

Supplementary Information

Global Research On Riparian Zones In The XXI Century: A Bibliometric Analysis

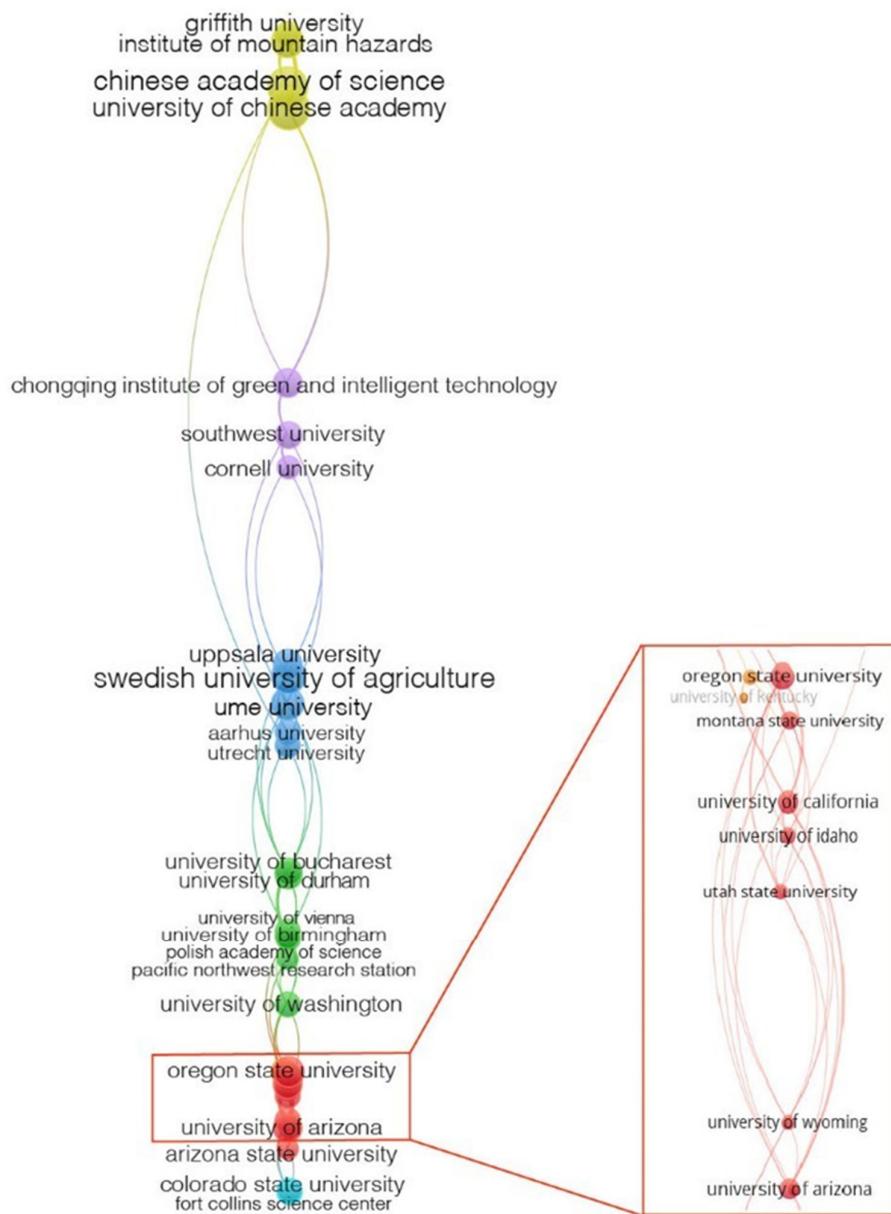


Figure S1. Co-authorship network between top institutions; a threshold of five for “minimum total link strength of an item” was applied, which resulted in a total of 25 institutions. The bubble size refers to the total number of articles; line thickness and color refer to link strength and clustering, respectively.

Table S1. Detailed query performed in Scopus and WoS.

Scopus	WoS
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Search Date	Nov-27-2020	Nov-27-2020
Total Results	1,171	1,054
Search Equation	TITLE ("riparian zone*" OR "riparian area*") OR AUTHKEY ("riparian zone*" OR "riparian area*") AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE, "re") OR LIMIT-TO (DOCTYPE, "ch") OR LIMIT-TO (DOCTYPE, "bk")) AND (LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014) OR LIMIT-TO (PUBYEAR, 2013) OR LIMIT-TO (PUBYEAR , 2012) OR LIMIT-TO (PUBYEAR, 2011) OR LIMIT-TO (PUBYEAR, 2010) OR LIMIT-TO (PUBYEAR, 2009) OR LIMIT-TO (PUBYEAR, 2008) OR LIMIT-TO (PUBYEAR, 2007) OR LIMIT-TO (PUBYEAR, 2006) OR LIMIT-TO (PUBYEAR, 2005) OR LIMIT-TO (PUBYEAR, 2004) OR LIMIT-TO (PUBYEAR, 2003) OR LIMIT-TO (PUBYEAR, 2002) OR LIMIT-TO (PUBYEAR, 2001)) AND (LIMIT-TO (LANGUAGE, "English"))	(TI = ("riparian zone*") OR TI = ("riparian area*") OR AK = ("riparian zone*") OR AK = ("riparian area*")) AND IDIOMA: (English) AND DOCTYPE: (Article OR Book OR Book Chapter OR Review)
Temporal Interval	2001-2020	2001-2020

Table S2. Set of bibliometric indicators used in the analyses.

Bibliometric Indicator	Meaning	Tool and Reference
Document Types	Number of records per each document type (i.e. article, book, book chapter, review)	"biblioAnalys" function from Bibliometrix (Aria and Cuccurullo, 2017)
Most Cited Papers	Top 10 of cited papers about riparian zones	"biblioAnalys" function from Bibliometrix (Aria and Cuccurullo, 2017)
Principal Journals or Sources	Top 10 of journals that publishes on riparian zones	"biblioAnalys" function from Bibliometrix (Aria and Cuccurullo, 2017)
Principal Countries	Map with the number of documents per country	Biblioshiny (Aria and Cuccurullo, 2017)
Principal Institutions	Top 10 of institutions publishing on riparian zones	"biblioAnalys" function from Bibliometrix (Aria and Cuccurullo, 2017)
Countries Collaboration Network	Network of countries publishing on riparian zones	VOS viewer 1.6.16 (van Eck and Waltman, 2020)
Authors Collaboration Network	Network of authors publishing on riparian zones	VOS viewer 1.6.16 (van Eck and Waltman, 2020)
Institutions Collaboration Network	Network of institutions publishing on riparian zones	Network construction: Biblioshiny (Aria and Cuccurullo, 2017). Plotting: VOS viewer 1.6.16 (van Eck and Waltman, 2020)
Cloud of Words	Graphic representation of principal key-words of riparian zones documents	Biblioshiny (Aria and Cuccurullo, 2017). Plotting: WordArt.com.
Yearly Occurrence of the Top Keywords	Graphic representation of yearly occurrence "KeywordGrowth" from Bibliometrix (Aria and Cuccurullo, 2017)	

Table S3. Citations per country (top 20).

Country	Total Citations	Average Article Citations
USA	9919	32.95
CANADA	1936	34.57
AUSTRALIA	1914	34.18
UNITED KINGDOM	1046	37.36
CHINA	1041	11.97
FRANCE	961	36.96
BRAZIL	776	15.52
SWEDEN	692	40.71
GERMANY	608	19.61
NETHERLANDS	551	50.09
SOUTH AFRICA	384	16.70
SPAIN	378	34.36
ITALY	286	22.00
HUNGARY	268	67.00
DENMARK	243	27.00
JAPAN	196	15.08
MEXICO	152	16.89
SWITZERLAND	137	19.57

POLAND	128	18.29
CHILE	115	16.43

Table S4. Yearly occurrence of top keywords.

Year	Authors Keywords									
	Riparian Zone	Riparian Zones	Riparian Areas	Riparian Area	Riparian	Denitrification	Groundwater	Water Quality	Nitrate	Nitrogen
2001	11	2	3	0	3	2	3	3	1	1
2002	15	1	3	2	1	3	1	1	2	0
2003	16	6	2	2	0	4	1	2	2	1
2004	11	7	6	2	2	3	4	1	4	3
2005	11	5	5	2	3	1	2	2	0	0
2006	14	6	2	1	3	3	4	1	5	1
2007	13	7	2	3	2	2	3	5	0	1
2008	13	5	5	1	4	5	3	1	0	4
2009	22	7	4	0	3	7	2	0	4	5
2010	16	4	6	1	5	5	2	1	6	2
2011	20	5	4	6	2	1	2	4	1	0
2012	17	6	3	5	2	2	1	1	1	0
2013	21	5	4	2	4	2	3	1	1	3
2014	25	11	5	3	4	3	2	1	3	1
2015	22	8	7	0	3	2	0	0	0	1
2016	32	9	2	1	6	2	2	4	1	2
2017	29	12	3	2	2	6	1	4	2	1
2018	32	5	6	0	3	3	3	4	1	1
2019	30	6	2	2	1	1	1	3	0	2
2020	34	7	4	5	1	2	1	1	1	1

Year	KeyWords Plus									
	Riparian Zone	Riparian Zones	Rivers	United States	Water Qual- ity	Nitrogen	Groundwater	Denitrifi- cation	China	Forestry
2001	16	1	4	9	8	8	7	6	0	2
2002	13	3	2	11	3	5	4	9	3	5
2003	21	0	2	12	7	5	5	7	1	4
2004	24	3	0	10	6	4	4	8	0	7
2005	24	2	0	13	8	3	6	1	0	6
2006	34	6	8	17	12	11	14	8	1	12
2007	36	0	6	9	13	4	7	5	0	6
2008	39	3	1	18	16	8	18	10	4	3
2009	45	13	12	16	12	9	5	11	4	14
2010	38	19	7	16	14	11	6	13	2	20
2011	32	10	11	13	12	8	8	5	0	6
2012	48	18	19	23	10	5	9	9	7	4
2013	38	11	20	11	5	4	6	3	9	10
2014	30	15	14	13	12	13	12	8	6	12
2015	40	12	14	8	7	13	8	2	5	6
2016	55	21	20	8	16	7	9	7	25	8
2017	55	18	23	8	12	41	17	17	19	6
2018	43	14	16	9	18	7	14	16	20	3
2019	46	17	28	7	9	15	11	13	22	6
2020	40	19	29	3	10	10	10	14	35	10

Additional Supporting Information (File uploaded separately)

Dataset S1. Bibliographic records as queried from Scopus (primary data)