Thomas Alerstam

List of Publications by Year
in descending order

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123 papers	9,440 citations	34105 52 h-index	40979 93 g-index
124 all docs	124 docs citations	124 times ranked	4600 citing authors

#	Article	IF	Citations
1	Long-distance migration: evolution and determinants. Oikos, 2003, 103, 247-260.	2.7	906
2	Optimum Fuel Loads in Migratory Birds: Distinguishing Between Time and Energy Minimization. Journal of Theoretical Biology, 1997, 189, 227-234.	1.7	389
3	When and where does mortality occur in migratory birds? Direct evidence from longâ€term satellite tracking of raptors. Journal of Animal Ecology, 2014, 83, 176-184.	2.8	361
4	The Development of Bird Migration Theory. Journal of Avian Biology, 1998, 29, 343.	1.2	342
5	Differences in Speed and Duration of Bird Migration between Spring and Autumn. American Naturalist, 2013, 181, 837-845.	2.1	313
6	Optimal bird migration revisited. Journal of Ornithology, 2011, 152, 5-23.	1.1	304
7	Optimal Fat Loads in Migrating Birds: A Test of the Time-Minimization Hypothesis. American Naturalist, 1992, 140, 477-491.	2.1	238
8	Detours in Bird Migration. Journal of Theoretical Biology, 2001, 209, 319-331.	1.7	228
9	Animal Orientation Strategies for Movement in Flows. Current Biology, 2011, 21, R861-R870.	3.9	227
10	Flight Speeds among Bird Species: Allometric and Phylogenetic Effects. PLoS Biology, 2007, 5, e197.	5.6	220
11	The annual cycle of a trans-equatorial Eurasianâ€“African passerine migrant: different spatio-temporal strategies for autumn and spring migration. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 1008-1016.	2.6	198
12	Wind as Selective Agent in Bird Migration. Ornis Scandinavica, 1979, 10, 76.	1.0	194
13	Optimal fat loads and longâ€distance flights by migrating Knots Calidris canutus, Sanderlings C. alba and Turnstones Arenaria interpres. Ibis, 1991, 133, 140-152.	1.9	176
14	Age-dependent migration strategy in honey buzzards Pernis apivorus tracked by satellite. Oikos, 2003, 103, 385-396.	2.7	159
15	Temporal and spatial patterns of repeated migratory journeys by ospreys. Animal Behaviour, 2006, 71, 555-566.	1.9	156
16	Bird orientation: compensation for wind drift in migrating raptors is age dependent. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, S8-11.	2.6	153
17	Conflicting Evidence About Long-Distance Animal Navigation. Science, 2006, 313, 791-794.	12.6	150
18	Individuality in bird migration: routes and timing. Biology Letters, 2011, 7, 502-505.	2.3	146

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19	How hazardous is the Sahara Desert crossing for migratory birds? Indications from satellite tracking of raptors. Biology Letters, 2010, 6, 297-300.	2.3	126
20	Climbing Performance of Migrating Birds as A Basis for Estimating Limits for Fuel-Carrying Capacity and Muscle Work. Journal of Experimental Biology, 1992, 164, 19-38.	1.7	118
21	How Fast Can Birds Migrate?. Journal of Avian Biology, 1998, 29, 424.	1.2	117
22	Convergent patterns of long-distance nocturnal migration in noctuid moths and passerine birds. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 3074-3080.	2.6	102
23	Bimodal orientation and the occurrence of temporary reverse bird migration during autumn in south Scandinavia. Behavioral Ecology and Sociobiology, 1996, 38, 293-302.	1.4	98
24	Dark-bellied Brent Geese Branta bernicla bernicla, as recorded by satellite telemetry, do not minimize flight distance during spring migration. Ibis, 2002, 144, 106-121.	1.9	97
25	Optimal use of wind by migrating birds: Combined drift and overcompensation. Journal of Theoretical Biology, 1979, 79, 341-353.	1.7	95
26	Satellite tracking of Swedish Ospreys Pandion haliaetus : autumn migration routes and orientation. Journal of Avian Biology, 2001, 32, 47-56.	1.2	95
27	Geographical and temporal flexibility in the response to crosswinds by migrating raptors. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 1339-1346.	2.6	95
28	Flight by night or day? Optimal daily timing of bird migration. Journal of Theoretical Biology, 2009, 258, 530-536.	1.7	93
29	Great flights by great snipes: long and fast non-stop migration over benign habitats. Biology Letters, 2011, 7, 833-835.	2.3	91
30	Weather and fuel reserves determine departure and flight decisions in passerines migrating across the Baltic Sea. Animal Behaviour, 2015, 104, 59-68.	1.9	88
31	Activity and migratory flights of individual freeâ€flying songbirds throughout the annual cycle: method and first case study. Journal of Avian Biology, 2017, 48, 309-319.	1.2	86
32	Bird flight and optimal migration. Trends in Ecology and Evolution, 1991, 6, 210-215.	8.7	85
33	Narrow-Front Loop Migration in a Population of the Common Cuckoo Cuculus canorus, as Revealed by Satellite Telemetry. PLoS ONE, 2014, 9, e83515.	2.5	85
34	Effects of Sidewinds on Optimal Flight Speed of Birds. Journal of Theoretical Biology, 1994, 170, 219-225.	1.7	82
35	The adaptive significance of reoriented migration of chaffinches Fringilla coelebs and bramblings F. montifringilla during autumn in southern Sweden. Behavioral Ecology and Sociobiology, 1986, 19, 417-424.	1.4	80
36	Loop migration in adult marsh harriers Circus aeruginosus, as revealed by satellite telemetry. Journal of Avian Biology, 2010, 41, 200-207.	1.2	78

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37	Skipping the Baltic: the emergence of a dichotomy of alternative spring migration strategies in Russian barnacle geese. Journal of Animal Ecology, 2009, 78, 63-72.	2.8	77
38	Flexibility in daily travel routines causes regional variation in bird migration speed. Behavioral Ecology and Sociobiology, 2008, 62, 1427-1432.	1.4	75
39	Timing and speed of migration in male, female and juvenile Ospreys Pandion haliaetus between Sweden and Africa as revealed by field observations, radar and satellite tracking. Journal of Avian Biology, 2001, 32, 57-67.	1.2	74
40	The strategy of fly-and-forage migration, illustrated for the osprey (Pandion haliaetus). Behavioral Ecology and Sociobiology, 2007, 61, 1865-1875.	1.4	74
41	Complex Timing of Marsh HarrierCircus aeruginosusMigration Due to Pre- and Post-Migratory Movements. Ardea, 2008, 96, 159-171.	0.6	73
42	Stopover Decisions under Wind Influence. Journal of Avian Biology, 1998, 29, 552.	1.2	70
43	Interspecific Comparison of the Performance of Soaring Migrants in Relation to Morphology, Meteorological Conditions and Migration Strategies. PLoS ONE, 2012, 7, e39833.	2.5	70
44	The adaptive significance of parental role division and sexual size dimorphism in breeding shorebirds. Biological Journal of the Linnean Society, 1990, 41, 301-314.	1.6	65
45	Do birds use waves for orientation when migrating across the sea?. Nature, 1976, 259, 205-207.	27.8	59
46	Bird migration patterns: Conditions for stable geographical population segregation. Journal of Theoretical Biology, 1986, 123, 403-414.	1.7	59
47	Where on earth can animals use a geomagnetic biâ€coordinate map for navigation?. Ecography, 2012, 35, 1039-1047.	4.5	59
48	Skylark optimal flight speeds for flying nowhere and somewhere. Behavioral Ecology, 1996, 7, 121-126.	2.2	58
49	Traveling or stopping of migrating birds in relation to wind: an illustration for the osprey. Behavioral Ecology, 2006, 17, 497-502.	2.2	57
50	Nocturnal passerine migrants fly faster in spring than in autumn: a test of the time minimization hypothesis. Animal Behaviour, 2012, 83, 87-93.	1.9	57
51	Consistency in long-distance bird migration: contrasting patterns in time and space for two raptors. Animal Behaviour, 2016, 113, 177-187.	1.9	56
52	Orientation along great circles by migrating birds using a sun compass. Journal of Theoretical Biology, 1991, 152, 191-202.	1.7	55
53	Adaptive variation of airspeed in relation to wind, altitude and climb rate by migrating birds in the Arctic. Behavioral Ecology and Sociobiology, 2002, 52, 308-317.	1.4	55
54	Bird Migration Speed. , 2003, , 253-267.		55

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55	Optimal Map Projections for Analysing Long-Distance Migration Routes. Journal of Avian Biology, 1998, 29, 597.	1.2	53
56	Why do migrating birds fly along coastlines?. Journal of Theoretical Biology, 1977, 65, 699-712.	1.7	50
57	Ecology of animal migration. Current Biology, 2018, 28, R968-R972.	3.9	50
58	Adaptive strategies in nocturnally migrating insects and songbirds: contrasting responses to wind. Journal of Animal Ecology, 2016, 85, 115-124.	2.8	49
59	A polar system of intercontinental bird migration. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 2523-2530.	2.6	48
60	Faster fuelling is the key to faster migration. Nature Climate Change, 2019, 9, 288-289.	18.8	48
61	Barriers and distances as determinants for the evolution of bird migration links: the arctic shorebird system. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 2251-2258.	2.6	47
62	Seasonal modulation of flight speed among nocturnal passerine migrants: differences between short- and long-distance migrants. Behavioral Ecology and Sociobiology, 2014, 68, 1799-1807.	1.4	47
63	The role of the geomagnetic field in the development of birds' compass sense. Nature, 1983, 306, 463-465.	27.8	43
64	Bird Migration Across a Strong Magnetic Anomaly. Journal of Experimental Biology, 1987, 130, 63-86.	1.7	42
65	Orientation scatter of free-flying nocturnal passerine migrants: components and causes. Animal Behaviour, 2003, 65, 987-996.	1.9	39
66	Actogram analysis of free-flying migratory birds: new perspectives based on acceleration logging. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2017, 203, 543-564.	1.6	39
67	Extreme altitudes during diurnal flights in a nocturnal songbird migrant. Science, 2021, 372, 646-648.	12.6	38
68	Daily Travel Schedules of Adult Eurasian HobbiesFalco subbuteoâ€" Variability in Flight Hours and Migration Speed Along the Route. Ardea, 2009, 97, 287-295.	0.6	37
69	Radar observations of northbound migration of the Arctic tern, Sterna paradisaea, at the Antarctic Peninsula. Antarctic Science, 1992, 4, 163-170.	0.9	36
70	Radar observations of the stoop of the Peregrine Falcon Falco peregrinus and the Goshawk Accipiter gentilis. Ibis, 1987, 129, 267-273.	1.9	36
71	Compass orientation and possible migration routes of passerine birds at high arctic latitudes. Oikos, 2003, 103, 341-349.	2.7	34
72	The migration of the great snipe Gallinago media: intriguing variations on a grand theme. Journal of Avian Biology, 2016, 47, 321-334.	1.2	34

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73	Immune function and blood parasite infections impact stopover ecology in passerine birds. Oecologia, 2018, 188, 1011-1024.	2.0	34
74	Bird orientation at high latitudes: flight routes between Siberia and North America across the Arctic Ocean. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 2499-2505.	2.6	33
75	Do Arctic waders use adaptive wind drift?. Journal of Avian Biology, 2004, 35, 305-315.	1.2	33
76	Migratory and resident blue tits Cyanistes caeruleus differ in their reaction to a novel object. Die Naturwissenschaften, 2010, 97, 981-985.	1.6	32
77	Effects of wind and weather on red admiral, Vanessa atalanta, migration at a coastal site in southern Sweden. Animal Behaviour, 2008, 76, 335-344.	1.9	31
78	Converging migration routes of Eurasian hobbiesFalco subbuteocrossing the African equatorial rain forest. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 727-733.	2.6	30
79	Migration distance affects stopover use but not travel speed: contrasting patterns between longâ€•and shortâ€distance migrating ospreys. Journal of Avian Biology, 2018, 49, e01839.	1.2	30
80	Diffuse, short and slow migration among Blue Tits. Journal of Ornithology, 2008, 149, 365-373.	1.1	29
81	Ecological factors influence timing of departures in nocturnally migrating songbirds at Falsterbo, Sweden. Animal Behaviour, 2017, 127, 253-269.	1.9	29
82	Extreme altitude changes between night and day during marathon flights of great snipes. Current Biology, 2021, 31, 3433-3439.e3.	3.9	29
83	To fly or not to fly depending on winds: shorebird migration in different seasonal wind regimes. Animal Behaviour, 2012, 83, 1449-1457.	1.9	28
84	How Important Is Clutch Size Dependent Adult Mortality?. Oikos, 1984, 43, 253.	2.7	26
85	Flight speeds and climb rates of Brent Geese: mass-dependent differences between spring and autumn migration. Journal of Avian Biology, 2000, 31, 215-225.	1.2	26
86	Can vector summation describe the orientation system of juvenile ospreys and honey buzzards? - An analysis of ring recoveries and satellite tracking. Oikos, 2003, 103, 350-359.	2.7	26
87	Editorial - 20 years with Journal of Avian Biology. Journal of Avian Biology, 2014, 45, 1-2.	1.2	26
88	Barometer logging reveals new dimensions of individual songbird migration. Journal of Avian Biology, 2018, 49, e01821.	1.2	26
89	Bird communities ofBrachystegia andAcacia woodlands in Zambia. Journal Fur Ornithologie, 1977, 118, 156-174.	1.2	25
90	Compensation for wind drift by migrating swifts. Animal Behaviour, 2010, 80, 399-404.	1.9	24

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91	Nocturnal passerine migration without tailwind assistance. Ibis, 2011, 153, 485-493.	1.9	24
92	Energy limitations for spring migration and breeding: the case of brent geeseBranta berniclatracked by satellite telemetry to Svalbard and Greenland. Oikos, 2003, 103, 426-445.	2.7	23
93	Shortâ€distance migration of the Common Buzzard Buteo buteo recorded by satellite tracking. Ibis, 2009, 151, 200-206.	1.9	23
94	Hypotheses and tracking results about the longest migration: The case of the arctic tern. Ecology and Evolution, 2019, 9, 9511-9531.	1.9	23
95	A mimicked bacterial infection prolongs stopover duration in songbirdsâ€”but more pronounced in shortâ€•than longâ€distance migrants. Journal of Animal Ecology, 2018, 87, 1698-1708.	2.8	22
96	Optimal climbing flight in migrating birds: predictions and observations of knots and turnstones. Animal Behaviour, 1994, 48, 47-54.	1.9	21
97	The lobster navigators. Nature, 2003, 421, 27-28.	27.8	21
98	Feasibility of sun and magnetic compass mechanisms in avian long-distance migration. Movement Ecology, 2018, 6, 8.	2.8	21
99	Detection of flow direction in high-flying insect and songbird migrants. Current Biology, 2015, 25, R751-R752.	3.9	20
100	Basal metabolic rate and energetic cost of thermoregulation among migratory and resident blue tits. Oikos, 2011, 120, 1784-1789.	2.7	19
101	The problem of estimating wind drift in migrating birds. Journal of Theoretical Biology, 2002, 218, 485-96.	1.7	19
102	Movements of Immature European Honey BuzzardsPernis apivorusin Tropical Africa. Ardea, 2012, 100, 157-162.	0.6	18
103	Harmonic oscillatory orientation relative to the wind in nocturnal roosting flights of the swift Apus apus. Journal of Experimental Biology, 2002, 205, 905-910.	1.7	18
104	Patterns and determinants of shorebird species richness in the circumpolar Arctic. Journal of Biogeography, 2005, 32, 383-396.	3.0	17
105	Harmonic oscillatory orientation relative to the wind in nocturnal roosting flights of the swift Apus apus. Journal of Experimental Biology, 2002, 205, 905-10.	1.7	15
106	Do migratory flight paths of raptors follow constant geographical or geomagnetic courses?. Animal Behaviour, 2006, 72, 875-880.	1.9	14
107	GREAT-CIRCLE MIGRATION OF ARCTIC PASSERINES. Auk, 2008, 125, 831-838.	1.4	14
108	Interspecific comparison of the flight performance between sparrowhawks and common buzzards migrating at the Falsterbo peninsula: A radar study. Environmental Epigenetics, 2014, 60, 670-679.	1.8	12

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109	Exaggerated orientation scatter of nocturnal passerine migrants close to breeding grounds: comparisons between seasons and latitudes. Behavioral Ecology and Sociobiology, 2010, 64, 2021-2031.	1.4	11
110	Orientation of shorebirds in relation to wind: both drift and compensation in the same region. Journal of Ornithology, 2013, 154, 385-392.	1.1	11
111	Are flight paths of nocturnal songbird migrants influenced by local coastlines at a peninsula?. Environmental Epigenetics, 2014, 60, 660-669.	1.8	10
112	Do Partial and Regular Migrants Differ in Their Responses to Weather?. Auk, 2006, 123, 537-547.	1.4	8
113	Remarkably similar migration patterns between different redâ€backed shrike populations suggest that migration rather than breeding area phenology determines the annual cycle. Journal of Avian Biology, 2020, 51, .	1.2	8
114	Individual and sexâ€related patterns of prolonged flights during both day and night by great reed warblers crossing the Mediterranean Sea and Sahara Desert. Journal of Avian Biology, 2021, 52, .	1.2	8
115	Optimal central place foraging flights in relation to wind. Journal of Ornithology, 2019, 160, 1065-1076.	1.1	6
116	Site use by dark-bellied brent geese Branta bernicla bernicla on the Russian tundra as recorded by satellite telemetry: implications for East Atlantic Fly way conservation. Wildlife Biology, 2002, 8, 229-239.	1.4	6
117	Does migration promote or restrict circumpolar breeding ranges of arctic birds?. Journal of Biogeography, 2008, 35, 781-790.	3.0	5
118	Fine-Scaled Orientation Changes in Migrating Shorebirds. Ardea, 2012, 100, 45-53.	0.6	5
119	Timing of nocturnal passerine migration in Arctic light conditions. Polar Biology, 2015, 38, 1453-1459.	1.2	5
120	Optimal Reproductive Success: Reply to Ricklefs. Oikos, 1983, 41, 286.	2.7	3
121	Migratory flights of Arctic geese tracked by satellite. Rendiconti Lincei, 1993, 4, 153-156.	2.2	1
122	The role of migration for spatial turnover of arctic bird species in a circumpolar perspective. Oikos, 2008, 117, 1619-1628.	2.7	1
123	Gustaf Rudebeck (1913-2005). Ibis, 2006, 148, 608-609.	1.9	0