

## Arnošt Farin

### Individual portfolio analysis

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### Introduction

Bibliometrics is extensively being used as a supporting technique in the process of research assessment worldwide. **Centre for Scientometric Support and Evaluation (CSSE)** offers a bibliometric service to assist the Masaryk University community in utilizing quantitative methods for various purposes (individual portfolios, multidimensional analysis of research performance of a certain unit, analysis, and recommendations for improving publishing strategies and others).

This report is a result of the summary of individual bibliometric analysis. Although bibliometrics serves as quantitative support for evaluation purposes, we must consider the limitations of bibliometrics. With respect to international good practice, indicators should never be used as the sole criteria for making final decisions, especially if the decision can influence individual promotion and rewarding.<sup>1</sup> Quantitative data should always be used in combination with other forms of evaluation, such as peer review, to provide critical insight. Indicators must not substitute for informed judgment. Best practice also uses multiple indicators to provide a robust and pluralistic picture.

This analysis aims to support habilitation procedures and professor appointment procedures. Therefore, it focuses preferably on the structure of the set of scientific outputs, coverage and especially the **analysis of citing sources**. The analyses presented in this report are categorized into themes: production, journals, citation impact and Author's audience (citing articles).

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<sup>1</sup> HICKS, D, et al. Bibliometrics: The Leiden Manifesto for research metrics. Nature. 2015, vol. 520, 7548, 429–431. doi: <http://dx.doi.org/10.1038/520429a>. Dostupné z: <http://www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351>; San Francisco Declaration on Research Assessment (DORA), Dostupné z: <http://www.ascb.org/dora/>.

# Information about the Author

## Name and institution

doc. Mgr. Arnošt Farin, Ph.D.

Department of Physics, Faculty of Science, University of Neverwhere

## Researcher's visibility (persistent identifiers & social networks)

Website	
ResearcherID / Publons	<a href="#">F-7757-2013</a>
ORCID	0000-0003-4067-6139
Google Scholar profile	
ResearchGate profile	
Scopus Author ID	Multiple – needs to be merged

## About the analysis

Sources	Web of Science, Scopus, InCites, IS MU
Document Types limitation	All (unless stated otherwise)
Publication Window	All (1997–2021), unless stated otherwise
Citation Window	Not defined
Data retrieved	22 <sup>nd</sup> September 2021

The dataset for this report was provided by Arnošt Farin and processed by M.P. All publications were identified by searching Web of Science/Scopus. Web of Science assigns subject categories to articles automatically according to the journal where the article is published in. An article may be assigned to multiple subject categories. Our citation analyses are based on data obtained from InCites. In several cases (normalized citation scores) we limited the analysis to original research publications (article, review, proceeding paper).

We recommend focusing on attributes as following and to **measure performance and evaluate these observations against the discipline-specific publication patterns and citation practices:**

- Analysis of citing articles and sources – this is the most important part according to the setting of this report.
- Production, activity in the observed period (rising, declining, constant), coverage in databases.
- How many citations articles attracted in comparison with typical citation rates in the field? Do the citation count and normalized citation scores (citation impact, percentiles) correspond with typical patterns in the field? A number of highly cited articles. See [Chapter 3 Citation Impact](#)). Consider that a lack of citation cannot be interpreted as these articles are valueless. Data from the Web of Science give an incomplete picture; many papers WoS shows with zero citations could have been cited elsewhere or could have had an influence on society.
- Internationalization (articles in international collaboration), inter-disciplinarity.
- Publishing strategies (reputation of sources compared with the reputation of citing sources).
- Author's roles: corresponding author, first author; contributorship; the average number of co-authors, etc.
- Consider other aspects of the author's work (awards, societal impact, ...)

# Summary

## Publication output

- The total publishing window documented in WoS is 2001 onwards. Farin's [publication activity](#) is predominantly focused on Web of Science-covered sources (176 out of 252 IS MU indexed documents) (see [Coverage](#)). Still, recent year (2021) might not be fully indexed in WoS. The WoS publication record comprises mainly of research articles (165 out of 176 WoS-indexed publications).

## Journals

- The main publication channel are international journals. Most frequently used journals are PRESLIA (22), JOURNAL OF VEGETATION SCIENCE (14), FOLIA GEOBOTANICA (13), APPLIED VEGETATION SCIENCE (11). See [Chapter 2 Journals](#). 71 % of all Articles are published in journals in Q1 (53 %) or Q2 (18 %) in the ranking by journal impact factor throughout the whole publishing period. However, these findings reflect just the visibility of sources and must not serve as a proxy for research quality!
- Looking at the visibility of Arnošt Farin's original research (first or corresponding author), these articles are published predominantly in higher-ranked (Q1 or Q2 in the ranking by the journal impact factor) outlets.
- Compared to the **Quartile Rank of citing papers**, the very high percentage of the citations also come from influential journals in Q1 (40 %) and Q2 (24 %). The share of citing journals in Q1 usually indicates the scientific community's interest using the high visibility journals (see [Citing Documents](#)).

## Collaboration

- The [visualization of the collaboration network](#) indicates a big range of cooperating authors. More than half of all results are published in international collaboration (also see [Summary Metrics \(all years\)](#)).

## Citation impact

- Average discipline-normalized citation impact of all articles in Web of Science is above the average (CNCI = 1,54) and it has slightly increased (CNCI=1,76) for the set of publications from the last ten years window. The [CNCI Distribution](#) also shows greater proportion of above-average performing articles. It has to be noted that two publications have extraordinary citation impact (CNCI 30,684 and 16,646).

# 1. Publication output

First publication year in IS MU / WoS	1999 / 2001
IS MU Documents*	252
Web of Science Documents (dataset for analysis)	176 (all types)
Scopus Documents (dataset for analysis)	Undetected due to multiple author profiles

\*Reported to RIV.

h-index WoS	40
h-index Scopus	Undetected due to multiple author profiles

## Coverage

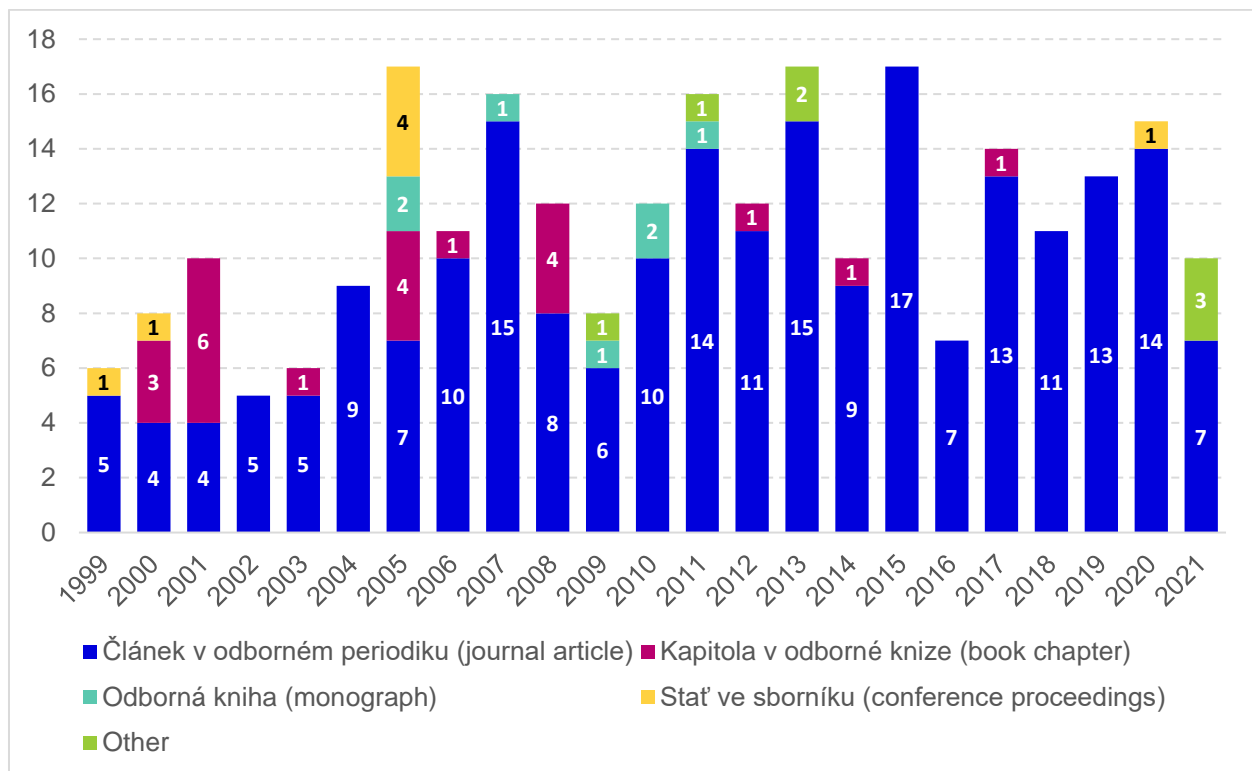
Source	# All Docs	Article	Review	Other***
IS MU*	252			
Web of Science**	176	165	4	7

\*Reported to RIV.

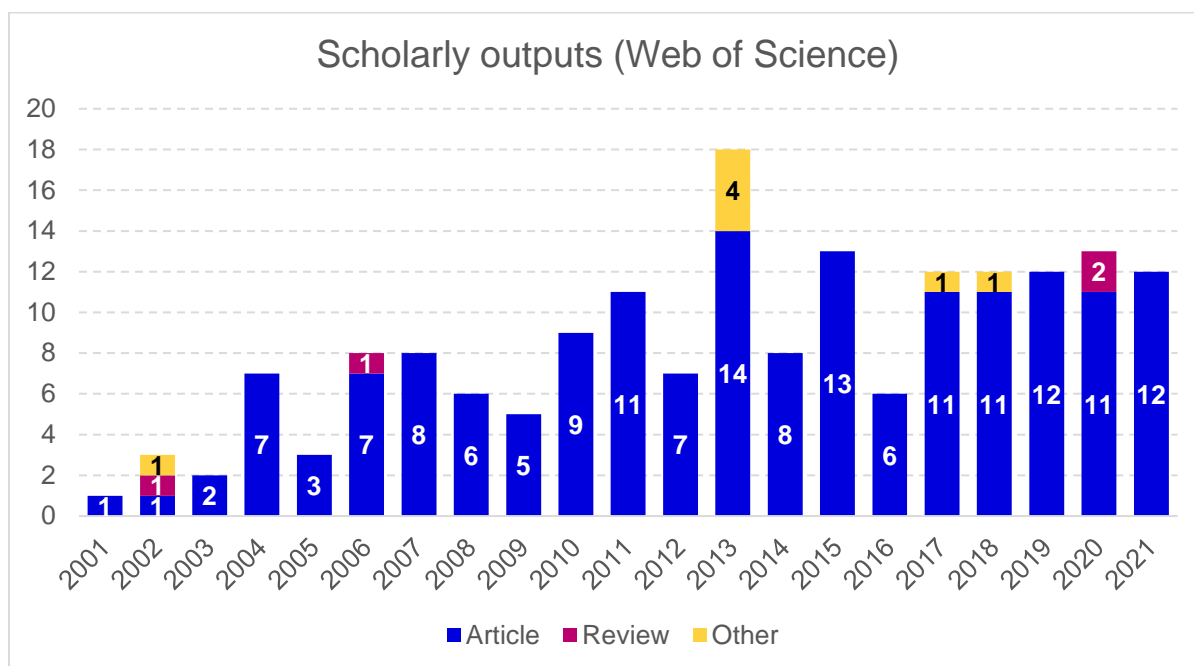
\*\*WoS Core Collection (SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI, Book Citation Index).

\*\*\*Book Chapter, Correction, Editorial Material, Meeting Abstract.

## Scholarly outputs (IS MU)



## Scholarly outputs (Web of Science)



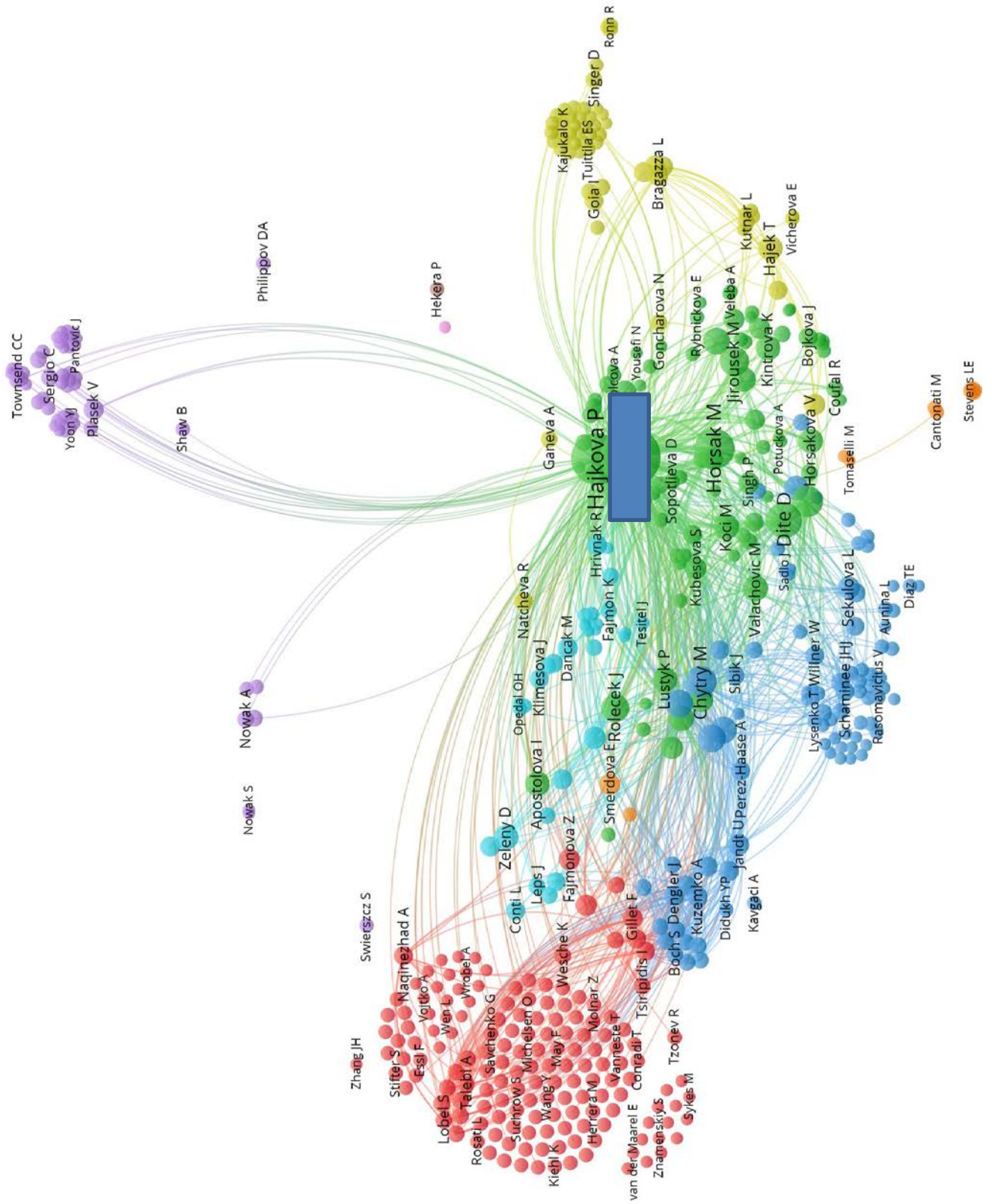
## Author's role (Web of Science)

Only **Articles and Reviews** throughout the whole publication period are counted.

Author's role	Web of Science Documents (N = 169)	% of 169
Corresponding author	26	15,4 %
First Author	22	13 %
Other	142	84 %

# Collaboration network (Web of Science) – Articles, Reviews

N = 169. Visualization: VOSViewer.



## 2. Journals (visibility) – Web of Science

In this part, we focus on journals where results (all types) were published in the whole period. This analysis is useful for tracking the reputation of sources or for observing the ability of the applicant to publish in highly influential journals; however, we cannot assess the quality of certain research (on the level of the article) with journal-level indicators. This analysis usually reveals the applicant's publication patterns and the common publication patterns in the field. Since we do not work with normalized indicators, we work with the whole publication period (2001–2021) and all publication types. The quartile Rank and the JIF were extracted for the year of the publishing of the result. In the summarized table, the Quartile Rank and JIF from 2020 are listed

<b>Quartile Rank</b>	Quartiles are derived for each journal in each of its subject categories according to which quartile of the IF distribution the journal occupies for that subject category. Q1 denotes the top 25 % of the IF distribution, Q2 between top 50 % and top 25 %, Q3 top 75 % to top 50 %, and Q4 bottom 25 % of the IF distribution.
<b>JIF</b>	The impact factor is a measure of the frequency with which the average article in a journal has been cited in a particular year. It is used to measure the importance or rank of a journal by calculating the times its articles are cited. The calculation is based on a two-year period and involves dividing the number of times articles were cited by the number of articles that are citable.

### Journals – sorted by # Web of Science Documents (all years, all publication types)

A–Article, Data Paper; R–Review; Other– Book Chapter, Correction, Editorial Material, Meeting Abstract.

Journal Name	WoS Docs	Times Cited	A	R	Other	Q 2020	JIF 2020	Country
PRESLIA	22	532	21	1	1	Q1	4,167	CZECH
JOURNAL OF VEGETATION SCIENCE	14	300	14			Q1	2,685	USA
FOLIA GEOBOTANICA	13	379	11		1	Q3	1,544	NETHERLANDS
APPLIED VEGETATION SCIENCE	11	670	11			Q1	3,252	USA
JOURNAL OF BIOGEOGRAPHY	6	349	6			Q1	4,324	USA
JOURNAL OF BRYOLOGY	5	126	5			Q3	1,361	ENGLAND
PHYTOCOENOLOGIA	5	70	5			Q2	2,043	GERMANY
ECOLOGICAL INDICATORS	4	30	4			Q2	4,958	NETHERLANDS
JOURNAL OF MOLLUSCAN STUDIES	4	137	4			Q3	1,348	ENGLAND
PLANT ECOLOGY	4	163	4			Q2	1,854	NETHERLANDS
QUATERNARY SCIENCE REVIEWS	4	49	4			Q1	4,112	ENGLAND
SCIENCE OF THE TOTAL ENVIRONMENT	4	53	4			Q1	7,963	NETHERLANDS
ACTA BIOLOGICA CRACOVIENSIA SERIES BOTANICA	3	0			3	Q4	0,938	POLAND
BIOLOGIA	3	33	3			Q4	1,35	USA
BOREAS	3	106	3			Q3	2,587	USA
HOLOCENE	3	76	3			Q2	2,769	ENGLAND
PERSPECTIVES IN PLANT ECOLOGY EVOLUTION AND SYSTEMATICS	3	262	2			Q1	3,634	GERMANY

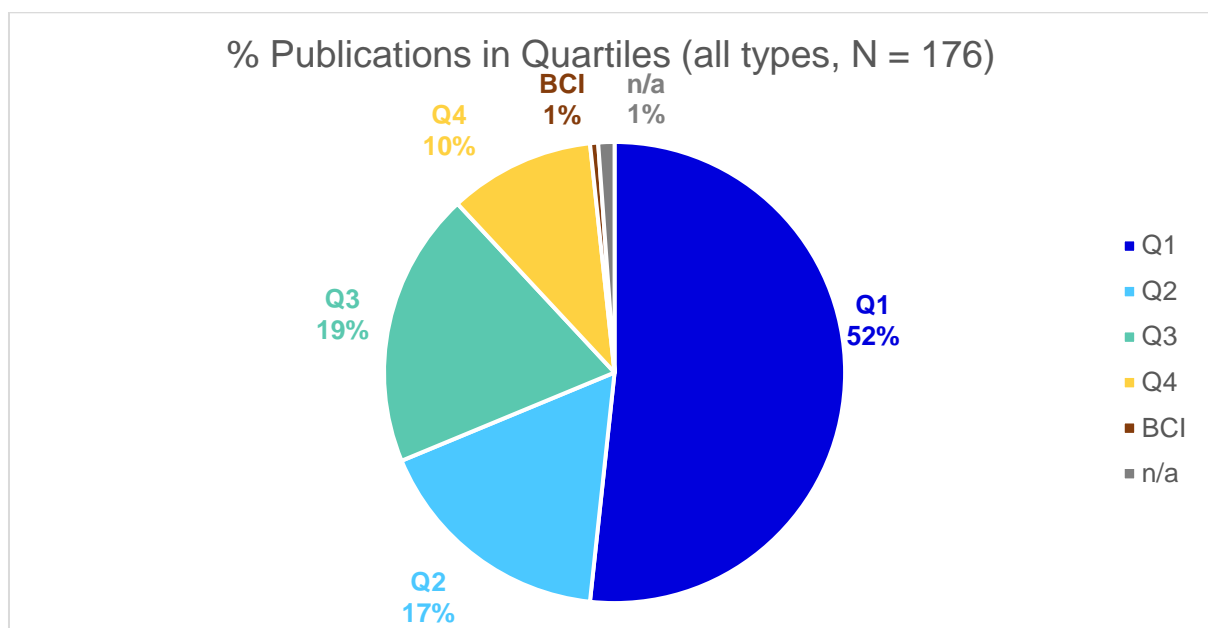
Journal Name	WoS Docs	Times Cited	A	R	Other	Q 2020	JIF 2020	Country
ACTA OECOLOGICA-INTERNATIONAL JOURNAL OF ECOLOGY	2	52	2			Q3	1,674	NETHERLANDS
ANNALES BOTANICI FENNICI	2	45	2			Q4	0,626	FINLAND
BIOLOGIA	2	37	2			Q4	1,35	POLAND
DIVERSITY AND DISTRIBUTIONS	2	47	2			Q1	5,139	USA
ENVIRONMENTAL POLLUTION	2	49	2			Q1	8,071	ENGLAND
HYDROBIOLOGIA	2	30	2			Q2	2,694	NETHERLANDS
JOURNAL OF ECOLOGY	2	10	2			Q1	6,256	USA
REVIEW OF PALAEOBOTANY AND PALYNOLOGY	2	9	2			Q2	1,94	NETHERLANDS
VEGETATION HISTORY AND ARCHAEOBOTANY	2	34	2			Q1	2,375	USA
ACTA PROTOZOOLOGICA	1	77	1			Q4	0,892	POLAND
ANNALES ZOOLOGICI FENNICI	1	5	1			Q3	1,324	FINLAND
AQUATIC BOTANY	1	0	1			Q2	2,473	NETHERLANDS
BIOGEOSCIENCES	1	15	1			Q1	4,295	GERMANY
BIOLOGIA	1	7	1			Q4	1,35	GERMANY
BOREAL ENVIRONMENT RESEARCH	1	4	1			Q4	1,289	FINLAND
BOTANICAL JOURNAL OF THE LINNEAN SOCIETY	1	2	1			Q2	2,911	ENGLAND
BRYOLOGIST	1	5	1			Q3	1,269	USA
COMMUNITY ECOLOGY	1	11	1			Q4	1,185	HUNGARY
EARTH SYSTEM SCIENCE DATA	1	5	1		1	Q1	11,333	GERMANY
ECOGRAPHY	1	0	1			Q1	5,992	USA
ECOLOGY	1	62	1			Q1	5,499	USA
ECOLOGY AND EVOLUTION	1	16	1			Q2	2,912	USA
ECOSYSTEMS	1	14	1			Q1	4,217	USA
FOLIA GEOBOTANICA	1	1			1	Q3	1,544	CZECH
FOTTEA	1	49	1			Q2	3,242	CZECH
FRESHWATER BIOLOGY	1	19	1			Q1	3,809	USA
FUNGAL ECOLOGY	1	6	1			Q2	3,404	ENGLAND
GLOBAL ECOLOGY AND BIOGEOGRAPHY	1	75	1			Q1	7,144	ENGLAND
GLOBAL ECOLOGY AND BIOGEOGRAPHY	1	26	1			Q1	7,144	USA
GLOBAL CHANGE BIOLOGY	1	145	1			Q1	10,863	USA
HERZOGIA	1	0	1			Q4	0,848	GERMANY
HYDROLOGICAL PROCESSES	1	0	1			Q2	3,565	USA
JOURNAL FOR NATURE CONSERVATION	1	1	1			Q2	2,831	GERMANY
JOURNAL OF ANIMAL ECOLOGY	1	34	1			Q1	5,091	USA
JOURNAL OF APPLIED ECOLOGY	1	49	1			Q1	6,528	USA
JOURNAL OF CONCHOLOGY	1	6	1			Q4	0,375	ENGLAND
JOURNAL OF LIMNOLOGY	1	31	1			Q3	1,589	ITALY
JOURNAL OF QUATERNARY SCIENCE	1	46	1			Q2	2,738	USA

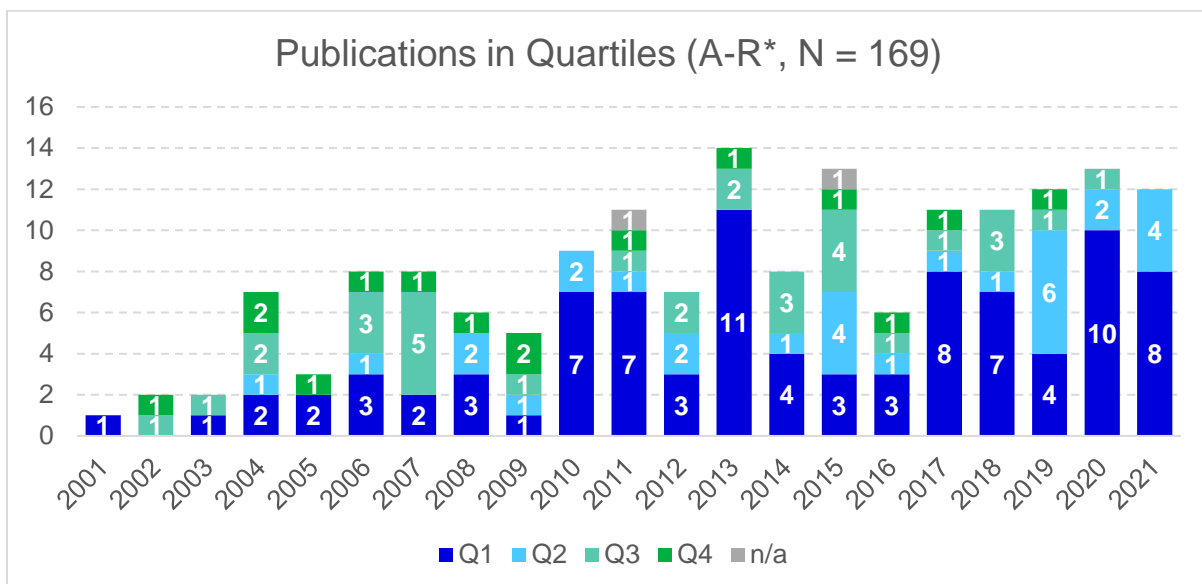
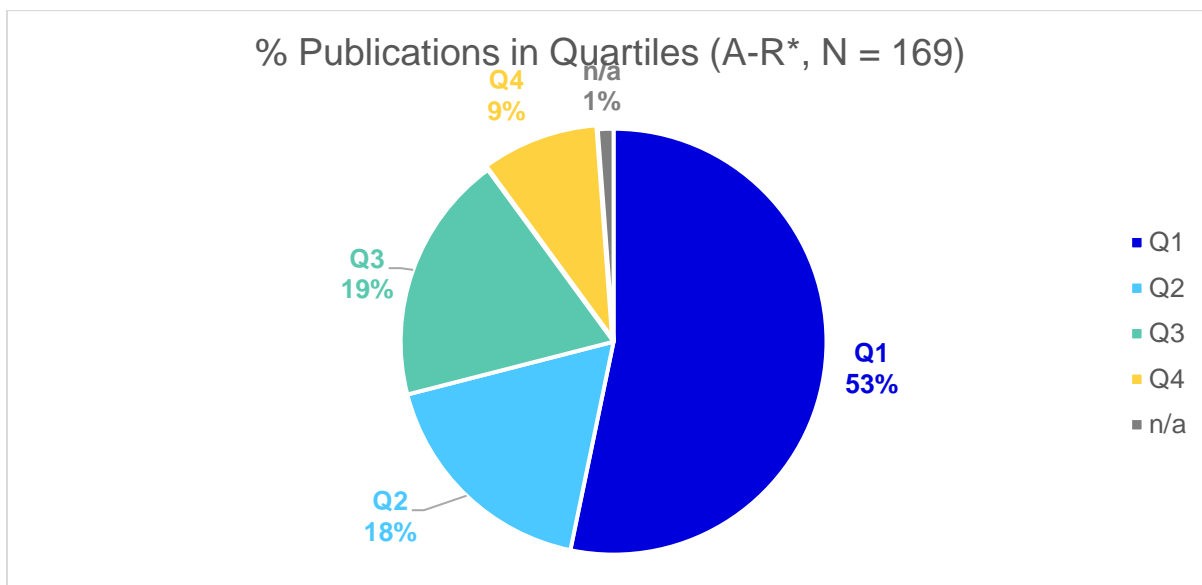


Journal Name	WoS Docs	Times Cited	A	R	Other	Q 2020	JIF 2020	Country
JOURNAL OF VEGETATION SCIENCE	1	78	1			Q1	2,685	SWEDEN
LAND DEGRADATION & DEVELOPMENT	1	6	1			Q1	4,977	USA
LAZAROA	1	1	1			n/a	0	SPAIN
MALACOLOGIA	1	16	1			Q4	0,625	USA
MIRES AND PEATLANDS OF EUROPE: STATUS, DISTRIBUTION AND CONSERVATION	1	0			1	BCI	n/a	GERMANY
NATURWISSENSCHAFTEN	1	9	1			n/a	0	USA
NEW PHYTOLOGIST	1	147	1			Q1	10,151	USA
NOVA HEDWIGIA	1	54	1			Q3	1,135	GERMANY
OIKOS	1	40	1			Q1	3,903	USA
ORYX	1	7	1			Q2	2,693	USA
PALYNOLOGY	1	5	1			Q1	2,344	USA
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	1	301	1			Q1	11,205	USA
QUATERNARY INTERNATIONAL	1	13	1			Q3	2,13	ENGLAND
QUATERNARY RESEARCH	1	26	1			Q3	2,72	USA
SOIL BIOLOGY & BIOCHEMISTRY	1	57	1			Q1	7,609	ENGLAND
TRENDS IN PLANT SCIENCE	1	22				Q1	18,313	ENGLAND
TUEXENIA	1	7	1			Q4	0,744	GERMANY
WATER	1	33				Q2	3,103	SWITZERLAND

### Quartile rank of articles (all years)

The graphs show the distribution of publications in quartiles based on the rank of journals in a certain field according to the journal impact factor. The quartile rank is valid in the year of publication.





\*A-R = Articles, Reviews (“citable” items).

### 3. Citation Impact – Web of Science

In this section, we provide multiple indicators derived from citations in Web of Science. According to the data validity and to follow the same pattern across people and fields, we most commonly work only with “**citable**” items (Article, Review). It is useful to see multiple citation-based metrics in mutual relationship (typically Category Normalized Citation Impact and the total count of citations in comparison with percentiles) for instance to investigate the influence of very few highly cited articles.

Indicators:

Category Normalized Citation Impact (CNCI)	CNCI determines the citation impact of the article relative to the average number of citations of all articles of the <b>same type in the same field and in the same publication year</b> as the article under review. A value greater than 1 indicates that the number of citations is greater than the average of the field.
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Percentiles	The percentile in which the paper ranks in its <b>category and database year</b> , based on total citations received by the paper. The higher the number of citations, comparing to other articles in the discipline, the higher is the percentile number. Average percentile is the mean of the percentiles for articles in the set.
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### Summary Metrics (all document types, all years)

This tab shows the **total number of obtained citations\***. This number is always higher than the count of citing articles (single article can refer to multiple articles of an analyzed unit). We use the count of citing articles only for analysis of citing sources (e.g. Quartile Rank). In this type of analysis (total counts), we accept all publication types including “non-citable” items – typically editorials, book reviews, etc.

	Web of Science	Web of Science – reprint or first
# publications	176	30
Sum of Times Cited*	5 192	1051
Without self-citations**	3 979	980
% self-citations	23,4 %	6,8 %

\* Obtained from Web of Science Citation Report.

\*\* Self-citations of the author under analysis excluded.

### Summary Metrics (A-R, all years)

N = 169. We only count citations to “citable items” (Articles, Reviews) in **all years**. Here, the number of publications is usually lower due to the delay in indexation of most recent publications in the analytical tool InCites.

WoS Docs	Times Cited	% Docs Cited	CNCI	PP (top 1%)	PP (top 10%)	Average Percentile	% Intl. Collab.
169	5 151	93,5 %	1,54	1,2 %	19,5 %	63,9	58 %

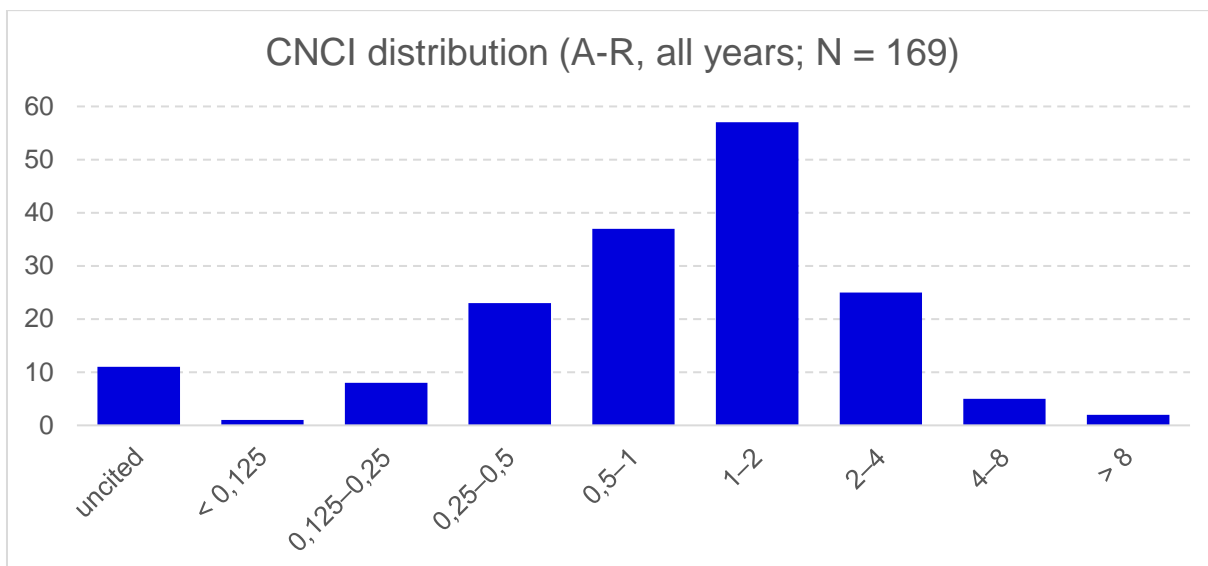
### Summary Metrics (A-R, 2011–2020)

N = 108. We only count citations to “citable items” (Articles, Reviews) in **last ten complete years**. Here, the number of publications is usually lower due to the delay in indexation of most recent publications in the analytical tool InCites.

WoS Docs	Times Cited	% Docs Cited	CNCI	PP (top 1%)	PP (top 10%)	Average Percentile	% Intl. Collab.
108	2 568	96,3 %	1,76	1,85 %	22,2 %	66,9	63 %

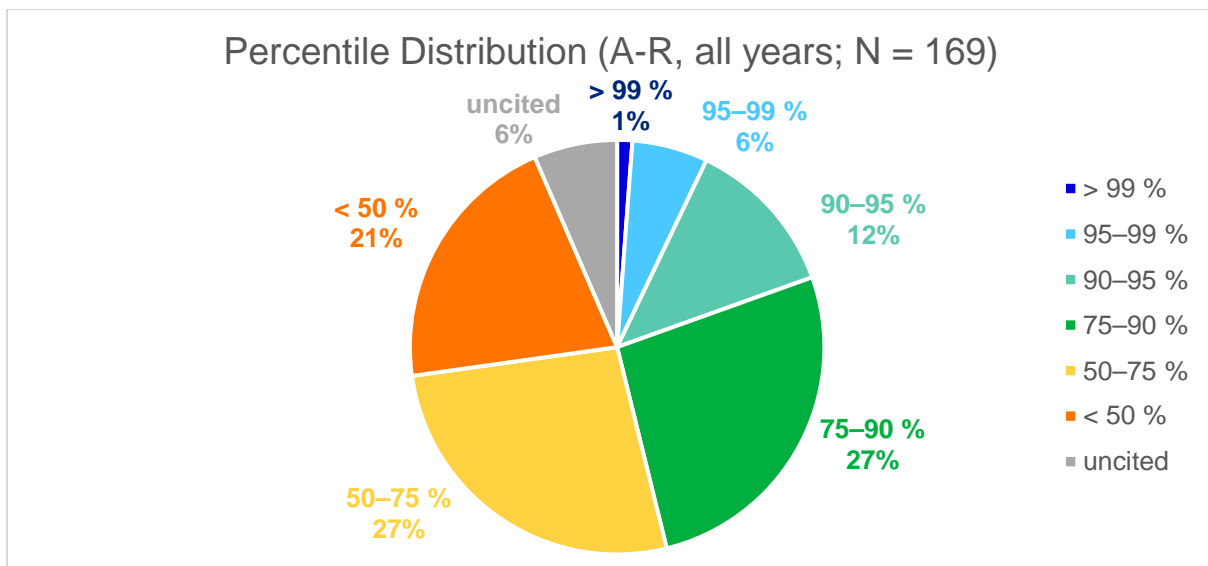
### CNCI Distribution (A-R, all years)

To responsibly interpret the citation impact and disentangle the data behind the average CNCI above, this graph shows the CNCI profile. Based on the distribution of publications (Articles, Reviews) in zones depending on their CNCI values, one can observe how many articles are of below average / average / above average discipline-normalized citation impact.



### Percentile Distribution (A-R, all years)

This graph shows the distribution of publications (Articles, Reviews) with **actual citations above the threshold for the percentiles 99 %, 95 %, 90 %, 75 % and 50 % in the dataset** (the sum is 100%). Percentiles are normalized for the discipline, type of publication and the publication year. A theoretically average publication set would have 10 % of its articles ranked in the top 10 % for citation counts (percentile 90 %) and so on. Articles with actual citation count above the threshold for 10 % most cited articles can point to highly influential research topics (percentile 90–99 %). Articles with actual citation count above the threshold for 1 % most cited articles (percentile > 99 %) can indicate the cutting-edge research.



### Top 10 cited documents – Web of Science (all years)

Article	Type	Q*	Times Cited	Comment
Citation 1	Article	Q1	414	

Citation 2	Article	Q1	301	
Citation 3	Review	Q1	195	Corresponding/First author
Citation 4	Article	Q1	147	
Citation 5	Article	Q1	145	
Citation 6	Review	Q3	119	Corresponding/First author
Citation 7	Article	Q1	115	Corresponding/First author
Citation 8	Article	Q1	83	
Citation 9	Article	Q3	79	
Citation 10	Article	Q1	79	

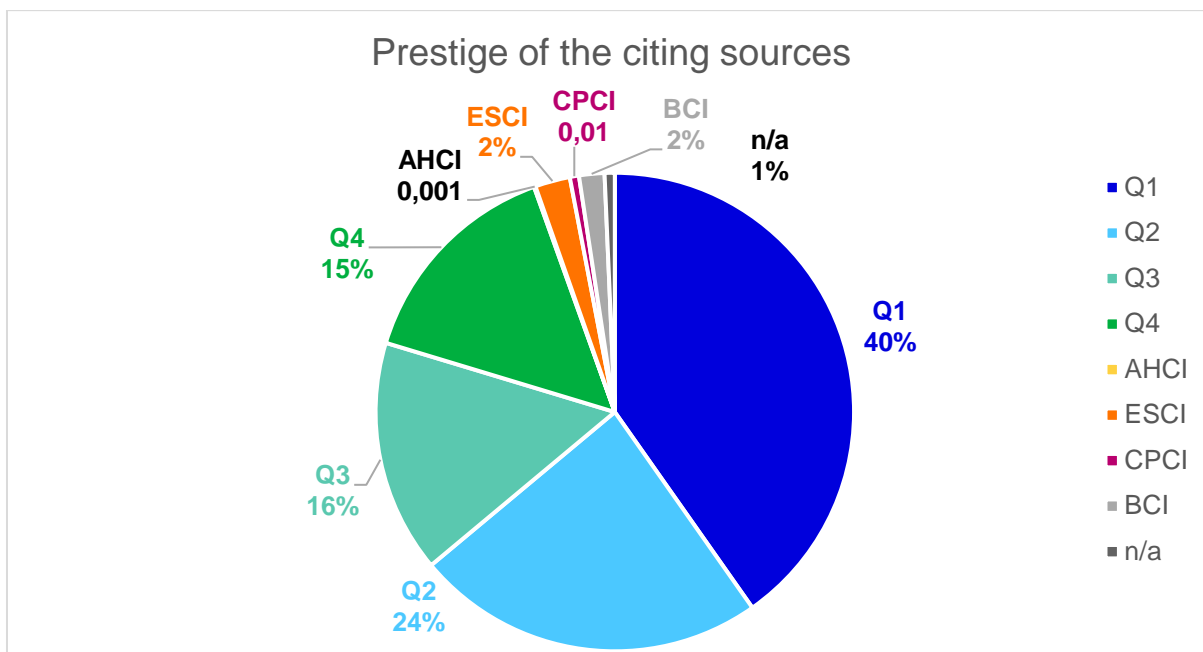
\*Quartile Rank in the 2020 JCR edition (most recent Q).

## 4. Citing Documents

Depending on a type of analysis, there is a need to consider the difference between the total count of citations and the number of citing documents (always lower) – a single article can refer to multiple articles of an analyzed unit.

### Citing articles – Quartile Rank

This graph shows the structure of citing articles according to the Quartile Rank of their sources. This analysis reveals the reputation of journals used by analyzed the Arnošt Farin's audience. For this analysis, the number of citing **scholarly outputs (all publication types)** serves as the source dataset (**N = 2 918**). The Quartile Rank is derived for each journal only for the best performing subject categories according to which quartile of the IF distribution the journal occupies for that subject category (i.e. if the journal is assigned to Subject Category 1 in Q1 and Subject Category 2 in Q3, we count this journal as Q1). Quartile Rank was extracted from the recent Journal Citation Reports edition (2020), i.e. not for the year in which the citing article was published.



ESCI = Emerging Sources Citation Index.

### Top citing authors – Web of Science

Authors with the highest occurrence in citing documents dataset (N = 2 918).

Authors	Records	% of 2 918
Farin A	162	5,552
Petr M	133	4,558
Horsak M	118	4,044
Hajkova P	108	3,701
Dengler J	52	1,782
Tichy L	46	1,576
Dite D	44	1,508
Lamentowicz M	42	1,439
Galka M	41	1,405
Jimenez-alfaro B	41	1,405
Plasek V	39	1,337
Silc U	33	1,131
Mitchell EAD	32	1,097
Willner W	32	1,097
Bednarek-ochyra H	31	1,062
Carni A	31	1,062
Ellis LT	31	1,062
Bergmeier E	30	1,028
Rolecek J	30	1,028
Jamrichova E	28	0,96
Mucina L	28	0,96

## Top citing journals – Web of Science

Journals with the highest occurrence in citing documents dataset (N = 2 918).

Source Titles	Records	Quartile Rank*	% of 2 918
JOURNAL OF VEGETATION SCIENCE	109	Q1	3,735
APPLIED VEGETATION SCIENCE	86	Q1	2,947
PHYTOCOENOLOGIA	71	Q2	2,433
PRESLIA	63	Q1	2,159
TUEXENIA	61	Q4	2,09
SCIENCE OF THE TOTAL ENVIRONMENT	56	Q1	1,919
BIOLOGIA	52	Q4	1,782
FOLIA GEOBOTANICA	51	Q3	1,748
JOURNAL OF BRYOLOGY	48	Q3	1,645
ECOLOGICAL INDICATORS	47	Q2	1,611
WETLANDS	39	Q3	1,337
PLOS ONE	38	Q2	1,302
GLOBAL CHANGE BIOLOGY	36	Q1	1,234
HOLOCENE	36	Q2	1,234
PLANT ECOLOGY	36	Q2	1,234
HYDROBIOLOGIA	34	Q2	1,165
JOURNAL OF BIOGEOGRAPHY	33	Q1	1,131
QUATERNARY SCIENCE REVIEWS	33	Q1	1,131
PLANT BIOSYSTEMS	32	Q2	1,097
BIODIVERSITY AND CONSERVATION	31	Q1	1,062

\*Quartile Rank in the recent JCR edition (2020).

## Top citing organizations – Web of Science

Organizations with the highest occurrence in citing documents dataset (N = 2 918).

Organizations-Enhanced	Records	% of 2 918
MASARYK UNIVERSITY BRNO	433	14,839
CZECH ACADEMY OF SCIENCES	348	11,926
INSTITUTE OF BOTANY OF THE CZECH ACADEMY OF SCIENCES	302	10,35
CHINESE ACADEMY OF SCIENCES	173	5,929
SLOVAK ACADEMY OF SCIENCES	155	5,312
RUSSIAN ACADEMY OF SCIENCES	150	5,141
CHARLES UNIVERSITY PRAGUE	139	4,764
UNIVERSITY OF SOUTH BOHEMIA CESKE BUDEJOVICE	131	4,489
POLISH ACADEMY OF SCIENCES	125	4,284
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	119	4,078
ADAM MICKIEWICZ UNIVERSITY	82	2,81
HUNGARIAN ACADEMY OF SCIENCES	80	2,742
SWISS FEDERAL INSTITUTE FOR FOREST SNOW LANDSCAPE RESEARCH	80	2,742
WAGENINGEN UNIVERSITY RESEARCH	77	2,639
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS CSIC	72	2,467

Organizations-Enhanced	Records	% of 2 918
UNIVERSITY OF BAYREUTH	67	2,296
UNIVERSITY OF BELGRADE	66	2,262
UNIVERSITY OF CHINESE ACADEMY OF SCIENCES CAS	66	2,262
GERMAN CTR INTEGRAT BIODIVERS RES IDIV	64	2,193
HUNGARIAN CENTRE FOR ECOLOGICAL RESEARCH	63	2,159
UNIVERSITY OF HELSINKI	63	2,159

## 5. Altmetric – attentions on the web

In this report, the overview of social media, news, blogs and other sources mentioning the applicant's research is provided. Sharable report is available online from the [Altmetric Explorer storage \(link\)](#).

## 6. Indicators

**Category Normalized Citation Impact (CNCI)** – determines the citation impact of the article relative to the average number of citations of all articles of the same type in the same field and in the same publication year as the article under review. A value greater than 1 indicates that the number of citations is greater than the average of the field.

**Journal Impact Factor (JIF)** – is defined as all citations to the journal in the current JCR year to items published in the previous two years, divided by the total number of scholarly items published in the journal in the previous two years. The Journal Impact Factor Percentile transforms the rank in a category by Journal Impact Factor into a percentile value, allowing more meaningful cross-category comparison.

**Percentiles** – The percentile in which the paper ranks in its **category and database year**, based on total citations received by the paper. The higher the number of citations, comparing to other articles in the discipline, the higher is the percentile number. Average percentile is the mean of the percentiles for articles in the set.

**Quartile Rank (Q)** – Quartiles are derived for each journal in each of its subject categories according to which quartile of the IF distribution the journal occupies for that subject category. Q1 denotes the top 25% of the IF distribution, Q2 between top 50% and top 25%, Q3 top 75% to top 50%, and Q4 bottom 25% of the IF distribution.