

CiteSpace的主要科学计量功能

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写在前面

- 有关CiteSpace的经典文献和实例文献

- 基础研究论文

1. Chen, C. (2004) [Searching for intellectual turning points: Progressive Knowledge Domain Visualization](#). Proceedings of the National Academy of Sciences of the United States of America (PNAS), **101** (Suppl. 1), 5303-5310.
2. Chen, C. (2006) [CiteSpace II: Detecting and visualizing emerging trends and transient patterns in scientific literature](#). Journal of the American Society for Information Science and Technology, 57(3), 359-377. 《中译本》
3. Chen, C. et al. (2010) [The structure and dynamics of co-citation clusters: A multiple-perspective co-citation analysis](#). Journal of the American Society for Information Science and Technology. ([10.1002/asi.21309](#))

- 近期很有学习意义的实例论文

1. Chen, C., Dubin, R., & Kim, M. C. (2014). Emerging trends and new developments in regenerative medicine: a scientometric update (2000-2014). *Expert opinion on biological therapy*, 14(9), 1295-1317. <http://informahealthcare.com/doi/pdf/10.1517/14712598.2014.920813>
2. Chen C, Dubin R, Kim M C. Orphan drugs and rare diseases: a scientometric review (2000-2014)[J]. *Expert Opinion on Orphan Drugs*, 2014 (0): 1-16. http://www.researchgate.net/profile/Chaomei_Chen

有关CiteSpace的论文

1. http://scholar.google.com/scholar?hl=en&q=CiteSpace&btnG=&as_sdt=1%2C5&as_sctp=
2. 学习科学计量分析的推荐论文
 - ① Peters, H. P., & Van Raan, A. F. (1991). Structuring scientific activities by co-author analysis. *Scientometrics*, 20(1), 235-255.
 - ② White, H. D., & McCain, K. W. (1998). Visualizing a discipline: An author co-citation analysis of information science, 1972-1995. *Journal of the American Society for information science*, 49(4), 327-355.
 - ③ Culnan, M. J. (1987). Mapping the intellectual structure of MIS, 1980-1985: a co-citation analysis. *Mis Quarterly*, 341-353.
 - ④ Kessler, M. M. (1963). Bibliographic coupling between scientific papers. *American documentation*, 14(1), 10-25.
 - ⑤ Boyack, K. W., & Klavans, R. (2010). Co-citation analysis, bibliographic coupling, and direct citation: Which citation approach represents the research front most accurately?. *Journal of the American Society for Information Science and Technology*, 61(12), 2389-2404.

主要功能总述



The screenshot shows the 'Node Types' selection window in CiteSpace. It contains two rows of radio buttons. The first row includes 'Author' (blue), 'Institution' (blue), 'Country' (blue), 'Term' (green), 'Keyword' (green), and 'Category' (green). The second row includes 'Cited Reference' (red, selected), 'Cited Author' (red), 'Cited Journal' (red), 'Paper' (blue), and 'Grant' (blue).

节点类型决定了使用CiteSpace分析的目的

☐ Author ☐ Institution ☐ Country

作者、机构或者国家的合作网络分析

☐ Term ☐ Keyword ☐ Category

主题、关键词或WoS分类的共现分析

☒ Cited Reference ☐ Cited Author ☐ Cited Journal

文献的共被引分析、作者的共被引分析以及期刊的共被引分析

☐ Paper

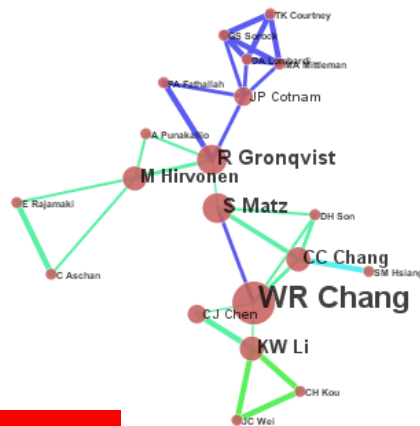
文献的耦合分析

合作网络分析举例

Author Institution Country

作者、机构或者国家的合作网络分析，在网中节点的大小反映的是作者、国家/地区或者机构的发文量。

CiteSpace, v. 3.8.R6 (64-bit)
October 24, 2014 12:05:39 AM CEST
C:\Users\Jerry Lee\citespace\TMP\data
Timespan: 2000-2013 (Slice Length=2)
Selection Criteria: Top 200 per slice
Network: N=1239, E=1122 (Density=0.0015)
Pruning: None
Modularity Q=0.9889
Mean Silhouette=0.5231



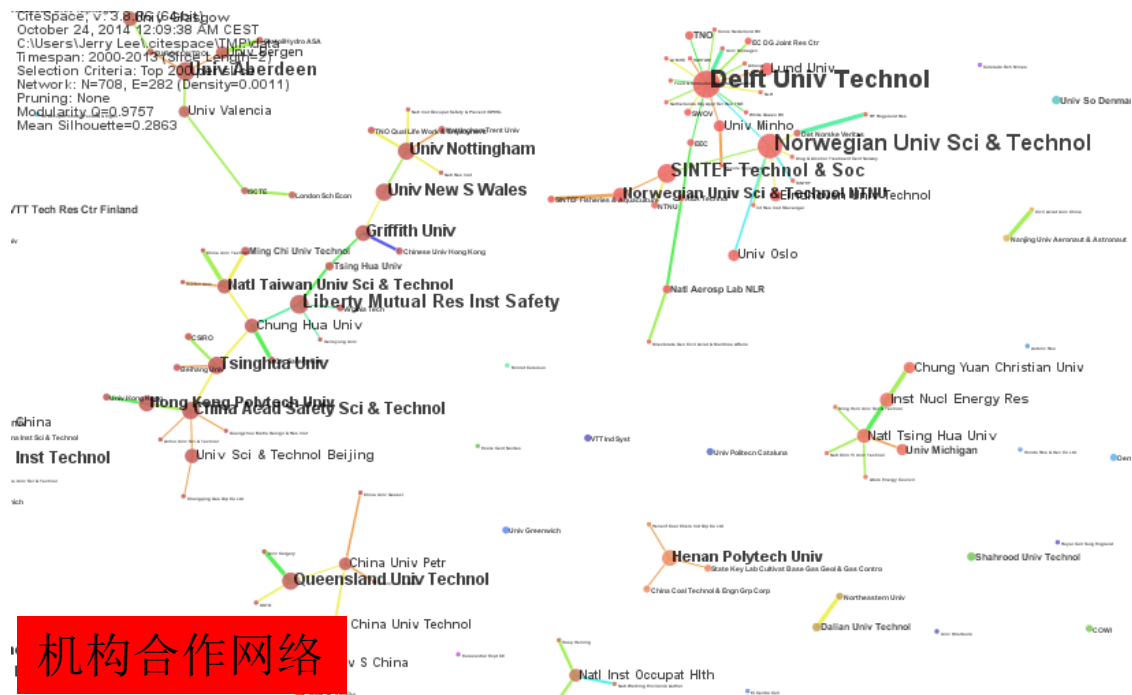
数据来源参见：

http://cluster.ischool.drexel.edu/~cchen/citespace/doc/tutorial/how_to/1.download_from_WOS.pdf

CiteSpace, v. 3.8.R6 (64-bit)
October 24, 2014 12:12:13 AM CEST
C:\Users\Jerry Lee\citespace\TMP\data
Timespan: 2000-2013 (Slice Length=2)
Selection Criteria: Top 200 per slice
Network: N=64, E=24 (Density=0.0119)
Pruning: None
Modularity Q=0.8498
Mean Silhouette=0.2194



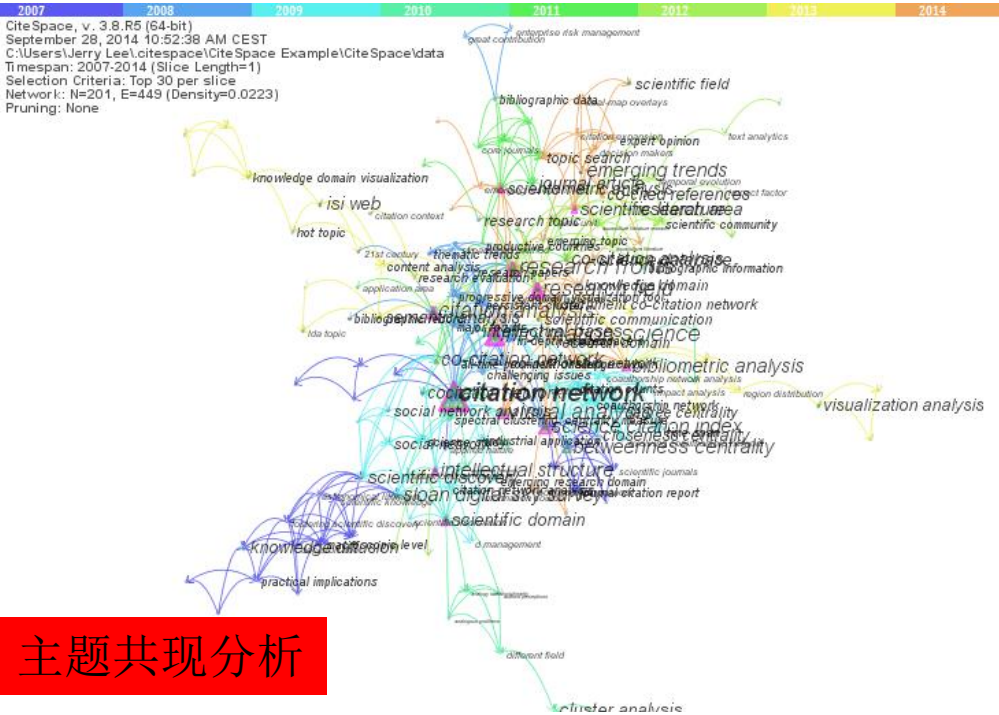
CiteSpace, v. 3.8.R6 (64-bit)
October 24, 2014 12:09:38 AM CEST
C:\Users\Jerry Lee\citespace\TMP\data
Timespan: 2000-2013 (Slice Length=2)
Selection Criteria: Top 200 per slice
Network: N=708, E=282 (Density=0.0011)
Pruning: None
Modularity Q=0.9757
Mean Silhouette=0.2863



主题、关键词或WoS分类的共现分析

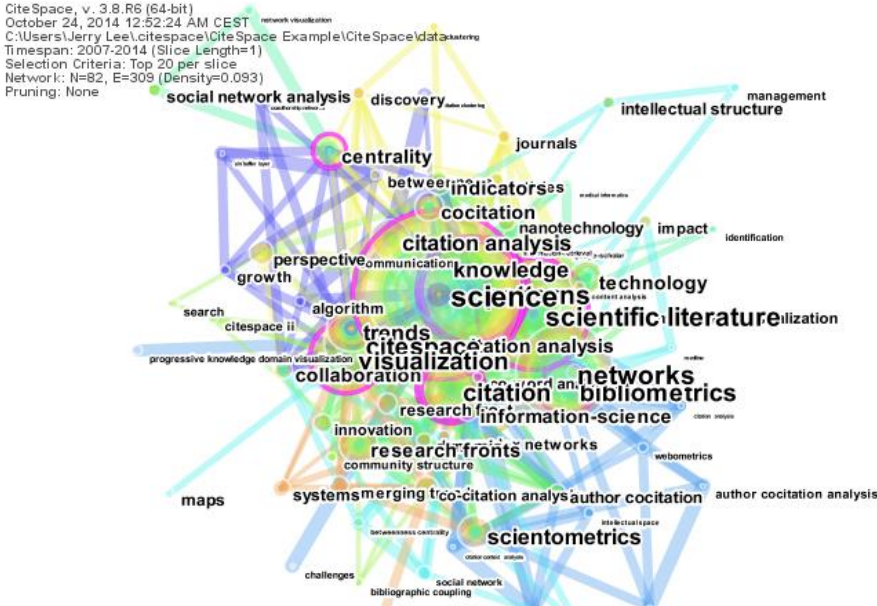
Term Keyword Category

主题、关键词或WoS分类的共现分析，节点大小反映的是主题、关键词或者领域的频次。

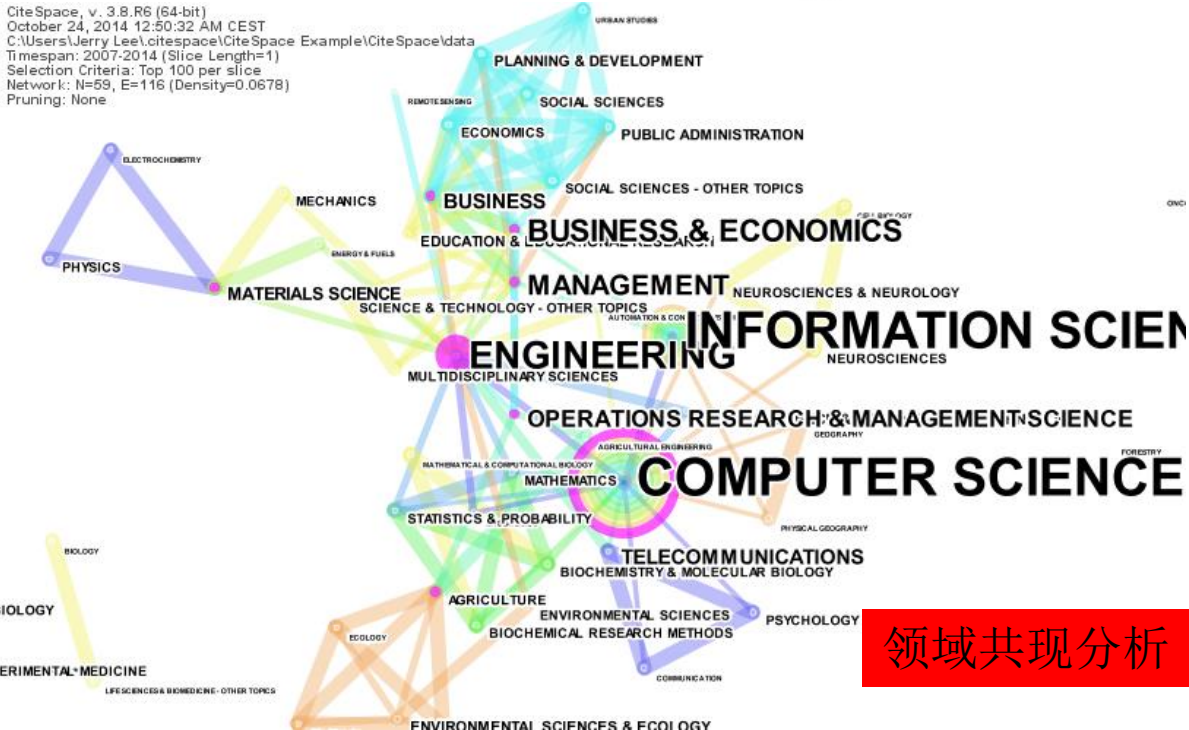


主题共现分析

数据来源参见：
<http://blog.sciencenet.cn/blog-554179-831518.html>



关键词共现分析

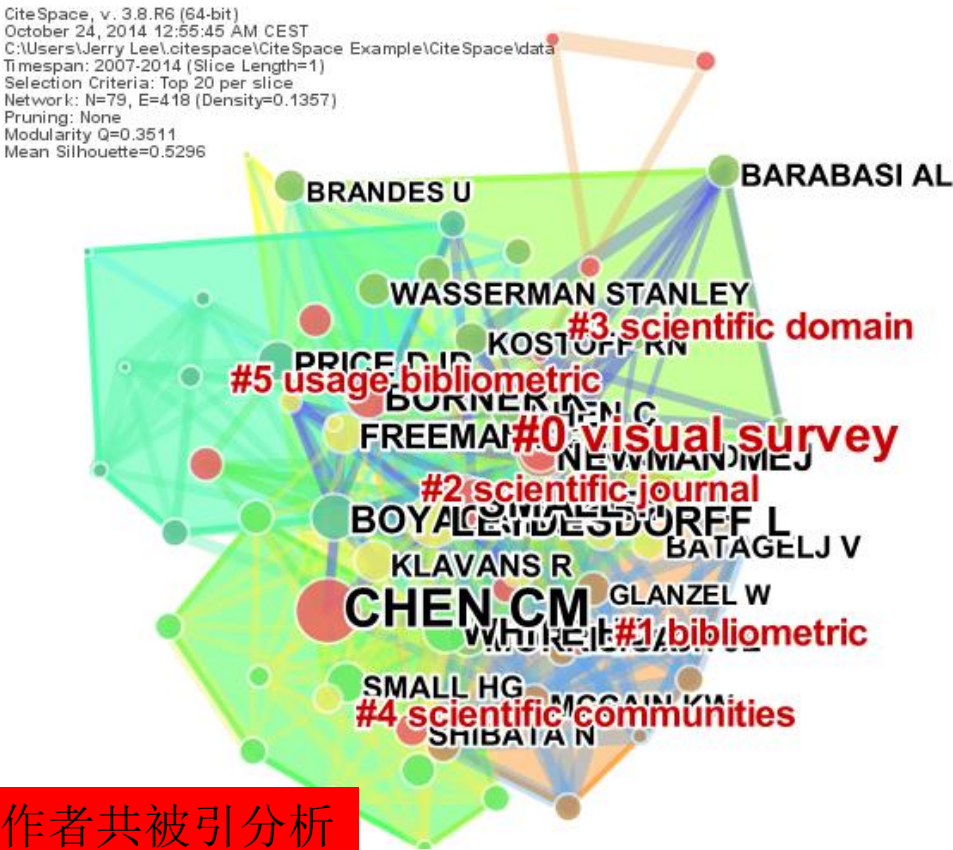


领域共现分析

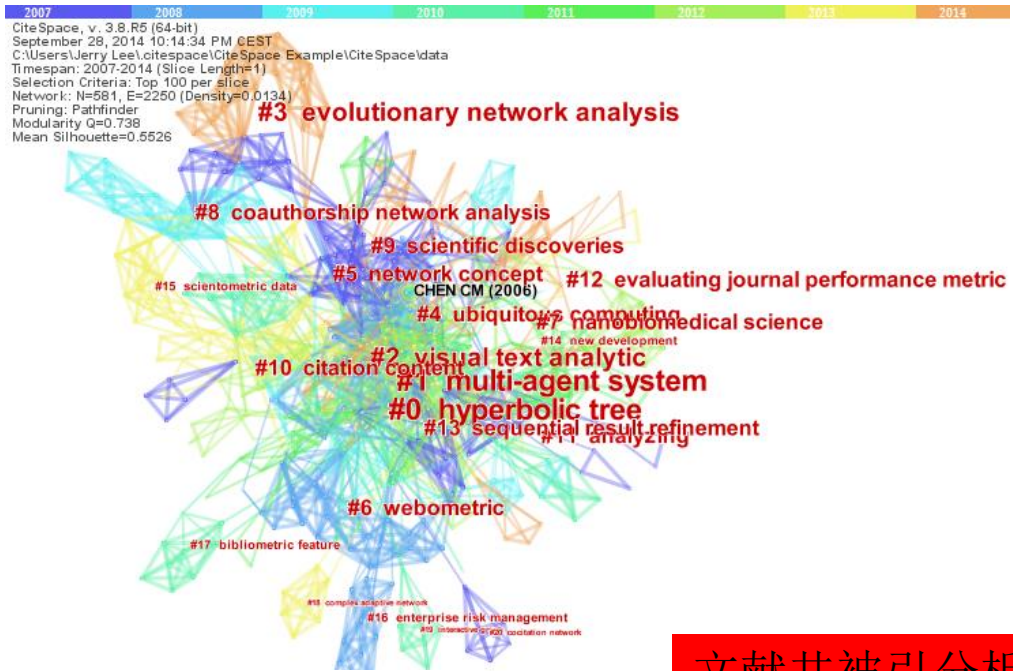
共被引分析

● Cited Reference ● Cited Author ● Cited Journal

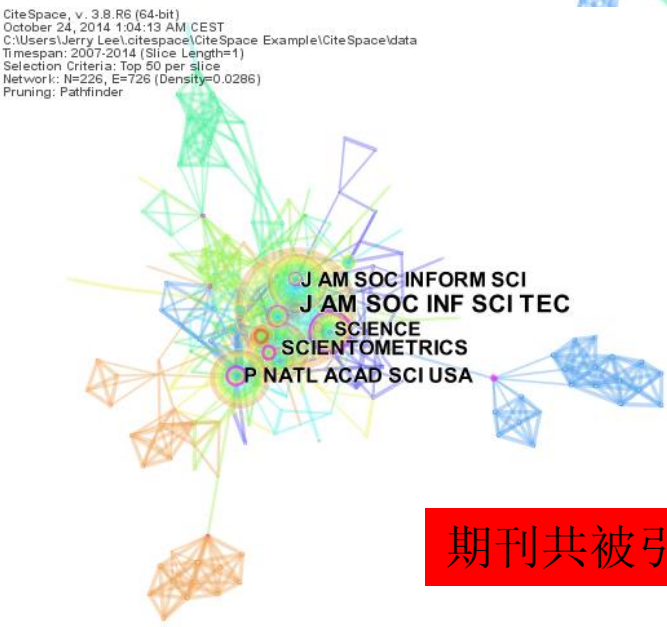
文献的共被引分析、作者的共被引分析以及期刊的共被引分析，节点的大小代表文献、期刊或者作者的被引次数，连线的颜色代表首次共被引的时间。



作者共被引分析



文献共被引分析



期刊共被引分析

数据来源参见: <http://blog.sciencenet.cn/blog-554179-831518.html>

文献的耦合分析

Paper

文献的耦合分析

数据来源参见:

<http://blog.sciencenet.cn/blog-554179-831518.html>



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1. 如何使用CiteSpace的几个示范. <http://blog.sciencenet.cn/blog-496649-838067.html>
2. Chen, C. (2014) The CiteSpace Manual.
<http://cluster.ischool.drexel.edu/~cchen/citespace/CiteSpaceManual.pdf>
3. CiteSpace重要问题整理. <http://blog.sciencenet.cn/blog-554179-667300.html>