

# Bibliometric Analysis

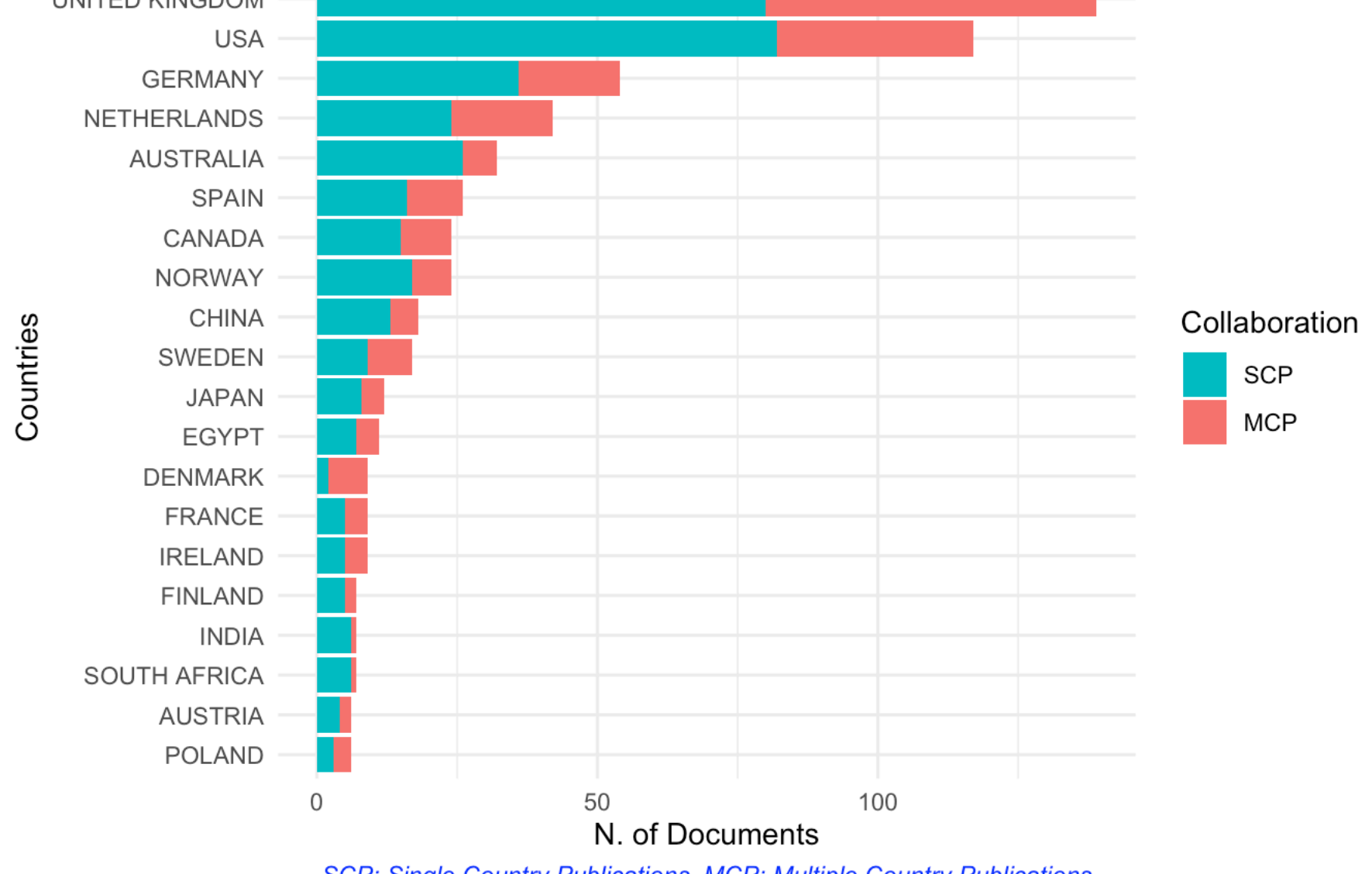
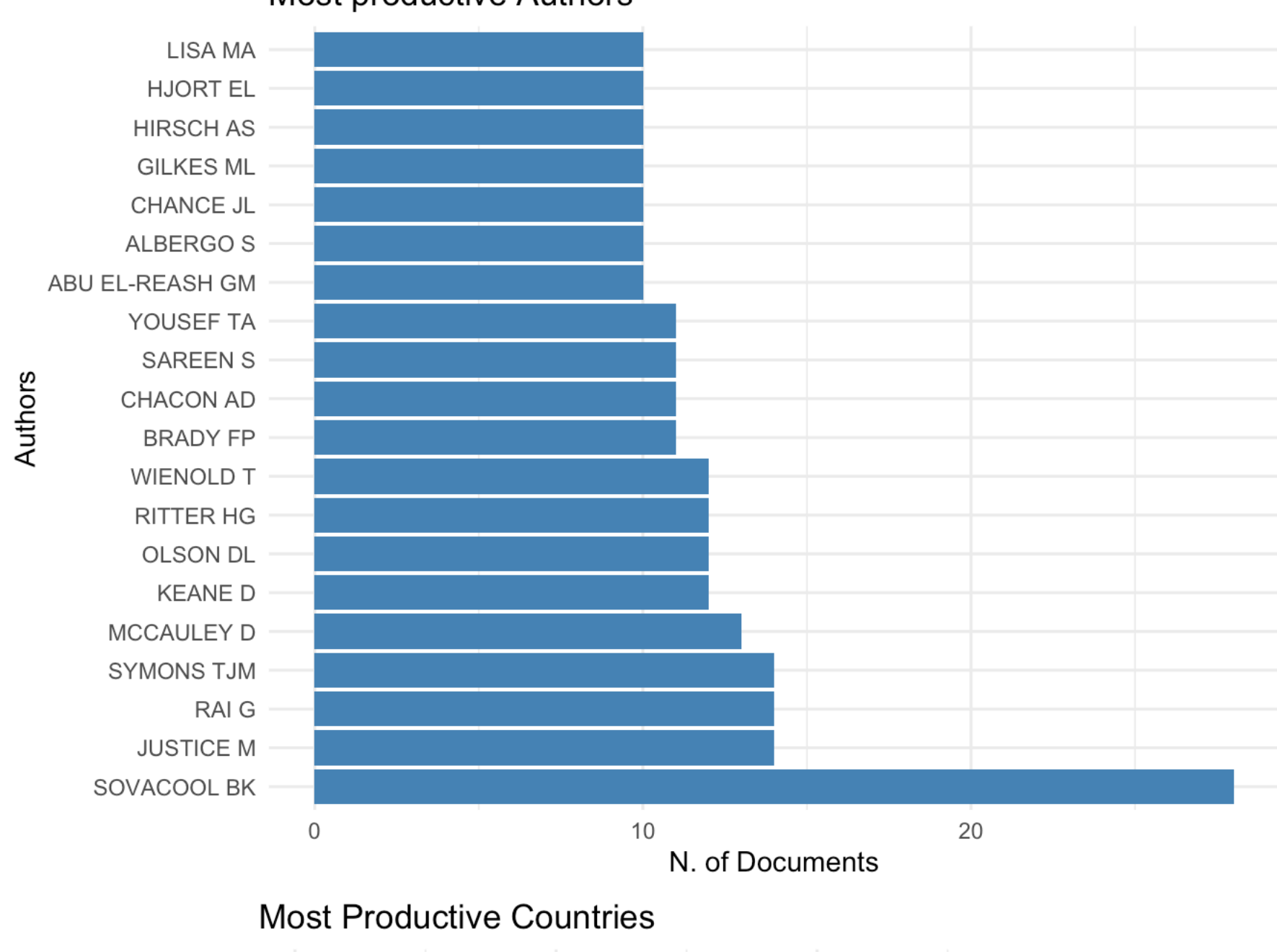
Dr. Mudit Kumar Singh

#Install the package in Rstudio using the command `install.packages("bibliometrix")`

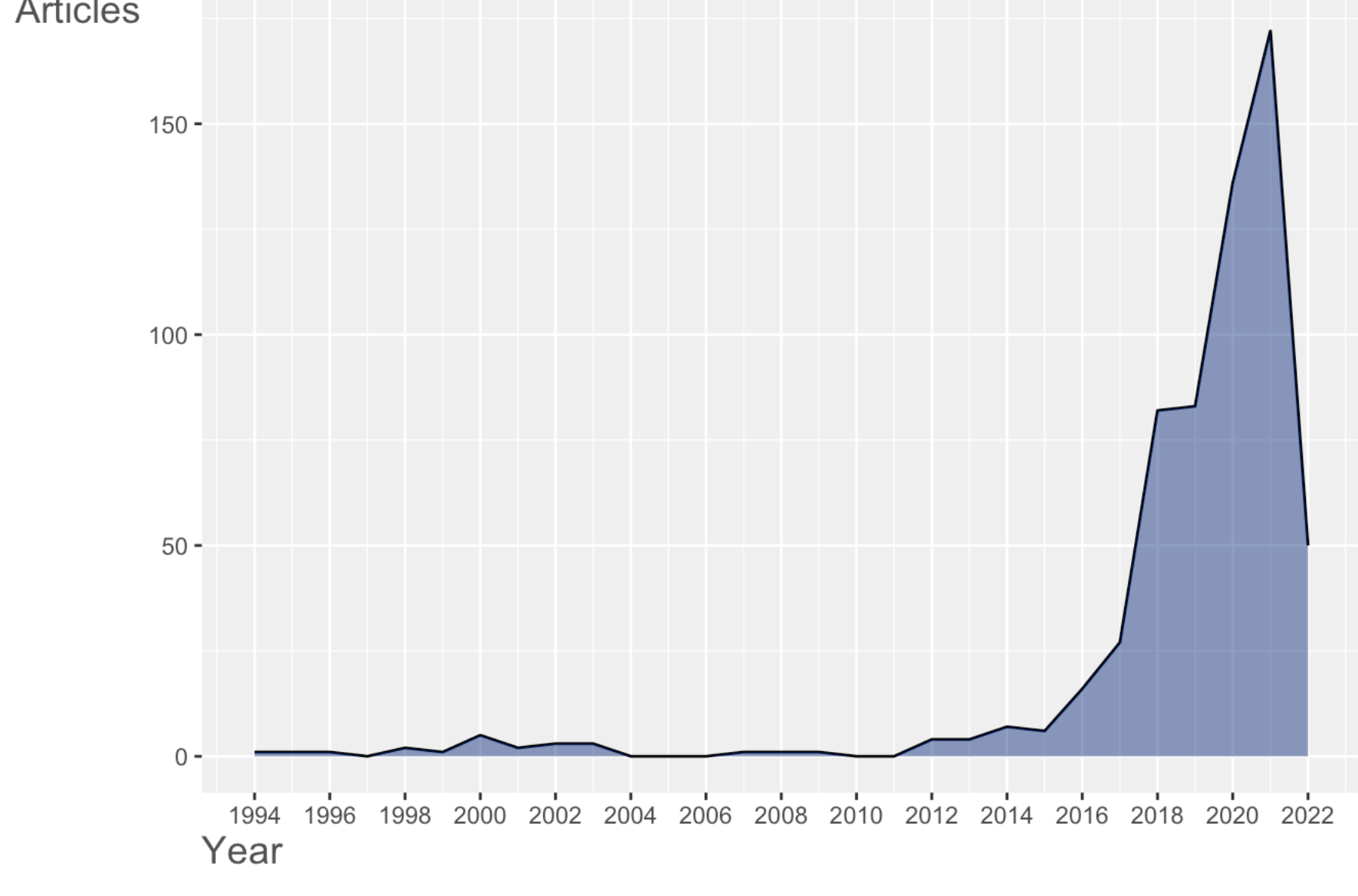
```
library(bibliometrix)
```

## Importing the file and Descriptive Analysis

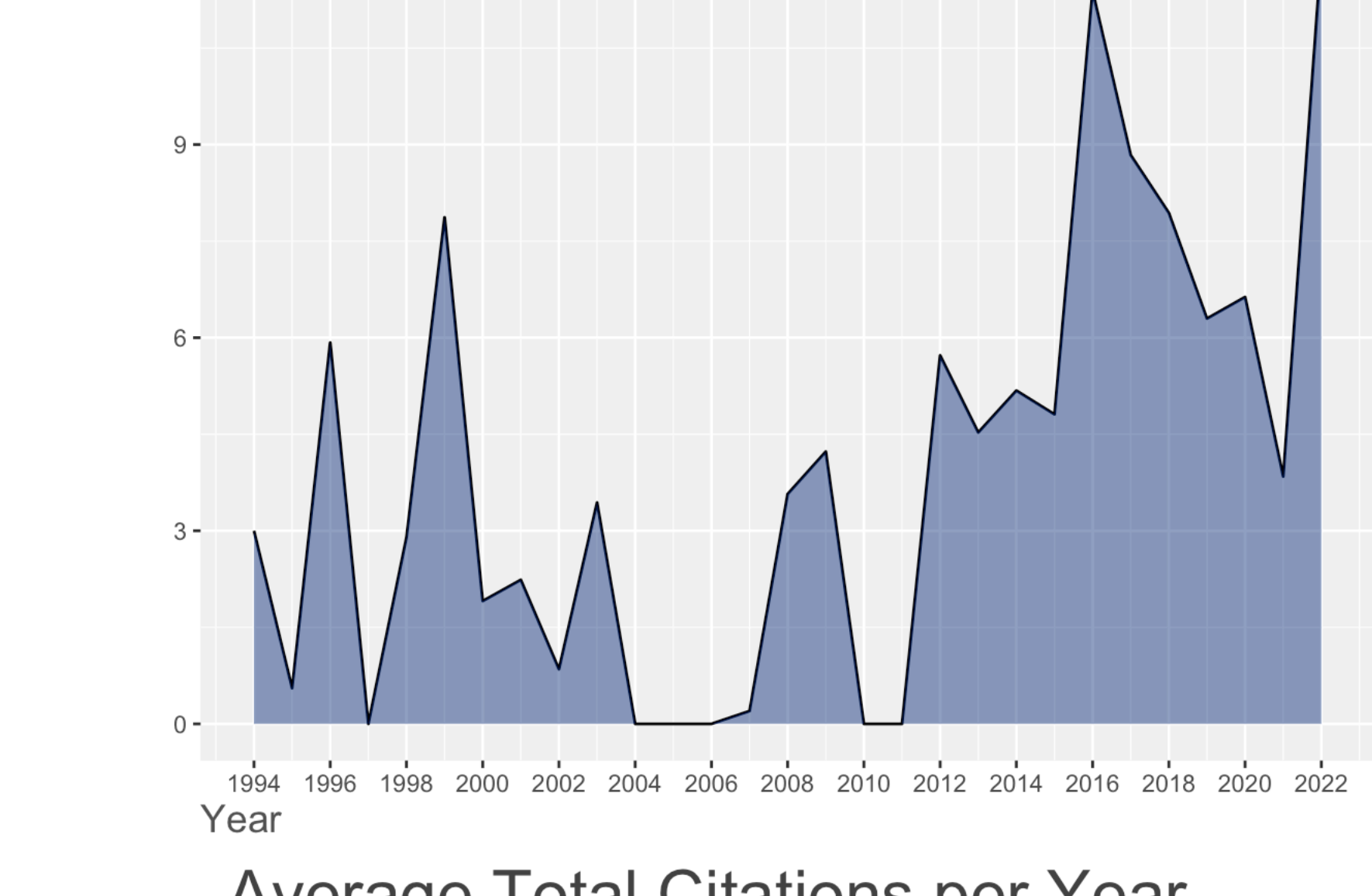
```
M<-convert2df(file="https://raw.githubusercontent.com/r4work/Bibliometric-Analysis/main/Running%20analysis/JET.bi
b",dbsource="wos",
              format = "bibtex")
r<-biblioAnalysis(M,sep=";")
options(width=100)
summary(r,k=10)
plot(x = r, k = 20, pause = FALSE)
```



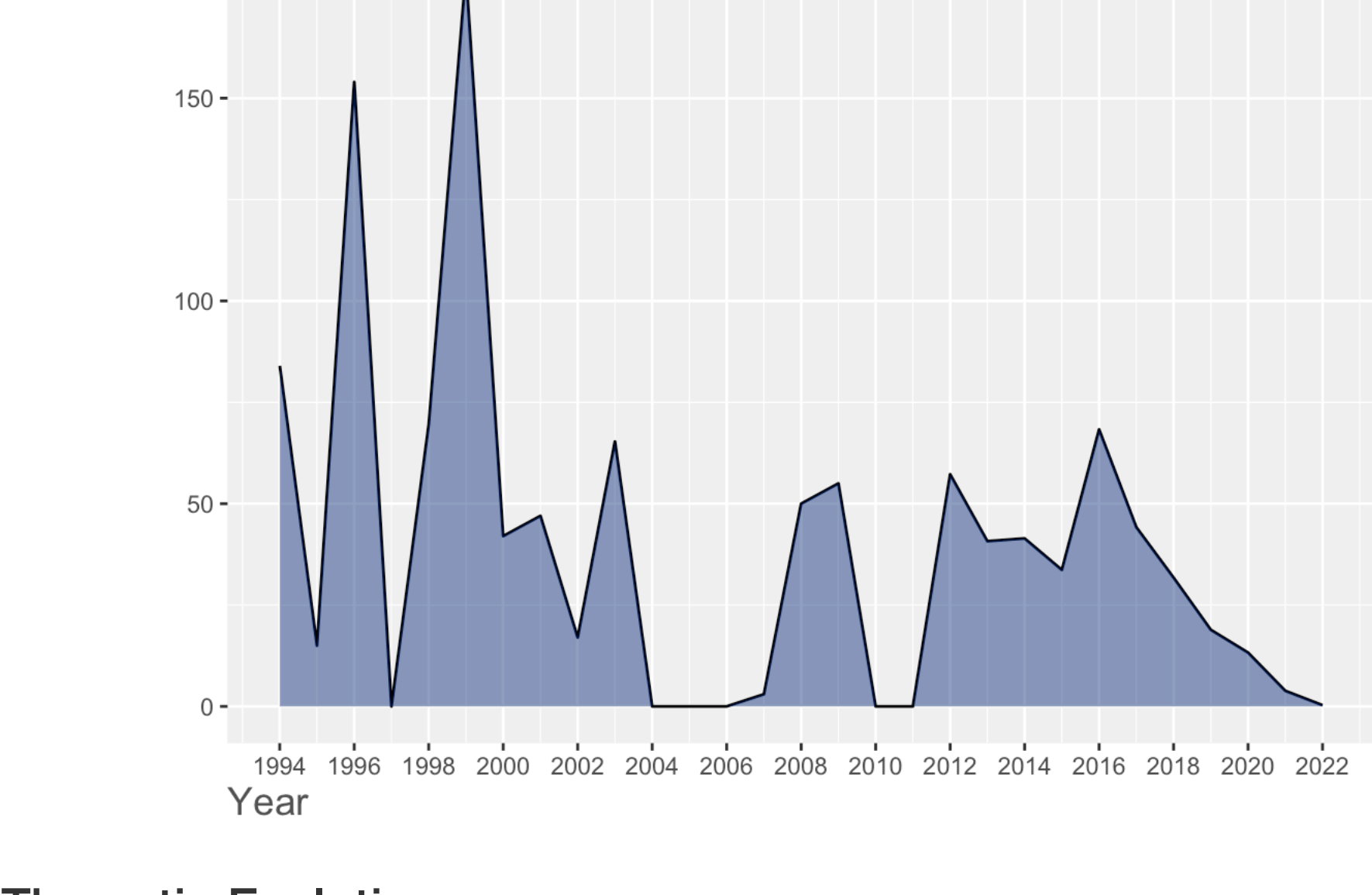
## Annual Scientific Production



## Average Article Citations per Year



## Average Total Citations per Year



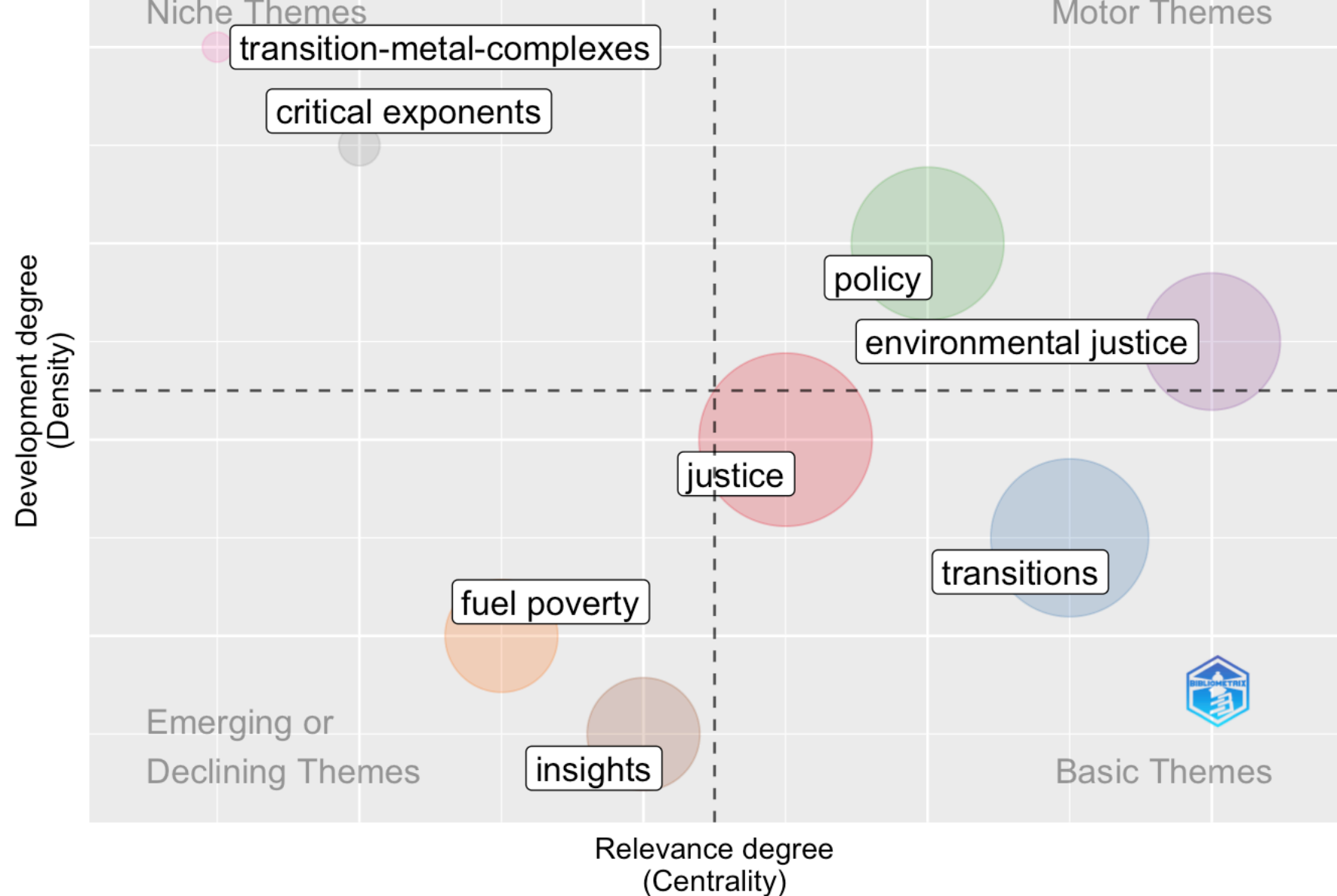
## Thematic Evolution

```
res1<-thematicEvolution(M,field="ID",years=c(2015),n=500,minFreq=2,size=0.5,n.labels=1)
```

```
plotThematicEvolution(res1$Nodes,res1$Edges,measure="inclusion")
```

## Thematic Maps

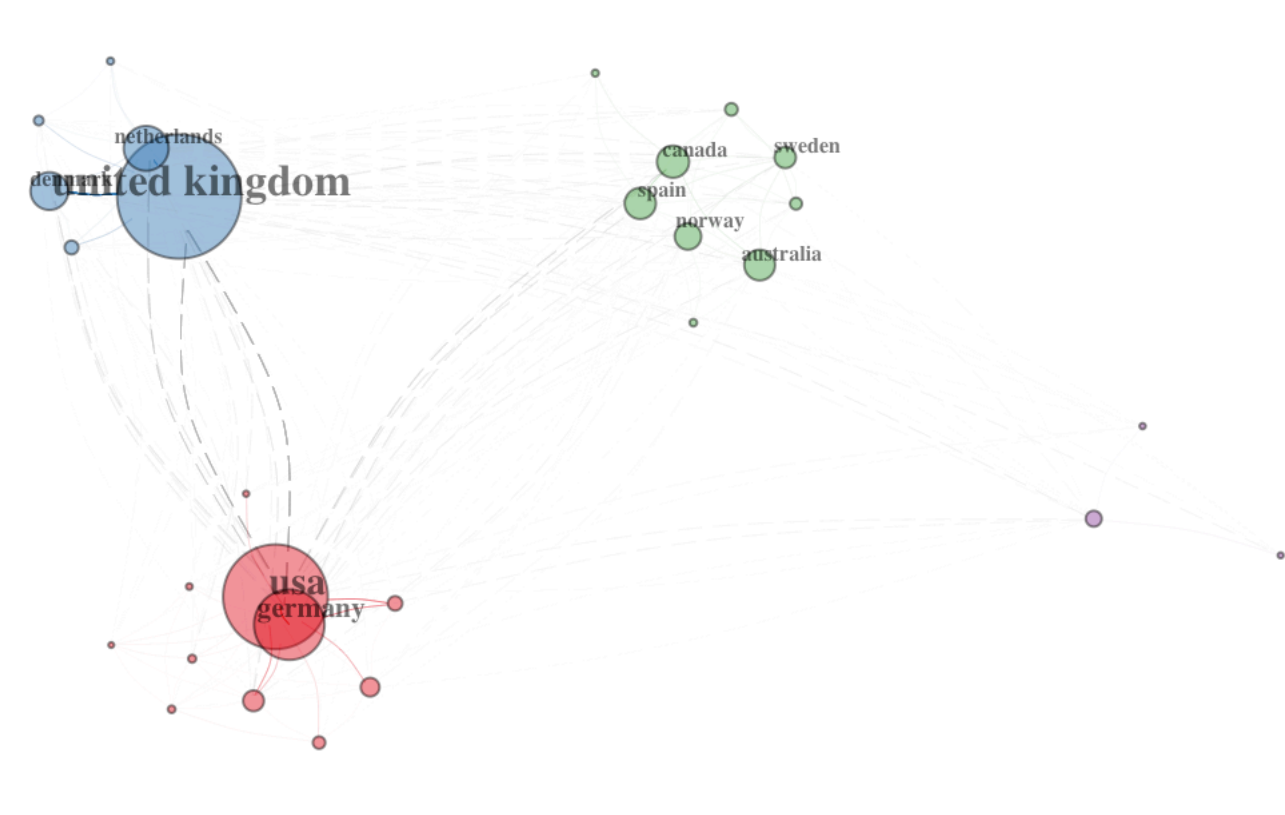
```
thematicMap(M,field="ID",n=250,minfreq=2,size=0.5,n.labels=1,repel=T)
```



## Country Collaboration

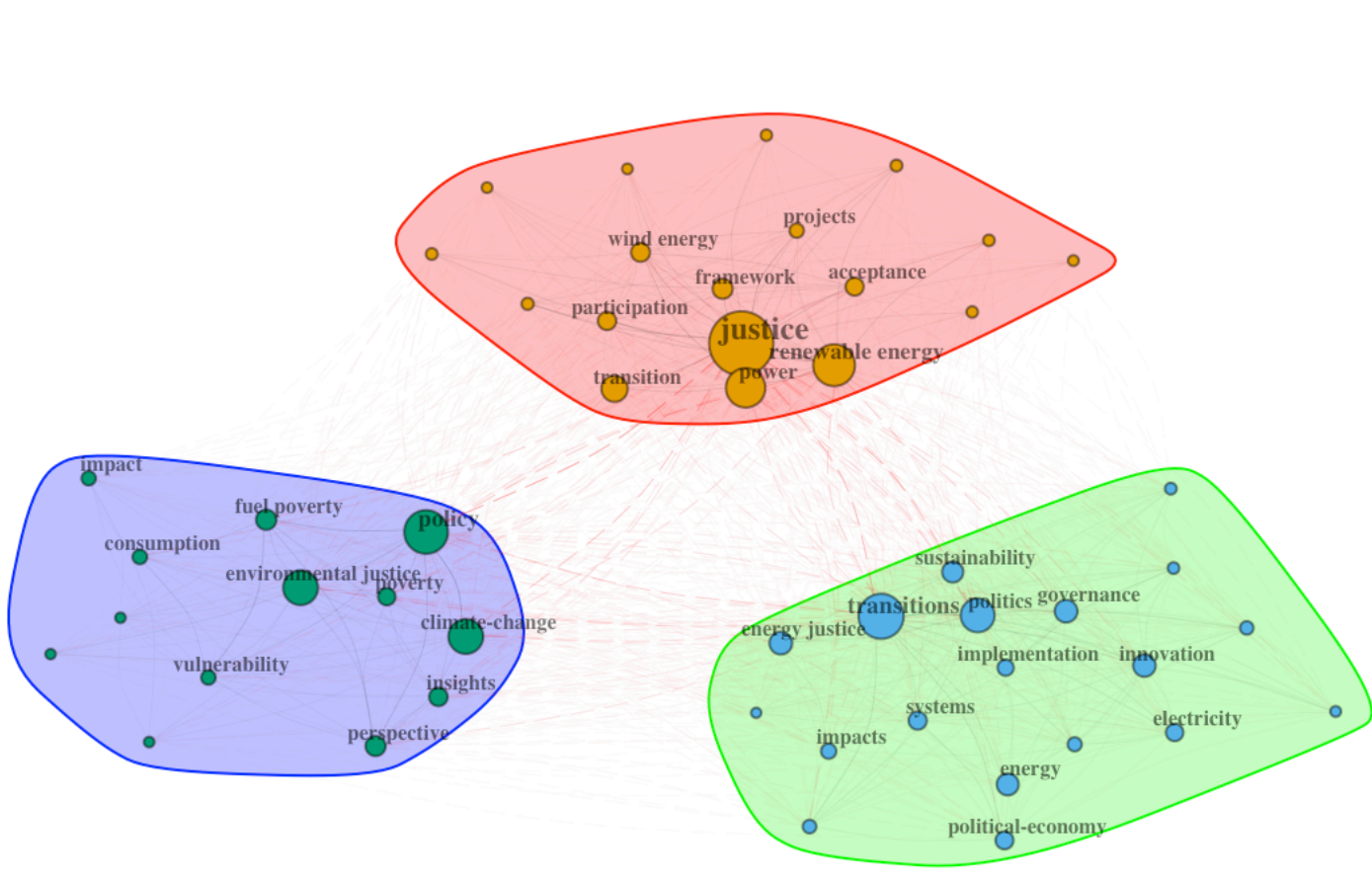
```
Mc <- metaTagExtraction(M, Field = "AU_CO", sep = ";")
NetMatrix <- biblioNetwork(Mc, analysis = "collaboration",
                           network = "countries", sep = ";")
# Plot the country network
networkPlot(NetMatrix, n = 30,
            Title = "Country Collaboration", type = "auto",
            normalize="association",label=TRUE,
            size=T, remove.multiple=F,remove.isolates=T,label.cex = T,
            edgesize=0.5, halo=F, community.repulsion = 1,
            curved=0.2, noloops=T,label.n=10,
            labels=1.5)
```

## Country Collaboration



## Keyword Occurrence

```
Mk <- metaTagExtraction(M, Field = "ID", sep = ";")
NetkeyMatrix <- biblioNetwork(Mk, analysis = "co-occurrences",
                             network = "keywords", sep = ";")
#Plot the network
networkPlot(NetkeyMatrix, normalize="association",
            weighted=T, n = 50, Title = NULL, label=T,labels=1.1,
            type = "fruchterman", size=10,size.cex =T,
            edgesize = 0.2,label.n=30,
            label.cex=T,curved=0.2,halo=T)
```



You can also run the analysis using the interface generated by the command `biblioshiny()` and save the images and tables according to your convenience.