

**THE SOCIAL SPACE OF SUSTAINABILITY SCIENCE:  
A BIBLIOMETRIC STUDY OF  
LEADING JOURNALS  
(2001-2021)**



THE SWEDISH SCHOOL OF LIBRARY  
AND INFORMATION SCIENCE  
UNIVERSITY OF BORÅS

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# PIERRE BOURDIEU'S SOCIAL SPACE

Field or  
*Champ*

Agents

Capital

Habitus

Historical  
perspective

## **(SOME) PREVIOUS RESEARCH**

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Gingras (1991) on the field of Canadian Physics (historical perspective)

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Cronin (2005) and Gingras (2008) on symbolic capital

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Social capital & co-authorship  
(Abbasi et. 2014)

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Other proxies for capital besides citations  
(Desrochers et al., 2018)

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Costly collaboration and negative capital  
(Mongeon & Larivière, 2016)

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# SUSTAINABILITY SCIENCE



## Emerging field



## Journals as “objectified capital”

- Leading journals embed more symbolic capital
- (JIF > the average in the field)

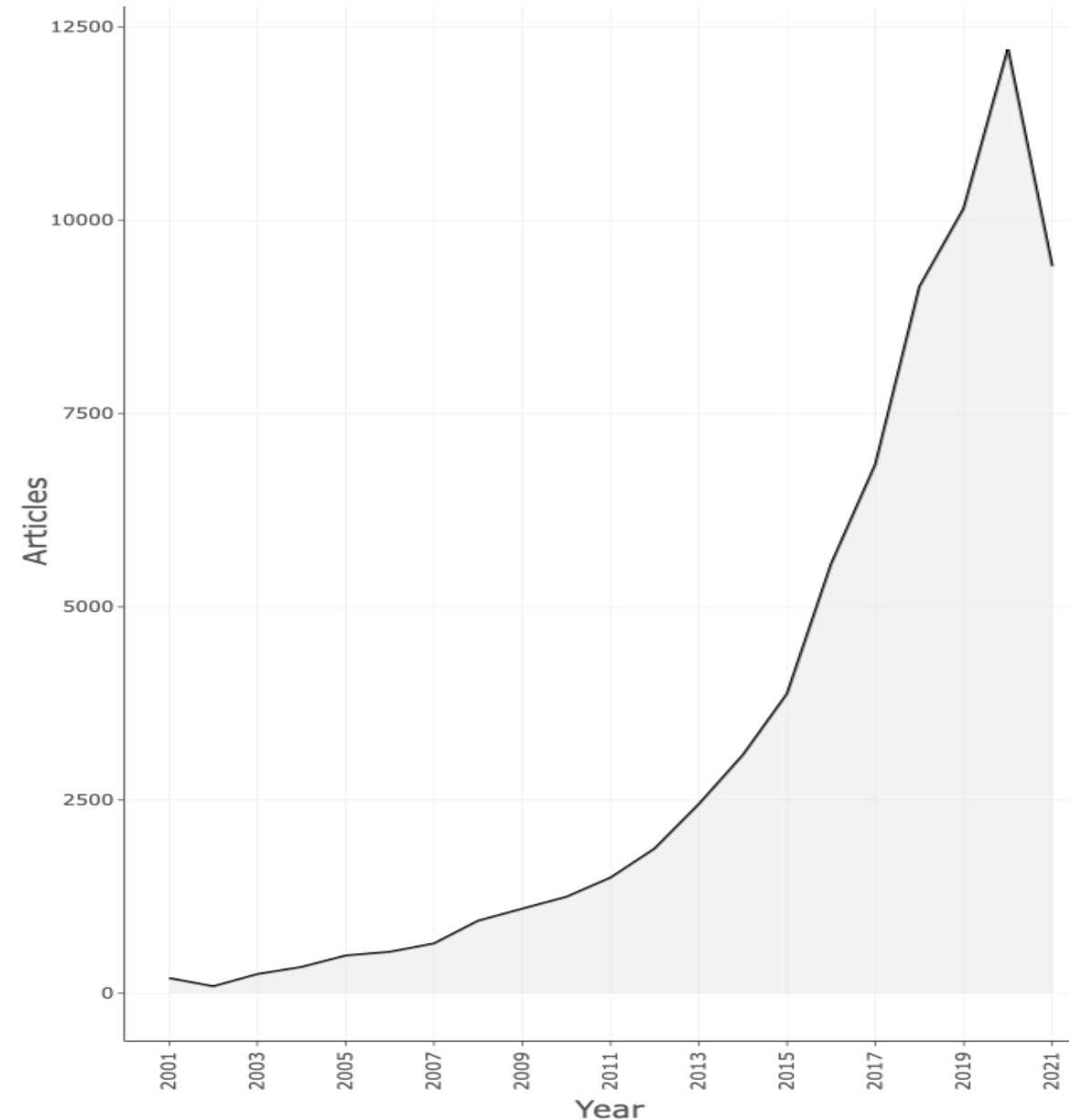


## Which agents?

- university and research centers as collective agents

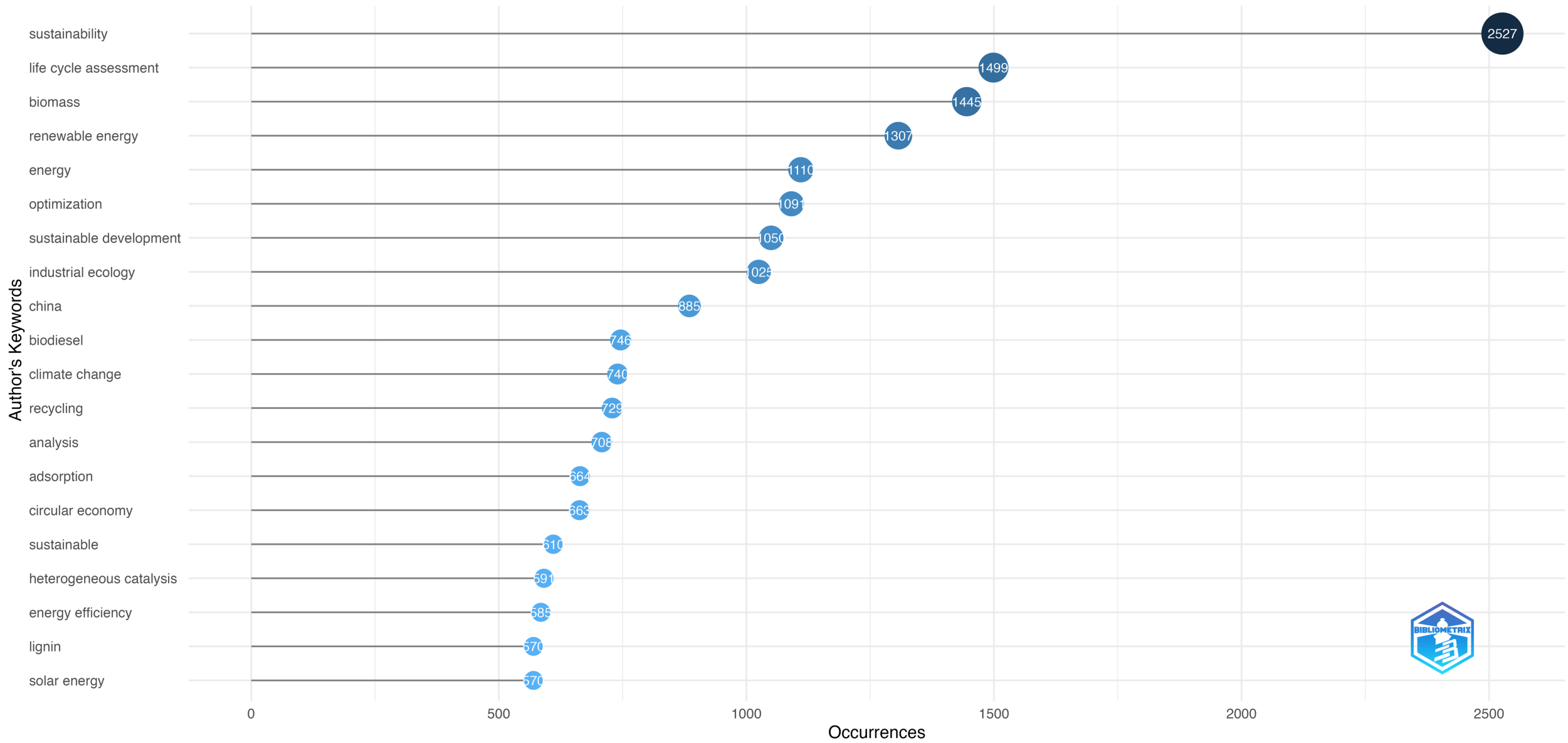
# THE DATA

- ❖ From *Web of Science (Core Collection)*
- ❖ Category “Green & Sustainable Science & Technology” (Bautista-Puig et al. 2021)
- ❖ Number of documents: 71871 (articles only)
- ❖ Data analysis with *bibliometrix* (Aria & Cuccurullo, 2017)
  - Focus on:
    - symbolic capital through journal co-citation (see Gingras, 2008);
    - Countries and Affiliation co-authorship (social and symbolic capital)



# MAIN INFORMATION ON THE DATASET

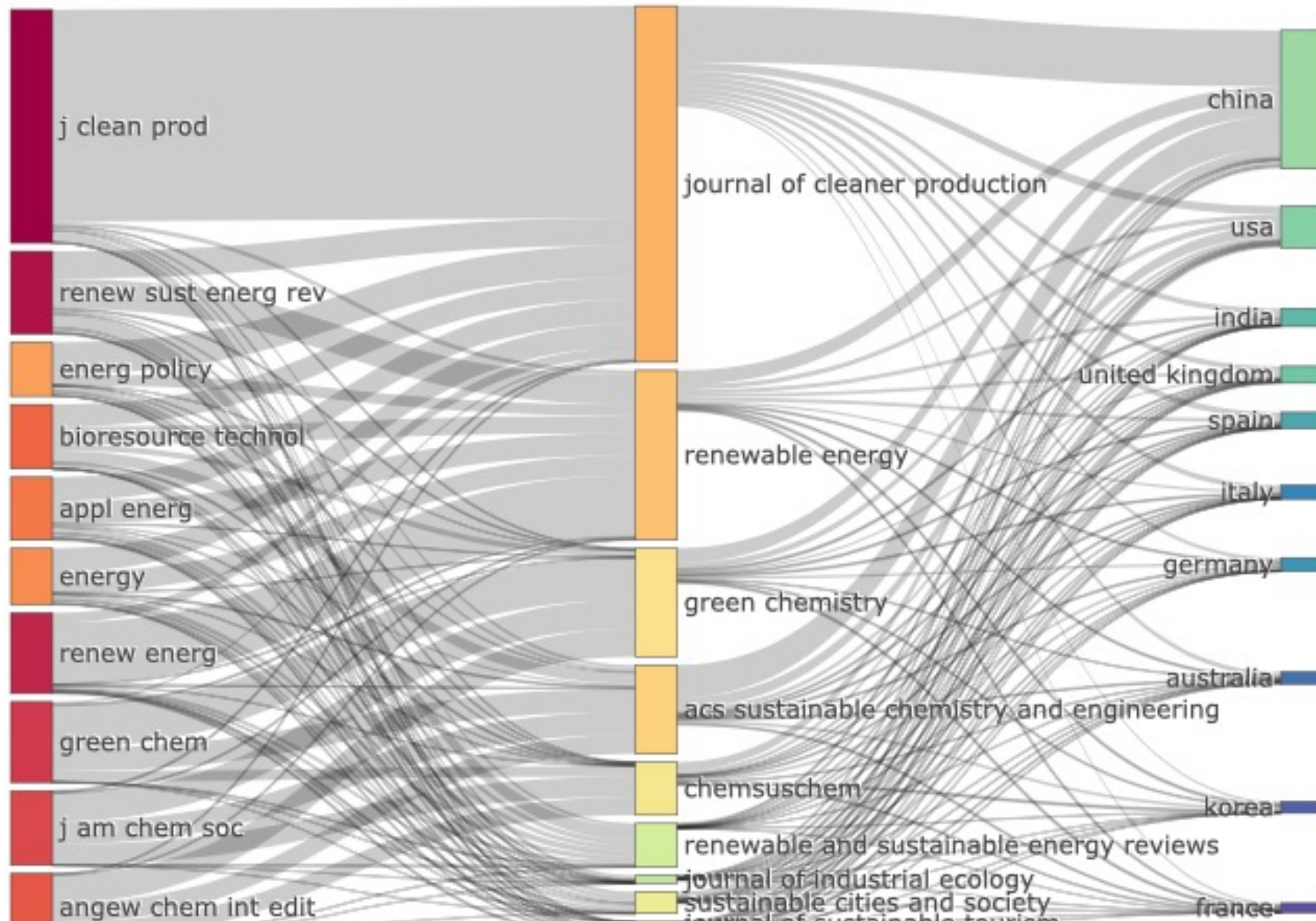
|                        |           |                                 |         |                             |        |
|------------------------|-----------|---------------------------------|---------|-----------------------------|--------|
| Timespan               | 2001:2021 | Sources                         | 18      | Documents                   | 71871  |
| Authors                | 122227    | Authors of single-authored docs | 2333    | International Co-Authorship | 29.2 % |
| Author's Keywords (DE) | 122760    | References                      | 1819331 | Document Average Age        | 5.05   |



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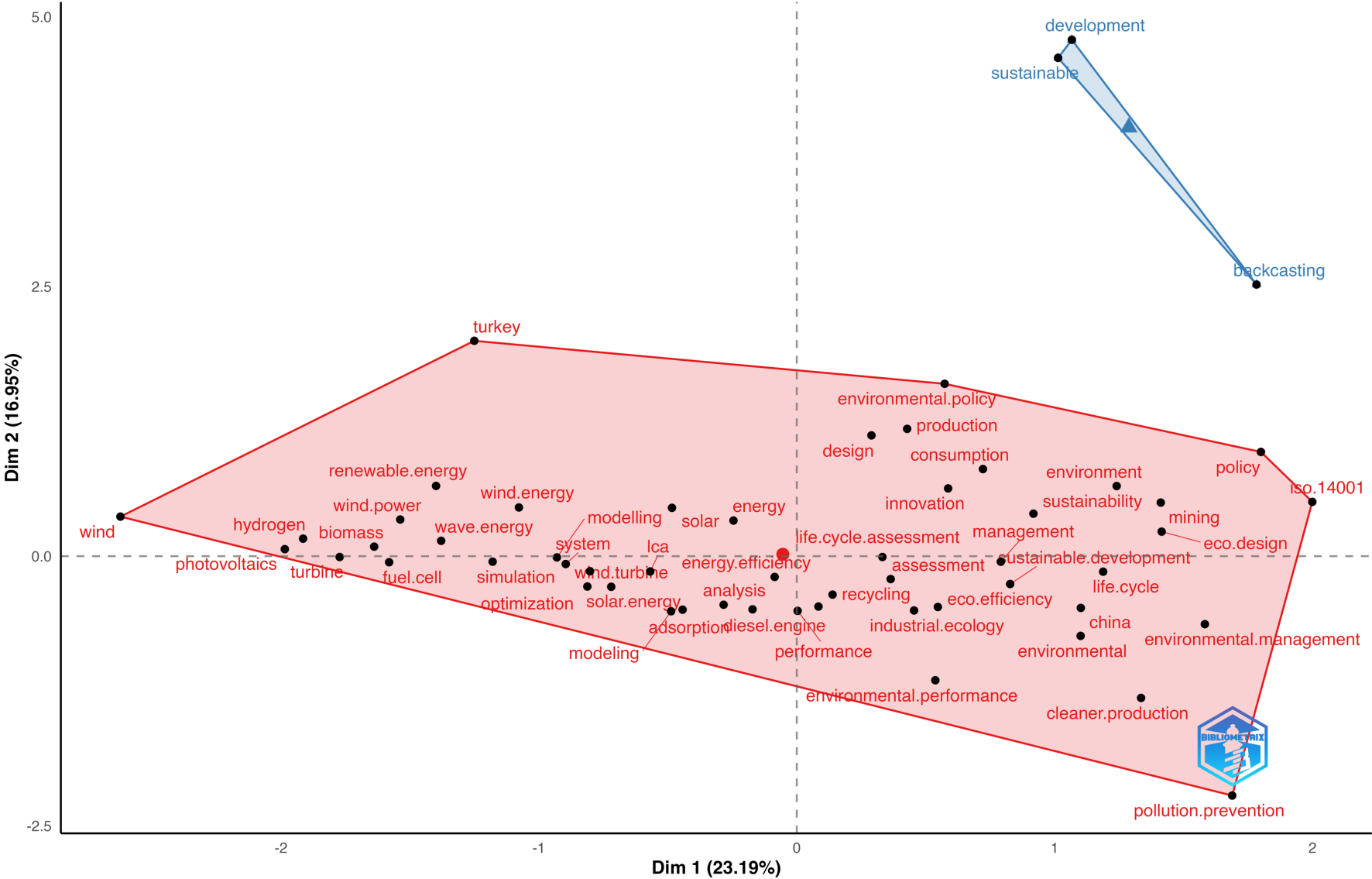
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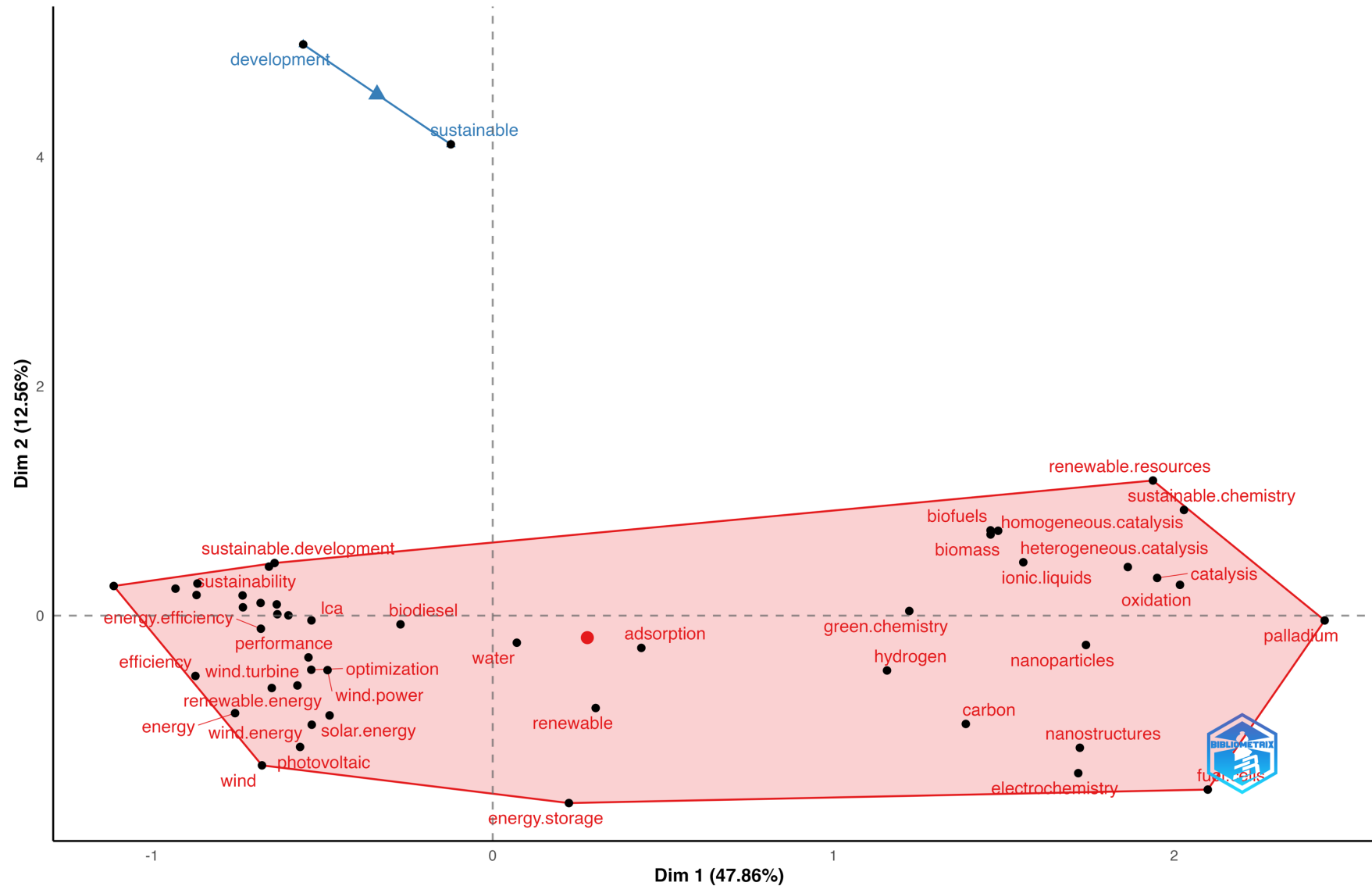




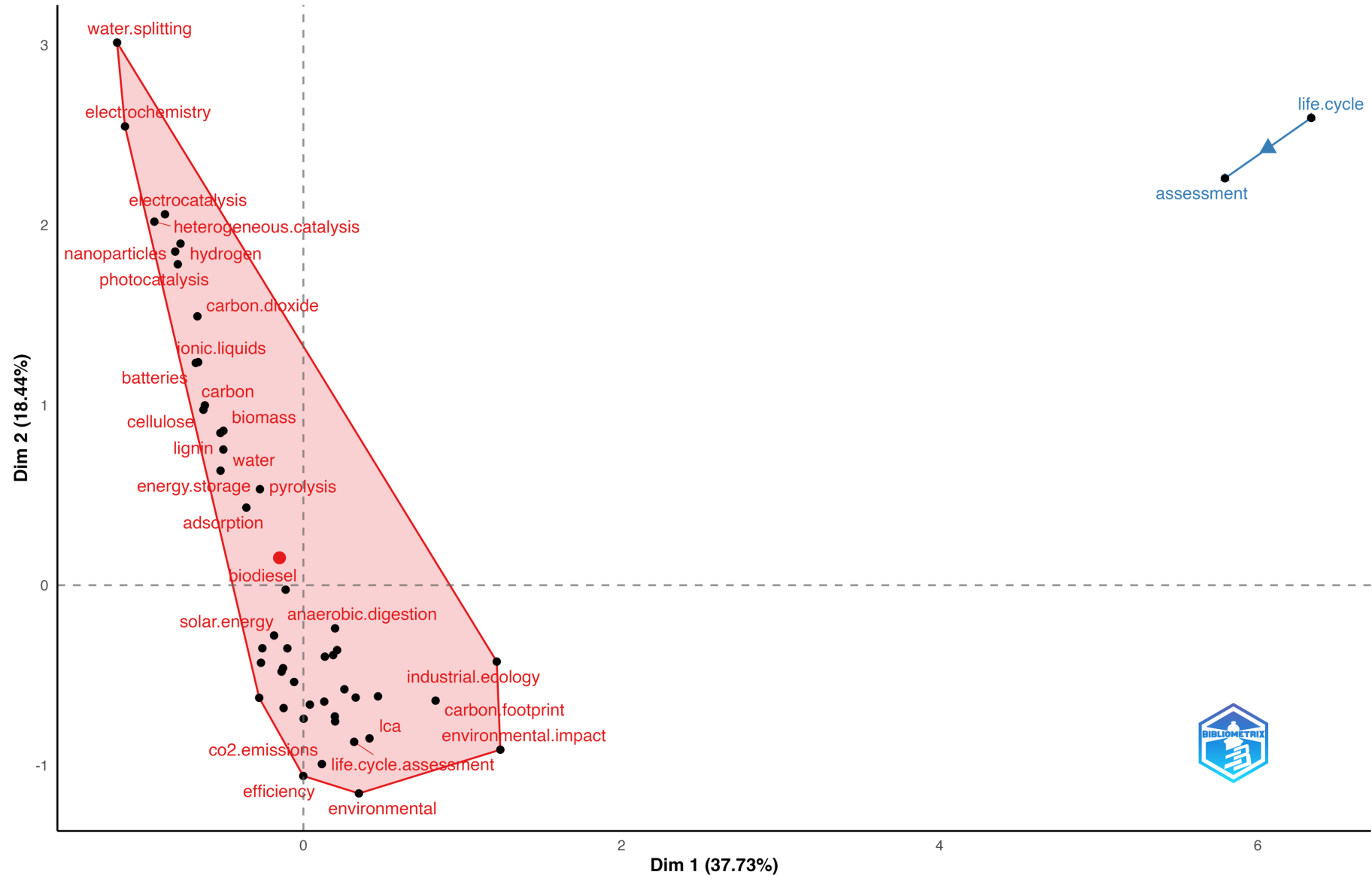
# MCA – AUTHOR KEYWORDS 2001-2007



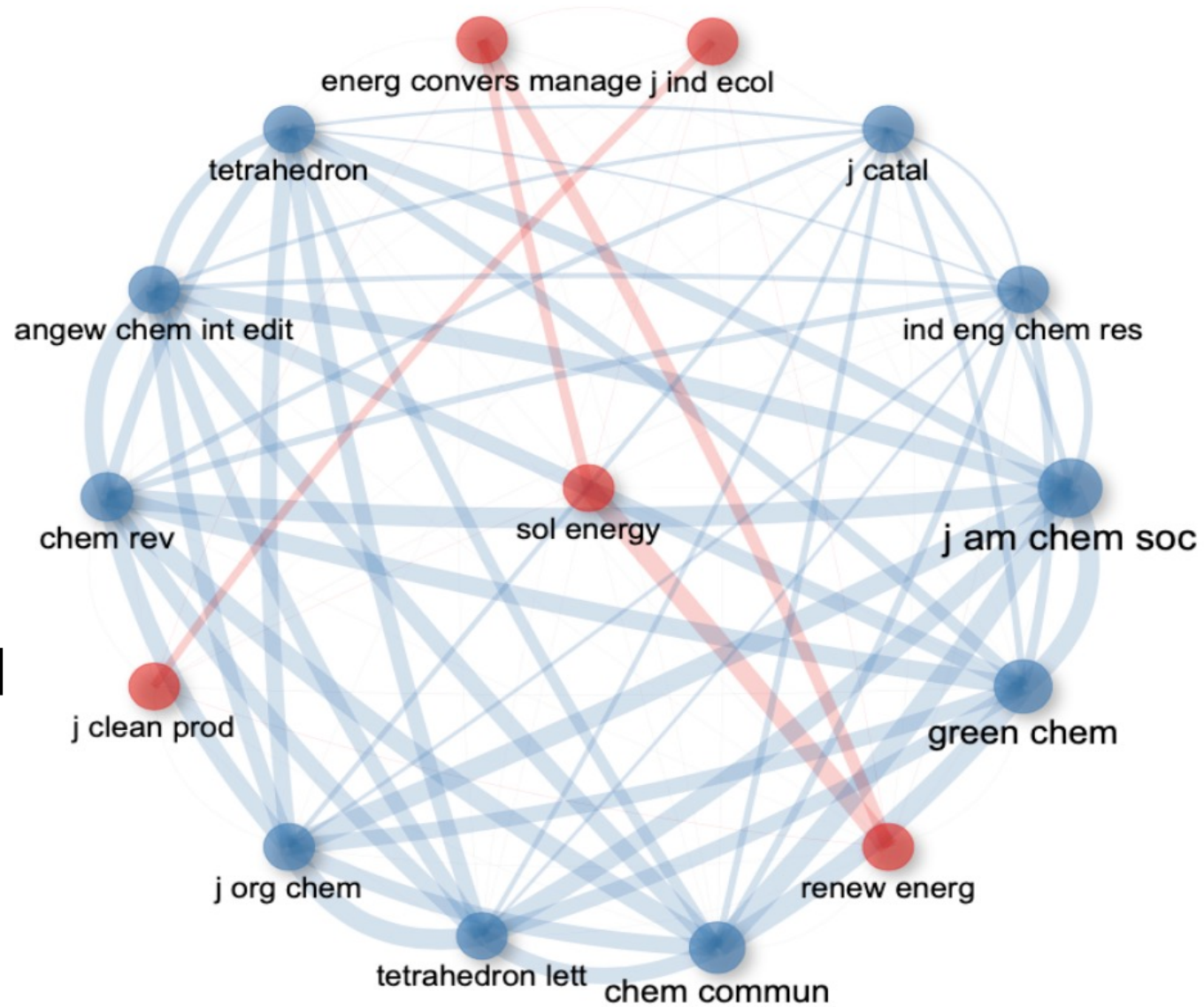
# MCA – AUTHOR KEYWORDS 2008-2014



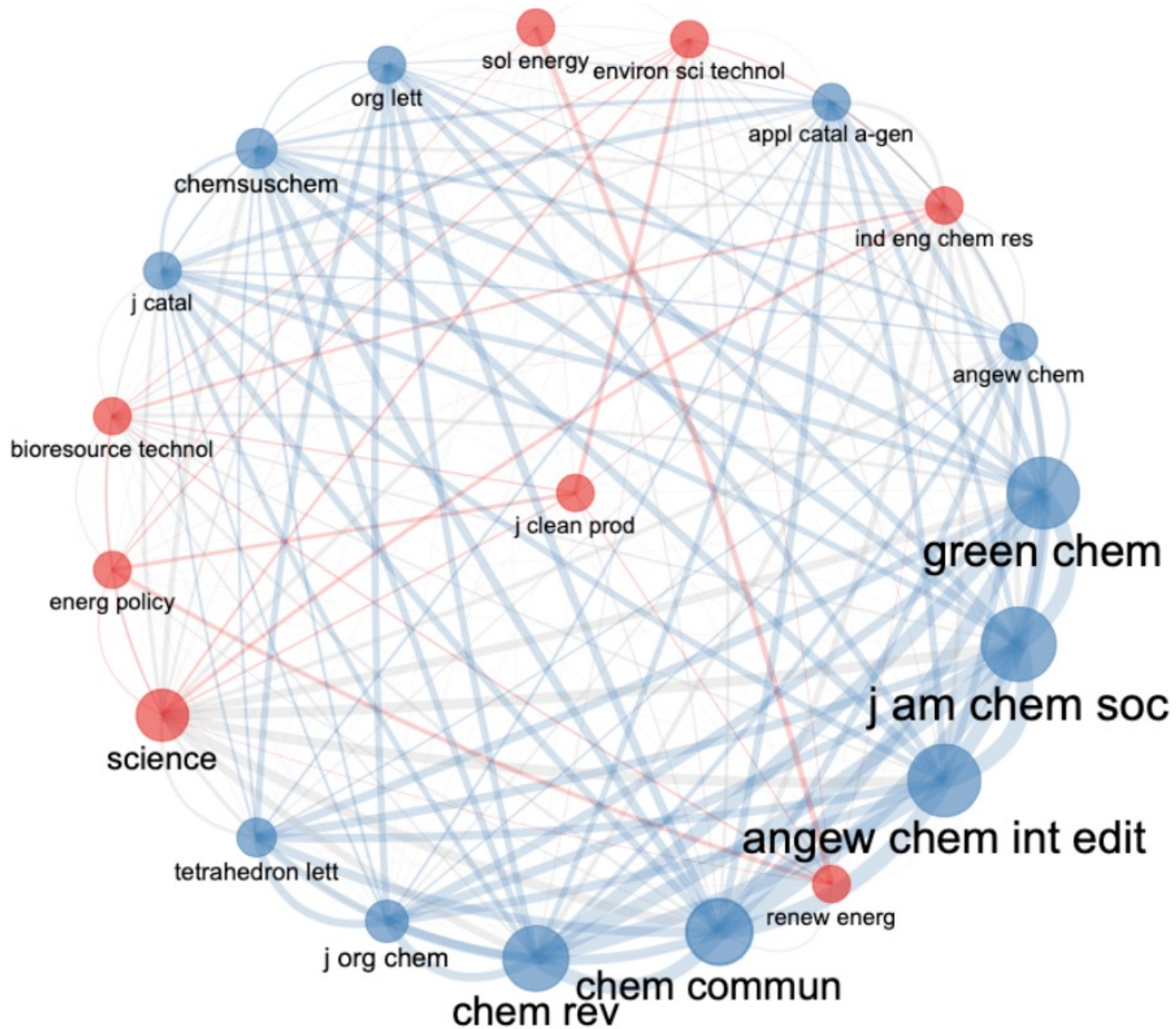
# MCA – AUTHOR KEYWORDS 2015-2021



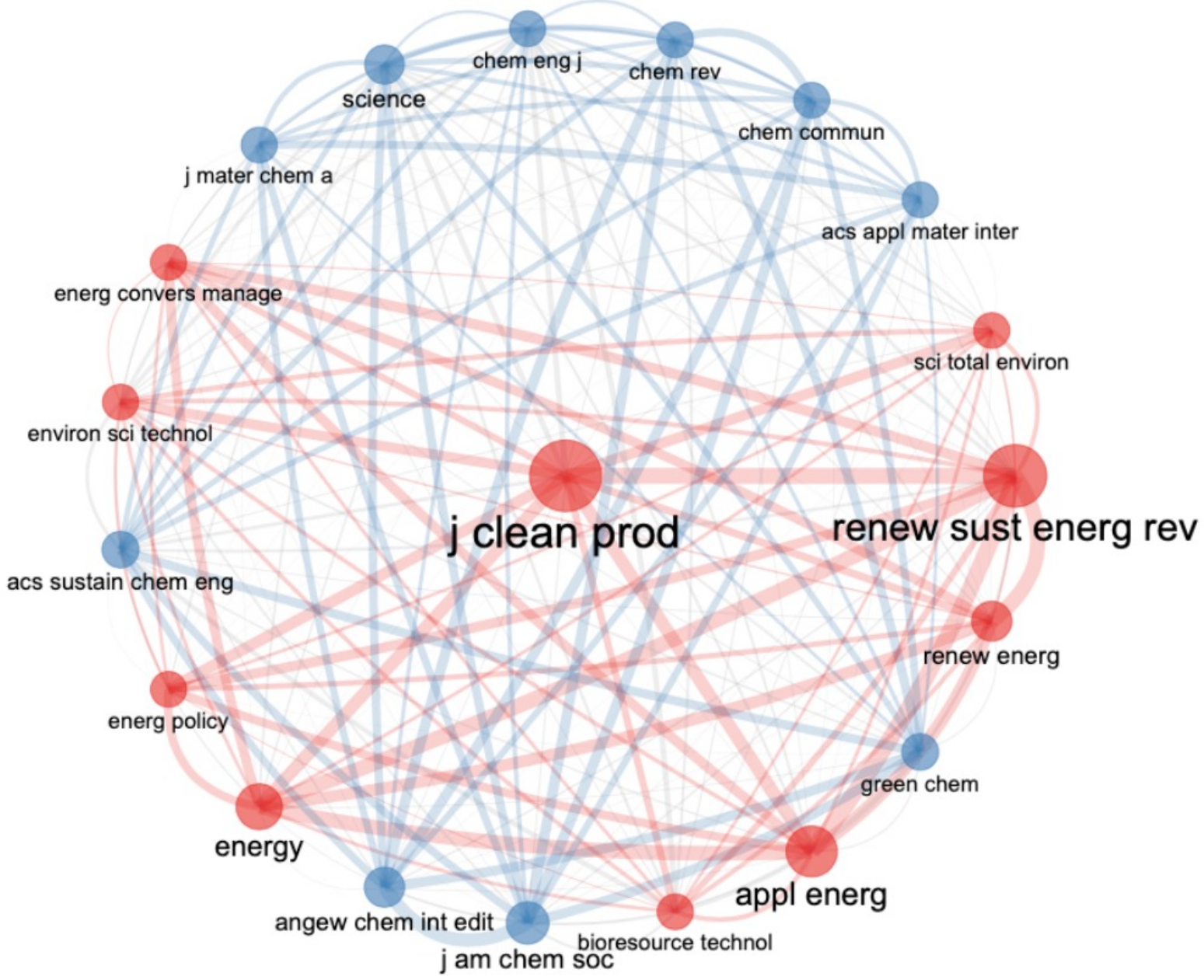
# 2001-2007 JOURNAL CO-CITATION



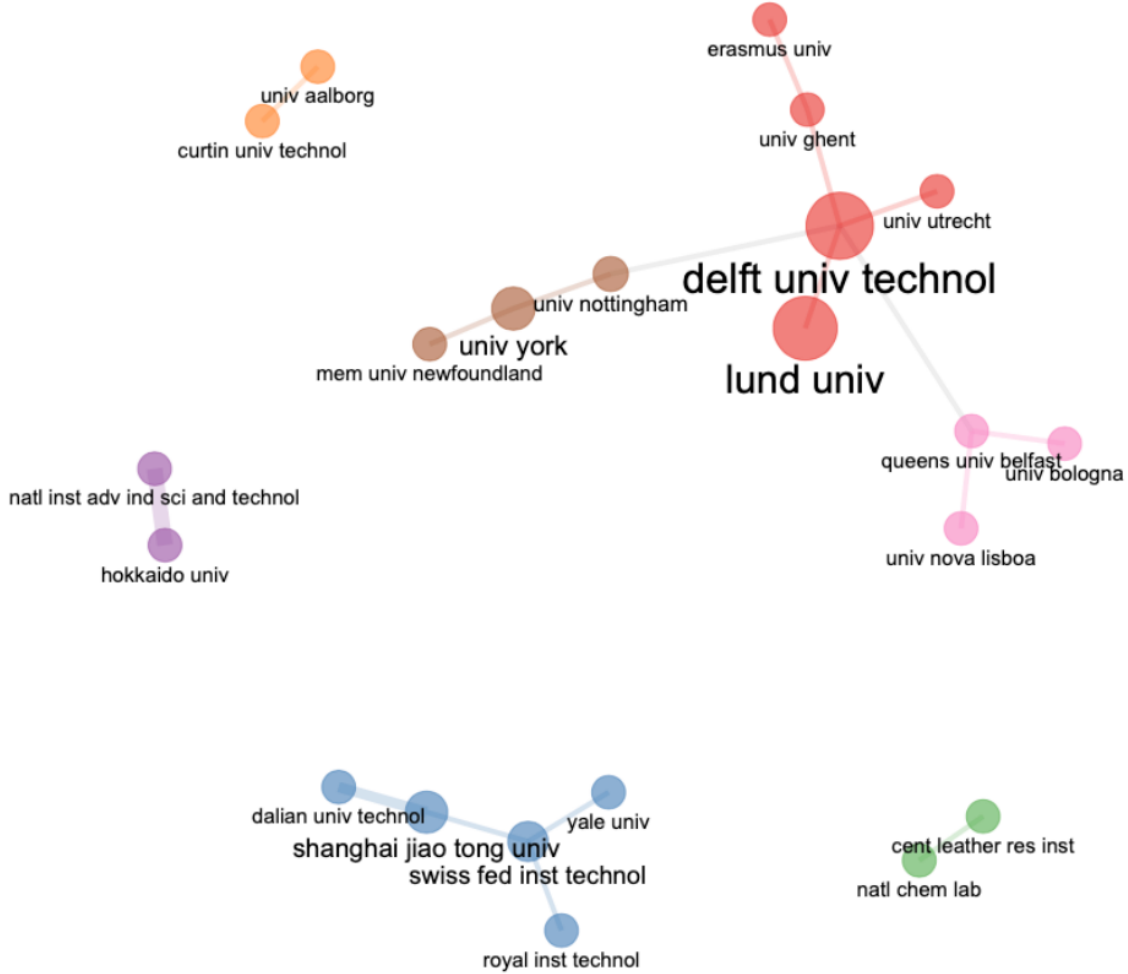
# 2008-2014 JOURNAL CO-CITATION



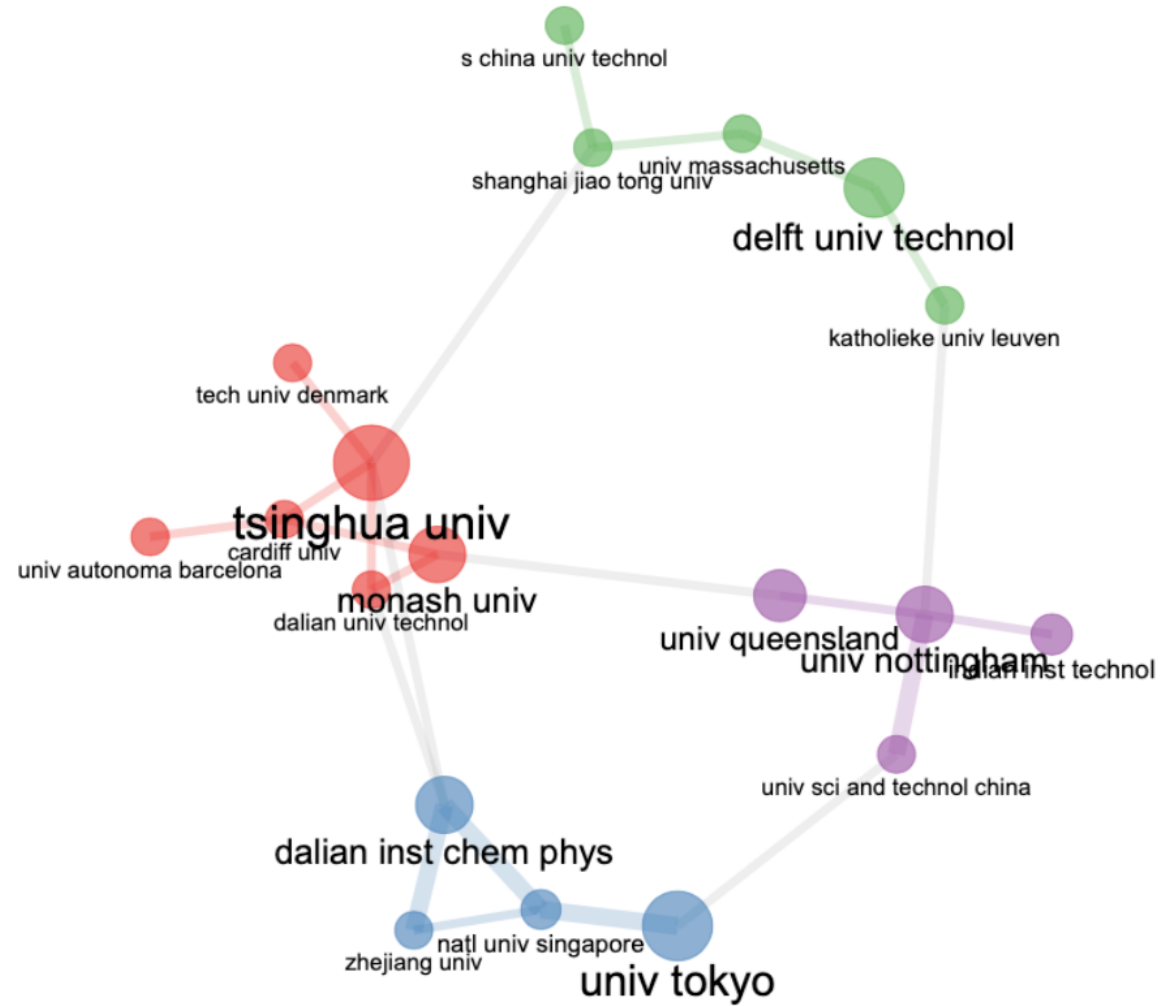
# 2015-2021 JOURNAL CO-CITATION



# 2001-2007 AFFILIATION CO-AUTHORSHIP

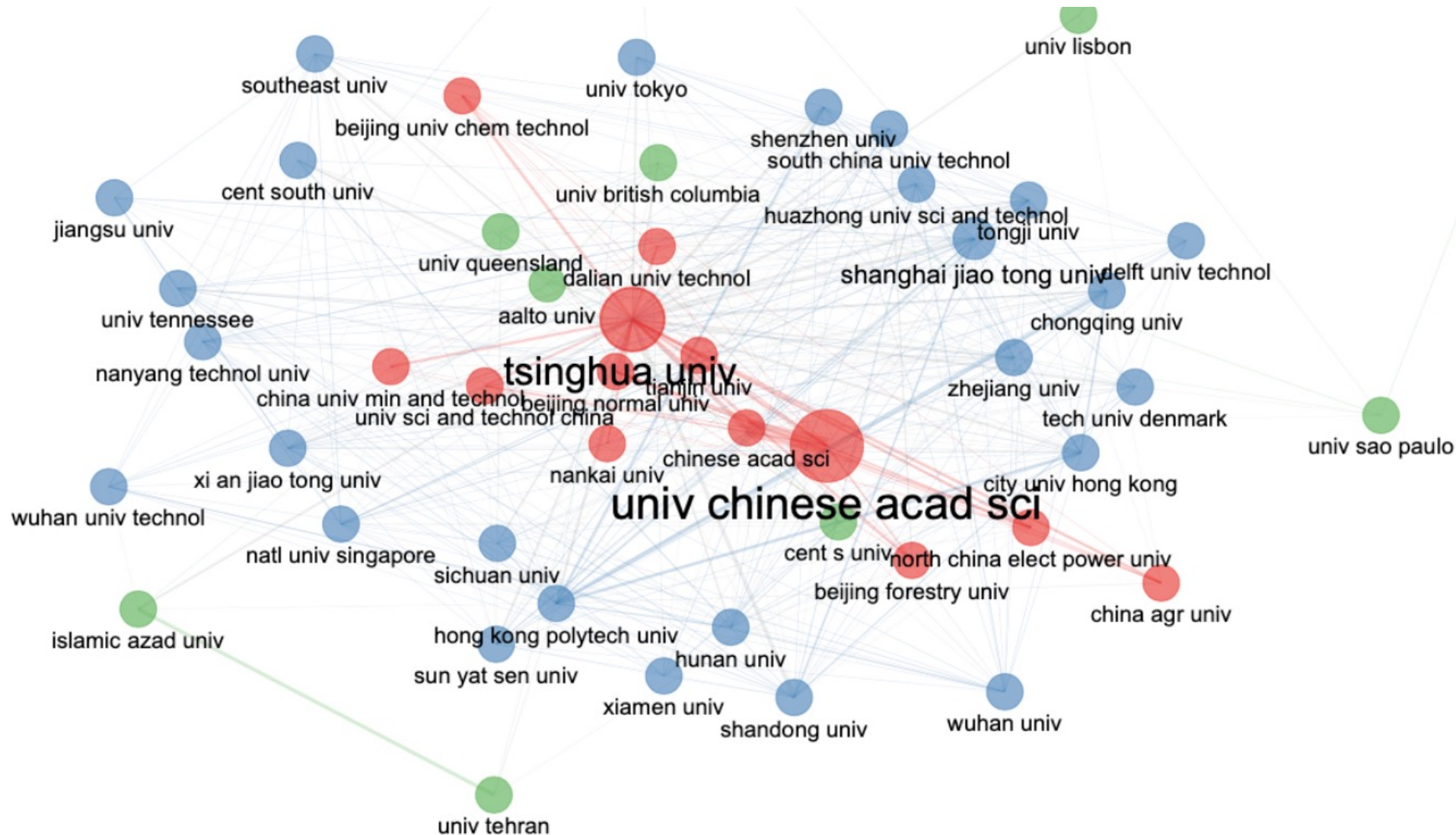


# 2008-2014 AFFILIATION CO-AUTHORSHIP

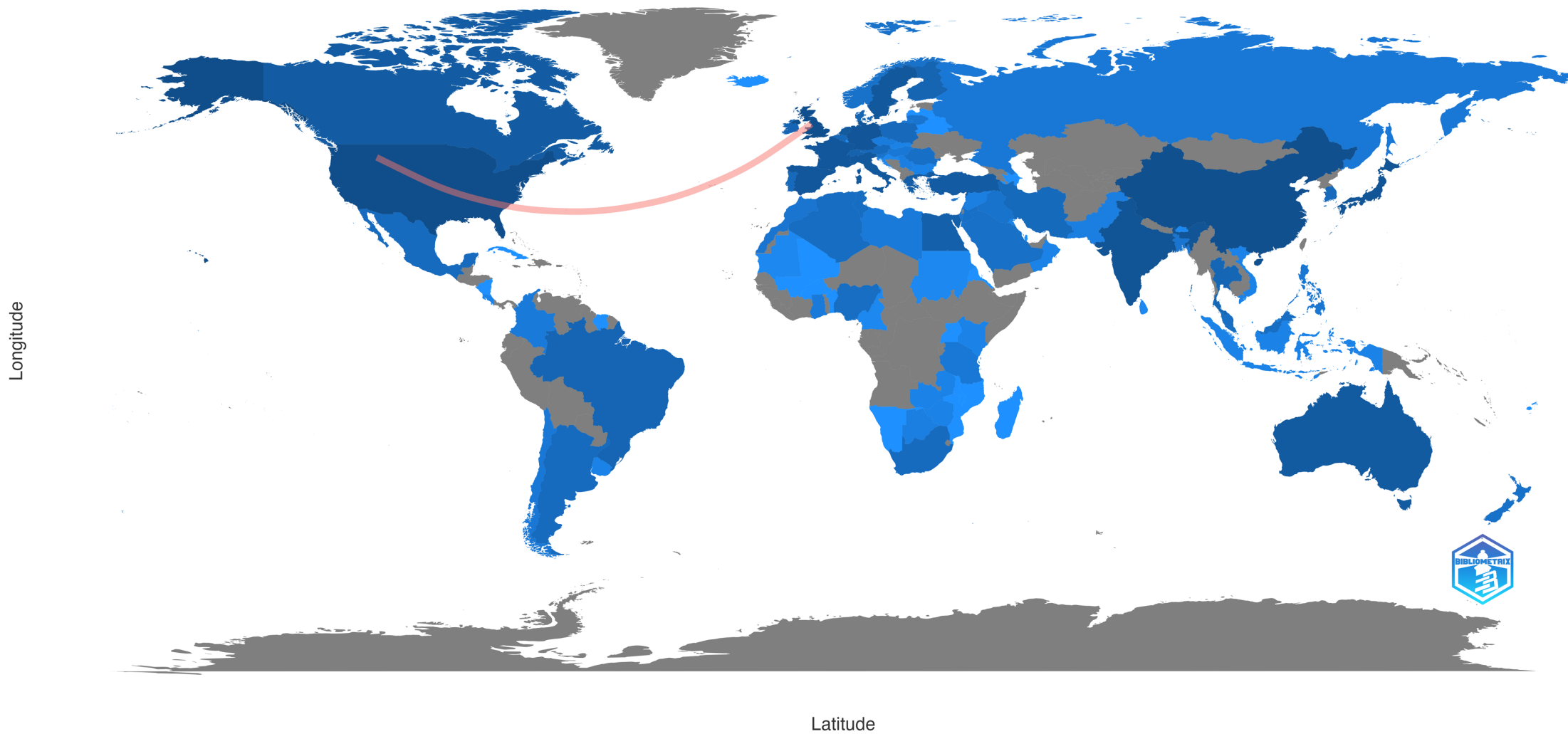




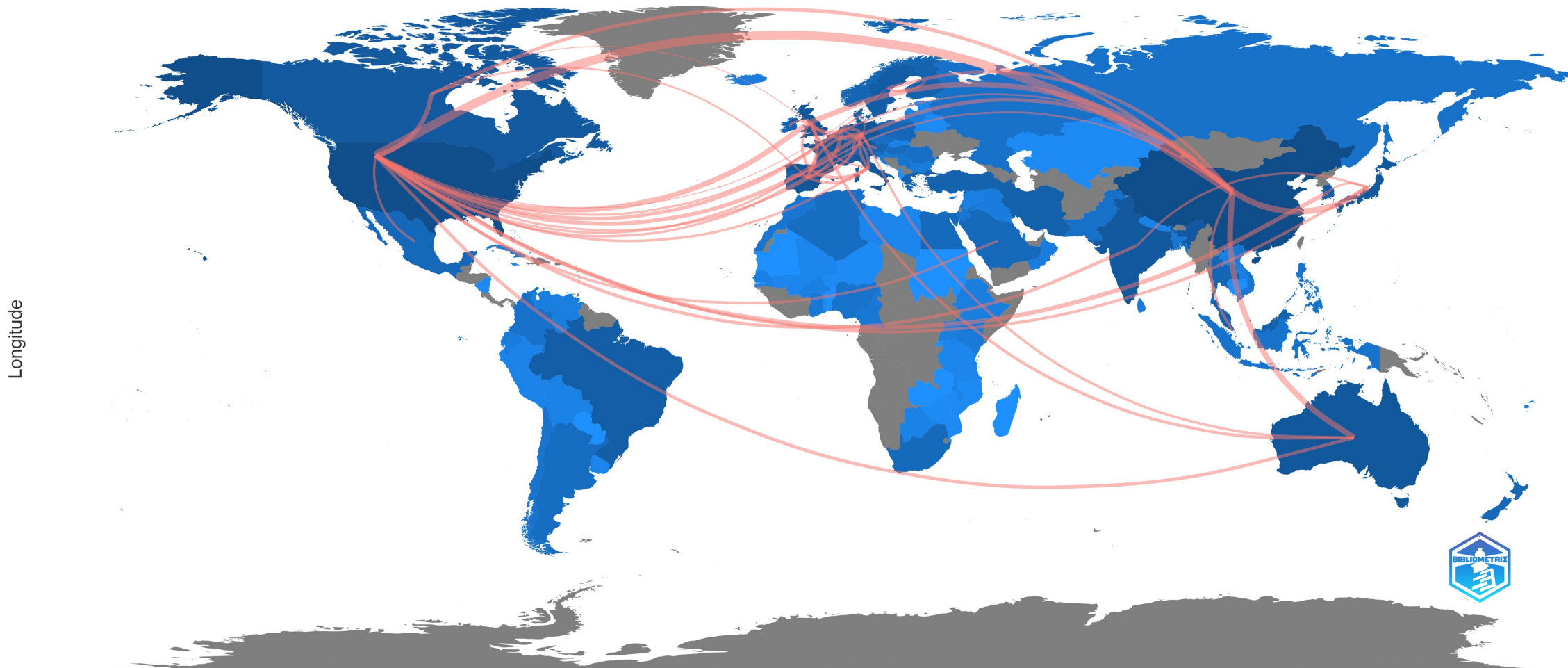
# 2015-2021 AFFILIATION CO-AUTHORSHIP



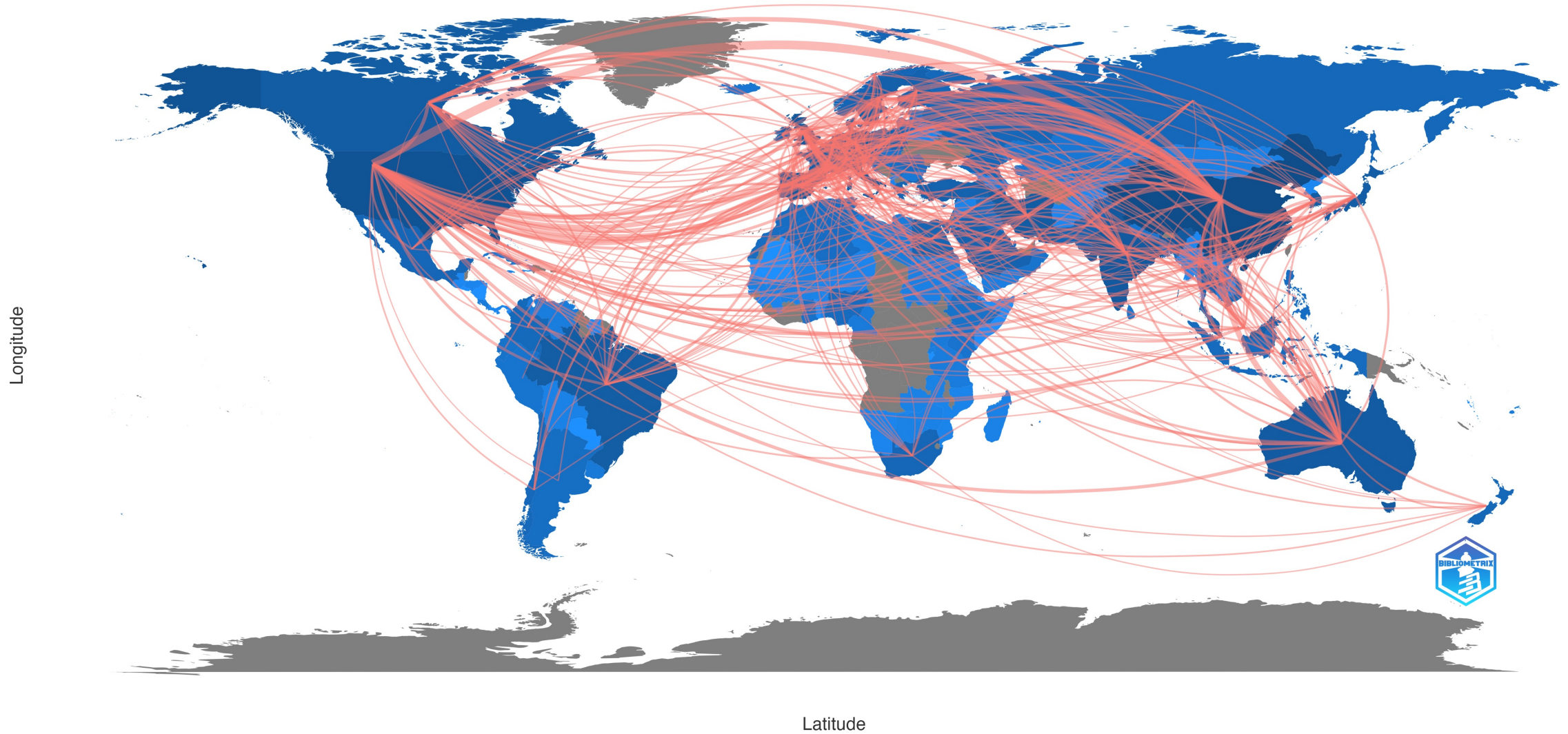
# 2001-2007 CO-AUTHORSHIP MAP



# 2008-2014 CO-AUTHORSHIP MAP



# 2015-2021 CO-AUTHORSHIP MAP



# FINDINGS

- Shift from the chemistry-related journals to the energy research + life cycle assessment.
- Increase in the symbolic capital associated with the *Journal of Cleaner Production*.
- More significant presence of Chinese universities in 2015-2021.
- Social capital at a global level of countries (with the extension to more countries in the Global South). Sustainability research *with* vis-à-vis research *on*?
- Role of Japan (and the University of Tokyo) in the “disciplinarianisation” of the field (the journal *Sustainability Science*).
- The topic of “Sustainability” versus “Sustainable Development.”

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