

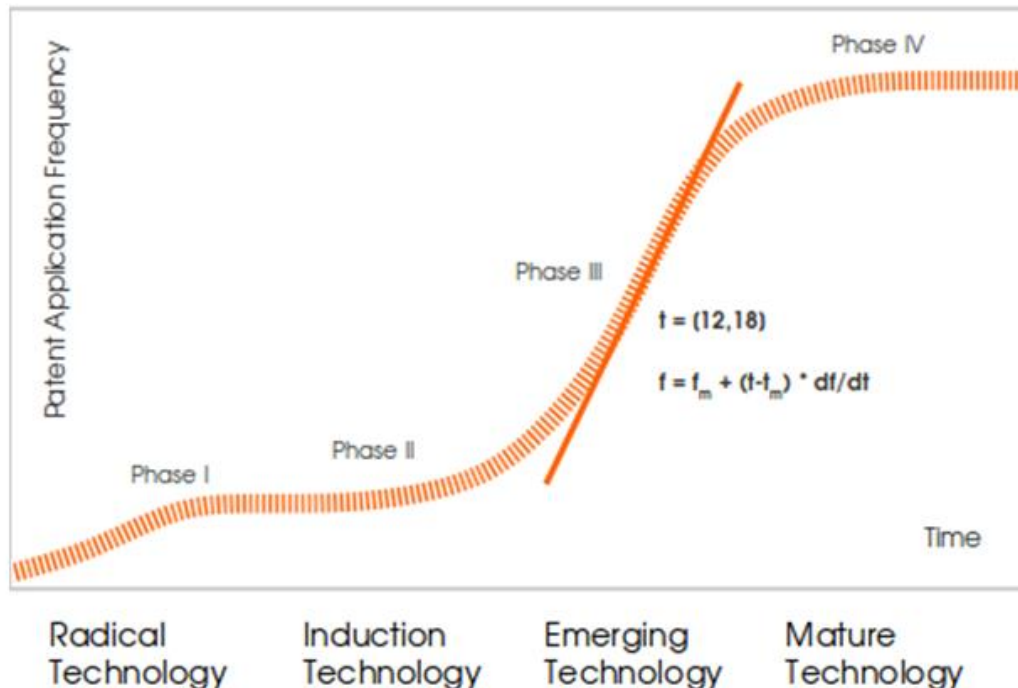
Tutorial

Technology Mapping with **percipio**<BigData>

<https://percipio-big-data.com/>

Determining Technology Maturity

The ability to map technological maturity enables strategic decisions to invest in new technologies that will capture market share and rapid profitability. This process is superior to previous attempts to supplant existing technologies using trial and error development programs whose success is based on unpredictable results.



Advanced methods based on bibliometric analysis of big data enable the identification of the current status of a technology. It's time to determine where your company is—and where it needs to be—on the technology maturity curve. **PERCIPIO** makes this effort quite smart and simple.

Technology Mapping in Practice

Evaluating maturity of specific technologies requires a sequence of activities.

1. Define the technology to be evaluated as clearly as possible.
2. Conduct patent and literature search and count the references of your technology over time.
3. Draw a graph showing number of citations over time.
4. Interpret the status of your technology.

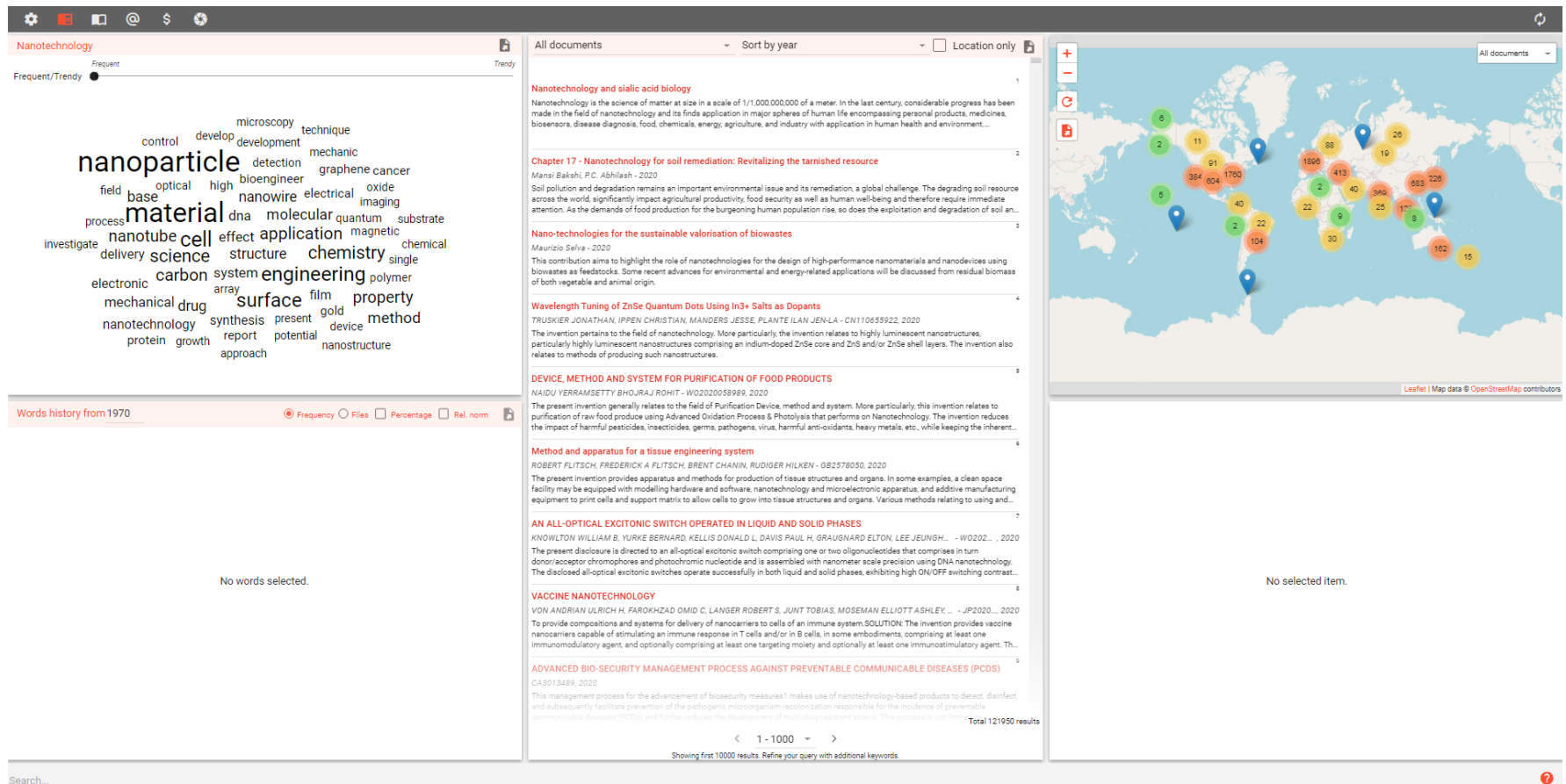
percipio<BigData> supports these activities comprehensively and efficiently.

Defining the Technology of Interest

- Characterize the technology of interest by choosing a couple of keywords.
- Get in touch with **percipio**<BigData> and ask them for setting up your private database.
- Submit your keywords.
- Access your private **percipio**<BigData> database and start the assessment.

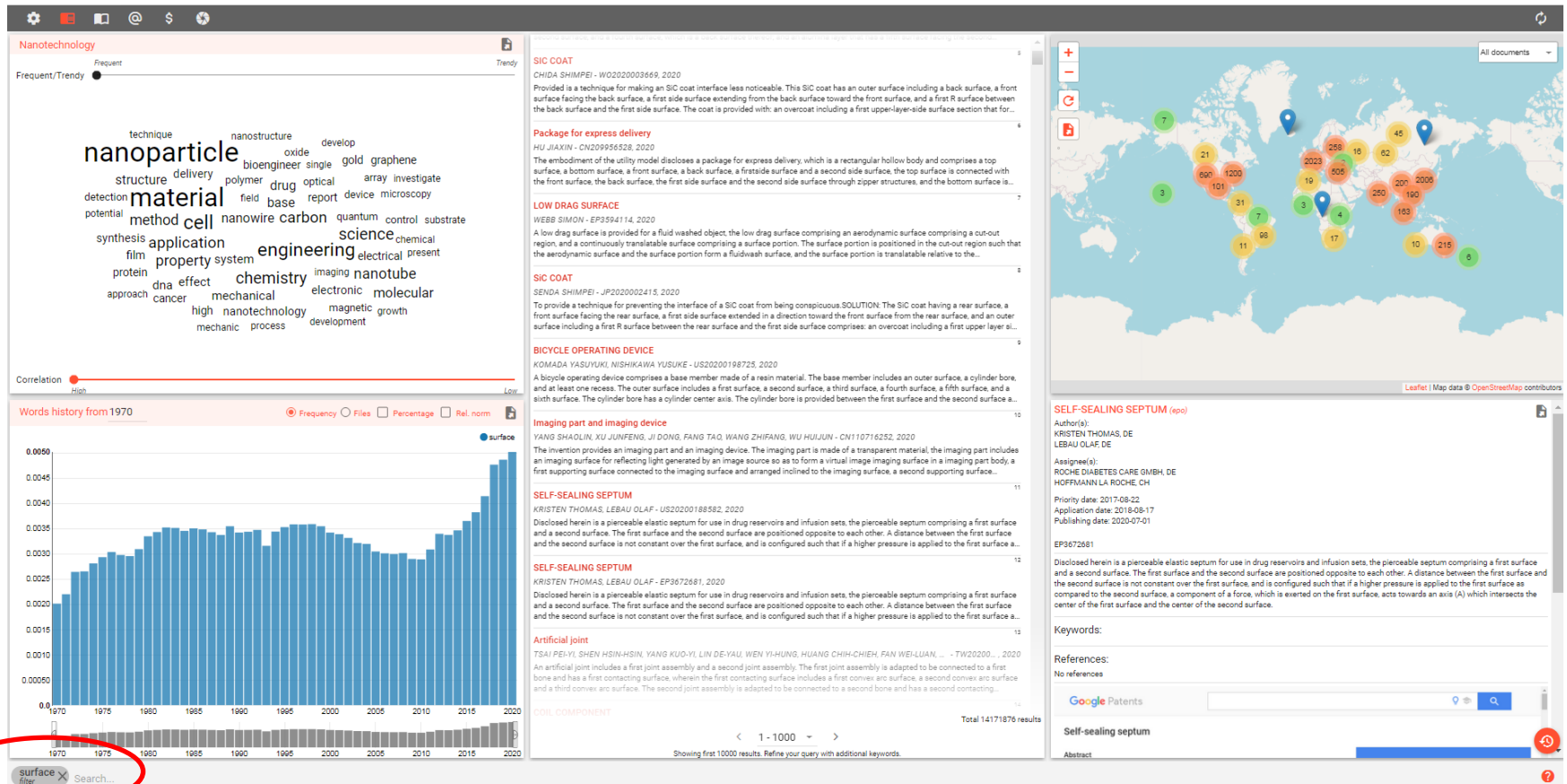
Setting Up your Private Database

Assuming that your technology topics is about nanotechnology, by accessing your private **percipio**<BigData> database you will find a default dashboard as the starting point into your evaluation journey.



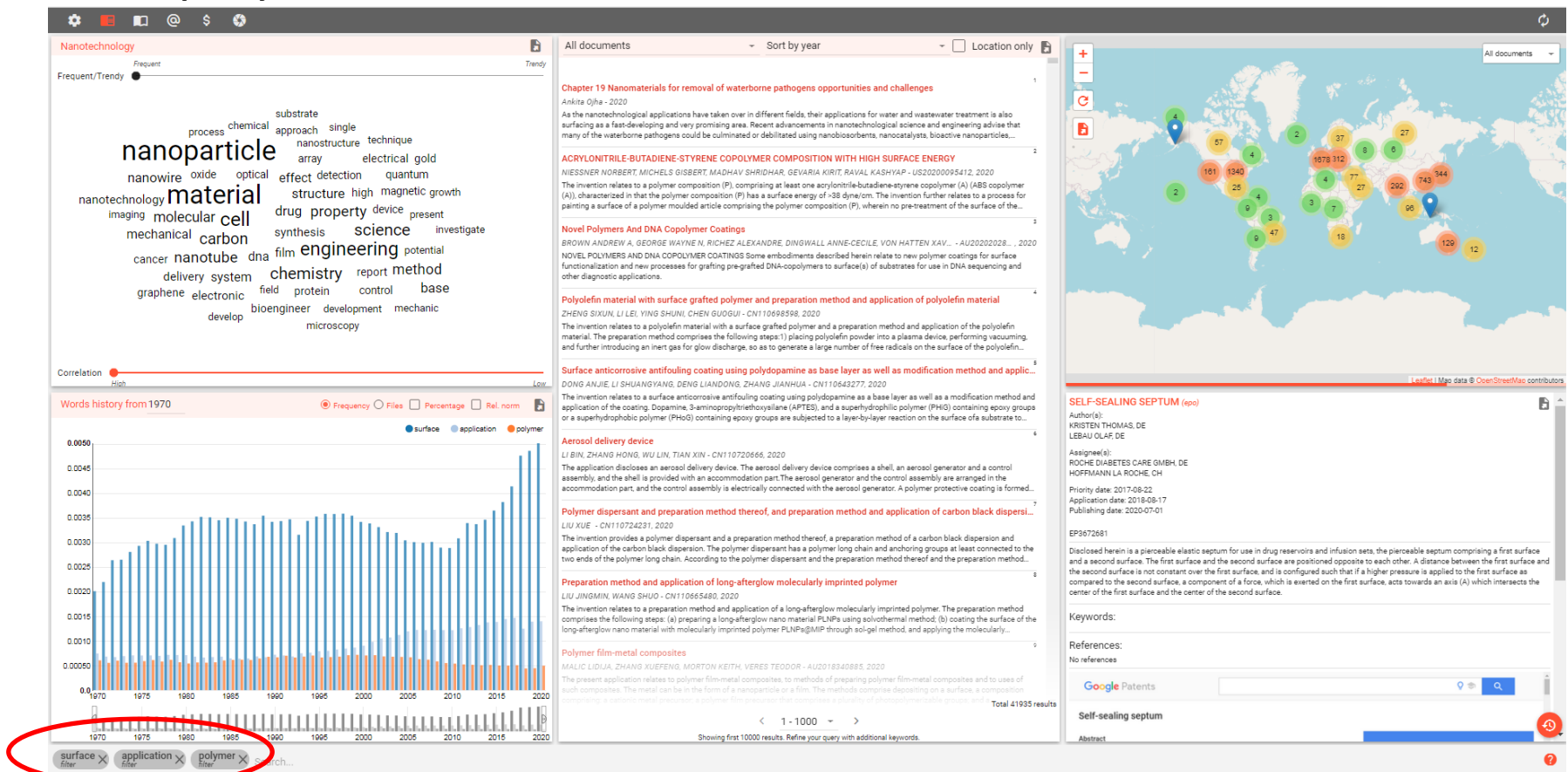
Designing a Specific Technology Focus (1)

In order to narrow down your field of interest, select terms from the word cloud and add the to search query bar at the bottom of your screen. Here the term “surface” was added.



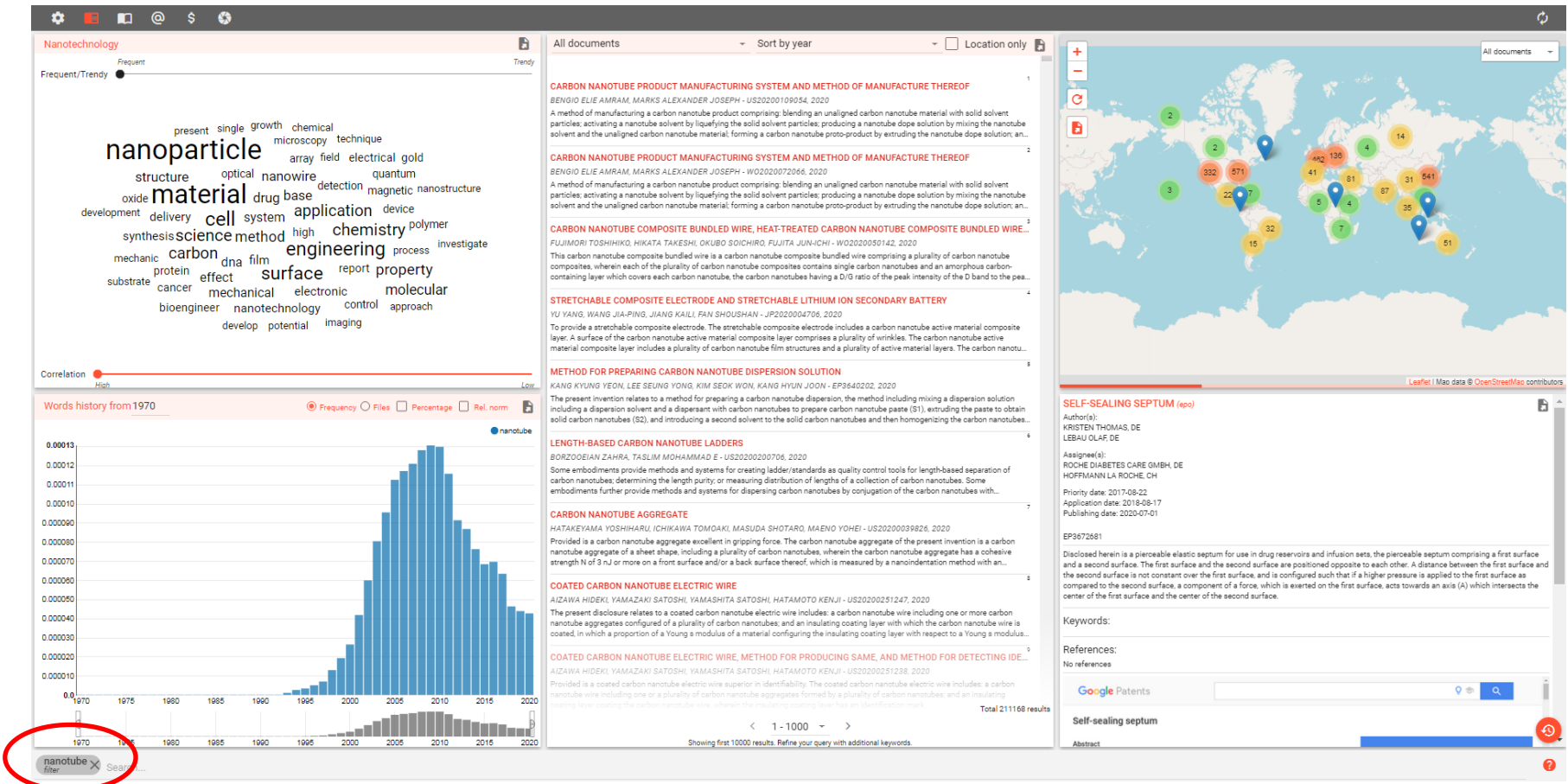
Designing a Specific Technology Focus (2)

The better you specify your technology the more specific your results are going to be. Here the terms “surface”, “application” and “polymer” have been added.



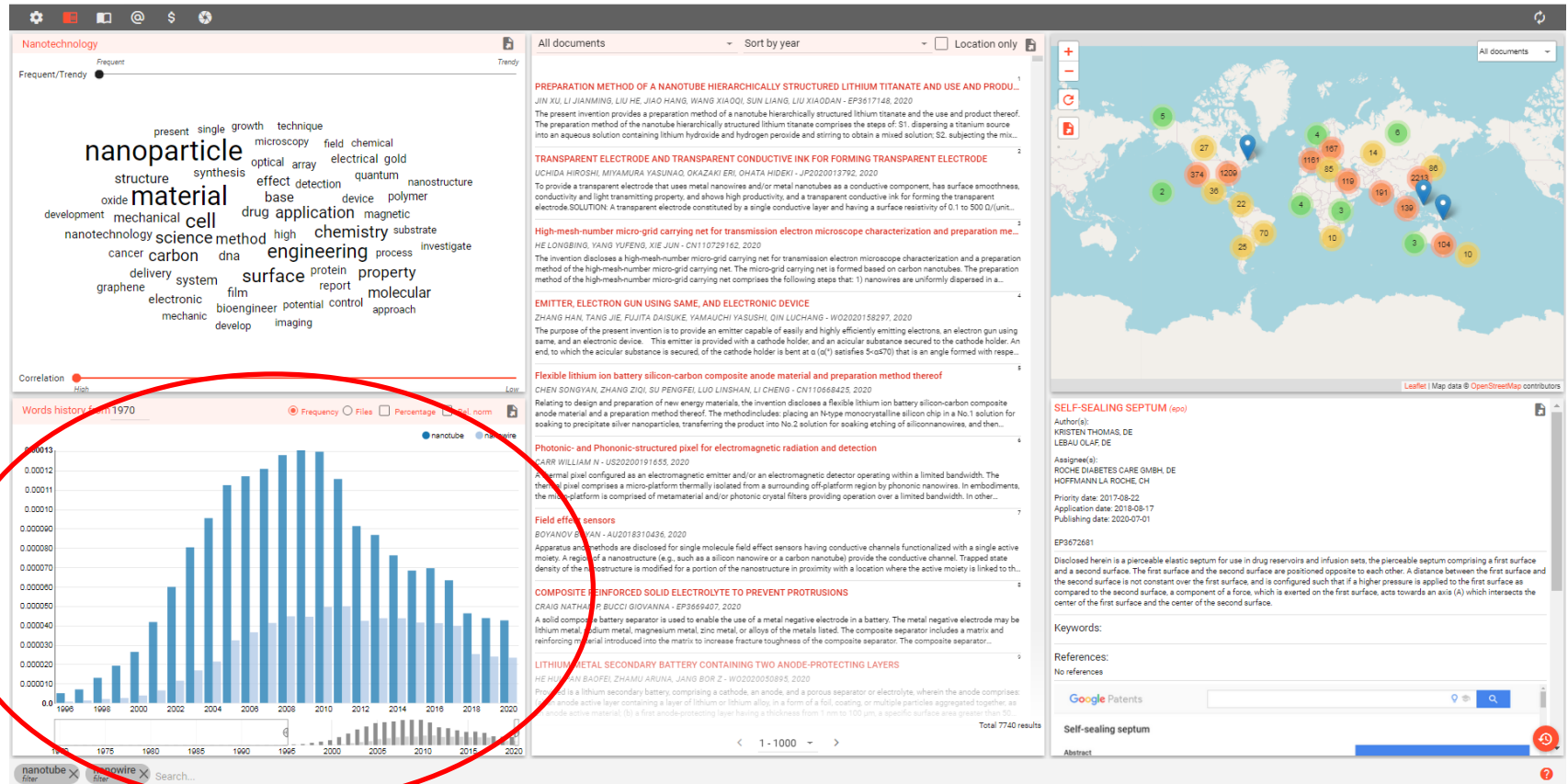
Designing a Specific Technology Focus (3)

As you want to explore specific technology maturity curves, try to delete or change your keyword selection or add additional terms not shown in the word cloud to the search bar.



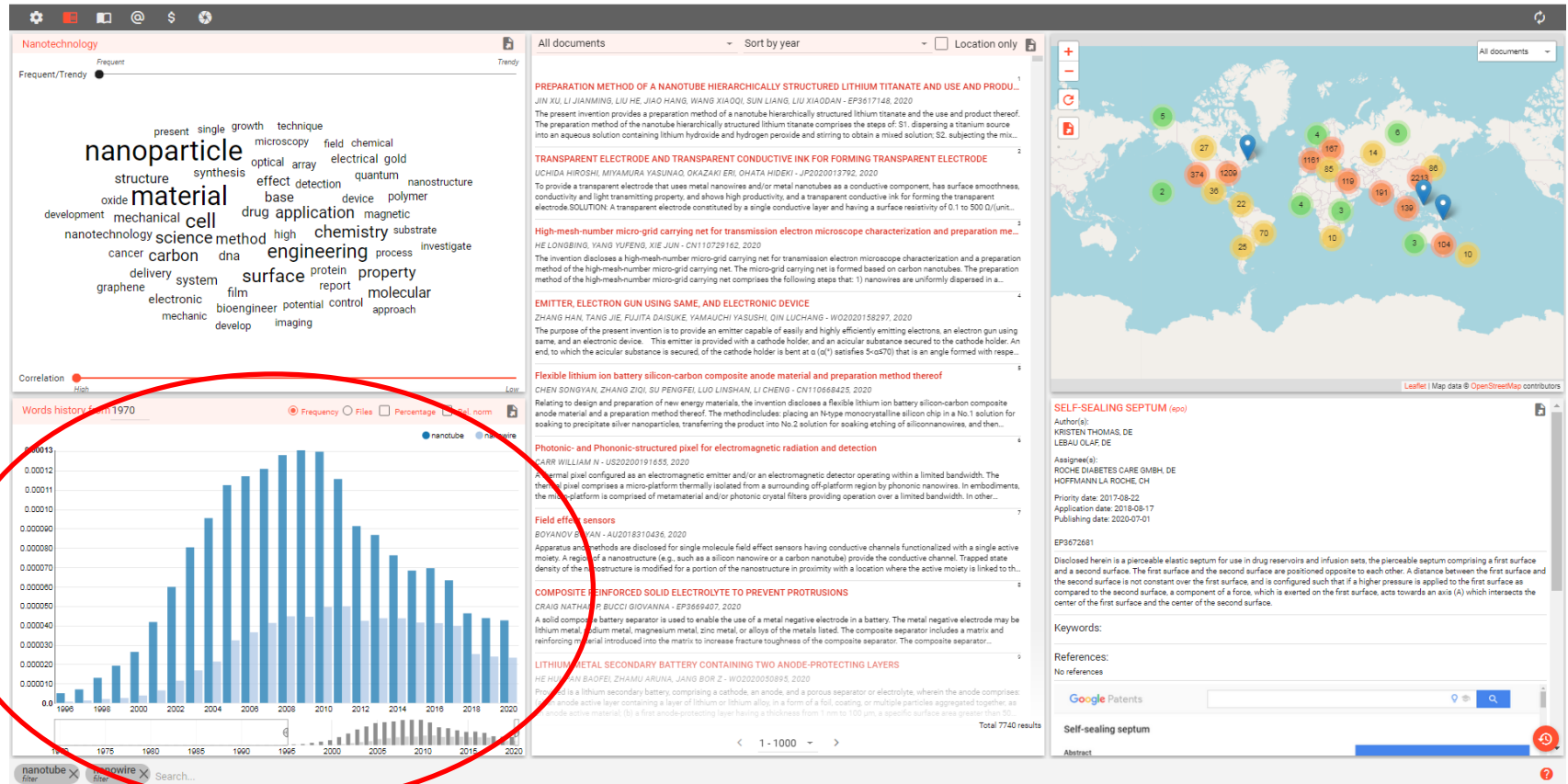
Collecting the Results (1)

The most important part of your dashboard is the timeline of keyword statistics (lower right image). It depicts the number of mentions of your search term(s) over time.



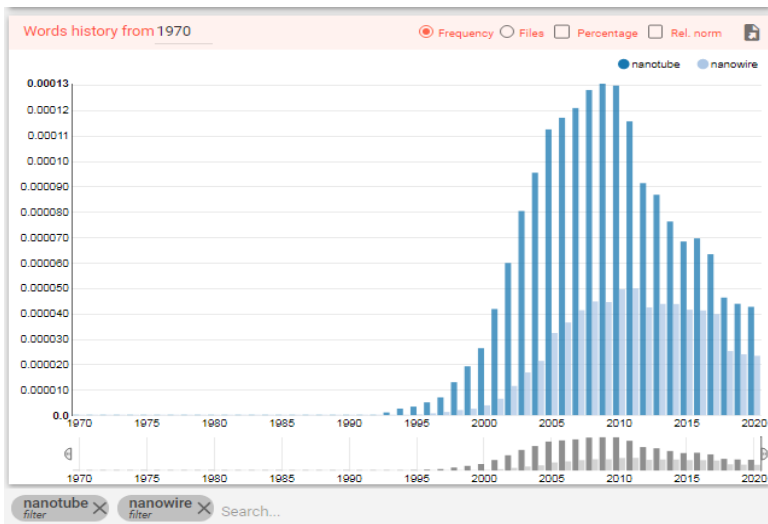
Collecting the Results (2)

The timeline of keyword statistics is calculated relative to each year. You may use the slider bar for choosing an appropriate time range.

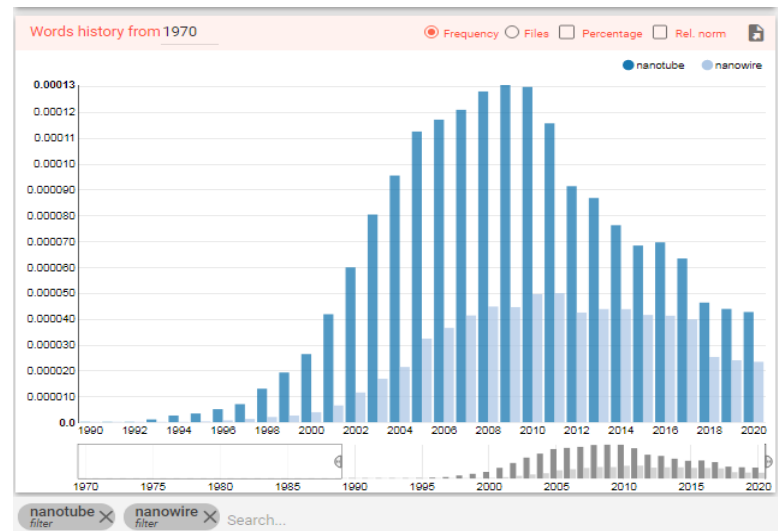


Collecting the Results (3)

The timeline of keyword statistics is calculated relative to each year. You may use the slider for choosing an appropriate time range.



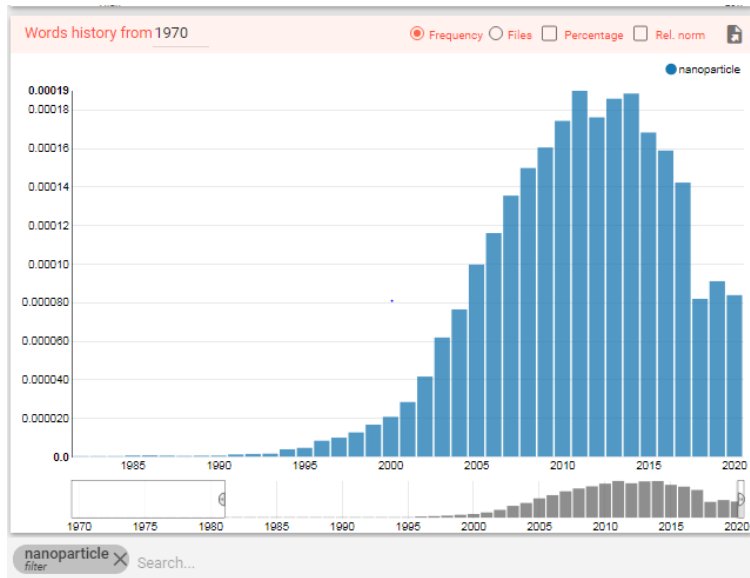
Slider in position “1970”



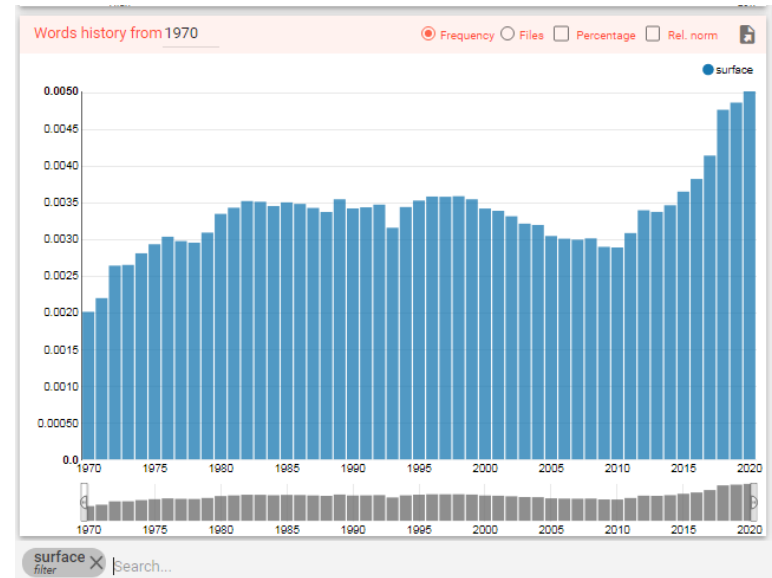
Slider moved to “1990”

Interpreting the Results (1)

Eventually you get both a specific and comprehensive picture of how your defined fields of technology are developing.



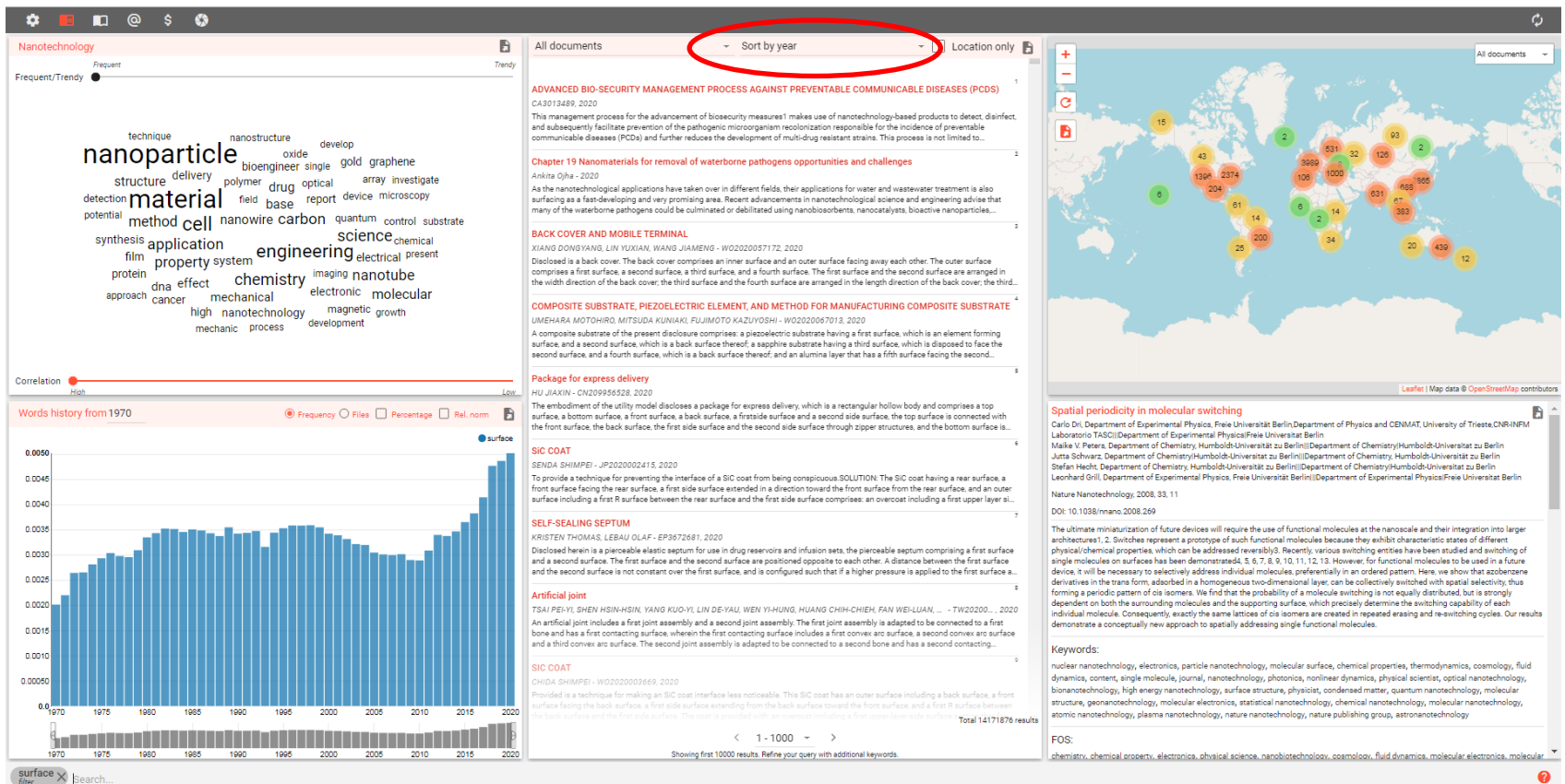
Within the field “nanotechnology” the number publications on nanoparticles, based on patents and scientific papers, is declining.



Within the field “nanotechnology” the number publications on surfaces, based on patents and scientific papers, is increasing.

Interpreting the Results (2)

For a closer look at the latest publications you may use the search results list, sorted by year or by relevance. A detailed document view (lower right corner) shows the abstract of the document you have selected.



That's by far not all

Based on your private **percipio**<BigData> database you may expand your research by further built-in functionalities.

- Evaluation of technology maturity
- Identification and location of experts in technologies of interest
- Performing dynamic searches based on pre-defined technologies
- Exploring of “unknown unknowns” by using the “frequency versus correlation” algorithm
- A “news button” provides you with the latest news about and around your technology of interest
- Classic search of patents and scientific articles
- and many more

Recommended Links

- Technology Maturity Using S-curve Descriptors
<https://triz-journal.com/technology-maturity-using-s-curve-descriptors/>
- Technology Foresight: Types and Methods
[https://www.researchgate.net/publication/240749145 Technology foresight Types and methods](https://www.researchgate.net/publication/240749145_Technology_foresight_Types_and_methods)
- Percipio Instruction Manual
https://percipio-big-data.com/files/percipio_user_manual.pdf
- Percipio Cases
https://percipio-big-data.com/files/percipio_sign_up_and_choose_plan.pdf

Don't hesitate and go for a trial ...

<https://percipio-big-data.com/>

