165.	3.6	10
22	Kinetic Modeling of the Arabidopsis Cryptochrome Photocycle: FADHo Accumulation Correlates with Biological Activity. Frontiers in Plant Science, 2016, 7, 888.	3.6	20
23	Mutations in the Nâ€terminal kinaseâ€like domain of the repressor of photomorphogenesis <scp>SPA</scp>1 severely impair <scp>SPA</scp>1 function but not light responsiveness in Arabidopsis. Plant Journal, 2016, 88, 205-218.	5.7	17
24	Light-dependent magnetoreception in birds: the crucial step occurs in the dark. Journal of the Royal Society Interface, 2016, 13, 20151010.	3.4	61
25	Photocycle and signaling mechanisms of plant cryptochromes. Current Opinion in Plant Biology, 2016, 33, 108-115.	7.1	70
26	Blue-light dependent ROS formation by Arabidopsis cryptochrome-2 may contribute toward its signaling role. Plant Signaling and Behavior, 2015, 10, e1042647.	2.4	58
27	Blueâ€light dependent reactive oxygen species formation by <i>Arabidopsis</i> cryptochrome may define a novel evolutionarily conserved signaling mechanism. New Phytologist, 2015, 206, 1450-1462.	7.3	101
28	Cellular metabolites modulate in vivo signaling of Arabidopsis cryptochrome-1. Plant Signaling and Behavior, 2015, 10, e1063758.	2.4	40
29	Cellular Metabolites Enhance the Light Sensitivity of <i>Arabidopsis</i> Cryptochrome through Alternate Electron Transfer Pathways Â Â. Plant Cell, 2014, 26, 4519-4531.	6.6	58
30	Lifetimes of Arabidopsis cryptochrome signaling states <i>in vivo</i>. Plant Journal, 2013, 74, 583-592.	5.7	48
31	Magnetoreception: activated cryptochrome 1a concurs with magnetic orientation in birds. Journal of the Royal Society Interface, 2013, 10, 20130638.	3.4	91
32	Magnetically sensitive light-induced reactions in cryptochrome are consistent with its proposed role as a magnetoreceptor. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4774-4779.	7.1	290
33	Single Amino Acid Substitution Reveals Latent Photolyase Activity in <i>Arabidopsis</i> cry1. Angewandte Chemie - International Edition, 2012, 51, 9356-9360.	13.8	31
34	Human Cryptochrome-1 Confers Light Independent Biological Activity in Transgenic Drosophila Correlated with Flavin Radical Stability. PLoS ONE, 2012, 7, e31867.	2.5	25
35	Light-Induced Conformational Changes in Full-Length Arabidopsis thaliana Cryptochrome. Journal of Molecular Biology, 2011, 413, 128-137.	4.2	65
36	The Cryptochromes: Blue Light Photoreceptors in Plants and Animals. Annual Review of Plant Biology, 2011, 62, 335-364.	18.7	723

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37	Light-activated Cryptochrome Reacts with Molecular Oxygen to Form a Flavinâ€“Superoxide Radical Pair Consistent with Magnetoreception. Journal of Biological Chemistry, 2011, 286, 21033-21040.	3.4	137
38	Photoreceptor-based magnetoreception: optimal design of receptor molecules, cells, and neuronal processing. Journal of the Royal Society Interface, 2010, 7, S135-46.	3.4	110
39	Cryptochrome. Communicative and Integrative Biology, 2010, 3, 24-27.	1.4	39
40	Cryptochrome Mediates Light-Dependent Magnetosensitivity of Drosophila's Circadian Clock. PLoS Biology, 2009, 7, e1000086.	5.6	197
41	Conformational change induced by ATP binding correlates with enhanced biological function of <i>Arabidopsis</i> cryptochrome. FEBS Letters, 2009, 583, 1427-1433.	2.8	36
42	What Makes the Difference between a Cryptochrome and DNA Photolyase? A Spectroelectrochemical Comparison of the Flavin Redox Transitions. Journal of the American Chemical Society, 2009, 131, 426-427.	13.7	68
43	Multiple interactions between cryptochrome and phototropin blue-light signalling pathways in Arabidopsis thaliana. Planta, 2008, 227, 1091-1099.	3.2	46
44	Evidence of a Light-Sensing Role for Folate in Arabidopsis Cryptochrome Blue-Light Receptors. Molecular Plant, 2008, 1, 68-74.	8.3	44
45	Human and Drosophila Cryptochromes Are Light Activated by Flavin Photoreduction in Living Cells. PLoS Biology, 2008, 6, e160.	5.6	136
46	The Signaling State of Arabidopsis Cryptochrome 2 Contains Flavin Semiquinone. Journal of Biological Chemistry, 2007, 282, 14916-14922.	3.4	227
47	Ethylene-induced Arabidopsis hypocotyl elongation is dependent on but not mediated by gibberellins. Journal of Experimental Botany, 2007, 58, 4269-4281.	4.8	64
48	Cryptochrome Blue Light Photoreceptors Are Activated through Interconversion of Flavin Redox States. Journal of Biological Chemistry, 2007, 282, 9383-9391.	3.4	349
49	HY5 is a point of convergence between cryptochrome and cytokinin signalling pathways in Arabidopsis thaliana. Plant Journal, 2007, 49, 428-441.	5.7	172
50	Magnetic intensity affects cryptochrome-dependent responses in Arabidopsis thaliana. Planta, 2007, 225, 615-624.	3.2	172
51	Blue-Light-Induced Changes in Arabidopsis Cryptochrome 1 Probed by FTIR Difference Spectroscopy. Biochemistry, 2006, 45, 2472-2479.	2.5	103
52	Heterologous Expression of Photoactivated Adenylyl Cyclase (PAC) Genes from the Flagellate Euglena gracilis in Insect Cells. Photochemistry and Photobiology, 2006, 82, 1601-1605.	2.5	11
53	Cryptochrome photoreceptors cry1 and cry2 antagonistically regulate primary root elongation in Arabidopsis thaliana. Planta, 2006, 224, 995-1003.	3.2	105
54	Heterologous Expression of Photoactivated Adenylyl Cyclase (PAC) Genes from the Flagellate Euglena gracilis in Insect Cells. Photochemistry and Photobiology, 2006, 82, 1601.	2.5	6

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55	Light-induced Electron Transfer in Arabidopsis Cryptochrome-1 Correlates with in Vivo Function. Journal of Biological Chemistry, 2005, 280, 19437-19440.	3.4	138
56	Novel ATP-binding and autophosphorylation activity associated with Arabidopsis and human cryptochrome-1. FEBS Journal, 2003, 270, 2921-2928.	0.2	89
57	Light-induced electron transfer in a cryptochrome blue-light photoreceptor. Nature Structural and Molecular Biology, 2003, 10, 489-490.	8.2	248
58	Action Spectrum for Cryptochrome-Dependent Hypocotyl Growth Inhibition in Arabidopsis. Plant Physiology, 2002, 129, 774-785.	4.8	188
59	Cryptochrome 1 controls tomato development in response to blue light. Plant Journal, 1999, 18, 551-556.	5.7	87
60	Seeing the world in red and blue: insight into plant vision and photoreceptors. Current Opinion in Plant Biology, 1999, 2, 230-235.	7.1	57
61	Cryptochrome blue-light photoreceptors of Arabidopsis implicated in phototropism. Nature, 1998, 392, 720-723.	27.8	168
62	The CRY1 Blue Light Photoreceptor of Arabidopsis Interacts with Phytochrome A In Vitro. Molecular Cell, 1998, 1, 939-948.	9.7	308
63	Chimeric Proteins between cry1 and cry2 Arabidopsis Blue Light Photoreceptors Indicate Overlapping Functions and Varying Protein Stability. Plant Cell, 1998, 10, 197-207.	6.6	158
64	Chimeric Proteins between cry1 and cry2 Arabidopsis Blue Light Photoreceptors Indicate Overlapping Functions and Varying Protein Stability. Plant Cell, 1998, 10, 197.	6.6	10
65	An enzyme similar to animal type II photolyases mediates photoreactivation in Arabidopsis.. Plant Cell, 1997, 9, 199-207.	6.6	128
66	An Enzyme Similar to Animal Type II Photolyases Mediates Photoreactivation in Arabidopsis. Plant Cell, 1997, 9, 199.	6.6	20
67	The blue-light receptor cryptochrome 1 shows functional dependence on phytochrome A or phytochrome B in Arabidopsis thaliana. Plant Journal, 1997, 11, 421-427.	5.7	191
68	Arabidopsis cryptochrome 1 is a soluble protein mediating blue light-dependent regulation of plant growth and development. Plant Journal, 1996, 10, 893-902.	5.7	220
69	The pef mutants of Arabidopsis thaliana define lesions early in the phytochrome signaling pathway. Plant Journal, 1996, 10, 1103-1110.	5.7	85
70	Seeing blue: the discovery of cryptochrome. Plant Molecular Biology, 1996, 30, 851-861.	3.9	153
71	Expression of an Arabidopsis cryptochrome gene in transgenic tobacco results in hypersensitivity to blue, UV-A, and green light.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 8423-8427.	7.1	189
72	Mutations throughout an Arabidopsis blue-light photoreceptor impair blue-light-responsive anthocyanin accumulation and inhibition of hypocotyl elongation. Plant Journal, 1995, 8, 653-658.	5.7	194

#	ARTICLE	IF	CITATIONS
73	Association of flavin adenine dinucleotide with the Arabidopsis blue light receptor CRY1. Science, 1995, 269, 968-970.	12.6	423
74	HY4 gene of A. thaliana encodes a protein with characteristics of a blue-light photoreceptor. Nature, 1993, 366, 162-166.	27.8	1,198
75	Topology of membrane insertion in vitro and plasma membrane assembly in vivo of the yeast arginine permease. Molecular Microbiology, 1988, 2, 627-635.	2.5	20
76	Yeast arginine permease: nucleotide sequence of the CAN1 gene. Current Genetics, 1986, 10, 587-592.	1.7	95