Frank H Koch

List of Publications by Year
in descending order

74	1,719	304743 22	302126 39
papers	citations	h-index	g-index

77	77	77	2004
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pest Risk Maps for Invasive Alien Species: A Roadmap for Improvement. BioScience, 2010, 60, 349-362.	4.9	259
2	Forestry Matters: Decline of Oaks Will Impact Wildlife in Hardwood Forests. Journal of Wildlife Management, 2007, 71, 1717-1728.	1.8	158
3	Recommendations for Assessing the Effectiveness of Surrogate Species Approaches. Biodiversity and Conservation, 2006, 15, 3949-3969.	2.6	156
4	Potential establishment of alien-invasive forest insect species in the United States: where and how many?. Biological Invasions, 2011, 13, 969-985.	2.4	72
5	Mapping Invasive Species Risks with Stochastic Models: A Crossâ€Border United Statesâ€Canada Application for Sirex noctilio Fabricius. Risk Analysis, 2009, 29, 868-884.	2.7	60
6	There is no silver bullet: The value of diversification in planning invasive species surveillance. Ecological Economics, 2014, 104, 61-72.	5.7	57
7	Review of broad-scale drought monitoring of forests: Toward an integrated data mining approach. Forest Ecology and Management, 2016, 380, 346-358.	3.2	56
8	Data, data everywhere: detecting spatial patterns in fine-scale ecological information collected across a continent. Landscape Ecology, 2016, 31, 67-84.	4.2	46
9	Evaluating Critical Uncertainty Thresholds in a Spatial Model of Forest Pest Invasion Risk. Risk Analysis, 2009, 29, 1227-1241.	2.7	43
10	Spatio-Temporal Analysis of <I>Xyleborus glabratus</I> (Coleoptera: Circulionidae:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382	1.4	42
11	Using a Network Model to Assess Risk of Forest Pest Spread via Recreational Travel. PLoS ONE, 2014, 9, e102105.	2.5	42
12	Dispersal of Invasive Forest Insects via Recreational Firewood: A Quantitative Analysis. Journal of Economic Entomology, 2012, 105, 438-450.	1.8	40
13	A review of southern pine decline in North America. Forest Ecology and Management, 2015, 349, 134-148.	3.2	35
14	A dominanceâ€based approach to map risks of ecological invasions in the presence of severe uncertainty. Diversity and Distributions, 2012, 18, 33-46.	4.1	33
15	Robust Surveillance and Control of Invasive Species Using a Scenario Optimization Approach. Ecological Economics, 2017, 133, 86-98.	5.7	33
16	Trade-associated pathways of alien forest insect entries in Canada. Biological Invasions, 2012, 14, 797-812.	2.4	32
17	Risk maps for targeting exotic plant pest detection programs in the United States. EPPO Bulletin, 2011, 41, 46-56.	0.8	31
18	Patterns of Forest Phylogenetic Community Structure across the United States and Their Possible Forest Health Implications. Forest Science, 2014, 60, 851-861.	1.0	31

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19	The Evolving Role of Forest Inventory and Analysis Data in Invasive Insect Research. American Entomologist, 2016, 62, 46-58.	0.2	27
20	Towards an integrated approach to modelling the risks and impacts of invasive forest species. Environmental Reviews, 2009, 17, 163-178.	4.5	26
21	Southern pine beetle regional outbreaks modeled on landscape, climate and infestation history. Forest Ecology and Management, 2011, 261, 473-479.	3.2	26
22	Robustness of Risk Maps and Survey Networks to Knowledge Gaps About a New Invasive Pest. Risk Analysis, 2010, 30, 261-276.	2.7	25
23	Cold tolerance and invasive potential of the redbay ambrosia beetle (Xyleborus glabratus) in the eastern United States. Biological Invasions, 2018, 20, 995-1007.	2.4	25
24	A New Multicriteria Risk Mapping Approach Based on a Multiattribute Frontier Concept. Risk Analysis, 2013, 33, 1694-1709.	2.7	24
25	Detection capacity, information gaps and the design of surveillance programs for invasive forest pests. Journal of Environmental Management, 2010, 91, 2535-2546.	7.8	21
26	Optimizing surveillance strategies for early detection of invasive alien species. Ecological Economics, 2019, 162, 87-99.	5.7	21
27	Comparing the potential effectiveness of conservation planning approaches in central North Carolina, USA. Biological Conservation, 2006, 128, 358-368.	4.1	20
28	Invasive forest pest surveillance: survey development and reliability. Canadian Journal of Forest Research, 2008, 38, 2422-2433.	1.7	19
29	Optimal allocation of invasive species surveillance with the maximum expected coverage concept. Diversity and Distributions, 2015, 21, 1349-1359.	4.1	17
30	Mapping ecological risks with a portfolioâ€based technique: incorporating uncertainty and decisionâ€making preferences. Diversity and Distributions, 2013, 19, 567-579.	4.1	16
31	Landscape-Scale Prediction of Hemlock Woolly Adelgid, <I>Adelges tsugae</I> (Homoptera: Adelgidae), Infestation in the Southern Appalachian Mountains. Environmental Entomology, 2006, 35, 1313-1323.	1.4	14
32	Modeling urban distributions of host trees for invasive forest insects in the eastern and central USA: A three-step approach using field inventory data. Forest Ecology and Management, 2018, 417, 222-236.	3.2	14
33	Prioritizing restoration of fragmented landscapes for wildlife conservation: A graph-theoretic approach. Biological Conservation, 2019, 232, 173-186.	4.1	14
34	Invasive alien species in the food chain: Advancing risk assessment models to address climate change, economics and uncertainty. NeoBiota, 0, 18, 1-7.	1.0	13
35	A safety rule approach to surveillance and eradication of biological invasions. PLoS ONE, 2017, 12, e0181482.	2.5	11
36	Simulating the effects of the southern pine beetle on regional dynamics 60 years into the future. Ecological Modelling, 2012, 244, 93-103.	2.5	10

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37	An Economic Assessment of Mountain Pine Beetle Timber Salvage in the West. Western Journal of Applied Forestry, 2013, 28, 143-153.	0.5	10
38	Future Trends in Remote Sensing. , 2016, , 277-285.		10
39	Exploring critical uncertainties in pathway assessments of human-assisted introductions of alien forest species in Canada. Journal of Environmental Management, 2013, 129, 173-182.	7.8	9
40	Prioritizing conservation seed banking locations for imperiled hemlock species using multi-attribute frontier mapping. New Forests, 2017, 48, 301-316.	1.7	9
41	Optimal invasive species surveillance in the real world: practical advances from research. Emerging Topics in Life Sciences, 2020, 4, 513-520.	2.6	9
42	Assessing land clearing potential in the Canadian agricultureâ€“forestry interface with a multi-attribute frontier approach. Ecological Indicators, 2015, 54, 71-81.	6.3	7
43	Predicting cannabis cultivation on national forests using a rational choice framework. Ecological Economics, 2016, 129, 161-171.	5.7	7
44	Bark Beetle Epidemics, Life Satisfaction, and Economic Well-Being. Forests, 2019, 10, 696.	2.1	7
45	Protecting wildlife habitat in managed forest landscapesâ€”How can network connectivity models help?. Natural Resource Modelling, 2021, 34, e12286.	2.0	7
46	Hotspots of pestâ€induced US urban tree death, 2020â€“2050. Journal of Applied Ecology, 2022, 59, 1302-1312.	4.0	7
47	Managing outbreaks of invasive species â€“ A new method to prioritize preemptive quarantine efforts across large geographic regions. Journal of Environmental Management, 2015, 150, 367-377.	7.8	6
48	Assessing the trade-offs between timber supply and wildlife protection goals in boreal landscapes. Canadian Journal of Forest Research, 0, , 243-258.	1.7	6
49	Exploring the tradeoffs among forest planning, roads and wildlife corridors: a new approach. Optimization Letters, 2022, 16, 747-788.	1.6	6
50	Cannabis legalization by states reduces illegal growing on US national forests. Ecological Economics, 2019, 164, 106366.	5.7	5
51	Managing biological invasions in urban environments with the acceptance sampling approach. PLoS ONE, 2019, 14, e0220687.	2.5	5
52	Considerations regarding species distribution models for forest insects. Agricultural and Forest Entomology, 2021, 23, 393-399.	1.3	5
53	Early Intervention Strategies for Invasive Species Management: Connections Between Risk Assessment, Prevention Efforts, Eradication, and Other Rapid Responses. , 2021, , 111-131.		5
54	Representing uncertainty in a spatial invasion model that incorporates human-mediated dispersal. NeoBiota, 0, 18, 173-191.	1.0	5

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55	Acceptance sampling for cost-effective surveillance of emerald ash borer in urban environments. Forestry, 2019, , .	2.3	4
56	Abiotic and Biotic Factors Affecting Loblolly Pine Health in the Southeastern United States. Forest Science, 2020, 66, 145-156.	1.0	4
57	A bioeconomic model for estimating potential economic damages from a hypothetical Asian beetle introduced via future trade with Cuba. Journal of Bioeconomics, 2020, 22, 33-58.	3.3	4
58	Quantifying uncertainty in pest risk maps and assessments: adopting a risk-averse decision makerâ€™s perspective. NeoBiota, 0, 18, 193-218.	1.0	3
59	A new hypervolume approach for assessing environmental risks. Journal of Environmental Management, 2017, 193, 188-200.	7.8	2
60	Optimal planning of multiâ€day invasive species surveillance campaigns. Ecological Solutions and Evidence, 2020, 1, e12029.	2.0	2
61	Data Processing Tools. SpringerBriefs in Space Development, 2012, , 39-62.	0.1	1
62	Remote Sensing: Past and Present. , 2016, , 1-20.		1
63	Spread of common native and invasive grasses and ruderal trees following anthropogenic disturbances in a tropical dry forest. Ecological Processes, 2017, 6, .	3.9	1
64	Impacts of Nonnative Species on the Health of Natural and Planted Forests. Forests, 2019, 10, 366.	2.1	1
65	Using Remote Sensing for Terrestrial Applications. SpringerBriefs in Space Development, 2012, , 63-80.	0.1	0
66	Atmospheric Applications of Remote Sensing. , 2016, , 177-199.		0
67	Observing Coastal and Ocean Ecosystems. , 2016, , 201-228.		0
68	Terrestrial Applications of Remote Sensing. , 2016, , 125-176.		0
69	Mapping Risks and Impacts of Invasive Alien Species with Dynamic Simulation Models. , 0, , 130-151.		0
70	Recent Immigrant Insect Faunaâ€”Another Look at a Classic Analysis. Journal of Integrated Pest Management, 2021, 12, .	2.0	0
71	Using Remote Sensing in Atmospheric Applications. SpringerBriefs in Space Development, 2012, , 81-94.	0.1	0
72	Oceanographic and Planetary Applications. SpringerBriefs in Space Development, 2012, , 95-112.	0.1	0

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73	International Agreements and Policies. SpringerBriefs in Space Development, 2012, , 113-124.	0.1	0
74	The Final Frontier: Building New Knowledge Through Planetary and Extrasolar Observation. , 2016, , 229-259.		0