John Pannell

List of Publications by Year in descending order

145 papers	6,428 citations	53751 45 h-index	82499 72 g-index
158 all docs	158 docs citations	158 times ranked	5172 citing authors

#	Article	IF	Citations
1	Effects of metapopulation processes on measures of genetic diversity. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 1851-1864.	1.8	248
2	The Evolution and Maintenance of Androdioecy. Annual Review of Ecology, Evolution, and Systematics, 2002, 33, 397-425.	6.7	247
3	BAKER'S LAW REVISITED: REPRODUCTIVE ASSURANCE IN A METAPOPULATION. Evolution; International Journal of Organic Evolution, 1998, 52, 657-668.	1.1	234
4	Silene as a model system in ecology and evolution. Heredity, 2009, 103, 5-14.	1.2	203
5	About PAR: The distinct evolutionary dynamics of the pseudoautosomal region. Trends in Genetics, 2011, 27, 358-367.	2.9	184
6	The scope of Baker's law. New Phytologist, 2015, 208, 656-667.	3.5	178
7	Reduced inbreeding depression after species range expansion. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15379-15383.	3.3	151
8	Are Q_{ST}â€“F_{ST} comparisons for natural populations meaningful?. Molecular Ecology, 2008, 17, 4782-4785.	2.0	147
9	Baker's Law Revisited: Reproductive Assurance in a Metapopulation. Evolution; International Journal of Organic Evolution, 1998, 52, 657.	1.1	141
10	Reduced Responses to Selection After Species Range Expansion. Science, 2008, 321, 96-96.	6.0	140
11	Evolution of the mating system in colonizing plants. Molecular Ecology, 2015, 24, 2018-2037.	2.0	137
12	NEUTRAL GENETIC DIVERSITY IN A METAPOPULATION WITH RECURRENT LOCAL EXTINCTION AND RECOLONIZATION. Evolution; International Journal of Organic Evolution, 1999, 53, 664-676.	1.1	129
13	Sexual selection in plants. Current Biology, 2011, 21, R176-R182.	1.8	127
14	Polyploidy and the sexual system: what can we learn from Mercurialis annua?. Biological Journal of the Linnean Society, 2004, 82, 547-560.	0.7	121
15	Low number of fixed somatic mutations in a long-lived oak tree. Nature Plants, 2017, 3, 926-929.	4.7	120
16	On the rarity of dioecy in flowering plants. Molecular Ecology, 2017, 26, 1225-1241.	2.0	118
17	ECOLOGICAL DIFFERENTIATION AND DIPLOID SUPERIORITY ACROSS A MOVING PLOIDY CONTACT ZONE. Evolution; International Journal of Organic Evolution, 2007, 61, 125-140.	1.1	107
18	THE MAINTENANCE OF GYNODIOECY AND ANDRODIOECY IN A METAPOPULATION. Evolution; International Journal of Organic Evolution, 1997, 51, 10-20.	1.1	104

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19	Variation in Sex Ratios and Sex Allocation in Androdioecious Mercurialis Annua. Journal of Ecology, 1997, 85, 57.	1.9	102
20	Simple allelic-phenotype diversity and differentiation statistics for allopolyploids. Heredity, 2006, 97, 296-303.	1.2	102
21	COALESCENCE IN A METAPOPULATION WITH RECURRENT LOCAL EXTINCTION AND RECOLONIZATION. Evolution; International Journal of Organic Evolution, 2003, 57, 949-961.	1.1	95
22	Roots, shoots and reproduction: sexual dimorphism in size and costs of reproductive allocation in an annual herb. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 2595-2602.	1.2	90
23	Selfâ€compatibility is overâ€represented on islands. New Phytologist, 2017, 215, 469-478.	3.5	84
24	Mixed genetic and environmental sex determination in an androdioecious population of Mercurialis annua. Heredity, 1997, 78, 50-56.	1.2	83
25	HYBRIDIZATION, POLYPLOIDY, AND THE EVOLUTION OF SEXUAL SYSTEMS IN MERCURIALIS (EUPHORBIACEAE). Evolution; International Journal of Organic Evolution, 2006, 60, 1801-1815.	1.1	83
26	Sexual Systems and Population Genetic Structure in an Annual Plant: Testing the Metapopulation Model. American Naturalist, 2006, 167, 354-366.	1.0	81
27	Neutral Genetic Diversity in a Metapopulation with Recurrent Local Extinction and Recolonization. Evolution; International Journal of Organic Evolution, 1999, 53, 664.	1.1	77
28	Plant Sex Determination. Current Biology, 2017, 27, R191-R197.	1.8	75
29	Range Expansion Compromises Adaptive Evolution in an Outcrossing Plant. Current Biology, 2017, 27, 2544-2551.e4.	1.8	75
30	Widespread functional androdioecy inMercurialis annuaL. (Euphorbiaceae). Biological Journal of the Linnean Society, 1997, 61, 95-116.	0.7	74
31	Effect of magnetic fields on cryptochrome-dependent responses in Arabidopsis thaliana. Journal of the Royal Society Interface, 2009, 6, 1193-1205.	1.5	73
32	Densityâ€dependent pollen limitation and reproductive assurance in a windâ€pollinated herb with contrasting sexual systems. Journal of Ecology, 2011, 99, 1531-1539.	1.9	70
33	Rapid Displacement of a Monoecious Plant Lineage Is Due to Pollen Swamping by a Dioecious Relative. Current Biology, 2006, 16, 996-1000.	1.8	69
34	DENSITY-DEPENDENT SELF-FERTILIZATION AND MALE VERSUS HERMAPHRODITE SIRING SUCCESS IN AN ANDRODIOECIOUS PLANT. Evolution; International Journal of Organic Evolution, 2007, 61, 2349-2359.	1.1	69
35	The incidence and selection of multiple mating in plants. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120051.	1.8	67
36	Colonisation as a common denominator in plant metapopulations and range expansions: effects on genetic diversity and sexual systems. Landscape Ecology, 2006, 21, 837-848.	1.9	66

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37	Gender Variation and Transitions between Sexual Systems inMercurialis annua(Euphorbiaceae). International Journal of Plant Sciences, 2008, 169, 129-139.	0.6	66
38	Evolution in subdivided plant populations: concepts, recent advances and future directions. New Phytologist, 2014, 201, 417-432.	3.5	65
39	The Maintenance of Gynodioecy and Androdioecy in a Metapopulation. Evolution; International Journal of Organic Evolution, 1997, 51, 10.	1.1	60
40	A hypothesis for the evolution of androdioecy: the joint influence of reproductive assurance and local mate competition in a metapopulation. Evolutionary Ecology, 2000, 14, 195-211.	0.5	60
41	Characterization of Microsatellite Loci and Reliable Genotyping in a Polyploid Plant, Mercurialis perennis (Euphorbiaceae). Journal of Heredity, 2011, 102, 479-488.	1.0	60
42	Genetic differentiation for size at first reproduction through male versus female functions in the widespread Mediterranean tree Pinus pinaster. Annals of Botany, 2012, 110, 1449-1460.	1.4	58
43	Sexual dimorphism in a dioecious population of the wind-pollinated herb Mercurialis annua: the interactive effects of resource availability and competition. Annals of Botany, 2011, 107, 1039-1045.	1.4	57
44	Hermaphroditic Sex Allocation Evolves When Mating Opportunities Change. Current Biology, 2009, 19, 514-517.	1.8	53
45	Early Sex-Chromosome Evolution in the Diploid Dioecious Plant Mercurialis annua. Genetics, 2019, 212, 815-835.	1.2	53
46	A neutral model for the loss of recombination on sex chromosomes. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200096.	1.8	50
47	Sex determination in dioecious Mercurialis annua and its close diploid and polyploid relatives. Heredity, 2015, 114, 262-271.	1.2	48
48	Kin discrimination allows plants to modify investment towards pollinator attraction. Nature Communications, 2018, 9, 2018.	5.8	47
49	Sex-specific strategies of resource allocation in response to competition for light in a dioecious plant. Oecologia, 2017, 185, 675-686.	0.9	44
50	Canopy seed storage is associated with sexual dimorphism in the woody dioecious genus Leucadendron. Journal of Ecology, 2010, 98, 509-515.	1.9	43
51	Sexual dimorphism in resource acquisition and deployment: both size and timing matter. Annals of Botany, 2011, 107, 119-126.	1.4	41
52	Widespread functional androdioecy in Mercurialis annua L. (Euphorbiaceae). Biological Journal of the Linnean Society, 1997, 61, 95-116.	0.7	39
53	Densityâ€Dependent Regulation of the Sex Ratio in an Annual Plant. American Naturalist, 2008, 171, 824-830.	1.0	36
54	Mixed genetic and environmental sex determination in an androdioecious population of Mercurialis annua. Heredity, 1997, 78, 50-56.	1.2	35

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55	Sexual Systems and Measures of Occupancy and Abundance in an Annual Plant: Testing the Metapopulation Model. American Naturalist, 2007, 169, 20-28.	1.0	34
56	Leaf Mimicry: Chameleon-like Leaves in a Patagonian Vine. Current Biology, 2014, 24, R357-R359.	1.8	34
57	Inferring the mode of origin of polyploid species from nextâ€generation sequence data. Molecular Ecology, 2015, 24, 1047-1059.	2.0	34
58	Effects of Population Size and Metapopulation Dynamics on a Mating-System Polymorphism. Theoretical Population Biology, 2001, 59, 145-155.	0.5	33
59	â€˜Haldane's Sieveâ€™ in a metapopulation: sifting through plant reproductive polymorphisms. Trends in Ecology and Evolution, 2005, 20, 374-379.	4.2	33
60	Probing the primacy of the patch: what makes a metapopulation?. Journal of Ecology, 2003, 91, 485-488.	1.9	30
61	Sexual dimorphism in intraâ€•and interspecific competitive ability of the dioecious herb Mercurialis annua. Plant Biology, 2011, 13, 218-222.	1.8	30
62	Patterns of flowering and sex-ratio variation in the Mediterranean shrub Phillyrea angustifolia (Oleaceae): implications for the maintenance of males with hermaphrodites. Ecology Letters, 2000, 3, 495-502.	3.0	30
63	What is functional androdioecy?. Functional Ecology, 2002, 16, 862-865.	1.7	29
64	Regional variation in sex ratios and sex allocation in androdioecious Mercurialis annua. Journal of Evolutionary Biology, 2014, 27, 1467-1477.	0.8	29
65	Female sterility in Ulmus minor (Ulmaceae): a hypothesis invoking the cost of sex in a clonal plant. American Journal of Botany, 2003, 90, 603-609.	0.8	28
66	A Quantitative Genetic Signature of Senescence in a Short-Lived Perennial Plant. Current Biology, 2014, 24, 744-747.	1.8	28
67	Rapid divergence in physiological and lifeâ€•history traits between northern and southern populations of the British introduced neoâ€•species, Senecio squalidus. Oikos, 2009, 118, 1053-1061.	1.2	27
68	Consequences of inbreeding depression due to sex-linked loci for the maintenance of males and outcrossing in branchiopod crustaceans. Genetical Research, 2008, 90, 73-84.	0.3	25
69	The rapid dissolution of dioecy by experimental evolution. Current Biology, 2021, 31, 1277-1283.e5.	1.8	24
70	Two's Company, Three's a Crowd: Experimental Evaluation of the Evolutionary Maintenance of Trioecy in Mercurialis annua (Euphorbiaceae). PLoS ONE, 2012, 7, e35597.	1.1	23
71	Size and Content of the Sex-Determining Region of the Y Chromosome in Dioecious Mercurialis annua, a Plant with Homomorphic Sex Chromosomes. Genes, 2018, 9, 277.	1.0	23
72	Sexual dimorphism and rapid turnover in gene expression in pre-reproductive seedlings of a dioecious herb. Annals of Botany, 2019, 123, 1119-1131.	1.4	23

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73	THE EFFECT OF POLLEN VERSUS SEED FLOW ON THE MAINTENANCE OF NUCLEAR-CYTOPLASMIC GYNODIOECY. Evolution; International Journal of Organic Evolution, 2010, 64, 772-784.	1.1	22
74	Inbreeding depression is high in a selfâ€incompatible perennial herb population but absent in a selfâ€compatible population showing mixed mating. Ecology and Evolution, 2017, 7, 8535-8544.	0.8	22
75	Canopy-Stored Seed Banks of Allocasuarina distyla and A. nana in Relation to Time Since Fire. Australian Journal of Botany, 1993, 41, 1.	0.3	21
76	Inbreeding depression in dioecious populations of the plant Mercurialis annua: comparisons between outcrossed progeny and the progeny of self-fertilized feminized males. Heredity, 2009, 102, 600-608.	1.2	21
77	Do metrics of sexual selection conform to Bateman's principles in a wind-pollinated plant?. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20190532.	1.2	21
78	Sexâ€specific selection on plant architecture through â€œbudgetâ€•and â€œdirectâ€•effects in experimental populations of the windâ€pollinated herb, Mercurialis annua. Evolution; International Journal of Organic Evolution, 2019, 73, 897-912.	1.1	21
79	Hybridization, polyploidy, and the evolution of sexual systems in Mercurialis (Euphorbiaceae). Evolution; International Journal of Organic Evolution, 2006, 60, 1801-15.	1.1	21
80	Solving the Problem of Ambiguous Paralogy for Marker Loci: Microsatellite Markers with Diploid Inheritance in Allohexaploid Mercurialis annua (Euphorbiaceae). Journal of Heredity, 2010, 101, 504-511.	1.0	20
81	A functional decomposition of sex inconstancy in the dioecious, colonizing plant Mercurialis annua. American Journal of Botany, 2019, 106, 722-732.	0.8	20
82	Differential niche modification by males and females of a dioecious herb: extending the Jack Sprat effect. Journal of Evolutionary Biology, 2010, 23, 2262-2266.	0.8	19
83	Female sterility associated with increased clonal propagation suggests a unique combination of androdioecy and asexual reproduction in populations of Cardamine amara (Brassicaceae). Annals of Botany, 2015, 115, 763-776.	1.4	19
84	The role of lateral and vertical herkogamy in the divergence of the blue- and red-flowered lineages of Lysimachia arvensis. Annals of Botany, 2020, 125, 1127-1135.	1.4	19
85	Mating-System Evolution: Rise of the Irresistible Males. Current Biology, 2010, 20, R482-R484.	1.8	18
86	The Scope for Postmating Sexual Selection in Plants. Trends in Ecology and Evolution, 2021, 36, 556-567.	4.2	18
87	Exogenous selection shapes germination behaviour and seedling traits of populations at different altitudes in a Senecio hybrid zone. Annals of Botany, 2012, 110, 1439-1447.	1.4	17
88	Responses of carbon acquisition traits to irradiance and light quality in Mercurialis annua (Euphorbiaceae): evidence for weak integration of plastic responses. American Journal of Botany, 2002, 89, 1388-1400.	0.8	16
89	Smallâ€scale and regional spatial dynamics of an annual plant with contrasting sexual systems. Journal of Ecology, 2017, 105, 1044-1057.	1.9	16
90	High rates of evolution preceded shifts to sex-biased gene expression in Leucadendron, the most sexually dimorphic angiosperms. ELife, 2021, 10, .	2.8	15

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91	Sex Determination: Separate Sexes Are a Double Turnoff in Melons. Current Biology, 2016, 26, R171-R174.	1.8	14
92	Effects of pollination intensity on offspring number and quality in a windâ€pollinated herb. Journal of Ecology, 2017, 105, 197-208.	1.9	14
93	The loss of selfâ€incompatibility in a range expansion. Journal of Evolutionary Biology, 2020, 33, 1235-1244.	0.8	14
94	Enhanced leaky sex expression in response to pollen limitation in the dioecious plant Mercurialis annua. Journal of Evolutionary Biology, 2021, 34, 416-422.	0.8	14
95	Sexual Dimorphism in Androdioecious Mercurialis annua, a Wind-Pollinated Herb. International Journal of Plant Sciences, 2011, 172, 49-59.	0.6	13
96	A test of the size-constraint hypothesis for a limit to sexual dimorphism in plants. Oecologia, 2016, 181, 873-884.	0.9	13
97	Mimicry in plants. Current Biology, 2016, 26, R784-R785.	1.8	13
98	Heritabilities of lateral and vertical herkogamy in Lysimachia arvensis. Plant Species Biology, 2019, 34, 31-37.	0.6	13
99	The maintenance of hybrid zones across a disturbance gradient. Heredity, 2007, 99, 89-101.	1.2	12
100	Do plants adjust their sex allocation and secondary sexual morphology in response to their neighbours?. Annals of Botany, 2012, 110, 1471-1478.	1.4	12
101	On the problems of a closed marriage: celebrating Darwin 200. Biology Letters, 2009, 5, 332-335.	1.0	11
102	Sex-Differential Herbivory in Androdioecious Mercurialis annua. PLoS ONE, 2011, 6, e22083.	1.1	11
103	Mixed mating in androdioecious Mercurialis annua inferred using progeny arrays and diploid-acting microsatellite loci in a hexaploid background. Annals of Botany, 2011, 107, 1057-1061.	1.4	11
104	Pleiotropic effect of the Flowering Locus C on plant resistance and defence against insect herbivores. Journal of Ecology, 2018, 106, 1244-1255.	1.9	11
105	The paradoxical spread of a new Y chromosome â€“ a novel explanation. Trends in Ecology and Evolution, 2009, 24, 59-63.	4.2	10
106	Recurrent allopolyploidization, Y-chromosome introgression and the evolution of sexual systems in the plant genus Mercurialis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2022, 377, 20210224.	1.8	10
107	Maintenance of mixed mating after the loss of self-incompatibility in a long-lived perennial herb. Annals of Botany, 2017, 119, 177-190.	1.4	9
108	Low siring success of females with an acquired male function illustrates the legacy of sexual dimorphism in constraining the breakdown of dioecy. Ecology Letters, 2019, 22, 486-497.	3.0	9

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109	Symptoms of population range expansion: lessons from phenotypic and genetic differentiation in hexaploidMercurialis annua. Plant Ecology and Diversity, 2010, 3, 103-108.	1.0	8
110	YY males of the dioecious plant Mercurialis annua are fully viable but produce largely infertile pollen. New Phytologist, 2019, 224, 1394-1404.	3.5	8
111	Environmental variation in sex ratios and sexual dimorphism in three windâ€pollinated dioecious plant species. Oikos, 2022, 2022, .	1.2	8
112	Intraorganismal genetic heterogeneity: is it a useful concept?. Journal of Evolutionary Biology, 2004, 17, 1180-1181.	0.8	7
113	Phenotypic plasticity and a functional vs genetic perspective of plant gender. New Phytologist, 2005, 168, 506-509.	3.5	7
114	Siring Success and Paternal Effects in Heterodichogamous Acer opalus. Annals of Botany, 2008, 101, 1017-1026.	1.4	7
115	Genetic load, inbreeding depression and heterosis in an ageâ€structured metapopulation. Journal of Evolutionary Biology, 2010, 23, 2324-2332.	0.8	7
116	Plasticity in sex allocation in the plant <scp>M</scp>ercurialis annua is greater for hermaphrodites sampled from dimorphic than from monomorphic populations. Journal of Evolutionary Biology, 2014, 27, 1939-1947.	0.8	7
117	Plant Mating Systems: Female Sterility in the Driverâ€™s Seat. Current Biology, 2015, 25, R511-R514.	1.8	7
118	Sex Determination: Sterility Genes out of Sequence. Current Biology, 2018, 28, R80-R83.	1.8	7
119	Rapid loss of selfâ€incompatibility in experimental populations of the perennial outcrossing plantLinaria cavanillesii. Evolution; International Journal of Organic Evolution, 2019, 73, 913-926.	1.1	6
120	HYBRIDIZATION, POLYPLOIDY, AND THE EVOLUTION OF SEXUAL SYSTEMS IN MERCURIALIS (EUPHORBIACEAE). Evolution; International Journal of Organic Evolution, 2006, 60, 1801.	1.1	5
121	Mating-System Evolution: Succeeding by Celibacy. Current Biology, 2009, 19, R983-R985.	1.8	5
122	Plant Sex Chromosomes: Lost Genes with Little Compensation. Current Biology, 2015, 25, R427-R430.	1.8	5
123	The divergence history of the perennial plant Linaria cavanillesii confirms a recent loss of selfâ€incompatibility. Journal of Evolutionary Biology, 2018, 31, 136-147.	0.8	5
124	The ecology of plant populations: their dynamics, interactions and evolution. Annals of Botany, 2012, 110, 1351-1355.	1.4	4
125	Development and characterization of microsatellite markers for diploid populations of the wind-pollinated herb Mercurialis annua. BMC Research Notes, 2017, 10, 386.	0.6	4
126	Gender specialisation and stigma height dimorphism in Mediterranean Lithodora fruticosa (Boraginaceae). Plant Biology, 2018, 20, 112-117.	1.8	4

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127	Pollination elicits an accelerated reduction in nocturnal scent emission by flowers of the dioecious herb Silene latifolia. Botany, 2019, 97, 495-502.	0.5	4
128	Evolution of combined versus separate sexes: What have we learnt from the Iberian populations of Mercurialis annua?. Ecosistemas, 2014, 23, 13-22.	0.2	4
129	Dioecy and chromosomal sex determination are maintained through allopolyploid speciation in the plant genus Mercurialis. PLoS Genetics, 2022, 18, e1010226.	1.5	4
130	Evolution in subdivided populations. Trends in Ecology and Evolution, 2000, 15, 90-92.	4.2	3
131	Inbreeding depression and genetic load at partially linked loci in a metapopulation. Genetical Research, 2010, 92, 127-140.	0.3	3
132	Transitions Between Combined and Separate Sexes in Flowering Plants. , 2018, , 81-98.		3
133	A new biological species in the Mercurialis annua polyploid complex: functional divergence in inflorescence morphology and hybrid sterility. Annals of Botany, 2019, 124, 165-178.	1.4	3
134	The opposing effects of genetic drift and Haldane's sieve on floralâ€morph frequencies in tristylous metapopulations. New Phytologist, 2019, 224, 1229-1240.	3.5	3
135	Rapid divergence in vegetative morphology of a windâ€pollinated plant between populations at contrasting densities. Evolution; International Journal of Organic Evolution, 2022, 76, 1737-1748.	1.1	2
136	Dispersal Ecology: Where Have All the Seeds Gone?. Current Biology, 2007, 17, R360-R362.	1.8	1
137	Speciation Genetics: Reinforcement by Shades and Hues. Current Biology, 2012, 22, R299-R302.	1.8	1
138	Linking key dimensions of plant phenotypic diversity. A commentary on: â€˜Mating systems and life historyâ€™. Annals of Botany, 2021, 127, iii-v.	1.4	1
139	Simulated herbivory enhances leaky sex expression in the dioecious herbMercurialis annua. Annals of Botany, 2022, 129, 79-86.	1.4	1
140	Mating-System Evolution: Genies from a Bottleneck. Current Biology, 2009, 19, R369-R370.	1.8	0
141	Characterization of microsatellite markers for Moricandia moricandioides (Brassicaceae) and related species. Applications in Plant Sciences, 2018, 6, e01172.	0.8	0
142	The heavy burden of female reproduction. A commentary on: â€˜Time for a change: patterns of sex expression, health and mortality in a sex-changing treeâ€™. Annals of Botany, 2019, 124, iv-v.	1.4	0
143	John Pannell. Current Biology, 2020, 30, R3-R5.	1.8	0
144	Gender and sexual dimorphism in flowering plants. Ed. by Monica A. Geber, Todd E. Dawson and Lynda F. Delph . 305 pages. Berlin, Germany: Springer Verlag, 1999. Â£49.50 h/b. ISBN 3 540 64597 7.. New Phytologist, 2000, 145, 423-425.	3.5	0

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145	Long story short. ELife, 2016, 5, .	2.8	0