

# Barry D Bruce

## List of Publications by Year in descending order

Source: [//exaly.com/author-pdf/4332968/publications.pdf](https://exaly.com/author-pdf/4332968/publications.pdf)

Version: 2025-02-01

78  
papers

4,416  
citations

118326

32  
h-index

87963

66  
g-index

83  
all docs

83  
docs citations

83  
times ranked

4653  
citing authors

#	ARTICLE	IF	CITATIONS
1	Probing the Influence of Novel Organometallic Copper(II) Complexes on Spinach PSII Photochemistry Using OJIP Fluorescence Transient Measurements. <i>Biomolecules</i> , 2023, 13, 1058.	4.4	2
2	Photosynthetic microbial fuel cells: practical applications of electron transfer chains. <i>Russian Chemical Reviews</i> , 2023, 92, RCR5073.	5.6	2
3	Microfractures in TiO <sub>2</sub> Enhance the Photoelectrochemical Properties of Photosystem I Bio-Sensitized Solar Cells. , 2023, , 1-7.		0
4	Cryo-EM structure of a tetrameric photosystem I from <i>Chroococcidiopsis</i> TS-821, a thermophilic, unicellular, non-heterocyst-forming cyanobacterium. <i>Plant Communications</i> , 2022, 3, 100248.	9.7	17
5	Co-flow injection for serial crystallography at X-ray free-electron lasers. <i>Journal of Applied Crystallography</i> , 2022, 55, 1-13.	2.6	15
6	PEDOT-Carbon Nanotube Counter Electrodes and Bipyridine Cobalt (II/III) Mediators as Universally Compatible Components in Bio-Sensitized Solar Cells Using Photosystem I and Bacteriorhodopsin. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3865.	4.5	9
7	Solubilization and purification of phosphatidylserine synthase from <i>Candida albicans</i> . <i>FASEB Journal</i> , 2022, 36, .	0.7	1
8	Small angle neutron scattering and lipidomic analysis of a native, trimeric PSI-SMALP from a thermophilic cyanobacteria. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2022, 1863, 148596.	0.6	5
9	Effects of Esterified Styrene-Maleic Acid Copolymer Degradation on Integral Membrane Protein Extraction. <i>Biomacromolecules</i> , 2022, 23, 4749-4755.	5.4	3
10	Poly(styrene-co-maleic acid)-mediated isolation of supramolecular membrane protein complexes from plant thylakoids. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2021, 1862, 148347.	0.6	7
11	Protein Extraction Efficiency and Selectivity of Esterified Styrene-Maleic Acid Copolymers in Thylakoid Membranes. <i>Biomacromolecules</i> , 2021, 22, 2544-2553.	5.4	12
12	Photosystem I integrated into mesoporous microspheres has enhanced stability and photoactivity in biohybrid solar cells. <i>Materials Today Bio</i> , 2021, 11, 100122.	7.3	2
13	Elucidating Protein Translocon Dynamics with Single-Molecule Precision. <i>Trends in Cell Biology</i> , 2021, 31, 569-583.	15.3	1
14	Aqueous-soluble bipyridine cobalt(II) complexes act as direct redox mediators in photosystem I-based biophotovoltaic devices. <i>RSC Advances</i> , 2021, 11, 10434-10450.	4.5	10
15	PSI-SMALP, a Detergent-free Cyanobacterial Photosystem I, Reveals Faster Femtosecond Photochemistry. <i>Biophysical Journal</i> , 2020, 118, 337-351.	0.4	22
16	Green Catalysts: Applied and Synthetic Photosynthesis. <i>Catalysts</i> , 2020, 10, 1016.	3.8	11
17	X-ray and Neutron Reflectivity Studies of Styrene-Maleic Acid Copolymer Interactions with Galactolipid-Containing Monolayers. <i>Langmuir</i> , 2020, 36, 3970-3980.	3.8	10
18	Putting Photosystem I to Work: Truly Green Energy. <i>Trends in Biotechnology</i> , 2020, 38, 1329-1342.	11.2	48

#	ARTICLE	IF	CITATIONS
19	Influence of osmolytes on the stability of thylakoidâ€based dyeâ€sensitized solar cells. <i>International Journal of Energy Research</i> , 2019, , .	4.4	2
20	Membrane protein megahertz crystallography at the European XFEL. <i>Nature Communications</i> , 2019, 10, .	14.1	53
21	Physiological and evolutionary implications of tetrameric photosystem I in cyanobacteria. <i>Nature Plants</i> , 2019, 5, 1309-1319.	7.0	36
22	Non-detergent isolation of a cyanobacterial photosystem I using styrene maleic acid alternating copolymers. <i>RSC Advances</i> , 2019, 9, 31781-31796.	4.5	20
23	Analysis of styrene maleic acid alternating copolymer supramolecular assemblies in solution by small angle X-ray scattering. <i>European Polymer Journal</i> , 2019, 111, 178-184.	6.0	14
24	Evaluation of commercially available styrene-co-maleic acid polymers for the extraction of membrane proteins from spinach chloroplast thylakoids. <i>European Polymer Journal</i> , 2019, 114, 485-500.	6.0	22
25	Biohybrid solar cells: Fundamentals, progress, and challenges. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2018, 35, 134-156.	12.5	78
26	Comparisons of Electron Transfer Reactions in a Cyanobacterial Tetrameric and Trimeric Photosystem I Complexes. <i>Photochemistry and Photobiology</i> , 2018, 94, 564-569.	2.9	1
27	Binding Mechanisms of Electron Transport Proteins with Cyanobacterial Photosystem I: An Integrated Computational and Experimental Model. <i>Journal of Physical Chemistry B</i> , 2018, 122, 1026-1036.	2.9	4
28	Cryo-EM structure of a tetrameric cyanobacterial photosystem I complex reveals novel subunit interactions. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2016, 1857, 1619-1626.	0.6	21
29	Functional Analysis of Semi-conserved Transit Peptide Motifs and Mechanistic Implications in Precursor Targeting and Recognition. <i>Molecular Plant</i> , 2016, 9, 1286-1301.	17.9	26
30	In vitro kinetics of P700 + reduction of <i>Thermosynechococcus elongatus</i> trimeric Photosystem I complexes by recombinant cytochrome c 6 using a Joliot-type LED spectrophotometer. <i>Photosynthesis Research</i> , 2016, 131, 79-91.	3.4	10
31	Non-native, N-terminal Hsp70 Molecular Motor Recognition Elements in Transit Peptides Support Plastid Protein Translocation. <i>Journal of Biological Chemistry</i> , 2015, 290, 7602-7621.	2.3	32
32	Big data - a 21st century science Maginot Line? No-boundary thinking: shifting from the big data paradigm. <i>BioData Mining</i> , 2015, 8, .	4.6	7
33	Engineering Photosystem I Complexes with Metal Oxide Binding Peptides for Bioelectronic Applications. <i>Bioconjugate Chemistry</i> , 2015, 26, 2097-2105.	3.9	21
34	Enhanced photocurrent from Photosystem I upon in vitro truncation of the antennae chlorophyll. <i>Photosynthesis Research</i> , 2015, 127, 161-170.	3.4	7
35	Photoelectrochemistry of Photosystem I Bound in Nafion. <i>Langmuir</i> , 2014, 30, 13650-13655.	3.8	29
36	Molecular interactions between photosystem I and ferredoxin: an integrated energy frustration and experimental model. <i>Journal of Molecular Recognition</i> , 2014, 27, 597-608.	3.1	13

#	ARTICLE	IF	CITATIONS
37	Growing green electricity: Progress and strategies for use of Photosystem I for sustainable photovoltaic energy conversion. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, 1553-1566.	0.6	117
38	Comparative Photoactivity and Stability of Isolated Cyanobacterial Monomeric and Trimeric Photosystem I. <i>Journal of Physical Chemistry B</i> , 2014, 118, 2703-2711.	2.9	29
39	Characterization and Evolution of Tetrameric Photosystem I from the Thermophilic Cyanobacterium <i>Chroococcidiopsis</i> sp TS-821. <i>Plant Cell</i> , 2014, 26, 1230-1245.	7.6	56
40	Analysis of the solution structure of <i>Thermosynechococcus elongatus</i> photosystem I in n-dodecyl- $\beta$ -D-maltoside using small-angle neutron scattering and molecular dynamics simulation. <i>Archives of Biochemistry and Biophysics</i> , 2014, 550-551, 50-57.	2.7	24
41	Structure and Function of POTRA Domains of Omp85/TPS Superfamily. <i>International Review of Cell and Molecular Biology</i> , 2014, , 1-34.	4.5	27
42	Photocurrent Generation from Surface Assembled Photosystem I on Alkanethiol Modified Electrodes. <i>Langmuir</i> , 2013, 29, 2412-2419.	3.8	62
43	Differential Transit Peptide Recognition during Preprotein Binding and Translocation into Flowering Plant Plastids. <i>Plant Cell</i> , 2012, 24, 3040-3059.	7.6	41
44	Thermodynamic Characterization of a Thermostable Antibiotic Resistance Enzyme, the Aminoglycoside Nucleotidyltransferase (4 $\beta$ €²). <i>Biochemistry</i> , 2012, 51, 9147-9155.	2.9	6
45	Self-assembled photosystem-I biophotovoltaics on nanostructured TiO <sub>2</sub> and ZnO. <i>Scientific Reports</i> , 2012, 2, .	3.7	210
46	Modulation of cyanobacterial photosystem I deposition properties on alkanethiolate Au substrate by various experimental conditions. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011, 88, 181-190.	5.4	22
47	Controlling the Morphology of Photosystem I Assembly on Thiol-Activated Au Substrates. <i>Langmuir</i> , 2010, 26, 16048-16054.	3.8	37
48	Optically tandem thin film solar cells. , 2009, , .		0
49	Designer Peptide Surfactants Stabilize Functional Photosystem-I Membrane Complex in Aqueous Solution for Extended Time. <i>Journal of Physical Chemistry B</i> , 2009, 113, 75-83.	2.9	71
50	Self-organized photosynthetic nanoparticle for cell-free hydrogen production. <i>Nature Nanotechnology</i> , 2009, 5, 73-79.	23.9	168
51	<i>LISTERIA MONOCYTOGENES</i> AND <i>ESCHERICHIA COLI</i> O157:H7 INHIBITION <i>IN VITRO</i> BY LIPOSOME-ENCAPSULATED NISIN AND ETHYLENE DIAMINETETRAACETIC ACID. <i>Journal of Food Safety</i> , 2008, 28, 183-197.	1.8	61
52	Chapter 16 Nano-scale Characterization of the Dynamics of the Chloroplast Toc Translocon. <i>Methods in Cell Biology</i> , 2008, , 365-398.	0.0	6
53	In Vitro Comparative Kinetic Analysis of the Chloroplast Toc GTPases. <i>Journal of Biological Chemistry</i> , 2007, 282, 11410-11426.	2.3	42
54	Antimicrobial Efficacy of Eugenol Microemulsions in Milk against <i>Listeria monocytogenes</i> and <i>Escherichia coli</i> O157:H7. <i>Journal of Food Protection</i> , 2007, 70, 2631-2637.	2.5	91

#	ARTICLE	IF	CITATIONS
55	Structural and functional changes in ultrasonicated bovine serum albumin solutions. <i>Ultrasonics Sonochemistry</i> , 2007, 14, 173-183.	8.7	484
56	Characterization of Antimicrobial-bearing Liposomes by $\zeta$ -Potential, Vesicle Size, and Encapsulation Efficiency. <i>Food Biophysics</i> , 2007, 2, 1-9.	2.6	130
57	A simple atomic force microscopy method for the visualization of polar and non-polar parts in thin organic films. <i>Journal of Experimental Nanoscience</i> , 2006, 1, 63-73.	2.8	1
58	Liposomal Nanocapsules in Food Science and Agriculture. <i>Critical Reviews in Food Science and Nutrition</i> , 2005, 45, 587-605.	11.2	439
59	Self-Assembling Peptide Detergents Stabilize Isolated Photosystem I on a Dry Surface for an Extended Time. <i>PLoS Biology</i> , 2005, 3, e230.	5.2	113
60	Growth Inhibition of <i>Escherichia coli</i> O157:H7 and <i>Listeria monocytogenes</i> by Carvacrol and Eugenol Encapsulated in Surfactant Micelles. <i>Journal of Food Protection</i> , 2005, 68, 2559-2566.	2.5	112
61	Catalysis, Subcellular Localization, Expression and Evolution of the Targeting Peptides Degrading Protease, AtPreP2. <i>Plant and Cell Physiology</i> , 2005, 46, 985-996.	3.5	55
62	Ultrasonic Spectroscopy and Differential Scanning Calorimetry of Liposomal-Encapsulated Nisin. <i>Journal of Agricultural and Food Chemistry</i> , 2005, 53, 8722-8728.	5.9	38
63	Integration of Photosynthetic Protein Molecular Complexes in Solid-State Electronic Devices. <i>Nano Letters</i> , 2004, 4, 1079-1083.	8.8	338
64	Enhanced Photocatalytic Hydrogen Evolution by Covalent Attachment of Plastocyanin to Photosystem I. <i>Nano Letters</i> , 2004, 4, 1815-1819.	8.8	52
65	Characterization of a novel zinc metalloprotease involved in degrading targeting peptides in mitochondria and chloroplasts. <i>Plant Journal</i> , 2003, 36, 616-628.	6.1	99
66	Size, Stability, and Entrapment Efficiency of Phospholipid Nanocapsules Containing Polypeptide Antimicrobials. <i>Journal of Agricultural and Food Chemistry</i> , 2003, 51, 8073-8079.	5.9	148
67	Technical Advance: Cytometric analysis of an epitope-tagged transit peptide bound to the chloroplast translocation apparatus. <i>Plant Journal</i> , 2001, 25, 349-363.	6.1	5
68	Nanoscale Photosynthesis: Photocatalytic Production of Hydrogen by Platinized Photosystem I Reaction Centers. <i>Photochemistry and Photobiology</i> , 2001, 73, 630-635.	2.9	9
69	Chloroplast transit peptides: structure, function and evolution. <i>Trends in Cell Biology</i> , 2000, 10, 440-447.	15.3	265
70	Identification of a Hsp70 Recognition Domain within the Rubisco Small Subunit Transit Peptide. <i>Plant Physiology</i> , 2000, 122, 1289-1300.	5.4	88
71	In vivo and in vitro interaction of DnaK and a chloroplast transit peptide. <i>Cell Stress and Chaperones</i> , 2000, 5, 62.	2.6	38
72	The C Terminus of a Chloroplast Precursor Modulates Its Interaction with the Translocation Apparatus and PIRAC. <i>Journal of Biological Chemistry</i> , 1999, 274, 32351-32359.	2.3	47

#	ARTICLE	IF	CITATIONS
73	The Mechanism of Inactivation of a 50-pS Envelope Anion Channel during Chloroplast Protein Import. <i>Biophysical Journal</i> , 1999, 77, 3156-3162.	0.4	8
74	Title is missing!. , 1998, 38, 223-246.		97
75	Characterization of the Molecular-Chaperone Function of the Heat-Shock-Cognate-70-Interacting Protein. <i>FEBS Journal</i> , 1997, 245, 738-744.	0.3	13
76	In Vitro Interaction between a Chloroplast Transit Peptide and Chloroplast Outer Envelope Lipids Is Sequence-specific and Lipid Class-dependent. <i>Journal of Biological Chemistry</i> , 1996, 271, 32907-32915.	2.3	89
77	Targeting of proteins into chloroplasts. <i>Physiologia Plantarum</i> , 1995, 93, 157-162.	3.7	23
78	Isolation and immobilization of various plastid subtypes by magnetic immunoabsorption. <i>Plant Journal</i> , 1994, 6, 767-779.	6.1	12