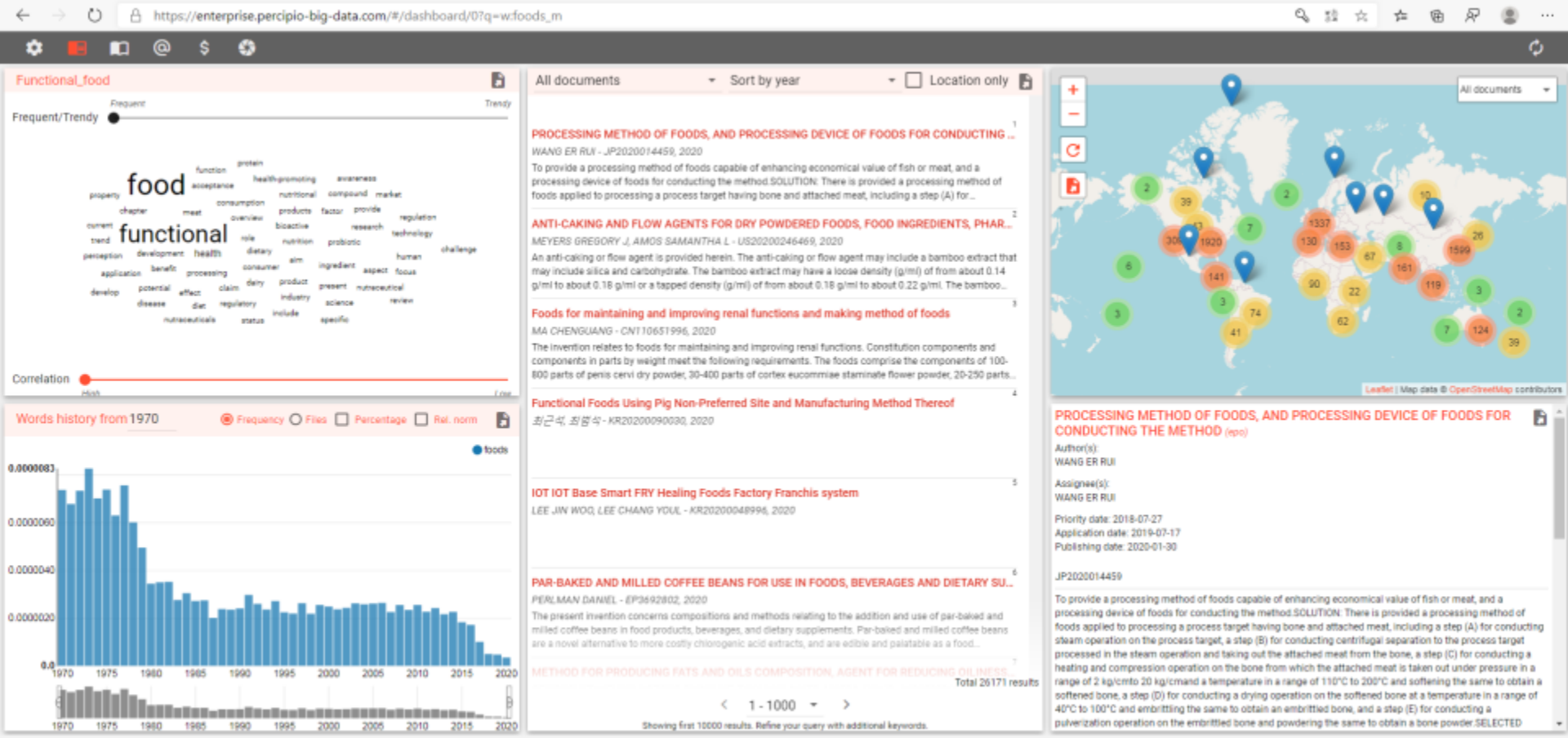


Tutorial

Prior Art Evaluation with **percipio**<BigData>

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

What is Prior Art?

- Prior art is constituted by all information that has been made available to the public in any form before a given date that might be relevant to a patent's claims of originality.
- If you want to file a patent it is important to check if this idea has already been published.
- If an invention has been described in the prior art or would have been obvious from what has been described in the prior art, a patent on that invention is not valid.
- Prior art search is researching various data sources. It is determining if there is prior art that discloses your invention. Prior art includes existing patents, patent applications, and non-patent literature. It can be found anywhere around the world. Prior art is any existing documents that show or describe the invention.

How to Search for Prior Art

Prior art is any existing documents that show or describe the invention, e.g. patents, patent applications, and non-patent literature.

- Describe your idea.
  A good concise description is simpler and easier to use than a long explanatory one.
- Define key words.
  The description is used to develop a good set of keywords.
- Choose your sources.
  The more places searched the more complete the search.
- Use the keywords to search.
  Download relevant documents for later reference and study.
- Review your first results.
  Assess, evaluate, and refine keywords to narrow the results.
- Expand your search.
  An exhaustive search includes a variety of databases, prior art can come from anywhere.

How to Improve Your Search

- One of the challenges in prior art search is the utilization of as many sources as possible and the efficient adaption of keywords.
- In many cases the identification of new keywords and the utilization of additional sources pose some effort and might need smart approaches. **How?** → Try **percipio**<BigData> and explore a more comprehensive approach based on searchable word clouds, covering patent and non-patent literature.

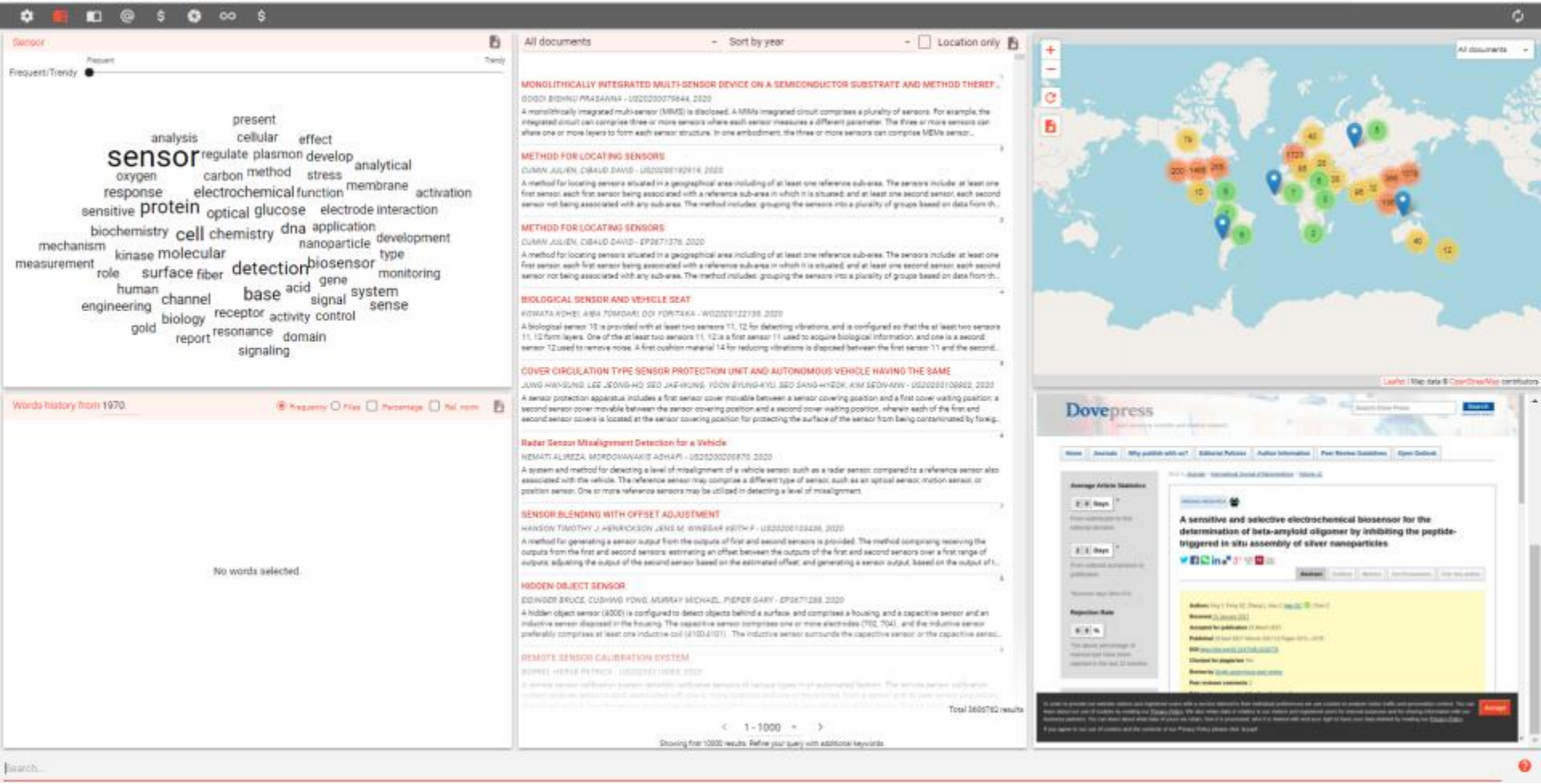
Example [Step 1]

You think about filing a patent related to a novel kind of biosensor.

- Describe your invention
  Biosensor based on nanoparticles for the detection of certain peptides.
- Define initial keywords
  E.g. “sensor, biosensor, nanoparticles, peptides, ...”
- Choose your plan (percipio_sign_up_and_choose_plan.pdf (percipio-big-data.com) and send keywords to **percipio**<BigData> (info@percipio-big-data.com)
- **percipio**<BigData>will set up your individual search engine based on initial keywords.

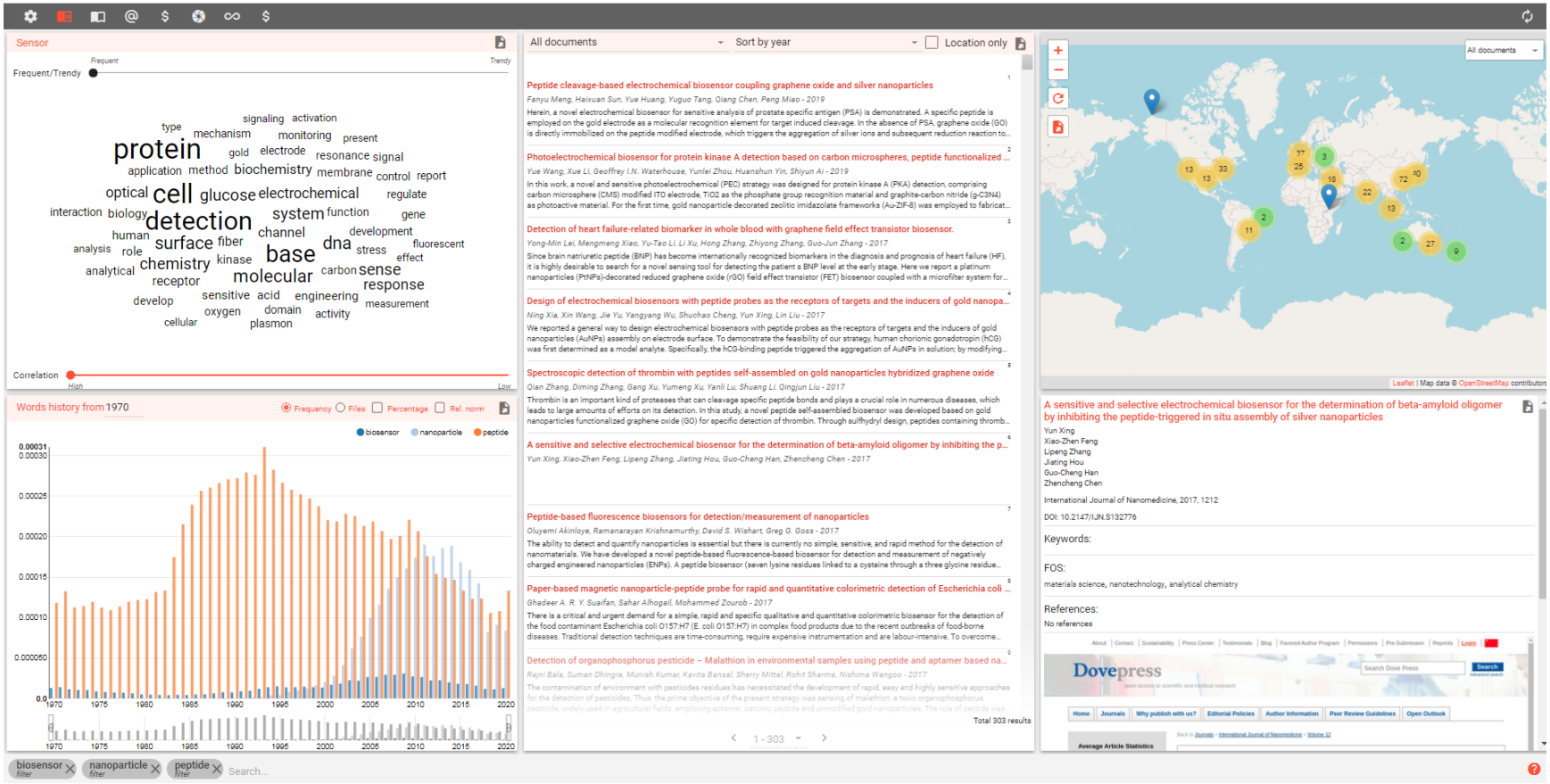
Example [Step 2]

Your screen might look like this, showing the specific word cloud, a comprehensive list of patents and articles, the localization of scientists and more.



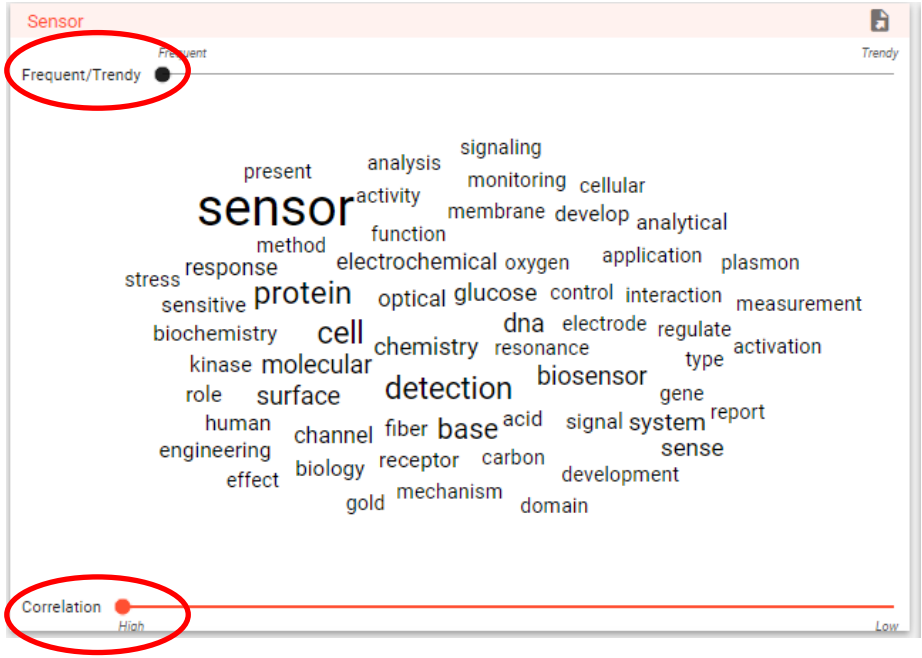
Example [Step 3]

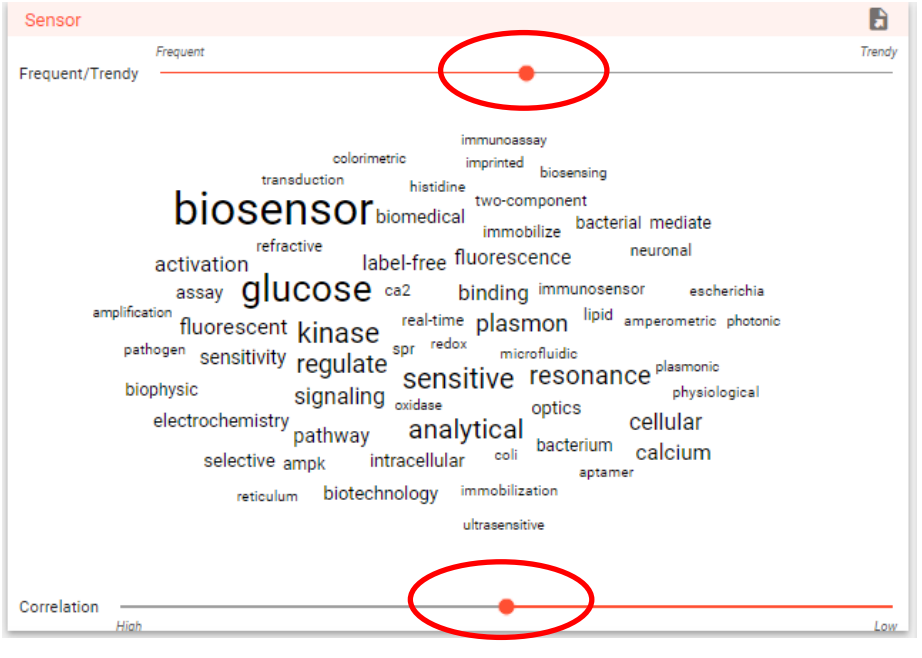
Utilize the power of **percipio**<BigData> to modify the word cloud by clicking on interesting words, adding new words, use the sliders to change correlation and frequency of words, ...



Example [Step 4]

Use the sliders to modify your word cloud by changing word frequency and correlation.



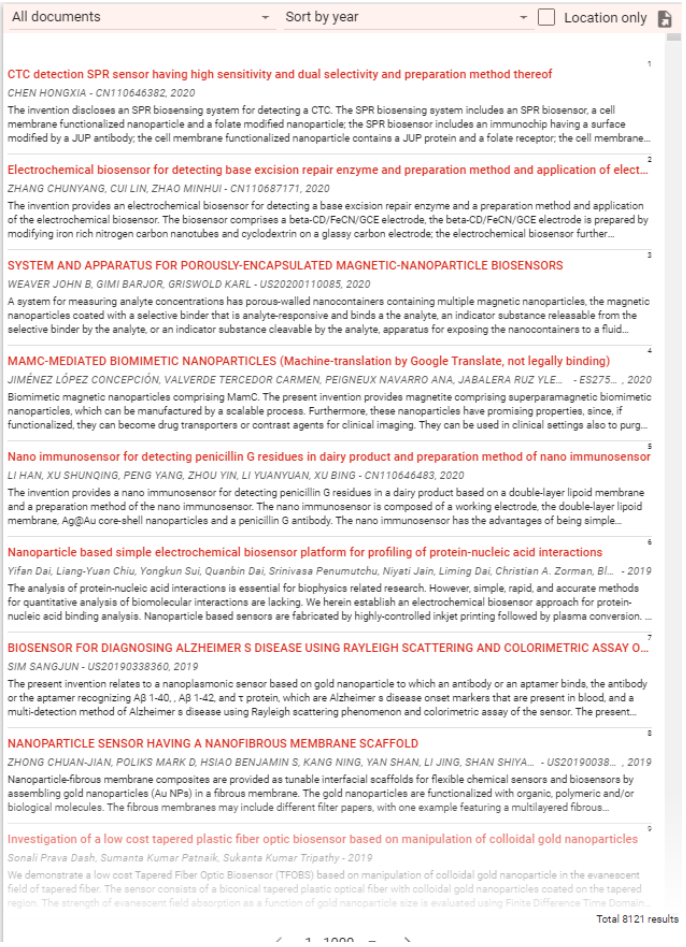


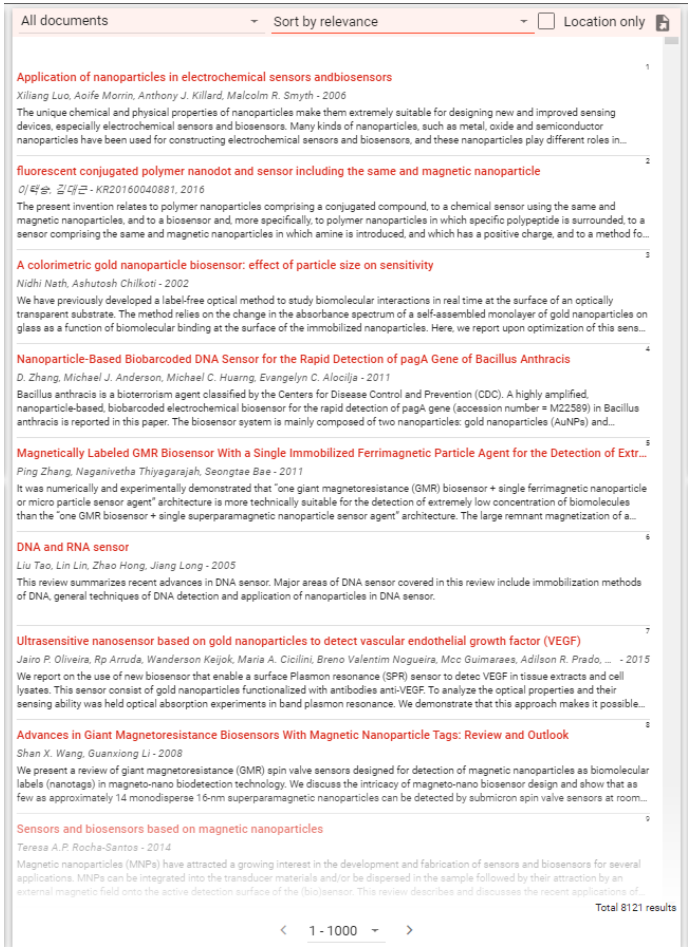
- Slider “Frequent/Trendy = 0 (most frequent words of the search are displayed)
- Slider “Correlation” = 100 (highly correlated words are displayed)

- Slider “Frequent/Trendy = 50 (words with moderate frequency are displayed)
- Slider “Correlation” = 50 (words with a somewhat less correlation are displayed)

Example [Step 5]

Browse the literature and patent list, sort by year or relevance, evaluate, modify search until prior art is detected or is most probably non existent.





Example [Step 7]

- Having created a satisfactory number of interesting scientific papers and patents, stop the session and have a look at your results
- Titles and abstracts of the search results should be read for the first level of screening
- Once most of the relevant prior arts have been shortlisted, their citations can be checked to discover more results around the shortlisted ones
- If you are not sure about the completeness of your results, repeat your search procedure by defining new keywords as described in steps 4 & 5
- **percipio**<BigData> specialists are glad to support you any time (info@percipio-big-data.com)

Example [Step 8]

percipio<BigData> offers a lot of additional features.

Refer to the manual on the website or contact us.

Recommended Links

- **Prior Art Searching**
  https://www.epo.org/learning/materials/inventors-handbook/novelty/searching.html
- **Prior Art Search: Everything you need to know**
  https://www.greyb.com/prior-art-search/
- **The Importance of Patent Searching Prior to Filing**
  https://ip.com/blog/importance-patent-searching-prior-filing/
- **Artificial intelligence: Simplifying the process of prior art patent search**
  https://blog.ipleaders.in/artificial-intelligence-simplifying-process-prior-art-patent-research/
- **Patenting an idea: importance of a prior art search**
  https://www.lexology.com/library/detail.aspx?g=af99d61d-b2ab-4e64-9325-48ebe205ddc1
- **Percipio Instruction Manual**
  https://percipio-big-data.com/files/percipio_user_manual.pdf

That’s by far not all ....

Based on your private 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, prior art search
- and many more ....

Don’t hesitate and go for a trial …

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