In this list we see tactics for discerning the roles of activity and actors, of teleological imperatives, of common ontology, and of the social semantics of any group engaged in intellectual collaboration. Smiraglia (2012) contains a meta-analysis of published domain analytical studies in knowledge organization. In fact, most domain analysis is informetric, using combinations of citation analysis, author co-citation analysis, co-word analysis, and network analysis to compare visualizations of a domain.

10.3 Techniques for Domain Analysis

Methodologically, domain analysis requires mixed methods approaches. Much of the work falls into what is thought of as qualitative by nature, although quite often quantitative techniques also are employed. Perusing Hjørland's list above makes it clear that all of those 11 approaches must take place within a specified environment, whether that be an office with workers or a domain with journals and conference proceedings. Establishing the domain by designating the boundaries for analysis is essentially a subjective task. Selecting parameters means using subjective decision-making to establish boundaries. But once that has been achieved, a number of quantitative measures can be applied. The effective use of ethnographic methods has been demonstrated by Hartel (2003, 2010) who used forms of participant observation to analyze hobbies and serious leisure activity, most notably cooking.

10.3.1 Citation Analysis

The most common informetric methods employed in domain analysis are citation analyses. Citations are a form of social networking. A scholar cites a published paper to designate authority for quoted work, but also as a means of associating research. If I cite a published paper it is a means of associating my work with that of the authors of the other paper. So in a sense it is a form of academic social networking. For that reason citations leave behind trace evidence of associations that might be tightly-woven within the domain, or might reach outside the domain, or both. A thorough source for the bases of citation analysis is De Bellis (2009).

Citations are ubiquitous in scholarly discourse, of course, making them an attractive data source for analysis. But indexing is a critical component of citation research. Large swaths of the sciences, social sciences, and humanities are indexed by two global giants Thomson-Reuters *Web of Science* and Elsevier *Scopus*. If the domain under study is indexed, compiling simple citation statistics can be almost automatic. For example, by searching the *Web of Science* (*WoS*) for "multi-lingual thesauri" a small exemplar of a domain is located including six publications. These are shown in Fig. 10.1.