Simon Benhamou

List of Publications by Year
in descending order

62 papers	6,442 citations	87888 38 h-index	118850 62 g-index
63 all docs	63 docs citations	63 times ranked	5714 citing authors

#	Article	IF	Citations
1	Random walk models in biology. Journal of the Royal Society Interface, 2008, 5, 813-834.	3.4	1,101
2	How to reliably estimate the tortuosity of an animal's path:. Journal of Theoretical Biology, 2004, 229, 209-220.	1.7	429
3	Spatial memory and animal movement. Ecology Letters, 2013, 16, 1316-1329.	6.4	402
4	Spatial analysis of animals' movements using a correlated random walk model. Journal of Theoretical Biology, 1988, 131, 419-433.	1.7	370
5	HOW MANY ANIMALS REALLY DO THE LÃ‰VY WALK?. Ecology, 2007, 88, 1962-1969.	3.2	365
6	ANIMAL MOVEMENTS IN HETEROGENEOUS LANDSCAPES: IDENTIFYING PROFITABLE PLACES AND HOMOGENEOUS MOVEMENT BOUTS. Ecology, 2008, 89, 3336-3348.	3.2	259
7	Memory keeps you at home: a mechanistic model for home range emergence. Oikos, 2009, 118, 641-652.	2.7	228
8	Dynamic Approach to Space and Habitat Use Based on Biased Random Bridges. PLoS ONE, 2011, 6, e14592.	2.5	215
9	Optimizing the use of biologgers for movement ecology research. Journal of Animal Ecology, 2020, 89, 186-206.	2.8	178
10	Efficiency of area-concentrated searching behaviour in a continuous patchy environment. Journal of Theoretical Biology, 1992, 159, 67-81.	1.7	159
11	How Predictability of Feeding Patches Affects Home Range and Foraging Habitat Selection in Avian Social Scavengers?. PLoS ONE, 2013, 8, e53077.	2.5	143
12	Incorporating Movement Behavior and Barriers to Improve Kernel Home Range Space Use Estimates. Journal of Wildlife Management, 2010, 74, 1353-1360.	1.8	139
13	Of scales and stationarity in animal movements. Ecology Letters, 2014, 17, 261-272.	6.4	127
14	How animals use their environment: a new look at kinesis. Animal Behaviour, 1989, 38, 375-383.	1.9	118
15	Spatial memory in large scale movements: Efficiency and limitation of the egocentric coding process. Journal of Theoretical Biology, 1990, 145, 1-12.	1.7	118
16	Marine Turtles Use Geomagnetic Cues during Open-Sea Homing. Current Biology, 2007, 17, 126-133.	3.9	107
17	Beyond the Utilization Distribution: Identifying home range areas that are intensively exploited or repeatedly visited. Ecological Modelling, 2012, 227, 112-116.	2.5	107
18	Spatial memory and searching efficiency. Animal Behaviour, 1994, 47, 1423-1433.	1.9	100

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19	FAD: Fish Aggregating Device or Fish Attracting Device? A new analysis of yellowfin tuna movements around floating objects. Animal Behaviour, 2004, 67, 319-326.	1.9	98
20	DETECTING AN ORIENTATION COMPONENT IN ANIMAL PATHS WHEN THE PREFERRED DIRECTION IS INDIVIDUAL-DEPENDENT. Ecology, 2006, 87, 518-528.	3.2	93
21	The Neuropsychology of Spatial Cognition in the Rat. Critical Reviews in Neurobiology, 1997, 11, 101-120.	3.1	91
22	Landmark use by navigating rats (Rattus norvegicus) contrasting geometric and featural information.. Journal of Comparative Psychology (Washington, D C: 1983), 1998, 112, 317-322.	0.5	89
23	Incorporating Movement Behavior and Barriers to Improve Kernel Home Range Space Use Estimates. Journal of Wildlife Management, 2010, 74, 1353-1360.	1.8	81
24	Distinguishing between elementary orientation mechanisms by means of path analysis. Animal Behaviour, 1992, 43, 371-377.	1.9	76
25	Path integration in dogs. Animal Behaviour, 1998, 55, 787-797.	1.9	68
26	How Memory-Based Movement Leads to Nonterritorial Spatial Segregation. American Naturalist, 2015, 185, E103-E116.	2.1	68
27	No evidence for cognitive mapping in rats. Animal Behaviour, 1996, 52, 201-212.	1.9	66
28	Optimal sinuosity in central place foraging movements. Animal Behaviour, 1991, 42, 57-62.	1.9	61
29	An olfactory orientation model for mammals' movements in their home ranges. Journal of Theoretical Biology, 1989, 139, 379-388.	1.7	60
30	Successful homing of magnet-carrying white-chinned petrels released in the open sea. Animal Behaviour, 2003, 65, 729-734.	1.9	54
31	The dynamics of group formation in large mammalian herbivores: an analysis in the European roe deer. Animal Behaviour, 2007, 74, 1429-1441.	1.9	50
32	Periodicity analysis of movement recursions. Journal of Theoretical Biology, 2013, 317, 238-243.	1.7	50
33	Movement-based analysis of interactions in African lions. Animal Behaviour, 2014, 90, 171-180.	1.9	50
34	Are <scp>C</scp>ape gannets dependent upon fishery waste? <scp>A</scp> multiâ€scale analysis using seabird <scp>GPS</scp>â€tracking, hydroâ€acoustic surveys of pelagic fish and vessel monitoring systems. Journal of Applied Ecology, 2013, 50, 659-670.	4.0	49
35	Spatiotemporal dynamics of forage and water resources shape space use of West African savanna buffaloes. Journal of Mammalogy, 2011, 92, 1287-1297.	1.3	47
36	How to find one's way in the labyrinth of path integration models. Journal of Theoretical Biology, 1995, 174, 463-466.	1.7	46

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37	On systems of reference involved in spatial memory. Behavioural Processes, 1997, 40, 149-163.	1.1	46
38	An analysis of movements of the wood mouse Apodemus sylvaticus in its home range. Behavioural Processes, 1991, 22, 235-250.	1.1	44
39	Identifying stationary phases in multivariate time series for highlighting behavioural modes and home range settlements. Journal of Animal Ecology, 2020, 89, 44-56.	2.8	39
40	The spatial ecology of juvenile loggerhead turtles (Caretta caretta) in the Indian Ocean sheds light on the â€œlost yearsâ€•mystery. Marine Biology, 2014, 161, 1835-1849.	1.5	38
41	Bicoordinate navigation based on non-orthogonal gradient fields. Journal of Theoretical Biology, 2003, 225, 235-239.	1.7	35
42	Ultimate failure of the LÃ©vy Foraging Hypothesis: Two-scale searching strategies outperform scale-free ones even when prey are scarce and cryptic. Journal of Theoretical Biology, 2015, 387, 221-227.	1.7	33
43	Coping with Spatial Heterogeneity and Temporal Variability in Resources and Risks: Adaptive Movement Behaviour by a Large Grazing Herbivore. PLoS ONE, 2015, 10, e0118461.	2.5	33
44	The Role of Geomagnetic Cues in Green Turtle Open Sea Navigation. PLoS ONE, 2011, 6, e26672.	2.5	31
45	High fidelity of sea turtles to their foraging grounds revealed by satellite tracking and capture-mark-recapture: New insights for the establishment of key marine conservation areas. Biological Conservation, 2020, 250, 108742.	4.1	29
46	Assessing the risk for an obligate scavenger to be dependent on predictable feeding sources. Biological Conservation, 2017, 215, 92-98.	4.1	26
47	The Gulf Stream frontal system: A key oceanographic feature in the habitat selection of the leatherback turtle?. Deep-Sea Research Part I: Oceanographic Research Papers, 2017, 123, 35-47.	1.4	23
48	From randomness to traplining: a framework for the study of routine movement behavior. Behavioral Ecology, 2017, 28, 280-287.	2.2	23
49	HOW MANY ANIMALS REALLY DO THE LÃ‰VY WALK? REPLY. Ecology, 2008, 89, 2351-2352.	3.2	22
50	Homing in pelagic birds: a pilot experiment with white-chinned petrels released in the open sea. Behavioural Processes, 2003, 61, 95-100.	1.1	20
51	What do European badgers (Meles meles) know about the spatial organisation of neighbouring groups?. Behavioural Processes, 2006, 72, 84-90.	1.1	18
52	Orientation and foraging movements in a patchy environment by the ant Serrastruma lujae (formicidae-myrmicinae). Behavioural Processes, 1993, 30, 233-243.	1.1	17
53	Place navigation in mammals: a configuration-based model. Animal Cognition, 1998, 1, 55-63.	1.8	17
54	Gastrointestinal parasitism and recursive movements in free-ranging mandrills. Animal Behaviour, 2017, 134, 87-98.	1.9	16

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55	Volume-concentrated searching by an aerial insectivore, the common swift, Apus apus. Animal Behaviour, 2018, 136, 159-172.	1.9	14
56	Flexible migratory choices of Coryâ€™s shearwaters are not driven by shifts in prevailing air currents. Scientific Reports, 2018, 8, 3376.	3.3	13
57	Space use and foraging movements in the American red squirrel (Tamiasciurus hudsonicus). Behavioural Processes, 1996, 37, 89-102.	1.1	12
58	Orientation and movement patterns of wood mice (Apodemus sylvaticus) released inside and outside a familiar area.. Journal of Comparative Psychology (Washington, D C: 1983), 1989, 103, 54-61.	0.5	10
59	Foraging efficiency in temporally predictable environments: is a long-term temporal memory really advantageous?. Royal Society Open Science, 2021, 8, 210809.	2.4	8
60	Infrasound as a Cue for Seabird Navigation. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	7
61	Path integration and coordinate systems. Journal of Theoretical Biology, 2014, 349, 163-166.	1.7	2
62	Evaluating vector navigation in green turtles migrating in a dynamic oceanic environment. Ethology Ecology and Evolution, 2021, 33, 290-306.	1.4	2