ACCSCIENCE PUBLISHING

Asian Journal of Water, Environment and Pollution

REVIEW ARTICLE

Insights into development trends for photocatalytic degradation of PFAS: A bibliometric time-series perspective

Supplementary Files

Table S1. Top 10 countries in articles of SCI-E in terms of PFAS degradation technologies in 1999-2025

Year	Ranking	Countries	Count	Centrality
1999–2020	1	PEOPLES R CHINA	194	0.63
	2	USA	62	0.25
	3	JAPAN	36	0.14
	4	GERMANY	22	0.15
	5	SPAIN	12	0.42
	5	ITALY	12	0.23
	7	NETHERLANDS	11	0.16
	7	INDIA	11	0
	7	ARGENTINA	11	0
	10	AUSTRALIA	10	0.03
2021–2025	1	PEOPLES R CHINA	267	0.65
	2	USA	103	0.48
	3	INDIA	25	0.38
	4	GERMANY	20	0.03
	5	JAPAN	17	0.02
	6	ITALY	16	0.09
	7	AUSTRALIA	15	0.03
	8	CANADA	12	0.08
	9	ENGLAND	11	0.01
	10	FRANCE	10	0.01
	10	SOUTH KOREA	10	0
	10	RUSSIA	10	0

Note: The keyword "TAIWAN" is included in the keyword "PEOPLE R CHINA".

Table S2. Top 10 institutions in articles of SCI-E in terms of PFAS degradation technologies in 1999–2025

Year	Ranking	Institutions	Count	Centrality
1999–2020	1	Tsinghua Univ	24	0.08
	2	Chinese Acad Sci	22	0.1
	3	Fuzhou Univ	14	0.02
	4	Eindhoven Univ Technol	10	0
	5	Harbin Inst Technol	8	0.01
	6	Univ Buenos Aires	8	0
	7	Natl Taiwan Univ	7	0
	8	Beijing Normal Univ	7	0
	9	Peking Univ	6	0.03
	10	Auburn Univ	6	0.01
	10	Cent China Normal Univ	6	0
	10	Hyogo Univ Hlth Sci	6	0
	10	Nanjing Univ	6	0
2021–2025	1	Sichuan Univ Sci & Engn	18	0
	2	Chinese Acad Sci	17	0.14
	3	Tsinghua Univ	16	0.13
	4	Rice Univ	11	0.11
	4	Tongji Univ	11	0.07
	6	Univ Technol Sydney	10	0
	6	Nankai Univ	10	0.01
	8	Zhengzhou Univ	9	0.02
	9	Chinese Res Inst Environm Sci	7	0.02
	9	Colorado Sch Mines	7	0.04
	9	Nanjing Univ	7	0.04
	9	CNR	7	0
	9	ND Zelinskii Inst Organ Chem	7	0
	9	Henan Normal Univ	7	0
	10	Shanghai Inst Pollut Control & Ecol Secur	6	0.02
	10	Zhejiang Univ Technol	6	0
	10	Osaka Univ	6	0

Table S3. Top authors in articles of SCI-E in terms of PFAS degradation technologies in 1999–2025

Year	Ranking	Authors	Count
1999–2020	1	Zhang, Pengyi	13
	2	Barata-vallejo	9
	3	Hessel, Volker	8
	3	Noel, Timothy	8
	5	Li, Zhenmin	7
	5	Postigo, Al	7
	5	Weng, Zhiqiang	7
	8	Jin, Ling	6
	8	Niu, Junfeng	6
	8	Shao, Tian	6
	8	Zhao, Dongye	6
2021–2025	1	Zhong, Junbo	14
	2	Li, Jianzhang	9
	3	Dilman, Alexander D	7
	4	Zhu, Yongbing	5
	4	Strathmann, Timothy J	5
	4	Postigo, Al	5
	4	Zhu, Yangmo	5
	4	Zhao, Dongye	5
	4	Yasuda, Makoto	5
	10	Wang, Bo	4
	10	Nishimoto, Yoshihiro	4
	10	Xu, Tianyuan	4
	10	Zhou, John L	4
	10	Bentel, Michael J	4
	10	Zhou, Xuefei	4
	10	Zhang, Chaojie	4
	10	Wei, Zongsu	4
	10	Wong, Michael S	4
	10	Chu, Liquan	4
	10	Higgins, Christopher P	4
	10	Levin, Vitalij V	4
	10	Li, Huan	4
	10	Senftle, Thomas P	4

Table S4. Top 10 keywords in articles of SCI-E in terms of PFAS degradation technologies in 1999–2025

Year	Ranking	Keywords	Count	Centrality
1999–2020	1	Water	70	0.11
	2	Degradation	56	0.12
	3	Perfluorooctanoic acid	55	0.06
	4	Perfluorocarboxylic acid	53	0.09
	4	Photoredox catalysis	53	0.09
	6	Photocatalytic decomposition	49	0.07
	7	Perfluorinated compound	48	0.13
	8	Perfluoroalkylation	47	0.06
	9	Decomposition	41	0.05
	10	Trifluoromethylation	40	0.05
2021–2025	1	Perfluorooctanoic acid	93	0.02
	2	Water	78	0.02
	3	Degradation	75	0.03
	4	Perfluoroalkyl substance	72	0.06
	5	Decomposition	61	0.02
	6	Photocatalytic degradation	54	0.05
	7	Fluorine	50	0.07
	8	Perfluorinated compound	46	0.04
	8	Perfluorooctanesulfonic acid	46	0.04
	10	Removal	41	0.04

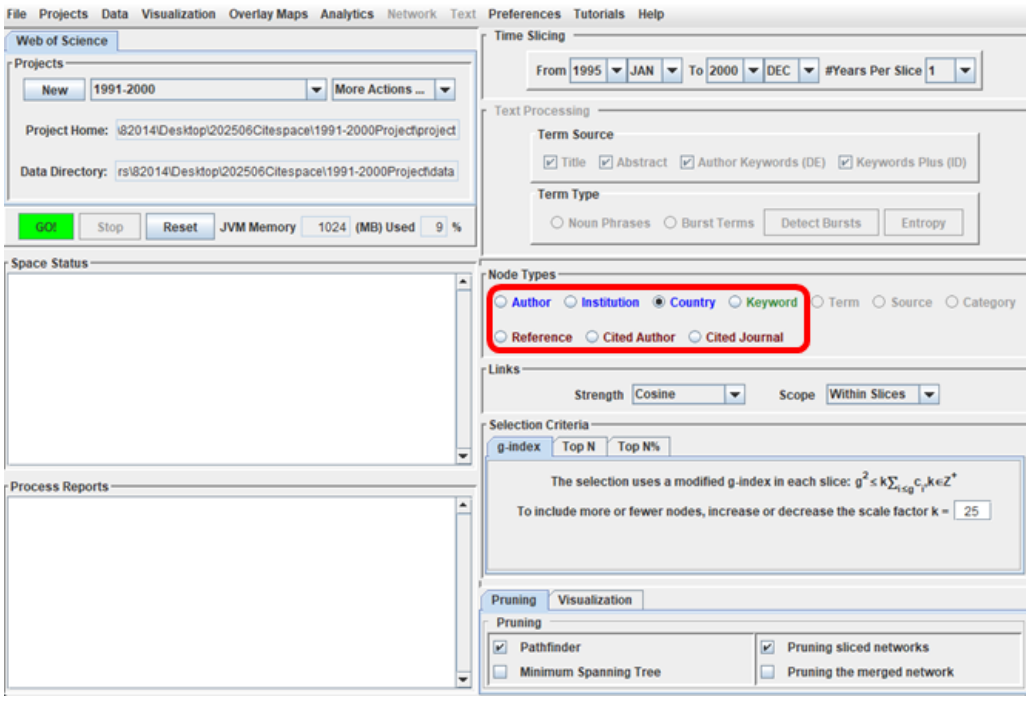

Figure S1. CiteSpace settings page. Analysis on countries, institutions, authors, keywords and references are conducted by individually ticking the "Country," "Institution," "Author," and "Keyword" in the red circle, respectively