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## Research Trends on Coronavirus (Covid-19) : A Bibliometric Analysis between 2010– March 2020

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# **Research Trends on Coronavirus (Covid-19) : A Bibliometric Analysis between 2010– March,2020.**

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## **Abstract**

Coronavirus is a respiratory syndrome, a virus causing stern pneumonia in humans. The results of the Pandemic virus is a high mortality, respiratory infections including common cold, high fever etc. The main objective of the study is to explore the publications trends of Coronavirus research by using R-Studio. Scopus database has been used to extract the bibliographic metadata of the publication between 2010 and April, 2020. A total of 10515 documents were published across the globe on Coronavirus (Covid-19) during the assessment period under consideration. The result of the current study suggests that the earlier outbreak of Coronavirus were understudied. It also observed that; the research volume of the disease, which emerges after an outbreak, is very high and very little on disease prevention. This may receive insufficient research and limited investment in obtaining a complete understanding of coronavirus management and prevention. The United State of America appeared as highest contributor and University of Honk Kong appeared as most productive affiliation during the study. The outcome of the current pandemic (COVID-19) outbreak, we believe that there should be an emphasis in the field of enticements on coronavirus research

**Keywords: Coronavirus, Covid-19, R-studio, Bibliometrics**

## **Introduction**

Coronavirus (Covid-19) is an aggressive virus and new addition of (SARS CoV-2) Severe Acute Respiratory Syndrome, a zoonotic disease of viral pneumonia in human cause's high mortality and similarity clinical symptom of SARS-1. It is a common disease between humans and animals which is enveloped, non-segmented and has positive sense single standard RNA virus (Danesh & Ghavidel, 2020) and the fatality rate is very high. This virus first appeared in China in 2003 (Swine flu, SARS-CoV), subsequently in 2012 (MERS-CoV) in the Middle East, and 2013-2014 appeared in Africa (Ebola).(Kagan, Moran-Gilad, & Fire, 2020)More than 10,000 cumulative cases with mortality rates of (10%, SARC-CoV), 37% (MERS-CoV) in the past two decades.(Bonilla-Aldana, Holguin-Rivera, et al., 2020)The Present virus (Covid-19) recognised in Huan Seafood Market, South Huan, China(Tang, Tambyah, & Hui, 2020). (Bonilla-Aldana, Holguin-Rivera, et al., 2020)This pandemic syndrome results more than, 2544792 effected and around 175694 death till April,24.2020(Practice, 2020). The World Health Organisation (WHO) has considered and included coronavirus in Blueprint List of priority diseases in 2018. Currently the whole World has suffering from the epidemic outbreak. WHO declared the virus to be pandemic as a Public Health Emergency of International Concern on January 3, 2020.(Bonilla-Aldana, Holguin-Rivera, et al., 2020)(Bonilla-Aldana, Quintero-Rada, et al., 2020)

The rapid growth of academic publications becomes unfeasible to exist with what is being publishing. However, the prominence on pragmatic contribution has caused in voluminous and fragmented research streams.(Aria & Cuccurullo, 2017). The use of bibliometrics has been extended to all disciplines, bibliometric analysis is complex because it entails several steps that employ numerous and diverse analyses and mapping software tools, which are frequently available only under commercial licenses. In this research assessment has carried out through R-Studio a unique tool, developed in the R language utilised to analyze the data,. It is comprehensive open-source bibliometric tools, follows a classic logical bibliometric workflow that we reconstruct. It provides a wide variety of statistical and graphical techniques and is highly extensible (Matloff, 2011). The bibliographic assessment pattern like publication trends, most country publication, most author affiliation, author impact, the most productive title has been analysed. Hence, this bibliometric analysis makes a bossy impact to the researchers interested in the field of Coronavirus and allied research, as it outlines the research trends, determined the most relevant research areas to be taken into consideration in future endeavour. Therefore, it will be useful for the researcher to determine the relevant field of research in Coronavirus and allied research that focuses on the large scale gaps that must be addressed.

### **Objective of the study**

This study is focused on accomplishing the following objectives:

1. Examine the scientific productivity on all Coronavirus related research articles cited in the Scopus database.
2. Determine the most productive authors, institutions, countries an in the field of Coronavirus research.
3. Identify the core journals publishing articles on Coronavirus research related trends.

### **Methodology**

The methodology applied in this study is based on bibliometric techniques that allow the robust analysis of “Coronavirus Research” publications at different stages. The pragmatic methods depend on the number of publications in the area, that were chosen based on two keywords ‘Coronavirus’ and ‘COVID-19’ in the title of papers. The bibliographic information for the present study was derived from the Scopus database during the period from 2010 to 31st March 2020. Various bibliometric approaches have been used to ascertain the publications of Coronavirus research by using R-Studio statistical tool. A total of 10,515 documents have been extracted during this study using different bibliometric indicator i.e annual research trend, most productive country, affiliation, author, author impact, and most productive Journal.

### **Research trends in Coronavirus**

During the study, a total of 10515 publications were recorded in the Scopus Database on Coronavirus research. Highest 7294 articles recorded in the shape of Article followed by, 1231 reviews, Notes 524, Letters 519, Editorials 487, Book chapters 177, Short Surveys 135, Conference papers 79, Erratum 56, Books 5, Conference Review 4, Articles in press 2 and Data paper 2 appeared on Coronavirus research between 2010 and March 2020.

The publications retrieved in 2020 were partial as the publications were retrieved until March 2020. The growth of research publications on Coronavirus was appeared to be uneven

/volatile. In the first three years, i.e., 2010-2012 witnessed (562, 517, and 577 respectively) little immobile, then suddenly increased significantly during 2013-2015 (809, 839, and 1,004 respectively) and kept on a decline during 2016-2017 (918, 830). A sudden spurt in publication happened in 2018 with 1,618 followed by shrinkage during 2019 with 814 publications and escalated to 1,927 publications till March 2020.

### Publications types

Publication type  
Table-1

Sl.No	Document Type	Total
1	Article	7294
2	Article in press	2
3	Book	5
4	Book chapter	177
5	Conference paper	79
6	Conference review	4
7	Data paper	2
8	Editorial	487
9	Erratum	56
10	Letter	519
11	Note	524
12	Review	1231
13	Short survey	135
	<b>Total</b>	<b>10515</b>

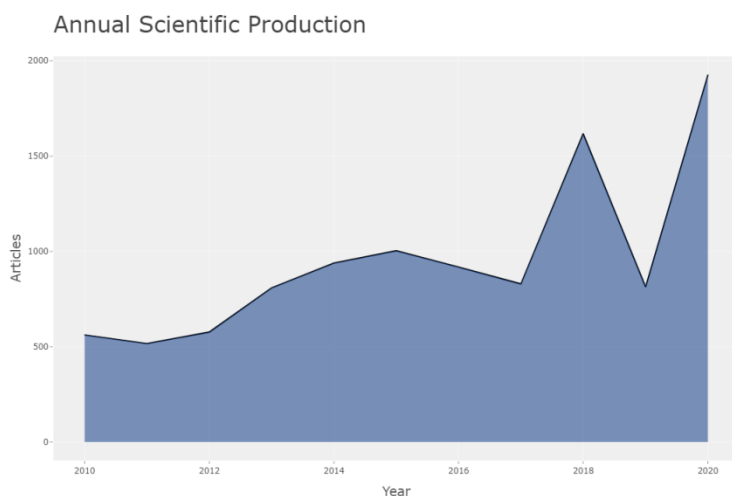
### Publications on Coronavirus, 2010-2020

**Table-2**

Year of Publication	TP	TC	CPP
2010	562	15079	26.83
2011	517	15239	29.48
2012	577	17807	30.86
2013	809	23254	28.74
2014	939	22899	24.39
2015	1004	16318	16.25
2016	918	11672	12.71
2017	830	6876	8.28
2018	1618	8052	4.98
2019	814	1525	1.87
2020 (March)	1927	5356	2.78
<b>Total</b>	<b>10515</b>	<b>144077</b>	<b>187.18</b>

## Average Citation 18.17

TP# Total papers; TC# Total Citations; CPP# Citations per paper



**Fig: 1 Annual Scientific Production**

Further, table-2 reveals a total of 10515 publications and 144077 citations have received on Coronavirus (COVID-19) research in 10.3 years averaged to 18.17 citations per publication (CPP) between 2010 and March 2020). The highest publications were calculated from 2020 till March with TP- 1927, TC- 1525, and CPP is 1.87. Similarly, the highest citations received during 2013 (TC, 23254) from 809 publication with 28.74 average citations per year.

### Country Scientific Production

Table-3 presents the research publications on Coronavirus by top 20 most productive countries between 2010 and March 2020. The United States tops the list with number one position by contributing (4,059) highest no. of number publications and highest citations (18,545) with citation per publication of 4.57 with an average per citation being 23.27. China contributed 3,838 publications with 8,546 citations and ranked second followed by the Netherlands with a contribution of 976 publications along with 5,692 citations, ranked third.

Similarly, in terms of country collaboration, again the United States has the highest number of country's collaborated papers (797) with a frequency ratio of 0.211687 ranked amongst the top, in the top 20 countries. It has contributed 612 single country publications and 185 multi-authored publications with the MCP ratio 0.232. Followed by United Kingdom (TP=688, F=0.182736, SCP=554, MCP=134, MCPR=0.195) appeared as the second position and Korea (TP=294, F=0.078088, SCP=255, MCP=39, MCPR=0.133) appeared as the third position on Coronavirus research between 2010 and March 2020 (Table-4).

**Top 20 most productive Country  
Table-3**

SL.No	Country	TP	TPR	TC	CR	CPP	APC
1	USA	4059	1	18545	1	4.57	23.27

2	China	3838	2	8546	2	2.23	12.42
3	Netherlands	976	3	5692	3	5.83	59.92
4	Germany	924	4	4154	4	4.50	26.80
5	United Kingdom	874	5	2875	5	3.29	15.88
6	Saudi Arabia	771	6	2596	6	3.37	22.38
7	Korea	642	7	2452	7	3.82	8.34
8	Hong Kong	548	8	1705	8	3.11	21.05
9	Switzerland	494	9	1663	9	3.37	25.59
10	France	491	10	1621	10	3.30	14.60
11	Canada	485	11	1528	11	3.15	15.28
12	Spain	449	12	1375	12	3.06	19.93
13	Japan	318	13	1245	13	3.92	11.22
14	Italy	314	14	1054	14	3.36	9.09
15	Australia	306	15	949	15	3.10	17.91
16	Finland	306	16	785	16	2.57	43.61
17	Taiwan	303	17	537	17	1.77	6.97
18	Brazil	224	18	521	18	2.33	6.68
19	Sweden	201	19	467	19	2.32	12.29
20	India	156	20	393	20	2.52	6.90

Note: TP# Total Publication, TPR# Total Publication Rank, TC# Total Citation, TCR# Citations ranking, APC# Average per Citation

### Country Scientific Production

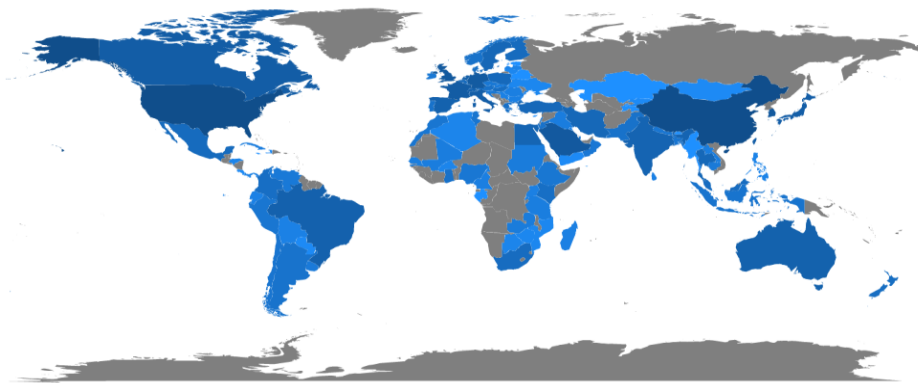


Fig:2 Country Scientific Production

### Top 20 Corresponding Author Country

Table-4

Country	TP	Freq	SCP	MCP	MCP_Ratio
USA	797	0.211687	612	185	0.232
China	688	0.182736	554	134	0.195

Korea	294	0.078088	255	39	0.133
United Kingdom	181	0.048074	127	54	0.298
Germany	155	0.041169	91	64	0.413
Italy	116	0.03081	89	27	0.233
Saudi Arabia	116	0.03081	45	71	0.612
France	111	0.029482	76	35	0.315
Japan	111	0.029482	87	24	0.216
Canada	100	0.02656	62	38	0.38
Netherlands	95	0.025232	51	44	0.463
Hong Kong	81	0.021514	55	26	0.321
Brazil	78	0.020717	66	12	0.154
Taiwan	77	0.020452	58	19	0.247
Spain	69	0.018327	45	24	0.348
Switzerland	65	0.017264	31	34	0.523
Singapore	62	0.016467	44	18	0.29
India	57	0.015139	45	12	0.211
Australia	53	0.014077	33	20	0.377
Sweden	38	0.010093	27	11	0.289

Note: TP# Total Publication, SP# Single Country Publication, MCP# Multi Country Publication

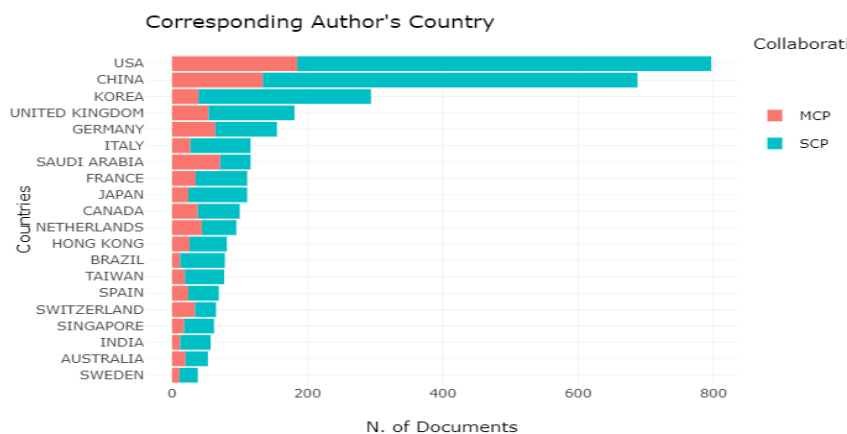


Fig-3: Most corresponding author's country

### Most Relevant author affiliation

The University of Hong Kong produced the highest number of publications with (314) articles and highest (19190) citations on Coronavirus research from 2010 to March 2020 and ranked first position among all the top ten affiliations. The University of California received the second position with total 195 publications, 11024 citations followed by National Institute of Allergy and Infectious Diseases with 120 publications and 9540 citations on Coronavirus research during the period the said period as presented in table-5.

**Top 10 most relevant author affiliation**  
**Table-5**

Sl.No	Affiliations	TP	TC	CPP	TCR
1	The University of Hong Kong	314	19190	61.11	1
2	University of California	195	11024	56.53	1
3	National Institute of Allergy And Infectious Diseases	120	9540	79.50	1
4	Fudan University	98	7854	80.14	1
5	Wuhan University	91	7987	87.77	1
6	Utrecht University	88	7945	90.28	1
7	Huazhong University of Science And Technology	87	6325	72.70	1
8	University of Iowa	87	4586	52.71	1
9	Zhejiang University	86	4253	49.45	1
10	University of Washington	84	4158	49.50	1

### Author dominance

**Author dominance Factor  
Table-6**

Sl.No	Author	Author Affiliation	Dominance factor	TA	SA	MA	FA	RA	RDF
1	Al-Tawfiq Ja	Saudi Aramco Medical Services Organization, Dhahran, Saudi Arabia	0.45977011	90	3	87	40	2	1
2	Chen Y	State Key Laboratory of Virology, College of Life Sciences, Wuhan University, Wuhan, China	0.19642857	112	0	112	22	13	2
3	Memish Za	Preventive Medicine Directorate, Ministry of Health, Alfaisal University, Riyadh, Saudi Arabia	0.19310345	149	4	145	28	19	3
4	Wang L	Vaccine Research Center, National Institute of Allergy and Infectious Diseases, United States	0.18888889	90	0	90	17	2	4
5	Wang J	Infection Disease Department, Wuhan Jinyintan Hospital, Wuhan, China	0.18644068	118	0	118	22	14	5
6	Li X	State Key Laboratory of Biocontrol, School of Life Sciences, Sun Yat-sen University, Guangzhou, China	0.15625	96	0	96	15	6	6
7	Liu Y	The Office of Drug Clinical Trial Institution, Wuhan Jinyintan Hospital, Wuhan, China	0.13636364	88	0	88	12	1	7



8	Chen J	Chen, J., Division of Swine Infectious Diseases, Nangang District, Harbin, 150001, China	0.13541667	98	2	96	13	7	8
9	Wang X	Animal Influenza Laboratory of the Ministry of Agriculture, Harbin, China	0.13207547	106	0	106	14	10	9
10	Jiang S	Lindsley F Kimball Research Institute, New York Blood Center, New York, NY, United States	0.13043478	95	3	92	12	5	10
11	Li Y	Department of Microbiology, Perelman School of Medicine, University of Pennsylvania	0.12582781	151	0	151	19	20	11
12	Zhang J	Department of Veterinary Diagnostic and Production Animal Medicine, College of Veterinary Medicine, Iowa State University	0.125	129	1	128	16	15	12
13	Li J	Departments of Microbiology and Immunology, University of Arkansas for Medical Sciences, United States	0.12264151	106	0	106	13	10	13
14	Wang H	Engineering and Technology Research Center of Traditional Chinese Veterinary Medicine of Gansu Province, Lanzhou, Gansu, China	0.11764706	102	0	102	12	9	14
15	Wang Y	Laboratory of Wildlife Epidemic Diseases, East China Normal University, Shanghai China	0.1056338	142	0	142	15	18	15
16	Zhao J	Zhao, J., College of Animal Science and Veterinary Medicine, Henan Agricultural University, Zhengzhou, Henan , China	0.10204082	98	0	98	10	7	16
17	Zhang Y	State Key Laboratory of Biocontrol, School of Life Sciences, Sun Yat-sen University, Guangzhou, 510006, China	0.09929078	141	0	141	14	17	17
18	Perlman S	Department of Microbiology, University of Iowa, Iowa City, IA 52242, United States	0.05660377	109	3	106	6	12	18
19	Drosten C	Drosten, C., Institute of Virology, University of Bonn Medical Centre, Bonn,	0.03007519	135	2	133	4	16	19

		Germany							
20	Yuen K Y	The University of Hong Kong, University Pathology Building, Queen Mary Hospital, Hong Kong, China	0.0106383	94	0	94	1	4	20

TA# Total article, SA# Single article, MA# Multi author, AR# author rank, DF# Dominance factor ranking

### Most productive author

Top 20 most author with publications and h index

Table-6

SL.No	Author	Author Affiliation	NP	TC	TCR	hi	gi	mi	hR	PY
1	Li Y	Department of Microbiology, Perelman School of Medicine, University of Pennsylvania	149	2171	11	21	42	1.9090909	11	2010
2	Memish ZA	Preventive Medicine Directorate, Ministry of Health, AlFaisal University, Riyadh, Saudi Arabia	149	6173	2	37	76	4.7777778	3	2012
3	Wang Y	Laboratory of Wildlife Epidemic Diseases, East China Normal University, Shanghai China	138	2428	9	19	46	1.7272727	14	2010
4	Zhang Y	Department of Veterinary Diagnostic and Production Animal Medicine, College of Veterinary Medicine, Iowa State University, Institute of Virology, University of Bonn	140	2845	7	28	51	2.5454545	7	2010
5	Drosten C	Medical Centre, Bonn, Germany	134	7399	1	46	84	4.1818182	1	2010
6	Na Na		131	327	20	8	17	0.7272727	20	2010
7	Zhang J	Department of Veterinary Diagnostic and Production Animal Medicine, College of Veterinary Medicine, Iowa State University	124	2054	12	24	41	2.1818182	10	2010
8	Baric RS	Department of	122	4100	3	38	61	3.4545455	2	2010

9	Wang J	Immunology, University of North Carolina at Chapel Hill, United States Infection Disease Department, Wuhan Jinyintan Hospital, Wuhan, China	112	2348	10	21	46	1.9090909	12	2010
10	Chen Y	State Key Laboratory of Virology, College of Life Sciences, Wuhan University, Wuhan, China	112	1428	18	19	33	1.7272727	15	2010
11	Perlman S	Department of Microbiology, University of Iowa, Iowa City, IA , United States	109	3134	6	32	52	2.9090909	5	2010
12	Li J	Departments of Microbiology and Immunology, University of Arkansas for Medical Sciences, United States	101	2014	13	19	43	1.7272727	16	2010
13	Wang X	Animal Influenza Laboratory of the Ministry of Agriculture, Harbin, China	105	1947	15	20	41	1.8181818	13	2010
14	Wang H	Engineering and Technology Research Center of Traditional Chinese Veterinary Medicine of Gansu Province, Lanzhou, Gansu, China	98	617	19	12	19	1.0909091	19	2010
15	Chen J	Chen, J., Division of Swine Infectious Diseases, Nangang District, Harbin, China	98	1773	16	19	40	1.7272727	17	2010
16	Zhao J	Zhao, J., College of Animal Science and Veterinary Medicine, Henan Agricultural University, Zhengzhou, Henan , China	84	2500	8	26	48	2.3636364	8	2010
17	Li X	State Key Laboratory of Biocontrol, School of Life Sciences, Sun Yat-sen University, Guangzhou , China	95	1450	17	15	36	1.3636364	18	2010

18	Jiang S	Lindsley F Kimball Research Institute, New York Blood Center, New York, NY, United States	95	2005	14	26	41	2.3636364	9	2010
19	Yuen KY	The University of Hong Kong, University Pathology Building, Queen Mary Hospital, Hong Kong, China	94	3757	4	34	60	3.0909091	4	2010
20	Al-Tawfiq JA	Saudi Aramco Medical Services Organization, Dhahran, Saudi Arabia	90	3376	5	30	57	3.0909091	6	2012
Total			2280	53846						

The author dominance factor is a ratio indicating the fraction of multi-authored publications where the author appears as first author (Aria, M. & Cuccurullo, C., 2017). Table-6 depicts Al Tawfiqja from Saudi Aramco Medical Services Organization, Dhahran, Saudi Arabia dominates their research group as he ranked first (DF= 0.45977011, TA= 90, SA=3, MA=87, FA=40) followed by Chen, Y from State Key Laboratory of Virology, College of Life Sciences, Wuhan University, Wuhan, China (DF=0.19642857, Ta=112, SA=0, FA= 22) ranked second. Similarly, Memish ZA from Preventive Medicine Directorate, Ministry of Health, AlFaisal University, Riyadh, Saudi Arabia (DF= 0.19310345, TA= 149, SA=4, MA=145, FA=28) ranked as the third position.

Furthermore, a total of 2,280 publications with 53,846 citations received together by the top 20 most authors originated in table-6 in the field of Coronavirus during the period under consideration. In terms of total publication and their citations, Drosten C (TP= 135, TC=7399) from Institute of Virology, University of Bonn Medical Centre, Bonn, Germany secured the first rank followed by Memisha ZA (TP=149, TC=6173) from Preventive Medicine Directorate, Ministry of Health, AlFaisal University, Riyadh, Saudi Arabia and Baric RS (TP=122, TC=401) ranked second and third respectively. Similarly for metrics ranking, again Drosten C (hi= 46,gi=84, mi=4.1818182) ranked first followed by Baric RS ( hi= 38, gi=84, mi=3.4545455) ranked second and Memish ZA ( hi= 37, gi=76, mi=4.7777778) secured the third position.

**Top 20 most Productive Journal**  
**Table-7**

Sl.No	Source	NP	HI	GI	MI	TC	PS	Rank
1	Journal of Virology	421	58	84	5.273	12408	2010	1
2	Plos One	255	35	48	3.182	4120	2010	2
3	Viruses	209	25	39	2.273	2423	2010	3
4	Emerging Infectious Diseases	168	44	74	4	6375	2010	4
5	Journal of Medical Virology	155	20	30	1.818	1255	2010	5
6	Virology	147	26	38	2.364	2133	2010	6
7	Virus Research	146	26	38	2.364	2251	2010	7
8	The Lancet	144	22	58	2.2	3472	2011	8
9	Archives of Virology	139	21	31	1.909	1555	2010	9

10	Veterinary Microbiology	134	23	34	2.091	1832	2010	10
11	BMJ (Clinical Research Ed.)	103	6	7	0.667	82	2012	11
12	Journal of General Virology	101	25	47	2.273	2448	2010	12
13	Antiviral Research	100	24	36	2.182	1738	2010	13
14	Journal of Virological Methods	98	16	24	1.455	968	2010	14
15	Nature	97	17	53	1.545	2811	2010	15
16	Virology Journal	96	19	32	1.727	1427	2010	16
17	Scientific Reports	90	15	23	1.875	898	2013	17
18	Vaccine	89	18	26	1.636	1054	2010	18
19	BMC Veterinary Research	85	16	25	1.778	831	2012	19
20	Emerging Microbes and Infections	85	12	17	1.333	539	2012	20

Table-7 depicts top 20 most productive journals in terms of total publication, citations and some indexing term from 2008 to March 2020. Journal of Virology considered as a most productive journal with 421 publications. The Journals H index is 54, G index, 84, M index, 5.273 and a total of 12408 citations received from 2010.

## Discussion

The present study represents the bibliometric analysis using R-Studio based on 10,515 documents indexed on Scopus database. The analysis of sequential development of scientific outcome on Coronavirus depicts that, though SARCOV-1 was identified mostly two decades ago, the publications trends are uneven. The trends of scientific productions of the coronavirus research appear suddenly high after the outbreak occurred in December 2019 in Huanan City, China. When the outbreak becomes pandemic and spread to all over the world, the WHO prioritise this disease under the list of blueprint and accelerated the research. Therefore, the accomplishment of scientific output is being encouraged in the coming years. Out of 10,515 documents on Coronavirus research were considered for analysis, 26,557 authors contributed their research on Coronavirus Research. Out of which 756 appeared as the author of single-author documents, (25,801) multi-authored and (12,95) authors have recognised as single author document. LI Y, (151 papers) from Department of Microbiology, Perelman School of Medicine, University of Pennsylvania appeared as the most productive author in terms of document publication. However, he was ranked 20 (ad=0.12582781) lowest ranks appeared in the Table-6 in terms of author dominance because most of his publication is with multi-author. LIU Y (0.13636364) from Office of Drug Clinical Trial Institution, Wuhan Jinyintan Hospital, Wuhan, China, ranked first in the category of author dominance. Drosten C from Institute of Virology, University of Bonn Medical Centre, Bonn, Germany ranked top in the chart in both citation and h-index. He received 7,399 citations with h-index = 46, g-index= 84 and m-index = 4.1818182 till March, 2020.

The United State of America has played a significant role by contributing the highest number of papers (38.60%) on the Coronavirus research followed by China 3,838 (36.50%), and none of the other countries has contributed beyond 1,000 publications. Both USA and China has contributed more than 70% of total papers on Coronavirus research. Again USA has strong collaboration than China followed by Korea, United Kingdom, and Germany. These countries have strong collaboration in which more than 150 publications contributed to Coronavirus research. Remaining countries were fewer contributors with below 150 publications. Though USA is the topmost contributors of publications, the University of Hong Kong, China appeared as leading affiliation institution followed by University of

California, USA and the National Institute of Allergy and Infectious Diseases, USA. They contributed 6% of the total paper on Coronavirus research.

The Journal of Virology emerged as the maximum number of publications on Coronavirus research followed by PLoS One and Viruses. The characterization of Coronavirus disease is a zoonotic, viral and pneumonia in human cause's high mortality and similarity clinical symptom. Therefore, Vaccine development and related subjects mostly dealt with in the publication of Coronavirus research.

## Conclusion

Coronavirus (Covid-19) has become global pandemic; the rate of fatalities has been increasing day by day at present almost all the country (213) suffers from this epidemic. The USA has been affected hardest by the pandemic in terms of the number of fatalities. The outcome of the study demonstrates the sanctity of the research output related to Coronavirus research. Though in 2010 the research output is stagnant, with little progress and suddenly it has been enhanced in 2013 due to the MERS-CoV appeared in the Middle East and in 2020 because of the current epidemic. The University of Hong Kong, China and the University of California, USA were found a majority of the contributor on Coronavirus research during the study. A huge degree of collaboration was appeared among inter-country and inter-content, like USA, China, Korea, UK etc., revealed that these developing countries work together to imbibe the current epidemic. The scientific literature on Coronavirus research (COVID-2019) was published across 1803 sources (Journal, Book, Conferences), quantitatively, 20 core journals have published approximately 27% of the publications on the Coronavirus research during the study. The initiatives of the World Health Organisation (WHO) to restrain the virus (COVID-19) are likely to enhance the scientific development of zoonotic infection. Though the occurrences of human infection have been spreading all over the world, countries from all over the world are in severe concern about the virus (COVID-19).

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