Fredros O Okumu

List of Publications by Year
in descending order

112	4,392	101496	149623
papers	citations	36 h-index	56 g-index

122	122	122	3403
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	malERA: An updated research agenda for malaria elimination and eradication. PLoS Medicine, 2017, 14, e1002456.	3.9	221
2	Development and Field Evaluation of a Synthetic Mosquito Lure That Is More Attractive than Humans. PLoS ONE, 2010, 5, e8951.	1.1	156
3	Combining indoor residual spraying and insecticide-treated nets for malaria control in Africa: a review of possible outcomes and an outline of suggestions for the future. Malaria Journal, 2011, 10, 208.	0.8	154
4	Consistently high estimates for the proportion of human exposure to malaria vector populations occurring indoors in rural Africa. International Journal of Epidemiology, 2013, 42, 235-247.	0.9	143
5	Addressing power asymmetries in global health: Imperatives in the wake of the COVID-19 pandemic. PLoS Medicine, 2021, 18, e1003604.	3.9	127
6	Interventions that effectively target Anopheles funestus mosquitoes could significantly improve control of persistent malaria transmission in southâ€“eastern Tanzania. PLoS ONE, 2017, 12, e0177807.	1.1	127
7	Mapping changes in housing in sub-Saharan Africa from 2000 to 2015. Nature, 2019, 568, 391-394.	13.7	124
8	Insecticide-Treated Nets Can Reduce Malaria Transmission by Mosquitoes Which Feed Outdoors. American Journal of Tropical Medicine and Hygiene, 2010, 82, 415-419.	0.6	118
9	Most outdoor malaria transmission by behaviourally-resistant Anopheles arabiensis is mediated by mosquitoes that have previously been inside houses. Malaria Journal, 2016, 15, 225.	0.8	105
10	Linking human behaviours and malaria vector biting risk in south-eastern Tanzania. PLoS ONE, 2019, 14, e0217414.	1.1	96
11	A new tent trap for sampling exophagic and endophagic members of the Anopheles gambiae complex. Malaria Journal, 2009, 8, 157.	0.8	95
12	Developing an expanded vector control toolbox for malaria elimination. BMJ Global Health, 2017, 2, e000211.	2.0	93
13	Attracting, trapping and killing disease-transmitting mosquitoes using odor-baited stations -The Ifakara Odor-Baited Stations. Parasites and Vectors, 2010, 3, 12.	1.0	70
14	Comparative field evaluation of combinations of long-lasting insecticide treated nets and indoor residual spraying, relative to either method alone, for malaria prevention in an area where the main vector is Anopheles arabiensis. Parasites and Vectors, 2013, 6, 46.	1.0	70
15	Going beyond personal protection against mosquito bites to eliminate malaria transmission: population suppression of malaria vectors that exploit both human and animal blood. BMJ Global Health, 2017, 2, e000198.	2.0	69
16	Potential Benefits, Limitations and Target Product-Profiles of Odor-Baited Mosquito Traps for Malaria Control in Africa. PLoS ONE, 2010, 5, e11573.	1.1	66
17	Target product profile choices for intra-domiciliary malaria vector control pesticide products: repel or kill?. Malaria Journal, 2011, 10, 207.	0.8	64
18	Toward the Definition of Efficacy and Safety Criteria for Advancing Gene Drive-Modified Mosquitoes to Field Testing. Vector-Borne and Zoonotic Diseases, 2020, 20, 237-251.	0.6	60

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19	Results from the Workshop â€œProblem Formulation for the Use of Gene Drive in Mosquitoesâ€: American Journal of Tropical Medicine and Hygiene, 2017, 96, 530-533.	0.6	59
20	Aquatic habitats of the malaria vector Anopheles funestus in rural south-eastern Tanzania. Malaria Journal, 2020, 19, 219.	0.8	59
21	Mathematical evaluation of community level impact of combining bed nets and indoor residual spraying upon malaria transmission in areas where the main vectors are Anopheles arabiensis mosquitoes. Parasites and Vectors, 2013, 6, 17.	1.0	58
22	A Modified Experimental Hut Design for Studying Responses of Disease-Transmitting Mosquitoes to Indoor Interventions: The Ifakara Experimental Huts. PLoS ONE, 2012, 7, e30967.	1.1	54
23	Using a new odour-baited device to explore options for luring and killing outdoor-biting malaria vectors: a report on design and field evaluation of the Mosquito Landing Box. Parasites and Vectors, 2013, 6, 137.	1.0	54
24	Fine-scale spatial and temporal heterogeneities in insecticide resistance profiles of the malaria vector, Anopheles arabiensis in rural south-eastern Tanzania. Wellcome Open Research, 2017, 2, 96.	0.9	53
25	Targeting cattle for malaria elimination: marked reduction of Anopheles arabiensis survival for over six months using a slow-release ivermectin implant formulation. Parasites and Vectors, 2018, 11, 287.	1.0	52
26	Implications of bio-efficacy and persistence of insecticides when indoor residual spraying and long-lasting insecticide nets are combined for malaria prevention. Malaria Journal, 2012, 11, 378.	0.8	51
27	Eave ribbons treated with the spatial repellent, transfluthrin, can effectively protect against indoor-biting and outdoor-biting malaria mosquitoes. Malaria Journal, 2018, 17, 368.	0.8	51
28	Housing gaps, mosquitoes and public viewpoints: a mixed methods assessment of relationships between house characteristics, malaria vector biting risk and community perspectives in rural Tanzania. Malaria Journal, 2018, 17, 298.	0.8	48
29	Human behaviour and residual malaria transmission in Zanzibar: findings from in-depth interviews and direct observation of community events. Malaria Journal, 2019, 18, 220.	0.8	48
30	Dramatic decreases of malaria transmission intensities in Ifakara, south-eastern Tanzania since early 2000s. Malaria Journal, 2018, 17, 362.	0.8	47
31	Methods and indicators for measuring patterns of human exposure to malaria vectors. Malaria Journal, 2020, 19, 207.	0.8	47
32	Sustainable innovation in vector control requires strong partnerships with communities. PLoS Neglected Tropical Diseases, 2019, 13, e0007204.	1.3	45
33	Correlations between household occupancy and malaria vector biting risk in rural Tanzanian villages: implications for high-resolution spatial targeting of control interventions. Malaria Journal, 2016, 15, 199.	0.8	43
34	Expanding the Vector Control Toolbox for Malaria Elimination: A Systematic Review of the Evidence. Advances in Parasitology, 2018, 99, 345-379.	1.4	43
35	Open letter to international funders of science and development in Africa. Nature Medicine, 2021, 27, 742-744.	15.2	43
36	An extra-domiciliary method of delivering entomopathogenic fungus, Metharizium anisopliae IP 46 for controlling adult populations of the malaria vector, Anopheles arabiensis. Parasites and Vectors, 2010, 3, 18.	1.0	42

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37	Prediction of mosquito species and population age structure using mid-infrared spectroscopy and supervised machine learning. Wellcome Open Research, 2019, 4, 76.	0.9	40
38	Control of Malaria Vector Mosquitoes by Insecticide-Treated Combinations of Window Screens and Eave Baffles. Emerging Infectious Diseases, 2017, 23, 782-789.	2.0	39
39	Variations in household microclimate affect outdoor-biting behaviour of malaria vectors. Wellcome Open Research, 2017, 2, 102.	0.9	39
40	Efficacy and user acceptability of transfluthrin-treated sisal and hessian decorations for protecting against mosquito bites in outdoor bars. Parasites and Vectors, 2017, 10, 197.	1.0	38
41	Patterns of pesticide usage in agriculture in rural Tanzania call for integrating agricultural and public health practices in managing insecticide-resistance in malaria vectors. Malaria Journal, 2020, 19, 257.	0.8	37
42	Crowdsourcing Vector Surveillance: Using Community Knowledge and Experiences to Predict Densities and Distribution of Outdoor-Biting Mosquitoes in Rural Tanzania. PLoS ONE, 2016, 11, e0156388.	1.1	37
43	Detection of malaria parasites in dried human blood spots using mid-infrared spectroscopy and logistic regression analysis. Malaria Journal, 2019, 18, 341.	0.8	36
44	Prediction of mosquito species and population age structure using mid-infrared spectroscopy and supervised machine learning. Wellcome Open Research, 2019, 4, 76.	0.9	36
45	Evaluation of a simple polytetrafluoroethylene (PTFE)-based membrane for blood-feeding of malaria and dengue fever vectors in the laboratory. Parasites and Vectors, 2018, 11, 236.	1.0	35
46	Comparative Evaluation of Methods Used for Sampling Malaria Vectors in the Kilombero Valley, South Eastern Tanzania. The Open Tropical Medicine Journal, 2008, 1, 51-55.	0.3	35
47	The fabric of life: what if mosquito nets were durable and widely available but insecticide-free?. Malaria Journal, 2020, 19, 260.	0.8	34
48	The importance of considering community-level effects when selecting insecticidal malaria vector products. Parasites and Vectors, 2011, 4, 160.	1.0	33
49	Using a miniaturized double-net trap (DN-Mini) to assess relationships between indoorâ€“outdoor biting preferences and physiological ages of two malaria vectors, Anopheles arabiensis and Anopheles funestus. Malaria Journal, 2019, 18, 282.	0.8	33
50	First report of natural Wolbachia infection in the malaria mosquito Anopheles arabiensis in Tanzania. Parasites and Vectors, 2018, 11, 635.	1.0	32
51	Protecting migratory farmers in rural Tanzania using eave ribbons treated with the spatial mosquito repellent, transfluthrin. Malaria Journal, 2019, 18, 414.	0.8	31
52	Comparative assessment of insecticide resistance phenotypes in two major malaria vectors, Anopheles funestus and Anopheles arabiensis in south-eastern Tanzania. Malaria Journal, 2020, 19, 408.	0.8	31
53	Lidar reveals activity anomaly of malaria vectors during pan-African eclipse. Science Advances, 2020, 6, eaay5487.	4.7	31
54	Opinions of key stakeholders on alternative interventions for malaria control and elimination in Tanzania. Malaria Journal, 2020, 19, 164.	0.8	31

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55	New evidence of mating swarms of the malaria vector, Anopheles arabiensis in Tanzania. Wellcome Open Research, 2017, 2, 88.	0.9	31
56	Retrospective analysis of suspected rabies cases reported at Bugando Referral Hospital, Mwanza, Tanzania. Journal of Global Infectious Diseases, 2010, 2, 216.	0.2	30
57	Community perceptions on outdoor malaria transmission in Kilombero Valley, Southern Tanzania. Malaria Journal, 2017, 16, 274.	0.8	30
58	Fine-scale spatial and temporal variations in insecticide resistance in Culex pipiens complex mosquitoes in rural south-eastern Tanzania. Parasites and Vectors, 2019, 12, 413.	1.0	28
59	Eave ribbons treated with transfluthrin can protect both users and non-users against malaria vectors. Malaria Journal, 2019, 18, 314.	0.8	28
60	Using mid-infrared spectroscopy and supervised machine-learning to identify vertebrate blood meals in the malaria vector, Anopheles arabiensis. Malaria Journal, 2019, 18, 187.	0.8	28
61	Rapid age-grading and species identification of natural mosquitoes for malaria surveillance. Nature Communications, 2022, 13, 1501.	5.8	28
62	Taxis assays measure directional movement of mosquitoes to olfactory cues. Parasites and Vectors, 2013, 6, 131.	1.0	27
63	Evaluation of an ultraviolet LED trap for catching Anopheles and Culex mosquitoes in south-eastern Tanzania. Parasites and Vectors, 2019, 12, 418.	1.0	26
64	Preferred resting surfaces of dominant malaria vectors inside different house types in rural south-eastern Tanzania. Malaria Journal, 2020, 19, 22.	0.8	25
65	Swarms of the malaria vector Anopheles funestus in Tanzania. Malaria Journal, 2019, 18, 29.	0.8	25
66	Outdoor malaria transmission risks and social life: a qualitative study in South-Eastern Tanzania. Malaria Journal, 2018, 17, 397.	0.8	23
67	Fitness characteristics of the malaria vector Anopheles funestus during an attempted laboratory colonization. Malaria Journal, 2021, 20, 148.	0.8	23
68	Studies on mosquito biting risk among migratory rice farmers in rural south-eastern Tanzania and development of a portable mosquito-proof hut. Malaria Journal, 2016, 15, 564.	0.8	22
69	Autodissemination of pyriproxyfen suppresses stable populations of Anopheles arabiensis under semi-controlled settings. Malaria Journal, 2019, 18, 166.	0.8	22
70	Evaluation of a pushâ€“pull system consisting of transfluthrin-treated eave ribbons and odour-baited traps for control of indoor- and outdoor-biting malaria vectors. Malaria Journal, 2019, 18, 87.	0.8	22
71	Creating mosquito-free outdoor spaces using transfluthrin-treated chairs and ribbons. Malaria Journal, 2020, 19, 109.	0.8	22
72	Behavioural and Electrophysiological Responses of Female Anopheles gambiae Mosquitoes to Volatiles from a Mango Bait. Journal of Chemical Ecology, 2020, 46, 387-396.	0.9	22

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73	Effects of a new outdoor mosquito control device, the mosquito landing box, on densities and survival of the malaria vector, Anopheles arabiensis, inside controlled semi-field settings. Malaria Journal, 2015, 14, 494.	0.8	21
74	Health impact assessment for promoting sustainable development: the HIA4SD project. Impact Assessment and Project Appraisal, 2020, 38, 225-232.	1.0	21
75	Semi-field assessment of the BG-Malaria trap for monitoring the African malaria vector, Anopheles arabiensis. PLoS ONE, 2017, 12, e0186696.	1.1	20
76	Predicting the impact of outdoor vector control interventions on malaria transmission intensity from semi-field studies. Parasites and Vectors, 2021, 14, 64.	1.0	20
77	Key Characteristics of Residual Malaria Transmission in Two Districts in South-Eastern Tanzaniaâ€"Implications for Improved Control. Journal of Infectious Diseases, 2021, 223, S143-S154.	1.9	20
78	Field evaluation of the BG-Malaria trap for monitoring malaria vectors in rural Tanzanian villages. PLoS ONE, 2018, 13, e0205358.	1.1	18
79	Combining Synthetic Human Odours and Low-Cost Electrocuting Grids to Attract and Kill Outdoor-Biting Mosquitoes: Field and Semi-Field Evaluation of an Improved Mosquito Landing Box. PLoS ONE, 2016, 11, e0145653.	1.1	17
80	An autoencoder and artificial neural network-based method to estimate parity status of wild mosquitoes from near-infrared spectra. PLoS ONE, 2020, 15, e0234557.	1.1	16
81	Real-time dispersal of malaria vectors in rural Africa monitored with lidar. PLoS ONE, 2021, 16, e0247803.	1.1	16
82	What Africa can do to accelerate and sustain progress against malaria. PLOS Global Public Health, 2022, 2, e0000262.	0.5	16
83	Evaluation of personal protection afforded by repellent-treated sandals against mosquito bites in south-eastern Tanzania. Malaria Journal, 2020, 19, 148.	0.8	15
84	Occurrence of 4 Dengue Virus Serotypes and Chikungunya Virus in Kilombero Valley, Tanzania, During the Dengue Outbreak in 2018. Open Forum Infectious Diseases, 2021, 8, ofaa626.	0.4	15
85	Limitation of using synthetic human odours to test mosquito repellents. Malaria Journal, 2009, 8, 150.	0.8	14
86	Using Stable Isotopes of Carbon and Nitrogen to Mark Wild Populations of Anopheles and Aedes Mosquitoes in South-Eastern Tanzania. PLoS ONE, 2016, 11, e0159067.	1.1	14
87	Using ecological observations to improve malaria control in areas where Anopheles funestus is the dominant vector. Malaria Journal, 2022, 21, .	0.8	14
88	Addressing key gaps in implementation of mosquito larviciding to accelerate malaria vector control in southern Tanzania: results of a stakeholder engagement process in local district councils. Malaria Journal, 2021, 20, 123.	0.8	13
89	Small-scale field evaluation of push-pull system against early- and outdoor-biting malaria mosquitoes in an area of high pyrethroid resistance in Tanzania. Wellcome Open Research, 2017, 2, 112.	0.9	13
90	Patterns of human exposure to malaria vectors in Zanzibar and implications for malaria elimination efforts. Malaria Journal, 2020, 19, 212.	0.8	12

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91	Sub-lethal aquatic doses of pyriproxyfen may increase pyrethroid resistance in malaria mosquitoes. PLoS ONE, 2021, 16, e0248538.	1.1	12
92	Mosquito Net Use in Early Childhood and Survival to Adulthood in Tanzania. New England Journal of Medicine, 2022, 386, 428-436.	13.9	12
93	The fight against malaria: Diminishing gains and growing challenges. Science Translational Medicine, 2022, 14, .	5.8	12
94	The paradigm of eave tubes: scaling up house improvement and optimizing insecticide delivery against disease-transmitting mosquitoes. Malaria Journal, 2017, 16, 207.	0.8	11
95	Unlocking the human factor to increase effectiveness and sustainability of malaria vector control. Malaria Journal, 2021, 20, 404.	0.8	11
96	Wash-resistance of pirimiphos-methyl insecticide treatments of window screens and eave baffles for killing indoor-feeding malaria vector mosquitoes: an experimental hut trial, South East of Zambia. Malaria Journal, 2018, 17, 164.	0.8	10
97	Habitat characteristics and insecticide susceptibility of Aedes aegypti in the Ifakara area, south-eastern Tanzania. Parasites and Vectors, 2020, 13, 53.	1.0	9
98	Hybrid mosquitoes? Evidence from rural Tanzania on how local communities conceptualize and respond to modified mosquitoes as a tool for malaria control. Malaria Journal, 2021, 20, 134.	0.8	8
99	Insecticide-treated eave ribbons for malaria vector control in low-income communities. Malaria Journal, 2021, 20, 415.	0.8	8
100	â€˜The mosquitoes are preparing to attack usâ€™: knowledge and perceptions of communities in south-eastern Tanzania regarding mosquito swarms. Malaria Journal, 2019, 18, 56.	0.8	7
101	Videographic analysis of flight behaviours of host-seeking Anopheles arabiensis towards BG-Malaria trap. PLoS ONE, 2019, 14, e0220563.	1.1	6
102	Effects of agricultural pesticides on the susceptibility and fitness of malaria vectors in rural south-eastern Tanzania. Parasites and Vectors, 2022, 15, .	1.0	6
103	Potential benefits of combining transfluthrin-treated sisal products and long-lasting insecticidal nets for controlling indoor-biting malaria vectors. Parasites and Vectors, 2018, 11, 231.	1.0	5
104	Dietary diversity among households living in Kilombero district, in Morogoro region, South-Eastern Tanzania. Journal of Agriculture and Food Research, 2021, 5, 100171.	1.2	5
105	Wild populations of malaria vectors can mate both inside and outside human dwellings. Parasites and Vectors, 2021, 14, 514.	1.0	5
106	Evaluation of an ivermectin-based attractive targeted sugar bait (ATSB) against Aedes aegypti in Tanzania.. Wellcome Open Research, 0, 7, 4.	0.9	5
107	Fine-scale distribution of malaria mosquitoes biting or resting outside human dwellings in three low-altitude Tanzanian villages. PLoS ONE, 2021, 16, e0245750.	1.1	4
108	Using Bayesian state-space models to understand the population dynamics of the dominant malaria vector, Anopheles funestus in rural Tanzania. Malaria Journal, 2022, 21, .	0.8	4

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109	Effect of larval density and additional anchoring surface on the lifeâ€history traits of a laboratory colonized Anopheles funestus strain. Medical and Veterinary Entomology, 2022, , .	0.7	3
110	Prediction of mosquito species and population age structure using mid-infrared spectroscopy and supervised machine learning. Wellcome Open Research, 0, 4, 76.	0.9	2
111	3. Creating long-term resilience against malaria vectors while addressing the immediate need to suppress pathogen transmission. Ecology and Control of Vector-Borne Diseases, 2021, , 33-57.	0.3	1
112	Maximising the impact of house modification with eave tubes for malaria control in Africa. MalariaWorld Journal, 2021, 12, 1.	0.2	0