

# F A Smith

## List of Publications by Year in descending order

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117  
papers

10,395  
citations

41258

49  
h-index

32761

100  
g-index

117  
all docs

117  
docs citations

117  
times ranked

6128  
citing authors

#	ARTICLE	IF	CITATIONS
1	Functioning of mycorrhizal associations along the mutualism-parasitism continuum. <i>New Phytologist</i> , 1997, 135, 575-585.	3.5	1,637
2	NITROGEN ASSIMILATION AND TRANSPORT IN VASCULAR LAND PLANTS IN RELATION TO INTRACELLULAR pH REGULATION. <i>New Phytologist</i> , 1976, 76, 415-431.	3.5	668
3	Intracellular PH and its Regulation. <i>Annual Review of Plant Physiology</i> , 1979, 30, 289-311.	11.1	576
4	Structural diversity in (vesicular)â€“arbuscular mycorrhizal symbioses. <i>New Phytologist</i> , 1997, 137, 373-388.	3.5	386
5	Arsenic Sequestration in Iron Plaque, Its Accumulation and Speciation in Mature Rice Plants ( <i>Oryza</i> ) Tj ETQq1 1 0.784314 rgBT / Overl	4.6	385
6	Structure and function of the interfaces in biotrophic symbioses as they relate to nutrient transport. <i>New Phytologist</i> , 1990, 114, 1-38.	3.5	353
7	Do phosphorus nutrition and iron plaque alter arsenate (As) uptake by rice seedlings in hydroponic culture?. <i>New Phytologist</i> , 2004, 162, 481-488.	3.5	296
8	PHOTOSYNTHESIS BY AQUATIC PLANTS: EFFECTS OF UNSTIRRED LAYERS IN RELATION TO ASSIMILATION OF CO <sub>2</sub> AND HCO <sub>3</sub> -AND TO CARBON ISOTOPIC DISCRIMINATION. <i>New Phytologist</i> , 1980, 86, 245-259.	3.5	291
9	Do iron plaque and genotypes affect arsenate uptake and translocation by rice seedlings ( <i>Oryza sativa</i> ) Tj ETQq1 1 0.784314 rgBT / O	2.4	261
10	Spatial differences in acquisition of soil phosphate between two arbuscular mycorrhizal fungi in symbiosis with <i>Medicago truncatula</i> . <i>New Phytologist</i> , 2000, 147, 357-366.	3.5	259
11	Enzymatic studies on the metabolism of vesicular-arbuscular mycorrhizas. V. Is H <sup>+</sup> -ATPase a component of ATP-hydrolysing enzyme activities in plant-fungus interfaces?. <i>New Phytologist</i> , 1991, 117, 61-74.	3.5	197
12	Arbuscular mycorrhizal fungi can induce the production of phytochemicals in sweet basil irrespective of phosphorus nutrition. <i>Mycorrhiza</i> , 2007, 17, 291-297.	1.3	194
13	Arbuscular mycorrhizal inhibition of growth in barley cannot be attributed to extent of colonization, fungal phosphorus uptake or effects on expression of plant phosphate transporter genes. <i>New Phytologist</i> , 2009, 181, 938-949.	3.5	177
14	Significance of hydrogen ion transport in plant cells. <i>Canadian Journal of Botany</i> , 1974, 52, 1035-1048.	1.2	165
15	Structural differences in arbuscular mycorrhizal symbioses: more than 100Âyears after Gallaud, where next?. <i>Mycorrhiza</i> , 2007, 17, 375-393.	1.3	145
16	The Formation of Alkaline and Acid Regions at the Surface of <i>Chara corallina</i> Cells. <i>Journal of Experimental Botany</i> , 1973, 24, 1-14.	2.4	139
17	Morphology of arbuscular mycorrhizas is influenced by fungal identity. <i>New Phytologist</i> , 2001, 151, 469-475.	3.5	136
18	Functional diversity in arbuscular mycorrhizas: exploitation of soil patches with different phosphate enrichment differs among fungal species. <i>Plant, Cell and Environment</i> , 2005, 28, 642-650.	2.8	127

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19	Bicarbonate assimilation by fresh-water charophytes and higher plants: I. Membrane transport of bicarbonate ions is not proven. <i>Journal of Membrane Biology</i> , 1980, 57, 51-58.	1.0	126
20	ACTIVITY OF GLUTAMINE SYNTHETASE AND GLUTAMATE DEHYDROGENASE IN TRIFOLIUM SUBTERRANEUM L. AND ALLIUM CEPA L: EFFECTS OF MYCORRHIZAL INFECTION AND PHOSPHATE NUTRITION. <i>New Phytologist</i> , 1985, 99, 211-227.	3.5	123
21	Sodium-calcium interactions in two wheat species differing in salinity tolerance. <i>Physiologia Plantarum</i> , 1997, 99, 323-327.	2.6	121
22	EFFECTS OF AMMONIUM AND NITRATE IONS ON MYCORRHIZAL INFECTION, NODULATION AND GROWTH OF TRIFOLIUM SUBTERRANEUM. <i>New Phytologist</i> , 1980, 85, 47-62.	3.5	110
23	Quantitative development of Paris $\epsilon$ type arbuscular mycorrhizas formed between <i>Asphodelus fistulosus</i> and <i>Glomus coronatum</i> . <i>New Phytologist</i> , 2001, 149, 105-113.	3.5	98
24	Amine uniport at the plasmalemma of charophyte cells: I. Current-voltage curves, saturation kinetics, and effects of unstirred layers. <i>Journal of Membrane Biology</i> , 1979, 49, 21-55.	1.0	96
25	EFFECTS OF PHOTON IRRADIANCE ON THE GROWTH OF SHOOTS AND ROOTS, ON THE RATE OF INITIATION OF MYCORRHIZAL INFECTION AND ON THE GROWTH OF INFECTION UNITS IN TRIFOLIUM SUBTERRANEUM L.. <i>New Phytologist</i> , 1986, 103, 375-390.	3.5	96
26	THE INTERNAL CONTROL OF NITRATE UPTAKE INTO EXCISED BARLEY ROOTS WITH DIFFERING SALT CONTENTS. <i>New Phytologist</i> , 1973, 72, 769-782.	3.5	95
27	Growth response of <i>Atriplex nummularia</i> to inoculation with arbuscular mycorrhizal fungi at different salinity levels. <i>Plant and Soil</i> , 2005, 273, 245-256.	1.8	91
28	THE MECHANISM OF CHLORIDE TRANSPORT IN CHARACEAN CELLS. <i>New Phytologist</i> , 1970, 69, 903-917.	3.5	89
29	Arbuscular mycorrhizal colonization reduces arsenate uptake in barley via downregulation of transporters in the direct epidermal phosphate uptake pathway. <i>New Phytologist</i> , 2009, 184, 962-974.	3.5	82
30	Circulating Electric Currents Between Acid and Alkaline Zones Associated with HCO <sub>3</sub> <sup>-</sup> Assimilation in <i>Chara</i> . <i>Journal of Experimental Botany</i> , 1977, 28, 1190-1206.	2.4	81
31	The evolution of chemiosmotic energy coupling. <i>Journal of Theoretical Biology</i> , 1976, 57, 301-312.	0.8	80
32	Chloride Transport in <i>Chara corallina</i> and the Electrochemical Potential Difference for Hydrogen Ions. <i>Journal of Experimental Botany</i> , 1976, 27, 451-459.	2.4	80
33	EFFECTS OF MYCORRHIZAL INFECTION ON PLANT GROWTH, NITROGEN AND PHOSPHORUS NUTRITION IN GLASSHOUSE-GROWN ALLIUM CEPAL.. <i>New Phytologist</i> , 1986, 103, 359-373.	3.5	78
34	Effects of arbuscular mycorrhizal inoculation on uranium and arsenic accumulation by Chinese brake fern ( <i>Pteris vittata</i> L.) from a uranium mining-impacted soil. <i>Chemosphere</i> , 2006, 62, 1464-1473.	4.2	78
35	Wheat Responses to Arbuscular Mycorrhizal Fungi in a Highly Calcareous Soil Differ from those of Clover, and Change with Plant Development and P supply. <i>Plant and Soil</i> , 2005, 277, 221-232.	1.8	76
36	Entry of Methylammonium and Ammonium Ions into <i>Chara</i> Internodal Cells. <i>Journal of Experimental Botany</i> , 1978, 29, 107-120.	2.4	75

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37	Growth and phosphorus nutrition of a Paris $\hat{e}$ type arbuscular mycorrhizal symbiosis. <i>New Phytologist</i> , 2003, 157, 127-134.	3.5	73
38	MYCORRHIZAL INFECTION AND GROWTH OF TRIFOLIUM SUBTERRANEUM: USE OF STERILIZED SOIL AS A CONTROL TREATMENT. <i>New Phytologist</i> , 1981, 88, 299-309.	3.5	71
39	Effect of <i>Glomus mosseae</i> on concentrations of rosmarinic and caffeic acids and essential oil compounds in basil inoculated with <i>Fusarium oxysporum</i> f.sp. <i>basilici</i> . <i>Plant Pathology</i> , 2008, 57, 1109-1116.	1.2	67
40	Transfer of phosphate from fungus to plant in VA mycorrhizas: calculation of the area of symbiotic interface and of fluxes of P from two different fungi to <i>Allium porrum</i> L. <i>New Phytologist</i> , 1994, 127, 93-99.	3.5	65
41	Inoculum type does not affect overall resistance of an arbuscular mycorrhiza-defective tomato mutant to colonisation but inoculation does change competitive interactions with wild-type tomato. <i>New Phytologist</i> , 2004, 161, 485-494.	3.5	65
42	Effect of Temperature and External pH on the Cytoplasmic pH of <i>Chara corallina</i> . <i>Journal of Experimental Botany</i> , 1978, 29, 853-866.	2.4	62
43	Active phosphate uptake by <i>Nitella translucens</i> . <i>Biochimica Et Biophysica Acta (BBA) - Biophysics Including Photosynthesis</i> , 1966, 126, 94-99.	2.3	61
44	ACTIVITY OF NITRATE REDUCTASE IN TRIFOLIUM SUBTERRANEUM: EFFECTS OF MYCORRHIZAL INFECTION AND PHOSPHATE NUTRITION. <i>New Phytologist</i> , 1983, 94, 63-79.	3.5	61
45	Transport of potassium in <i>Chara australis</i> : I. A symport with sodium. <i>Journal of Membrane Biology</i> , 1989, 108, 125-137.	1.0	60
46	Amine uniport at the plasmalemma of charophyte cells II. Ratio of matter to charge transported and permeability of free base. <i>Journal of Membrane Biology</i> , 1979, 49, 283-296.	1.0	59
47	The mechanism of cobalt toxicity in mung beans. <i>Physiologia Plantarum</i> , 2000, 110, 104-110.	2.6	57
48	Title is missing!. <i>Plant and Soil</i> , 2002, 239, 1-8.	1.8	51
49	Arsenate (As) uptake by and distribution in two cultivars of winter wheat ( <i>Triticum aestivum</i> L.). <i>Chemosphere</i> , 2006, 62, 608-615.	4.2	51
50	Measurement of calcium fluxes in plants using $^{45}\text{Ca}$ . <i>Planta</i> , 1992, 186, 558-66.	1.6	50
51	Phosphorus-Zinc Interactions in Two Barley Cultivars Differing in Phosphorus and Zinc Efficiencies. <i>Journal of Plant Nutrition</i> , 2003, 26, 1085-1099.	0.9	46
52	Characterization of two arbuscular mycorrhizal fungi in symbiosis with <i>Allium porrum</i> : colonization, plant growth and phosphate uptake. <i>New Phytologist</i> , 1999, 144, 163-172.	3.5	42
53	Ionic fluxes in cells of <i>Chara corallina</i> . <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1969, 183, 565-576.	1.4	41
54	Rates of Photosynthesis in Characean Cells. <i>Journal of Experimental Botany</i> , 1968, 19, 207-217.	2.4	40

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55	Phosphate uptake in Chara : membrane transport via Na/Pi cotransport. Plant, Cell and Environment, 2000, 23, 223-228.	2.8	40
56	Uptake of Methylammonium Ions by Hydrodictyon africanum. Journal of Experimental Botany, 1978, 29, 121-133.	2.4	39
57	Control of Intracellular pH in Chara corallina during Uptake of Weak Acid. Journal of Experimental Botany, 1989, 40, 883-891.	2.4	39
58	Control of phosphate transport across the plasma membrane of Chara corallina. Journal of Experimental Botany, 1998, 49, 13-19.	2.4	39
59	PHOTOSYNTHETIC CAPACITIES AND BIOLOGICAL STRATEGIES OF GIANT-CELLED AND SMALL-CELLED MACRO-ALGAE. New Phytologist, 1979, 83, 299-309.	3.5	38
60	Comparison of the Effects of Ammonia and Methylamine on Chloride Transport and Intracellular pH in Chara corallina. Journal of Experimental Botany, 1980, 31, 597-606.	2.4	38
61	The Control of Na Uptake into Nitella translucens. Journal of Experimental Botany, 1967, 18, 716-731.	2.4	37
62	MYCORRHIZAL INFECTION AND GROWTH OF TRIFOLIUM SUBTERRANEUM: COMPARISON OF NATURAL AND ARTIFICIAL INOCULA. New Phytologist, 1981, 88, 311-325.	3.5	36
63	Measurements of the Cytoplasmic pH of Chara corallina using Double-barrelled pH Micro-electrodes. Journal of Experimental Botany, 1988, 39, 1421-1432.	2.4	36
64	Function and Diversity of Arbuscular Mycorrhizae in Carbon and Mineral Nutrition. Ecological Studies, 2003, , 75-92.	0.4	36
65	Regulation of Calcium Influx in Chara. Plant Physiology, 1992, 100, 637-643.	2.3	34
66	Phosphorus efficiencies and their effects on Zn, Cu, and Mn nutrition of different barley (Hordeum) Tj ETQqO 0 0 rgBT /Overlock 10 Tf 50	1.5	33
67	Regulation of the Cytoplasmic pH of Chara corallina: Response to Changes in External pH. Journal of Experimental Botany, 1984, 35, 43-50.	2.4	32
68	Links between Glucose Uptake and Metabolism in Nitella translucens. Journal of Experimental Botany, 1967, 18, 348-358.	2.4	31
69	Calcium-salinity interactions affect ion transport in Chara corallina. Plant, Cell and Environment, 1992, 15, 727-733.	2.8	31
70	Metabolic Effects on Ion Fluxes in Tolypella intricata. Journal of Experimental Botany, 1968, 19, 442-451.	2.4	29
71	H <sup>+</sup> Transport and Regulation of Cell pH. , 1976, , 317-346.		28
72	STIMULATION OF CHLORIDE TRANSPORT IN CHARA BY EXTERNAL PH CHANGES. New Phytologist, 1972, 71, 595-601.	3.5	27

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73	ENERGY-DEPENDENT PROCESSES IN CHARA CORALLINA: ABSENCE OF LIGHT STIMULATION WHEN ONLY PHOTO-SYSTEM ONE IS OPERATIVE. <i>New Phytologist</i> , 1974, 73, 1-12.	3.5	27
74	Effect of temperature on ion content, ion fluxes and energy metabolism in <i>Chara corallina</i> . <i>Plant, Cell and Environment</i> , 1978, 1, 231-238.	2.8	27
75	Effect of Zinc?Cadmium Interactions on the Uptake of Zinc and Cadmium by Winter Wheat ( <i>Triticum</i> ) Tj ETQq1 1 0.784314 rgBT /Ov 1289-96.	1.3	27
76	Opening the black box: outcomes of interactions between arbuscular mycorrhizal (<scp>AM</scp>) and nonâ€host genotypes of <i><scp>M</scp>edicago</i> depend on fungal identity, interplay between <scp>P</scp> uptake pathways and external <scp>P</scp> supply. <i>Plant, Cell and Environment</i> , 2014, 37, 1382-1392.	2.8	27
77	Mycorrhizas. <i>Ecological Studies</i> , 2003, , 257-295.	0.4	27
78	H <sup>+</sup> transport in the evolution of photosynthesis. <i>BioSystems</i> , 1981, 14, 95-111.	0.9	24
79	The uptake and metabolism of urea by <i>Chara australis</i> : IV. Symport with sodium?A slip model for the high and low affinity systems. <i>Journal of Membrane Biology</i> , 1993, 136, 263-71.	1.0	24
80	The effect of fungicides on vesicular-arbuscular mycorrhizal symbiosis. II. The effects on area of interface and efficiency of P uptake and transfer to plant. <i>New Phytologist</i> , 1996, 132, 583-592.	3.5	23
81	Transmembrane electric potential difference of germ tubes of arbuscular mycorrhizal fungi responds to external stimuli. <i>New Phytologist</i> , 2000, 147, 631-639.	3.5	23
82	UPTAKE OF GLUCOSE, TREHALOSE AND MANNITOL BY LEAF SLICES OF THE ORCHID BLETILLA HYACINTHINA. <i>New Phytologist</i> , 1973, 72, 957-964.	3.5	22
83	Characterization of two arbuscular mycorrhizal fungi in symbiosis with <i>Allium porrum</i> : inflow and flux of phosphate across the symbiotic interface. <i>New Phytologist</i> , 1999, 144, 173-181.	3.5	22
84	Proton/chloride cotransport in <i>Chara</i> : mechanism of enhanced influx after rapid external acidification. <i>Planta</i> , 1985, 163, 411-418.	1.6	21
85	No evidence for competition between arsenate and phosphate for uptake from soil by medic or barley. <i>Environment International</i> , 2009, 35, 485-490.	4.8	21
86	Plant growth and cation composition of two cultivars of spring wheat ( <i>Triticum aestivum</i> L.) differing in P uptake efficiency. <i>Journal of Experimental Botany</i> , 2001, 52, 1277-82.	2.4	21
87	Solute transport at the plasmalemma and the early evolution of cells. <i>BioSystems</i> , 1982, 15, 13-26.	0.9	20
88	ENZYMES OF AMMONIUM ASSIMILATION IN THE MYCORRHIZAL FUNGUS PEZIZELLA ERICAE READ. <i>New Phytologist</i> , 1985, 100, 579-584.	3.5	19
89	Cadmium Uptake by Winter Wheat Seedlings in Response to Interactions Between Phosphorus and Zinc Supply in Soils. <i>Journal of Plant Nutrition</i> , 2005, 28, 1569-1580.	0.9	19
90	Rates of Photosynthesis in Characean Cells. <i>Journal of Experimental Botany</i> , 1967, 18, 509-517.	2.4	18

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91	Effects of salinity and turgor on calcium influx in Chara. Plant, Cell and Environment, 1993, 16, 547-554.	2.8	18
92	The effect of fungicides on vesicular-arbuscular mycorrhizal symbiosis. III. The influence of VA mycorrhiza on phytotoxic effects following application of fosetyl-Al and phosphonate. New Phytologist, 1998, 139, 321-330.	3.5	18
93	Regulation of the Cytoplasmic pH of Chara corallina in the Absence of External Ca <sup>2+</sup> : Its Significance in Relation to the Activity and Control of the H <sup>+</sup> Pump. Journal of Experimental Botany, 1984, 35, 1525-1536.	2.4	17
94	Ions and Osmoregulation. , 1980, 14, 101-118.		17
95	Short-term Measurements of the Cytoplasmic pH of Chara corallina Derived from the Intracellular Equilibration of 5,5-Dimethylloxazolidine-2,4-Dione (DMO). Journal of Experimental Botany, 1986, 37, 1733-1745.	2.4	16
96	Effects of Ammonia and Methylamine on Cl <sup>-</sup> Transport and on the pH Changes and Circulating Electric Currents Associated with HCO <sub>3</sub> <sup>-</sup> Assimilation in Chara corallina. Journal of Experimental Botany, 1980, 31, 119-133.	2.4	15
97	Potassium Transport Across the Membranes of Chara. Journal of Experimental Botany, 1987, 38, 731-751.	2.4	15
98	A COMPARISON OF THE UPTAKE OF NITRATE, CHLORIDE AND PHOSPHATE BY EXCISED BEECH MYCORRHIZAS. New Phytologist, 1972, 71, 875-882.	3.5	14
99	Induction of the Na <sup>+</sup> /Pi cotransport system in the plasma membrane of Chara corallina requires external Na <sup>+</sup> and low levels of Pi. Plant, Cell and Environment, 2002, 25, 1475-1481.	2.8	13
100	Comparison of Cytoplasmic pH and Cl <sup>-</sup> Influx in Cells of Chara corallina Following <sup>36</sup> Cl <sup>-</sup> Starvation <sup>TM</sup> . Journal of Experimental Botany, 1981, 32, 827-835.	2.4	12
101	Title is missing!. Plant and Soil, 1997, 196, 305-310.	1.8	12
102	Effect of light intensity on root growth, mycorrhizal infection and phosphate uptake in onion (Allium cepa L.). Plant and Soil, 1988, 111, 183-186.	1.8	11
103	Biophysical and Biochemical Regulation of Cytoplasmic pH in Chara corallina during Acid Loads. Journal of Experimental Botany, 1991, 42, 173-182.	2.4	11
104	Control of sodium influx by calcium and turgor in two charophytes differing in salinity tolerance. Plant, Cell and Environment, 1996, 19, 721-728.	2.8	10
105	Deciphering the Arbuscular Mycorrhizal Pathway of P Uptake in Non-responsive Plant Species. , 2009, , 89-106.		10
106	Transport of Methylammonium and Ammonium Ions by Elodea densa. Journal of Experimental Botany, 1982, 33, 221-232.	2.4	8
107	Effects of Cations on the Cytoplasmic pH of Chara corallina. Journal of Experimental Botany, 1985, 36, 1331-1340.	2.4	8
108	Salinity-induced Malate Accumulation in Chara. Journal of Experimental Botany, 1992, 43, 837-842.	2.4	8

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109	Uptake of Imidazole and its Effects on the Intracellular pH and Ionic Relations of Chara corallina. Journal of Experimental Botany, 1988, 39, 1549-1560.	2.4	7
110	Transport processes at the plant-fungus interface in mycorrhizal associations: physiological studies. , 1997, , 737-742.		7
111	H+ Fluxes, Cytoplasmic pH and the Control of Salt Accumulation in Plants. , 1974, , 380-385.		6
112	Membranes and Nutrition: Opportunities for Integration and Progress. , 1999, , 291-301.		6
113	Changes in the wall potential of Scutellospora calospora associated with colonization of Allium porrum roots are not accompanied by equivalent changes in the host. Canadian Journal of Botany, 1998, 76, 153-156.	1.2	5
114	Effect of light intensity on root growth, mycorrhizal infection and phosphate uptake in onion (Allium cepa L.). , 1989, , 107-110.		4
115	Phosphate transfer in VA mycorrhizas. Special mechanisms or not?. , 1995, , 155-161.		3
116	Sitting Bull?. Nature, 1974, 252, 93-93.	13.7	0
117	Mycorrhizal Involvement in Plant Mineral Nutrition: A Molecular and Cell Biology Perspective. , 1999, , 303-310.		0