Jiri Fajkus

List of Publications by Year
in descending order

137 papers	4,338 citations	101543 36 h-index	155660 55 g-index
140 all docs	140 docs citations	140 times ranked	3586 citing authors

#	Article	IF	Citations
1	MEDIATOR SUBUNIT17 integrates jasmonate and auxin signaling pathways to regulate thermomorphogenesis. Plant Physiology, 2022, 189, 2259-2280.	4.8	9
2	The kinase module of the Mediator complex: an important signalling processor for the development and survival of plants. Journal of Experimental Botany, 2021, 72, 224-240.	4.8	15
3	Distinct Responses of Arabidopsis Telomeres and Transposable Elements to Zebularine Exposure. International Journal of Molecular Sciences, 2021, 22, 468.	4.1	7
4	Origin and Fates of TERT Gene Copies in Polyploid Plants. International Journal of Molecular Sciences, 2021, 22, 1783.	4.1	5
5	WALTER: an easy way to online evaluate telomere lengths from terminal restriction fragment analysis. BMC Bioinformatics, 2021, 22, 145.	2.6	23
6	G2/M-checkpoint activation in <i>fasciata1</i> rescues an aberrant S-phase checkpoint but causes genome instability. Plant Physiology, 2021, 186, 1893-1907.	4.8	11
7	Expansion of rDNA and pericentromere satellite repeats in the genomes of bank voles <i>Myodes glareolus</i> exposed to environmental radionuclides. Ecology and Evolution, 2021, 11, 8754-8767.	1.9	7
8	Extraordinary diversity of telomeres, telomerase RNAs and their template regions in Saccharomycetaceae. Scientific Reports, 2021, 11, 12784.	3.3	14
9	Evolution of plant telomerase RNAs: farther to the past, deeper to the roots. Nucleic Acids Research, 2021, 49, 7680-7694.	14.5	26
10	Super-resolution microscopy of chromatin fibers and quantitative DNA methylation analysis of DNA fiber preparations. Journal of Cell Science, 2021, 134, .	2.0	2
11	The rDNA Lociâ€"Intersections of Replication, Transcription, and Repair Pathways. International Journal of Molecular Sciences, 2021, 22, 1302.	4.1	15
12	Two combinatorial patterns of telomere histone marks in plants with canonical and nonâ€canonical telomere repeats. Plant Journal, 2020, 102, 678-687.	5.7	18
13	Composition and Function of Telomeraseâ€"A Polymerase Associated with the Origin of Eukaryotes. Biomolecules, 2020, 10, 1425.	4.0	16
14	G4 Structures in Control of Replication and Transcription of rRNA Genes. Frontiers in Plant Science, 2020, 11, 593692.	3.6	15
15	Composite 5-methylations of cytosines modulate i-motif stability in a sequence-specific manner: Implications for DNA nanotechnology and epigenetic regulation of plant telomeric DNA. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129651.	2.4	19
16	No Evidence of Persistence or Inheritance of Mitochondrial DNA Copy Number in Holocaust Survivors and Their Descendants. Frontiers in Genetics, 2020, 11, 87.	2.3	5
17	Human-like telomeres in Zostera marina reveal a mode of transition from the plant to the human telomeric sequences. Journal of Experimental Botany, 2020, 71, 5786-5793.	4.8	16
18	Chromatin, Epigenetics and Plant Physiology. International Journal of Molecular Sciences, 2020, 21, 2763.	4.1	3

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19	Optimized Detection of Protein-Protein and Protein-DNA Interactions, with Particular Application to Plant Telomeres. Methods in Molecular Biology, 2020, 2175, 139-167.	0.9	0
20	Telomerase RNAs in land plants. Nucleic Acids Research, 2019, 47, 9842-9856.	14.5	54
21	Different Modes of Action of Genetic and Chemical Downregulation of Histone Deacetylases with Respect to Plant Development and Histone Modifications. International Journal of Molecular Sciences, 2019, 20, 5093.	4.1	14
22	Telomeres in Plants and Humans: Not So Different, Not So Similar. Cells, 2019, 8, 58.	4.1	39
23	Holocaust history is not reflected in telomere homeostasis in survivors and their offspring. Journal of Psychiatric Research, 2019, 117, 7-14.	3.1	5
24	Roles of <scp>RAD</scp>51 and <scp>RTEL</scp>1 in telomere and <scp>rDNA</scp> stability in <i>Physcomitrella patens</i>. Plant Journal, 2019, 98, 1090-1105.	5.7	36
25	The plant Pontin and Reptin homologues, Ruv<scp>BL</scp>1 and Ruv<scp>BL</scp>2a, colocalize with <scp>TERT</scp> and <scp>TRB</scp> proteins <i>inÂvivo</i>, and participate in telomerase biogenesis. Plant Journal, 2019, 98, 195-212.	5.7	18
26	Comparative Dissection of Three Giant Genomes: Allium cepa, Allium sativum, and Allium ursinum. International Journal of Molecular Sciences, 2019, 20, 733.	4.1	37
27	Replication of ribosomal DNA in <i>Arabidopsis</i> occurs both inside and outside of the nucleolus during S-phase progression. Journal of Cell Science, 2018, 131, .	2.0	23
28	Transgenerational phenotype aggravation in <scp>CAF</scp>â€1 mutants reveals parentâ€ofâ€origin specific epigenetic inheritance. New Phytologist, 2018, 220, 908-921.	7.3	15
29	Visualization of the Nucleolus Using Ethynyl Uridine. Frontiers in Plant Science, 2018, 9, 177.	3.6	13
30	Rituximab primarily targets an intra-clonal BCR signaling proficient CLL subpopulation characterized by high CD20 levels. Leukemia, 2018, 32, 2028-2031.	7.2	26
31	Telomere elongation upon transfer to callus culture reflects the reprogramming of telomere stability control in Arabidopsis. Plant Molecular Biology, 2018, 98, 81-99.	3.9	8
32	Tissue-specific expression of telomerase reverse transcriptase gene variants in Nicotiana tabacum. Planta, 2017, 245, 549-561.	3.2	10
33	BAL31-NGS approach for identification of telomeres de novo in large genomes. Methods, 2017, 114, 16-27.	3.8	22
34	Variations of Histone Modification Patterns: Contributions of Inter-plant Variability and Technical Factors. Frontiers in Plant Science, 2017, 8, 2084.	3.6	10
35	Evolutionarily Distant Streptophyta Respond Differently to Genotoxic Stress. Genes, 2017, 8, 331.	2.4	1
36	Telomere- and Telomerase-Associated Proteins and Their Functions in the Plant Cell. Frontiers in Plant Science, 2016, 7, 851.	3.6	31

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37	<i>Allium</i> telomeres unmasked: the unusual telomeric sequence (<scp>CTCGGTTATGGG</scp>)_{<i>n</i>} is synthesized by telomerase. Plant Journal, 2016, 85, 337-347.	5.7	72
38	Identification of Nucleolus-Associated Chromatin Domains Reveals a Role for the Nucleolus in 3D Organization of the A.Âthaliana Genome. Cell Reports, 2016, 16, 1574-1587.	6.4	113
39	Variation of 45S rDNA intergenic spacers in Arabidopsis thaliana. Plant Molecular Biology, 2016, 92, 457-471.	3.9	35
40	Phenotypic reversion in <i>fas</i> mutants of <i>Arabidopsis thaliana</i> by reintroduction of <i><scp>FAS</scp></i> genes: variable recovery of telomeres with major spatial rearrangements and transcriptional reprogramming of 45S <scp>rDNA</scp> genes. Plant Journal, 2016, 88, 411-424.	5.7	29
41	Telomere binding protein TRB1 is associated with promoters of translation machinery genes in vivo. Plant Molecular Biology, 2016, 90, 189-206.	3.9	25
42	Chromatin dynamics of plant telomeres and ribosomal genes. Plant Journal, 2015, 83, 18-37.	5.7	52
43	Centromere and telomere sequence alterations reflect the rapid genome evolution within the carnivorous plant genus <i>Genlisea</i>. Plant Journal, 2015, 84, 1087-1099.	5.7	41
44	Holokinetic centromeres and efficient telomere healing enable rapid karyotype evolution. Chromosoma, 2015, 124, 519-528.	2.2	44
45	Telomere dynamics in the lower plant Physcomitrella patens. Plant Molecular Biology, 2015, 87, 591-601.	3.9	9
46	Characterisation of an unusual telomere motif (<scp>TTTTTTAGGG</scp>)_n in the plant <i>Cestrum elegans</i> (Solanaceae), a species with a large genome. Plant Journal, 2015, 82, 644-654.	5.7	51
47	Homologyâ€dependent repair is involved in 45<scp>S rDNA</scp> loss in plant <scp>CAF</scp>â€1 mutants. Plant Journal, 2015, 81, 198-209.	5.7	42
48	Compromised telomere maintenance in hypomethylated Arabidopsis thaliana plants. Nucleic Acids Research, 2014, 42, 2919-2931.	14.5	22
49	Chromatin features of plant telomeric sequences at terminal vs. internal positions. Frontiers in Plant Science, 2014, 5, 593.	3.6	33
50	Telomere repeat binding proteins are functional components of <scp>A</scp>rabidopsis telomeres and interact with telomerase. Plant Journal, 2014, 77, 770-781.	5.7	66
51	Epigenetic Regulation of Telomere Maintenance. Cytogenetic and Genome Research, 2014, 143, 125-135.	1.1	15
52	A telomerase-independent component of telomere loss in chromatin assembly factor 1 mutants of Arabidopsis thaliana. Chromosoma, 2013, 122, 285-293.	2.2	17
53	New perspectives of valproic acid in clinical practice. Expert Opinion on Investigational Drugs, 2013, 22, 1535-1547.	4.1	52
54	Structureâ€function relationships during transgenic telomerase expression in <i>Arabidopsis</i>. Physiologia Plantarum, 2013, 149, 114-126.	5.2	22

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55	Decrease in Abundance of Apurinic/Apyrimidinic Endonuclease Causes Failure of Base Excision Repair in Culture-Adapted Human Embryonic Stem Cells. Stem Cells, 2013, 31, 693-702.	3.2	22
56	Subnuclear partitioning of rRNA genes between the nucleolus and nucleoplasm reflects alternative epiallelic states. Genes and Development, 2013, 27, 1545-1550.	5.9	115
57	A Broad Phylogenetic Survey Unveils the Diversity and Evolution of Telomeres in Eukaryotes. Genome Biology and Evolution, 2013, 5, 468-483.	2.5	89
58	Developmental silencing of the AtTERT gene is associated with increased H3K27me3 loading and maintenance of its euchromatic environment. Journal of Experimental Botany, 2012, 63, 4233-4241.	4.8	14
59	Dynamic Evolution of Telomeric Sequences in the Green Algal Order Chlamydomonadales. Genome Biology and Evolution, 2012, 4, 248-264.	2.5	50
60	Synergism of the Two Myb Domains of Tay1 Protein Results in High Affinity Binding to Telomeres. Journal of Biological Chemistry, 2012, 287, 32206-32215.	3.4	18
61	A combined approach for the study of histone deacetylase inhibitors. Molecular BioSystems, 2012, 8, 2937.	2.9	14
62	Three TERT genes in Nicotiana tabacum. Chromosome Research, 2012, 20, 381-394.	2.2	10
63	HMGB1 gene knockout in mouse embryonic fibroblasts results in reduced telomerase activity and telomere dysfunction. Chromosoma, 2012, 121, 419-431.	2.2	58
64	Non-telomeric activities of telomerase. Molecular BioSystems, 2011, 7, 1013.	2.9	37
65	Editorial [Hot Topic: Proteins in Signalling Pathways and Chromosome Stability in Plants (Guest) Tj ETQq1 1 0.784314 rgBT /Overlock	1.4	0
66	Hypomethylating drugs efficiently decrease cytosine methylation in telomeric DNA and activate telomerase without affecting telomere lengths in tobacco cells. Plant Molecular Biology, 2011, 77, 371-380.	3.9	25
67	Methylation of plant telomeric DNA: what do the results say?. Plant Molecular Biology, 2011, 77, 533-536.	3.9	12
68	Role of HMGB Proteins in Chromatin Dynamics and Telomere Maintenance in Arabidopsis thaliana. Current Protein and Peptide Science, 2011, 12, 105-111.	1.4	17
69	Using the Telobox to Search for Plant Telomere Binding Proteins. Current Protein and Peptide Science, 2011, 12, 75-83.	1.4	19
70	Molecular analysis of T-DNA insertion mutants identified putative regulatory elements in the AtTERT gene. Journal of Experimental Botany, 2011, 62, 5531-5545.	4.8	18
71	Role of HMGB Proteins in Chromatin Dynamics and Telomere Maintenance in Arabidopsis thaliana. Current Protein and Peptide Science, 2011, 999, 1-7.	1.4	0
72	Telomere maintenance in liquid crystalline chromosomes of dinoflagellates. Chromosoma, 2010, 119, 485-493.	2.2	18

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73	Genomic characterization of large rearrangements of the LDLR gene in Czech patients with familial hypercholesterolemia. BMC Medical Genetics, 2010, 11, 115.	2.1	34
74	Keratin mutations in patients with epidermolysis bullosa simplex: correlations between phenotype severity and disturbance of intermediate filament molecular structure. British Journal of Dermatology, 2010, 162, 1004-1013.	1.5	22
75	AtTRB1, a telomeric DNA-binding protein from Arabidopsis, is concentrated in the nucleolus and shows highly dynamic association with chromatin. Plant Journal, 2010, 61, 637-649.	5.7	29
76	Dysfunction of Chromatin Assembly Factor 1 Induces Shortening of Telomeres and Loss of 45S rDNA in<i>Arabidopsis thaliana</i>Â Â. Plant Cell, 2010, 22, 2768-2780.	6.6	86
77	Single Integration and Spread of a <i>Copia</i>-Like Sequence Nested in rDNA Intergenic Spacers of <i>Allium cernuum </i>(Alliaceae). Cytogenetic and Genome Research, 2010, 129, 35-46.	1.1	16
78	Structureâ€"function relationships in telomerase genes. Biology of the Cell, 2009, 101, 375-406.	2.0	51
79	Protect and regulate: Recent findings on plant POT1-like proteins. Biologia Plantarum, 2009, 53, 1-4.	1.9	7
80	Single-Myb-histone proteins from Arabidopsis thaliana: a quantitative study of telomere-binding specificity and kinetics. Biochemical Journal, 2009, 419, 221-230.	3.7	18
81	Functional characterization of domains in AtTRB1, a putative telomere-binding protein in Arabidopsis thaliana. Phytochemistry, 2008, 69, 1814-1819.	2.9	34
82	Role of alternative telomere lengthening unmasked in telomerase knock-out mutant plants. Plant Molecular Biology, 2008, 66, 637-646.	3.9	39
83	Mapping of interaction domains of putative telomereâ€binding proteins AtTRB1 and AtPOT1b from <i>Arabidopsis thaliana</i>. FEBS Letters, 2008, 582, 1400-1406.	2.8	31
84	Analysis of Telomeres and Telomerase. Methods in Molecular Biology, 2008, 463, 267-296.	0.9	2
85	Two faces of Solanaceae telomeres: a comparison between <i>Nicotiana</i> and <i>Cestrum</i> telomeres and telomere-binding proteins. Cytogenetic and Genome Research, 2008, 122, 380-387.	1.1	14
86	Telomerase activity in head and neck cancer. Anticancer Research, 2008, 28, 3125-9.	1.1	12
87	Quantitative analysis of CAPN3 transcripts in LGMD2A patients: Involvement of nonsense-mediated mRNA decay. Neuromuscular Disorders, 2007, 17, 143-147.	0.6	20
88	Analysis of point mutations in the SMN1 gene in SMA patients bearing a single SMN1 copy. Neuromuscular Disorders, 2007, 17, 476-481.	0.6	33
89	Characterization of nucleoprotein complexes in plants with human-type telomere motifs. Plant Physiology and Biochemistry, 2007, 45, 716-721.	5.8	6
90	Minisatellite telomeres occur in the family Alliaceae but are lost in <i>Allium</i>. American Journal of Botany, 2006, 93, 814-823.	1.7	58

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91	Detection of telomerase activity by the TRAP assay and its variants and alternatives. Clinica Chimica Acta, 2006, 371, 25-31.	1.1	66
92	Asparagales Telomerases which Synthesize the Human Type of Telomeres. Plant Molecular Biology, 2006, 60, 633-646.	3.9	43
93	Comparison of different kinds of probes used for analysis of variant telomeric sequences. Biophysical Chemistry, 2005, 117, 225-231.	2.8	12
94	Telomeres in evolution and evolution of telomeres. Chromosome Research, 2005, 13, 469-479.	2.2	142
95	Techniques in plant telomere biology. BioTechniques, 2005, 38, 233-243.	1.8	11
96	Characterization of two<i>Arabidopsis thaliana</i>myb-like proteins showing affinity to telomeric DNA sequence. Genome, 2004, 47, 316-324.	2.0	64
97	An evolutionary change in telomere sequence motif within the plant section Asparagales had significance for telomere nucleoprotein complexes. Cytogenetic and Genome Research, 2004, 107, 132-138.	1.1	21
98	Complete DNA sequence of the linear mitochondrial genome of the pathogenic yeast Candida parapsilosis. Molecular Genetics and Genomics, 2004, 272, 173-180.	2.1	56
99	Interactions of putative telomereâ€binding proteins in <i>Arabidopsis thaliana</i>: identification of functional TRF2 homolog in plants. FEBS Letters, 2004, 578, 311-315.	2.8	53
100	The signature of the Cestrum genome suggests an evolutionary response to the loss of (TTTAGGG) n telomeres. Chromosoma, 2003, 112, 164-172.	2.2	42
101	Characterization of telomere-subtelomere junctions in Silene latifolia. Molecular Genetics and Genomics, 2003, 269, 13-20.	2.1	32
102	The absence of <i>Arabidopsis</i>â€type telomeres in <i>Cestrum</i> and closely related genera <i>Vestia</i> and <i>Sessea</i> (Solanaceae): first evidence from eudicots. Plant Journal, 2003, 34, 283-291.	5.7	106
103	Telomere variability in the monocotyledonous plant order Asparagales. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 1893-1904.	2.6	110
104	Changes in telomerase activity, expression and splicing in response to differentiation of normal and carcinoma colon cells. Anticancer Research, 2003, 23, 1605-12.	1.1	15
105	Dual-color real-time telomeric repeat amplification protocol. BioTechniques, 2003, 35, 912-4.	1.8	11
106	Tiptoeing to chromosome tips: facts, promises and perils of today's human telomere biology. Philosophical Transactions of the Royal Society B: Biological Sciences, 2002, 357, 545-562.	4.0	18
107	Recovery of tobacco cells from cadmium stress is accompanied by DNA repair and increased telomerase activity. Journal of Experimental Botany, 2002, 53, 2151-2158.	4.8	53
108	Analysis of chromosome termini in potato varieties. Plant, Soil and Environment, 2002, 48, 477-479.	2.2	1

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109	Columnar Packing of Telomeric Nucleosomes. Biochemical and Biophysical Research Communications, 2001, 280, 961-963.	2.1	55
110	Novel dystrophin mutations revealed by analysis of dystrophin mRNA: alternative splicing suppresses the phenotypic effect of a nonsense mutation. Neuromuscular Disorders, 2001, 11, 133-138.	0.6	37
111	Changes in the expression of FGFR3 in patients with chronic myeloid leukaemia receiving transplants of allogeneic peripheral blood stem cells. British Journal of Haematology, 2001, 113, 832-835.	2.5	8
112	Transition between two forms of heterochromatin at plant subtelomeres. Chromosome Research, 2001, 9, 309-323.	2.2	35
113	Analysis of the Gâ€overhang structures on plant telomeres: evidence for two distinct telomere architectures. Plant Journal, 2000, 23, 633-641.	5.7	65
114	Detailed Mapping of Methylcytosine Positions at the CpG Island Surrounding the Pa Promoter at the bcr-abl Locus in CML Patients and in Two Cell Lines, K562 and BV173. Blood Cells, Molecules, and Diseases, 2000, 26, 193-204.	1.4	5
115	Telomerase Activity and Expression and Telomere Analysis in Situ in the Course of Treatment of Childhood Leukemias. Blood Cells, Molecules, and Diseases, 2000, 26, 534-539.	1.4	14
116	Inhibition of plant telomerase by telomereâ€binding proteins from nuclei of telomeraseâ€negative tissues. FEBS Letters, 2000, 467, 305-310.	2.8	24
117	TAS49Â—a dispersed repetitive sequence isolated from subtelomeric regions of Nicotiana tomentosiformis chromosomes. Genome, 2000, 43, 273-284.	2.0	23
118	<i>TAS49</i>â€”a dispersed repetitive sequence isolated from subtelomeric regions of <i>Nicotiana</i> <i>tomentosiformis</i> chromosomes. Genome, 2000, 43, 273-284.	2.0	5
119	DNA loop domains in a 1.4-Mb region around the human hprt gene mapped by cleavage mediated by nuclear matrix-associated topoisomerase II. Molecular Genetics and Genomics, 1998, 260, 410-416.	2.4	8
120	Plant cells express telomerase activity upon transfer to callus culture, without extensively changing telomere lengths. Molecular Genetics and Genomics, 1998, 260, 470-474.	2.4	72
121	Developmental Control of Telomere Lengths and Telomerase Activity in Plants. Plant Cell, 1998, 10, 1691-1698.	6.6	142
122	Characterization of Two Nonsense Mutations in the Human Dystrophin Gene. Journal of Neurogenetics, 1998, 12, 183-189.	1.4	3
123	Developmental Control of Telomere Lengths and Telomerase Activity in Plants. Plant Cell, 1998, 10, 1691.	6.6	13
124	Distribution of dystrophin gene deletions mapped by multiplex PCR in the Moravian population. Molecular and Cellular Probes, 1997, 11, 85-87.	2.1	0
125	Chromatin fragmentation associated with apoptotic changes in tobacco cells exposed to cold stress. FEBS Letters, 1997, 414, 289-292.	2.8	131
126	NTRS, a new family of highly repetitive DNAs specific for the T1 chromosome of tobacco. Chromosoma, 1997, 106, 369-379.	2.2	39

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127	Telomerase activity in plant cells. FEBS Letters, 1996, 391, 307-309.	2.8	59
128	Evidence for a sequence-directed conformation periodicity in the genomic highly repetitive DNA detectable with single-strand-specific chemical probe potassium permanganate. Chromosome Research, 1996, 4, 340-349.	2.2	4
129	Species-specific evolution of telomeric and rDNA repeats in the tobacco composite genome. Theoretical and Applied Genetics, 1996, 92, 1108-1111.	3.6	33
130	Characterization of a new family of tobacco highly repetitive DNA, GRS, specific for theNicotiana tomentosiformis genomic component. Chromosome Research, 1995, 3, 245-254.	2.2	55
131	Organization of telomeric and subtelomeric chromatin in the higher plant Nicotiana tabacum. Molecular Genetics and Genomics, 1995, 247, 633-638.	2.4	151
132	DNA Curvature of the Tobacco GRS Repetitive Sequence Family and its Relation to Nucleosome Positioning. Journal of Biomolecular Structure and Dynamics, 1995, 12, 1103-1119.	3.5	11
133	The telomeric sequence is directly attached to the HRS60 subtelomeric tandem repeat in tobacco chromosomes. FEBS Letters, 1995, 364, 33-35.	2.8	35
134	Changes in chromatin structure due to hypomethylation induced with 5-azacytidine orDL-ethionine. FEBS Letters, 1992, 314, 13-16.	2.8	30
135	Genome modifications in protoplast-derived tobacco plants: Contents of repetitive DNA sequences. Biologia Plantarum, 1991, 33, 448.	1.9	7
136	Genome modifications in protoplast-derived tobacco plants: Phenotypic evaluation and RFLP Analysis. Biologia Plantarum, 1991, 33, 455-460.	1.9	8
137	Isolation and characterization of two middle repetitive DNA sequences of nuclear tobacco genome. Theoretical and Applied Genetics, 1991, 81, 740-744.	3.6	25