## Research on Commercial Potential Evaluation of Emerging Technology

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Only a small proportion of emerging technologies bring major economic benefits. Therefore, Identifying the emerging technologies with significant commercial potential is an important topic for companies and nations. This paper proposes an emerging technology commercial potential evaluation framework.

- How to assess the stage of development of certain emerging technologies;
- How to identify the core technology areas and their relative opportunities;
- How to evaluate market environment and technology competition.

In order to evaluate the commercial potential of certain emerging technologies objectively, three component processes should be addressed.

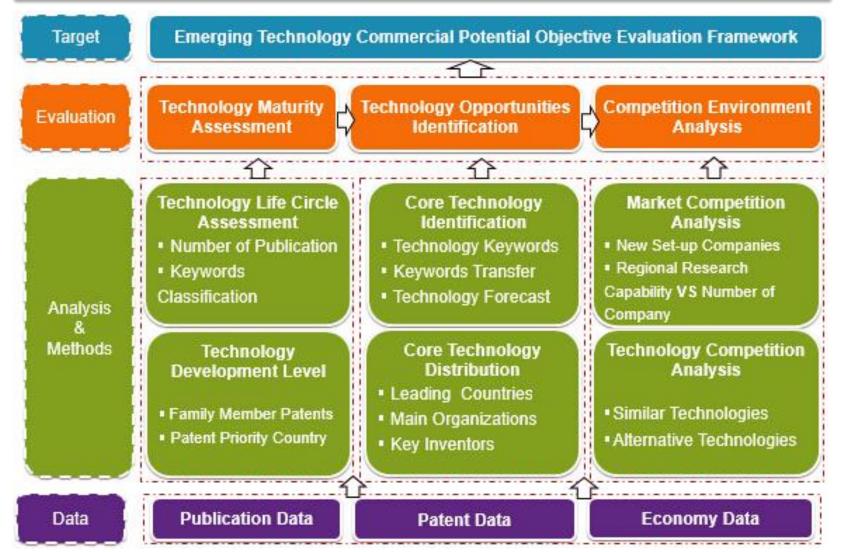


Figure 1. Emerging technology commercial potential evaluation framework

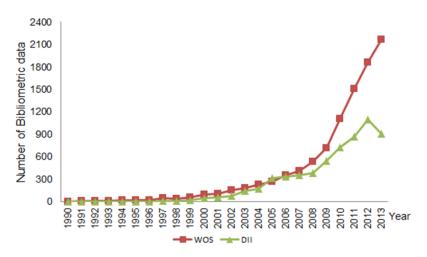


Figure 2. Trends for DSSCs in WOS & DII

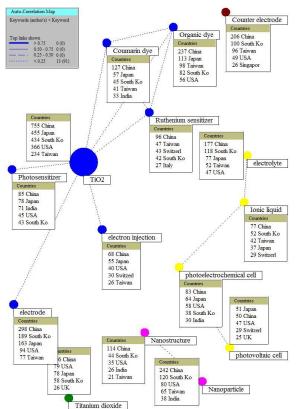


Figure 4. Hot topics of DSSCs

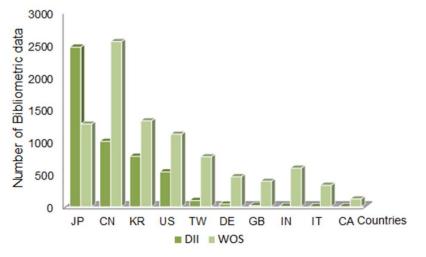
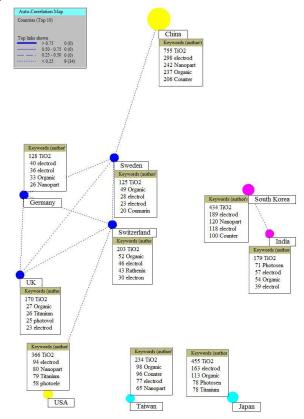


Figure 3. Main countries in DSSCs field



**Figure 5. Countries Correlation** 

Figure 6. Company growth of DSSCs

Figure 7. Company distribution of DSSCs

- 1. DSSCs are in the growth stage of the Technology Life Cycle, and most technologies are still in research phase;
- 2. Topics on materials of DSSCs are a recent research focus. China, Europe, Japan and USA lead the development of DSSCs, but they have different directions.
- 3. With support of the Chinese government, the number of solar cell enterprises is increasing every year, and the eastern coastal area is the highly competitive area.

Developing a comprehensive model to evaluate the commercialization potential of emerging technologies, by combining subjective and objective methods, is our future research aim.