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**Bibliometric Analysis of the papers which appeared in the Journal
of London Mathematical Society from 1990 to 2019**

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Έχω διαβάσει και κατανοήσει τους κανόνες για τη λογοκλοπή και τον τρόπο σωστής αναφοράς των πηγών που περιέχονται στον Οδηγό συγγραφής διπλωματικών εργασιών του ΤΜΟΔ. Δηλώνω ότι, από όσα γνωρίζω, το περιεχόμενο της παρούσας διπλωματικής εργασίας είναι προϊόν δικής μου δουλειάς και υπάρχουν αναφορές σε όλες τις πηγές που χρησιμοποιήσα.

ABSTRACT

The present research aims to provide scientific conclusions about the publications of Journal of London Mathematical Society. We made a Bibliometric analysis of the publications of the “Journal” from 1990 to 2019, collecting data from 2 different databases (Scopus and Web of Science). We searched for empty gaps and duplicate values in the information columns. We compare the data from these 2 different databases, we found similarities and odds in these specific fields (number of papers per volume and issues), we clean their results and then we append the cleaned data into 1 file with the criteria of some basic information columns. Then in this file we made our Bibliometric analysis, specifically we searched if the Lotka’s law applied to our research and after we agreed to that we make our Bibliometric analysis according to Lotka’s law., which contains the author productivity. That means the papers written per author in complete count and also the papers written per author in adjusted count (fractional). In the end we made the Bibliometric analysis for the volumes that corresponding to the number of the articles, for the Volumes and the Author’s count that corresponding to the number of articles and finally the Volumes and the Author’s count that corresponding to the number of pages of each article.

ΠΕΡΙΛΗΨΗ

Η παρούσα έρευνα στοχεύει στην εξαγωγή επιστημονικών συμπερασμάτων σχετικά με τις δημοσιεύσεις του περιοδικού Journal of the London Mathematical Society. Πραγματοποιήσαμε μια βιβλιομετρική ανάλυση των δημοσιεύσεων του «περιοδικού» από το 1990 έως το 2019, συλλέγοντας τα δεδομένα μας από 2 διαφορετικές βάσεις δεδομένων (Scopus και Web of Society). Αναζητήσαμε κενά διαστήματα (NAs) και διπλοεγγραφές στις στήλες πληροφοριών. Συγκρίναμε τα δεδομένα από αυτές τις 2 διαφορετικές βάσεις δεδομένων, βρήκαμε ομοιότητες και διαφορές σε συγκεκριμένα πεδία που μας ενδιέφεραν για την ανάλυση μας (αριθμός δημοσιεύσεων ανά volume και issue.). Καθαρίσαμε τα αποτελέσματά που βρήκαμε δηλαδή αφαιρέσαμε στήλες και περιεχόμενα που δεν επηρέαζαν την ανάλυση μας και που ως προς το περιεχόμενο τους ήταν γεμάτα με κενά διαστήματα κ διπλοεγγραφές και μετά ενώσαμε τα καθαρά δεδομένα σε 1 αρχείο. Η ένωση των 2 αρχείων σε 1 έγινε με κριτήριο ορισμένες βασικές πληροφορίες που μας παρείχαν συγκεκριμένες στήλες. Στη συνέχεια, σε αυτό το ενωμένο αρχείο κάναμε τη βιβλιομετρική μας ανάλυση, συγκεκριμένα αναζητήσαμε εάν ο νόμος του Lotka επαληθεύεται στην έρευνά μας, στα δεδομένα μας και αφού συμφωνήσαμε σε αυτό, εφαρμόσαμε τη βιβλιομετρική ανάλυσή μας σύμφωνα με το νόμο της Lotka. Αυτό σημαίνει ότι ερευνήσαμε πόσα έγγραφα γράφτηκαν ανά συγγραφέα η ανά συγγραφείς σε πλήρη καταμέτρηση (complete count) και επίσης πόσα έγγραφα που γράφτηκαν ανά συγγραφέα σε προσαρμοσμένη μέτρηση (adjusted count). Στο τέλος κάναμε τη βιβλιομετρική ανάλυση για τα volumes που αντιστοιχούν στον αριθμό των άρθρων, για τα volumes και τον αριθμό των συγγραφέων που αντιστοιχούν στον αριθμό των άρθρων και τέλος για τα volumes και τον αριθμό των συγγραφέων που αντιστοιχούν στον αριθμό των σελίδων του κάθε άρθρου-δημοσίευσης.

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1. INTRODUCTION

A Bibliometric study and analysis is a useful way that will help us to analyze books, articles, journals and citations and also it will show us the way of drawing important scientific conclusions in a specific scientific field. The purpose of this analysis is to collect the publications of a journal, and with certain Bibliometric methods such as Lotka's law, extract a complete scientific conclusion about the scientific productivity in this field of study and many useful conclusions that we will see below.

In this study the data were gathered from the Journal of the London Mathematical Society and we are interested in searching for all publications of this Journal from 1990 to 2019. We are going to collect our data from two commonly used Bibliometric databases named Scopus and Web of Science. First we gathered the data from the "Journal of the London Mathematical Society" from Scopus and then from the Web of Science. We used 2 sources for the validity and for a better analysis of our data instead of using only one database. From these result we will have a better quality and also the comparison between the results from 2 databases we will help us see for mistakes and content that doesn't make sense which will be eliminated in order to make a succeed analysis and lead us to scientifically correct conclusions.

First we got involved with the quality and then with the quantity of our data. In the beginning we searched for values that they won't let us have a valid result in certain cases such as the empty gaps and the duplicate values. We eliminate a large amount of them from certain column content that will cause us serious problems and lead us to mistakes, and we kept a large amount of these values, where they will be needed in the next stage. Then we unite the data from the 2 sources into one file, according to the columns that they have common information's in their content, and also from specific columns, not all of them. We searched for differences in columns and in column's content between the results we take from the 2 sources and compare them to each other. In the last stage with certain Bibliometric tools and laws that used in the Bibliometric science, we will analyze the productivity of the author's profile, which means the contribution of each author in the field we analyze, and we will apply author's characteristics for the quality and productivity of their work in the subject of Mathematic in the articles that published by the "Journal of London Mathematical Society".

1.1 Bibliometrics

Bibliometrics is the use of statistical methods to analyze books, articles and other publications. Bibliometric methods are frequently used in the field of library and information science. The sub-field of Bibliometrics which concerns itself with the analysis of scientific publications is called Scientometrics. Many research fields use Bibliometric methods to explore the impact of their field, the impact of a set of

researchers, the impact of a particular paper, or to identify particularly impactful papers within a specific field of research.

Historically, Bibliometric methods have been used to trace relationships amongst academic journal citations. Bibliometrics are now used in quantitative research assessment exercises of academic output which is starting to threaten practice based research.

The term Bibliometrics first appeared in print (Pritchard, 1969). It was defined as the ‘application of mathematical and statistical methods to books and other media of communication’, and the term was quickly adopted and used, particularly in North America (Wilson, 1999). At almost the same time, Nalimov and Mulchenko (1969) coined the term Scientometrics to refer to ‘the application of quantitative methods which are dealing with the analysis of science viewed as an information process’. In contrast, this term was widely used in Europe (Wolfram, 2003). Initially, therefore, Scientometrics was restricted to the measurement of science communication, whereas Bibliometrics was designed to deal with more general information processes. At present, however, Bibliometrics and Scientometrics are used as synonyms (Glänzel, 2003). The first evidence of Bibliometrics dates back to 1873, when de Candolle described changes in the scientific strength of nations according to membership of scientific societies. With this study he aimed to identify factors that might influence the scientific success of a nation (van Raan, 2004).

However, the real breakthrough in Bibliometrics arrived some years later through the work of Garfield (1955) and Price (1963). Garfield developed a Science Citation Index, i.e. a multidisciplinary database in which authors could find articles from across many fields. This proved to be a visionary tool that greatly facilitated the researcher’s task.

Derek J. de Solla Price was the first scientist to formulate a specific exponential growth law applied to science. It became his most famous contribution and is now known as Price’s law. The law was presented and discussed in his most well-known publication; the book entitled Little Science, Big Science (Price, 1963). The term ‘big science’ refers to large scale instruments and facilities, supported by funding from government or international agencies, in which research is conducted by teams or groups of scientists. In fact, this term was previously introduced by Weinberg (1961). Price’s short book has had a huge impact on the formulation of scientific growth, as well as on the foundations of Bibliometrics. In his book Price explains how science has progressed from ‘little science’, which was traditionally carried out by a small group of erudite scholars who then became eminent in their field of study. In comparison, ‘big science’ is characterized by large amounts of money being invested in personnel and infrastructure. ‘Big science’ has now taken precedence over its forerunner, and investment in the advancement of science plays an important role in the economy of developed countries. However, the transition from

'little' to 'big science' has been gradual and less dramatic than it might seem at first sight. In order to analyze how this change from 'little' to 'big science' has come about, it is necessary to measure productivity over time. Price stated, on the basis of various numerical indicators taken from many fields and aspects of science, that there is regularity in the growth of its production. This growth pattern fits an exponential function. Consequently, science grows in a multiplicative way over time and, according to this exponential function, the growth rate will be proportional to the population size, i.e. the bigger the population is, the faster it grows.

In Bibliometrics, a descriptive analysis can identify the most highly productive people in a given area of research, which means that we could find out the most productive authors in a specific scientific field. Author productivity is usually analyzed according to a widely used Bibliometric law: Lotka's law. Lotka's law, named after Alfred J. Lotka, is one of a variety of special applications of Zipf's law to describes the frequency of publication by authors in any given field. More of this law and his applies you will see in this research.

1.2. Journal of the London Mathematical Society

The London Mathematical Society has published mathematical texts since its founding in 1865.

All surplus income from the London Mathematical Society publications is used entirely to support mathematicians and mathematics research. This includes activities such as funding mathematics conferences, awarding mathematics research grants, giving prizes for mathematical accomplishments, and representing mathematics to government and national policymakers.

Here are the journals published in the London mathematical society:

- Journal of the London Mathematical Society.
- Bulletin of the London Mathematical Society.
- Proceedings of the London Mathematical Society.
- Transactions of the London Mathematical Society.
- Journal of Topology
- Mathematica.

In this study we will indulge in the mathematical articles that published in the Journal of the London Mathematical Society from 1990 to 2019. The Journal of the London Mathematical Society Edited by Mark Haskins and James Maynard. It has been publishing leading research in a broad range of mathematical subject areas since 1926. Articles accepted by the Journal are of high quality and well written, with a minimum length of 18 pages. The total volumes of the Journal from its funding until now are 103 volumes.

<https://londmathsoc.onlinelibrary.wiley.com/journal/14697750>

1.3. Data collection for the Journal of the London Mathematical Society from Scopus and WOS

The data we are going to search from the Journal of the London Mathematical Society will be from 1990 to 2019. We will search for the data in 2 specific databases, named “Scopus” and “Web of Science”.

Scopus is Elsevier’s abstract and citation database launched in 2004. Scopus covers nearly 36,377 titles (22,794 active titles and 13,583 inactive titles) from approximately 11,678 publishers, of which 34,346 are peer-reviewed journals in top-level subject fields: life sciences, social sciences, physical sciences and health sciences. It covers three types of sources: book series, journals, and trade journals.

Web of Science (previously known as Web of Knowledge) is a website that provides subscription-based access to multiple databases that provide comprehensive citation data for many different academic disciplines. Their data is editorially selective, publisher neutral, and has been consistently structured since 1950. The Web of Science numbers 171 millions of records, more than 34000 journals indexes, 1.89 billions of cited references and nearly 119 years of back files, dating to 1900.

Due to the fact that in some cases we will find a large number of data, we are going to break them up. In the beginning I will start first to search and download the data from Scopus and then I am going to follow the same process on getting data from Web of Science.

Searching in these 2 databases, it provides us the document results of the “Journal of the London Mathematical Society. By choosing the “Document search” in Scopus and “Publication name” in WOS (Web of Science) we collect all the document results from this Journal between the years 1990 to 2019. The data from Scopus were gathered on the 20st of May 2020 and are freely accessible at the Scopus database, for the “Journal of London Mathematical Society” and this is Scopus link:

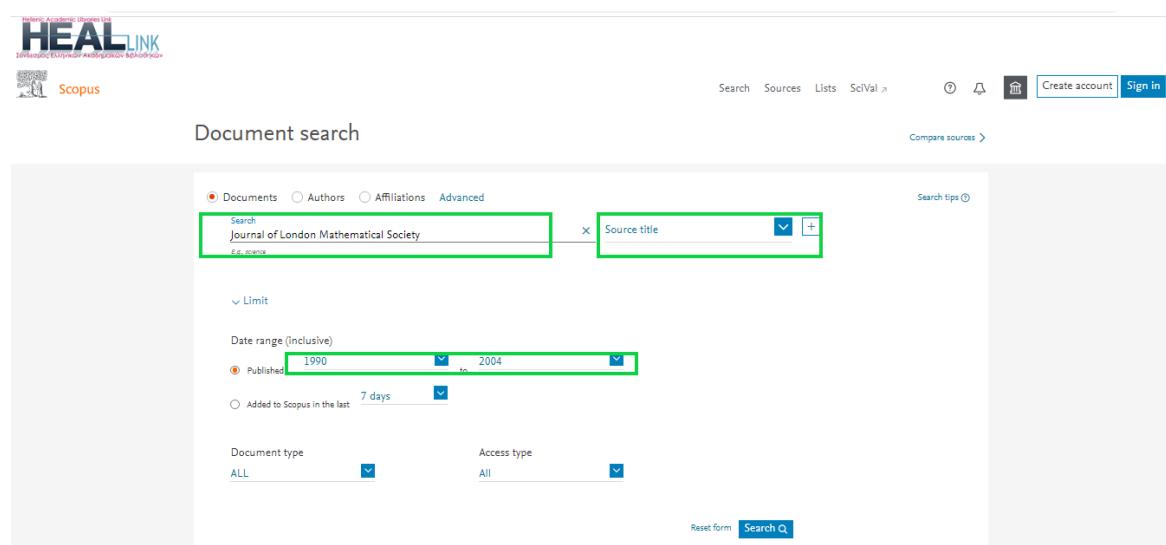
<https://www.scopus.com/search/form.uri?display=basic&zone=header&origin=resultslist>.

The data from WOS (Web of Science) were gathered on the 20st of May 2020 and are freely accessible at the Web of Science database for the Journal of London Mathematical society and this is the WOS link:

https://apps.webofknowledge.com/WOS_GeneralSearch_input.do?product=WOS&search_mode=GeneralSearch&SID=F3GJ5YuYgGsuaEWHMRQ&preferencesSaved=

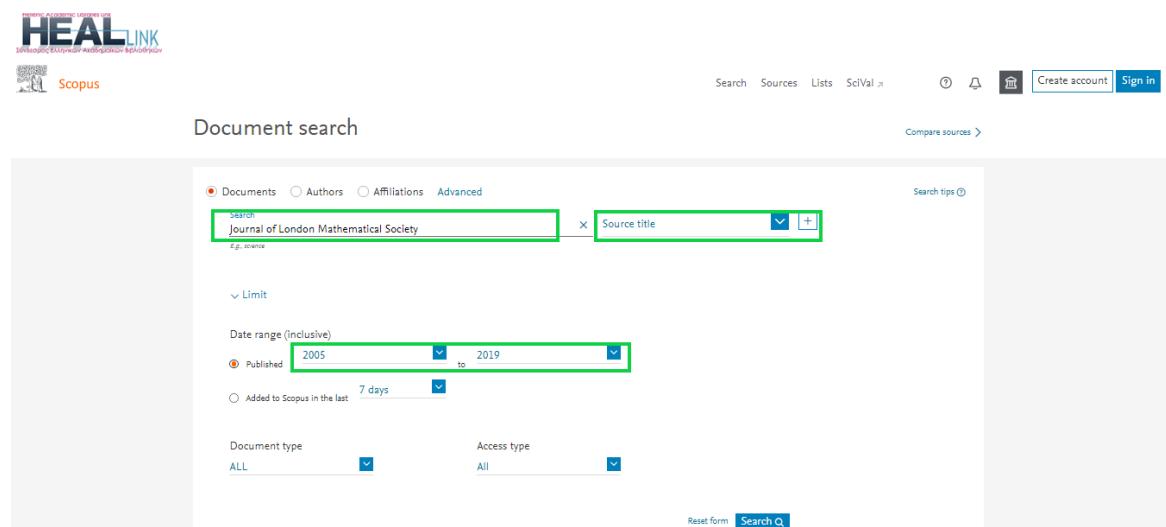
Next we are going to search for all the documents for the last three decades (1990-2019) in all forms of data.

Our documents result in Scopus for these years are too many, so we are going to break our search up by two parts separated by years. In the first part, the data for the Journal (London Mathematical Society) gathered with document search from years 1990 to 2004 as you can see in the Figure 1.2.1 and in the second part from years 2005 to 2019 as you can see in Figure 1.2.2. In Web of Science I will search for the full part of documents by the years 1990-2019(Figure 1.2.3.).



The screenshot shows the Scopus search interface. At the top, there are links for 'Search', 'Sources', 'Lists', 'SciVal', and account options ('Create account', 'Sign in'). Below the header, the search bar contains 'Journal of London Mathematical Society' and a dropdown menu set to 'Source title'. A green box highlights this search input. Underneath, the date range is set to 'Published' from 1990 to 2004, also highlighted with a green box. Other search parameters like 'Document type' (ALL) and 'Access type' (All) are visible. At the bottom right are 'Reset form' and 'Search' buttons.

Figure 1.3.1 Document search in Scopus Database for Journal of London Mathematical society 1990-2004



This screenshot shows the same Scopus search interface as Figure 1.3.1, but with a different date range. The search term 'Journal of London Mathematical Society' remains in the search bar, and the date range is now set to 'Published' from 2005 to 2019, highlighted with a green box. The other search parameters are identical to the previous figure.

Figure 2 1.3.2 Document search in Scopus Database for Journal of London Mathematical Society in Scopus 2005-2019

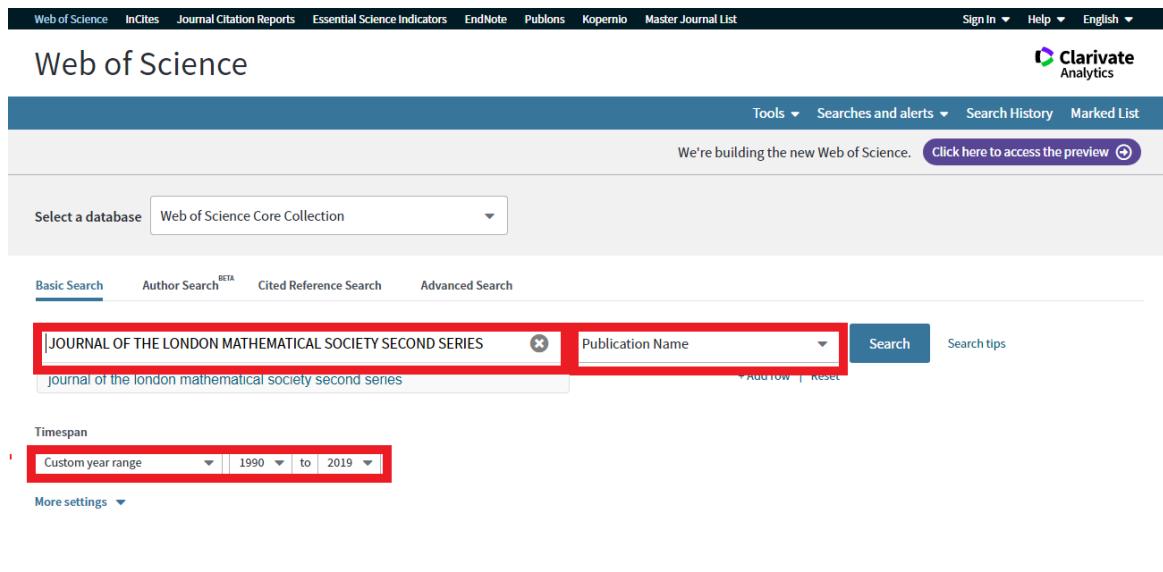


Figure 3 1.3.3 Document search in Web of Science 1990-2019

We will see that the total number of the document results from our first research in Scopus is between the years 1990 and 2004 exists 1500 documents (figure 1.2.4.) And by the years 2005-2019 we found out that there are 1298 document results (figure 1.25.). We made this break up in document results by this group of years so as to make it easier for us to download these 2 files. By exporting these 2 files and when the whole process ends, we will merge these two files that are going to download, which are separated by the years 1990 to 2004 and 2005 to 2019 into one named Journal of London Mathematical Society 1990-2019.

Scopus

1,500 document results

SRCTITLE (journal AND london AND mathematical AND society) AND PUBYEAR > 1989 AND PUBYEAR < 2005

Search Sources Lists SciVal | Create account Sign in

Export

Document title	Authors	Year	Source	Cited by
Eberlein-Šmuljan theorem for Abelian topological groups	Bruguera, M., Martín-Peinador, E., Tarieladze, V.	2004	Journal of the London Mathematical Society	6
Equivariant local epsilon constants and étale cohomology	Breuning, M.	2004	Journal of the London Mathematical Society	12

Figure 4 1.3.4 Total document results in Scopus 1990-2004 and the way to export them

Scopus

1,298 document results

SRCTITLE (journal AND london AND mathematical AND society) AND PUBYEAR > 2004 AND PUBYEAR < 2020

Search Sources Lists SciVal | Create account Sign in

Export

Document title	Authors	Year	Source	Cited by
Random ideal hyperbolic quadrilaterals, the cross ratio distribution and punctured tori	Martin, G.J.	2019	Journal of the London Mathematical Society	1
The conjugacy problem in $GL(n, \mathbb{Z})$	Eick, B., Hofmann, T., O'Brien, E.	2019	Journal of the London Mathematical Society	1

Figure 5 1.3.5 Total document results in Scopus 2005-2019 and the way to export them

We follow the same procedure for the documents we found in Web of Science. We face 2873 results as we can see in Figure 1.2.6. Then we group these results by the order they appear and they should not exceed more than 500 results in each group. This process will help us download easily the files. We exported 5 files of 500 results

each and 1 file of 373 results, and then we combine them to one single file named Journal of London Mathematical society second series W.O.S. total.

The screenshot shows the Web of Science interface. At the top, there are navigation links: Web of Science, InCites, Journal Citation Reports, Essential Science Indicators, EndNote, Publons, Kopernio, and Master Journal List. On the right, there are links for Sign In, Help, and English. The main title 'Web of Science' is at the top left, and the Clarivate Analytics logo is at the top right. Below the header, a green box highlights 'Results: 2,873 (from Web of Science Core Collection)'. The search bar contains the query 'JOURNAL OF THE LONDON MATHEMATICAL SOCIETY-SECOND SERIES'. The results are sorted by Date. The first result is 'Strongly perfect lattices sandwiched between Barnes-Wall lattices' by Hu, Sihuang; Nebe, Gabriele, published in JOURNAL OF THE LONDON MATHEMATICAL SOCIETY-SECOND SERIES, Volume: 101, Issue: 3, Pages: 1068-1089, Published: JUN 2020, Early Access: DEC 2019. The second result is 'Higher structures, quantum groups and genus zero modular operad' by Manin, Yuri I., published in JOURNAL OF THE LONDON MATHEMATICAL SOCIETY-SECOND SERIES, Volume: 100, Issue: 3, Pages: 721-730, Published: DEC 2019. Both results have options to 'Select Page', 'Export...', 'Add to Marked List', 'Full Text from Publisher', and 'View Abstract'. To the right of the results, there are links for 'Analyze Results' and 'Create Citation Report'. Below the results, there are sections for 'Times Cited: 0 (from Web of Science Core Collection)' and 'Usage Count'.

Figure 6 1.3.6 Total search results in Web of Science 1990-2019 and the way to export them

2. GENERAL INFORMATIONS ABOUT OUR DATA

2.1. Exporting and save the data from Scopus and W.O.S.

After all the process we follow, we have to export our data and save them to our personal computer. In Scopus we save our data in a .CSV excel file under the name “jlms_scopus_1990_2019” for Scopus database. This file that we downloaded it will appear in a matrix format where in each file, the number of the lines will be determined by the total number of documents. This file consists of 2798 rows which represents the total number of 2797 document results and 1 more row (the first row) that contains the category of each column. We have a total number of 45 columns and these 45 columns are classified into categories and subcategories and contain the selected information below.

The information below was found in Scopus, specifically through ‘Scopus Field Code’ section. Field codes are used in an advanced search for a term in a specific field.

It explains in detail not only what the columns of our file mean, but also many more categories of information that exist in Scopus. The 45 columns are presented in the order they appear in the CSV excel file, as well as information about the content of each column:

- Authors (First and last name of the authors. This variable is a character variable because it is a combination of alphabetical letters and other symbols. An example of this variable is Breuning M., Martin-Peinador E., and Tavieladje V. etc.)
- Authors ID (It represents a unique ID number for each and every author. It can be characterized as a character, because of the fact that there are a combination of numeric characters and symbols such as ;. An example of this variable is: 6602607108 ;)
- Title (The title of each document. This variable can be characterized as a character due to the fact that there this variable consists of symbols such as the example "Weighted composition operator on the Bergman space.)
- Year (publication year of the document. It can be characterized as an integer variable, because it consists of variables which are numbers with 4 digits and concerns of the publication years which means that it cannot be float variables, only integer. We can see 2 examples of these variables:2004,2005)
- Source title (The title of the journal, book, conference proceeding, or report in which the document was published. It can be characterized as a character because it consists of alphabetical symbols. An example of this is: Journal of the London Mathematical Society.)
- Volume (ID for a serial version. It can be characterized as a character variable, due to the fact that this variable consists of numbers which are up to 3 digits but they are on (""). An example of these values is: "69","70".)
- Issue (ID for a serial version. It can be characterized as an integer numeric variable, as you can see in the example, where there consists of number between 1 to 4.)
- Article Number (A persistent identifier for a document used by a few publishers instead of, or in addition to, page numbers. Article numbers can be assigned at the time of electronic publication, so documents can be cited and searched for earlier in the publication process. It can be characterized as a character variable and as we can see there are a lot of NANS values which means not a number.)
- Page start (Indicates the first page of a page range within a publishing. It can be characterized as an integer numeric variable. We can see in the examples the numbers that help us understand that: 851 731 1065)
- Page end (Indicates the last page of a page range within a publishing. It can be characterized as an integer numeric variable. We can understand that by looking at the examples: 1080 850 1012)
- Page count (A combination field that searches PAGEFIRST and PAGELAST fields. It is a logical variable because there are missing values in there (NAs)).
- Cited by (It is an integer numeric variable as we can see in the result: 1 2 3 etc.)
- DOI (A unique alphanumeric string created to identify a piece of intellectual property in an online environment. It can be characterized as a character. An example of this variable is: "10.1112/jlms.12249".)
- Link (The URL of a website of a cited reference. It is a character variable as we can see in the example: ""<https://www.scopus.com/inward/record.uri?eid=2-s2.0>

85075998214&doi=10.1112%2fjmls.12249&partnerID=40&md5=681a0"|" _truncated_")

- Affiliations (The organization portion of an author affiliation address. It can be characterized as w character. An example of this is: "New Zealand Institute of Advanced Study, Massey University, Albany, Auckland, 0632, New Zealand")
- Authors with affiliations (AFFIL is a combined field that searches the following author address fields: AFFILCITY, AFFILCOUNTRY, and AFFILORG. When searching the AFFIL field, you can specify if you want all of your search terms to be found in the same affiliation. This variable can be characterized as a character. An example of this variable is: "Martin, G.J., New Zealand Institute of Advanced Study, Massey University, Albany, Auckland, 0632, New Zealand")
- Abstract (summary of a document. This variable is a character. An example of this variable is: «Earlier work introduced a geometrically natural probability measure on the group of all Möbius transformations ".)
- Author keywords (Keywords assigned to the document by the author. This variable can be characterized as a character as we can see in the next examples which are a combination of letters, numbers and symbols: "11Y40 (secondary); 20C15; 20C40 (primary); 20D05")
- Index keywords (Controlled vocabulary terms assigned to the document. It can be characterized as a logical variable, due to the fact that there are missing values in this variable (NAs))
- Molecular Sequence numbers (The number assigned to an amino acid or nucleotide sequence defined or mentioned in a document. It can be characterized as a logical variable, due to the fact that there are missing values in this variable (NAs))
- Chemicals/CAS (A numeric identifier assigned to a substance when it enters the CAS registry database. It can be characterized as a logical variable, due to the fact that there are missing values in this variable (NAs).)
- Tradenames (A name used to identify a commercial product or service. It can be characterized as a logical variable, due to the fact that there are missing values in this variable (NAs).)
- Manufacturers (The name of a manufacturer, such as a device or chemical manufacturer. It can be characterized as a logical variable, due to the fact that there are missing values in this variable (NAs).)
- Funding details (A combined field that searches the Funding acknowledgement text as well as the following Funding fields: FUND-NO, FUND-ACR, FUND-SPONSOR. It is a character variable and we can see that in the next 2 results: "Georgia-Pacific", "Tata Institute of Fundamental Research, and TIFR".)
- Funding text 1 (Number of the grant or award supporting the work. It can be characterized as a character. A result of this variable is: "First, I thank the organizers of the Georgia Algebraic Geometry Symposium 2015, where the early ideas for this ".)

- Funding text 2(Number of the grant or award supporting the work. It can be characterized as a character. A result of this column is: Acknowledgements. The author gratefully acknowledges the support of K.C. Wong Education Foundation and DAAD. He also would like to thank Professor Ka-Sing Lau for his support and valuable discussions, especially on Section 5.)
- References (REF is a combined field that searches the REFAUTH, REFTITLE, REFSRCTITLE, REFPUBYEAR, REFPAGE and WEBSITE fields. When searching the REF field, you can specify if you want all of your search terms to be found in the same reference. The data of this column can be characterized as characters. An example of this is: "Ahlfors, L.V., (2006) Lectures on quasiconformal mappings, University Lecture Series (, American Mathematical")
- Correspondence Address (This variable can be characterized as a character. A single result of this variable is: "Martin, G.J.; New Zealand Institute of Advanced Study, Massey University, Albany, New Zealand; email: g.j.martin@massey.ac.nz")
- Editors (A combined field that searches the following fields: EDLASTNAME and EDFIRST. These are editor's first and editor's last name. The data of this column is characterized as logical variables. This happens because of the missing values that exist in the entire column.)
- Sponsors (Sponsor providing grant or funding for the work. The data of this column is characterized as logical variables. This happens because of the missing values that exist in the entire column.)
- Publisher (Search for Books from named publisher. This variable can be characterized as a character and we can see a result of this: "John Wiley and Sons Ltd.")
- Conference name (The name of a conference. This variable is a logical variable because of the missing values that there are in the entire column (NAs))
- Conference date (The date of a conference. This variable is a logical variable because of the missing values that there are in the entire column (NAs))
- Conference location (The location of a conference. This variable is a logical variable because of the missing values that there are in the entire column (NAs))
- Conference code (The code of a conference. This variable is a logical variable because of the missing values that there are in the entire column (NAs))
- ISSN (A unique identification number assigned to all serial publications. This variable can be characterized as an integer numeric variable. An example of this variable is "00246107".)
- ISBN (A unique identification number assigned to all books. This variable is a logical variable because of the missing values that there are in the entire column (NAs).)
- CODEN (A unique, six-character code that identifies serial and nonserial publications. This variable is a logical variable because of the missing values that there are in the entire column (NAs).)
- PubMed ID (A unique identifier for all Medline documents. This variable is a logical variable because of the missing values that there are in the entire column (NAs).)

- Language of Original Document (the language in which the original document is written. This is a character variable as we can see in the example: "English".)
- Abbreviated source title (This variable is a character variable. We can see in the example. J. Lond. Math. Soc.)
- Document Type (Limits your search to document types, is characterized as a character variable. In the result we can see it: "Article")
- Publication Stage (The stages of a publication, which is a character variable as we can see in the example below: "Final".)
- Access Type (Access type field code is used to filter the documents by Open Access documents, which can be characterized as a character variable and we can see it in the next result: "Open Access".)
- Source (This is a character variable. An example of this variable is the next value: "Scopus".)
- EID (EID (Electronic Identifier) is a unique alphanumeric string created to identify a record in Scopus. Note: EIDs are visible through the document export function. Unlike DOIs, they are internal identifiers meant to be used only in Scopus. This is a character variable. An example of this variable is: "2-s2.0-7544249140".)

The information for each and every column was gathered on the 28st of May 2020 from the Scopus website, in the section "Scopus: Access and use support center". All these information retrieved from https://service.elsevier.com/app/answers/detail/a_id/11236/c/10547/supporthub/scopus/%20.

In Web of Science database, the data was collected under the name "Jlms_secser_wos total" and is also in matrix format as in Scopus. This file consists of 67 variables which they represent selected information for each row. These variables constitute the column of the table. In W.O.S. file exists 2873 rows where the 2872 appeared through Document Search in W.O.S database and constitute each and every paper of Journal that we searched for, in this database and 1 more row where it contains the categories of each document. These categories are the W.O.S field codes where they descript each and every column of this file.

Below we give a full description of each column and their symbols from the data that we downloaded from Web of Science. There are a lot common records with Scopus dataset that mentioned and analyzed above and we will not mentioned them here:

- Author. (Represents the first and the last name of each author. The symbol of this column is "AU")
- Title. (Represents the title of each document. The symbol of this column is "TI").
- DOI. (Digital object identifier represents a unique alphanumeric string created to identify a piece of intellectual property in an online environment. If

you know the DOI of a publication you can identify the document. Its symbol is “DOI”).

- Source. (Represents the publication name or source. Its symbol is “SO”).
- ISO source abbreviation. (Represents the source abbreviation. Its symbol is “JI”).
- Abstract. (Represents the summary of the subject of the publication. Its symbol is “AB”).
- Author Keywords. (Represents the keywords used by authors. Its symbol is “DE”).
- Keywords associated or Keywords Plus. (Represents the extra keywords or plus keywords. Its symbol is “ID”).
- Language. (Represents the language in which the document is written e.g. English. Its symbol is “LA”).
- Document Type. (Represents the type of the document for example article, note, review. Its symbol is “DT”).
- Document Type 2. (Represents only articles .Its symbol is “DT2”).
- Times Cited. (Represents the Web of Science core collection times cited count. Its symbol is “TC”).
- Cited references. (Represents the details about the cited references. Its symbol is “CR”).
- Authors address. (Represents the information about the University address. Its symbol is “C1”).
- Publisher .(Represents the publisher address. Its symbol is “PA”).
- Funding. (Represents the funding agency and grant number. Its symbol is “FU”).
- Funding Text (Represents the Funding text. Its symbol is “FX”).
- Issue. (Represents the issues of a volume. Its symbol is “PN”).
- Pages. (Represents the Page number. Its symbol is “PP”).
- Publisher. (Represents the publisher’s name. Its symbol is “PU”).
- Volume. (Represents the volume of a journal. Its symbol is “VL”).
- Year. (Represents the year of a publication. Its symbol is “PY”).
- Unique article identified. (Represents the Unique article identified . Its symbol is “UT”).
- Cited references. (Represents the cited references in wos core collection. Its symbol is “NR”).
- Subject categories. (Represents the subject categories. Its symbol is “SC”).
- Usage count. (Represents the usage count. Its symbol is “U2”).
- Web of science categories. (Represents the categories of the Web of Science. Its symbol is “WC”).
- Email address. (Represents the e-mail address of the author(s) . Its symbol is “EM”).
- IDS Number. (Identifies an issue of a journal. Used to order copies of articles from a document delivery service. Its symbol is “GA”).

- Reprint address (Identifies the address of the reprint author. It may include reprint author, organization, sub-organization, street, city, state or province, zip or postal code. Its symbol is “RP”).
- Bibliographical database. . (Identifies which bibliographic database is used. Its symbol is “DB”).
- Authors university. (Identifies which is the authors university. Its symbol is “AU_UN”).
- Authors university. (Identifies which is the authors university. Its symbol is “AU1_UN”).
- Authors university. (Identifies which is the authors university. Its symbol is “AU_UN_NR”).
- Author name, publication, year, source. (Identifies author name, publication, year, source. Its symbol is “SR_FULL”).
- Software review. (Contain information which distinguishes each paper. Its symbol is “SR”).

2.2. Searching for missing values (NAs) in our data set

In this section, we are going to locate if there are missing values in our data set.

In the next step we have to locate the exact number of missing values that exist in every single column of our dataset (“jlms_scopus_1990_2019” and in “jlms_secser_wos_total”). In the 2 tables below you will see how the missing values are distributed, in the columns of the dataset “jlms_scopus_1990_2019” (table 2.2.1) and the table of the exact number of missing values in W.O.S. named “Jlms_secser_wos_total” (table 2.2.2):

COLUMN SCOPUS	NAME	NUMBER OF NAs SCOPUS
Authors	0	
Authors' ID	0	
Title	0	
Year	0	
Source. Title	0	
Volume	7	
Issue	7	
Art.No	1298	

Page. Start	7
Page. End	17
Page. Count	2798
Cited.by	252
DOI	0
Link	0
Affiliations	0
Authors. With. affiliations	0
Abstract	0
Author. Keywords	1500
Index. Keywords	2798
Molecular. Sequence. Numbers	2798
Chemicals. AS	2798
Tradenames	2798
Manufacturers	2798
Funding. Details	0
Funding.Text.1	0
Funding.Text.2	0
References	0
Correspondence. Address	0
Editors	2798
Sponsors	2798
Publisher	0
Conference.name	2798
Conference. Date	2798
Conference. Location	2798
Conference. Code	2798
ISSN	0
ISBN	2798
CODEN	2798
PubMed.ID	2798
Language.of. Original.Document	0
Abbreviated. Source. Title	0
Document. Type	0
Publication.Stage	0
Access.Type	1500
Source	0
EID	0

Table 1-2.2.1 Exact number of missing values per column, in Scopus dataset.

COLUMN NAME WOS	NUMBER OF NA WOS
X	0
Publication.Type	0
Authors	0
Book.Authors	2873
Book.Editors	2873
Book.Group.Authors	2873
Author.Full.Names	0
Book.Author.Full.Names	2873
Group.Authors	2873
Article.Title	0
Source.Title	0
Book.Series.Title	2873
Book.Series.Subtitle	2873
Language	0
Document.Type	0
Conference.Title	2871
Conference.Date	2871
Conference.Location	2871
Conference.Sponsor	2872
Conference.Host	2871
Author.Keywords	2785
Keywords.Plus	841
Abstract	626
Addresses	420
Reprint.Addresses	78
Email.Addresses	1346
Researcher.Ids	2305
ORCIDs	2056
Funding.Orgs	2104
Funding.Text	2120
Cited.References	2873
Cited.Reference.Count	0
Times.Cited..WoS.Core	0
Times.Cited..All.Databases	0
X180.Day.Usage.Count	0
Since.2013.Usage.Count	0
Publisher	0
Publisher.City	0
Publisher.Address	0
ISSN	0
eISSN	1732
ISBN	2873
Journal.Abbreviation	0
Journal.ISO.Abbreviation	0
Publication.Date	6
Publication.Year	6

Volume	6
Issue	2741
Part.Number	167
Supplement	2873
Special.Issue	2873
Meeting.Abstract	2873
Start.Page	6
End.Page	6
Article.Number	2873
DOI	432
Book.DOI	2873
Early.Access.Date	2835
Number.of.Pages	0
WoS.Categories	0
Research.Areas	0
IDS.Number	0
UT..Unique.WOS.ID.	0
Pubmed.Id	2873
Open.Access.Designations	2689
Highly.Cited.Status	2873
Hot.Paper.Status	2873

Table 2-2.2.2 Exact number of missing value per column in Web of Science dataset

With the results we took from these 2 tables, we can conclude some important things about the columns which their consistence is full of missing values. Also a few fields have only missing values in their content and others that shouldn't have any missing values and that it's indeed what happened in this case.

These are the columns that they consist of missing values in every of their field in Scopus:

- Page count
- Index Keywords
- Molecular Sequence Numbers
- Chemicals/CAS
- Tradenames
- Manufacturers
- Editors
- Sponsors
- Conference name
- Conference date
- Conference location
- Conference code
- ISBN

- CODEN
- PubMed ID

We can see also which columns have in their fields missing values but they are not full of them and we can also notice that their columns that shouldn't have any missing values in their fields. In certain cases, though it is not allowed in columns to have missing values in their fields. In that case because the dataset results do not make sense and that means we have made mistakes, because some registrations showing us unique things that characterized the data and they must not be missing.

These columns that shouldn't have missing cases in any cell in Scopus, and that's indeed the case here, are the fields below:

- Source Title
- ISSN
- EID

In W.O.S. the columns that consist of missing values only are the following columns

- Book.Series.Title
- Book.Series.Subtitle
- Book.Author.Full.Names
- Group.Authors
- Book.Authors
- Book.Editors
- Book.Group.Authors
- Cited.References
- ISBN
- Article.Number
- Supplement
- Special.Issue
- Meeting.Abstract
- Article.Number
- Book.DOI
- Pubmed.Id
- Highly.Cited.Status
- Hot.Paper.Status

These are the columns that we shouldn't have any missing values and that is really happening in W.O.S.

- Article.Title
- Source.Title
- ISSN

Continuing and analyzing our data we must remove columns in both datasets which are full of empty data in their content. So we proceed by making this deletion.

There are also column information fields that exist only in one dataset and they don't exist in the other.

Columns that exist only in Scopus

- Link
- EID
- Source
- Access Type
- CODEN
- Document Type
- Abbreviated Source Title
- Conference Name
- Conference Code
- Editors
- Sponsors
- References
- Correspondence Address
- Tradenames
- Index Keywords
- Manufactures
- Chemicals/Cas
- Molecular Sequence Numbers
- Cited by

Columns that exist only in Web of Science

- Hot.Paper.Status
- Date of Export
- Highly.Cited.Status
- Open.Access.Designations
- IDS.Number
- UT.Unique.WOS.ID
- Research.Areas
- Early.Access.Date
- Book.DOI
- Meeting.Abstract
- Supplement
- Special.Issue
- Journal.Abbreviation
- Journal.ISO.Abbreviation
- Publication.Date
- Publication.Year

- Publisher.City
- Publisher.Address
- Times.Cited.All.Databases
- Times.Cited.WoS.Core
- Cited.Reference.Count
- Cited.References
- ORCIDs
- Funding.Orgs
- Email.Addresses
- Researcher.Ids
- Addresses
- Reprint.Addresses
- Keywords.Plus
- Conference.Host
- Conference.Title
- Conference.Sponsor
- Book.Series.Subtitle
- Book.Series.Title
- Book.Author.Full.Names
- Author.Full.Names
- Book.Authors
- Book.Editors
- Book.Group.Authors

2.3. Locate double elements (DUBLICATES)

In this part we are going to search for fields that have not any unique prices. In other words, we are searching for elements or values that repeated among the columns. These values we will call them from now on “duplicates”. We are interested in searching for duplicates (double elements) in both Scopus and W.O.S. in the columns

- DOI
- Title
- EID(SCOPUS)-U.T.UNIQUE.WOS.ID(WOS)

First, our research for double elements begun with the column named “DOI”. First of all, we searched out for unique registrations in this column and we discovered that we have 2781 unique observations in this field in Scopus and 2441 unique observations in W.O.S. That means, if we made the verification, we must locate 18 observations which are duplicates in Scopus and 432 observations in Web of Science and that's exactly what happened. The 18 duplicate observations in Scopus and the 432 observations in Web of Science are empty gaps (NAs).

Next we searched for duplicates (double elements) in the column named "EID" in Scopus and the corresponding column in W.O.S. that contains the same information in Web of Science dataset and this is the column named U.T.Unique.WOS.ID. In both cases, we found out that there aren't any double elements because the electronic identification (EID in Scopus) and (U.T.Unique.WOS.ID. in Web of Science) is unique for every observation.

We also searched for double elements in the column named "Title". We found out that there are 2 repeated values in this column in Scopus and 2796 unique observations. In Scopus dataset, these are the character observations "Pointwise limits of analytic functions" and "Normal elements of C*-algebras of real rank zero without finite-spectrum approximants". These records appeared for 2 times each. In Web of Science we have 3 repeated values in this column. These records are also character observations and appeared 2 times each. These observations are: "On imprimitive rank 3 permutation groups", "Barely transitive locally nilpotent p-groups" and "The co radical filtration for quantized enveloping algebras."

We searched before for double elements in single columns, but now we are going to search for duplicates in a combination of columns. The first combination is the combination of columns named "Volume", "Issue", "Page. Start". In Scopus we locate 9 integer numeric variables which are repetitive. The duplicates in the combination "volume" "issue" and "page start" are shown in the table below (Table 2.3.1). As you can see, we locate every combination which is recurring and we recorded them in the table depending on the number of times that they appeared.

We do the same procedure in the combination "Volume", "Issue", "Page end" in Scopus again as we shown in Table 2.3.2.

N	VOLUME	ISSUE	PAGE START
1	51	1	27
2	51	1	27
3	51	2	342
4	51	2	342
5	S2-43	2	225
6	S2-43	2	225
7	NA	NA	NA
8	NA	NA	NA
9	NA	NA	NA
10	NA	NA	NA
11	NA	NA	NA
12	NA	NA	NA
13	NA	NA	NA

Table 3-2.3.1 Duplicate values in the combination of columns' names "Volume"- "Issue"- "Page Start" in Scopus dataset

N	VOLUME	ISSUE	PAGE END
1	51	1	40
2	51	1	40
3	51	2	352
4	51	2	352
5	NA	NA	NA
6	NA	NA	NA
7	NA	NA	NA
8	NA	NA	NA
9	NA	NA	NA
10	NA	NA	NA
11	NA	NA	NA

Table 4-2.3.2 Duplicate values in the combination of columns' names "Volume"- "Issue"- "Page end" in Scopus dataset

In Web of Science the research for duplicates values in the combination of columns "Volume"- "Issue"- "Page start" and "Volume"- "Issue"- "Page end" lead us to 6 duplicates for each combination. These 6 duplicate combinations are the same for both cases and contain only NAs as you can see in the tables below (Table 2.3.3 and Table 2.3.4):

N	VOLUME	ISSUE	PAGE START
1	NA	NA	NA
2	NA	NA	NA
3	NA	NA	NA
4	NA	NA	NA
5	NA	NA	NA
6	NA	NA	NA

Table 5-2.3.3 Duplicate values in the combination of columns' names "Volume"- "Issue"- "Page start" in Web of Science dataset

N	VOLUME	ISSUE	PAGE END
1	NA	NA	NA
2	NA	NA	NA
3	NA	NA	NA
4	NA	NA	NA

5	NA	NA	NA
6	NA	NA	NA

Table 6-2.3.4 duplicate values in the combination of columns' names "Volume"- "Issue"-Page end" in Web of Science dataset

2.4. Identification in unique values in specific columns

In this part we are going to deal with columns that they have only one value in the entire column (unique value in the entire column) and this value is the same in all of rows of these specific columns. We are also going to talk for specific columns that they have only few values that we are interested in.

Firstly, we searched for the content of the column named "ISSN". We locate that there exists only one registration, for all of the lines of this column and this registration is character variable for both databases. This registration is the record "00246107" for Scopus and "0024-6107" for W.O.S. This happened because in every journal newspaper magazine or periodical of all kind that it had been published, there is an 8-digit code to identify them. The ISSN code is the same in our research in both cases because the data are published in the same journal, the journal of London Mathematical Society.

Next, we search for the registrations in the column named "Publishers". We figured out that there are 4 different registrations in Scopus for publishers that they published in this journal and these are their personal names or their institution names: "John Wiley and Sons Ltd", "Wiley Blackwell", "Oxford University Press" and the NA value. For Web of Science we notice that we had 4 different registrations among the total records for the column named "Publisher". These are the registrations "Wiley", "Oxford University Press", "Cambridge University Press" and "London Mathematical society".

Lastly we searched for the registrations in the column named "Source title" and we discovered that there is only one registration in all of these 2798 lines of this column in Scopus and this registration is the name of the journal, which is "Journal of the London Mathematical Society" as we expected. In W.O.S. we also had one value in all of 2873 lines in this column (Source title) and this is "Journal of the London Mathematical Society - second series" as we expected.

2.5. Display the number of papers by year-volume-issue

In this section we searched for papers in the columns "Volume" and "Issue" per year. We search for volume and issues that there are exist per year in both databases, we found the exact number of notes and papers that showed up and then we went in the

website of Journal of the London Mathematical Society to make the comparison and see if we faced the same results and noticed for disagreements.

In the table below (Table 2.5.1) you can see the number of papers in Scopus and Web of Science classified per year-volume and issue:

	Year	Volume Scopus	Volume W.O.S.	Issue	Scopus Papers	W.O.S. Papers	The number of the papers of the Journal of London Mathematical Society
1	1990	s2-41	41	1	18	18	18
2	1990	s2-41	41	2	16	16	16
3	1990	s2-41	41	3	15	15	15
4	1990	s2-42	42	1	14	14	14
5	1990	s2-42	42	2	14	14	16
6	1990	s2-42	42	3	16	16	16
7	1991	s2-43	43	1	NA	17	17
8	1991	s2-43	43	2	16	16	16
9	1991	s2-43	43	3	13	13	13
10	1991	s2-44	44	1	14	14	14
11	1991	s2-44	44	2	14	14	14
12	1991	s2-44	44	3	15	15	15
13	1992	s2-45	45	1	13	13	13
14	1992	s2-45	45	2	17	17	17
15	1992	s2-45	45	3	13	13	13
16	1992	s2-46	46	1	15	15	15
17	1992	s2-46	46	2	14	15	15
18	1992	s2-46	46	3	15	15	15
19	1993	s2-47	47	1	15	15	15
20	1993	s2-47	47	2	13	13	13
21	1993	s2-47	47	3	14	14	14
22	1993	s2-48	48	1	15	15	15
23	1993	s2-48	48	2	13	13	13
24	1993	s2-48	48	3	14	14	14
25	1994	49	49	1	16	16	16
26	1994	49	49	2	14	14	14
27	1994	49	49	3	14	14	14
28	1994	50	50	1	14	14	14
29	1994	50	50	2	15	15	15
30	1994	50	50	3	15	15	15
31	1995	51	51	1	16	16	16
32	1995	51	51	2	17	17	17
33	1995	51	51	3	17	17	17
34	1995	52	52	1	17	17	17

35	1995	52	52	2	15	15	15
36	1995	52	52	3	15	15	15
37	1996	53	53	1	15	15	15
38	1996	53	53	2	15	15	15
39	1996	53	53	3	17	17	17
40	1996	54	54	1	15	15	15
41	1996	54	54	2	13	15	15
42	1996	54	54	3	13	13	13
43	1997	55	55	1	16	16	16
44	1997	55	55	2	19	19	19
45	1997	55	55	3	15	15	15
46	1997	56	56	1	14	14	14
47	1997	56	56	2	15	15	15
48	1997	56	56	3	19	19	19
49	1998	57	57	1	17	17	17
50	1998	57	57	2	19	19	19
51	1998	57	57	3	17	17	17
52	1998	58	58	1	20	20	20
53	1998	58	58	2	17	17	17
54	1998	58	58	3	17	17	17
55	1999	59	59	1	24	24	24
56	1999	59	59	2	26	26	26
57	1999	59	59	3	23	23	23
58	1999	60	60	1	22	22	22
59	1999	60	60	2	22	22	22
60	1999	60	60	3	22	22	22
61	2000	61	61	1	22	22	22
62	2000	61	61	2	22	22	22
63	2000	61	61	3	24	24	24
64	2000	62	62	1	25	25	25
65	2000	62	62	2	24	24	24
66	2000	62	62	3	24	24	24
67	2001	63	63	1	17	17	17
68	2001	63	63	2	18	18	18
69	2001	63	63	3	15	15	15
70	2001	64	64	1	16	16	16
71	2001	64	64	2	20	20	20
72	2001	64	64	3	16	16	16
73	2002	65	65	1	17	17	17
74	2002	65	65	2	16	16	16
75	2002	65	65	3	17	17	17
76	2002	66	66	1	17	17	17
77	2002	66	66	2	17	17	17
78	2002	66	66	3	16	16	16
79	2003	67	67	1	19	19	19
80	2003	67	67	2	17	17	17
81	2003	67	67	3	17	17	17

82	2003	68	68	1	18	18	18
83	2003	68	68	2	17	17	17
84	2003	68	68	3	17	17	17
85	2004	69	69	1	18	18	18
86	2004	69	69	2	18	18	18
87	2004	69	69	3	16	16	16
88	2004	70	70	1	14	14	14
89	2004	70	70	2	17	17	17
90	2004	70	70	3	16	16	16
91	2005	71	71	1	17	17	17
92	2005	71	71	2	16	16	16
93	2005	71	71	3	15	15	15
94	2005	72	72	1	16	16	16
95	2005	72	72	2	15	15	15
96	2005	72	72	3	15	15	15
97	2006	73	73	1	16	16	16
98	2006	73	73	2	16	16	16
99	2006	73	73	3	16	16	16
100	2006	74	74	1	17	17	17
101	2006	74	74	2	15	15	15
102	2006	74	74	3	16	15	16
103	2007	75	75	1	18	18	18
104	2007	75	75	2	17	17	17
105	2007	75	75	3	18	17	18
106	2007	76	76	1	18	18	18
107	2007	76	76	2	16	16	16
108	2007	76	76	3	17	17	17
109	2008	77	77	1	17	17	17
110	2008	77	77	2	15	15	15
111	2008	77	77	3	16	16	16
112	2008	78	78	1	17	17	17
113	2008	78	78	2	14	14	14
114	2008	78	78	3	16	16	16
115	2009	79	79	1	16	10	16
116	2009	79	79	2	16	7	16
117	2009	79	79	3	13	12	13
118	2009	80	80	1	15	15	15
119	2009	80	80	2	15	11	15
120	2009	80	80	3	15	8	15
121	2010	81	81	1	14	14	14
122	2010	81	81	2	12	12	12
123	2010	81	81	3	15	15	15
124	2010	82	82	1	15	15	15
125	2010	82	82	2	13	13	13
126	2010	82	82	3	15	15	15
127	2011	83	83	1	14	14	14
128	2011	83	83	2	13	13	13

129	2011	83	83	3	15	15	15
130	2011	84	84	1	13	13	13
131	2011	84	84	2	12	12	12
132	2011	84	84	3	14	14	14
133	2012	85	85	1	11	11	11
134	2012	85	85	2	17	17	17
135	2012	85	85	3	14	14	14
136	2012	86	86	1	15	15	15
137	2012	86	86	2	15	15	15
138	2012	86	86	3	13	13	13
139	2013	87	87	1	16	16	16
140	2013	87	87	2	18	18	18
141	2013	87	87	3	16	16	16
142	2013	88	88	1	15	15	15
143	2013	88	88	2	16	16	16
144	2013	88	88	3	16	16	16
145	2014	89	89	1	15	15	16
146	2014	89	89	2	16	16	16
147	2014	89	89	3	16	16	16
148	2014	90	90	1	16	16	16
149	2014	90	90	2	15	15	15
150	2014	90	90	3	3	16	16
151	2014	92	92	1	9	NA	NA
152	2014	92	92	2	14	NA	NA
153	2015	91	91	1	14	14	14
154	2015	91	91	2	14	14	14
155	2015	91	91	3	9	9	9
156	2015	92	92	1	2	11	11
157	2015	92	92	3	16	16	16
158	2015	93	93	1	13	NA	NA
159	2016	93	93	2	13	13	13
160	2016	93	93	3	15	15	15
161	2016	94	94	1	15	15	15
162	2016	94	94	2	18	18	18
163	2016	94	94	3	15	15	15
164	2017	95	95	1	3	15	15
165	2017	95	95	2	16	16	16
166	2017	95	95	3	16	16	16
167	2017	96	96	1	14	14	14
168	2017	96	96	2	9	9	9
169	2017	96	96	3	10	10	10
170	2018	97	97	1	5	5	5
171	2018	97	97	2	11	11	11
172	2018	97	97	3	10	10	10
173	2018	98	98	1	11	11	11
174	2018	98	98	2	11	11	11
175	2018	98	98	3	12	12	12

176	2019	100	100	1	15	15	15
177	2019	100	100	2	16	16	16
178	2019	100	100	3	16	16	16
179	2019	99	99	1	10	10	10
180	2019	99	99	2	15	15	15
181	2019	99	99	3	17	17	17
182	2019	NA	NA	NA	7	NA	NA
183	2006	74	74	NA	NA	1	0
184	2007	75	75	NA	NA	1	0
185	2009	79	79	NA	NA	16	0
186	2009	80	80	NA	NA	11	0
187	2015	92	92	2	NA	14	14
188	2016	93	93	1	NA	13	13
189	NA	NA	NA	NA	NA	6	0

Table 7-2.5.1 Number of papers per year-volume-issue in both databases Scopus and Web of Science and in journal.

There are also many differences in the number of papers between the 2 databases and the Journal of London Mathematical Society. These differences appears in the next 2 tables(Table 2.5.2 and Table 2.5.3).

	Year	Volume	Issue	Scopus(anti)
1	1990	S2-42	2	2
2	1992	S2-46	2	1
3	1996	54	2	2
4	2014	89	1	1
5	2014	90	3	13
6	2014	92	1	9
7	2014	92	2	14
8	2015	92	1	9
9	2015	92	2	14
10	2015	93	1	13
11	2016	93	1	13
12	2017	95	1	12
13	2019	NA	NA	7

Table 8-2.5.2 Differences in papers per year-volume issue between Journal of London Mathematical Society and Scopus database

	Year	Volume	Issue	WOS(anti)
1	1990	42	2	2
2	2006	74	3	1
3	2006	74	NA	1

4	2007	75	3	1
5	2007	75	NA	1
6	2009	79	1	6
7	2009	79	2	9
8	2009	79	3	1
9	2009	79	NA	16
10	2009	80	2	4
11	2009	80	3	7
12	2009	80	NA	11
13	2014	89	1	1
14	NA	NA	NA	6

Table 9-2.5.3 Differences in papers per year-volume-issue between Web of Science database and Journal of London Mathematical Society

3. MERGING THE TWO DATASETS AND THE RESULTING DIFFERENCES THAT WE ARE DEALING WITH IN THE MERGED FILE

3.1. Merging our two datasets (SCOPUS-W.O.S.) by the same columns' informations and the conclusion we draw.

In this section we will explain the methodology we used to append the 2 files jlms_scopus_1990_2019 and jlms_secser_wos_total by specific columns' characteristics and then we are going to find out if this union led us to correct results in our research. Once we finish this process we will be in a position to analyze our data in order to provide a clean result and also useful conclusions.

We spoke above about "cleaned results". That means, in order to start analyzing, we do not want to have unnecessary information's that does not help us drawing useful conclusions and also delay the researcher a lot. So without further delay we are going to remove carefully the column fields in both dataset that there are full of empty gaps (NAs). Then we are going to move on to the next step which will be the merging of the 2 datasets by specific columns at a time.

The first criterion for merging the 2 files was the DOI column which exists in both files with the same name. The DOI information for each dataset consists of a unique number for each record of the dataset. That means we will search for NA values and duplicate values before we make the union. Then, in order to lead in successfully results we are going to remove all this information(nas and duplicates) and after

that we will make the merging of the common records in column DOI for both datasets. We had 2367 records with common DOI that joined successfully by the DOI column from both Scopus and W.O.S. files, but there are also records that append in Scopus and doesn't append in W.O.S. and the opposite.

Each time the union was made with each criterion of the column we want to append, we will then create archive with the documents that did not join and they stayed out of the union. The files that merge in one dataset and don't merged in the other we are going to append them each and every time with the duplicate elements and the NA elements that we removed in first case respectively and from each dataset and in each column criterion that we want to joined, so that we can move on our next criterion.

The second criterion of joining the documents for the unjoined documents is the column named Title. Before we started we had to make the union between the 2 unjoined documents as to DOI criterion (1 that joined in Scopus an it doesn't joined in W.O.S. and the other that joined in W.O.S. and doesn't joined in Scopus) with the NAs in DOI column and the duplicates in DOI column, that we find in each case. So we joined the unjoined Scopus document as to DOI criterion with the NAs in DOI in Scopus and with the duplicates in Scopus. The same process we follow and in the Web of Science unjoined file as to DOI criterion. The column named "Title" has common name in both datasets but as we notice the entries of the dataset in Scopus were in lower case and the Titles in Web of Science were in capitals. We decided to convert the capitals into lower case in Web of Science so that there will be a complete match between the registrations in column. But before that we noticed that the sources that there are in the Titles came from all over the world. That means depending on the topical language that were written and the country that were written also there are some tones and idioms that exist in the files in the column Title and this idioms and tones must be eliminated so we can make the matching. After that we found out the NAs and the duplicate values in Scopus and in W.O.S. and we separated them for joining later in the unjoined files as to Titles and move on to the next criterion. Now we are ready to join our 2 unjoined files as to DOI due to the Title column and the result was a file with 197 common Titles.

This analytic procedure that we described above in the columns DOI in the beginning and Title next we will also follow and in the combination of columns according to the order shown below:

- Volume-Issue-Page Start-Page End.
- Volume-Issue-Page Start.

- Volume-Issue-Page End.

We had to notice that we must checked for NAs and for duplicate elements in each of the combinations at a time. We separated them (NAs and duplicates) and joined them in the unjoined file of the next (combination of columns) criterion as we have done above. You can see the full results in the two tables below (Table 3.1.1 and Table 3.1.2).

	Rows	NAs	Duplicates	Rows after exclusions	Merged	No merged
DOI	2798	18	0	2780	2367	413
Title	431	0	0	431	197	234
Volume-Issue-Page start-Page end	234	1	7	226	36	190
Volume-Issue-Page star	198	1	28	169	0	169
Volume-Issue-Page end	198	1	29	168	0	168

Table 10-3.1.1 The procedure of merging data due to certain columns in Scopus file and the conclusions we draw.

	Rows	NAs	Duplicates	Rows after exclusions	Merged	No merged
DOI	2873	432	0	2441	2367	74
Title	506	0	1	505	197	308
Volume-Issue-Page start-Page end	309	0	11	298	36	262
Volume-Issue-Page star	273	0	41	232	0	232
Volume-Issue-Page end	273	0	45	228	0	228

Table 11-3.1.2 The procedure of merging data due to certain columns and combination of columns in Web of Science and the conclusions we draw.

As you can see in both Tables (Table 3.1.1 and Table 3.1.2) of each column or combination of columns in Scopus and in Web of Science, we provide an analytic result of our research in the number of NAs and duplicate in each variable or combination of variables. Next we saw how many the rows are after we separate the duplicate and the NAs values in every field (rows after exclusion) and finally we saw how many fields joined depending on the criterion we established each time and how many did not joined. Then if we add the number of non merged files with the NAs and the duplicate values we met in the rows of these tables (Table 3.1.1 and Table 3.1.2) the result is the number of rows in the next line of the table. For example if we add the non merged rows in the first row of Table 3.1.2 with the NAs and the duplicates values of this row ($74+432+0=506$) we will lead to the number of rows in the next row of the table, specifically the row with the character name Title. If we added the second row of no merged file with the NAs and the duplicates in the Table 3.1.2 ($308+0+1+309$) this will leads us to the number of rows in the row number 3 of the Table 6.2, with the character name Volume-Issue-Page Start-Page End. Etc.

Finally the number of merged rows in Scopus must be the same with the number of merged rows in W.O.S. That means that the sum of the total rows of the merged files, specifically the number in the column named "merged" in the Tables 3.1.1 and 3.1.2 must be the same. If these 2 sums are the same then we lead us to correct results of our research. This happens indeed in both cases and the total number of the merged files in both cases is 2600 rows or better 2600 common records. This file with 2600 rows will be our final merged file with the name "final Scopus W.O.S." and will represent the file that we merged from 2 different sources (Scopus and W.O.S.) in the same research subject (papers of Journal of London Mathematical Society) and will provides a common result in the columns and in the combination of columns that we wanted to research. From now on and after we had exported the result of this union we are going to work with this common file, the file with the name "final Scopus W.O.S."

3.2. Finding differences in the merged file.

After the archieves was merged into one file we have to investigate in some specific columns of information if we are dealing with the same records or if we had a huge amount of differences that might cause us serious problem in our research. To begin with we are going to identify which of our results came from which source and then we are going to compare them in order to see the differences and exclude some safe results.

The columns that we are interested in searching for differences between the 2 datasets are the columns that we found them in both datasets and it is important for our results we draw.

In some columns such as the columns Author and Affiliation there are more than one record in each field and for that reason we separated from each other according to special characters that we found on the text and these are the symbols “,” or “;”. We had to separate the Authors (AUTHOR 1, AUTHOR 2 etc) that they participated in writing a paper published by the Journal of London Mathematical Society and also had to separate the Affiliations (Affiliation 1, Affiliation 2, Affiliation 3 etc) which represents the address of the institute or the address of the organization portion of an author.

In the table below (Table 3.2.1) you can see the number of results in each column that we chose and the number of NAs that they exist in these columns:

COLUMNS	NUMBER OF DIFFERENCES	BOTH NAs	NA ONLY WOS	NA ONLY SCOPUS
DOI	229	229	36	200
TITLE	36	0	0	0
PAGE START- PAGE END - VOLUME- ISSUE.	156	71	91	18
PAGE START- VOLUME-ISSUE	153	27	39	12
PAGE END - VOLUME-ISSUE	153	71	85	12
AUTHOR 1	154	0	0	0
AUTHOR2	92	1146	1143	1135
AUTHOR 3	43	2122	2120	2120
AUTHOR 4	5	2492	2491	2492
AUTHOR 5	6	2581	2580	2581
ABSTRACT	1916	484	14	470
AUTHOR KEYWORDS	0	2600	2600	2600
DOOCUMENT TYPE	52	0	0	0
LANGUAGE OF ORIGINAL DOCUMENTS	11	0	0	0
AFFILIATION 1	2222	378	92	297
AFFILIATION 2	1049	1551	1379	1396
AFFILIATION 3	306	2294	2234	2156

AFFILIATION 4	83	2517	2498	2457
AFFILIATION 5	21	2579	2574	2547

Table 12-3.2.1 Number of differences and NAs in specific columns in the merged file

4. AUTHORS CHARACTERISTICS

This section aims to shed light about the work and the contribution of each author or group of authors that appeared in the Journal for 3 decades. It is known that we are going to deal with single author's work (articles that appeared and are single author's work) and papers or articles that small or large group of authors cooperate to accomplish a publication. Our Bibliometric research will help us, for our investigation about the productivity of the authors according to Lotka's law. This law was developed by A.J. Lotka and according to his study it can describe the frequency of publication by authors in any given field. In other words he developed a mathematical relation based on the prediction of author's productivity. As Lotka said in his law "there are a lot of authors who publish only one study while a small group of authors contributes with a large number of publications.

4.1 Authors' productivity and Lotka's Bibliometric law

In mathematics Lotka's law is defined as $y(x)$ is the number of authors with x publications, c is the number of authors with a single publication and x is the number of publications itself. We can see the Lotka's law in mathematical equation below:

$$y(x) = cx^{-n}, \text{ where}$$

X = Number of publications

Y(x) = Number of authors with x publications

C= Number of authors with a single publication

N= exponent n which almost always equals to 2 for scientific subjects.

Number of papers, written by x authors	Number of authors	Frequency (%)
1	3107	82.63
2	473	12.58
3	130	3.46

4	36	0.96
5	6	0.16
6	4	0.11
7	1	0.03
8	1	0.03
10	1	0.03
13	1	0.03
Total	3760	100

Table 13-4.1.1 Authors' productivity

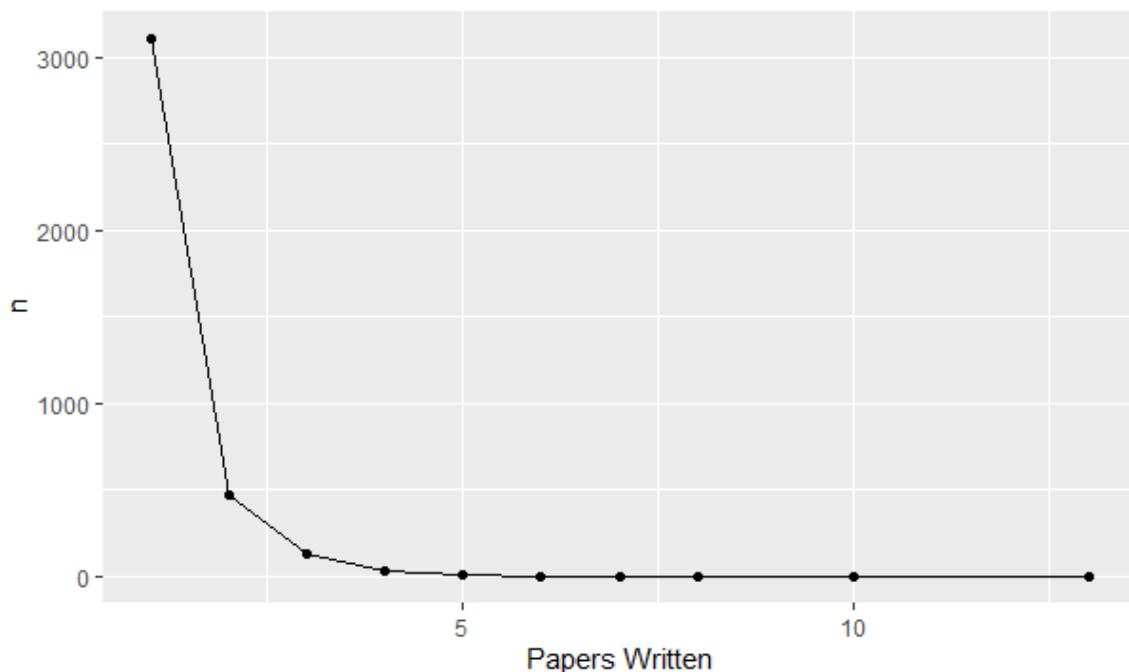


Figure 7 4.1.1 Lotka's law distribution in graph for our data results

A closer look to the above graph (Figure 4.1.1) will convince us that our data matches to the mathematical equation of Lotka (Lotka's law) and this distribution follows the Lotka's law distribution. The above graph corresponds to the number of authors (y axis) and how many papers were written by these authors(x axis).

Now we are in position of creating a table with all necessary elements and equations for describing our data according to Lotka's hypothesis about the author productivity and also observe if this our example perfectly matches to Lotka's law.

So in the next table(Table 4.1.2) that we created for the reason above, we can observe that in the first 2 column of this table are presented the number of articles(x column) who have published in the London mathematical society and in the second column the number of authors who have published these articles (column with

symbol $y(x)$). The $y(x)$ column correspond to the number of authors who have published x articles and what we have is a total number of 3760 authors. As we can see there is only one author who has contributed in this field with 13 publications and as Lotka said these author are the most productive once.

The next 2 columns of Table4.1.2 (X and Y) correspond to the logarithm of the number of articles and to the logarithm of the number of authors:

$$X = \log x, Y = \log y.$$

Next we want a column which will represent the square of each element of column X (X^2). Also we want a column of the product of elements X and Y (X^*Y).

The next 2 columns represent mathematical operations each one of them and it is possible to calculate the frequency of authors with a single article, and those with two, three, etc. (corresponding to column $y(x)/\sum y(x)$). So far, these data have been directly obtained from the frequency of authors publishing x articles. Once this frequency (the observed frequency) has been obtained, Lotka's law can be applied to obtain the expected frequency of authors publishing x articles. Thus it is necessary to calculate the n exponent for this particular case.

Although Lotka's law proposes a growth in production according to its formula $y(x) = cx^{-n}$, where n is equal to 2, the law has to be tested for the data in question. This will yield the exponent n , which corresponds to the present distribution of author productivity and also indicates whether the data really fit Lotka's law. Consequently, the first step is to calculate the exponent n using the least squares method and according to the following formula:

$$n = \frac{N \sum XY - \sum X \sum Y}{N \sum X^2 - (\sum X)^2}$$

All the data needed for the n formula can be obtained from Table 4.1.2. The only index that requires further work is N , which represents the number of pairs considered. In this example, those authors who have published between one and ten articles will be considered, so this will represent ten pairs of data ($N = 10$). There is one specific case where not all the pairs of data are included in the analysis of Lotka's law. This is when $y(x) = 1$ is found at the end of the distribution, corresponding to the highest values of x (number of articles). In such cases, these small groups of most prolific authors are excluded from the analysis in order not to overestimate the results. However, these pairs of data have to be carefully excluded. If $y(x) = 1$ is located not at the end of the distribution but within other pairs of data, then it should be included in Lotka's calculation. Inserting the corresponding values into the n formula stated above gives:

$$n = \frac{10 \times 3.763206338 - 6.719463873 \times 11.21765949}{10 \times 5.545450425 - (6.719463873)^2}$$

Thus the value of n (absolute value) is 3.663346642, which will then be the specific value of the coefficient in Lotka's formula that will explain author productivity in this particular case. As the formula of Lotka's law is $y(x) = cx^{-n}$ and n is now known, the only index left to calculate is c. This value is obtained as follows:

$$c = \frac{1}{\sum \frac{1}{x^n}}$$

For our data c will take the value 0.901865513 and thus Lotka's formula will be

$$y(x) \equiv 0.901865513 \times x^{3.663346642}$$

Here, $y(x)$ represents the expected frequency of authors publishing x documents. In order to avoid confusion in the nomenclature, let us define the expected frequency of Lotka's law as Fe , to distinguish it from the observed frequency ($y(x)$). By introducing the values taken by the number of articles variable (x) it is now possible to obtain the corresponding expected frequencies. The values taken by Fe are shown in Table 4.1.2, along with its cumulative frequency ($\sum Fe$). As the aim of this analysis is to determine whether these data fit Lotka's law, it is necessary to know the magnitude of the difference between observed and expected frequencies. This difference is shown in the last column of Table 4.1.2 and is computed by subtracting the cumulative expected frequency from the cumulative observed frequency: $\sum(y(x)/\sum y(x)) - \sum Fe$. This difference, in its absolute value, is shown in the D column.

x	y(x)	X=logx	Y=logy	X^2	XY	$y(x)/\Sigma y(x)$	$\Sigma(y(x))/\Sigma y(x)$	Fe	ΣFe	D
1	3107	0.000	3.49234 1253	0.000	0	0.82632 9787	0.82632 9787	0.9020 0	0.90200	0.075 7
2	473	0.30102 9995	2.67486 1141	0.09061 9057	0.80521 3435	0.12579 7872	0.95212 7659	0.0708 6	0.97286	0.020 76
3	130	0.47712 1254	2.11394 3352	0.22764 4691	1.00860 7303	0.03457 4468	0.98670 2127	0.0160 0	0.98886	0.002 16
4	36	0.60205 9991	1.55630 2501	0.36247 6232	0.93698 7469	0.00957 446808 51	0.99627 659508 51	0.0055 6	0.99436	0.001 9165 95
5	6	0.69897 0004	0.77815 125	0.48855 9066	0.54390 4382	0.00159 574468 08	0.99787 233976 59	0.0024 5	0.99681	0.001 0623 397
6	4	0.77815 125	0.60205 9991	0.60551 9367	0.46849 3734	0.00106 382978 72	0.99893 616955 31	0.0012 6	0.99807	0.000 8661 695
7	1	0.84509 804	0.000	0.71419 0697	0	0.00026 595744 68	0.99920 212699 99	0.0007 1	0.99878	0.000 4221 269
8	1	0.90308 9987	0.000	0.81557 1524	0	0.00026 595744 68	0.99946 808444 67	0.0004 4	0.99922	0.000 2680 844
10	1	1.000	0.000	1	0	0.00026 595744 68	0.99973 404189 35	0.0001 9	0.99985	0.000 1159 582
13	1	1.11394 3352	0.000	1.24086 9791	0	0.00026 595744 68	1	0.0000 7	1	0
TOTAL	3760	6.71946 3873	11.2176 5949	5.54545 0425	3,76320 6338					

Table 14- 4.1.2 Lotka's law variables

Finally, the Kolmogorov-Smirnov test is applied in order to verify whether the observed data fit the theoretical distribution according to Lotka's law. The highest value in column (Dmax) is taken as reference for comparison with the critical value whose general formulation is:

$$c.v. \equiv \frac{1.63}{[\sum y + (\frac{\sum y^{\frac{1}{2}}}{10})^{\frac{1}{2}}]^{\frac{1}{2}}}$$

In this example, the critical value is 0.026514088, obtained from the following formula:

$$c.v. \equiv \frac{1.63}{[3760 + (\frac{3760}{10})^{\frac{1}{2}}]^{\frac{1}{2}}} \equiv 0.026514088$$

Since the maximum difference (Dmax) obtained from Table, is 0.0757, which is bigger than the critical value (0.026514088), the null hypothesis has not to be accepted. We can therefore conclude that author productivity in this hypothetical research area does not fit Lotka's law, but according to our data is a model very close to Lotka's law model and that we can conclude it by observing the final results(0.0265114088 and 0.0757) and how closely is these results between them.

Authors collaborations	Number of papers	Frequency (%)
1	1132	43.54
2	986	37.92
3	373	14.35
4	89	3.42
5	20	0.77
Total	2600	100

Table 15-4.1.3 Collaborations between authors

As we can see from the Table above(Table 4.1.3) we can notice where we dealing with collaborations and also when the articles are a single work result. We found out, that in 43.54% of total cases there is only one author behind article publications, (1132 publications in total of 2600 documents). Also in the 37.92% of cases we had collaborations of exactly 2 authors (the exact number of articles that published by exact 2 authors are 986 in total of 2600 articles that published in the journal.). Last we conclude that as the number of authors that collaborates getting bigger, the number of articles published became smaller, which means that as the number of authors that collaborate in an article increases, the total number of articles that these authors collaborates getting smaller. So the percentage of accurate collaboration of 3 authors is 14.35 %(373 in total of 2600 articles), the collaboration rate of exactly 4 authors is 3.42%(89 in total of 2600 articles) and last the percentage between the collaboration between 5 authors is only 0.77%(20 in total of 2600 articles). A useful conclusion we come to, is the fact that in 43.53 % of the cases we are talking about a single authorship, which means that only one author contributed in writing an article in the Journal and in 56.47% of the cases we had collaborations between 2, 3, 4 and 5 authors that contribute to the publication of an article in the Journal.

4.2 Author's profile and its characteristics

In this section we are going to notice and analyze the authors profiles. With this phrase we are going to search and locate how an author contributed on writing an article and how he contributed in its publicity. In one phrase from now on, we will call the contribution of an author on publishing an article and this phrase is "author's productivity".

First it is very simple to give full credit on an author, who wrote and published an article all alone, but what happened when we are dealing with collaborations between authors of a published article in the Journal? There are several ways for authors to receive credit for publications they have co-authored. In this research we are interested for analyze and use 2 of them.

The first way it is called complete count. This way describes that each occurrence of an author is recognized and receives equal treatment, regardless of the number of authors associated with the article.

The second way describes the fact that Authors receive fractional credit for publications with multiple authors. According to this adjusted count, each author within a publication with two authors will receive 0.5; 0.2 for five authors, etc. In

other words in this way, the productivity of an author will be calculated dividing the number one (which represents each author that contributed to specific publication) with the the total number of participating authors in this specific publication ($1/N$, where N the total number of participating authors).This way on counting authors productivity it is called adjusted count or fractional count.

In the next Table (Table 4.2.1) we will represent the authors (Authors' names), who participated in writing article or articles in the journal, and the 2 method counts (complete and adjusted or fractional count) which shows us the measure of author productivity in each case.

Authors Names	Papers Written by complete count	Contributions by fractional/adjusted count
[no author name available]	1	0.5
<u+0218>enturk z	1	0.5
abakumov e	1	0.3333333333
abate m	1	0.5
abbondanza b	1	0.5
abdessemed a	1	1
abe t	2	0.666666667
abels h	1	0.3333333333
abrams a	1	0.2
abreu j	1	0.3333333333
achigar m	1	0.3333333333
adamczewski b	1	0.5
adams gt	1	0.5
addaszanata s	1	1
addington n	1	0.3333333333
adeleke sa	3	1.3333333333
adem a	1	0.5
adimurthi k	1	0.5
adler jd	2	0.8333333333
aehle r	1	1
agarwal rp	1	0.3333333333
agol i	1	0.3333333333
agora e	1	0.25
aguade j	1	0.3333333333
agustin jic	1	0.5
aharoni r	2	1
ahmadinezhad h	1	1
aida m	1	0.2
aigon a	1	0.5
aihara t	1	0.5

aikawa h	1	
ainong f	1	0.5
aka m	1	0.3333333333333333
akita t	1	1
akkouchi m	1	0.3333333333333333
albert m	1	0.5
albert mh	1	1
albeverio s	1	0.3333333333333333
albiac f	1	0.3333333333333333
alboth d	1	1
aldred mp	1	0.5
aleman a	1	0.25
alexander jc	1	0.5
alfonseca a	1	1
alibegovic e	1	0.5
alkenani an	1	0.5
allan gr	1	0.5
allcock d	1	1
allday c	1	1
alldridge a	1	0.3333333333333333
allen p	1	0.3333333333333333
almeida j	1	0.5
alon n	2	0.5833333333333333
alonso j	1	0.3333333333333333
alsalman a	1	0.5
alseda l	1	0.3333333333333333
alspach de	1	1
altinel t	2	0.75
aluffi p	1	0.5
alvarez v	1	0.5
alvarezmanilla m	1	0.3333333333333333
alves jf	1	0.3333333333333333
alves mms	1	0.3333333333333333
alzer h	1	1
amarzaya a	1	0.5
ambosspies k	1	0.3333333333333333
ambrosetti a	1	0.5
amirkhanyan g	1	0.25
amou m	1	0.5
anagnostopoulou v	1	0.5
anantharamandelaroch e	1	1
anderson jw	1	0.5
andersson e	2	2
ando h	1	0.5
andrada a	2	0.6666666666666667
andre n	1	0.5

andrews g	1	0.5
andrews ge	1	0.5
andrews s	1	0.5
andrica d	2	1
androulakis g	1	0.5
andruchow e	1	0.5
anisov s	1	1
anni s	1	1
anoussis m	1	0.5
ansorena jl	2	0.8333333333333333
antezana j	1	0.25
aougab t	1	0.3333333333333333
ara d	1	1
araujo j	1	0.5
araujo v	1	0.3333333333333333
archbold rj	2	0.8333333333333333
arcozzi n	1	0.25
arendt w	1	0.3333333333333333
ares gastesi p	1	1
arezzo c	1	1
ariasdereyna j	1	1
ariki s	1	0.3333333333333333
aristide t	1	1
ariyawansa ka	1	0.3333333333333333
armitage dh	4	2
armstrong sn	1	0.5
arrondo e	1	1
arthur robinson e	1	0.5
artigue a	1	0.3333333333333333
arzhantsev i	1	0.3333333333333333
arzhantseva gn	1	0.5
asadigolmankhaneh ma	1	0.5
asar ao	3	3
ash jm	1	0.3333333333333333
ashbaugh ms	1	0.5
astengo f	1	0.25
athreya js	2	1.3333333333333333
atkinson j	1	0.25
attal s	1	0.5
aubry jm	1	1
auckly d	1	0.25
auinger k	2	1.5
aupetit b	1	1
auscher p	1	1
auvrav h	1	1
avramov ll	1	0.3333333333333333

axelsson a	1	0.3333333333
ayala v	1	0.5
aydin h	1	0.5
azizov ty	1	0.25
azoff ea	1	0.5
azzolini a	1	1
babai l	2	0.75
baddeley rw	1	1
badger m	1	1
badiozzaman aj	1	0.5
baier s	1	0.5
bailey ra	1	0.5
bailey tn	1	0.5
baird t	1	0.5
bakali a	1	0.3333333333
baker a	1	1
baker jw	1	0.5
baker rc	1	1
bakke buan a	1	0.5
bakonyi m	1	0.5
baldwin e	1	1
balkanova o	1	0.5
balkema aa	1	0.3333333333
ball k	1	1
ball s	1	1
balog a	2	0.75
balogh j	2	0.75
bamberg j	1	1
bamon r	1	0.3333333333
bandle c	1	0.3333333333
bandt c	1	0.5
bandtlow of	1	0.5
banerjee d	1	0.5
banica t	1	0.5
banuelos r	4	1.6666666667
bao d	1	0.5
baranov aa	1	0.5
baranski k	1	0.25
barany b	1	0.3333333333
barany i	1	0.5
barat g	1	0.5
barbatis g	1	1
barberis ml	2	0.6666666667
barbina s	1	1
barcelo h	1	0.3333333333
barclay s	1	1

barden d	3	1.5
bardoe m	1	0.5
barlet d	1	0.5
barlow mt	1	0.5
baro e	1	0.3333333333333333
barot m	1	0.3333333333333333
barov s	1	0.3333333333333333
barreira l	1	0.3333333333333333
bartal y	1	0.25
bartel a	1	0.5
barth kf	1	0.5
bartolo ea	1	0.25
baruch em	2	1
bass rf	1	0.5
basu s	1	0.5
batista e	1	0.3333333333333333
batista vr	1	1
batoreo mn	1	1
battaglia f	1	1
baudier fp	1	0.5
baudisch a	1	1
bauer w	1	0.3333333333333333
baumeister b	1	1
baumslag g	1	0.25
bavard c	1	1
bavula vv	2	2
baxa c	1	0.5
bayart f	1	0.5
bazzoni s	1	0.5
bean ma	1	0.5
beardon af	1	0.5
beattie m	1	0.5
beaucoup f	1	0.25
becher v	1	0.5
beck j	1	0.5
bedaride n	1	0.5
beelen p	1	0.5
behravesh h	1	1
behrndt j	3	1.0833333333333333
behrstock ja	1	0.5
belegradek o	1	0.5
belgun f	1	0.25
beliaev d	1	0.2
beliakova a	1	0.25
belinschi st	1	1
bell gc	1	0.5

bell jp	3	2.3333333333333333
bellaiche j	1	1
belmans p	1	0.5
belton acr	2	1.3333333333333333
beltran a	1	0.2
belyaev vv	1	0.5
ben simon g	1	0.2
beneteau c	1	0.2
benguria rd	1	0.5
benkart g	1	0.5
bennewitz c	1	0.5
benoist o	1	1
benson dj	1	0.5
benth fe	1	0.5
berard p	1	1
berarducci a	3	1.3333333333333333
berend d	1	0.3333333333333333
beresnevich v	1	0.25
berestycki n	1	0.25
berge am	2	1
bergen j	1	0.5
berger r	1	1
berger t	1	0.25
bergeron n	1	0.3333333333333333
bergh d	1	1
bergh pa	1	0.3333333333333333
bergman gm	1	0.5
bergweiler w	3	1.3333333333333333
berkani m	1	0.3333333333333333
berkes i	1	0.5
berkman a	1	0.5
berkovitch a	1	0.5
berkson e	1	0.5
berlanga r	1	1
berman mn	1	0.25
berman rd	2	1
bernard a	1	0.5
berndt bc	2	0.8333333333333333
berndt j	1	0.5
bernik j	1	0.3333333333333333
berrick aj	1	0.5
berteloot f	1	0.5
bertoin j	1	0.5
bessenrodt c	4	1.5833333333333333
bestvina m	1	0.5
betsumiya k	1	0.5

bevan d	1	
bezem m	1	0.5
bhosle un	3	3
bian w	1	0.5
bianchi g	1	1
bichon j	2	1.5
bielawski r	2	2
bieri r	1	0.5
bierstone e	1	0.5
biggins jd	1	1
bihan f	1	1
biliotti l	1	0.3333333333333333
biliotti m	1	1
billerey n	1	0.5
bilski m	1	0.5
bilu y	1	1
binding pa	1	0.3333333333333333
bing n	1	0.5
biquard o	1	1
biringer i	1	0.5
bimir b	1	0.2
bisci gm	1	0.5
bishop cj	1	1
biskup m	1	0.5
biswas a	1	0.5
biswas i	3	1.166666667
biswas s	1	0.3333333333333333
biviaausina c	1	1
bjorklund j	1	1
bjorn a	2	1.3333333333333333
bjorn j	1	0.3333333333333333
bjorner a	2	0.5833333333333333
black ev	1	1
blackburn sr	2	1.3333333333333333
blanco a	2	1.3333333333333333
blandigneres a	1	0.2
blasco o	2	1
blasi d	1	0.5
bleak c	2	1.3333333333333333
blecher dp	1	0.5
bleher fm	1	1
blei rc	1	1
blickle m	1	0.3333333333333333
blokhuis a	1	0.3333333333333333
blomer v	1	1
bloom tf	1	1

blower g	1	1
blyth rd	1	0.5
bobb md	1	1
bober jw	1	1
bobinski g	1	1
bobkov v	1	0.5
boca fp	2	0.8333333333333333
boden hu	1	0.5
bodin a	2	1.3333333333333333
bogdan k	1	0.3333333333333333
bohman t	1	0.5
boij m	1	0.5
boileau m	1	0.5
bojanov b	1	1
bolley f	1	0.3333333333333333
bollobas b	1	0.3333333333333333
bolsinov av	1	0.3333333333333333
bolt sw	1	0.3333333333333333
bolthausen e	1	0.5
boltje r	1	1
bolton j	1	0.3333333333333333
bonet j	2	1.3333333333333333
bonfiglioli a	1	0.5
bongiorno b	1	0.3333333333333333
bonheure d	1	0.3333333333333333
bordbar b	1	1
borg p	2	2
borichev a	1	0.5
boroczky kj	1	0.3333333333333333
borodin ov	1	0.3333333333333333
borodzik m	2	1
borovik a	1	0.5
borovik av	2	0.8333333333333333
borwein p	6	2.25
bottcher a	1	0.5
bottcher b	1	1
bottcher j	1	0.3333333333333333
bouc s	1	0.5
bouganis t	1	0.5
boughattas s	1	1
boukhadra o	1	0.5
boumazgour m	1	0.3333333333333333
bourel m	1	0.3333333333333333
bourgain j	2	0.8333333333333333
bourque mf	1	0.5
bouw ii	1	0.5

bowditch bh	2	
bownik m	1	0.5
boxall j	1	0.3333333333333333
boyadzhiev kn	1	1
boyd da	1	1
boyd dw	1	0.25
boyer s	1	0.3333333333333333
boyle m	1	1
bracci f	1	0.5
bracho j	1	0.25
bradley jd	1	0.3333333333333333
bradlow sb	1	0.5
brady n	3	1.5333333333333333
brady ze	1	1
branco mb	1	0.25
brander d	1	1
brandes j	1	1
brandhorst s	1	0.5
brandolese l	1	1
brasselet jp	1	0.25
braverman a	1	0.5
braverman msh	1	1
bray jn	1	0.3333333333333333
breaz s	1	0.5
bremont j	1	1
brendle j	1	0.5
brenti f	1	1
bresar m	1	0.5
bressaud x	1	0.3333333333333333
breuning m	1	1
bridges d	1	0.5
bridson mr	1	0.25
bright m	2	1.5
brin mg	1	1
bringmann k	1	1
brion m	1	1
britnell jr	3	1.8333333333333333
brochet jm	1	1
brodskiy n	1	0.25
brodzki j	1	0.3333333333333333
broisealamichel a	1	0.5
brookes cjb	2	0.8333333333333333
broomhead n	1	0.3333333333333333
broto c	1	0.3333333333333333
brown bm	3	1.0333333333333333
brown g	1	0.3333333333333333

brown lg	2	1.5
brown m	2	0.5833333333333333
brown mr	1	1
brown s	1	1
brownawell wd	1	0.5
browne pj	1	0.3333333333333333
browning t	1	0.5
brualdi ra	1	0.5
bruce jw	1	1
bruck r	1	1
brudern j	2	2
bruguera m	1	0.3333333333333333
bruin h	2	1
bruin n	1	0.5
brum j	1	0.3333333333333333
brumatti p	1	0.3333333333333333
brunat o	1	1
brundan j	1	1
bruneau v	1	1
brusamarello r	1	0.5
bryant rm	3	1.5
brynjones a	1	0.5
buan ab	2	0.8333333333333333
buch as	1	0.5
buck d	1	0.25
buckley sm	1	0.5
buczynski j	1	0.3333333333333333
budur n	1	0.25
bueken p	1	0.5
bufetov ai	1	0.3333333333333333
buff x	1	0.25
bugeaud y	3	2
bui hm	1	0.3333333333333333
bujalance e	1	0.5
bumagin i	1	0.5
bunce lj	3	1.5
burciu s	1	1
burdges j	3	1.3333333333333333
burdzy k	2	1
burenkov vi	1	0.5
burger eb	1	1
burger m	1	0.2
burillo j	1	1
burke dk	1	0.5
burness tc	1	1
burstall fe	1	0.5

bush a	1	0.25
bushell pj	1	0.5
bushnell cj	1	1
buttkewitz y	1	0.5
button jo	1	1
bux ku	2	0.8333333333
byun y	2	2
cabada a	1	0.5
cabrera fm	1	0.3333333333
cabrera garcia m	1	0.3333333333
cachia v	1	0.5
cahn p	1	0.5
caibar m	1	1
caicedo m	1	0.3333333333
caldero p	1	0.5
calegari f	1	0.5
callejasbedregal r	1	0.5
calvert w	1	0.3333333333
camara mc	1	0.25
cameron j	1	0.25
cameron pj	3	1.2
campesato jb	1	1
campillo a	2	0.6666666667
canary rd	1	0.5
canetti r	1	0.3333333333
cantoralfarfán v	1	0.25
cap a	1	0.3333333333
capiotto a	2	1
carberry e	2	1
carbery a	1	1
carette m	1	1
cariolaro d	1	1
carl b	1	0.3333333333
carlini e	2	1
carlotto a	1	0.5
carlson jd	1	0.5
carmona jj	2	1
carmona p	1	0.3333333333
carnicer mm	1	0.3333333333
caro y	1	1
carrillo ja	1	0.25
carrion jr	1	0.5
carro mj	5	2.5833333333
carroll t	2	0.8333333333
carron g	1	1
carter je	1	0.5

carter s	1	0.5
cartwright d	1	0.333333333333
casacuberta c	1	0.5
casagrande c	1	1
casarino v	1	0.5
cascante c	1	0.333333333333
casnati g	2	1
cassaigne j	1	0.5
cassidy t	2	1
cassounogues p	2	0.75
cassounogues ph	1	0.25
castell f	1	0.333333333333
castella f	1	1
castellana n	1	0.5
casteras jb	1	0.333333333333
castillo jmf	1	0.333333333333
catalisano mv	2	1
catoiu s	1	0.333333333333
cattabriga a	1	0.5
ceccherin silberstein t	1	0.5
cekanavicius v	1	1
cesnavicius k	1	1
chacholski w	1	0.333333333333
chaika j	1	0.5
chaio c	1	0.333333333333
chalendar i	1	0.333333333333
champanerkar a	3	1
chan d	1	0.5
chan hh	3	1.666666666667
chan k	1	1
chan th	1	1
chan wk	1	0.5
chang cy	1	0.333333333333
chang je	1	1
chantraine b	1	0.333333333333
chapman rj	1	1
charney r	1	0.5
chatters aw	1	0.333333333333
chaumont l	1	1
chavan s	1	0.5
chavezdominguez ja	1	1
chen bl	1	0.333333333333
chen h	3	1.833333333333
chen hx	1	0.5
chen ja	1	0.5
chen m	1	0.5

chen wwl	1	0.5
chen x	3	1.3333333333333333
chen yg	1	1
chen z	3	1.3333333333333333
chen zq	1	0.3333333333333333
cheng mc	1	0.5
cheng qm	1	1
cheng z	1	0.3333333333333333
cherlin g	2	0.75
chernikov a	1	0.3333333333333333
chernov v	1	0.5
chernyavskaya n	2	1
chervova o	1	0.3333333333333333
chetwynd ag	1	0.3333333333333333
cheung ws	1	1
chevalier l	1	1
chiantini l	1	0.5
chiappinelli r	1	0.5
chill r	1	0.25
chin w	2	1
chinburg t	2	0.75
chipeniuk k	1	0.5
cho dh	1	0.5
choi kks	1	0.5
choi s	1	0.3333333333333333
choi sr	1	0.25
choi y	1	1
choi ye	1	0.5
choi ys	2	1
cholak p	1	0.5
cholak pa	1	0.5
chong ct	1	0.5
chou ks	1	0.5
chow s	1	1
chowdhury a	1	0.5
christensen lw	1	0.3333333333333333
chu ch	2	1.5
chu cw	1	0.5
chua sk	1	1
chuah mk	1	1
chuang j	1	0.5
chuquia m	1	0.5
chung s	1	0.5
chung sy	1	1
chyan dk	1	0.3333333333333333
chyzykov i	1	0.5

cianchi a	2	1.5
cichon d	1	0.3333333333
cid ja	2	1
ciliberto g	1	0.5
cima a	1	0.3333333333
cinti e	1	0.3333333333
cioletti l	1	0.25
clapp m	1	0.5
clark we	1	0.3333333333
clay a	1	0.5
cliff g	3	1.8333333333
climenhaga v	1	0.5
cluckers r	1	0.3333333333
clunie j	2	0.666666667
coates j	1	0.5
coates kj	1	1
cobb j	1	0.3333333333
cobos f	4	1.5
cochran t	1	0.5
cochrane t	1	0.3333333333
cohen dc	1	0.5
cohen jm	2	0.666666667
cohen sd	2	1
cohn pm	2	1.5
colbourn cj	1	0.25
cole b	2	0.4
coles rj	1	0.3333333333
colesanti a	1	0.5
colman h	1	0.5
colonna f	2	0.666666667
colorado e	1	0.5
colzani l	1	0.3333333333
conca a	1	1
conder m	3	1.0833333333
conder mde	1	0.5
conlon d	1	0.25
connell c	1	0.3333333333
constales d	1	0.5
conti m	1	0.5
contiero a	1	0.5
contreras g	1	1
contreras md	1	0.3333333333
cook al	1	0.5
cools f	1	0.5
cooper s	1	0.3333333333
cooper sb	1	0.5

cooper t	1	0.5
coornaert m	2	1
coppens m	1	0.5
corach g	1	0.5
cordero e	1	0.3333333333333333
cordes m	1	0.5
cornean hd	1	0.5
cornick j	1	0.5
coronel d	1	0.3333333333333333
corran r	1	0.5
corredor lj	1	0.25
corson jm	1	0.5
cortadellas o	1	0.3333333333333333
cortes t	2	1
cortes v	1	0.25
cortez mi	3	1.25
cossidente a	1	0.5
costa af	1	0.5
costakis g	1	0.5
costantino f	1	1
costara c	1	1
coudene y	1	1
coulbois t	3	1
coulhon t	1	1
cowen r	1	1
cowling m	2	0.5833333333333333
cox a	1	0.3333333333333333
coxeter hsm	2	1.3333333333333333
crabb mc	1	0.5
crauel h	1	1
craven da	1	1
crawleyboevey w	1	0.5
crisan d	1	0.5
croot e	1	0.25
croot iii es	1	0.5
cruz i	1	0.5
csikos b	1	0.5
cuadra j	1	0.5
cuckovic z	1	0.5
culiuc a	1	0.3333333333333333
cummings j	1	0.5
curbera gp	1	1
curtis rt	2	0.666666667
curto re	1	0.5
cutkosky sd	1	1
cuypers h	3	1.8333333333333333

cwalina k	1	0.5
d'almeida j	1	0.3333333333333333
d'andecy lp	1	0.5
d'aprile t	1	0.5
d'este g	1	1
da silva ar	1	0.5
da silva jv	1	0.3333333333333333
dadarlat m	2	1
dai y	1	0.5
dales hg	4	1.416666667
dambrosio w	1	0.5
dancer en	3	1.3333333333333333
danh tn	1	0.5
dani p	1	0.2
daniel s	1	1
daniilidis a	1	0.5
danilenko ai	1	0.5
dascalescu s	1	0.5
daverman rj	2	1.3333333333333333
david c	1	0.5
david l	2	1
david o	1	0.5
david p	1	0.5
davidon wc	1	0.3333333333333333
davidson m	1	1
davie am	2	2
davies e	1	0.25
davies eb	7	6
davila j	1	0.3333333333333333
davis b	1	0.5
davis cw	1	0.25
davis ja	1	0.5
davis m	1	0.5
davis mw	1	0.5
daws m	2	1.25
daykin de	1	0.5
de blasi fs	2	1
de bobadilla jf	1	0.5
de bonis m	2	1
de boor c	1	0.5
de borbon m	1	1
de cicco v	1	0.3333333333333333
de clercq c	1	0.5
de cornulier y	1	0.3333333333333333
de giovanni f	1	0.5
de haan l	1	0.5

de la breteche r	2	
de la torre a	1	0.5
de mari f	1	0.3333333333333333
de pagter b	1	0.5
de poi p	1	0.5
de smit b	1	0.5
de visscher m	1	0.3333333333333333
debes p	1	0.5
defant a	1	0.5
degtyarev a	1	1
dehornoy p	1	1
deitmar a	1	0.5
del centina a	1	0.5
del pezzo lm	1	0.3333333333333333
del pino m	2	0.8333333333333333
del rio a	1	0.3333333333333333
delaubenfels r	1	1
delgado f	1	0.3333333333333333
delgado j	1	0.3333333333333333
demange b	1	1
dembele l	1	0.25
demeter c	1	0.5
deninger c	1	0.5
denisov d	1	0.3333333333333333
denk r	1	0.3333333333333333
denka k	1	0.25
denker m	2	0.75
derakhshan j	1	0.25
derbez p	1	0.5
derenthal u	1	0.5
derksen h	1	0.3333333333333333
derome g	1	0.5
desjardins j	1	1
detomi e	2	1
devillers a	3	0.7333333333333333
devoto ja	1	1
dezotti a	1	1
di biase f	1	1
di blasio b	1	0.25
di cerbo g	1	0.5
di cerbo lf	1	0.5
di gennaro r	1	0.3333333333333333
di martino l	1	0.3333333333333333
di napoli ap	1	0.3333333333333333
di natale c	1	0.3333333333333333
di piazza l	1	0.3333333333333333

di plinio f	1	0.3333333333333333
diamantis n	1	0.5
diarra b	1	0.5
dias aps	1	0.5
diaz a	2	0.75
diazmadrigal s	1	0.3333333333333333
diazramos jc	1	0.5
dickenstein a	1	0.3333333333333333
dier d	1	0.3333333333333333
diestel r	2	0.8333333333333333
dieterich e	1	0.5
dietmann r	1	1
dieulefait lv	1	0.5
digne f	1	1
dijkstra jj	1	0.3333333333333333
dilworth sj	1	0.25
ding f	1	0.3333333333333333
diogo c	1	0.25
dipierro s	1	0.3333333333333333
dixon jd	2	1
djament a	2	2
do n	1	0.5
dodson mm	2	1.3333333333333333
dokchitser v	1	0.5
dolbeault j	1	0.25
dolfi s	2	0.5
domanski p	1	0.3333333333333333
domokos m	1	0.5
donaire jj	1	1
doney ra	3	2.5
dong w	1	1
donkin s	3	2.5
donovan w	1	0.3333333333333333
donsig ap	1	0.5
doron a	1	0.5
dotti i	2	0.6666666667
doubrov b	1	0.5
douglas rg	1	0.3333333333333333
doust i	1	0.5
downes rj	1	0.3333333333333333
downey r	3	1.5
downey rg	2	0.6666666667
drabek p	1	0.5
dragicevic o	1	0.5
dragoni f	1	0.3333333333333333
drasin d	1	0.5

dritschel ma	1	0.3333333333333333
drmota m	2	0.8333333333333333
droste m	2	0.8333333333333333
drummondcole gc	1	0.5
du j	1	1
du plessis aa	1	0.3333333333333333
du y	2	1
dubejko t	1	1
dubois l	1	1
ducasse r	1	1
duchin m	1	0.2
duda j	1	0.5
dufour jp	2	1
dujella a	1	0.5
dummigan n	1	1
dunajski m	1	0.3333333333333333
duncan bl	1	1
dundas bi	2	1.5
dungey n	1	0.3333333333333333
duninbarkowski p	1	0.25
dunwoody mj	1	1
duoandikoetxea j	1	0.5
dupont c	1	0.5
dupont e	1	1
durand a	1	1
durand f	2	0.5833333333333333
durham mg	2	1.3333333333333333
dutta sp	2	2
duvall p	1	0.3333333333333333
dvorak z	1	0.3333333333333333
dwyer wg	1	0.3333333333333333
dyakonov km	1	1
dyda b	1	0.3333333333333333
dydak j	1	0.25
dye rh	1	1
dzamonja m	1	0.5
earl r	1	0.5
earnest ag	2	0.8333333333333333
earp rs	1	0.5
eastham msp	1	1
ebeling w	1	1
ebenfelt p	3	1.8333333333333333
ebmeyer c	1	0.3333333333333333
eccles pj	1	0.5
echterhoff s	1	1
eckhardt j	1	0.25

eda e	1	0.5
edalat a	1	0.333333333333
edjvet m	1	0.5
edmunds de	1	0.333333333333
edward j	1	1
edwards cm	1	0.5
edwards da	1	1
edwards k	1	1
efendiev m	1	0.2
efimov ai	1	1
egami s	1	0.5
ehring m	1	1
eick b	2	1.333333333333
einsiedler m	1	0.333333333333
ekstrom f	1	0.5
elashvili ag	1	0.5
elfallah o	1	0.5
elguindy a	2	1.333333333333
elias j	1	1
ellenberg js	1	0.25
ellia p	1	1
elliott ga	1	0.5
elliott pdta	4	3.5
ellis d	1	1
ellis g	1	1
ellis gj	2	2
elmahi a	1	0.5
elsholtz c	3	1.25
elsken t	1	0.333333333333
emmanouil i	2	1
engler a	1	0.25
englis m	1	0.5
enochs e	1	0.333333333333
erbe l	1	0.333333333333
erdelyi t	4	2.166666667
erdmann k	1	0.5
erdos ja	1	0.333333333333
erdos p	1	0.333333333333
eremenko a	1	0.333333333333
erez b	1	0.25
erman d	1	0.333333333333
ermert o	1	1
ershov mv	1	1
escassut a	1	0.5
escauriaza l	1	0.25
eser zs	1	0.5

essen m	1	0.5
essen mr	1	0.5
esteban mj	1	0.25
esterle j	1	0.333333333333
esteve a	1	0.5
esteves e	1	0.333333333333
estevez d	1	0.333333333333
estrada s	1	0.333333333333
etnyre jb	2	1
evans dm	4	3
evans mp	1	0.5
evans sn	1	1
evans wd	3	1.166666667
everest g	2	1
everest gr	3	3
eveson sp	1	1
ezzaaraoui a	1	0.5
faber e	1	0.5
fabian m	1	0.333333333333
fabio c	1	0.5
fabrice k	1	1
fagella n	2	0.5
fahrenwaldt ma	1	1
falconer kj	3	2.5
fan a	1	0.333333333333
fan ah	1	0.333333333333
fan ck	1	0.5
fan q	1	0.5
fan s	1	0.333333333333
fang j	1	0.25
fang xg	1	0.333333333333
farah lg	1	0.5
farb b	1	0.333333333333
farenick dr	1	1
farkas g	1	1
farkas w	1	0.5
farmer dw	1	0.333333333333
farnsteiner r	1	0.5
farran hr	1	0.5
fasangova e	1	0.25
fassarella t	1	0.5
fatighenti e	1	0.333333333333
fawkes j	1	1
fayad br	1	1
fayers m	1	1
fearnley j	1	0.333333333333

fehrenbach j	1	0.5
feichtinger hg	1	0.3333333333
fein b	1	0.5
feinstein jf	2	0.8333333333
feireisl e	2	0.5
fejzic h	1	0.3333333333
felder g	1	0.5
felgner u	1	0.5
felikson a	1	0.5
felix y	1	0.5
felli v	1	0.5
feng dj	2	1.3333333333
feng q	1	0.5
feng x	1	0.5
fenton pc	1	0.5
ferber a	1	0.5
ferenczi s	1	1
ferenczi v	2	0.5833333333
fergola p	1	0.3333333333
fernandez m	1	0.25
fernandezalcober ga	1	0.5
fernandezcabrera lm	2	0.666666667
fernandezpolo fj	2	0.8333333333
ferone a	1	0.5
ferrand e	1	0.5
fesenko ib	1	1
fetter h	1	0.25
fiedlerle touze s	1	1
fila m	2	0.8333333333
filali m	2	1
filip s	1	0.3333333333
filipuk g	1	0.5
fine j	1	0.5
finkelberg m	1	0.5
fino a	1	0.5
fintzen j	1	0.3333333333
fiore m	1	0.25
fiorenza d	1	0.3333333333
fiorilli d	1	1
fisher jc	1	0.3333333333
fiz pontiveros g	1	0.2
flapan e	1	0.3333333333
flavell p	2	2
fletcher a	1	1
florens v	1	0.5
flores j	2	0.75

flores rj	1	0.5
florit la	1	1
fodor f	1	0.3333333333333333
fok ck	1	0.5
folsom a	2	1
fonarev a	1	0.5
font jj	1	0.5
fontanari c	1	0.5
ford k	1	1
ford kb	1	1
forrest ah	1	1
foscolo l	1	1
fossy j	1	0.5
foster t	1	1
fottner h	1	0.5
fouche wl	1	1
foulis dj	1	0.5
fournais s	1	0.5
fox j	1	0.3333333333333333
fra <u><u+0327></u> czeck k	2	1.5
frajria pm	1	0.3333333333333333
francisco ca	1	0.3333333333333333
frank rl	1	0.3333333333333333
frankild a	1	0.3333333333333333
frankl p	1	0.5
frantzikinakis n	1	0.5
frechette sm	1	1
freeman de	1	1
freiberg t	1	1
freibert m	1	0.25
freiling c	2	0.6666666666666667
freiman ga	1	0.3333333333333333
freitas p	1	1
fremlin dh	1	1
freniche fj	1	0.3333333333333333
frentzen h	1	1
fresse l	1	0.5
fricain e	1	0.2
friedl s	1	0.5
friedlander j	1	0.3333333333333333
friedman e	2	1
froelich j	1	1
frolenkov d	1	0.5
fu c	1	0.5
fu hl	1	0.3333333333333333
fuchs c	1	0.5

fuertes y	1	0.5
fuhr h	1	0.2
fujisaki t	1	1
fujita n	1	0.5
fujiwara k	1	0.5
fukui t	2	1.333333333
fumagalli f	1	1
funar l	2	1
further jp	1	1
fuster mcr	1	0.25
gabai d	1	0.5
gabardo jp	1	0.5
gabriele g	1	0.5
gabrielov a	2	0.833333333
gaffney t	1	0.5
gagne m	1	0.333333333
galaev as	1	1
galaktionov va	1	1
galazfontes f	1	1
galbraith sd	1	0.5
gale je	1	0.5
galindo c	1	1
galindo j	1	1
gallardo l	1	0.2
gallardogutierrez ea	1	0.5
gallego e	1	0.5
galvin f	1	1
gambino n	1	0.25
gan wl	1	0.5
gandini j	1	0.333333333
ganev i	1	1
gantz c	1	0.5
gao h	1	0.333333333
garaialde ocana o	1	0.333333333
garban c	1	0.25
garcia de la fuente j	1	0.333333333
garcia del amo a	1	0.25
garciacalcines j	1	0.5
garciacalcines jm	1	0.333333333
garciacuerva j	1	0.2
garciadiaz pr	1	0.333333333
garciafernandez m	1	0.5
garciafritz n	1	1
garciagarcia ji	1	0.25
garciapradra o	2	0.833333333
garciaramos f	1	0.5

garciarozas jr	1	0.3333333333333333
garciasanchez pa	1	0.25
garciavazquez jc	1	0.3333333333333333
gardener ts	1	1
gardiner a	2	0.5833333333333333
gardiner sj	2	1.5
gardner rj	1	0.5
garibaldi s	3	1.5
garling djh	1	0.5
garnett jb	1	0.5
garofalo n	1	0.3333333333333333
garrido a	1	0.3333333333333333
gasharov v	1	0.5
gasull a	1	0.3333333333333333
gaunard f	1	0.2
gaviraromero a	1	0.5
gayet d	1	0.5
geck m	2	1.5
gei<u+00df> c	1	0.3333333333333333
geiges h	3	1.3333333333333333
geisinger l	1	0.5
geisler m	1	0.5
geiss c	1	0.3333333333333333
geiss s	1	0.5
geissert m	2	1
gelaki s	1	0.5
gelbrich g	1	0.5
gellredman j	1	0.3333333333333333
genovese f	1	1
gentil i	1	0.3333333333333333
geoffrey gr	1	1
georgakopoulos a	1	1
georgiev pg	1	0.25
geraschenko a	1	0.5
gerritzen l	1	0.5
gersten sm	1	1
gesztesy f	2	0.75
getsadze r	1	1
getz jr	1	1
gyerl	1	0.25
ghahramani f	1	0.3333333333333333
ghaswala t	1	0.5
ghezzi l	1	0.2
ghosh a	3	1.5833333333333333
giachetti d	2	0.8333333333333333
giambò r	1	0.5

giambruno a	2	0.8333333333333333
giannelli e	1	1
giannetti f	1	0.3333333333333333
giannoni f	1	0.5
giannopoulos a	1	0.3333333333333333
giansiracusa j	2	2
gigante g	1	0.5
gil s	1	1
gilbert ad	1	0.5
gilkey pb	1	0.5
gill n	1	1
gille p	1	0.5
gillespie ta	3	1.25
gilmer pm	1	0.5
ginensky a	1	0.3333333333333333
giordano t	1	0.5
giraldo l	1	0.3333333333333333
giraudeau m	1	0.3333333333333333
giudici m	4	1.6
giulietti m	1	0.5
giulini s	1	0.3333333333333333
glasby sp	1	0.25
glasner y	1	0.3333333333333333
glass amw	3	1.3333333333333333
glessner a	1	0.25
glibichuk aa	1	0.3333333333333333
glover r	1	0.5
gluck d	1	0.5
gobel r	2	0.8333333333333333
goertsches o	1	0.25
gogatishvili a	1	0.3333333333333333
gogolev a	1	0.5
goh r	1	0.5
goh ss	1	1
goldstein m	1	0.5
gomes da	1	0.5
gomez a	1	0.5
gomezmont x	1	0.3333333333333333
gomi k	1	1
goncalves dl	1	0.5
goncalves jz	1	0.5
gonek sm	2	0.8333333333333333
gonzalez c	1	0.5
gonzalez j	2	2
gonzalez m	1	0.3333333333333333
gonzalez s	1	0.5

gonzalezalonso v	1	0.5
gonzalezdiez g	1	0.5
gonzalo r	1	0.333333333333
goodey p	2	0.833333333333
goodman aj	1	0.5
gordon b	1	0.5
gordon c	1	0.5
gordon cmca	1	0.333333333333
gordon dm	1	1
gordon ra	1	1
gorkin p	3	1.333333333333
goryunov v	1	0.5
goryunov vv	1	1
gothen pb	1	0.5
goto s	2	0.7
gourion c	1	1
gournay a	1	0.5
gover ar	1	0.333333333333
gow r	2	2
grabner pj	2	0.833333333333
grabowski je	1	0.333333333333
grace sr	1	0.333333333333
gramain jb	1	1
gramlich r	1	0.333333333333
grammatikopoulos mk	1	0.5
grandjean v	1	1
granero as	1	0.25
grannell mj	1	0.25
granovsky bl	1	0.5
grant d	1	0.333333333333
granville a	2	1
grater j	1	0.5
gratz s	1	0.333333333333
grau m	1	0.5
green b	1	0.5
green rm	2	1.5
greenlees jpc	1	1
greg h	3	1.5
gregori p	1	0.5
gregory l	1	0.5
grekos g	1	0.2
griesemer m	1	0.5
griffiths s	1	0.2
griffon r	1	1
griggs ts	1	0.25
grigor'yan a	1	0.5

grigorshuk ri	1	0.5
grillo g	1	1
grinshpan a	1	1
gritzmann p	2	1
grochenig k	4	1.7
groechenig m	1	0.3333333333
groemer h	1	1
grosserdmann kg	1	1
grosset mp	1	0.5
grosu c	2	1.3333333333
groves d	1	1
groves dp	1	1
groves jrj	4	2
grozev gr	1	0.5
gruber d	1	1
gruber pm	1	1
grudsky s	1	0.5
greet jc	1	0.5
grunbaum b	1	0.5
grundling h	2	2
gruson l	1	0.3333333333
grzeszczuk p	1	0.5
guadalupe jj	1	0.3333333333
guardia j	1	1
guaschi j	2	1.5
guay n	1	0.5
guedj v	1	0.3333333333
guentner e	1	0.5
guerrero jb	1	0.3333333333
guest ma	1	0.5
guest s	1	0.25
guil asensio pa	1	0.5
guilfoyle b	1	0.5
guillin a	1	0.3333333333
guitart x	1	0.5
gundlach f	1	1
gundry j	1	0.3333333333
guo cy	1	0.5
guo f	1	0.3333333333
guo k	1	0.5
guo x	1	0.3333333333
guo y	1	0.5
guo z	4	1.8333333333
guralnick r	1	0.5
guralnick rm	1	0.25
gurjar rv	1	0.3333333333

gurka p	1	0.2
guseinzade sm	1	0.333333333333
gutierrez jj	1	1
guyot l	1	0.333333333333
gwiazda p	1	0.25
haak b	1	0.333333333333
haase m	1	1
habegger p	1	1
habiro k	1	0.25
habsieger l	1	0.2
hachenberger d	1	1
hacon cd	1	1
haeseler s	1	0.333333333333
hagen mf	1	1
hagger r	1	0.333333333333
haglund f	1	0.333333333333
haimi a	1	0.2
haissinsky p	1	1
hajarnavis cr	1	0.333333333333
hajlasz p	1	0.5
halberstadt e	1	0.5
halberstam h	1	0.333333333333
halic m	1	1
hall c	1	0.25
hall j	1	1
hall rr	1	1
hallerdintelmann r	1	0.333333333333
halterkoch f	1	0.25
halverson t	1	0.5
hambly bm	1	0.333333333333
hamel m	1	0.5
hamilton a	1	1
hamilton dh	2	2
hamilton e	1	0.333333333333
hamilton ep	1	0.5
hammerl m	1	0.333333333333
hammerlindl a	1	0.5
han ym	1	0.5
hansen w	1	0.5
haraki a	1	1
haran d	1	0.25
haraoka y	1	0.5
harbourne b	1	0.333333333333
harizanov v	1	0.333333333333
harlander j	3	1.5
harman g	2	1.5

harris dj	2	0.666666667
harris me	2	1.5
harrison kj	1	0.5
hartley b	2	1.5
hartmann a	1	0.2
hartnick t	1	0.2
hartz m	1	0.25
hartzoulaki m	1	0.333333333
harvey s	1	0.5
haskell d	1	0.333333333
hassan ne	1	1
hassell a	1	0.333333333
hatcher a	1	0.5
hau<u+00df>mann w	1	0.5
haug f	1	1
hayashi n	1	0.333333333
haydn n	1	0.5
haydon r	1	1
haydys a	1	1
hayman wk	1	1
heathbrown dr	1	0.5
hebisch w	1	0.333333333
heck h	1	0.333333333
hedenmalm h	1	0.333333333
heffernan d	1	1
heine k	1	0.5
heinig hp	1	0.5
helemskii ay	2	1.333333333
helffer b	1	0.5
helfgott ha	1	1
heller a	1	1
hemmer dj	1	0.5
henderson mj	1	0.5
henke a	1	0.333333333
hennecart f	1	0.2
hennings m	1	1
henriksen c	1	0.25
hensel s	1	0.5
hernandez am	1	0.25
hernandez fl	3	1
hernandez?corbato l	1	1
hernando f	1	0.5
herrero da	1	1
herwig b	1	0.333333333
herzog i	1	0.5
herzog j	1	0.333333333

herzog m	1	0.25
heyer h	1	0.5
hickin kk	1	1
hida a	1	0.5
hidalgo ra	2	1.5
hieber m	2	1.3333333333333333
hieronymi p	1	1
higgins pj	1	0.5
hild t	1	0.5
hilden hm	1	0.3333333333333333
hilgemann m	1	0.5
hilgert j	1	0.3333333333333333
hilhorst d	1	0.25
hilion a	3	1
hill d	1	0.5
hill r	1	0.5
hillar cj	1	0.5
hillman ja	3	2.5
hils m	1	1
hilton ajw	3	1.3333333333333333
hindman n	1	0.3333333333333333
hinkkanen a	1	0.5
hinrichs a	1	1
hinz am	1	0.5
hirano m	1	1
hironaka e	1	1
hirschfeldt dr	1	0.3333333333333333
hiss g	2	1.3333333333333333
hitching gh	1	1
hitrik m	1	0.5
hladky j	1	0.3333333333333333
ho t	1	0.25
hoang v	1	0.2
hochman m	1	1
hodges w	1	0.5
hodgkin l	1	1
hoeve m	1	1
hofbauer f	1	1
hoffmann d	1	0.5
hoffmann dw	1	0.5
hoffmannostenhof m	1	0.25
hoffmannostenhof t	1	0.25
hofmann t	1	0.3333333333333333
holland d	2	1.5
holland m	1	0.5
hollings c	1	0.5

holmes pe	2	
holt df	4	1.75
honda n	1	0.5
hone anw	1	0.333333333333
hong j	1	0.2
hong jh	1	0.5
hong s	1	1
horie k	1	1
hornbostel j	1	0.5
horvath m	1	0.5
hosseini m	1	0.5
host b	2	0.75
houdayer c	1	0.5
housworth e	1	1
hovey m	1	0.5
howe ew	1	1
howes p	1	0.25
howey raj	1	1
howie j	1	0.5
hoyt c	1	0.333333333333
hrushovski e	3	1.833333333333
hsia js	1	0.333333333333
hsia lc	1	1
hsu ep	1	1
hu f	1	0.333333333333
hu j	1	0.5
hu s	1	0.5
hu y	1	1
huang h	2	0.666666666667
huang j	1	0.25
huang r	1	0.5
huang z	1	0.5
hubard i	1	0.333333333333
hubbuck jr	1	1
hubery a	2	2
huckaba s	1	0.5
huczynska s	1	0.5
hudson rl	2	1.5
hufnagel a	1	0.5
hug d	2	0.833333333333
hume d	1	0.5
huneke c	1	1
hung dc	1	0.333333333333
hurley tc	2	1.5
hurtubise j	1	0.333333333333
hurtubise jc	1	1

hwang jm	1	0.5
hwang sg	1	0.5
hyde j	1	0.25
hyland m	1	0.25
hyun y	1	0.25
iagar rg	1	0.5
ianni i	1	0.5
icaza mi	1	1
ichimura h	2	2
ieronymou e	1	0.3333333333
ignat li	1	0.5
ih si	1	1
ilardi g	1	0.3333333333
iliev id	1	1
ilyin aa	2	2
im bh	1	0.5
im yh	1	0.3333333333
inahama y	1	0.5
infante g	3	1.5
ingram p	1	1
inninger c	2	1
inoue m	1	1
intermont m	1	0.3333333333
ioffe ad	1	1
iozzi a	1	0.2
irving aj	1	1
isaacs im	1	0.5
iserles a	1	0.5
ishihara k	1	0.25
ishikawa g	1	1
isola s	1	0.5
isono y	1	0.5
isralowitz j	1	0.3333333333
ito ht	1	0.5
ito k	1	0.5
itoh t	1	0.5
ivanisvili p	1	0.5
ivanov aa	1	0.5
ivanov kg	1	0.3333333333
ivanov s	1	0.25
ivic a	1	1
iwaniec h	1	0.5
iwaniec t	1	0.25
iwanik a	1	0.3333333333
iwata k	1	0.5
iyama o	2	0.8333333333

iyengar s	1	0.3333333333333333
iyengar sb	1	0.3333333333333333
izuchi k	1	1
izumiya s	1	0.25
jablonski zj	1	0.5
jabuka s	1	1
jachelon b	1	1
jacob n	1	0.5
jacon n	1	0.5
jager t	1	1
jager th	1	0.5
jahnel j	1	1
jaikinzapirain a	1	0.5
jaikinzaptrain a	1	1
james g	1	0.3333333333333333
janeczko s	1	0.5
jang y	1	0.25
jansen c	2	1
jaramillo ja	1	0.3333333333333333
jarden m	2	1
jarque x	1	0.25
jarvenpaa e	1	0.2
jarvenpaa m	1	0.2
jarvi p	1	0.5
jasso g	1	0.3333333333333333
javaloyes ma	1	0.3333333333333333
jaworska a	1	0.3333333333333333
jebelean p	1	0.5
jech t	1	0.5
jeffrey lc	1	1
jehanne a	1	0.5
jelisiejew j	1	1
jelonek w	2	2
jelonek z	1	0.5
jenkinson o	2	1
jenne r	1	0.25
jens p	1	1
jenssen m	1	0.25
jeon d	1	0.3333333333333333
jerzy k	1	1
ji c	1	0.3333333333333333
jiang j	1	0.5
jiang jf	1	1
jiang y	1	1
jianguo z	1	1
jiao y	2	0.5833333333333333

jiaping w	1	0.3333333333
jiaquan l	1	0.5
jie x	1	0.5
jimenez sevilla m	1	0.25
jin o	1	0.3333333333
jin x	1	0.5
jin z	1	0.5
jocic dr	1	1
jockusch jr cg	1	0.5
johnson be	2	2
johnson c	1	0.3333333333
johnson cr	1	0.3333333333
johnson kw	1	0.3333333333
johnson m	1	0.5
johnston h	1	0.5
joita m	1	1
jolissaint pn	1	0.5
jonas p	1	0.25
jones ga	2	0.7
jones r	1	1
jonusas j	1	0.25
jordan t	1	0.5
jorgensen p	2	1.3333333333
joshi n	2	0.5833333333
joyce d	1	1
joyce h	1	1
jr	1	0.5
junge m	1	0.5
juniati d	1	0.3333333333
justel d	1	1
kachmar a	1	0.5
kaenmaki a	3	0.8666666667
kaikina ei	1	0.3333333333
kakde m	1	1
kakol j	1	0.5
kalaj d	1	1
kalamajska a	1	0.5
kaltenback m	1	0.5
kalton n	1	0.25
kalton nj	2	1.25
kambites m	1	0.5
kamenova l	1	0.3333333333
kaminker j	1	0.5
kamiya s	1	1
kamowitz h	1	0.5
kang h	1	0.2

kang sy	1	
kaniuth e	2	0.8333333333333333
kantor wm	1	0.2
kaplan i	1	0.3333333333333333
kapovich i	1	0.5
kapustka g	1	1
karlovich yui	1	0.25
karpinska b	3	1.0833333333333333
kartsatos ag	1	0.5
kasikova a	1	0.3333333333333333
katavolos a	1	0.5
kath i	1	1
kato k	1	0.3333333333333333
katsoulis eg	1	0.5
katsurada h	1	0.5
katz mg	1	0.5
katzman m	1	1
kaul a	1	1
kaveh k	1	1
kawabi h	1	0.5
kawada k	1	0.5
kawamura k	1	0.5
kawan c	2	1
kaye r	1	1
kazez wh	1	0.5
keating jp	2	0.8333333333333333
kechris as	1	1
keesling j	1	0.3333333333333333
keevash p	2	0.5833333333333333
keisler hj	1	0.5
keith s	1	0.3333333333333333
kelbert m	1	0.5
kellay k	1	1
kellendonk j	1	0.5
keller b	1	0.3333333333333333
keller g	1	1
keller j	1	1
keller m	1	0.3333333333333333
kellerhals r	1	0.5
kelly m	1	0.5
kendall ws	1	1
kenderov ps	1	0.5
kenig ce	2	0.45
kenmotsu k	1	1
kepert ag	1	1
kerner d	1	1

keshari dk	1	0.3333333333333333
kessar r	1	1
keswani n	1	1
keum j	1	0.3333333333333333
keyantuo v	1	0.5
kezuka y	1	1
khalil i	1	0.3333333333333333
kharlampovich o	1	0.5
khavinson d	2	0.5333333333333333
khukhro ei	2	1.5
kida y	1	1
kiderlen m	1	1
kielak d	1	1
kiem yh	2	1
kigami j	1	0.5
kilian m	2	0.5
kim b	2	2
kim ch	1	0.3333333333333333
kim hj	1	0.25
kim j	1	0.5
kim jh	1	0.25
kim k	1	0.2
kim p	1	0.3333333333333333
kim s	2	1
kim sg	2	1
kim t	1	0.5
kim y	1	0.3333333333333333
kiming i	2	0.6666666666666667
king ad	1	0.5
king jd	1	1
king jr	1	0.3333333333333333
kiosak v	1	0.3333333333333333
kirat i	1	0.5
kirchberg e	1	0.5
kirschenhofer p	1	0.3333333333333333
kirsten k	1	0.5
kirwan f	1	0.5
kisilevsky h	1	0.3333333333333333
kissin e	2	1.3333333333333333
kitaev av	1	0.3333333333333333
kitchloo n	1	1
kitroser d	1	0.3333333333333333
kiwi j	1	0.5
kjoshanssen b	1	0.3333333333333333
klamt a	1	1
kleidman pb	1	0.3333333333333333

kleiman h	1	
kleiman s	1	0.3333333333
klep i	1	0.3333333333
kleschevich i	1	0.5
kleshchев as	2	1.333333333
klin mhmarusic dnowitz la	1	0.2
klingenberg w	1	0.5
klopsch b	2	0.8333333333
klotz a	2	0.7
kluppelberg c	1	0.3333333333
knapp mp	2	2
knowles i	1	0.3333333333
knudsen b	1	0.5
knudson kp	1	1
kobayashi sp	2	0.5
kobayashi t	1	0.25
kochloukova d	1	0.25
kochloukova dh	3	2
kock j	1	0.5
kodaka k	1	1
koenigsmann j	1	1
kofman i	3	1
kohayakawa y	1	0.3333333333
koivusalo h	1	0.3333333333
kojman m	2	1.5
kolb m	1	0.3333333333
koldobsky a	1	0.3333333333
kolev b	1	0.3333333333
kolodziej s	1	1
kolountzakis mn	1	0.5
kolte su	1	0.3333333333
komorowski t	1	0.5
kondratiev v	1	0.25
konig h	1	1
konig s	1	0.5
konyagin sv	1	0.3333333333
kopp mk	1	1
korchmaros g	1	0.5
korenblum b	2	0.8333333333
korner tw	3	3
koshitani s	1	0.5
koskela p	3	1.25
kossak r	1	0.5
kostin in	1	1
kostochka av	1	0.3333333333
kotani m	1	

kotowski m	2	
kotschick d	1	0.5
kou c	1	0.3333333333333333
koumandos s	1	0.3333333333333333
kounchev o	1	0.5
kovalev lv	1	1
kovarik h	1	1
kowalczyk m	1	0.5
kowalski e	3	1.75
kowalski mw	1	0.5
kowalski p	2	1.5
kozhevnikov a	1	1
kozlovski o	1	1
kra b	2	0.8333333333333333
krammer d	1	1
krasilnikov an	1	1
kratz w	2	1.5
krau<u+00df>har rs	1	0.5
kraus a	1	0.5
kraus d	1	0.5
krause h	1	0.5
krbec m	1	0.3333333333333333
kreji p	1	0.3333333333333333
kreu<u+00df>ler b	1	0.5
riegler c	1	1
kronheimer pb	1	1
kroo a	1	0.3333333333333333
kropholler ph	2	1
krstic s	1	0.5
krug a	1	0.5
kruse hp	1	1
krushkal sl	1	1
krylov i	1	1
kucharz w	1	0.5
kufner a	1	0.5
kuhn d	1	0.3333333333333333
kuhn t	3	1.8333333333333333
kuijlaars abj	1	0.5
kujawa jr	1	0.5
kulczycki t	1	0.5
kulesz l	1	1
kulkarni rs	1	0.5
kulshammer b	1	0.5
kumabe m	1	0.5
kumchev av	1	0.5
kuo tc	1	0.5

kuo w	1	0.5
kupavskii a	1	0.5
kuran u	2	1
kurata k	1	1
kurdyka k	1	0.5
kurokawa y	1	0.5
kurta vv	1	0.5
kusuoka s	1	0.3333333333333333
kuwata m	1	0.3333333333333333
kuznetsov a	2	0.8333333333333333
kuzucuoglu m	2	1
kwan m	1	0.3333333333333333
kwasnicki m	1	0.3333333333333333
kwon hk	2	0.6666666666666667
kyrezi i	1	0.3333333333333333
kyriazis g	1	0.5
laba i	1	1
labs o	1	1
laca m	2	1.5
lacka m	1	0.5
laczkovich m	1	1
ladkani s	1	1
laeng e	1	0.3333333333333333
lafont jf	2	1.5
lagarias jc	3	2
lai cj	1	0.5
laine i	1	0.5
lakeland gs	1	0.5
lalin m	2	0.6666666666666667
lalley sp	1	1
lam t	1	1
lambrechts p	1	1
lambrou ms	2	0.8333333333333333
lamplugh j	1	1
lan kq	2	1.5
lancaster k	1	0.5
landau lj	1	1
lande h	1	0.3333333333333333
landreau bplagne a	1	0.2
landsberg jm	3	1.3333333333333333
lang j	2	1
lang l	1	1
lang ml	1	0.3333333333333333
lange h	1	1
langer a	2	2
langer m	2	0.8333333333333333

langley j	1	0.5
lanza de cristoforis m	1	1
lanzat s	1	0.5
lapidus ml	2	1
laptev a	3	0.8333333333333333
larman dg	1	0.5
larotonda g	1	0.5
larsen ns	1	0.5
larsen pl	1	1
laskowski mc	1	1
lau at	2	0.6666666666666667
lau atm	1	0.3333333333333333
lau ks	2	0.8333333333333333
lau sc	1	1
laubie f	1	0.5
laubinger m	1	0.3333333333333333
lauda ad	1	0.25
laugesen rs	1	1
launois s	1	0.3333333333333333
laurence mr	1	1
laurencot p	1	0.5
laurent c	1	0.3333333333333333
laurent m	1	0.5
lauret j	1	1
laustsen nj	2	1.25
lavenant h	1	0.5
lavrenyuk y	1	0.5
lawson jd	1	1
lazarev a	1	0.5
le calvez p	1	0.3333333333333333
le coz s	1	0.5
le h	5	3.5
le merdy c	2	1.5
le meur p	1	0.3333333333333333
le th	1	0.5
le vk	1	0.5
leader i	2	0.8333333333333333
leary ij	2	0.8333333333333333
leclerc b	1	0.3333333333333333
lecourturier e	1	1
ledyaev yus	1	0.5
lee c	1	0.25
lee h	1	0.2
lee j	1	0.25
lee s	1	0.5
lee y	1	0.3333333333333333

leedhamgreen c	1	1
leedhamgreen cr	1	1
lefvre p	1	0.5
lehrback j	1	0.5
leiderman a	1	0.3333333333333333
leinen f	1	0.5
leininger cj	2	0.8333333333333333
lekili y	1	0.5
lemaire l	1	0.5
lemanczyk m	3	1.3333333333333333
lemire n	1	0.25
lempf s	2	0.6666666667
lemvig j	1	0.5
lenagan th	2	0.8333333333333333
leoncardenal e	1	0.3333333333333333
leprevost f	1	0.3333333333333333
lequin y	1	0.3333333333333333
lerman m	1	0.3333333333333333
leschke k	1	0.5
lettl g	1	0.25
letzter es	1	1
leung dh	1	1
leung nc	1	0.5
lev vf	2	2
levcovitz d	1	0.3333333333333333
levi r	2	1.5
levin m	1	0.25
lewanski d	1	0.25
lewis aem	1	0.5
lewis k	1	0.2
lewis kwemer j	1	0.2
lewis ml	1	0.25
lewis r	1	1
li a	1	0.5
li c	1	0.3333333333333333
li ch	3	0.9
li g	1	0.5
li h	2	0.6666666667
li j	3	1.8333333333333333
li k	1	0.5
li l	1	0.5
li x	2	0.8333333333333333
li zq	1	1
liang j	1	0.5
liang x	1	1
liangang p	1	0.5

liaw c	2	0.5333333333333333
liaw wc	1	0.3333333333333333
libman a	2	1
liebeck mw	2	1
lim ch	1	0.3333333333333333
lin a	1	0.5
lin cc	1	1
lin h	1	0.5
lin q	1	0.5
lin w	1	0.5
lin y	2	1.5
linares f	1	0.5
linckelmann m	2	1.5
lindsay jm	2	0.8333333333333333
ling ach	1	0.25
linial n	1	0.25
linnell pa	1	1
lipshitz l	2	0.8333333333333333
liskevich v	3	1.0833333333333333
lissaman rm	1	0.3333333333333333
liu g	1	1
liu j	1	0.5
liu k	1	1
liu pd	1	0.5
liu q	1	0.5
liu s	2	2
liu t	1	0.3333333333333333
liu y	2	0.8333333333333333
liu yr	1	0.5
livingston c	2	1
lizama c	1	0.5
lo sfv	1	0.5
lodha y	1	1
logunov a	1	0.3333333333333333
loh c	1	0.5
lomakina e	1	0.5
longobardi p	1	0.3333333333333333
longstaff we	1	0.5
lopes ao	1	0.25
lopez g	1	0.3333333333333333
lorenz m	1	0.25
loring ta	1	1
los j	1	0.5
losert v	1	1
loss m	1	0.25
lotay j	2	2

lotoreichik v	1	0.3333333333333333
loubert jw	1	0.3333333333333333
louboutin s	1	1
louboutin sr	1	1
loughran d	1	1
louveau a	1	0.3333333333333333
lovasz l	1	0.25
lovejoy j	1	1
lozano mt	1	0.3333333333333333
lozanorobledo a	1	0.5
lu h	1	0.5
lu s	1	0.3333333333333333
lubeck f	1	0.5
lubotzky a	1	0.5
luca f	1	0.5
lucchini a	3	1.3333333333333333
ludwig j	1	0.3333333333333333
luengo i	1	0.25
lukas f	1	1
lukina o	1	1
luks t	1	0.3333333333333333
luminet d	1	0.5
lunardi a	2	1
lundberg e	1	0.5
lundquist m	1	0.3333333333333333
luo jj	1	1
luo l	1	0.5
luo s	1	0.5
lusky w	2	2
lustig m	4	1.5
lyons r	1	0.2
lysenok ig	1	0.5
lyzzaik a	2	2
ma j	1	0.5
ma l	2	1
ma x	1	0.5
maasalo oe	1	0.5
maass a	3	1.0833333333333333
maciasvirgos e	1	0.5
maciejewski m	1	0.5
macintyre a	1	0.3333333333333333
mackenzie kch	1	0.5
maclachlan c	3	1.75
maclaughlin c	1	0.25
macpherson d	3	1
magaard k	1	0.5

magajna b	1	
maginnis j	1	1
magnani v	1	0.3333333333333333
maher j	1	1
maier h	1	0.5
mairesse j	1	0.5
maj m	1	0.3333333333333333
makarenko nyu	1	0.5
makarov n	1	0.5
malcolmson p	1	1
maldeghem hv	1	0.5
maleva o	1	1
malicki p	1	0.3333333333333333
maligranda l	1	1
malik ma	1	0.3333333333333333
malinnikova e	1	0.3333333333333333
malle g	5	2.3333333333333333
maltcev v	1	0.3333333333333333
mamino m	1	0.5
manchon pmg	1	0.5
mandel r	1	0.3333333333333333
manderscheid d	1	1
mangoubi d	1	1
maniar l	1	0.5
manin yi	1	1
manjunath m	1	1
manning jf	1	1
manosas f	1	0.3333333333333333
manoussakis a	1	0.5
manoussos a	1	0.3333333333333333
mansfield el	1	1
mantica g	1	0.5
mantoiu m	1	1
manuilov v	1	0.5
mao z	1	0.5
marasingha g	1	1
marcoux lw	4	2.3333333333333333
marcut i	1	0.5
mardei p	1	0.3333333333333333
margalit d	1	0.3333333333333333
margolis l	1	0.3333333333333333
markarian n	1	1
marker d	1	0.3333333333333333
markovic v	1	1
marks c	1	0.5
marletta g	1	1

marletta m	2	0.5833333333333333
marley t	1	0.5
marra v	1	0.5
marseglia s	1	1
marsh r	1	0.5
marsh rj	3	1.3333333333333333
marson a	1	1
martin g	3	1.25
martin gj	2	1.5
martin hm	1	0.5
martin p	1	0.3333333333333333
martin s	1	0.5
martin wj	1	0.5
martin y	1	1
martinet j	2	1
martinez a	1	0.5
martinez c	2	0.8333333333333333
martinezavendano ra	1	1
martinezmoreno j	1	0.25
martinezperez c	1	0.5
martinmarquez v	1	0.3333333333333333
martino m	1	1
martinpeinador e	1	0.3333333333333333
martinpizarro a	1	0.5
martinreyes fj	2	0.7
marusicpaloka e	1	0.5
marzantowicz w	3	2
mascarenhas h	1	0.3333333333333333
masdeu m	1	0.5
mason aw	1	0.5
mason g	1	0.5
mason lj	1	0.25
masri r	1	1
massaneda x	1	1
massarenti a	1	1
masser dw	1	0.5
massey d	1	0.25
massuyeau g	1	1
mastylo m	1	0.3333333333333333
masumoto m	1	1
mathai v	1	0.5
mathas a	1	1
mathes b	1	1
matheus f	1	0.5
mathonet p	2	1
matousek j	1	1

matsumoto k	2	
mattarei s	1	0.3333333333
mattila p	1	0.5
matucci f	1	0.3333333333
matusevich lf	3	1.5
matveev s	1	0.5
matveev vs	1	0.3333333333
mauceri g	2	0.5333333333
mauduit c	3	1.166666667
maugendre h	2	1.3333333333
mavron vc	1	0.5
mawhin j	2	1
mayer d	1	0.25
mayr p	1	0.5
maz'ya v	1	0.5
mazzocco m	1	1
mbekhta m	1	0.5
mc connell g	1	0.5
mc intosh rj	1	1
mc kay s	1	1
mccarthy je	1	0.25
mccolm gl	1	0.3333333333
mcconnell d	1	1
mccool j	1	0.5
mccoy d	1	1
mccullough d	1	1
mcgibbon ca	1	0.5
mcgraw wj	1	0.5
mcguire pj	1	0.5
mcintosh a	1	0.3333333333
mcintosh i	2	1.5
mcintosh rj	1	0.5
mckay b	1	1
mckee j	2	1.5
mckennon kd	1	0.3333333333
mckubrejordens m	1	0.5
mclaughlin j	1	1
mcnamara pj	1	1
mcneilly d	1	0.3333333333
mcninch gj	1	1
mcreynolds db	1	0.3333333333
meachan c	1	0.3333333333
meakin j	1	0.5
meda s	3	0.866666667
medeiros n	1	0.5
medvedev y	2	2

medynets k	1	0.5
mehringer j	1	0.5
mei t	1	1
meierfrankenfeld u	3	1.666666667
meinert h	1	0.5
meir e	1	0.5
melbourne i	2	1
melleray j	1	0.333333333
mellon p	1	0.5
melnikov a	1	0.5
melot c	1	0.333333333
melvin p	1	0.25
menamatos h	1	0.5
menarguez t	1	0.333333333
mendel m	1	0.25
meng g	1	1
merel l	1	0.5
merkurjev a	1	1
mermin j	1	0.333333333
meskine d	1	0.5
metafune g	1	0.25
metz v	1	0.333333333
miao t	1	1
miemietz v	1	0.333333333
migliore jc	2	1.5
mihalik m	1	0.5
mihaljevicbrandt h	1	1
mikaelian vh	1	1
milbers z	1	0.5
miles j	1	1
miles r	1	0.5
militaru g	1	1
miller bd	1	0.333333333
miller iii cf	1	0.25
miller js	1	0.333333333
miller tl	1	0.333333333
miller vg	1	0.333333333
milman m	1	0.5
milman pd	1	0.5
milnes p	2	0.666666667
milson r	1	1
mimura m	2	1.2
minac j	2	0.75
mingo ja	2	1.5
minsky yn	1	0.5
minty rjh	1	1

mirkovic i	1	0.5
mirza my	1	0.5
mirzaii b	1	1
mishchenko s	1	0.3333333333333333
misra g	1	0.3333333333333333
mistretta ec	1	1
mitankin v	1	1
mitchell jd	2	0.5833333333333333
mitra a	1	0.25
mitsis t	1	1
miyachi ji	1	0.3333333333333333
mizukawa h	1	0.5
mizuno y	2	1.5
mizuta y	1	1
mo x	1	0.3333333333333333
mohapatra rn	1	0.3333333333333333
moioli o	1	0.5
mok cp	1	1
mokhtari a	1	0.3333333333333333
molle r	1	1
moller m	2	0.8333333333333333
molnar l	1	1
molto a	1	0.25
mombelli m	1	1
monaghan a	1	0.3333333333333333
monar md	1	0.3333333333333333
mond d	3	1.5
monden n	1	1
mondino a	1	0.5
mongardi g	1	0.5
montalban a	1	0.5
montaner f	2	1
montanucci m	1	0.5
montejano l	1	0.25
montesinos v	1	0.3333333333333333
montesinosamilibia jm	1	0.3333333333333333
montesrodriguez a	1	1
monteverde i	1	0.3333333333333333
montgomery r	1	1
montgomerysmith s	1	0.25
montgomerysmith sj	1	0.5
moody ja	1	1
moore k	1	1
moors wb	1	0.5
moracorral c	1	1
moradifam a	1	1

morales j	1	0.5
moreno galindo a	1	0.3333333333
moreno jm	1	0.3333333333
moreno jp	1	0.25
morenomezia i	1	1
moreto a	2	0.7
mori i	2	2
moricz f	1	0.5
morigi m	1	0.5
morillon m	1	0.5
moriyama t	1	1
morley l	1	0.3333333333
moroianu a	1	0.5
moroz v	1	0.3333333333
morozov a	1	0.5
morpurgo c	1	0.3333333333
morra s	1	0.5
morris aj	1	1
morris r	1	0.2
morris sa	1	0.3333333333
morters p	1	0.5
mortini r	2	1
morton hr	1	0.5
moshchevitin ng	1	1
moshkovitz g	1	0.3333333333
mosley a	1	0.3333333333
mosquera ca	1	0.3333333333
moszynska m	1	1
motohashi y	1	1
mountford ts	1	0.5
movahhedi a	1	0.5
mozolyako p	1	0.3333333333
mroz k	1	0.5
mrozik p	1	1
mubayi d	1	0.5
mueller ua	1	0.5
muhlherr b	1	0.3333333333
mulazzani m	1	0.5
muller d	1	0.3333333333
muller g	1	1
muller j	1	0.3333333333
muller pfx	2	1.5
muller t	1	1
muller tw	1	0.5
muller v	2	1
mumbru p	1	0.3333333333

munehiko i	1	0.3333333333333333
munemasa a	1	0.5
munn wd	1	1
munoz v	2	1.25
munshi r	1	0.5
munteanu o	1	0.5
murakami h	1	1
murata l	1	0.5
murillo a	1	0.3333333333333333
murolo c	1	0.3333333333333333
murray mk	2	1.5
mushtaq q	1	0.5
musson im	2	1
mustafa mt	1	1
muzician o	1	0.5
muzzolini m	1	1
myasnikov a	1	0.5
n<u+00e6>vdal g	2	0.8333333333333333
naatanen m	1	0.5
naboko s	1	0.25
nacu s	1	0.5
nadirashvili n	1	0.5
nagase h	1	1
nagel m	1	0.25
nagisa m	1	0.5
nagy g	1	0.5
naie d	1	1
naimi r	1	0.3333333333333333
nakajima t	1	0.3333333333333333
nakamura s	1	0.5
nakanishi t	1	0.5
nakano dk	2	1
nakazono n	1	0.25
nandakumar v	1	0.3333333333333333
naor a	1	0.25
napolitano f	1	1
nashed mz	1	0.5
nashwilliams cstja	1	0.5
nasseh s	1	0.5
nasserden b	1	0.5
natali f	1	1
naumkin pi	1	0.3333333333333333
navarro g	3	0.7833333333333333
navas a	1	0.3333333333333333
nawata n	1	1
nayak t	1	0.5

nebe g	1	0.5
nedela r	1	0.25
nekrashevych v	1	0.5
nemethi a	4	2.5
nesin a	4	1.5833333333333333
nestoridis v	1	1
neumann pm	4	2
neunhoffer m	1	0.3333333333333333
neves js	1	0.3333333333333333
newelski l	2	1.5
newton r	1	1
ng ck	1	1
ng l	1	0.3333333333333333
ng n	1	1
ng sa	1	0.5
ng sh	1	0.5
ng tw	2	1.5
ngai sm	2	0.8333333333333333
nhu nt	1	1
niblo ga	1	0.3333333333333333
niche cj	1	0.5
nichols r	1	0.25
nickel a	2	1.5
nicol m	2	1
nicolaescu li	1	0.5
nicolau a	2	1.5
nielsen pp	1	0.5
niemeyer ac	1	0.5
nieminen pj	1	0.5
nies a	2	0.8333333333333333
nikeghbali a	1	0.5
nikolaev a	1	0.5
nikolaev i	1	0.5
nikulin vv	1	1
nishida k	1	0.5
nishimura t	1	1
nishio m	1	0.3333333333333333
nishiura t	2	1
nogueira a	1	0.5
nonnenmacher djf	1	1
noot r	1	1
norbury p	2	1.5
norton sp	1	0.5
noskov g	1	0.3333333333333333
notbohm d	3	2.3333333333333333
noussair es	1	0.5

novaga m	1	0.3333333333333333
novikov d	1	0.5
nowak k	1	0.3333333333333333
nucinkis bea	2	0.8333333333333333
nugari r	1	0.5
nuida k	1	0.3333333333333333
numata y	1	0.3333333333333333
nuno ballesteros jj	1	0.3333333333333333
nussbaum rd	2	1.5
o'brien ea	2	0.8333333333333333
o'farrell ag	1	0.3333333333333333
o'hara jg	2	2
o'neill jd	1	1
o'regan d	1	0.3333333333333333
o?connor a	1	0.5
odell e	2	0.5
odoni rwk	1	1
oeding l	1	0.3333333333333333
ogden cp	1	1
oger f	1	1
ogilvie r	1	0.5
oh s	1	0.5
ohman j	1	0.5
ohta h	1	0.3333333333333333
ohta si	1	1
oikhberg t	1	1
ojanguren m	1	0.25
okikiolu k	1	1
okrasinski w	1	0.5
okuma t	2	1.5
okuyama y	1	0.5
olberding b	2	2
olbermann m	1	0.3333333333333333
oleszkiewicz k	1	0.25
oliveira g	1	1
oliver jm	1	1
olsen l	2	1.5
olsson jb	3	1.0833333333333333
onn u	1	0.25
ono k	4	1.75
onshuus a	1	0.5
ontaneda p	1	1
opic b	3	1.1666666667
oppermann s	1	1
orihuebla j	1	0.25
ortega jm	1	0.3333333333333333

ortega p	1	0.2
ortega r	2	2
ortiz ij	1	0.5
osgood b	1	0.5
osthus d	1	0.333333333333
ostrovskii iv	1	0.5
oswal a	1	0.5
otal jp	1	0.5
otero m	2	0.833333333333
ottem jc	1	0.5
otto f	1	0.5
ou y	1	0.333333333333
ouhabaz em	2	1.333333333333
ouyang c	1	0.5
oya h	1	0.5
ozawa m	1	0.25
ozeki k	1	0.2
paaajanen p	1	0.25
pacetti a	1	0.25
pach j	1	0.333333333333
pacifci e	1	0.25
paget r	1	0.5
pajor a	1	0.333333333333
pal a	1	1
pallara d	1	0.25
palmer v	2	1.5
pan k	1	0.5
pan y	1	0.5
panaia o	1	1
pancholi dm	2	1
pang jch	1	0.5
pang mmh	1	1
pang pyh	1	0.333333333333
pankka p	1	0.5
pankrashkin k	1	0.5
panov d	1	0.5
panov t	1	0.333333333333
panyushev di	3	2.5
paolini g	1	0.5
paouris g	1	0.333333333333
pap g	1	0.5
papadima s	2	1
papadimitrakis m	1	0.5
papadopoulos a	1	0.5
papanikolas ma	1	0.333333333333
papasoglu p	1	1

papi p	1	0.3333333333333333
papini pl	1	0.3333333333333333
papistas ai	2	2
parameswaran aj	1	0.25
parapatits l	1	1
pardo jc	1	0.3333333333333333
parimala r	1	0.25
parini e	1	0.5
park c	1	0.5
park e	1	0.3333333333333333
park j	2	0.5
park s	1	0.25
parker c	4	1.8333333333333333
parker jr	1	0.3333333333333333
parlier h	1	0.5
parnovski l	1	1
parreau a	1	1
parreau f	1	0.5
parry w	2	1.5
parsell st	1	1
parshall bj	1	0.5
partington jr	1	0.3333333333333333
parusinski a	1	0.5
parviainen m	1	0.3333333333333333
pascoe je	1	0.3333333333333333
pasechnik dv	2	0.8333333333333333
pasquotto f	1	0.5
passeggi a	1	1
pata v	1	0.3333333333333333
pate th	2	2
patie p	1	0.3333333333333333
patyi i	1	0.5
pauksztello d	1	0.3333333333333333
paule p	1	0.5
paulin f	2	1.5
pauly c	1	0.5
paunescu l	2	1
pavlov r	1	0.5
pawliuk m	1	0.25
pearce g	2	0.4
pearse epj	1	0.5
pearson db	1	0.3333333333333333
pedersen h	1	0.25
pedit f	1	0.5
peetre j	2	0.8333333333333333
peeva i	1	0.3333333333333333

peherstorfer f	3	2
pei d	1	0.25
peixoto mm	1	0.5
pelczarbarwacz a	1	0.5
peloso mm	1	0.5
pena jl	1	0.333333333333
penegini m	1	0.5
peng l	2	1
penkov i	1	0.333333333333
penrose md	2	2
penttila t	2	1
peralta am	4	1.583333333333
pereira al	1	0.5
pereira mc	1	0.5
pereira mp	1	1
perelli a	2	1
perepechko a	1	0.333333333333
peres y	3	1
peresse y	1	0.25
perez c	2	1.5
perez gl	1	0.333333333333
perez m	1	0.333333333333
perez pdg	1	0.5
perez s	2	0.833333333333
perez vhj	1	0.5
perezgarcia d	1	0.333333333333
peris a	1	0.5
perkins w	1	0.25
perrin m	1	1
perrin n	1	0.333333333333
person y	1	0.333333333333
persson t	1	0.5
pertusi l	1	1
pestov v	1	0.333333333333
peter j	1	1
peters jr	1	0.5
peterson a	1	0.333333333333
peterzil y	1	0.5
petho a	1	0.25
petit f	1	0.333333333333
petite s	1	0.5
petkova v	1	1
petrov v	1	0.5
petrushev p	1	0.5
petrykowski m	1	0.5
petzeltova h	1	0.25

peyerimhoff n	1	
pham hl	2	1.25
pheidas t	2	1
philipp w	1	0.5
philippon p	1	1
phillips re	1	1
phuc nc	1	0.5
phuong ttvasconcelos wv	1	0.2
pianigiani g	2	1
piatnitski al	1	0.5
picantin m	1	0.5
piccione p	1	0.333333333333
pichon a	1	0.333333333333
pichot m	1	0.333333333333
pick l	4	1.366666667
pierce lb	2	1.5
pierce s	1	0.333333333333
piergallini r	1	0.5
pieropan m	1	0.5
pietruskopaluba k	1	0.5
pikhurko o	1	0.5
pilca m	1	0.5
pillay a	4	1.833333333333
pinheiro s	1	0.5
pinheiro v	1	0.333333333333
pinner c	4	1.583333333333
pinsky rg	1	1
pinto aa	2	0.833333333333
pintz j	1	0.5
pipher j	1	0.5
pisanski t	1	0.333333333333
piskarev s	1	0.333333333333
pistoia a	1	0.5
pitsch w	1	0.333333333333
pittet c	1	1
planasvilanova f	1	1
plantholt mj	1	0.5
plater a	1	1
plaumann d	1	0.5
plaza s	1	0.333333333333
plesken w	1	0.5
ploog d	1	0.333333333333
plum m	1	0.2
poggicorradini p	1	0.5
pol r	1	0.5
polizzi f	1	0.5

pollack p	1	0.5
pollack r	1	0.5
pollack rd	1	0.5
pollicott m	3	1.5
pollington a	1	0.5
polterovich i	1	0.5
poltoratski a	1	0.3333333333333333
polyak m	1	0.5
pomerance c	1	0.5
pommerenke c	3	1.3333333333333333
ponce g	2	0.45
ponce m	1	0.3333333333333333
ponnusamy s	1	1
pontecorvo m	1	0.5
poon ys	2	0.75
pop f	1	0.5
popescu d	1	0.3333333333333333
popescu g	1	1
popolitov a	1	0.25
poppenberg m	1	1
porter t	1	1
postinghel e	1	0.3333333333333333
potrie r	1	0.5
pott s	2	0.5833333333333333
pouso rl	2	1.5
pouzet m	1	0.5
powell gml	1	1
prado he	1	1
praeger ce	13	5.8166666667
pramanik m	1	0.5
pratoussevitch a	1	0.3333333333333333
prats m	1	1
pravdastarov k	1	1
precup r	1	0.5
preiss d	1	0.3333333333333333
premet a	1	1
presotto d	1	0.5
prest m	2	1.5
pride sj	2	1
prieto c	1	0.5
prieto ct	1	0.5
prihoda p	1	0.5
prodinger h	1	0.3333333333333333
prokhorov dv	1	1
pryby c	1	0.25
prytula t	1	1

przytycki p	1	0.5
ptak m	1	0.5
puchta jc	1	0.5
pucinskaite d	1	1
puder d	1	0.5
puglisi o	1	0.5
puhle c	1	1
puig l	1	0.5
pulmannova s	1	0.5
puninskaya v	2	0.666666667
puninski g	5	2.666666667
purcell js	2	0.666666667
purice r	1	0.5
pushkar pe	1	0.5
pustylnik e	1	1
putman a	1	0.5
putnam if	1	1
pym j	1	0.333333333
pym js	1	0.333333333
qian z	1	0.5
qinsheng l	1	1
qiu y	1	0.333333333
quaas a	1	0.5
quick m	2	2
quilodran r	1	1
rackham l	1	0.5
rademacher hb	1	1
radjavi h	1	0.333333333
radnell d	1	0.5
radosz m	1	0.2
radoux f	2	1
raeburn i	2	1
rafi k	1	0.5
ragusa ma	1	0.5
rahman qi	2	0.833333333
raicu c	1	0.5
rajala k	1	0.5
rajala tsmirnov ssuomala v	1	0.2
rallis s	1	0.5
ramachandran k	1	0.5
ramanan s	2	1
ramiharimanana nc	1	0.5
ramsden p	1	0.25
ramsey c	1	0.5
rand da	1	0.5
randrianantoanina n	2	1.333333333

ranganathan d	1	
ranieri g	1	1
ransford t	1	0.5
ransford tj	1	0.3333333333
rao h	1	0.3333333333
raptis g	1	0.5
rathbun m	1	0.25
ravichandran m	1	0.25
ray a	2	0.75
razafinjatovo h	1	0.5
read cj	1	1
reckwerdt e	1	1
redondo mj	1	1
rees m	1	0.5
rees s	2	0.75
reichel w	2	0.8333333333
reichstein z	1	0.25
reid aw	1	0.5
reiher c	1	0.3333333333
reiner v	2	0.8333333333
reis h	1	0.5
reiten i	1	0.3333333333
remling c	2	2
render h	1	0.5
reni m	1	1
rennemo jv	1	0.5
renshaw e	1	0.5
revesz sgy	1	0.5
reznikoff s	1	0.5
reznikoff sa	1	1
rhemtulla ah	1	0.3333333333
rhodes r	1	0.25
ribes l	1	0.3333333333
riche s	1	0.5
richomme g	1	0.3333333333
richter s	2	0.75
rickard j	1	1
ricker wj	1	0.5
rieffel eg	1	1
riera g	1	1
rigal l	1	0.3333333333
rigby jf	1	0.5
rinne d	2	0.6666666667
rioscollantesdeteran r	1	0.3333333333
rippon pj	4	2.5
rittatore a	1	0.3333333333

rivas c	1	0.3333333333333333
rivot j	2	0.8333333333333333
rivera a	1	1
riveraletelier j	1	1
rivlin tj	1	0.3333333333333333
robbiani m	1	1
roberts b	1	0.25
roberts go	1	0.5
robertson d	1	0.5
robertson sa	1	0.5
robin graham c	2	1.25
robinson djs	3	1.5
robinson dw	1	0.3333333333333333
robinson gr	1	1
robinson jr ea	1	0.5
robinson pl	3	3
robinson pm	1	0.3333333333333333
robinson z	2	0.8333333333333333
robles c	1	0.5
rocca e	1	0.3333333333333333
rochberg r	1	0.25
roche a	1	0.5
rochenewton o	2	1.25
rockner m	2	0.8333333333333333
rod l v	1	0.3333333333333333
rodriguez jl	1	0.5
rodriguez jm	1	0.5
rodriguez palacios a	1	0.3333333333333333
rodriguez rs	1	0.3333333333333333
rodriguezlopez s	1	1
rodriguezpalacios a	2	0.666666667
rodriguezpiazza l	2	0.8333333333333333
rogers a	1	0.5
rogers lcg	1	1
rognes j	1	0.5
rolfson d	1	0.5
rollenske s	1	1
romaguera s	1	0.5
romera e	1	1
romero jl	1	0.2
ron a	1	0.5
ronan m	1	1
rong y	1	1
roos je	1	1
rordam m	1	0.5
rosa k	1	0.25

rosales jc	1	0.25
roseblade je	1	0.3333333333
rosen j	1	1
rosenberg j	1	0.5
rosendal c	1	0.3333333333
rosenhouse j	1	0.3333333333
ross w	1	0.2
rossi j	1	0.3333333333
rossi jd	2	0.666666667
rossman w	2	0.5
rosso d	1	0.3333333333
rostami s	1	1
roth o	1	0.5
rothmaler p	1	0.5
rouault a	1	0.5
roulleau x	1	0.5
rourke c	1	0.5
rouse j	1	1
rousseau e	1	0.5
rover ce	2	0.75
rowen lh	1	0.25
rowley p	4	1.8333333333
roy d	1	0.5
ruane k	1	0.5
ruberman d	2	0.75
ruckert j	2	1
rudyak yb	1	0.5
ruiperez dh	1	0.5
ruiz a	1	1
ruiz del portal fr	2	0.8333333333
ruiz fj	1	0.3333333333
ruiz lms	1	0.5
rulling k	1	0.5
runde v	4	3.5
runst t	1	0.5
rush ja	1	1
ruskuc n	2	0.8333333333
russo b	2	0.75
rustom n	1	0.3333333333
ruttimann gt	1	0.5
ruzhansky m	1	0.3333333333
ruzsa iz	3	1.0833333333
ryba aje	1	0.3333333333
rychkov vs	1	1
rydh d	1	0.5
rydhe e	2	2

ryinne bp	1	0.3333333333333333
saari k	1	0.3333333333333333
sabadini i	1	0.5
sabok m	1	0.25
sabourau s	1	1
sadofsky h	1	0.5
sadun l	1	0.5
sadykov r	1	0.3333333333333333
saeki o	2	0.8333333333333333
saez atiep ph	1	0.2
saff eb	2	0.6666666667
safronov o	1	0.3333333333333333
sagan be	1	0.5
saha a	1	0.5
sahebdjahromi n	1	0.3333333333333333
sahin aa	1	0.5
sahin eser z	1	0.5
sahlsten t	2	0.6666666667
saia mj	1	0.3333333333333333
saito k	1	1
saito m	2	0.75
saito t	1	1
saito y	1	0.5
sakaguchi s	1	1
saker sh	1	0.3333333333333333
sakuma k	2	0.8333333333333333
salamon s	1	0.25
salani p	1	0.3333333333333333
salazar jm	2	0.8333333333333333
salberger p	1	0.5
salce l	1	0.5
salgado c	1	0.3333333333333333
salinier a	1	0.5
salmi p	1	0.5
salomon g	1	0.5
salort am	1	0.3333333333333333
saltman dj	1	0.25
salvy b	1	0.5
samart d	1	0.3333333333333333
samei e	1	1
samokhin a	1	1
samatij w	2	1
sanchez fc	2	0.6666666667
sanchez ruiz lm	1	0.5
sanchez vm	1	0.25
sanchezgarcia rj	1	1

sanchis m	1	0.5
sander f	1	1
sander jw	1	1
sanderson b	1	0.5
sands jw	1	0.5
santambrogio f	1	0.5
santhaloubane r	1	1
santos pa	1	0.3333333333
santos sd	1	0.5
sanus l	1	0.25
sapir m	1	0.5
saracco a	2	1
saradha n	1	0.5
sarkozy a	1	0.3333333333
sarmiento s	1	0.5
sarrion mdde la torre a	1	0.2
satherwagstaff s	3	1.8333333333
sato s	2	2
satoh t	1	1
satriano m	2	0.8333333333
sauer r	1	0.5
saunders n	1	0.3333333333
savov m	1	0.3333333333
sawabe m	1	1
sawon j	1	0.5
sawyer e	1	0.25
saxl j	1	0.5
saxon sa	3	1.5
saxton d	1	0.2
sbordone c	1	0.25
scardua b	1	0.5
schacher m	1	0.5
schacht m	1	0.3333333333
schafer j	1	0.5
schaffer s	1	1
schaller ps	1	0.5
schapira b	1	1
schechter a	1	1
schechter m	1	1
scheel a	1	0.5
scheicher k	1	0.3333333333
scheiderer c	1	0.5
schein mm	1	0.5
schelp rh	1	0.3333333333
schenck h	1	0.3333333333
scherbak i	1	1

scherer j	1	0.5
scheuer t	1	1
scheutzow m	1	0.5
scheven c	1	0.3333333333
schick t	1	0.3333333333
schindler d	1	0.5
schippers e	1	0.5
schleicher d	4	2
schlichting m	1	0.5
schlumprecht t	1	0.5
schlumprecht th	1	0.25
schmerl jh	1	0.5
schmid p	1	1
schmidt r	1	0.5
schmidt ta	1	0.5
schmitt k	1	0.5
schmitt n	2	0.5
schnaubelt r	1	0.5
schneider r	1	1
schoen c	1	1
schoen t	1	0.5
schofield a	2	1.3333333333
schoissengeier j	1	0.5
schonbek me	1	0.5
schonbek tp	1	0.5
schroer j	1	0.3333333333
schroer s	1	1
schruter m	1	0.5
schultz a	1	0.25
schupp pe	1	0.5
schuricht f	1	0.5
schutt m	1	0.3333333333
schwanzl r	1	0.3333333333
schwarz gw	1	1
schwede k	1	0.3333333333
schweig j	1	0.3333333333
schweizer a	1	0.5
scott ja	1	1
scott ll	1	0.5
seade j	2	0.5833333333
seceleanu a	1	0.3333333333
seco d	1	0.2
sedykh vd	1	1
seeger a	1	0.5
sega lm	1	0.3333333333
segal d	3	1.8333333333

segal j	1	
segura de leon s	2	0.8333333333333333
sehgal sk	1	0.3333333333333333
seidel m	1	0.3333333333333333
seidler j	1	0.5
seip k	2	1.5
seitz gm	3	2
semenov em	1	0.25
semenov n	1	0.5
semenov y	1	0.5
semrl p	1	1
sengun mh	1	0.25
sereni js	1	0.3333333333333333
seress a	1	1
serganova v	1	0.3333333333333333
servatius h	1	0.5
shackell j	2	1.5
shadrin s	2	0.5833333333333333
shah na	1	0.3333333333333333
shalev a	3	2.5
shalit om	1	1
shamash j	1	0.5
shami z	1	1
shankar an	1	0.5
shao s	1	0.5
shapira a	1	1
shapira u	2	0.8333333333333333
shapiro b	1	1
shapiro hs	1	0.3333333333333333
sharif t	1	0.3333333333333333
sharland t	1	1
sharp r	1	0.5
shaw sy	1	0.3333333333333333
shea d	1	0.5
sheiham d	1	1
shekhtman b	1	0.3333333333333333
shelah s	8	3.833333333333333
shelton b	2	1
shen cy	1	0.25
shen j	1	1
shen z	2	0.8333333333333333
sheppard b	1	1
shestakov i	1	0.3333333333333333
shi jy	1	1
shi p	1	0.5
shiga h	1	1

shimakura h	1	1
shimokawa k	1	0.25
shimomura k	1	0.3333333333
shin du	1	1
shin j	1	0.2
shirvani m	1	0.5
shiu dkl	1	1
shkarin s	2	2
shkredov id	1	0.25
shlapentokh a	1	0.3333333333
shmelkin da	1	1
shmerkin p	3	1.166666667
shoda t	1	1
shore ra	1	0.3333333333
short h	1	0.25
shparlinski i	1	0.3333333333
shparlinski ie	1	0.5
shulman ev	1	1
shulman v	1	0.5
shulman vs	1	0.3333333333
shumyatsky p	1	0.5
shuster l	2	1
shusterman m	1	1
shustin e	1	0.5
sickel w	2	1
sidki s	1	1
sidman j	1	0.3333333333
siedentop h	1	0.5
siegmund s	1	1
sierra sj	1	0.3333333333
siksek s	1	0.5
silhol r	2	1.5
silva c	1	0.3333333333
silva ce	2	1
silver ds	1	0.5
silver sa	1	0.5
simmons d	1	0.25
simon k	1	0.3333333333
simon p	2	0.666666667
simon sb	1	0.5
simons ld	1	0.5
simpson sg	1	1
simson d	1	1
sin p	1	0.5
sinclair a	1	0.5
singman d	2	0.666666667

sinnamon g	1	0.5
siran j	1	0.25
sirvent vf	1	0.333333333333
sivek s	1	0.333333333333
sixsmith dj	1	1
sjogren p	1	0.2
skalski a	1	0.5
skalski ag	1	0.333333333333
skjelnes r	1	0.5
skjelnes rm	1	1
skokan j	1	0.2
skoldberg e	1	1
skorobogatov a	1	0.5
skorobogatov an	1	0.333333333333
skoruppa np	1	0.5
skoviera m	1	0.25
skowronski a	2	1.333333333333
skripchenko a	1	0.5
skryabin s	1	1
skrypnik ii	1	0.333333333333
skrzypczak l	3	3
slaman ta	2	0.833333333333
slomka ba	1	0.333333333333
smart np	1	1
smillie p	1	0.333333333333
smirnov s	1	0.5
smith dj	1	0.333333333333
smith e	1	0.5
smith g	1	1
smith gc	1	0.5
smith i	1	1
smith km	1	0.5
smith ml	1	1
smith mp	1	1
smith rc	1	0.333333333333
smith rj	1	1
smith rr	2	1
smith sm	1	1
smith st	1	0.5
smith w	1	0.333333333333
smyth cj	1	0.5
smyth mb	1	1
snaith v	1	1
sobel z	2	0.583333333333
sobukawa t	1	0.5
sodaigui b	1	0.5

soderberg j	1	0.5
sodergren a	1	1
sohn j	1	0.5
sola aa	1	0.2
solanes g	1	0.5
solanki v	1	1
solberg o	1	0.5
solel b	1	1
solomon n	1	0.3333333333
solomon r	1	0.3333333333
solomyak b	1	0.3333333333
solovej m	1	1
somerset dwb	3	1.8333333333
song r	1	0.3333333333
songying l	1	0.5
sordoni v	1	1
soria f	3	1.3333333333
soria j	3	1.0833333333
sosna p	1	0.5
sottile f	1	0.3333333333
soundararajan k	2	1.5
sourour ar	2	1
souto j	1	0.5
soverchia e	1	1
spanoudakis nk	1	0.3333333333
sparling gaj	1	0.25
spearman bk	1	0.5
spielberg j	1	1
spiga p	1	0.25
spitkovsky im	1	0.25
spitz l	1	0.3333333333
spotti c	1	1
sprekels j	1	0.3333333333
spronk n	1	0.5
sproston jp	1	0.5
squassina m	1	1
sridharan r	1	0.25
stade e	1	0.5
stadlbauer m	1	0.25
stadtsteller u	3	1.3333333333
stafford jt	1	1
stallard gm	6	4.3333333333
stan d	1	0.5
stancu r	2	0.75
staniszkis jm	1	1
stanley d	1	0.3333333333

stanoyevitch a	2	0.8333333333333333
stanton d	1	0.3333333333333333
stark d	1	0.5
stark e	1	0.5
stark j	1	0.5
stavroulakis ip	1	0.5
steer b	1	0.5
stefanov a	2	1
stegenga da	1	0.3333333333333333
steimle w	1	0.5
steinbach a	1	0.5
steinberg b	1	0.5
steiner r	1	0.5
steinhorn c	1	0.5
steinmetz n	1	1
stempak k	1	1
stender t	1	0.5
stepanov e	2	0.8333333333333333
stepanov v	2	1.5
stepanov vd	2	1.5
stephan f	1	0.3333333333333333
steprans j	1	0.3333333333333333
stepras j	1	0.5
stevens g	1	0.5
stevenson d	1	0.5
stewart cl	1	0.3333333333333333
stewart i	1	0.5
stienon m	1	0.5
stochel j	2	0.8333333333333333
stockmeyer e	1	0.5
stohr ko	1	0.5
stohr r	1	0.5
stoimenow a	1	1
stokke a	1	0.5
stoll m	2	1.5
storme l	1	0.3333333333333333
stovall b	1	1
straszak m	1	0.5
strauss d	2	0.8333333333333333
strickland np	1	1
striuli j	1	0.3333333333333333
strohmaier a	1	0.5
stroppel c	1	1
strumia mm	1	0.5
strungmann l	1	0.5
stuart ca	2	1.5

su<u+00df> h	1	0.3333333333333333
suci ai	4	2
sudakov b	2	0.5833333333333333
suh dy	1	0.3333333333333333
suk a	1	0.5
sukochev f	1	0.3333333333333333
sumi h	1	1
sun w	1	0.3333333333333333
sun y	1	0.5
sundari m	1	0.25
sung cj	1	0.3333333333333333
suomala v	2	0.8333333333333333
surer p	1	0.3333333333333333
suresh v	1	0.25
suzuki n	1	0.3333333333333333
svanstedt n	1	0.2
svensson m	2	1.5
swallow j	1	0.25
swanepoel k	1	0.5
swann af	1	0.3333333333333333
swanson i	1	1
swierczewskagwiazda a	1	0.25
swinnertonyer p	1	1
swinnertonyer sp	1	1
switkowski j	1	1
symonds p	1	0.5
symons f	1	0.3333333333333333
szabo c	1	0.5
szabo e	1	0.5
szabo s	1	1
szabo t	1	0.3333333333333333
szafraniec fh	1	0.3333333333333333
szarek t	1	0.5
szechtmann f	1	0.3333333333333333
szendroi b	1	1
szolo'lsi f	1	1
szonyi t	1	0.3333333333333333
szymanski w	1	0.5
tabacco a	1	0.3333333333333333
taback j	1	0.5
tachikawa a	1	0.5
taggart j	1	0.5
taheri a	1	1
takac p	2	0.75
takahashi m	1	0.25
takahashi r	1	1

takao k	1	0.25
talbot j	1	1
talelli o	2	1
tam lf	1	0.333333333333
tam ty	1	1
tamburini mc	2	0.666666667
tamura h	1	0.5
tamvakis h	3	2.33333333333
tan nd	1	0.5
tan sp	1	0.333333333333
tan v	1	0.333333333333
tanaka n	1	1
tang xh	2	1.5
tang y	1	0.25
tange r	1	1
tanimoto s	2	0.75
tanis j	1	0.5
tanre d	1	0.5
tarbard m	1	1
tari f	1	1
tarieladze v	1	0.333333333333
taylor kf	1	0.5
taylor mj	2	1.25
taylor sj	1	0.333333333333
teh jh	1	1
teicher h	1	0.5
teixeira ev	1	0.5
tenenbaum g	2	1
tent k	3	1.83333333333
teo km	1	1
teplitskaya y	1	0.5
teplyaev a	1	0.333333333333
ter elst afm	1	0.333333333333
terao h	1	0.333333333333
terenzi p	1	1
terglane n	1	0.5
terjeki j	1	0.5
teschl g	1	0.25
testa d	1	0.333333333333
teymurazyan r	1	0.5
tharp bc	1	0.5
thas ja	2	1
thaule m	1	0.333333333333
thevenaz j	1	0.5
thiem n	1	0.5
thiery a	1	1

thieullen p	1	0.5
thom a	1	0.5
thomas cb	1	0.5
thomas farrell f	1	0.5
thomas mp	1	1
thomas rm	1	0.25
thomas s	2	1
thomas t	1	1
thompson d	1	1
thompson dj	1	0.5
thomsen k	1	0.5
thomson bs	1	0.3333333333333333
thorpe b	2	1
thunder jl	1	0.5
tibar m	1	0.5
tichy rf	1	0.25
tickner s	1	1
tidblom j	1	0.25
tiep ph	1	0.25
tijdeman r	1	0.5
tillmann u	1	1
timm m	1	0.5
timoney rm	2	0.8333333333333333
tipler c	1	0.5
tipnis sk	1	0.5
to wk	3	2
tod kp	1	1
tod p	1	0.3333333333333333
todd m	1	0.5
todorov ig	1	1
todorovic vasiljevic s	1	0.25
toffalori c	2	0.6666666666666667
toh pc	1	0.3333333333333333
tokarev ag	1	0.5
toland jf	1	1
tolsa x	1	1
tolstykh v	3	3
tolstykh va	1	1
tomassini a	1	0.5
tomilov y	2	0.75
tomkinson mj	1	1
tomova m	1	1
tongviet hp	1	0.25
torrea jl	1	0.2
torrecillas jg	1	0.5
torregrosa j	1	0.3333333333333333

torres bo	1	0.5
torres dm	1	1
torres rh	3	1.8333333333333333
toth cd	1	0.3333333333333333
totik v	1	0.5
toubiana e	1	0.5
touze sfl	1	1
trace b	1	0.5
tradacete p	1	0.25
tran t	1	0.3333333333333333
trang ld	1	0.3333333333333333
traustason g	1	1
treil s	2	0.5833333333333333
trepode s	1	0.3333333333333333
tretter c	1	0.3333333333333333
trevisan d	1	0.3333333333333333
triebel h	2	0.8333333333333333
trifonov o	1	1
trivedi s	1	0.5
trlifaj j	1	0.5
trofimchuk s	1	0.5
trotman d	1	0.3333333333333333
trotman dja	1	0.3333333333333333
trotter pg	1	0.5
troubetzkoy s	1	0.5
troyanski s	1	0.25
trujillogonzalez r	1	0.5
trung nv	2	1.3333333333333333
trunk c	1	0.25
tseng j	1	0.3333333333333333
tsolomitis a	1	0.3333333333333333
tsujikawa t	1	0.2
tsutaya m	1	1
tuan nd	1	1
tucker k	1	0.3333333333333333
tumarkin p	1	0.5
turovskii yv	1	0.3333333333333333
turowska l	2	1
turull a	1	1
twomey jb	2	1.5
tyomkyn m	1	1
ueda y	1	1
ugarte l	1	0.25
ulanovskii a	1	1
ulanovskii am	2	1.5
ulger a	1	0.3333333333333333

ulirsch m	1	
urbano jm	1	0.3333333333
urbanski m	1	0.5
us o	1	0.25
vajaitu m	1	0.3333333333
valdinoci e	1	0.3333333333
valette a	1	0.5
valette g	1	0.3333333333
vallarino m	1	0.3333333333
valles j	1	0.3333333333
valls c	1	0.3333333333
vamos p	1	1
van casteren ja	1	1
van den berg m	4	2.3333333333
van den dries l	2	0.666666667
van den heuvel j	1	0.5
van hamel j	1	1
van koert o	1	0.3333333333
van maldeghem h	1	0.5
van neerven j	1	0.3333333333
van neerven jmam	1	1
van straten d	1	0.5
van tuyl a	1	1
van wamelen pb	1	1
vancliff m	4	2.5
vandembroucq l	1	0.5
vanderkam jm	1	1
vanhaecke p	1	0.5
vargas am	1	1
vargas v	1	0.25
varillyalvarado a	1	0.3333333333
varma s	1	0.3333333333
vasilescu fh	1	0.5
vasilevski n	1	0.3333333333
vassiliev d	1	0.3333333333
vega l	3	0.95
velani s	2	0.75
velani sl	1	0.5
velasco mv	1	0.3333333333
veldman w	1	0.5
veliche o	1	0.3333333333
venjakob o	1	1
vera j	1	0.3333333333
verbitsky ie	1	0.3333333333
verbitsky m	2	1.3333333333
vercruyse j	1	0.3333333333

verret g	1	0.25
verrill ha	1	0.3333333333
vershinin vv	1	1
veselov ap	1	0.5
veys w	2	0.5833333333
vickers jag	1	0.3333333333
vidaux x	2	1
vieli ffg	1	1
vigon v	1	1
vilafreyer r	1	0.5
villadelprat j	1	0.5
villamizar n	1	0.3333333333
villanueva i	1	0.3333333333
villena ar	4	3
vince a	1	0.3333333333
vinogradov i	1	0.5
viola j	1	1
viselter a	1	0.5
vishik a	1	0.5
visse e	1	0.25
vlachou v	1	1
vogelgesang j	1	0.3333333333
vogt d	1	0.3333333333
vogt rm	1	0.3333333333
vogtmann k	2	0.8333333333
voigt d	1	0.5
volberg a	3	1.25
volcic j	1	0.3333333333
volec j	1	0.3333333333
voll c	1	0.5
vorobjov n	3	1.3333333333
voskanyan vk	1	0.5
vrancken l	1	0.3333333333
vre <u>+u+1017></u> ica st	1	0.25
vrsovsky j	1	0.5
vu vh	1	0.3333333333
vugalter s	1	1
vukotic d	1	1
vulpe n	1	0.5
vuorinen m	1	0.5
wachtel v	1	0.3333333333
wade a	1	0.5
wade rd	1	1
wahl n	1	1
wahlberg p	1	0.3333333333
wakefield m	1	0.3333333333

waldhausen f	1	0.3333333333333333
walkden cp	1	1
walker wj	1	0.3333333333333333
wall ctc	2	2
wallace e	1	1
wallis b	1	0.3333333333333333
walters m	1	1
walters p	2	2
walters s	1	1
walters sg	1	1
walther u	1	0.5
wandel m	1	0.5
wang b	1	0.3333333333333333
wang fy	1	0.5
wang j	2	0.8333333333333333
wang k	1	0.3333333333333333
wang l	1	0.3333333333333333
wang m	2	0.8333333333333333
wang mx	1	1
wang q	1	0.5
wang s	2	1.5
wang y	4	1.8333333333333333
wang z	3	1.8333333333333333
wang zq	1	0.3333333333333333
ward jr jr	1	0.5
ward la	1	0.5
ward ma	1	0.5
ward t	1	0.5
wark hm	2	2
warnke l	1	0.5
watanabe t	1	1
waterman d	1	1
waters rj	1	1
watson ba	1	0.3333333333333333
watt n	1	1
webb jrl	4	2.5
weber c	1	0.3333333333333333
weber m	1	0.5
webster b	1	0.25
weese m	1	0.5
weetman gm	2	2
wehrfritz baf	5	5
wei ft	1	1
wei g	1	0.3333333333333333
wei j	3	1.5
wei l	1	0.5

weidl t	2	1.5
weigel t	1	1
weikard r	1	0.3333333333333333
weiss r	1	1
welschinger jy	1	0.5
wen z	1	0.5
wendl c	1	1
wenzel j	1	1
wermer j	1	0.2
werner em	1	0.3333333333333333
werner i	1	1
werner w	1	0.5
westbury bw	1	1
westenberger e	1	0.5
westreich s	1	0.5
weth t	1	0.5
weyman j	3	1.3333333333333333
wheeler ww	2	1.5
white d	1	0.3333333333333333
white dj	1	0.5
white k	1	1
white mc	1	1
white n	1	1
white s	2	0.75
wick bd	1	0.25
wieland b	1	0.5
wiemeler m	1	1
wienhard a	1	0.2
wiese g	1	0.3333333333333333
wilcox s	1	0.5
wildberger nj	1	1
wildon m	3	1.3333333333333333
wiles a	1	1
wilker jb	1	0.3333333333333333
wilkie aj	1	1
wilkins tjd	1	1
willett r	1	0.5
williams j	1	0.5
williams ks	1	0.5
williams sg	1	0.5
wills sj	1	0.5
willwacher t	1	0.5
wilson js	10	7.6666666667
wilson ra	6	2.75
wilson s	1	0.25
wilson smj	1	0.5

wilton h	3	1.3333333333333333
winkler m	2	0.8333333333333333
winskel g	1	0.25
winter m	1	0.5
winter s	2	1.5
winter w	1	1
wisdom jm	1	1
wise dt	3	1.5833333333333333
wladis c	1	1
wojciechowski j	4	4
wojciechowski rk	1	0.3333333333333333
wolfart j	1	0.5
won j	1	0.25
wong mw	2	1
wong p	1	0.5
wood dr	1	0.5
wood i	2	0.45
wood jc	2	1
wood mm	2	1.3333333333333333
wood pm	1	0.3333333333333333
woodall dr	1	0.3333333333333333
woodcock cf	1	1
woodcock d	1	1
woodhouse dj	1	0.5
woodin wh	1	1
woodward l	1	1
woodward lm	1	0.3333333333333333
wooley td	5	3.5
woolf j	3	2
woracek h	1	0.5
worch j	1	1
wright j	1	0.5
wright jdm	1	0.5
wright nj	1	0.3333333333333333
wu c	1	0.5
wu j	3	1.8333333333333333
wu jm	2	1.5
wu l	2	0.5833333333333333
wu s	3	1.3333333333333333
wu y	1	0.3333333333333333
wu z	1	1
wuthrich c	1	1
xantcha qr	1	1
xi c	3	2
xi cc	1	0.5
xi g	1	0.5

xi lf	1	
xiang cl	1	0.5
xiang q	1	0.5
xiao j	1	1
xiao tj	1	0.5
xiaoyou h	1	0.5
xie x	1	1
xu hk	1	1
xu q	3	1.8333333333333333
xu z	1	0.3333333333333333
yadav mk	1	1
yafaev dr	1	1
yagi a	1	0.2
yagita n	2	1.5
yakovenko s	1	0.5
yakubovich d	1	0.3333333333333333
yamada hf	2	0.8333333333333333
yamazaki t	1	0.5
yan s	2	1
yang cc	1	0.5
yang cw	1	0.5
yang d	2	0.8333333333333333
yang h	1	0.3333333333333333
yang han	1	1
yang sy	1	0.5
yang t	1	0.5
yang y	3	1.5
yao c	1	0.3333333333333333
yao y	1	1
yap hp	1	0.3333333333333333
yaskin v	1	0.3333333333333333
yaskina m	1	0.3333333333333333
yattselev m	1	0.3333333333333333
ye d	1	1
ye s	1	1
yeganefar n	1	0.3333333333333333
yekutieli a	2	1.5
yeung sk	1	0.5
yildirim yolcu s	1	0.5
yilma zb	1	0.5
yin z	1	0.5
yokogawa k	1	0.5
yoneda k	1	1
yor m	1	0.3333333333333333
you s	1	1
young nj	1	1

young r	1	0.2
youssfi a	2	1
yu j	2	0.8333333333
yu jd	1	0.5
yu js	1	0.5
yu s	2	0.7
yu x	1	0.5
yuan h	1	0.5
yuan p	1	0.5
yuchuan w	1	0.5
yuxia g	1	0.5
yuzvinsky s	2	0.75
zacharias j	1	0.5
zagier d	1	0.5
zagrebnov va	1	0.5
zaharescu a	3	1.166666667
zahid j	1	1
zahle m	1	1
zaicev m	2	0.8333333333
zajicek l	1	0.5
zalesski ae	1	1
zalesskii ae	6	3.333333333
zalesskii p	1	0.5
zalesskii pa	3	0.916666667
zamboni lq	1	0.3333333333
zanin d	2	0.5833333333
zare h	1	1
zarhin yg	1	0.3333333333
zatorskagoldstein a	1	0.5
zelditch s	1	0.3333333333
zelenko i	1	0.5
zelevinsky a	1	0.3333333333
zelewski pm	1	1
zell t	1	0.3333333333
zelmanov e	1	0.3333333333
zelo d	1	0.5
zemanek j	1	0.5
zeng q	1	0.5
zerbes sl	1	1
zhang ch	1	0.5
zhang dq	1	0.3333333333
zhang g	3	2
zhang j	3	1.166666667
zhang jj	1	0.5
zhang l	3	3
zhang m	2	2

zhang s	3	1.3333333333333333
zhang x	1	0.3333333333333333
zhang y	1	1
zhao c	1	0.5
zhao j	2	0.8333333333333333
zhao k	2	1.3333333333333333
zhao l	1	0.5
zhao r	1	0.5
zhao y	3	2.5
zheltukhina na	1	0.5
zheng f	1	1
zheng jh	2	1.5
zheng kx	1	0.3333333333333333
zhitomirskii m	1	0.5
zhong y	1	0.5
zhou d	1	0.25
zhou g	1	0.3333333333333333
zhou hs	2	1
zhou s	1	0.3333333333333333
zhou y	3	1.5
zhu b	2	1
zhu k	4	2.8333333333333333
zhu qj	1	0.5
zhu s	1	0.3333333333333333
zhuang g	1	1
ziegler m	1	0.5
tiesler s	1	1
zilber b	3	2.5
zimmer j	1	0.5
zimmermann b	1	1
zimmermann g	1	0.5
zimmermann s	1	1
zinchenko m	1	0.5
ziv r	1	0.5
zivaljevi<u+1017> rt	1	0.25
zizler v	2	0.5833333333333333
zong c	1	1
zou w	2	0.6666666666666667
zou x	2	0.6666666666666667
zsak a	1	0.25
zucchi a	1	0.3333333333333333
zucconi f	1	0.5
zuddas d	1	0.5
zudilin w	2	1.3333333333333333
zuk a	1	0.3333333333333333
zunigagalindo wa	1	0.3333333333333333

zupan a	1	
zvonkine d	1	0.3333333333333333
zwara g	1	1
zymonopoulou m	1	0.3333333333333333

Table 16-4.2.1 Authors' productivity in complete and adjusted count

Continuing in authors' productivity, in the next graph (Figure 4.2.1) we can observe the 10 most productive authors using the method of complete count in author's credit. Praeger holds the first place with 13 publications and Wilson follows with 10 publications in the second place.

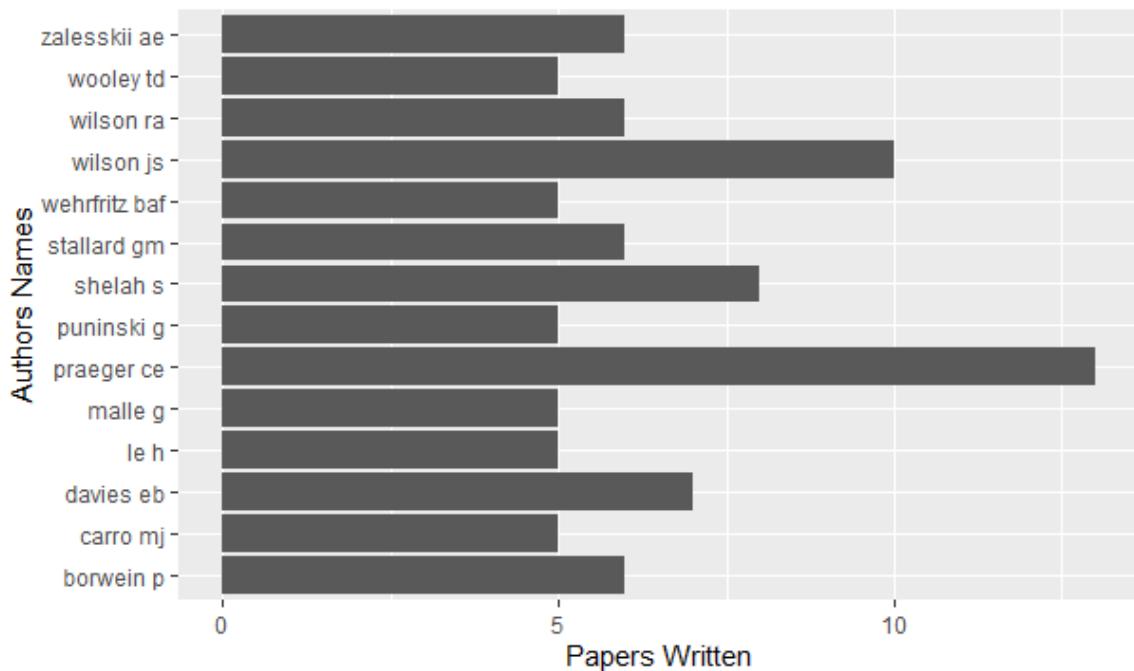


Figure 8 4.2.1 The 10 most productive authors by complete count

In the other hand, the next graph(Figure 4.2.2) illustrates the top 10 most productive authors in fractional count this time. First we met Wilson and his contribution measures 7.666667 in fractional count and second is Davies with 6.00000.

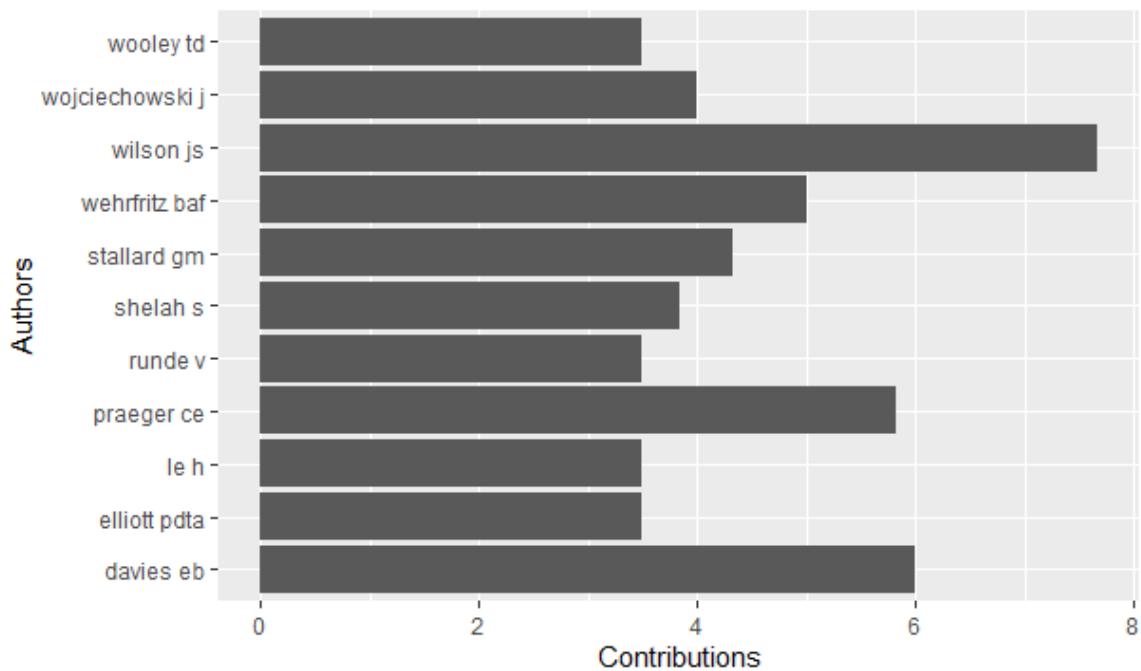


Figure 9 4.2.2 The 10 most productive authors by adjusted count

5.JOURNAL'S PRODUCTIVITY

In this part we are going to analyze the results by the year of publicity and we will observe the results about the most productive years. We are going to search for articles which had published in the journal of London Mathematical Society between the years 1990-2019. In these 30 years of publications we had 60 volumes, that means we had 2 volumes in each year and every volume has 3 issues (issue 1, issue 2 and issue 3), so in total in 30 years we had 60 volumes and 180 issues. Actually in our research the most important part for journal productivity is the productivity of each volume, and then of each year. Then we are going to observe the number of pages of each volume cause we are interested in for the length of each article.

Volumes	Years	Number of papers
41	1990	20
42	1990	16
43	1991	8
44	1991	25
45	1992	16
46	1992	22
47	1993	14
48	1993	18
49	1994	44
50	1994	44
51	1995	50
52	1995	47
53	1996	47

54	1996	41
55	1997	50
56	1997	48
57	1998	53
58	1998	54
59	1999	73
60	1999	66
61	2000	68
62	2000	73
63	2001	50
64	2001	52
65	2002	50
66	2002	50
67	2003	53
68	2003	52
69	2004	52
70	2004	47
71	2005	48
72	2005	46
73	2006	48
74	2006	48
75	2007	53
76	2007	51
77	2008	48
78	2008	47
79	2009	45
80	2009	45
81	2010	41
82	2010	43
83	2011	42
84	2011	42
85	2012	42
86	2012	43
87	2013	50
88	2013	47
89	2014	47
90	2014	34
91	2015	37
92	2015	31
93	2016	28
94	2016	48
95	2017	35
96	2017	33
97	2018	24
98	2018	36
99	2019	42
100	2019	47

92	2014	23
93	2015	13
NA	2019	6
Total		2600

Table 17-5.1 Number of papers per year-volume

In this table (Table 5.1) we can notice all the volumes that exist in the years 1990-2019 and the number of articles that published in each volume.

In the next table(Table 5.2) we are interested in noticing the number of papers that published in a group of 10 volumes at a time which means we are interested in papers per 5 years, and also we want a percentage of these records to help us understand better the productivity of each group of volumes-years.

Volumes	Years	Numbers of papers	Percentage (%)
41-50	1990-1994	288	11.08
51-60	1995-1999	573	22.04
61-70	2000-2004	500	19.23
71-80	2005-2009	469	18.04
81-90	2010-2014	435	16.73
91-100	2015-2019	299	11.50
Few excluded volumes 92 and 93 in 2014-	2014	36	1.38
Total		2600	100

Table 18-5.2 Number of papers per 5 years and their percentage

As we spoke before we are interested not only about the number of papers. We want also to research and the length of each paper per volume and year. The way to do that is to represent the number of pages per volume and per years as you can see in the next table(Table 5.3).

Volume	Number of pages
41	242
42	200
43	100
44	331
45	208
46	290
47	188
48	253
49	624
50	624
51	624
52	624
53	624
54	611
55	621
56	672
57	768
58	768
59	1152
60	960
61	960
62	960
63	768
64	768
65	768
66	768
67	816
68	816
69	816
70	816
71	816
72	816
73	816
74	816
75	812
76	812
77	811
78	812
79	802
80	813
81	790
82	830
83	808
84	806
85	908

86	955
87	961
88	956
89	956
90	696
91	803
92	797
93	864
94	1017
95	780
96	716
97	599
98	752
99	968
100	1079
Total	43907

Table 19-5.3 Number of pages per Volume

In the next table(Table 5.4) we have the number of pages per 5 years from 1990-2019. So we have 6 groups between the years 1990-1994, 1995-1999, 2000-2004, 2005-2009, 2010-2014 and 2015-2019. This groups represent in the next table but according to the number of volumes of each year(each year has 2 volumes).

Volume	Number of pages	Percentage (%)
41-50	3060	6.97
51-60	7424	16.91
61-70	8256	18.80
71-80	8122	18.51
81-90	8666	19.74
91-100	8375	19.07
Total	43907	100

Table 20-5.4 Number of pages per group of 10 volumes

As we can see as we moving forward to the next years we manage to see that the percentage of number of pages getting bigger. That means the length of the article as the year passes increases and this tells us that the productivity increases. From 2010 to 2015 we have the largest workload of papers and the biggest percentage proved that (19.74%).

Years	Volume s	Min(Q0)	Quartile 1	Media n	Quartile 3	Max(Q4)	Average(mean)
1990 - 1994	41-50	6	10.0625	12	16.25	29	13.23696
1995 - 1999	51-60	2	10.25	13	17	31	13.93947
2000 - 2004	61-70	1	12.0625	15	18	48	15.22601
2005 - 2009	71-80	1	14	17	20	29	17.00428
2010 - 2014	81-90	1	17	20	23.875	38	20.26752
2015 - 2019	91-100	2	18.25	21.5	25.75	42	21.85463

Table 21-5.5 Quartiles 0-1 and 3-4, median(quartile 2) and average of number of pages per 10 volumes at a time

As we can see from the Table 5.5 we have 6 groups of 10 Volumes each. This table help us understand how the number of pages distributed in each volume. In the 3rd column of the table we can see the minimum value or the smallest number of pages per each group of 10 volumes. Next we have the 1st quartile and that quartile shows that the 25% of the data(here the number of pages) are less than this value. The 3rd quartile presents that the 75% of our data(number of pages) are less than the values of this column. At last we have the maximum or the biggest number of pages in each group of 10 volumes. Median indicates the the middle value of the dataset, that means the meadian value is the value separating the higher half from the lower half of values of a sample and in the last column we have the average value,or the average number of papers in each group of 10 volumes.

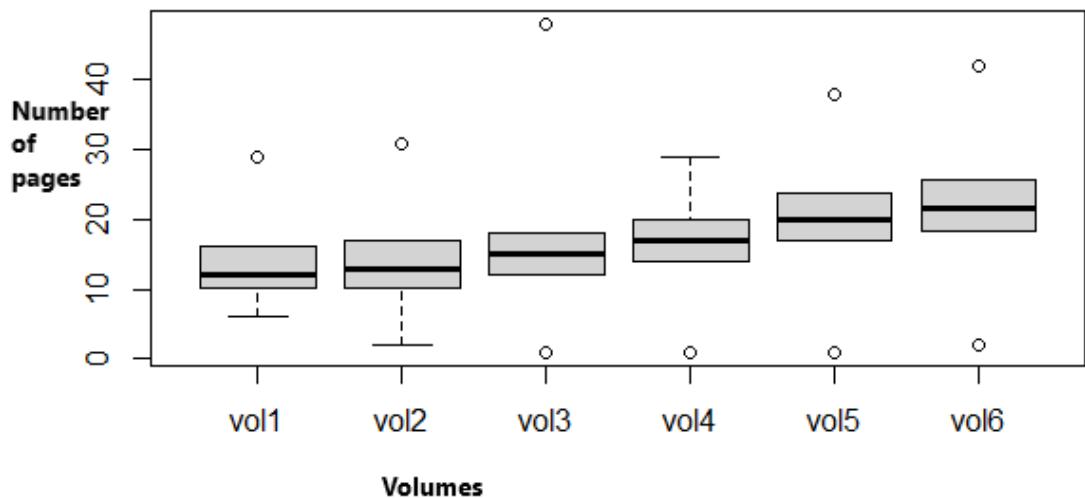


Figure 10-5.1 Boxplots of number of pages published by the group of 10 Volumes at a time

As we can see from the graph it is easy to understand that vol1 = volumes 41-50, vol2 = volumes 51-60, vol3 = volumes 61-70, vol4 = volumes 71-80, vol5 = volumes 81-90 and vol6 = volumes 91-100. This graph illustrates the summary of each quartile in graph. We can notice for example the interquartile range of each of the cases. If we do that we are going to observe that the quartile vol6 has the biggest interquartile range(Q3-Q1) but all the prices of interquartiles ranges are close enough to each other as we can observe from the graph. Also in all quartiles the median value is smaller than the average value(mean) so our data are right-skewed.

6.CONCLUSIONS

In these section we will observe the conclusions we draw. These are:

The 56.46% of publications is a result of co operations between multiple authors.

The 82.63% of the authors wrote only one article. The results shows that author's productivity are very closely to Lotka's law but they are not following Lotka's law .

Most productive author in complete count is Praeger with 13 publications. In fractional count most productive author is Wilson with participation 7.66.

The biggest amount of papers were written between the years 1995-1999(22.04% of the total papers) , a total number of 573 publications were published during that period in total of 2600 publications from 1990 to 2019.

The biggest length of the publications (the most number of pages) were observed in volumes 81-90(years from 2010-2014) . 8666 pages written during this period out of 43907(19.07%).

We highly recommend the data base Scopus.

6.1 Ideas for future study

This study has prospects for future research and in this chapter we will represent some ideas for future research. First of all we could make a citation analysis from journal's citations. Next we could search for author's affiliations, collaborations between institutes, national and international collaborations and also we can create or study the research networks between the authors or institutes that collaborate in order to publish a publication.

REFERENCES

1 **Andres Ana.** Measuring academic research: *How to undertake a bibliometric study*, 2009.

Relative links

<https://londmathsoc.onlinelibrary.wiley.com/journal/14697750>

<https://en.wikipedia.org/wiki/Bibliometrics>

https://en.wikipedia.org/wiki/Lotka%27s_law

<https://www.scopus.com/search/form.uri?zone=TopNavBar&origin=searchbasic&display=basic#basic>

https://apps.webofknowledge.com/WOS_GeneralSearch_input.do?product=WOS&search_mode=GeneralSearch&SID=C3ByEY9hUoe1pB1HgDE&preferencesSaved=

<https://www.elsevier.com/>

https://en.wikipedia.org/wiki/Box_plot