Volker Knoop

List of Publications by Year
in descending order

88 papers	5,663 citations	61857 43 h-index	82410 72 g-index
89 all docs	89 docs citations	89 times ranked	3717 citing authors

#	Article	IF	Citations
1	The deepest divergences in land plants inferred from phylogenomic evidence. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15511-15516.	3.3	579
2	The mitochondrial DNA of land plants: peculiarities in phylogenetic perspective. Current Genetics, 2004, 46, 123-39.	0.8	262
3	A hypothesis on the identification of the editing enzyme in plant organelles. FEBS Letters, 2007, 581, 4132-4138.	1.3	211
4	When you canâ€™t trust the DNA: RNA editing changes transcript sequences. Cellular and Molecular Life Sciences, 2011, 68, 567-586.	2.4	176
5	Extreme RNA Editing in Coding Islands and Abundant Microsatellites in Repeat Sequences of Selaginella moellendorffii Mitochondria: The Root of Frequent Plant mtDNA Recombination in Early Tracheophytes. Genome Biology and Evolution, 2011, 3, 344-358.	1.1	164
6	A Root-Expressed Magnesium Transporter of the<i>MRS2/MGT</i>Gene Family in<i>Arabidopsis thaliana</i>Allows for Growth in Low-Mg2+ Environments. Plant Cell, 2010, 21, 4018-4030.	3.1	154
7	<i>Ginkgo</i>and<i>Welwitschia</i>Mitogenomes Reveal Extreme Contrasts in Gymnosperm Mitochondrial Evolution. Molecular Biology and Evolution, 2016, 33, 1448-1460.	3.5	151
8	The mitochondrial genome on its way to the nucleus: different stages of gene transfer in higher plants. FEBS Letters, 1993, 325, 140-145.	1.3	141
9	A trans -splicing group I intron and tRNA-hyperediting in the mitochondrial genome of the lycophyte Isoetes engelmannii. Nucleic Acids Research, 2009, 37, 5093-5104.	6.5	139
10	A member of a novel Arabidopsis thaliana gene family of candidate Mg2+ ion transporters complements a yeast mitochondrial group II intron-splicing mutant. Plant Journal, 2000, 24, 489-501.	2.8	138
11	Plant Mitochondrial RNA Editing. Journal of Molecular Evolution, 1999, 48, 303-312.	0.8	131
12	Transport of magnesium and other divalent cations: evolution of the 2-TM-GxN proteins in the MIT superfamily. Molecular Genetics and Genomics, 2005, 274, 205-216.	1.0	128
13	Expression of the avirulence gene avrBs3 from Xanthomonas campestris pv. vesicatoria is not under the control of hrp genes and is independent of plant factors. Journal of Bacteriology, 1991, 173, 7142-7150.	1.0	119
14	Ancestors of Trans-Splicing Mitochondrial Introns Support Serial Sister Group Relationships of Hornworts and Mosses with Vascular Plants. Molecular Biology and Evolution, 2004, 22, 117-125.	3.5	104
15	RNA editing: only eleven sites are present in the Physcomitrella patens mitochondrial transcriptome and a universal nomenclature proposal. Molecular Genetics and Genomics, 2009, 281, 473-481.	1.0	103
16	Trans-splicing group II introns in plant mitochondria: The complete set of cis-arranged homologs in ferns, fern allies, and a hornwort. Rna, 1998, 4, 1599-1609.	1.6	102
17	A unique transcriptome: 1782 positions of RNA editing alter 1406 codon identities in mitochondrial mRNAs of the lycophyte Isoetes engelmannii. Nucleic Acids Research, 2011, 39, 2890-2902.	6.5	102
18	A molecular phylogeny of bryophytes based on nucleotide sequences of the mitochondrialnad5 gene. Plant Systematics and Evolution, 1999, 218, 179-192.	0.3	101

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19	Chloroplast RNA editing going extreme: more than 3400 events of C-to-U editing in the chloroplast transcriptome of the lycophyte <i>Selaginella uncinata</i>. Rna, 2014, 20, 1499-1506.	1.6	98
20	Homologues of yeast and bacterial rotenone-insensitive NADH dehydrogenases in higher eukaryotes: two enzymes are present in potato mitochondria. Plant Journal, 1999, 20, 79-87.	2.8	97
21	Organellar RNA Editing and Plant-Specific Extensions of Pentatricopeptide Repeat Proteins in Jungermanniid but not in Marchantiid Liverworts. Molecular Biology and Evolution, 2008, 25, 1405-1414.	3.5	90
22	Plant-type pentatricopeptide repeat proteins with a DYW domain drive C-to-U RNA editing in Escherichia coli. Communications Biology, 2019, 2, 85.	2.0	88
23	The<i>Physarum polycephalum</i>Genome Reveals Extensive Use of Prokaryotic Two-Component and Metazoan-Type Tyrosine Kinase Signaling. Genome Biology and Evolution, 2016, 8, 109-125.	1.1	87
24	<i>copia-, gypsy-</i> and LINE-Like Retrotransposon Fragments in the Mitochondrial Genome of <i>Arabidopsis thaliana</i>. Genetics, 1996, 142, 579-585.	1.2	82
25	Distribution of RNA editing sites in Oenothera mitochondrial mRNAs and rRNAs. Current Genetics, 1991, 20, 397-404.	0.8	77
26	Plant organelle RNA editing and its specificity factors: enhancements of analyses and new database features in PREPACT 3.0. BMC Bioinformatics, 2018, 19, 255.	1.2	77
27	Evolution of a Pseudogene: Exclusive Survival of a Functional Mitochondrial nad7 Gene Supports Haplomitrium as the Earliest Liverwort Lineage and Proposes a Secondary Loss of RNA Editing in Marchantiidae. Molecular Biology and Evolution, 2007, 24, 1068-1074.	3.5	76
28	Molecular characterization of a seed transmitted clavicipitaceous fungus occurring on dicotyledoneous plants (Convolvulaceae). Planta, 2006, 224, 533-544.	1.6	73
29	The Expansion and Diversification of Pentatricopeptide Repeat RNA-Editing Factors in Plants. Molecular Plant, 2020, 13, 215-230.	3.9	71
30	Nuclear DYW-Type PPR Gene Families Diversify with Increasing RNA Editing Frequencies in Liverwort and Moss Mitochondria. Journal of Molecular Evolution, 2012, 74, 37-51.	0.8	64
31	Reverse U-to-C editing exceeds C-to-U RNA editing in some ferns â€“ a monilophyte-wide comparison of chloroplast and mitochondrial RNA editing suggests independent evolution of the two processes in both organelles. BMC Evolutionary Biology, 2016, 16, 134.	3.2	64
32	Evolution of trans-splicing plant mitochondrial introns in pre-Permian times. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 553-558.	3.3	63
33	Towards a plant model for enigmatic Uâ€toâ€C RNA editing: the organelle genomes, transcriptomes, editomes and candidate RNA editing factors in the hornwort <i>Anthoceros agrestis</i>. New Phytologist, 2020, 225, 1974-1992.	3.5	57
34	Horsetails are the sister group to all other monilophytes and Marattiales are sister to leptosporangiate ferns. Molecular Phylogenetics and Evolution, 2015, 90, 140-149.	1.2	56
35	The Mitochondrial nad2 Gene as a Novel Marker Locus for Phylogenetic Analysis of Early Land Plants: A Comparative Analysis in Mosses. Molecular Phylogenetics and Evolution, 2001, 18, 117-126.	1.2	50
36	Introducing the plant RNA editing prediction and analysis computer tool PREPACT and an update on RNA editing site nomenclature. Current Genetics, 2010, 56, 189-201.	0.8	50

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37	Slugsâ€™ last meals: molecular identification of sequestered chloroplasts from different algal origins in Sacoglossa (Opisthobranchia, Gastropoda). Molecular Ecology Resources, 2010, 10, 968-978.	2.2	50
38	Frequent chloroplast RNA editing in early-branching flowering plants: pilot studies on angiosperm-wide coexistence of editing sites and their nuclear specificity factors. BMC Evolutionary Biology, 2016, 16, 23.	3.2	50
39	Magnesium Deficiency Phenotypes Upon Multiple Knockout of Arabidopsis thaliana MRS2 Clade B Genes Can be Ameliorated by Concomitantly Reduced Calcium Supply. Plant and Cell Physiology, 2013, 54, 1118-1131.	1.5	49
40	PREPACT 2.0: Predicting C-to-U and U-to-C RNA Editing in Organelle Genome Sequences with Multiple References and Curated RNA Editing Annotation. Bioinformatics and Biology Insights, 2013, 7, BBI.S11059.	1.0	49
41	Clavicipitaceous Fungi Associated with Ergoline Alkaloid-Containing Convolvulaceae. Journal of Natural Products, 2007, 70, 1955-1960.	1.5	48
42	Primary Sooty Mangabey Simian Immunodeficiency Virus and Human Immunodeficiency Virus Type 2 nef Alleles Modulate Cell Surface Expression of Various Human Receptors and Enhance Viral Infectivity and Replication. Journal of Virology, 2005, 79, 10547-10560.	1.5	47
43	Nef Proteins from Simian Immunodeficiency Virus-Infected Chimpanzees Interact with p21-Activated Kinase 2 and Modulate Cell Surface Expression of Various Human Receptors. Journal of Virology, 2004, 78, 6864-6874.	1.5	46
44	Assigning DYWâ€type PPR proteins to RNA editing sites in the funariid mosses <i>Physcomitrella patens</i> and <i>Funaria hygrometrica</i>. Plant Journal, 2011, 67, 370-380.	2.8	46
45	DYWâ€type PPR proteins in a heterolobosean protist: Plant RNA editing factors involved in an ancient horizontal gene transfer?. FEBS Letters, 2010, 584, 4287-4291.	1.3	45
46	A <scp>DYW</scp>â€protein knockout in <i><scp>P</scp>hyscomitrella</i> affects two closely spaced mitochondrial editing sites and causes a severe developmental phenotype. Plant Journal, 2013, 76, 420-432.	2.8	45
47	The gene for ribosomal protein S10 is present in mitochondria of pea and potato but absent from those of Arabidopsis and Oenothera. Current Genetics, 1995, 27, 559-564.	0.8	42
48	Evidence for a group II intron inEscherichia coliinserted into a highly conserved reading frame associated with mobile DNA sequences. Nucleic Acids Research, 1994, 22, 1167-1171.	6.5	40
49	A survey of PPR proteins identifies DYW domains like those of land plant RNA editing factors in diverse eukaryotes. RNA Biology, 2013, 10, 1549-1556.	1.5	40
50	Mitochondrial DNA variations and nuclear RFLPs reflect different genetic similarities among 23 Arabidopsis thaliana ecotypes. Plant Molecular Biology, 1997, 33, 37-45.	2.0	38
51	A tripartite group II intron in mitochondria of an angiosperm plant. Molecular Genetics and Genomics, 1997, 255, 269-276.	2.4	36
52	Divergent Intron Conservation in the Mitochondrial nad2 Gene: Signatures for the Three Bryophyte Classes (Mosses, Liverworts, and Hornworts) and the Lycophytes. Journal of Molecular Evolution, 2002, 55, 265-271.	0.8	36
53	Plant-type mitochondrial RNA editing in the protist <i>Naegleria gruberi</i>: FIGURE 1.. Rna, 2011, 17, 2058-2062.	1.6	36
54	Mitochondrial Genome Evolution in the Plant Lineage. , 2011, , 3-29.		35

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55	Horizontal Gene Transfer of Chlamydial-Like tRNA Genes into Early Vascular Plant Mitochondria. Molecular Biology and Evolution, 2015, 32, 629-634.	3.5	32
56	Introducing Intron Locus cox1i624 for Phylogenetic Analyses in Bryophytes: On the Issue of Takakia as Sister Genus to All Other Extant Mosses. Journal of Molecular Evolution, 2010, 70, 506-518.	0.8	31
57	The nad4L gene is encoded between exon c of nad5 and orf25 in the Arabidopsis mitochondrial genome. Molecular Genetics and Genomics, 1992, 236, 33-38.	2.4	30
58	Complex II subunit 4 (sdh4) homologous sequences in plant mitochondrial genomes. Current Genetics, 1998, 34, 313-317.	0.8	29
59	The phylogeny of mosses â€" Addressing open issues with a new mitochondrial locus: Group I intron cobi420. Molecular Phylogenetics and Evolution, 2010, 54, 417-426.	1.2	29
60	On the Identification of Group II Introns in Nucleotide Sequence Data. Journal of Molecular Biology, 1994, 242, 389-396.	2.0	26
61	Plant mitochondrial genome peculiarities evolving in the earliest vascular plant lineages. Journal of Systematics and Evolution, 2013, 51, 1-12.	1.6	26
62	Seed Plant Mitochondrial Genomes: Complexity Evolving. Advances in Photosynthesis and Respiration, 2012, , 175-200.	1.0	25
63	Promiscuous mitochondrial group II intron sequences in plant nuclear genomes. Journal of Molecular Evolution, 1994, 39, 144-150.	0.8	24
64	RNA editing of a conserved reading frame in plant mitochondria increases its similarity to two overlapping reading frames in Escherichia coli. Molecular Genetics and Genomics, 1994, 242, 65-72.	2.4	21
65	A mitochondrial intron sequence in the 5?-flanking region of a plant nuclear lectin gene. Current Genetics, 1991, 20, 423-425.	0.8	20
66	Different Fates of Two Mitochondrial Gene Spacers in Early Land Plant Evolution. International Journal of Plant Sciences, 2007, 168, 709-717.	0.6	20
67	Expected and unexpected evolution of plant RNA editing factors CLB19, CRR28 and RARE1: retention of CLB19 despite a phylogenetically deep loss of its two known editing targets in Poaceae. BMC Evolutionary Biology, 2018, 18, 85.	3.2	20
68	Tracing Plant Mitochondrial DNA Evolution: Rearrangements of the Ancient Mitochondrial Gene Cluster trnA-trnT-nad7 in Liverwort Phylogeny. Journal of Molecular Evolution, 2008, 66, 621-629.	0.8	19
69	MitBASE : a comprehensive and integrated mitochondrial DNA database. The present status. Nucleic Acids Research, 2000, 28, 148-152.	6.5	18
70	Bryophytes and other basal land plants: the mitochondrial perspective. Taxon, 2005, 54, 293-297.	0.4	18
71	Fifty mosses on five trees: comparing phylogenetic information in three types of non-coding mitochondrial DNA and two chloroplast loci. Plant Systematics and Evolution, 2009, 282, 241-255.	0.3	18
72	One C-to-U RNA Editing Site and Two Independently Evolved Editing Factors: Testing Reciprocal Complementation with DYW-Type PPR Proteins from the Moss <i>Physcomitrium</i> (<i>Physcomitrella</i>) <i>patens</i> and the Flowering Plants <i>Macadamia integrifolia</i> and Arabidopsis. Plant Cell, 2020, 32, 2997-3018.	3.1	18

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73	MitBASE: a comprehensive and integrated mitochondrial DNA database. Nucleic Acids Research, 1999, 27, 128-133.	6.5	17
74	Bryophytes and Other Basal Land Plants: The Mitochondrial Perspective. Taxon, 2005, 54, 293.	0.4	15
75	Convergent Evolution of Fern-Specific Mitochondrial Group II Intron atp1i361g2 and Its Ancient Source Paralogue rps3i249g2 and Independent Losses of Intron and RNA Editing among Pteridaceae. Genome Biology and Evolution, 2016, 8, 2505-2519.	1.1	13
76	A Single-Target Mitochondrial RNA Editing Factor of Funaria hygrometrica Can Fully Reconstitute RNA Editing at Two Sites in Physcomitrella patens. Plant and Cell Physiology, 2017, 58, 496-507.	1.5	13
77	Multifarious Evolutionary Pathways of a Nuclear RNA Editing Factor: Disjunctions in Coevolution of DOT4 and Its Chloroplast Target rpoC1eU488SL. Genome Biology and Evolution, 2019, 11, 798-813.	1.1	11
78	Monilophyte mitochondrial rps1 genes carry a unique group II intron that likely originated from an ancient paralog in rpl2. Rna, 2016, 22, 1338-1348.	1.6	11
79	A functional twintron, â€˜zombieâ€™ twintrons and a hypermobile group II intron invading itself in plant mitochondria. Nucleic Acids Research, 2020, 48, 2661-2675.	6.5	10
80	Membrane protein interactions between different Arabidopsis thaliana MRS2-type magnesium transporters are highly permissive. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 2032-2040.	1.4	9
81	Exclusive conservation of mitochondrial group II intron nad4i548 among liverworts and its use for phylogenetic studies in this ancient plant clade. Plant Biology, 2012, 14, 382-391.	1.8	7
82	Between DNA and protein - RNA editing in plant mitochondria. Physiologia Plantarum, 1991, 81, 437-445.	2.6	7
83	Nucleotide sequences of the mitochondrial genes trnS(TGA) encoding tRNASerTGA in Oenothera berteriana and Arabidopsis thaliana. Gene, 1991, 102, 245-247.	1.0	6
84	The dual-targeted RNA editing factor AEF1 is universally conserved among angiosperms and reveals only minor adaptations upon loss of its chloroplast or its mitochondrial target. Plant Molecular Biology, 2020, 102, 185-198.	2.0	6
85	Looking for sense in the nonsense:Âa short review of non-coding organellar DNA elucidatingnÂthe phylogeny of bryophytes . Bryophyte Diversity and Evolution, 2015, 31, 51.	1.0	5
86	Interorganellar gene transfer in bryophytes: the functional. Molecular Genetics and Genomics, 1997, 256, 589.	2.4	3
87	Plant PPRs Come in Multiple Flavorsâ€"But Why?. Plant and Cell Physiology, 2020, 61, 1685-1686.	1.5	1
88	RNA-Editing in Pflanzen: dem Editor auf der Spur. Biologie in Unserer Zeit, 2011, 41, 228-229.	0.3	0