Ben D Hankamer

List of Publications by Year
in descending order

118 papers	9,997 citations	44042 48 h-index	34964 98 g-index
121 all docs	121 docs citations	121 times ranked	9433 citing authors

#	Article	IF	Citations
1	Second Generation Biofuels: High-Efficiency Microalgae for Biodiesel Production. Bioenergy Research, 2008, 1, 20-43.	2.2	1,932
2	An economic and technical evaluation of microalgal biofuels. Nature Biotechnology, 2010, 28, 126-128.	9.4	412
3	Supramolecular structure of the photosystem II complex from green plants and cyanobacteria.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 175-179.	3.3	324
4	STRUCTURE AND MEMBRANE ORGANIZATION OF PHOTOSYSTEM II IN GREEN PLANTS. Annual Review of Plant Biology, 1997, 48, 641-671.	14.2	322
5	Improved Photobiological H2 Production in Engineered Green Algal Cells. Journal of Biological Chemistry, 2005, 280, 34170-34177.	1.6	316
6	Engineering photosynthetic light capture: impacts on improved solar energy to biomass conversion. Plant Biotechnology Journal, 2007, 5, 802-814.	4.1	313
7	Green Bioplastics as Part of a Circular Bioeconomy. Trends in Plant Science, 2019, 24, 237-249.	4.3	294
8	Future prospects of microalgal biofuel production systems. Trends in Plant Science, 2010, 15, 554-564.	4.3	288
9	Photosynthesis: a blueprint for solar energy capture and biohydrogen production technologies. Photochemical and Photobiological Sciences, 2005, 4, 957.	1.6	284
10	Artificial photosynthesis as a frontier technology for energy sustainability. Energy and Environmental Science, 2013, 6, 1074.	15.6	284
11	Selection, breeding and engineering of microalgae for bioenergy and biofuel production. Trends in Biotechnology, 2012, 30, 198-205.	4.9	266
12	Improvement of light to biomass conversion by de-regulation of light-harvesting protein translation in Chlamydomonas reinhardtii. Journal of Biotechnology, 2009, 142, 70-77.	1.9	198
13	Photosynthetic biomass and H2production by green algae: from bioengineering to bioreactor scale-up. Physiologia Plantarum, 2007, 131, 10-21.	2.6	189
14	Isolation and Biochemical Characterization of Monomeric and Dimeric Photosystem II Complexes from Spinach and Their Relevance to the Organisation of Photosystem II In vivo. FEBS Journal, 1997, 243, 422-429.	0.2	188
15	Perspectives and advances of biological H2 production in microorganisms. Applied Microbiology and Biotechnology, 2006, 72, 442-449.	1.7	175
16	Two-dimensional structure of plant photosystem II at 8-Ã... resolution. Nature, 1997, 389, 522-526.	13.7	159
17	Phosphatidylglycerol Is Involved in the Dimerization of Photosystem II. Journal of Biological Chemistry, 2000, 275, 6509-6514.	1.6	158
18	Microalgal hydrogen production. Current Opinion in Biotechnology, 2010, 21, 238-243.	3.3	152

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19	Developments and perspectives of photobioreactors for biofuel production. Applied Microbiology and Biotechnology, 2010, 87, 1291-1301.	1.7	137
20	Transcriptome for Photobiological Hydrogen Production Induced by Sulfur Deprivation in the Green Alga Chlamydomonas reinhardtii. Eukaryotic Cell, 2008, 7, 1965-1979.	3.4	136
21	Challenges and opportunities for hydrogen production from microalgae. Plant Biotechnology Journal, 2016, 14, 1487-1499.	4.1	134
22	Crystal structure of a central stalk subunit C and reversible association/dissociation of vacuole-type ATPase. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 59-64.	3.3	130
23	Functional integration of the HUP1 hexose symporter gene into the genome of C. reinhardtii: Impacts on biological H2 production. Journal of Biotechnology, 2007, 131, 27-33.	1.9	130
24	Revealing the structure of the oxygen-evolving core dimer of photosystem II by cryoelectron crystallography. Nature Structural Biology, 1999, 6, 560-564.	9.7	123
25	The Metabolome of Chlamydomonas reinhardtii following Induction of Anaerobic H2 Production by Sulfur Depletion. Journal of Biological Chemistry, 2009, 284, 23415-23425.	1.6	119
26	Technoeconomic analysis of renewable aviation fuel from microalgae, Pongamia pinnata, and sugarcane. Biofuels, Bioproducts and Biorefining, 2013, 7, 416-428.	1.9	112
27	RNAi Knock-Down of LHCBM1, 2 and 3 Increases Photosynthetic H2 Production Efficiency of the Green Alga Chlamydomonas reinhardtii. PLoS ONE, 2013, 8, e61375.	1.1	99
28	3D structure of the Yersinia entomophaga toxin complex and implications for insecticidal activity. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20544-20549.	3.3	91
29	Three-Dimensional Structure of the Photosystem II Core Dimer of Higher Plants Determined by Electron Microscopy. Journal of Structural Biology, 2001, 135, 262-269.	1.3	88
30	The discriminative bilateral filter: An enhanced denoising filter for electron microscopy data. Journal of Structural Biology, 2006, 155, 395-408.	1.3	88
31	Flow Cytometry Pulse Width Data Enables Rapid and Sensitive Estimation of Biomass Dry Weight in the Microalgae Chlamydomonas reinhardtii and Chlorella vulgaris. PLoS ONE, 2014, 9, e97269.	1.1	87
32	Microalgal Aquafeeds As Part of a Circular Bioeconomy. Trends in Plant Science, 2019, 24, 959-970.	4.3	87
33	Subunit positioning and transmembrane helix organisation in the core dimer of photosystem II. FEBS Letters, 2001, 504, 142-151.	1.3	80
34	Organization of the AAA+ Adaptor Protein PspA Is an Oligomeric Ring*. Journal of Biological Chemistry, 2004, 279, 8862-8866.	1.6	77
35	Can photosynthesis enable a global transition from fossil fuels to solar fuels, to mitigate climate change and fuel-supply limitations?. Renewable and Sustainable Energy Reviews, 2016, 62, 134-163.	8.2	74
36	The Interplay of Proton, Electron, and Metabolite Supply for Photosynthetic H2 Production in Chlamydomonas reinhardtii. Journal of Biological Chemistry, 2010, 285, 30247-30260.	1.6	68

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37	Light-Harvesting Complex Protein LHCBM9 Is Critical for Photosystem II Activity and Hydrogen Production in Chlamydomonas reinhardtii Â Â. Plant Cell, 2014, 26, 1598-1611.	3.1	64
38	Structure of a PSIâ€“LHCIâ€“cyt b ₆ f supercomplex in Chlamydomonas reinhardtii promoting cyclic electron flow under anaerobic conditions. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10517-10522.	3.3	64
39	The three-dimensional structure of a photosystem II core complex determined by electron crystallography. Structure, 1997, 5, 837-849.	1.6	62
40	Phylogenetic and molecular analysis of hydrogen-producing green algae. Journal of Experimental Botany, 2009, 60, 1691-1702.	2.4	62
41	Structural Analysis of Chi1 Chitinase from Yen-Tc: The Multisubunit Insecticidal ABC Toxin Complex of Yersinia entomophaga. Journal of Molecular Biology, 2012, 415, 359-371.	2.0	61
42	Trading Off Global Fuel Supply, CO2 Emissions and Sustainable Development. PLoS ONE, 2016, 11, e0149406.	1.1	61
43	Structure of the dengue virus glycoprotein non-structural protein 1 by electron microscopy and single-particle analysis. Journal of General Virology, 2012, 93, 771-779.	1.3	58
44	The structure of bacterial RNA polymerase in complex with the essential transcription elongation factor NusA. EMBO Reports, 2009, 10, 997-1002.	2.0	55
45	Localization of the 23-kDa subunit of the oxygen-evolving complex of photosystem II by electron microscopy. FEBS Journal, 1998, 252, 268-276.	0.2	54
46	Subunit positioning in photosystem II revisited. Trends in Biochemical Sciences, 1999, 24, 43-45.	3.7	52
47	Automated nutrient screening system enables high-throughput optimisation of microalgae production conditions. Biotechnology for Biofuels, 2015, 8, 65.	6.2	51
48	Multifactorial comparison of photobioreactor geometries in parallel microalgae cultivations. Algal Research, 2016, 15, 187-201.	2.4	50
49	The metabolome of Chlamydomonas reinhardtii following induction of anaerobic H2 production by sulfur depletion.. Journal of Biological Chemistry, 2009, 284, 35996.	1.6	48
50	Three-Dimensional Structure of AAA ATPase Vps4: Advancing Structural Insights into the Mechanisms of Endosomal Sorting and Enveloped Virus Budding. Structure, 2009, 17, 427-437.	1.6	46
51	Expanding the microalgal industry â€“ continuing controversy or compelling case?. Current Opinion in Chemical Biology, 2013, 17, 444-452.	2.8	45
52	Bacterial Mechanosensitive Channels: Models for Studying Mechanosensory Transduction. Antioxidants and Redox Signaling, 2014, 20, 952-969.	2.5	41
53	Photoacclimation and productivity of Chlamydomonas reinhardtii grown in fluctuating light regimes which simulate outdoor algal culture conditions. Algal Research, 2016, 13, 182-194.	2.4	41
54	High-throughput optimisation of light-driven microalgae biotechnologies. Scientific Reports, 2018, 8, 11687.	1.6	40

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55	Cryo-EM structures of the pore-forming A subunit from the Yersinia entomophaga ABC toxin. Nature Communications, 2019, 10, 1952.	5.8	40
56	Relationship between Excitation Energy Transfer, Trapping, and Antenna Size in Photosystem II. Biochemistry, 2001, 40, 4026-4034.	1.2	39
57	Time-Course Global Expression Profiles of Chlamydomonas reinhardtii during Photo-Biological H2 Production. PLoS ONE, 2011, 6, e29364.	1.1	37
58	Design scenarios of outdoor arrayed cylindrical photobioreactors for microalgae cultivation considering solar radiation and temperature. Algal Research, 2019, 41, 101515.	2.4	36
59	SwarmPS: Rapid, semi-automated single particle selection software. Journal of Structural Biology, 2007, 157, 174-188.	1.3	35
60	Integration in microalgal bioprocess development: Design of efficient, sustainable, and economic processes. Engineering in Life Sciences, 2014, 14, 560-573.	2.0	35
61	Experimental Investigations of Physical and Chemical Properties for Microalgae HTL Bio-Crude Using a Large Batch Reactor. Energies, 2017, 10, 467.	1.6	33
62	Impact of Procedural Steps and Cryopreservation Agents in the Cryopreservation of Chlorophyte Microalgae. PLoS ONE, 2013, 8, e78668.	1.1	30
63	High-throughput screen for high performance microalgae strain selection and integrated media design. Algal Research, 2015, 11, 313-325.	2.4	30
64	Heterogeneity and Pigment Composition of Isolated Photosystem II Reaction Centersâ€. Biochemistry, 1996, 35, 15074-15079.	1.2	28
65	Membrane-protein crystallizationin cubo: temperature-dependent phase behaviour of monooleinâ€“detergent mixtures. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 239-246.	2.5	28
66	Techno-economic evaluation of microalgae high-density liquid fuel production at 12 international locations. Biotechnology for Biofuels, 2021, 14, 133.	6.2	28
67	The Laplacian of Gaussian and arbitrary z-crossings approach applied to automated single particle reconstruction. Journal of Structural Biology, 2007, 159, 122-134.	1.3	26
68	Optimising light conditions increases recombinant protein production in Chlamydomonas reinhardtii chloroplasts. Algal Research, 2018, 32, 329-340.	2.4	25
69	Microalgal nanocellulose â€“ opportunities for a circular bioeconomy. Trends in Plant Science, 2021, 26, 924-939.	4.3	25
70	Hydroxyproline and proline content of cell walls of sunflower, peanut and cotton grown under salt stress. Plant Science, 1990, 69, 27-32.	1.7	24
71	Charting a development path to deliver cost competitive microalgae-based fuels. Algal Research, 2020, 45, 101721.	2.4	23
72	Sargassum blooms in the Atlantic Ocean â€“ From a burden to an asset. Algal Research, 2021, 54, 102188.	2.4	23

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73	Cryoelectron Microscopy Map of Atadenovirus Reveals Cross-Genus Structural Differences from Human Adenovirus. Journal of Virology, 2008, 82, 7346-7356.	1.5	21
74	Cationic polyacrylamide induced flocculation and turbulent dewatering of microalgae on a Britt Dynamic Drainage Jar. Separation and Purification Technology, 2020, 233, 116004.	3.9	21
75	Gateway-Assisted Vector Construction to Facilitate Expression of Foreign Proteins in the Chloroplast of Single Celled Algae. PLoS ONE, 2014, 9, e86841.	1.1	20
76	Bilateral edge filter: Photometrically weighted, discontinuity based edge detection. Journal of Structural Biology, 2007, 160, 93-102.	1.3	18
77	Circular biomanufacturing through harvesting solar energy and CO2. Trends in Plant Science, 2022, 27, 655-673.	4.3	18
78	Synthesis of Nickel-Chelating Fluorinated Lipids for Protein Monolayer Crystallizations. Journal of Organic Chemistry, 2009, 74, 1473-1479.	1.7	17
79	Light guide systems enhance microalgae production efficiency in outdoor high rate ponds. Algal Research, 2020, 47, 101846.	2.4	17
80	A 3D Image Filter for Parameter-Free Segmentation of Macromolecular Structures from Electron Tomograms. PLoS ONE, 2012, 7, e33697.	1.1	17
81	Hydrothermal pre-treatment coupled with urea solubilisation enables efficient protein extraction from microalgae. Green Chemistry, 2019, 21, 6361-6371.	4.6	16
82	Germination screen for microalgae-generated plant growth biostimulants. Algal Research, 2022, 66, 102784.	2.4	16
83	Sulphur responsiveness of the Chlamydomonas reinhardtii LHCBM9 promoter. Planta, 2015, 241, 1287-1302.	1.6	15
84	Algae biofertilisers promote sustainable food production and a circular nutrient economy â€“ An integrated empirical-modelling study. Science of the Total Environment, 2021, 796, 148913.	3.9	15
85	The structure, function and dynamics of photosystem two. Physiologia Plantarum, 1997, 100, 817-827.	2.6	14
86	The Vps4 C-terminal helix is a critical determinant for assembly and ATPase activity and has elements conserved in other members of the meiotic clade of AAAâ€ƒATPases. FEBS Journal, 2008, 275, 1427-1449.	2.2	13
87	Triggered exocytosis of the protozoan Tetrahymena as a source of bioflocculation and a controllable dewatering method for efficient harvest of microalgal cultures. Algal Research, 2016, 13, 148-158.	2.4	13
88	Solar biorefinery concept for sustainable co-production of microalgae-based protein and renewable fuel. Journal of Cleaner Production, 2022, 368, 132981.	4.6	13
89	Electron Crystallographic Study of Photosystem II of the CyanobacteriumSynechococcus elongatusâ€. Biochemistry, 2002, 41, 5163-5167.	1.2	11
90	Molecular Packing of Functionalized Fluorinated Lipids in Langmuir Monolayers. Langmuir, 2010, 26, 18868-18873.	1.6	11

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91	Light and heat-shock mediated TDA1 overexpression as a tool for controlled high-yield recombinant protein production in Chlamydomonas reinhardtii chloroplasts. Algal Research, 2020, 48, 101921.	2.4	11
92	The fate of nitrogen and sulphur during co-liquefaction of algae and bagasse: Experimental and multi-criterion decision analysis. Biomass and Bioenergy, 2021, 151, 106119.	2.9	9
93	Genetic Engineering for Microalgae Strain Improvement in Relation to Biocrude Production Systems. Biofuel and Biorefinery Technologies, 2015, , 191-249.	0.1	8
94	Title is missing!. Photosynthesis Research, 1999, 60, 191-198.	1.6	7
95	Symmetry: A guide to its application in 2D electron crystallography. Journal of Structural Biology, 2007, 160, 332-343.	1.3	7
96	Electron crystallography of membrane proteins. Journal of Structural Biology, 2007, 160, 263-264.	1.3	7
97	A method for screening the temperature dependence of three-dimensional crystal formation. Acta Crystallographica Section D: Biological Crystallography, 2006, 62, 559-562.	2.5	6
98	15 Microalgal production systems: Global impact of industry scale-up. , 0, , .		6
99	Proteomic and Electron Microscopy Survey of Large Assemblies in Macrophage Cytoplasm. Molecular and Cellular Proteomics, 2011, 10, M111.008763.	2.5	5
100	Structural Analysis of the Photosystem II Core/Antenna Holocomplex by Electron Microscopy. , 2005, , 403-424.		4
101	Solution structure of the RNA-binding cold-shock domain of the Chlamydomonas reinhardtii NAB1 protein and insights into RNA recognition. Biochemical Journal, 2015, 469, 97-106.	1.7	4
102	Prospects for Photobiological Hydrogen as a Renewable Energy. Current Biotechnology, 2016, 5, 173-191.	0.2	4
103	Utilisation of Seaweeds in the Australian Market â€“ Commercialisation Strategies: Current Trends and Future Prospects. , 2022, , 265-294.		4
104	Synthetic Approaches to Functionalized Lipids for Protein Monolayer Crystallizations. Current Organic Chemistry, 2009, 13, 1378-1405.	0.9	3
105	Inducible release of particulates from liposomes using the mechanosensitive channel of large conductance and l-Î±-lysophosphatidylcholine. European Biophysics Journal, 2015, 44, 521-530.	1.2	3
106	RAZA: A Rapid 3D z-crossings algorithm to segment electron tomograms and extract organelles and macromolecules. Journal of Structural Biology, 2017, 200, 73-86.	1.3	3
107	Measuring the Release of Fluorescein from MscL-Loaded Liposomes with Stressed Lipid Bilayers. Biophysical Journal, 2010, 98, 328a.	0.2	1
108	Mscl Channels as Nanovales for the Controlled Release of Liposome-Encapsulated Compounds. Biophysical Journal, 2011, 100, 277a-278a.	0.2	1

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109	Functional similarities between heterogeneously and homogenously expressed MscL constructs. European Biophysics Journal, 2015, 44, 589-598.	1.2	1
110	Inducible high level expression of a variant Î”D19A,D58A-ferredoxin-hydrogenase fusion increases photohydrogen production efficiency in the green alga Chlamydomonas reinhardtii. Algal Research, 2021, 55, 102275.	2.4	1
111	Biochemical Characterisation and Structural Analysis of Monomeric and Dimeric Photosystem II Core Preparations. , 1995, , 2305-2308.		1
112	Purification of Oxygen Evolving PSII Complexes from Synechococcus elongatus for Electron Crystallography. , 1998, , 969-972.		1
113	Electron Microscopy of â€œThe Green Yeastâ€• Microscopy and Microanalysis, 2006, 12, 446-447.	0.2	0
114	Ultrastructure of Photosynthesis in Green Algae Mutants. Microscopy and Microanalysis, 2007, 13, .	0.2	0
115	Thylakoid Ultrastructure: Visualizing the Photosynthetic Machinery. Microbiology Monographs, 2017, , 149-191.	0.3	0
116	Microalgal biofuel systems: Climate change, fuel supply and economic opportunities for sustainable development. Microbiology Australia, 2009, 30, 89.	0.1	0
117	Photosystem II Structure Investigated by Electron Microscopy and Single-Particle Averaging. , 1995, , 2169-2172.		0
118	Morphological aspects of in cubo protein crystallisation. Special Publication - Royal Society of Chemistry, 0, , 221-236.	0.0	0