# Stanley J Roux

List of Publications by Year
in descending order



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|---|---|---|---|
| 64 papers | 3,791 citations | 109321 35 h-index | 128289 60 g-index |
| 65 all docs | 65 docs citations | 65 times ranked | 2593 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Extracellular ATP Induces the Accumulation of Superoxide via NADPH Oxidases in Arabidopsis. Plant Physiology, 2006, 140, 1222-1232. | 4.8 | 260 |
| 2 | The Role of Annexin 1 in Drought Stress in Arabidopsis Â. Plant Physiology, 2009, 150, 1394-1410. | 4.8 | 220 |
| 3 | Evidence of a Novel Cell Signaling Role for Extracellular Adenosine Triphosphates and Diphosphates in Arabidopsis. Plant Cell, 2004, 16, 2652-2664. | 6.6 | 182 |
| 4 | Differential Expression of Members of the Annexin Multigene Family in Arabidopsis. Plant Physiology, 2001, 126, 1072-1084. | 4.8 | 156 |
| 5 | A Role for Ectophosphatase in Xenobiotic Resistance. Plant Cell, 2000, 12, 519-533. | 6.6 | 147 |
| 6 | Evolutionary adaptation of plant annexins has diversified their molecular structures, interactions and functional roles. New Phytologist, 2012, 196, 695-712. | 7.3 | 145 |
| 7 | Extracellular ATP: an unexpected role as a signaler in plants. Trends in Plant Science, 2007, 12, 522-527. | 8.8 | 136 |
| 8 | A Pan-plant Protein Complex Map Reveals Deep Conservation and Novel Assemblies. Cell, 2020, 181, 460-474.e14. | 28.9 | 133 |
| 9 | Extracellular ATP Inhibits Root Gravitropism at Concentrations That Inhibit Polar Auxin Transport. Plant Physiology, 2003, 131, 147-154. | 4.8 | 122 |
| 10 | Apyrases (Nucleoside Triphosphate-Diphosphohydrolases) Play a Key Role in Growth Control in Arabidopsis. Plant Physiology, 2007, 144, 961-975. | 4.8 | 122 |
| 11 | Disruption of Apyrases Inhibits Pollen Germination in Arabidopsis. Plant Physiology, 2003, 131, 1638-1647. | 4.8 | 117 |
| 12 | Apyrase Functions in Plant Phosphate Nutrition and Mobilizes Phosphate from Extracellular ATP1. Plant Physiology, 1999, 119, 543-552. | 4.8 | 103 |
| 13 | Characterization of Oat Calmodulin and Radioimmunoassay of Its Subcellular Distribution. Plant Physiology, 1984, 75, 382-386. | 4.8 | 101 |
| 14 | Intersection of two signalling pathways: extracellular nucleotides regulate pollen germination and pollen tube growth via nitric oxide. Journal of Experimental Botany, 2009, 60, 2129-2138. | 4.8 | 85 |
| 15 | Multiherbicide tolerance conferred by AtPgp1 and apyrase overexpression in Arabidopsis thaliana. Nature Biotechnology, 2003, 21, 428-433. | 17.5 | 84 |
| 16 | Role of calcium ions in phytochrome responses: an update. Physiologia Plantarum, 1986, 66, 344-348. | 5.2 | 83 |
| 17 | Extracellular Nucleotides and Apyrases Regulate Stomatal Aperture in Arabidopsis Â Â. Plant Physiology, 2011, 156, 1740-1753. | 4.8 | 82 |
| 18 | Structure, function, and mechanism of action of Calmodulin. Critical Reviews in Plant Sciences, 1986, 4, 311-339. | 5.7 | 78 |

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|---|---|---|---|
| 19 | Apyrase (Nucleoside Triphosphate-Diphosphohydrolase) and Extracellular Nucleotides Regulate Cotton Fiber Elongation in Cultured Ovules. Plant Physiology, 2010, 152, 1073-1083. | 4.8 | 75 |
| 20 | Both the stimulation and inhibition of root hair growth induced by extracellular nucleotides in Arabidopsis are mediated by nitric oxide and reactive oxygen species. Plant Molecular Biology, 2010, 74, 423-435. | 3.9 | 74 |
| 21 | Photoreversible Calcium Fluxes Induced by Phytochrome in Oat Coleoptile Cells. Plant Physiology, 1980, 65, 658-662. | 4.8 | 71 |
| 22 | Gene expression changes induced by space flight in single-cells of the fern CeratopterisÂrichardii. Planta, 2008, 229, 151-159. | 3.2 | 65 |
| 23 | Apyrase Suppression Raises Extracellular ATP Levels and Induces Gene Expression and Cell Wall Changes Characteristic of Stress Responses Â Â Â. Plant Physiology, 2014, 164, 2054-2067. | 4.8 | 65 |
| 24 | Antisense Expression of an Arabidopsis Ran Binding Protein Renders Transgenic Roots Hypersensitive to Auxin and Alters Auxin-Induced Root Growth and Development by Arresting Mitotic Progress. Plant Cell, 2001, 13, 2619-2630. | 6.6 | 64 |
| 25 | Light-modulated abundance of an mRNA encoding a calmodulin-regulated, chromatin-associated NTPase in pea. Plant Molecular Biology, 1996, 30, 135-147. | 3.9 | 57 |
| 26 | Gravity-directed calcium current in germinating spores of Ceratopteris richardii. Planta, 2000, 210, 607-610. | 3.2 | 55 |
| 27 | Molecular and biochemical comparison of two different apyrases from Arabidopsis thaliana. Plant Physiology and Biochemistry, 2000, 38, 913-922. | 5.8 | 52 |
| 28 | Apyrases, extracellular ATP and the regulation of growth. Current Opinion in Plant Biology, 2011, 14, 700-706. | 7.1 | 51 |
| 29 | Identification of plant actin-binding proteins by F-actin affinity chromatography. Plant Journal, 2000, 24, 127-137. | 5.7 | 48 |
| 30 | Role for Apyrases in Polar Auxin Transport in Arabidopsis Â Â Â. Plant Physiology, 2012, 160, 1985-1995. | 4.8 | 45 |
| 31 | PARTICIPATION OF EXTRACELLULAR NUCLEOTIDES IN THE WOUND RESPONSE OF <i>DASYCLADUS VERMICULARIS</i> AND <i>ACETABULARIA ACETABULUM</i> (DASYCLADALES, CHLOROPHYTA)<sup>1</sup>. Journal of Phycology, 2008, 44, 1504-1511. | 2.3 | 40 |
| 32 | Breakthroughs spotlighting roles for extracellular nucleotides and apyrases in stress responses and growth and development. Plant Science, 2014, 225, 107-116. | 3.6 | 40 |
| 33 | ANN1 and ANN2 Function in Post-Phloem Sugar Transport in Root Tips to Affect Primary Root Growth. Plant Physiology, 2018, 178, 390-401. | 4.8 | 40 |
| 34 | Influence of gravity and light on the developmental polarity of Ceratopteris richardii fern spores. Planta, 1998, 205, 553-560. | 3.2 | 39 |
| 35 | Cellular mechanisms controlling lightâ€stimulated gravitropism: Role of calcium. Critical Reviews in Plant Sciences, 1987, 5, 205-236. | 5.7 | 38 |
| 36 | Polar distribution of annexin-like proteins during phytochrome-mediated initiation and growth of rhizoids in the ferns Dryopteris and Anemia. Planta, 1995, 197, 376-384. | 3.2 | 36 |

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|---|---|---|---|
| 37 | Characterization of Nucleoside Triphosphatase Activity in Isolated Pea Nuclei and Its Photoreversible Regulation by Light. Plant Physiology, 1986, 81, 609-613. | 4.8 | 35 |
| 38 | Regulation of a recombinant pea nuclear apyrase by calmodulin and casein kinase II. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 2000, 1494, 248-255. | 2.4 | 33 |
| 39 | RNAâ€seq analysis identifies potential modulators of gravity response in spores of <i>Ceratopteris</i> (Parkeriaceae): Evidence for modulation by calcium pumps and apyrase activity. American Journal of Botany, 2013, 100, 161-174. | 1.7 | 31 |
| 40 | Inhibition of gravitropism in oat coleoptiles by the calcium chelator, ethyleneglycol-bis-(beta-aminoethyl ether)-N'-tetraacetic acid. Physiologia Plantarum, 1984, 61, 449-454. | 5.2 | 30 |
| 41 | AtAPY1 and AtAPY2 Function as Golgi-Localized Nucleoside Diphosphatases in Arabidopsis thaliana. Plant and Cell Physiology, 2012, 53, 1913-1925. | 3.1 | 30 |
| 42 | Modulation of Root Skewing in Arabidopsis by Apyrases and Extracellular ATP. Plant and Cell Physiology, 2015, 56, pcv134. | 3.1 | 29 |
| 43 | A self-referencing biosensor for real-time monitoring of physiological ATP transport in plant systems. Biosensors and Bioelectronics, 2015, 74, 37-44. | 10.1 | 28 |
| 44 | Light Differentially Regulates Cell Division and the mRNA Abundance of Pea Nucleolin during De-Etiolation. Plant Physiology, 2001, 125, 339-350. | 4.8 | 26 |
| 45 | Co-regulation of exine wall patterning, pollen fertility and anther dehiscence byÂArabidopsis apyrases 6 and 7. Plant Physiology and Biochemistry, 2013, 69, 62-73. | 5.8 | 26 |
| 46 | Role of Ca2+ in Mediating Plant Responses to Extracellular ATP and ADP. International Journal of Molecular Sciences, 2018, 19, 3590. | 4.1 | 25 |
| 47 | DETERMINATION OF EXTINCTION COEFFICIENTS OF OAT PHYTOCHROME BY QUANTITATIVE AMINO ACID ANALYSES. Photochemistry and Photobiology, 1982, 35, 537-543. | 2.5 | 24 |
| 48 | Ectopic expression of a pea apyrase enhances root system architecture and drought survival in Arabidopsis and soybean. Plant, Cell and Environment, 2019, 42, 337-353. | 5.7 | 24 |
| 49 | Early development of fern gametophytes in microgravity. Advances in Space Research, 2003, 31, 215-220. | 2.6 | 21 |
| 50 | Biochemical characterization of <i>Arabidopsis</i> APYRASE family reveals their roles in regulating endomembrane NDP/NMP homoeostasis. Biochemical Journal, 2015, 472, 43-54. | 3.7 | 18 |
| 51 | Current status and proposed roles for nitric oxide as a key mediator of the effects of extracellular nucleotides on plant growth. Frontiers in Plant Science, 2013, 4, 427. | 3.6 | 15 |
| 52 | Recent Advances Clarifying the Structure and Function of Plant Apyrases (Nucleoside Triphosphate) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 | 4.1 | 13 |
| 53 | A RAPID PROCEDURE FOR THE PURIFICATION OF 124 kDALTON PHYTOCHROME FROM AVENA. Photochemistry and Photobiology, 1985, 41, 229-232. | 2.5 | 12 |
| 54 | CALCIUM-REGULATED NUCLEAR ENZYMES: POTENTIAL MEDIATORS OF PHYTOCHROME-INDUCED CHANGES IN NUCLEAR METABOLISM?. Photochemistry and Photobiology, 1992, 56, 811-814. | 2.5 | 11 |

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|---|---|---|---|
| 55 | Partial purification and characterization of a type 1 protein phosphatase in purified nuclei of pea plumules. Biochemical Journal, 1996, 319, 985-991. | 3.7 | 9 |
| 56 | Red Light-Induced Appearance of Phosphotyrosine-like Epitopes on Nuclear Proteins from Pea (Pisum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf | 2.5 | 9 |
| 57 | A Start Point for Extracellular Nucleotide Signaling. Molecular Plant, 2014, 7, 937-938. | 8.3 | 7 |
| 58 | APYRASE1/2 mediate red light-induced de-etiolation growth in Arabidopsis seedlings. Plant Physiology, 2022, 189, 1728-1740. | 4.8 | 5 |
| 59 | Regulation of enzymes in isolated plant nuclei. BioEssays, 1986, 5, 120-123. | 2.5 | 4 |
| 60 | Regulation of Plant Growth and Development by Extracellular Nucleotides. , 2006, , 221-234. | | 4 |
| 61 | New Insights in Plant Biology Gained from Research in Space. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2015, 3, 3-19. | 0.8 | 4 |
| 62 | Apyrase inhibitors enhance the ability of diverse fungicides to inhibit the growth of different plantâ€pathogenic fungi. Molecular Plant Pathology, 2017, 18, 1012-1023. | 4.2 | 3 |
| 63 | Extracellular ATP Signaling in Animals and Plants: Comparison and Contrast. , 2019, , 389-409. | | 1 |
| 64 | Constitutive expression of a pea apyrase, psNTP9, increases seed yield in field-grown soybean. Scientific Reports, 2022, 12, . | 3.3 | 1 |