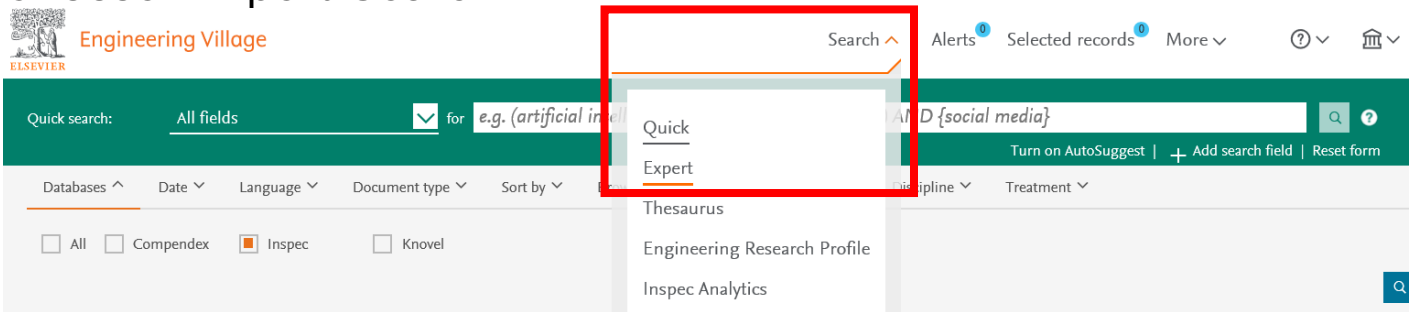


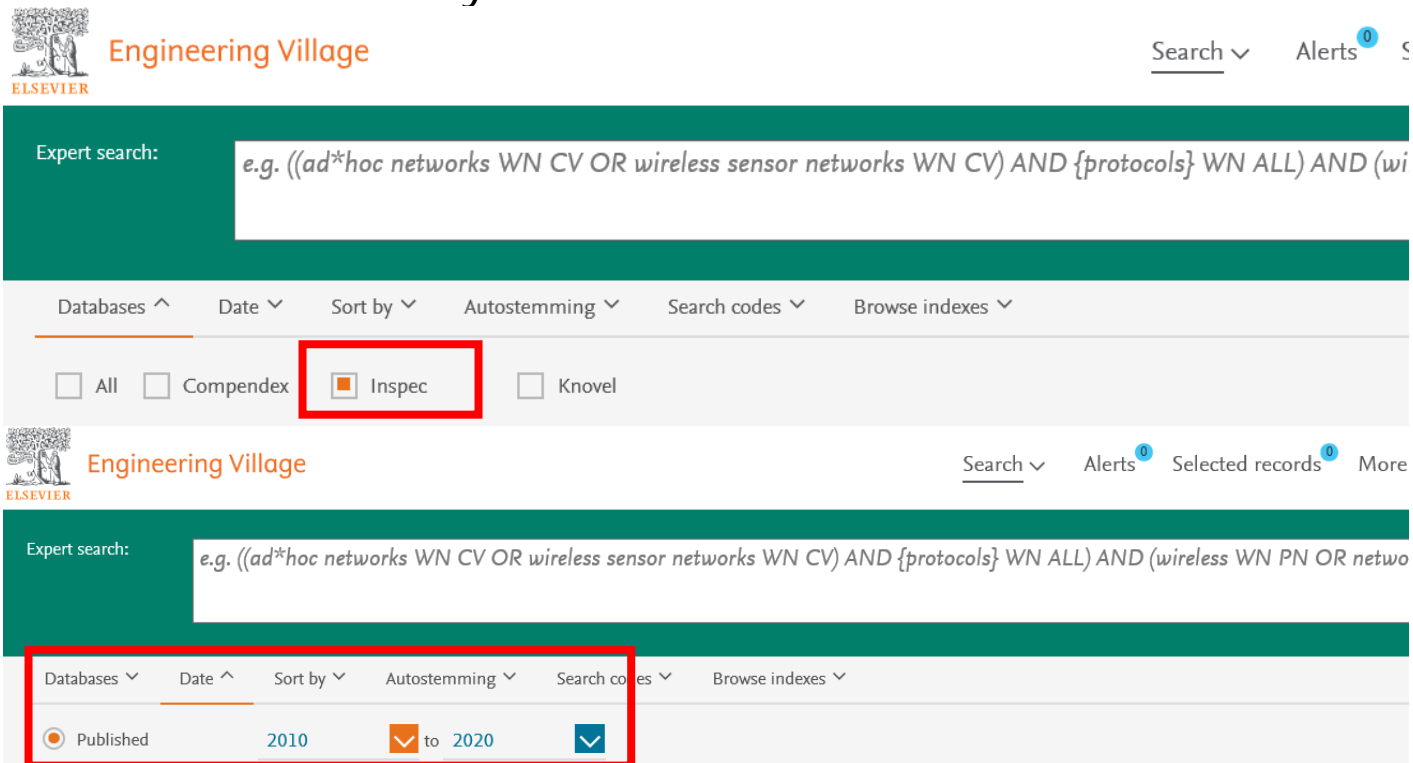
The Inspec database can be found in our Databases list.



Choose "Expert Search".

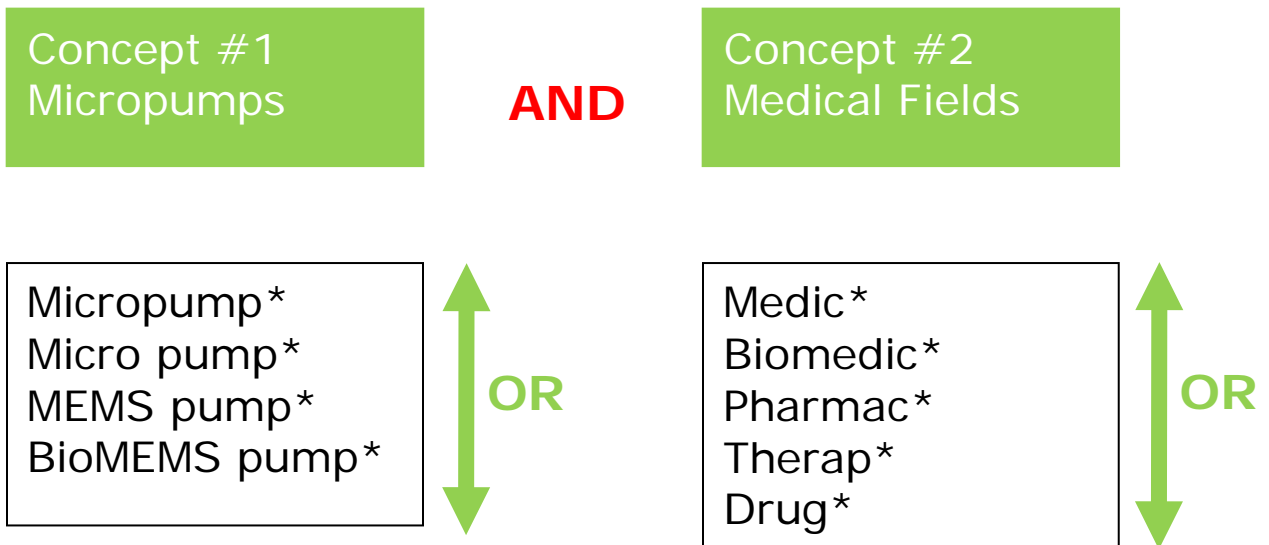


Ensure that only the Inspec database is selected and limit the search to the last 10 years.



For a literature review search in Inspec, limit the search to **1 or 2 concepts**.

Subject example:
Prototype of a micropump [implanted] for the purpose of anti-epileptic drug delivery.



Use OR to combine the words within the same concept. Write each concept in parentheses.

Engineering Village

Search Alerts Selected records More ? ? ? ? ?

Expert search:

Databases Date Sort by Autostemming Search codes Browse indexes

Published 2010 to 2020

Combine the concepts using AND. Add wn KY after each concept to search in the Subject/Title/Abstract fields.

Engineering Village

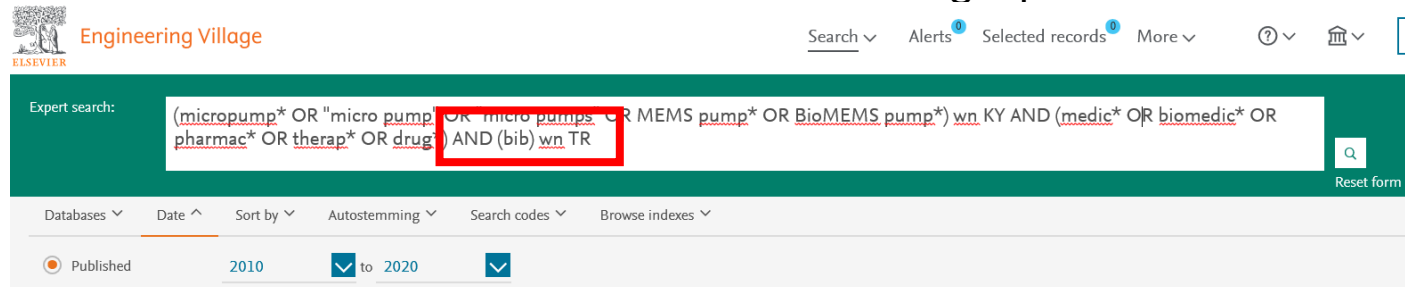
Search Alerts Selected records More ? ? ? ? ?

Expert search:

Databases Date Sort by Autostemming Search codes Browse indexes

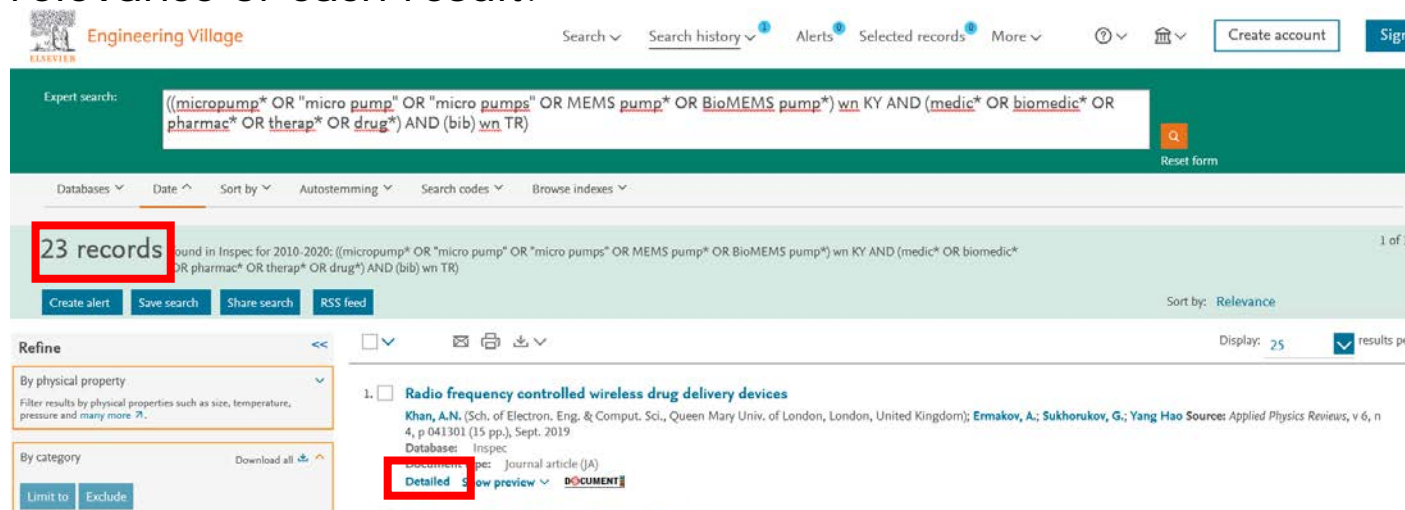
Published 2010 to 2020

End the search by adding: **AND (bib) wn TR**. This offers documents that include more than 50 bibliographic references.



The screenshot shows the Engineering Village search interface. At the top, the Engineering Village logo is on the left, and navigation links for Search, Alerts, Selected records, and More are on the right. The main search bar contains the query: `((micropump* OR "micro pump*" OR "micro pumps*" OR MEMS pump* OR BioMEMS pump*) wn KY AND (medic* OR biomedic* OR pharmac* OR therap* OR drug*) AND (bib) wn TR`. The text `AND (bib) wn TR` is highlighted with a red box. Below the search bar, there are filters for Databases, Date (2010 to 2020), and other search options.

The search gave 23 results. Click on "Detailed" to evaluate the relevance of each result.



The screenshot shows the search results page on Engineering Village. The search query is repeated in the search bar. A red box highlights the text **23 records**. Below the search bar, there are options to Create alert, Save search, Share search, and RSS feed. The results are sorted by Relevance. On the left, there is a 'Refine' section with filters for physical properties and categories. The first result is titled **Radio frequency controlled wireless drug delivery devices** by Khan, A.N., et al. The word **Detailed** is highlighted with a red box in the result's metadata.

This literature review, containing 130 references, seems interesting.

Radio frequency controlled wireless **drug** delivery devices

Accession number: 19090235

Authors: Khan, A.N.¹ ; Ermakov, A.²; Sukhorukov, G.²; Yang Hao¹ 

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Abstract: **Drug** delivery devices have revolutionized the course of **therapeutic** treatment in the recent past. These devices provide a firm foundation for diverse strategies to overcome the limitations of systemic administration that cannot provide a high **drug** potency at the specific disease infected body tissues. The ongoing developments in the **pharmaceutical** industry have focused on exploring the reliable actuating mechanisms that can provide **therapy** and dispense **drugs** precisely to control **therapeutic** effects with minimum toxicity. The wireless actuation of **drug** delivery devices has been considered as an intervening noninvasive approach to release encapsulated **drug** compounds. This review paper highlights implantable and transdermal **drug** delivery devices that are based on wirelessly controlled microchips, **micropumps**, microvalves, and magnetic robots. Their key features, such as working principle, dimensions, materials, operating frequency, and wireless actuation through radio frequency for **drug** delivery are explained. The interaction of radio waves with electrically conductive and magnetic nanoparticles is also discussed for **drug** delivery. Furthermore, the radio frequency assisted data telemetry and wireless power transfer techniques are elucidated for **drug** delivery devices. The opportunities to enhance the patients' control on **therapeutic** indexes and release mechanisms are still possible by incorporating advanced wireless sensors for concocting future innovations in the wirelessly controlled **drug** delivery devices.

Number of references: 130

Inspecc controlled terms: **biomedical materials**

