

Agepati S Raghavendra

List of Publications by Year in descending order

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153
papers

6,417
citations

87888

38
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74163

75
g-index

156
all docs

156
docs citations

156
times ranked

6149
citing authors

#	ARTICLE	IF	CITATIONS
1	ABA perception and signalling. Trends in Plant Science, 2010, 15, 395-401.	8.8	1,106
2	Beneficial interactions of mitochondrial metabolism with photosynthetic carbon assimilation. Trends in Plant Science, 2003, 8, 546-553.	8.8	435
3	Cytoplasmic Alkalinization Precedes Reactive Oxygen Species Production during Methyl Jasmonate- and Abscisic Acid-Induced Stomatal Closure. Plant Physiology, 2004, 134, 1536-1545.	4.8	429
4	Emerging concept for the role of photorespiration as an important part of abiotic stress response. Plant Biology, 2013, 15, 713-722.	3.8	278
5	Guard cell metabolism and CO ₂ sensing. New Phytologist, 2005, 165, 665-682.	7.3	188
6	Abscisic Acid-Induced Stomatal Closure: An Important Component of Plant Defense Against Abiotic and Biotic Stress. Frontiers in Plant Science, 2021, 12, 615114.	3.6	181
7	Mechanism of Stomatal Closure in Plants Exposed to Drought and Cold Stress. Advances in Experimental Medicine and Biology, 2018, 1081, 215-232.	1.6	161
8	Nitric oxide production occurs downstream of reactive oxygen species in guard cells during stomatal closure induced by chitosan in abaxial epidermis of <i>Pisum sativum</i> . Planta, 2009, 229, 757-765.	3.2	134
9	Multiple strategies to prevent oxidative stress in Arabidopsis plants lacking the malate valve enzyme NADP-malate dehydrogenase. Journal of Experimental Botany, 2012, 63, 1445-1459.	4.8	125
10	Essentiality of Mitochondrial Oxidative Metabolism for Photosynthesis: Optimization of Carbon Assimilation and Protection Against Photoinhibition. Critical Reviews in Biochemistry and Molecular Biology, 2002, 37, 71-119.	5.2	113
11	Induction of the AOX1D Isoform of Alternative Oxidase in <i>A. thaliana</i> T-DNA Insertion Lines Lacking Isoform AOX1A Is Insufficient to Optimize Photosynthesis when Treated with Antimycin A. Molecular Plant, 2009, 2, 284-297.	8.3	112
12	Nitric oxide in guard cells as an important secondary messenger during stomatal closure. Frontiers in Plant Science, 2013, 4, 425.	3.6	110
13	Interdependence of photosynthesis and respiration in plant cells: interactions between chloroplasts and mitochondria. Plant Science, 1994, 97, 1-14.	3.6	109
14	Perspectives for a better understanding of the metabolic integration of photorespiration within a complex plant primary metabolism network. Journal of Experimental Botany, 2016, 67, 3015-3026.	4.8	98
15	Importance of ROS and antioxidant system during the beneficial interactions of mitochondrial metabolism with photosynthetic carbon assimilation. Planta, 2010, 231, 461-474.	3.2	94
16	Dark Respiration Protects Photosynthesis Against Photoinhibition in Mesophyll Protoplasts of Pea (<i>Pisum sativum</i>). Plant Physiology, 1992, 99, 1232-1237.	4.8	88
17	Photorespiration is complemented by cyclic electron flow and the alternative oxidase pathway to optimize photosynthesis and protect against abiotic stress. Photosynthesis Research, 2019, 139, 67-79.	2.9	79
18	Different signaling pathways involved during the suppression of stomatal opening by methyl jasmonate or abscisic acid. Plant Science, 2003, 164, 481-488.	3.6	75

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19	Hydrogen peroxide production is an early event during bicarbonate induced stomatal closure in abaxial epidermis of Arabidopsis. <i>Planta</i> , 2007, 225, 1421-1429.	3.2	73
20	Action of Proline on Stomata Differs from That of Abscisic Acid, G-Substances, or Methyl Jasmonate. <i>Plant Physiology</i> , 1987, 83, 732-734.	4.8	70
21	Importance of AOX pathway in optimizing photosynthesis under high light stress: role of pyruvate and malate in activating AOX. <i>Physiologia Plantarum</i> , 2010, 139, 13-26.	5.2	68
22	Nitric oxide production occurs after cytosolic alkalization during stomatal closure induced by abscisic acid. <i>Plant, Cell and Environment</i> , 2008, 31, 1717-1724.	5.7	65
23	Ascorbic acid is a key participant during the interactions between chloroplasts and mitochondria to optimize photosynthesis and protect against photoinhibition. <i>Journal of Biosciences</i> , 2011, 36, 163-173.	1.1	63
24	Polyamines increase nitric oxide and reactive oxygen species in guard cells of Arabidopsis thaliana during stomatal closure. <i>Protoplasma</i> , 2018, 255, 153-162.	2.1	58
25	Molecular biology of C4 phosphoenolpyruvate carboxylase: Structure, regulation and genetic engineering. <i>Photosynthesis Research</i> , 1994, 39, 115-135.	2.9	55
26	Importance of oxidative electron transport over oxidative phosphorylation in optimizing photosynthesis in mesophyll protoplasts of pea (<i>Pisum sativum</i> L.). <i>Physiologia Plantarum</i> , 1999, 105, 546-553.	5.2	53
27	Optimization of photosynthesis by multiple metabolic pathways involving interorganelle interactions: resource sharing and ROS maintenance as the bases. <i>Photosynthesis Research</i> , 2013, 117, 61-71.	2.9	50
28	Enhanced production of antimicrobial sesquiterpenes and lipoxygenase metabolites in elicitor-treated hairy root cultures of <i>Solanum tuberosum</i> . <i>Biotechnology Letters</i> , 2003, 25, 593-597.	2.2	49
29	Alternative Oxidase Pathway Optimizes Photosynthesis During Osmotic and Temperature Stress by Regulating Cellular ROS, Malate Valve and Antioxidative Systems. <i>Frontiers in Plant Science</i> , 2016, 7, 68.	3.6	49
30	Participation of Mitochondrial Metabolism in Photorespiration1. <i>Plant Physiology</i> , 1998, 116, 1333-1337.	4.8	47
31	Cytosolic alkalization is a common and early messenger preceding the production of ROS and NO during stomatal closure by variable signals, including abscisic acid, methyl jasmonate and chitosan. <i>Plant Signaling and Behavior</i> , 2009, 4, 561-564.	2.4	46
32	Light-Enhanced Dark Respiration in Mesophyll Protoplasts from Leaves of Pea. <i>Plant Physiology</i> , 1991, 96, 1368-1371.	4.8	45
33	Blue light effects on stomata are mediated by the guard cell plasma membrane redox system distinct from the proton translocating ATPase. <i>Plant, Cell and Environment</i> , 1990, 13, 105-110.	5.7	44
34	Gum resin of <i>Boswellia serrata</i> inhibited human monocytic (THP-1) cell activation and platelet aggregation. <i>Journal of Ethnopharmacology</i> , 2011, 137, 893-901.	4.1	43
35	Nitric oxide as a secondary messenger during stomatal closure as a part of plant immunity response against pathogens. <i>Nitric Oxide - Biology and Chemistry</i> , 2014, 43, 89-96.	2.7	43
36	Title is missing!. <i>Photosynthesis Research</i> , 1999, 62, 231-239.	2.9	42

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37	Dramatic difference in the responses of phosphoenolpyruvate carboxylase to temperature in leaves of C3 and C4 plants. <i>Journal of Experimental Botany</i> , 2003, 54, 707-714.	4.8	42
38	Evolution of C4 phosphoenolpyruvate carboxylase in the genus <i>Alternanthera</i> : gene families and the enzymatic characteristics of the C4 isozyme and its orthologues in C3 and C3/C4 <i>Alternantheras</i> . <i>Planta</i> , 2006, 223, 359-368.	3.2	40
39	Metabolomics of Medicinal Plants - A Versatile Tool for Standardization of Herbal Products and Quality Evaluation of Ayurvedic Formulations. <i>Current Science</i> , 2016, 111, 1624.	0.8	37
40	Pyrabactin, an ABA agonist, induced stomatal closure and changes in signalling components of guard cells in abaxial epidermis of <i>Pisum sativum</i> . <i>Journal of Experimental Botany</i> , 2012, 63, 1349-1356.	4.8	35
41	Markedly low requirement of added CO ₂ for photosynthesis by mesophyll protoplasts of pea (<i>Pisum</i>) Tj ETQq1 1 0.784314 rgBT /Overbo 2006, 128, 763-772.	5.2	34
42	Nitric oxide is a signaling intermediate during bicarbonate-induced stomatal closure in <i>Pisum sativum</i> . <i>Physiologia Plantarum</i> , 2007, 130, 91-98.	5.2	34
43	Light-dependent pH changes in leaves of C4 plants Comparison of the pH response to carbon dioxide and oxygen with that of C3 plants. <i>Planta</i> , 1993, 189, 278.	3.2	32
44	Oxidative stress induced in chloroplasts or mitochondria promotes proline accumulation in leaves of pea (<i>Pisum sativum</i>): another example of chloroplast-mitochondria interactions. <i>Protoplasma</i> , 2019, 256, 449-457.	2.1	32
45	Malonate-inhibition of allosteric phosphoenolpyruvate carboxylase from <i>Setaria italica</i> . <i>Biochemical and Biophysical Research Communications</i> , 1975, 66, 160-165.	2.1	30
46	DISTRIBUTION OF THE C4 DICARBOXYLIC ACID PATHWAY OF PHOTOSYNTHESIS IN LOCAL MONOCOTYLEDONOUS PLANTS AND ITS TAXONOMIC SIGNIFICANCE. <i>New Phytologist</i> , 1976, 76, 301-305.	7.3	30
47	Convergence and Divergence of Signaling Events in Guard Cells during Stomatal Closure by Plant Hormones or Microbial Elicitors. <i>Frontiers in Plant Science</i> , 2016, 7, 1332.	3.6	30
48	Energy Supply for Stomatal Opening in Epidermal Strips of <i>Commelina benghalensis</i> . <i>Plant Physiology</i> , 1981, 67, 385-387.	4.8	29
49	Tetrazolium Reduction by Guard Cells in Abaxial Epidermis of <i>Vicia faba</i> : Blue Light Stimulation of a Plasmalemma Redox System. <i>Plant Physiology</i> , 1989, 90, 59-62.	4.8	29
50	Light-induced pH changes in leaves of C4 plants. <i>Planta</i> , 1993, 189, 267.	3.2	29
51	Patterns of phosphoenolpyruvate carboxylase activity and cytosolic pH during light activation and dark deactivation in C3 and C4 plants. <i>Photosynthesis Research</i> , 1993, 38, 51-60.	2.9	28
52	Stem-bark of <i>Terminalia arjuna</i> attenuates human monocytic (THP-1) and aortic endothelial cell activation. <i>Journal of Ethnopharmacology</i> , 2013, 146, 456-464.	4.1	28
53	REVERSAL OF ABSCISIC ACID INDUCED STOMATAL CLOSURE BY BENZYL ADENINE. <i>New Phytologist</i> , 1976, 76, 449-452.	7.3	27
54	High Mitochondrial Activity but Incomplete Engagement of the Cyanide-Resistant Alternative Pathway in Guard Cell Protoplasts of Pea. <i>Plant Physiology</i> , 1994, 105, 1263-1268.	4.8	27

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55	Beneficial interaction between photosynthesis and respiration in mesophyll protoplasts of pea during short light-dark cycles. <i>Physiologia Plantarum</i> , 1990, 80, 467-471.	5.2	26
56	Predominant localization of mitochondria enriched with glycine-decarboxylating enzymes in bundle sheath cells of <i>Alternanthera tenella</i> , a C3-C4 intermediate species. <i>Plant, Cell and Environment</i> , 1995, 18, 589-594.	5.7	26
57	Both rubisco and phosphoenolpyruvate carboxylase are beneficial for stomatal function in epidermal strips of <i>Commelina benghalensis</i> . <i>Plant Science</i> , 1997, 124, 153-157.	3.6	24
58	Consequence of restricted mitochondrial oxidative metabolism on photosynthetic carbon assimilation in mesophyll protoplasts: Decrease in light activation of four chloroplastic enzymes. <i>Physiologia Plantarum</i> , 2001, 112, 582-588.	5.2	24
59	Purification and properties of glycolate oxidase from plants with different photosynthetic pathways: Distinctness of C4 enzyme from that of a C3 species and a C3-C4 intermediate. <i>Photosynthesis Research</i> , 1996, 47, 231-238.	2.9	23
60	Illumination Increases the Affinity of Phosphoenolpyruvate Carboxylase to Bicarbonate in Leaves of a C4 Plant, <i>Amaranthus hypochondriacus</i> . <i>Plant and Cell Physiology</i> , 2000, 41, 905-910.	3.1	23
61	Simultaneous occurrence of C3 and C4 photosyntheses in relation to leaf position in <i>Mollugo nudicaulis</i> . <i>Nature</i> , 1978, 273, 143-144.	27.8	22
62	Preparation of <i>Arabidopsis</i> mesophyll protoplasts with high rates of photosynthesis. <i>Physiologia Plantarum</i> , 2007, 129, 879-886.	5.2	22
63	Characterisation of abscisic acid inhibition of stomatal opening in isolated epidermal strips. <i>Plant Science Letters</i> , 1976, 6, 111-115.	1.8	21
64	Respiration in Guard Cells, Pattern and Possible Role in Stomatal Function. <i>Journal of Plant Physiology</i> , 1989, 135, 3-8.	3.5	21
65	Prolongation of photosynthetic induction as a consequence of interference with mitochondrial oxidative metabolism in mesophyll protoplasts of the pea (<i>Pisum sativum</i> L.). <i>Plant Science</i> , 1999, 142, 29-36.	3.6	20
66	Stomatal closure induced by phytosphingosine-1-phosphate and sphingosine-1-phosphate depends on nitric oxide and pH of guard cells in <i>Pisum sativum</i> . <i>Planta</i> , 2016, 244, 831-841.	3.2	20
67	Metabolomics of <i>Withania somnifera</i> (L.) Dunal: Advances and applications. <i>Journal of Ethnopharmacology</i> , 2021, 267, 113469.	4.1	20
68	Antitranspirants for improvement of water use efficiency of crops. <i>Outlook on Agriculture</i> , 1979, 10, 92-98.	3.4	19
69	Stomatal Closure and Rise in ROS/NO of <i>Arabidopsis</i> Guard Cells by Tobacco Microbial Elicitors: Cryptogein and Harpin. <i>Frontiers in Plant Science</i> , 2017, 8, 1096.	3.6	18
70	Replacibility of Potassium by Sodium for Stomatal Opening in Epidermal Strips of <i>Commelina benghalensis</i> . <i>Zeitschrift für Pflanzenphysiologie</i> , 1976, 80, 36-42.	1.4	17
71	Partial Reduction in Activities of Photorespiratory Enzymes in C3-C4 Intermediates of <i>Alternanthera</i> and <i>Parthenium</i> . <i>Journal of Experimental Botany</i> , 1993, 44, 779-784.	4.8	17
72	PHOTOOXIDATIVE STRESS. , 2006, , 157-186.		17

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73	Bioenergetic processes in guard cells related to stomatal function. <i>Physiologia Plantarum</i> , 1995, 93, 146-154.	5.2	16
74	A screening of the dicotyledonous weed flora for the occurrence of C4 dicarboxylic acid pathway of photosynthesis. <i>Proceedings of the Indian Academy of Sciences - Section A Part 3 Mathematical Sciences</i> , 1973, 77, 93-100.	0.1	16
75	Adenosine triphosphatase in epidermal tissue of <i>Commelina benghalensis</i> : Possible involvement of isozymes in stomatal movement. <i>Plant Science Letters</i> , 1976, 7, 391-396.	1.8	15
76	Diversity in the Arrangements of Mesophyll Cells among Leaves of Certain C4 Dicotyledons in Relation to C4 Physiology. <i>Zeitschrift für Pflanzenphysiologie</i> , 1976, 77, 283-291.	1.4	15
77	Purification and Properties of Phosphoenolpyruvate and Ribulose Diphosphate Carboxylases from C4 and C3 Plants. <i>Zeitschrift für Pflanzenphysiologie</i> , 1977, 82, 315-321.	1.4	15
78	Inhibition of photosynthesis by osmotic stress in pea (<i>Pisum sativum</i>) mesophyll protoplasts is intensified by chilling or photoinhibitory light; intriguing responses of respiration. <i>Plant, Cell and Environment</i> , 1994, 17, 739-746.	5.7	15
79	Variable Secondary Metabolite Profiles Across Cultivars of <i>Curcuma longa</i> L. and <i>C. aromatica</i> Salisb.. <i>Frontiers in Pharmacology</i> , 2021, 12, 659546.	3.5	15
80	A novel method of measuring volume changes of mesophyll cell protoplasts and the effect of mercuric chloride on their osmotically-induced swelling. <i>Journal of Experimental Botany</i> , 1999, 50, 401-406.	4.8	14
81	Molecular Basis Sets A General Similarity-Based Approach for Representing Chemical Spaces. <i>Journal of Chemical Information and Modeling</i> , 2007, 47, 1328-1340.	5.4	14
82	Vacuolar pH oscillations in mesophyll cells accompany oscillations of photosynthesis in leaves: Interdependence of cellular compartments, and regulation of electron flow in photosynthesis. <i>Planta</i> , 1992, 186, 526-31.	3.2	12
83	Photorespiration in C3?C4 intermediate species of <i>Alternanthera</i> and <i>Parthenium</i> : Reduced ammonia production and increased capacity of CO ₂ refixation in the light. <i>Photosynthesis Research</i> , 1993, 38, 177-184.	2.9	12
84	Highly Sensitive HPLC Method for Estimation of Total or Individual Curcuminoids in <i>Curcuma</i> Cultivars and Commercial Turmeric Powders. <i>Current Science</i> , 2016, 111, 1816.	0.8	12
85	Phosphoenolpyruvate Carboxylase from <i>Setaria italica</i> : Inhibition by Oxalacetate and Malate. <i>Zeitschrift für Pflanzenphysiologie</i> , 1976, 78, 434-437.	1.4	11
86	Comparative Studies on C4 and C3 Photosynthetic Systems: Enzyme Levels in the Leaves and Their Distribution in Mesophyll and Bundle Sheath Cells. <i>Zeitschrift für Pflanzenphysiologie</i> , 1978, 87, 379-393.	1.4	11
87	STIMULATION AND INHIBITION BY BICARBONATE OF STOMATAL OPENING IN EPIDERMAL STRIPS OF <i>COMMELINA BENGHALENSIS</i> . <i>New Phytologist</i> , 1982, 91, 413-418.	7.3	11
88	Photosynthesis research in India: transition from yield physiology into molecular biology. <i>Photosynthesis Research</i> , 2003, 76, 435-450.	2.9	11
89	Light activation of NADP malic enzyme in leaves of maize: Marginal increase in activity, but marked change in regulatory properties of enzyme. <i>Journal of Plant Physiology</i> , 2003, 160, 51-56.	3.5	11
90	Sensitivity of photosynthesis by spinach chloroplast membranes to osmotic stress in vitro: Rapid inhibition of O ₂ evolution in presence of magnesium. <i>Photosynthesis Research</i> , 1990, 23, 325-330.	2.9	10

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91	Antimycin A sensitive pathway independent from PGR5 cyclic electron transfer triggers non-photochemical reduction of PQ pool and state transitions in <i>Arabidopsis thaliana</i> . <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2015, 146, 24-33.	3.8	10
92	Modulation of Photorespiratory Enzymes by Oxidative and Photo-Oxidative Stress Induced by Menadione in Leaves of Pea (<i>Pisum sativum</i>). <i>Plants</i> , 2021, 10, 987.	3.5	10
93	Role of dark respiration in photoinhibition of photosynthesis and its reactivation in the cyanobacterium <i>Anacystis nidulans</i> . <i>Physiologia Plantarum</i> , 1993, 88, 446-452.	5.2	10
94	The role of gasotransmitters in movement of stomata: mechanisms of action and importance for plant immunity. <i>Biologia Plantarum</i> , 0, 64, 623-632.	1.9	10
95	(Na ⁺ +K ⁺)-stimulated ATPase in Leaves of C4Plants: Possible Involvement in Active Transport of C4Acids. <i>Journal of Experimental Botany</i> , 1978, 29, 39-47.	4.8	9
96	Modulation by Bicarbonate of Catalytic and Regulatory Properties of C4Phosphoenolpyruvate Carboxylase from <i>Amaranthus hypochondriacus</i> : Desensitization to Malate and Glucose 6-Phosphate and Sensitization to Mg ²⁺ . <i>Plant and Cell Physiology</i> , 1998, 39, 1294-1298.	3.1	9
97	Variation with age in the photosynthetic carbon fixation pattern by leaves of <i>Amaranthus paniculatus</i> and <i>Oryza sativa</i> : Change in the primary carboxylation but no shift from C4 or C3 pathway. <i>Physiologia Plantarum</i> , 1980, 49, 405-409.	5.2	8
98	Interplay of light and temperature during the in planta modulation of C4 phosphoenolpyruvate carboxylase from the leaves of <i>Amaranthus hypochondriacus</i> L.: diurnal and seasonal effects manifested at molecular levels. <i>Journal of Experimental Botany</i> , 2011, 62, 1017-1026.	4.8	8
99	Methyl salicylate is the most effective natural salicylic acid ester to close stomata while raising reactive oxygen species and nitric oxide in <i>Arabidopsis</i> guard cells. <i>Plant Physiology and Biochemistry</i> , 2020, 157, 276-283.	5.8	8
100	Suppression of the stomatal opening by morphactins in isolated epidermal strips. <i>Plant and Cell Physiology</i> , 1976, 17, 77-82.	3.1	7
101	Correlation between the inhibition of photosynthesis and the decrease in area of detached leaf discs or volume/absorbance of protoplasts under osmotic stress in pea (<i>Pisum sativum</i>). <i>Physiologia Plantarum</i> , 1996, 96, 395-400.	5.2	7
102	Marked changes in volume of mesophyll protoplasts of pea (<i>Pisum sativum</i>) on exposure to growth hormones. <i>Journal of Plant Physiology</i> , 2004, 161, 557-562.	3.5	7
103	Chloride and Nitrate Stimulate Stomatal Opening and Decrease Potassium Uptake and Malate Production in Epidermal Tissues of <i>Commelina benghalensis</i> . <i>Functional Plant Biology</i> , 1980, 7, 663.	2.1	6
104	Plasma Membrane Redox System in Guard Cell Protoplasts of Pea (<i>Pisum sativum</i> L.). <i>Journal of Experimental Botany</i> , 1992, 43, 291-297.	4.8	6
105	Light Activation of Phosphoenolpyruvate Carboxylase in Maize Mesophyll Protoplasts. <i>Journal of Plant Physiology</i> , 1992, 139, 431-435.	3.5	6
106	Antitranspirant Activity of Inhibitors of Cyclic Photophosphorylation. <i>Journal of Experimental Botany</i> , 1977, 28, 480-483.	4.8	5
107	Effects of Light Quality on Photosynthetic Carbon Metabolism in C4and C3Plants: Rapid Movements of Photosynthetic Intermediates Between Mesophyll and Bundle Sheath Cells. <i>Journal of Experimental Botany</i> , 1977, 28, 1169-1179.	4.8	5
108	SHIFTS IN PHOTOSYNTHETIC CARBON LABELLING PATTERN BY ETIOLATED RICE (<i>ORYZA SATIVA</i> L.) SEEDLINGS DURING GREENING. <i>New Phytologist</i> , 1977, 79, 89-94.	7.3	5

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109	Regulation of phosphoenolpyruvate carboxylase in C ₄ plants: Inhibition by pyrophosphate of the enzyme from <i>Amaranthus viridis</i> . Archives of Biochemistry and Biophysics, 1980, 201, 356-358.	3.0	5
110	Oscillations in photosynthetic carbon assimilation and chlorophyll fluorescence are different in <i>Amaranthus caudatus</i> , a C ₄ plant, and <i>Spinacia oleracea</i> , a C ₃ plant. Planta, 1995, 195, 471.	3.2	5
111	Importance of the cytochrome pathway of mitochondrial electron transport over the alternative pathway during the Kok effect in leaf discs of pea (<i>Pisum sativum</i>). Physiologia Plantarum, 2001, 113, 430-434.	5.2	5
112	Marked modulation by phosphate of phosphoenolpyruvate carboxylase in leaves of <i>Amaranthus hypochondriacus</i> , a NAD-ME type C ₄ plant: decrease in malate sensitivity but no change in the phosphorylation status. Journal of Experimental Botany, 2003, 54, 2661-2668.	4.8	5
113	C ₄ photosynthesis and a unique type of Kranz anatomy in <i>Glossocordia boswallaea</i> (Asteraceae). Proceedings of the Indian Academy of Sciences - Section A Part 3 Mathematical Sciences, 1976, 84, 12-19.	0.1	5
114	Shrinkage of Guard Cell Chloroplasts in Relation to Stomatal Opening in <i>Commelina benghalensis</i> L.. Annals of Botany, 1976, 40, 899-901.	2.9	4
115	ASPARTATE-DEPENDENT ALANINE PRODUCTION BY LEAF DISCS OF <i>AMARANTHUS PANICULATUS</i> , AN ASPARTATE UTILIZING NAD-MALIC ENZYME TYPE C ₄ PLANT. New Phytologist, 1977, 79, 481-487.	7.3	4
116	Photosynthetic Carbon Metabolism in Leaves of C ₄ - and C ₃ -Plants: A Detailed Comparative Study. Zeitschrift für Pflanzenphysiologie, 1978, 87, 297-311.	1.4	4
117	Purification and Stability during Storage of Phosphoenolpyruvate Carboxylase from Leaves of <i>Amaranthus hypochondriacus</i> , a NAD-ME Type C ₄ Plant. Photosynthetica, 2000, 38, 45-52.	1.7	4
118	Modulation of Phosphoenolpyruvate Carboxylase Phosphorylation in Leaves of <i>Amaranthus hypochondriacus</i> , a NAD-ME Type of C ₄ Plant. Photosynthetica, 2000, 38, 23-28.	1.7	4
119	Mutual stimulation of temperature and light effects on C ₄ phosphoenolpyruvate carboxylase in leaf discs and leaves of <i>Amaranthus hypochondriacus</i> . Journal of Plant Physiology, 2008, 165, 1023-1032.	3.5	4
120	Nitric Oxide (NO) Measurements in Stomatal Guard Cells. Methods in Molecular Biology, 2016, 1424, 49-56.	0.9	4
121	Editorial: Signal Transduction in Stomatal Guard Cells. Frontiers in Plant Science, 2017, 8, 114.	3.6	4
122	Special issue in honour of Prof. Reto J. Strasser - Targets of nitric oxide (NO) during modulation of photosystems in pea mesophyll protoplasts: studies using chlorophyll a fluorescence. Photosynthetica, 2020, 58, 452-459.	1.7	4
123	Inhibition of chloroplast photochemical reactions with 2-chloromercuri 4,6-dinitrophenol. Archives of Biochemistry and Biophysics, 1976, 175, 355-356.	3.0	3
124	Change in Levels of Starch and Sugars in Epidermis of <i>Commelina benghalensis</i> during Fusicoccin Stimulated Stomatal Opening. Journal of Experimental Botany, 1983, 34, 1018-1025.	4.8	3
125	Structure, Regulation and Biosynthesis of Phosphoenolpyruvate Carboxylase from C ₄ Plants. Journal of Plant Biochemistry and Biotechnology, 1992, 1, 73-80.	1.7	3
126	Phosphoenolpyruvate Carboxylase Purified from Leaves of C ₃ , C ₄ , and C ₃ -C ₄ intermediate species of <i>Alternanthera</i> : Properties at Limiting and Saturating Bicarbonate. Photosynthetica, 2000, 38, 415-419.	1.7	3

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127	Computer Vision Method for Biomedical Image Analysis. IETE Technical Review (Institution of) Tj ETQq1 1 0.784314 rgBT /Ovrlock 10 T	3.2	3
128	Photosynthesis is sensitive to nitric oxide and respiration sensitive to hydrogen peroxide: Studies with pea mesophyll protoplasts. Journal of Plant Physiology, 2020, 246-247, 153133.	3.5	3
129	Stomatal Closure Sets in Motion Long-Term Strategies of Plant Defense Against Microbial Pathogens. Frontiers in Plant Science, 2021, 12, 761952.	3.6	3
130	Comparative Studies on C4 and C3 Photosynthetic Systems: Effect of Metabolic Inhibitors and Biochemical Intermediates on Carbon Metabolism. Zeitschrift für Pflanzenphysiologie, 1977, 85, 9-16.	1.4	2
131	Erratum. Plant Cell Reports, 1985, 4, 114-114.	5.6	2
132	Modulation by weak bases or weak acids of the pH of cell sap and phosphoenolpyruvate carboxylase activity in leaf discs of C4 plants. Physiologia Plantarum, 1998, 104, 456-462.	5.2	2
133	Modulation in vivo by Nitrate Salts of the Activity and Properties of Phosphoenolpyruvate Carboxylase in Leaves of Alternanthera pungens (C ₄ plant) and A. sessilis (C ₃) Tj ETQq1 1.0.784314 rgBT /Ovrlock 10 T	1.0	2
134	Stimulation by abscisic acid of the activity of phosphoenolpyruvate carboxylase in leaf disks of Amaranthus hypochondriacus L., C4 plant: role of pH and protein levels. Protoplasma, 2017, 254, 1973-1981.	2.1	2
135	Chapter 3 Introduction. Advances in Photosynthesis and Respiration, 2010, , 17-25.	1.0	2
136	Light-Enhanced Dark ¹⁴ C ₂ Fixation by Leaves in Relation to the C4 Dicarboxylic Acid Pathway of Photosynthesis. Functional Plant Biology, 1977, 4, 833.	2.1	2
137	Isolation of intact mesophyll cells from the leaves of higher plants. Proceedings of the Indian Academy of Sciences - Section A Part 3 Mathematical Sciences, 1979, 88, 143-154.	0.1	2
138	Endogenous Photophosphorylation by Mesophyll and Bundle Sheath Chloroplasts from Setaria italica and Amaranthus paniculatus1. Annals of Botany, 1977, 41, 667-669.	2.9	1
139	Mechanism of stomatal movement. Nature, 1977, 266, 282-282.	27.8	1
140	Photochemical Characteristics of Mesophyll and Bundle Sheath Chloroplasts from C4 Plants. Physiologia Plantarum, 1978, 43, 107-113.	5.2	1
141	Development of photochemical activities in mesophyll and bundle sheath chloroplasts of C4 and C3 plants during seedling growth. Plant Science Letters, 1978, 12, 355-360.	1.8	1
142	Photosynthetic Units and Carbon Assimilation in Leaves of Grain Sorghum under Different Light Intensities. Plant and Cell Physiology, 1983, 24, 1395-1400.	3.1	1
143	Stomatal opening in isolated epidermis of Commelina benghalensis L. heterophasic response to KCl concentration. Plant Cell Reports, 1984, 3, 199-202.	5.6	1
144	Suppression of Oxygen Evolving System in Spinach Chloroplast Membranes due to Release of Manganese on Exposure to Osmotic Stress in vitro in Presence of Magnesium. Journal of Plant Biochemistry and Biotechnology, 1994, 3, 137-140.	1.7	1

#	ARTICLE	IF	CITATIONS
145	Photosynthesis research in India: transition from yield physiology into molecular biology. , 2005, , 1189-1204.		1
146	Chapter 1 Sir Jagadish Chandra Bose (1858â€“1937): A Pioneer in Photosynthesis Research and Discoverer of Unique Carbon Assimilation in Hydrilla. Advances in Photosynthesis and Respiration, 2010, , 3-11.	1.0	1
147	Blue light-promoted stomatal opening in abaxial epidermis of Commelina benghalensis is maximal at low calcium. Physiologia Plantarum, 1997, 101, 861-864.	5.2	1
148	Modulation of phosphoenolpyruvate carboxylase in vivo by Ca ²⁺ in Amaranthus hypochondriacus, a NAD-ME type C4 plant: Possible involvement of Ca ²⁺ in up-regulation of PEPC-protein kinase in vivo. Journal of Plant Physiology, 2005, 162, 1095-1102.	3.5	0
149	Interaction of polyethylene glycol-6000 with C4 phosphoenolpyruvate carboxylase in crude leaf extracts as well as in purified protein form from Amaranthus hypochondriacus L.: evidence for oligomerization of PEPC in vitro and in vivo. Physiology and Molecular Biology of Plants, 2008, 14, 227-234.	3.1	0
150	C 3 Plants. , 2017, , 44-51.		0
151	Measurement of Mitochondrial Respiration in Isolated Protoplasts: Cytochrome and Alternative Pathways. Methods in Molecular Biology, 2017, 1670, 253-265.	0.9	0
152	Multiple Factors Mediate the Cross Talk Between Mitochondrial Metabolism and Photosynthetic Carbon Assimilation: Roles of Photorespiratory CO ₂ and Ascorbate. , 2008, , 1057-1061.		0
153	Protein Phosphatases in Guard Cells: Key Role in Stomatal Closure and Opening. , 2020, , 125-147.		0