

L Andrew Staehelin

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	A rich and bountiful harvest: Key discoveries in plant cell biology. <i>Plant Cell</i> , 2022, 34, 53-71.	6.6	7
2	A brief history of how microscopic studies led to the elucidation of the 3D architecture and macromolecular organization of higher plant thylakoids. <i>Photosynthesis Research</i> , 2020, 145, 237-258.	2.9	20
3	3D electron tomographic and biochemical analysis of ER, Golgi and trans Golgi network membrane systems in stimulated Venus flytrap (<i>Dionaea muscipula</i>) glandular cells. <i>Journal of Biological Research</i> , 2018, 25, 15.	2.1	10
4	Thylakoid-Bound Polysomes and a Dynamin-Related Protein, FZL, Mediate Critical Stages of the Linear Chloroplast Biogenesis Program in Greening <i>Arabidopsis</i> Cotyledons. <i>Plant Cell</i> , 2018, 30, 1476-1495.	6.6	39
5	Plant Cytokinesis: Terminology for Structures and Processes. <i>Trends in Cell Biology</i> , 2017, 27, 885-894.	7.9	155
6	Single microfilaments mediate the early steps of microtubule bundling during preprophase band formation in onion cotyledon epidermal cells. <i>Molecular Biology of the Cell</i> , 2016, 27, 1809-1820.	2.1	20
7	C2-O-02 Dimorphic secretory vesicles produced from the Golgi stacks of mucilage secreting root cap cells. <i>Microscopy (Oxford, England)</i> , 2015, 64, i65.1-i65.	1.5	0
8	A three-stage model of Golgi structure and function. <i>Histochemistry and Cell Biology</i> , 2013, 140, 239-249.	1.7	81
9	Cis-Golgi Cisternal Assembly and Biosynthetic Activation Occur Sequentially in Plants and Algae. <i>Traffic</i> , 2013, 14, 551-567.	2.7	75
10	Electron Tomography of Rab4 and Plâ€4K12 Labeled Trans Golgi Network Compartments in <i>Arabidopsis</i> . <i>Traffic</i> , 2011, 12, 313-329.	2.7	246
11	Protein Disulfide Isomerase-2 of <i>Arabidopsis</i> Mediates Protein Folding and Localizes to Both the Secretory Pathway and Nucleus, Where It Interacts with Maternal Effect Embryo Arrest Factor. <i>Molecules and Cells</i> , 2011, 32, 459-476.	2.6	47
12	Protein Storage Vacuoles Are Transformed into Lytic Vacuoles in Root Meristematic Cells of Germinating Seedlings by Multiple, Cell Type-Specific Mechanisms. <i>Plant Physiology</i> , 2011, 155, 2023-2035.	4.8	78
13	Three-Dimensional Architecture of Grana and Stroma Thylakoids of Higher Plants as Determined by Electron Tomography. <i>Plant Physiology</i> , 2011, 155, 1601-1611.	4.8	148
14	A role of endocytosis in plant cytokinesis. <i>Communicative and Integrative Biology</i> , 2010, 3, 36-38.	1.4	14
15	Mitochondrial reticulation in shoot apical meristem cells of <i>Arabidopsis</i> provides a mechanism for homogenization of mtDNA prior to gamete formation. <i>Plant Signaling and Behavior</i> , 2009, 4, 168-171.	2.4	53
16	Statolith Sedimentation Kinetics and Force Transduction to the Cortical Endoplasmic Reticulum in Gravity-Sensing <i>Arabidopsis</i> Columella Cells. <i>Plant Cell</i> , 2009, 21, 843-860.	6.6	147
17	ER-to-Golgi transport by COPII vesicles in <i>Arabidopsis</i> involves a ribosome-excluding scaffold that is transferred with the vesicles to the Golgi matrix. <i>Protoplasma</i> , 2008, 234, 51-64.	2.1	88
18	Electron tomographic characterization of a vacuolar reticulum and of six vesicle types that occupy different cytoplasmic domains in the apex of tip-growing <i>Chara</i> rhizoids. <i>Planta</i> , 2008, 227, 1101-1114.	3.2	14

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19	The Mitochondrial Cycle of Arabidopsis Shoot Apical Meristem and Leaf Primordium Meristematic Cells Is Defined by a Perinuclear Tentaculate/Cage-Like Mitochondrion. <i>Plant Physiology</i> , 2008, 148, 1380-1393.	4.8	72
20	<i>Caenorhabditis elegans</i> drp-1 and fis-2 Regulate Distinct Cell-Death Execution Pathways Downstream of ced-3 and Independent of ced-9. <i>Molecular Cell</i> , 2008, 31, 586-597.	9.7	128
21	<i>Arabidopsis</i> Protein Disulfide Isomerase-5 Inhibits Cysteine Proteases during Trafficking to Vacuoles before Programmed Cell Death of the Endothelium in Developing Seeds. <i>Plant Cell</i> , 2008, 20, 2205-2220.	6.6	155
22	Nanoscale Architecture of Endoplasmic Reticulum Export Sites and of Golgi Membranes as Determined by Electron Tomography. <i>Plant Physiology</i> , 2008, 147, 1454-1468.	4.8	168
23	Identification and characterization of COPIa- and COPIb-type vesicle classes associated with plant and algal Golgi. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 163-168.	7.1	131
24	Plant Cytokinesis – Insights Gained from Electron Tomography Studies. <i>Plant Cell Monographs</i> , 2007, , 251-287.	0.4	18
25	The cyclic nucleotide gated cation channel AtCNGC10 traffics from the ER via Golgi vesicles to the plasma membrane of <i>Arabidopsis</i> root and leaf cells. <i>BMC Plant Biology</i> , 2007, 7, 48.	3.6	58
26	Dual-axis electron tomography: a new approach for investigating the spatial organization of wood cellulose microfibrils. <i>Wood Science and Technology</i> , 2007, 41, 101-116.	3.2	102
27	The cyclic nucleotide-gated calmodulin-binding channel AtCNGC10 localizes to the plasma membrane and influences numerous growth responses and starch accumulation in <i>Arabidopsis thaliana</i> . <i>Planta</i> , 2007, 225, 563-573.	3.2	81
28	Plastoglobules Are Lipoprotein Subcompartments of the Chloroplast That Are Permanently Coupled to Thylakoid Membranes and Contain Biosynthetic Enzymes. <i>Plant Cell</i> , 2006, 18, 1693-1703.	6.6	401
29	The Proteolytic Processing of Seed Storage Proteins in <i>Arabidopsis</i> Embryo Cells Starts in the Multivesicular Bodies. <i>Plant Cell</i> , 2006, 18, 2567-2581.	6.6	188
30	Electron tomography of ER, Golgi and related membrane systems. <i>Methods</i> , 2006, 39, 154-162.	3.8	60
31	Cell cycle-dependent changes in Golgi stacks, vacuoles, clathrin-coated vesicles and multivesicular bodies in meristematic cells of <i>Arabidopsis thaliana</i> : A quantitative and spatial analysis. <i>Planta</i> , 2006, 223, 223-236.	3.2	118
32	Senescence-associated vacuoles with intense proteolytic activity develop in leaves of <i>Arabidopsis</i> and soybean. <i>Plant Journal</i> , 2005, 41, 831-844.	5.7	296
33	Quantitative analysis of changes in spatial distribution and plus-end geometry of microtubules involved in plant-cell cytokinesis. <i>Journal of Cell Science</i> , 2005, 118, 3895-3903.	2.0	86
34	Electron Tomographic Analysis of Somatic Cell Plate Formation in Meristematic Cells of <i>Arabidopsis</i> Preserved by High-Pressure Freezing [W]. <i>Plant Cell</i> , 2004, 16, 836-856.	6.6	267
35	Electron tomographic analysis of post-meiotic cytokinesis during pollen development in <i>Arabidopsis thaliana</i> . <i>Planta</i> , 2004, 218, 501-515.	3.2	107
36	Chloroplast structure: from chlorophyll granules to supra-molecular architecture of thylakoid membranes. <i>Photosynthesis Research</i> , 2003, 76, 185-196.	2.9	160

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37	Selective Trafficking of Non-Cell-Autonomous Proteins Mediated by NtNCAPP1. <i>Science</i> , 2003, 299, 392-396.	12.6	165
38	Tomographic Evidence for Continuous Turnover of Golgi Cisternae in <i>Pichia pastoris</i> . <i>Molecular Biology of the Cell</i> , 2003, 14, 2277-2291.	2.1	133
39	Developing Seeds of <i>Arabidopsis</i> Store Different Minerals in Two Types of Vacuoles and in the Endoplasmic Reticulum. <i>Plant Cell</i> , 2002, 14, 1311-1327.	6.6	160
40	Reevaluation of the Effects of Brefeldin A on Plant Cells Using Tobacco Bright Yellow 2 Cells Expressing Golgi-Targeted Green Fluorescent Protein and COPI Antisera. <i>Plant Cell</i> , 2002, 14, 237-261.	6.6	329
41	Improved method for visualizing coated pits, microfilaments, and microtubules in cryofixed and freeze-substituted plant cells. <i>Journal of Electron Microscopy</i> , 2002, 51, 133-136.	0.9	21
42	Three-Dimensional Analysis of Syncytial-Type Cell Plates during Endosperm Cellularization Visualized by High Resolution Electron Tomography[W]. <i>Plant Cell</i> , 2001, 13, 2033-2051.	6.6	175
43	Correlation between persistent forms of zeaxanthin-dependent energy dissipation and thylakoid protein phosphorylation. <i>Photosynthesis Research</i> , 2001, 67, 63-78.	2.9	51
44	Nodal Endoplasmic Reticulum, a Specialized Form of Endoplasmic Reticulum Found in Gravity-Sensing Root Tip Columella Cells. <i>Plant Physiology</i> , 2001, 125, 252-265.	4.8	73
45	Amyloplast Sedimentation Dynamics in Maize Columella Cells Support a New Model for the Gravity-Sensing Apparatus of Roots. <i>Plant Physiology</i> , 2001, 125, 1045-1060.	4.8	130
46	Cytokinesis in flowering plants: more than one way to divide a cell. <i>Current Opinion in Plant Biology</i> , 2000, 3, 493-502.	7.1	127
47	Syncytial-Type Cell Plates: A Novel Kind of Cell Plate Involved in Endosperm Cellularization of <i>Arabidopsis</i> . <i>Plant Cell</i> , 2000, 12, 933-947.	6.6	124
48	Redistribution of Golgi Stacks and Other Organelles during Mitosis and Cytokinesis in Plant Cells. <i>Plant Physiology</i> , 2000, 124, 135-152.	4.8	162
49	Golgi Structure in Three Dimensions: Functional Insights from the Normal Rat Kidney Cell. <i>Journal of Cell Biology</i> , 1999, 144, 1135-1149.	5.2	607
50	Stop-and-Go Movements of Plant Golgi Stacks Are Mediated by the Acto-Myosin System. <i>Plant Physiology</i> , 1999, 121, 1127-1141.	4.8	546
51	Dynamic simulations of the molecular conformations of wild type and mutant xanthan polymers suggest that conformational differences may contribute to observed differences in viscosity. , 1998, 38, 251-272.		15
52	Xyloglucan sidechains modulate binding to cellulose during in vitro binding assays as predicted by conformational dynamics simulations. <i>Plant Journal</i> , 1997, 11, 373-386.	5.7	112
53	The plant ER: a dynamic organelle composed of a large number of discrete functional domains. <i>Plant Journal</i> , 1997, 11, 1151-1165.	5.7	425
54	Modulation of statolith mass and grouping in white clover (<i>Trifolium repens</i>) grown in 1-g, microgravity and on the clinostat. <i>Plant Journal</i> , 1997, 12, 1361-1373.	5.7	44

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55	Caffeine inhibits cell plate formation by disrupting membrane reorganization just after the vesicle fusion step. <i>Protoplasma</i> , 1996, 195, 144-155.	2.1	48
56	Partial blocks in the early steps of the chlorophyll synthesis pathway: A common feature of chlorophyllb-deficient mutants. <i>Physiologia Plantarum</i> , 1996, 97, 311-320.	5.2	44
57	Structure, Composition, Functional Organization and Dynamic Properties of Thylakoid Membranes. <i>Advances in Photosynthesis and Respiration</i> , 1996, , 11-30.	1.0	52
58	Analysis of xanthophyll cycle carotenoids and chlorophyll fluorescence in light intensity-dependent chlorophyll-deficient mutants of wheat and barley. <i>Photosynthesis Research</i> , 1994, 42, 191-202.	2.9	52
59	Structure and regulation of tobacco extensin. <i>Plant Journal</i> , 1993, 4, 1011-1022.	5.7	46
60	STRUCTURAL POLARITY IN THE CHARA RHIZOID: A REEVALUATION. <i>American Journal of Botany</i> , 1993, 80, 273-282.	1.7	23
61	Structural Polarity in the Chara rhizoid: A Reevaluation. <i>American Journal of Botany</i> , 1993, 80, 273.	1.7	10
62	Biochemical Characterization of Photosystem II Antenna Polypeptides in Grana and Stroma Membranes of Spinach. <i>Plant Physiology</i> , 1992, 100, 1517-1526.	4.8	35
63	Identification of type 1 and type 2 light-harvesting chlorophyll a/b-binding proteins using monospecific antibodies. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1992, 1098, 191-200.	1.0	39
64	Functional Compartmentation of the Golgi Apparatus of Plant Cells. <i>Plant Physiology</i> , 1992, 99, 1070-1083.	4.8	364
65	Species-related differences in the electrophoretic behavior of CP 29 and CP 26: An immunochemical analysis. <i>Photosynthesis Research</i> , 1992, 34, 249-262.	2.9	27
66	Ethylene-induced chitinase and ?-1,3-glucanase accumulate specifically in the lower epidermis and along vascular strands of bean leaves. <i>Planta</i> , 1992, 186, 367-75.	3.2	39
67	A nomenclature for the genes encoding the chlorophylla/b-binding proteins of higher plants. <i>Plant Molecular Biology Reporter</i> , 1992, 10, 242-253.	1.8	155
68	Simulations of the static and dynamic molecular conformations of xyloglucan. The role of the fucosylated sidechain in surface-specific sidechain folding. <i>Plant Journal</i> , 1991, 1, 195-215.	5.7	162
69	High pressure freezing for the preservation of biological structure: Theory and practice. <i>Journal of Electron Microscopy Technique</i> , 1989, 13, 165-174.	1.1	296
70	A new organelle related to osmoregulation in ultrarapidly frozen <i>Pelvetia</i> embryos. <i>Planta</i> , 1989, 178, 425-435.	3.2	18
71	Antibody localization of extensin in cell walls of carrot storage roots. <i>Planta</i> , 1988, 174, 321-332.	3.2	77
72	Immunogold localization of the cell-wall-matrix polysaccharides rhamnogalacturonan I and xyloglucan during cell expansion and cytokinesis in <i>Trifolium pratense</i> L.; implication for secretory pathways. <i>Planta</i> , 1988, 174, 433-445.	3.2	209

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73	Spatial relationship between microtubules and plasma-membrane rosettes during the deposition of primary wall microfibrils in <i>Closterium</i> sp.. <i>Planta</i> , 1988, 173, 22-30.	3.2	116
74	Immunogold Localization of the L3 Protein of Maize Lipid Bodies during Germination and Seedling Growth. <i>Plant Physiology</i> , 1988, 86, 270-274.	4.8	28
75	Compensatory Alterations in the Photochemical Apparatus of a Photoregulatory, Chlorophyll <i>a</i> -Deficient Mutant of Maize. <i>Plant Physiology</i> , 1988, 87, 365-370.	4.8	50
76	A Second Extensin-Like Hydroxyproline-Rich Glycoprotein from Carrot Cell Walls. <i>Plant Physiology</i> , 1987, 84, 820-825.	4.8	13
77	Does Gibberellic Acid Induce the Transfer of Lipase from Protein Bodies to Lipid Bodies in Barley Aleurone Cells?. <i>Plant Physiology</i> , 1987, 85, 487-496.	4.8	36
78	Improved specimen support cups and auxiliary devices for the Balzers high pressure freezing apparatus. <i>Journal of Microscopy</i> , 1987, 148, 103-106.	1.8	34
79	Association of the 33 kDa extrinsic polypeptide (water-splitting) with PS II particles: immunochemical quantification of residual polypeptide after membrane extraction. <i>Photosynthesis Research</i> , 1987, 13, 69-80.	2.9	25
80	Immunolocalization of the CHL <i>a/b</i> -Light Harvesting Complex and CP29 under Conditions Favoring Phosphorylation and Dephosphorylation of Thylakoid Membranes (State 1- State 2 Transitions). , 1987, , 701-704.		15
81	The Role of Carbohydrate in Maintaining Extensin in an Extended Conformation. <i>Plant Physiology</i> , 1986, 81, 242-246.	4.8	83
82	Advances in ultrarapid freezing for the preservation of cellular ultrastructure. <i>Journal of Electron Microscopy Technique</i> , 1986, 3, 177-210.	1.1	399
83	Implications of cytochrome <i>b₆/f</i> location for thylakoidal electron transport. <i>Journal of Bioenergetics and Biomembranes</i> , 1986, 18, 419-436.	2.3	16
84	Cross-Linking Patterns in Salt-Extractable Extensin from Carrot Cell Walls. <i>Plant Physiology</i> , 1986, 81, 234-241.	4.8	79
85	Immunogold Localization of Xyloglucan and Rhamnogalacturonan I in the Cell Walls of Suspension-Cultured Sycamore Cells. <i>Plant Physiology</i> , 1986, 82, 787-794.	4.8	147
86	Isolation and Characterization of a New Minor Chlorophyll <i>a/b</i> -Protein Complex (CP24) from Spinach. <i>Plant Physiology</i> , 1986, 80, 429-434.	4.8	89
87	Freeze-Fracture (-Etch) Electron Microscopy. , 1986, , 213-240.		11
88	Membrane adhesion in photosynthetic bacterial membranes. Light harvesting complex I (LHI) appears to be the main adhesion factor. <i>Archives of Microbiology</i> , 1985, 141, 290-296.	2.2	14
89	Lateral Distribution of the Cytochrome <i>b₆/f</i> and Coupling Factor ATP Synthetase Complexes of Chloroplast Thylakoid Membranes. <i>Plant Physiology</i> , 1985, 78, 199-202.	4.8	75
90	Isolation of Photosystem I Complexes from Octyl Glucoside/Sodium Dodecyl Sulfate Solubilized Spinach Thylakoids. <i>Plant Physiology</i> , 1985, 78, 606-613.	4.8	70

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91	Plasma membrane "Rosettes" in carrot and sycamore suspension culture cells. Journal of Ultrastructure Research, 1985, 93, 87-91.	1.1	11
92	The Ejectisomes of the Flagellate <i>Chilomonas paramecium</i> : Visualization by Freeze-Fracture and Isolation Techniques. Journal of Protozoology, 1984, 31, 259-267.	0.8	27
93	Correlation of structure and function of chloroplast membranes at the supramolecular level. Journal of Cellular Biochemistry, 1984, 24, 261-269.	2.6	35
94	New methods for making chloroplast lipid liposomes and for reconstituting chlorophyll-protein complexes isolated from SDS polyacrylamide gels. Photosynthesis Research, 1984, 5, 293-296.	2.9	8
95	Freeze-fracture observations on the plasma membrane, the cell wall and the cuticle of growing protonemata of <i>Adiantum capillus-veneris</i> L. Planta, 1981, 151, 462-468.	3.2	62
96	Observation of microplasmodesmata in both heterocyst-forming and non-heterocyst forming filamentous cyanobacteria by freeze-fracture electron microscopy. Archives of Microbiology, 1981, 129, 295-298.	2.2	53
97	Supramolecular organization of chlorosomes (chlorobium vesicles) and of their membrane attachment sites in <i>Chlorobium limicola</i> . Biochimica Et Biophysica Acta - Bioenergetics, 1980, 589, 30-45.	1.0	261
98	Evaluation of IgG molecules, Fab' fragments and IgG-horseradish peroxidase conjugates as surface labels for freeze-etched membranes. Journal of Microscopy, 1979, 117, 363-373.	1.8	5
99	Visualization of the supramolecular architecture of chlorosomes (chlorobium type vesicles) in freeze-fractured cells of <i>Chloroflexus aurantiacus</i> . Archives of Microbiology, 1978, 119, 269-277.	2.2	287
100	THE ULTRASTRUCTURE OF <i>SCENEDESMUS</i> (CHLOROPHYCEAE). I. SPECIES WITH THE "RETICULATE" OR "WARTY" TYPE OF ORNAMENTAL LAYER. Journal of Phycology, 1975, 11, 163-185.	2.3	17
101	THE ULTRASTRUCTURE OF <i>SCENEDESMUS</i> (CHLOROPHYCEAE). II. CELL DIVISION AND COLONY FORMATION. Journal of Phycology, 1975, 11, 186-202.	2.3	66
102	THE ULTRASTRUCTURE OF <i>SCENEDESMUS</i> (CHLOROPHYCEAE). I. SPECIES WITH THE "RETICULATE" OR "WARTY" TYPE OF ORNAMENTAL LAYER. Journal of Phycology, 1975, 11, 163-185.	2.3	61
103	THE ULTRASTRUCTURE OF <i>SCENEDESMUS</i> (CHLOROPHYCEAE). II. CELL DIVISION AND COLONY FORMATION. Journal of Phycology, 1975, 11, 186-202.	2.3	49
104	Fine structure of the chloroplast membranes of <i>Euglena gracilis</i> as revealed by freeze-cleaving and deep-etching techniques. Protoplasma, 1973, 77, 55-78.	2.1	45
105	A new type of storage container for freeze-etch specimens. Journal of Microscopy, 1973, 99, 349-352.	1.8	4
106	LUMENAL PLASMA MEMBRANE OF THE URINARY BLADDER. Journal of Cell Biology, 1972, 53, 92-104.	5.2	70
107	LUMENAL PLASMA MEMBRANE OF THE URINARY BLADDER. Journal of Cell Biology, 1972, 53, 73-91.	5.2	249
108	Feinstruktur von Zellwand und Plasmamembran bei <i>Micrasterias denticulata</i> Br. nach Gefrier- etzung. Protoplasma, 1972, 74, 227-237.	2.1	31

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109	STRUCTURAL DIFFERENTIATION OF STACKED AND UNSTACKED CHLOROPLAST MEMBRANES. Journal of Cell Biology, 1971, 48, 594-619.	5.2	183
110	Temperature and contamination dependent freeze-etch images of frozen water and glycerol solutions. Journal of Ultrastructure Research, 1971, 37, 146-168.	1.1	70
111	Actin-Microtubule Interaction in Plants. , 0, , .		5