## Maria J Harrison

List of Publications by Year in descending order

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26630 66911 12,989 80 56 citations h-index papers

g-index 85 85 85 7610 docs citations times ranked citing authors all docs

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| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | A Phosphate Transporter from Medicago truncatula Involved in the Acquisition of Phosphate Released by Arbuscular Mycorrhizal Fungi. Plant Cell, 2002, 14, 2413-2429.  | 6.6  | 733       |
| 2  | Phosphate transport in Arabidopsis: Pht1;1 and Pht1;4 play a major role in phosphate acquisition from both low- and high-phosphate environments. Plant Journal, 2004, 39, 629-642.  | 5.7  | 719       |
| 3  | SIGNALING IN THE ARBUSCULAR MYCORRHIZAL SYMBIOSIS. Annual Review of Microbiology, 2005, 59, 19-42.  | 7.3  | 647       |
| 4  | A Medicago truncatula phosphate transporter indispensable for the arbuscular mycorrhizal symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1720-1725.                                      | 7.1  | 634       |
| 5  | A phosphate transporter from the mycorrhizal fungus Glomus versiforme. Nature, 1995, 378, 626-629.  | 27.8 | 575       |
| 6  | Arbuscular mycorrhizal symbiosis is accompanied by local and systemic alterations in gene expression and an increase in disease resistance in the shoots. Plant Journal, 2007, 50, 529-544.   | 5.7  | 430       |
| 7  | MOLECULAR AND CELLULAR ASPECTS OF THE ARBUSCULAR MYCORRHIZAL SYMBIOSIS. Annual Review of Plant Biology, 1999, 50, 361-389.  | 14.3 | 397       |
| 8  | Phosphate in the arbuscular mycorrhizal symbiosis: transport properties and regulatory roles. Plant, Cell and Environment, 2007, 30, 310-322.   | 5.7  | 339       |
| 9  | A Chloroplast Phosphate Transporter, PHT2;1, Influences Allocation of Phosphate within the Plant and Phosphate-Starvation Responses. Plant Cell, 2002, 14, 1751-1766.   | 6.6  | 310       |
| 10 | Transcript Profiling Coupled with Spatial Expression Analyses Reveals Genes Involved in Distinct Developmental Stages of an Arbuscular Mycorrhizal Symbiosis [W]. Plant Cell, 2003, 15, 2106-2123.  | 6.6  | 309       |
| 11 | Medicago truncatula and Glomus intraradices gene expression in cortical cells harboring arbuscules in the arbuscular mycorrhizal symbiosis. BMC Plant Biology, 2009, 9, 10.   | 3.6  | 277       |
| 12 | The <i>Medicago truncatula </i> ortholog of Arabidopsis EIN2, <i>sickle </i> , is a negative regulator of symbiotic and pathogenic microbial associations. Plant Journal, 2008, 55, 580-595.  | 5.7  | 272       |
| 13 | DELLA proteins regulate arbuscule formation in arbuscular mycorrhizal symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E5025-34.  | 7.1  | 266       |
| 14 | Cloning and Characterization of Two Phosphate Transporters from Medicago truncatula Roots: Regulation in Response to Phosphate and to Colonization by Arbuscular Mycorrhizal (AM) Fungi. Molecular Plant-Microbe Interactions, 1998, 11, 14-22. | 2.6  | 264       |
| 15 | A Phosphate Transporter Gene from the Extra-Radical Mycelium of an Arbuscular Mycorrhizal Fungus<br>Glomus intraradices Is Regulated in Response to Phosphate in the Environment. Molecular<br>Plant-Microbe Interactions, 2001, 14, 1140-1148. | 2.6  | 261       |
| 16 | Arbuscular mycorrhizaâ€specific enzymes FatM and <scp>RAM</scp> 2 fineâ€tune lipid biosynthesis to promote development of arbuscular mycorrhiza. New Phytologist, 2017, 214, 1631-1645.   | 7.3  | 260       |
| 17 | Isoflavonoid Accumulation and Expression of Defense Gene Transcripts During the Establishment of Vesicular-Arbuscular Mycorrhizal Associations in Roots of <i>Medicago truncatula </i> Plant-Microbe Interactions, 1993, 6, 643.                | 2.6  | 244       |
| 18 | Plant Signaling and Metabolic Pathways Enabling Arbuscular Mycorrhizal Symbiosis. Plant Cell, 2017, 29, 2319-2335.  | 6.6  | 241       |

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|----|--|------|-----------|
| 19 | The Down-Regulation of Mt4-Like Genes by Phosphate Fertilization Occurs Systemically and Involves Phosphate Translocation to the Shoots1. Plant Physiology, 1999, 119, 241-248.  | 4.8  | 229       |
| 20 | Two <i>Medicago truncatula</i> Half-ABC Transporters Are Essential for Arbuscule Development in Arbuscular Mycorrhizal Symbiosis. Plant Cell, 2010, 22, 1483-1497.   | 6.6  | 223       |
| 21 | Live-Cell Imaging Reveals Periarbuscular Membrane Domains and Organelle Location in <i>Medicago truncatula</i> Roots during Arbuscular Mycorrhizal Symbiosis  Â. Plant Physiology, 2009, 151, 809-819.                       | 4.8  | 215       |
| 22 | Spatial patterns of expression of flavonoid/isoflavonoid pathway genes during interactions between roots of Medicago truncatula and the mycorrhizal fungus Glomus versiforme. Plant Journal, 1994, 6, 9-20.                  | 5.7  | 207       |
| 23 | Genes conserved for arbuscular mycorrhizal symbiosis identified through phylogenomics. Nature Plants, 2016, 2, 15208.  | 9.3  | 206       |
| 24 | Loss of At4 function impacts phosphate distribution between the roots and the shoots during phosphate starvation. Plant Journal, 2006, 45, 712-726.  | 5.7  | 205       |
| 25 | <i>Medicago truncatula</i> Vapyrin is a novel protein required for arbuscular mycorrhizal symbiosis. Plant Journal, 2010, 61, 482-494.   | 5.7  | 198       |
| 26 | A sugar transporter from Medicago truncatula: altered expression pattern in roots during vesicular-arbuscular (VA) mycorrhizal associations. Plant Journal, 1996, 9, 491-503.  | 5.7  | 192       |
| 27 | A CCaMK-CYCLOPS-DELLA Complex Activates Transcription of RAM1 to Regulate Arbuscule Branching. Current Biology, 2016, 26, 987-998.   | 3.9  | 182       |
| 28 | Suppression of Arbuscule Degeneration in <i>Medicago truncatula phosphate transporter4</i> Mutants Is Dependent on the Ammonium Transporter 2 Family Protein AMT2;3. Plant Cell, 2015, 27, 1352-1366.                        | 6.6  | 180       |
| 29 | The spatial expression patterns of a phosphate transporter (MtPT1) from Medicago truncatula indicate a role in phosphate transport at the root/soil interface. Plant Journal, 2001, 25, 281-293.                             | 5.7  | 176       |
| 30 | Polar localization of a symbiosis-specific phosphate transporter is mediated by a transient reorientation of secretion. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E665-72. | 7.1  | 164       |
| 31 | Reprogramming Plant Cells for Endosymbiosis. Science, 2009, 324, 753-754.  | 12.6 | 160       |
| 32 | The arbuscular mycorrhizal symbiosis: an underground association. Trends in Plant Science, 1997, 2, 54-60.   | 8.8  | 155       |
| 33 | A comprehensive draft genome sequence for lupin ( <i>Lupinus angustifolius</i> ), an emerging health food: insights into plant–microbe interactions and legume evolution. Plant Biotechnology Journal, 2017, 15, 318-330.    | 8.3  | 153       |
| 34 | Cellular programs for arbuscular mycorrhizal symbiosis. Current Opinion in Plant Biology, 2012, 15, 691-698.   | 7.1  | 151       |
| 35 | RNA Interference Identifies a Calcium-Dependent Protein Kinase Involved in Medicago truncatula Root<br>Development. Plant Cell, 2005, 17, 2911-2921.   | 6.6  | 147       |
| 36 | The halfâ€size ABC transporters STR1 and STR2 are indispensable for mycorrhizal arbuscule formation in rice. Plant Journal, 2012, 69, 906-920.   | 5.7  | 131       |

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|----|---|------------------|----------------|
| 37 | Transcriptomic analysis of field-droughted sorghum from seedling to maturity reveals biotic and metabolic responses. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 27124-27132.                       | 7.1              | 129            |
| 38 | A set of fluorescent proteinâ€based markers expressed from constitutive and arbuscular mycorrhizaâ€inducible promoters to label organelles, membranes and cytoskeletal elements in <i>Medicago truncatula</i> . Plant Journal, 2014, 80, 1151-1163. | 5.7              | 121            |
| 39 | EXO70I Is Required for Development of a Sub-domain of the Periarbuscular Membrane during Arbuscular Mycorrhizal Symbiosis. Current Biology, 2015, 25, 2189-2195.  | 3.9              | 120            |
| 40 | A novel gene whose expression in Medicago truncatula roots is suppressed in response to colonization by vesicular-arbuscular mycorrhizal (VAM) fungi and to phosphate nutrition., 1997, 34, 199-208.  |                  | 113            |
| 41 | A Transcriptional Program for Arbuscule Degeneration during AM Symbiosis Is Regulated by MYB1.<br>Current Biology, 2017, 27, 1206-1212.   | 3.9              | 110            |
| 42 | <i>Medicago truncatula mtpt4</i> mutants reveal a role for nitrogen in the regulation of arbuscule degeneration in arbuscular mycorrhizal symbiosis. Plant Journal, 2011, 68, 954-965.  | 5.7              | 103            |
| 43 | Signaling events during initiation of arbuscular mycorrhizal symbiosis. Journal of Integrative Plant Biology, 2014, 56, 250-261.  | 8.5              | 102            |
| 44 | Hyphal branching during arbuscule development requires RAM1. Plant Physiology, 2015, 169, pp.01155.2015.  | 4.8              | 94             |
| 45 | Conserved and reproducible bacterial communities associate with extraradical hyphae of arbuscular mycorrhizal fungi. ISME Journal, 2021, 15, 2276-2288.   | 9.8              | 91             |
| 46 | Genome and evolution of the arbuscular mycorrhizal fungus <i>Diversispora epigaea</i> (formerly) Tj ETQq0 0 C   | rgBT /Ove<br>7.3 | erlock 10 Tf 5 |
| 47 | Closely Related Members of the Medicago truncatula PHT1 Phosphate Transporter Gene Family Encode Phosphate Transporters with Distinct Biochemical Activities. Journal of Biological Chemistry, 2008, 283, 24673-24681.                              | 3.4              | 87             |
| 48 | Diversity of morphology and function in arbuscular mycorrhizal symbioses in Brachypodium distachyon. Planta, 2012, 236, 851-865.  | 3.2              | 85             |
| 49 | Extensive membrane systems at the host–arbuscular mycorrhizal fungus interface. Nature Plants, 2019, 5, 194-203.  | 9.3              | 85             |
| 50 | Biotrophic interfaces and nutrient transport in plant/fungal symbioses. Journal of Experimental Botany, 1999, 50, 1013-1022.  | 4.8              | 84             |
| 51 | Novel Genes Induced During an Arbuscular Mycorrhizal (AM) Symbiosis Formed Between Medicago truncatula and Glomus versiforme. Molecular Plant-Microbe Interactions, 1999, 12, 171-181.  | 2.6              | 78             |
| 52 | Microtubule organization in root cells of Medicago truncatula during development of an arbuscular mycorrhizal symbiosis with Glomus versiforme. Protoplasma, 2001, 217, 154-165.  | 2.1              | 76             |
| 53 | Defensin gene family in Medicago truncatula: structure, expression and induction by signal molecules. Plant Molecular Biology, 2005, 58, 385-399.   | 3.9              | 73             |
| 54 | Phytohormones, miRNAs, and peptide signals integrate plant phosphorus status with arbuscular mycorrhizal symbiosis. Current Opinion in Plant Biology, 2019, 50, 132-139.  | 7.1              | 70             |

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|----|--|------------|-----------|
| 55 | Blumenols as shoot markers of root symbiosis with arbuscular mycorrhizal fungi. ELife, 2018, 7, .  | 6.0        | 69        |
| 56 | A CLE–SUNN module regulates strigolactone content and fungal colonization in arbuscular mycorrhiza. Nature Plants, 2019, 5, 933-939.   | 9.3        | 65        |
| 57 | Diverse <scp><i>Sorghum bicolor</i></scp> accessions show marked variation in growth and transcriptional responses to arbuscular mycorrhizal fungi. Plant, Cell and Environment, 2019, 42, 1758-1774.  | <b>5.7</b> | 60        |
| 58 | Development of the arbuscular mycorrhizal symbiosis. Current Opinion in Plant Biology, 1998, 1, 360-365.   | 7.1        | 59        |
| 59 | Arsenate induces the expression of fungal genes involved in As transport in arbuscular mycorrhiza. Fungal Biology, 2011, 115, 1197-1209.   | 2.5        | 58        |
| 60 | Exocytosis for endosymbiosis: membrane trafficking pathways for development of symbiotic membrane compartments. Current Opinion in Plant Biology, 2017, 38, 101-108.   | 7.1        | 54        |
| 61 | Expression of a xyloglucan endotransglucosylase/hydrolase gene, Mt-XTH1, from Medicago truncatula is induced systemically in mycorrhizal roots. Gene, 2005, 345, 191-197.  | 2.2        | 53        |
| 62 | A phosphate transporter from Medicago truncatula is expressed in the photosynthetic tissues of the plant and located in the chloroplast envelope. New Phytologist, 2003, 157, 291-302.   | 7.3        | 46        |
| 63 | Characterization of the Mt4 gene from Medicago truncatula. Gene, 1998, 216, 47-53.   | 2.2        | 45        |
| 64 | Laser microdissection and its application to analyze gene expression in arbuscular mycorrhizal symbiosis. Pest Management Science, 2009, 65, 504-511.  | 3.4        | 45        |
| 65 | cDNA arrays as a tool to identify mycorrhiza-regulated genes: identification of mycorrhiza-induced genes that encode or generate signaling molecules implicated in the control of root growth.  Canadian Journal of Botany, 2004, 82, 1177-1185. | 1.1        | 32        |
| 66 | Construction and characterization of genomic libraries of two endomycorrhizal fungi: Glomus versiforme and Gigaspora margarita. Mycological Research, 1999, 103, 955-960.  | 2.5        | 29        |
| 67 | Fifteen compelling open questions in plant cell biology. Plant Cell, 2022, 34, 72-102.   | 6.6        | 27        |
| 68 | Accumulation of phosphoinositides in distinct regions of the periarbuscular membrane. New Phytologist, 2019, 221, 2213-2227.   | 7.3        | 24        |
| 69 | DELLA proteins regulate expression of a subset of AM symbiosis-induced genes in <i>Medicago truncatula</i> . Plant Signaling and Behavior, 2016, 11, e1162369.   | 2.4        | 23        |
| 70 | Novel plant and fungal AGP-like proteins in the Medicago truncatula–Glomus intraradices arbuscular mycorrhizal symbiosis. Mycorrhiza, 2008, 18, 403-412.   | 2.8        | 17        |
| 71 | A short LysM protein with high molecular diversity from an arbuscular mycorrhizal fungus,<br>Rhizophagus irregularis. Mycoscience, 2019, 60, 63-70.  | 0.8        | 15        |
| 72 | The Arbuscular Mycorrhizal Symbiosis. , 1997, , 1-34.  |            | 14        |

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|----|---|-----|-----------|
| 73 | Genetic variation for root architecture, nutrient uptake and mycorrhizal colonisation in Medicago truncatula accessions. Plant and Soil, 2010, 336, 113-128.  | 3.7 | 13        |
| 74 | RiArsB and RiMT-11: Two novel genes induced by arsenate in arbuscular mycorrhiza. Fungal Biology, 2018, 122, 121-130.   | 2.5 | 13        |
| 75 | Phosphate Transporters in Arbuscular Mycorrhizal Symbiosis. , 2010, , 117-135.  |     | 12        |
| 76 | A Phosphate-Dependent Requirement for Transcription Factors IPD3 and IPD3L During Arbuscular Mycorrhizal Symbiosis in <i>Medicago truncatula</i> . Molecular Plant-Microbe Interactions, 2019, 32, 1277-1290. | 2.6 | 11        |
| 77 | Constitutive Overexpression of RAM1 Leads to an Increase in Arbuscule Density in Brachypodium distachyon. Plant Physiology, 2020, 184, 1263-1272.   | 4.8 | 11        |
| 78 | Gene Silencing in Medicago truncatula Roots Using RNAi. Methods in Molecular Biology, 2013, 1069, 163-177.  | 0.9 | 10        |
| 79 | <scp><i>KIN3</i></scp> impacts arbuscular mycorrhizal symbiosis and promotes fungal colonisation in <i>Medicago truncatula</i> . Plant Journal, 2022, 110, 513-528.   | 5.7 | 9         |
| 80 | A genetically encoded biosensor reveals spatiotemporal variation in cellular phosphate content in <i>Brachypodium distachyon</i> mycorrhizal roots. New Phytologist, 2022, 234, 1817-1831.                    | 7.3 | 4         |