

如何使用CiteSpace分析 *Derwent*专利数据

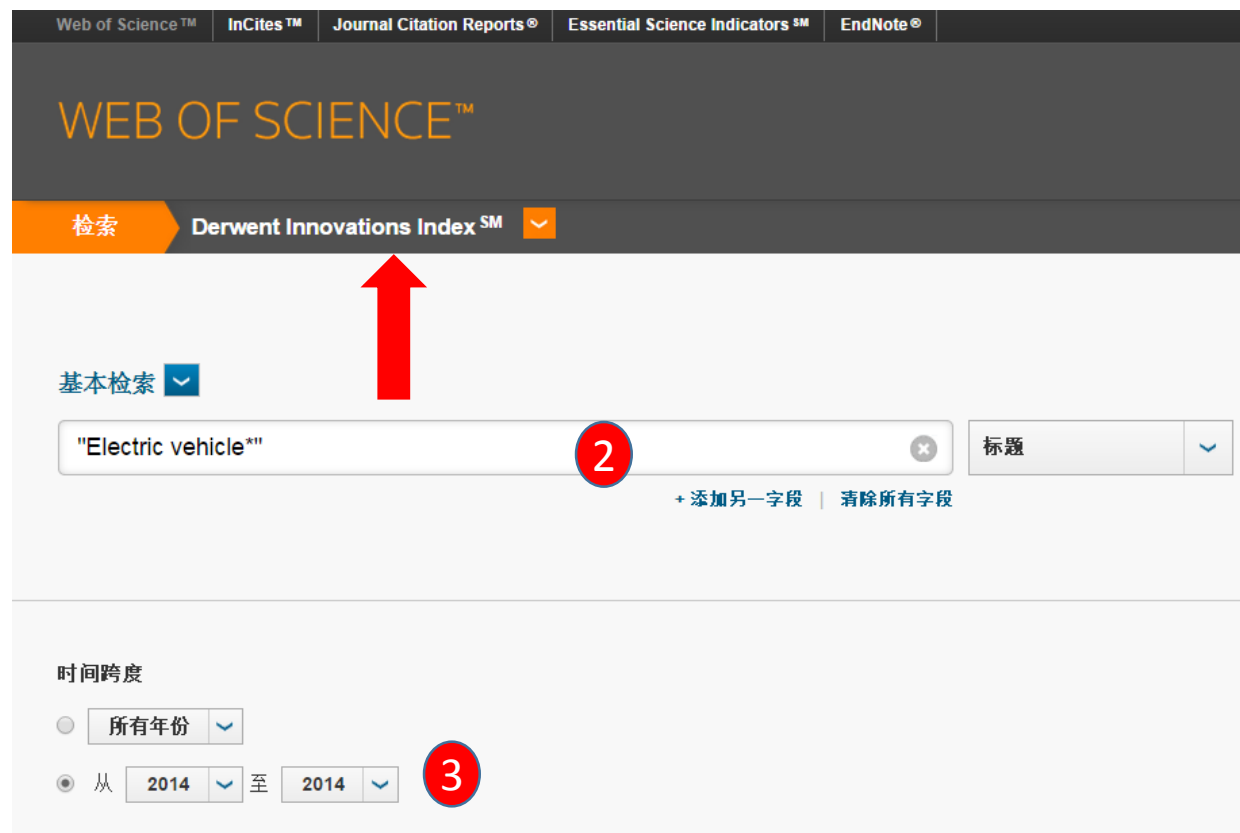
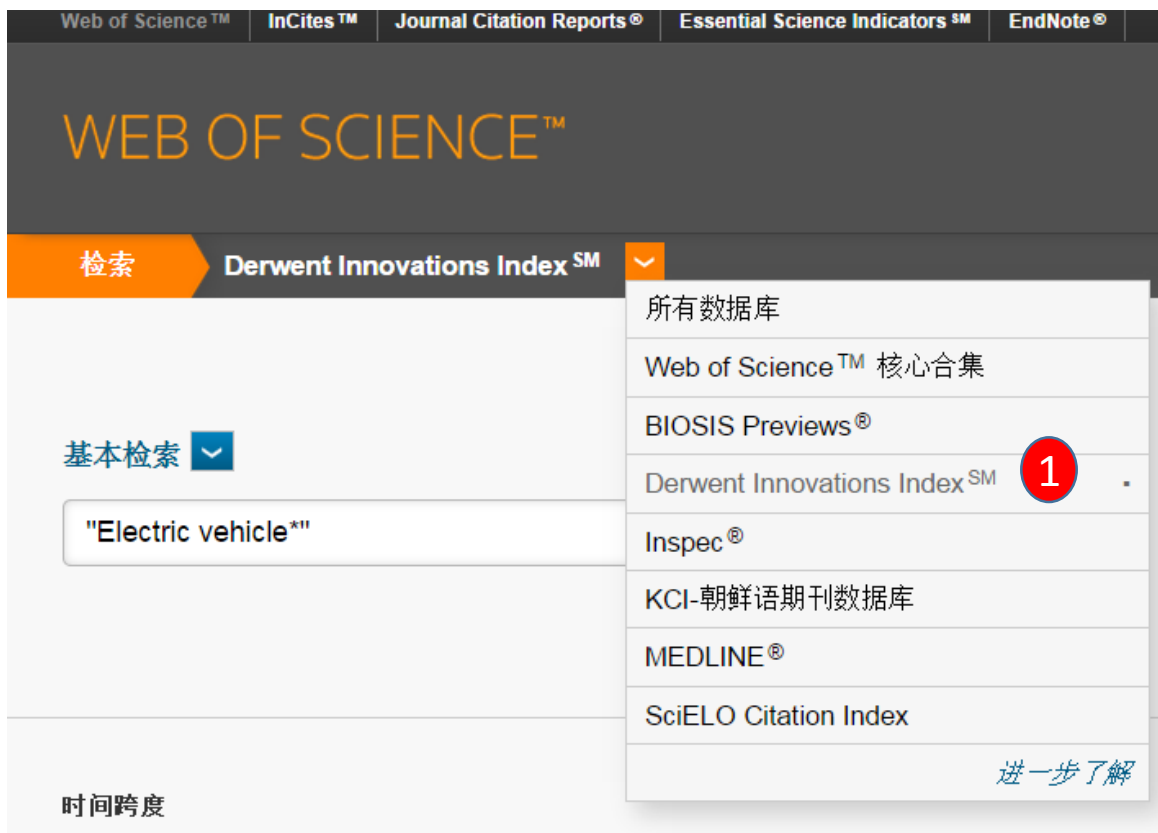
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个人主页: <http://blog.sciencenet.cn/u/jerrycueb>

1. 登录Derwent Innovations Index数据库

可以通过登录Web of science后，选择专利数据库Derwent Innovations Index



2. 检索结果与数据采集

The image shows a Web of Science search results page and an export dialog box. Red arrows and numbered circles (1-4) highlight key steps in the data collection process.

Web of Science Search Results Page:

- 检索结果: 5,655** (来自 Derwent Innovations Index)
- 您的检索:** 标题: ("Electric vehicle")
- 排序方式:** 更新日期
- 1** (Red circle) points to the "保存至 EndNote Online" button.
- 2** (Red circle) points to the "保存至 EndNote Online" button in the export dialog.
- 3** (Red circle) points to the "记录数" (Number of records) section in the export dialog.
- 4** (Red circle) points to the "发送" (Send) button in the export dialog.

Export Dialog Box:

- 选择页面:** 选择页面
- 保存至 EndNote Online** (Button)
- 添加到标记结果列表** (Button)
- 保存为其他文件格式** (Dropdown menu)
- 保存至 EndNote Online** (Option)
- 保存至 EndNote** (Option)
- 保存至 ResearcherID - 我撰写了** (Option)
- 保存为其他文件格式** (Option)
- 2** (Red circle) points to the "保存为其他文件格式" option.
- 发送到文件** (Section header)
- 记录数:** 页面上的所有记录 (Radio button), 记录 1 至 500 (Radio button)
- 3** (Red circle) points to the "记录数" section.
- 记录内容:** 全记录 (Dropdown menu)
- 文件格式:** 纯文本 (Dropdown menu)
- 发送** (Button)
- 取消** (Button)
- 4** (Red circle) points to the "发送" button.

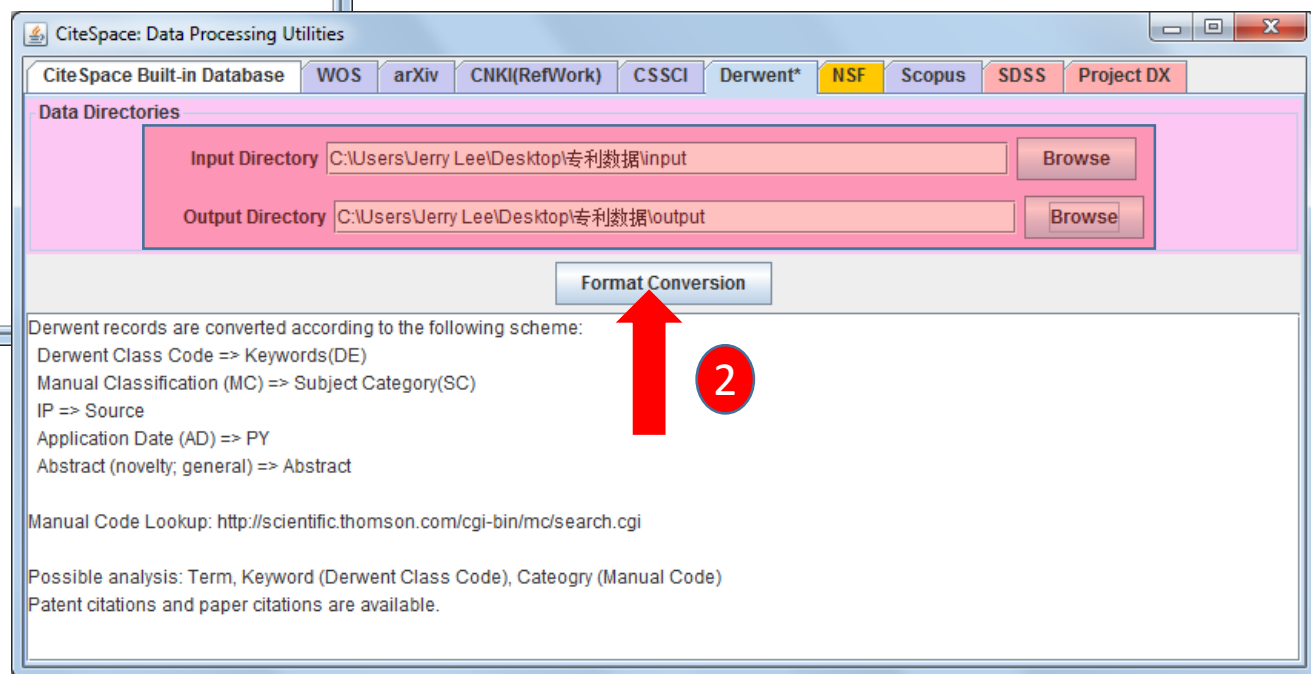
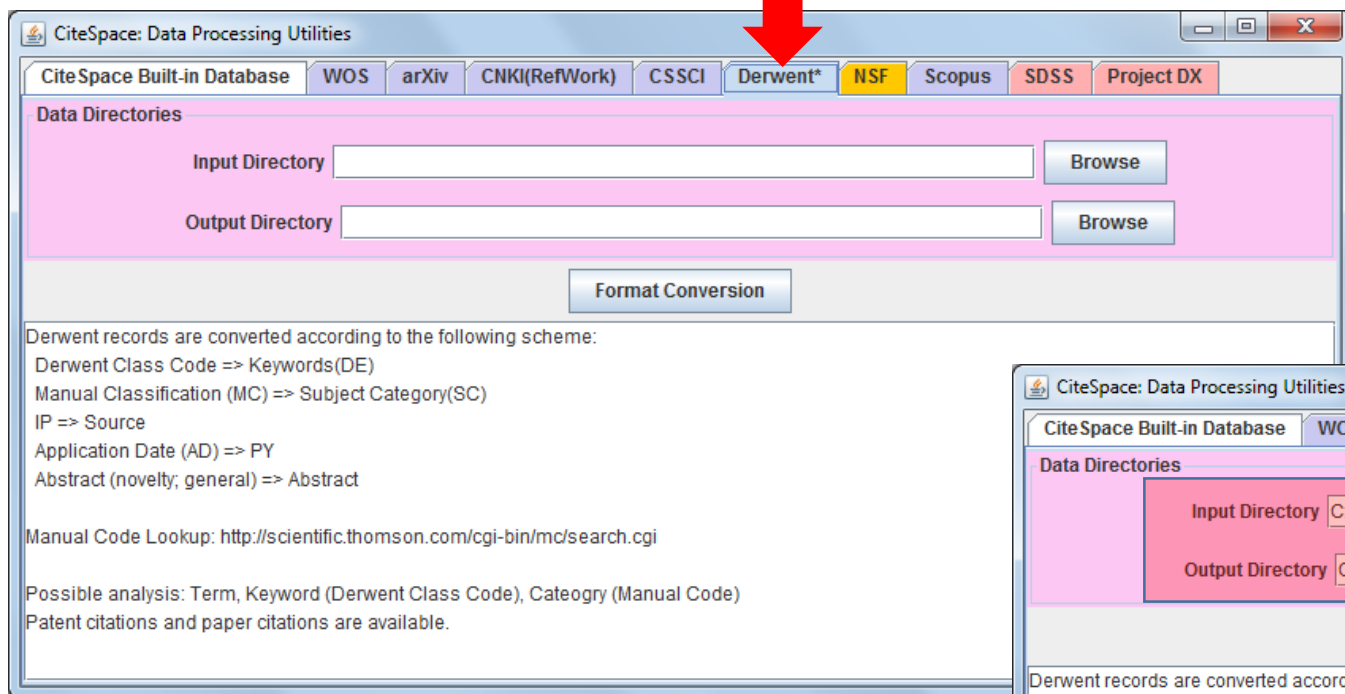
将记录发送至文件 (Section header)

如果没有自动发送, 请选择 "发送"。

发送 (Button) | **取消** (Button)

此处仅仅下载前500条记录作为案例数据。

3. 数据转换



3. 数据转换

```
1 FN Thomson Reuters Web of Science™
2 VR 1.0
3 PT P
4 PN US2014277881-A1
5 TI Method for starting internal combustion engine of hybrid electric vehic
6 AU OKUBO S
7 BUTCHER J A
8 AE FORD GLOBAL TECHNOLOGIES LLC (FORD-C)
9 GA 2014T50898
10 AB NOVELTY - The method involves applying cranking torque of an engine
11 USE - Method for starting an engine i.e. internal combustion engine, of
12 ADVANTAGE - The method enables shutting down the engine during times th
13 DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the fol
14 (1) a method for controlling an engine
15 (2) a hybrid vehicle.
16 DESCRIPTION OF DRAWING(S) - The drawing shows a schematic view of a veh
17 Vehicle (10)
18 Engine (12)
19 System controller (14)
20 Transaxle (32)
21 Gear set (38)
22 DC Q73 (Combustion equipment/processes); X21 (Electric Vehicles); X22 (Aut
23 MC X21-A01D1; X22-A03A; X22-A03E; X22-P04A; X22-X06N
24 IP B60W-010/06; B60W-010/08; B60W-020/00; F02D-041/06
25 PD US2014277881-A1 18 Sep 2014 F02D-041/06 201469 Pages: 10 Engl
26 AD US2014277881-A1 US010618 27 Aug 2013
27 FD US2014277881-A1 Provisional Application US799103P
28 PI US799103P 15 Mar 2013
29 US010618 27 Aug 2013
```

转换前

```
1 FN ISI Export Format
2 VR 1.0
3 PT P
4 AU OKUBO, S
5 BUTCHER, JA
6 AF OKUBO, S
7 BUTCHER, JA
8 TI Method for starting internal combustion engine of hybrid electric vehicle, involves applying cr
9 SO B60W-010/06;B60W-010/08;B60W-020/00;F02D-041/06
10 LA English
11 DT Article
12 DE q73 (combustion equipment/processes); x21 (electric vehicles); x22 (automotive electrics)
13 AB NOVELTY - The method involves applying cranking torque of an engine (12) to an engine cranking
14 C1 FORD GLOBAL TECHNOLOGIES LLC (FORD-C).
15 RP .
16 NR 0
17 TC 0
18 PU
19 PI
20 PA
21 SN
22 J9 -
23 PD Aug-27
24 PY 2013
25 VL -
26 IS -
27 BP -
28 EP -
29 DI
30
```

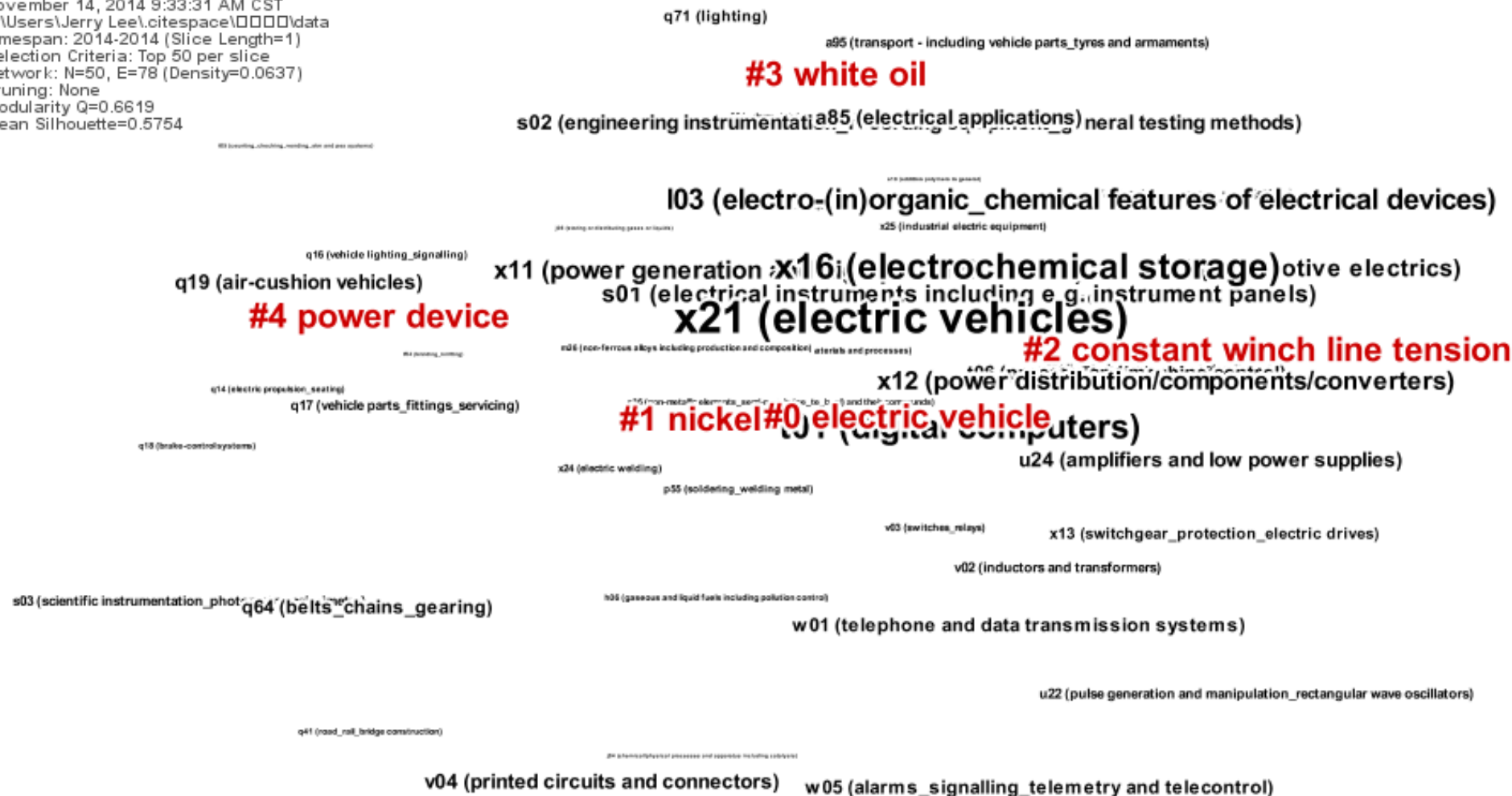
转换后

4. 数据分析

- 分析步骤与分析Web of Science的文献数据一致，一些基础步骤请参考：如何使用CiteSpace的一组示范及常见问题解答
- http://cluster.ischool.drexel.edu/~cchen/citespace/doc/tutorial/how_to/2.co-citation-analysis.pdf

4.结果： 共词（Keywords）网络

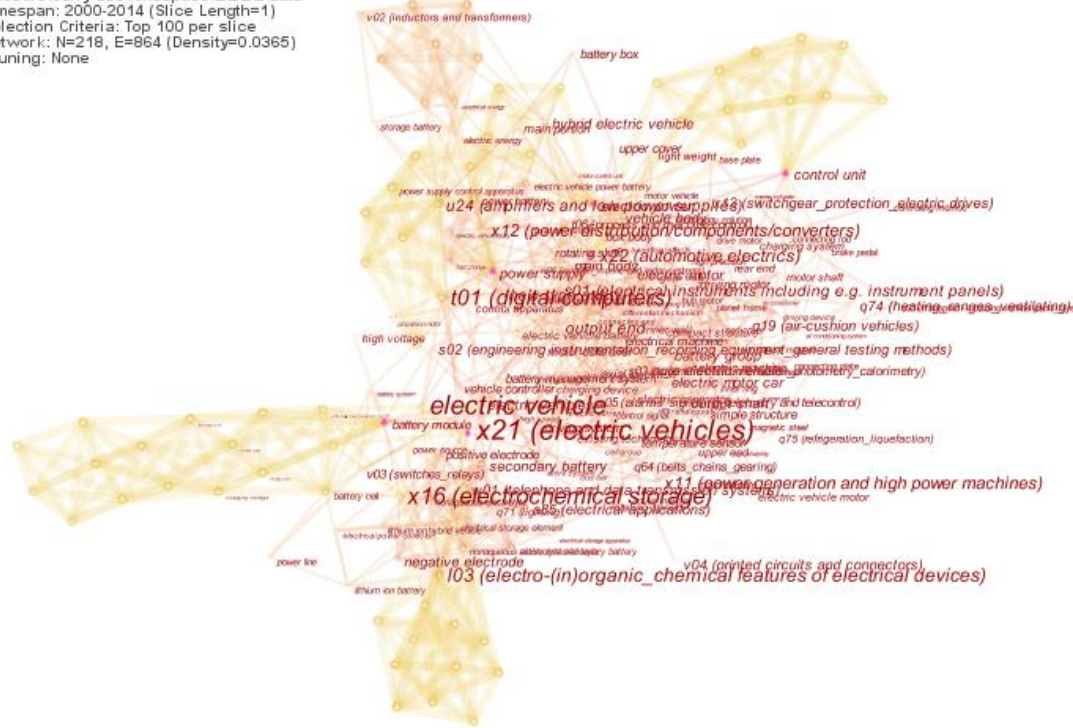
CiteSpace, v. 3.8.R7 (64-bit)
November 14, 2014 9:33:31 AM CST
C:\Users\Jerry Lee\citespace\□□□□\data
Timespan: 2014-2014 (Slice Length=1)
Selection Criteria: Top 50 per slice
Network: N=50, E=78 (Density=0.0637)
Pruning: None
Modularity Q=0.6619
Mean Silhouette=0.5754



4.结果：主题（terms）网络

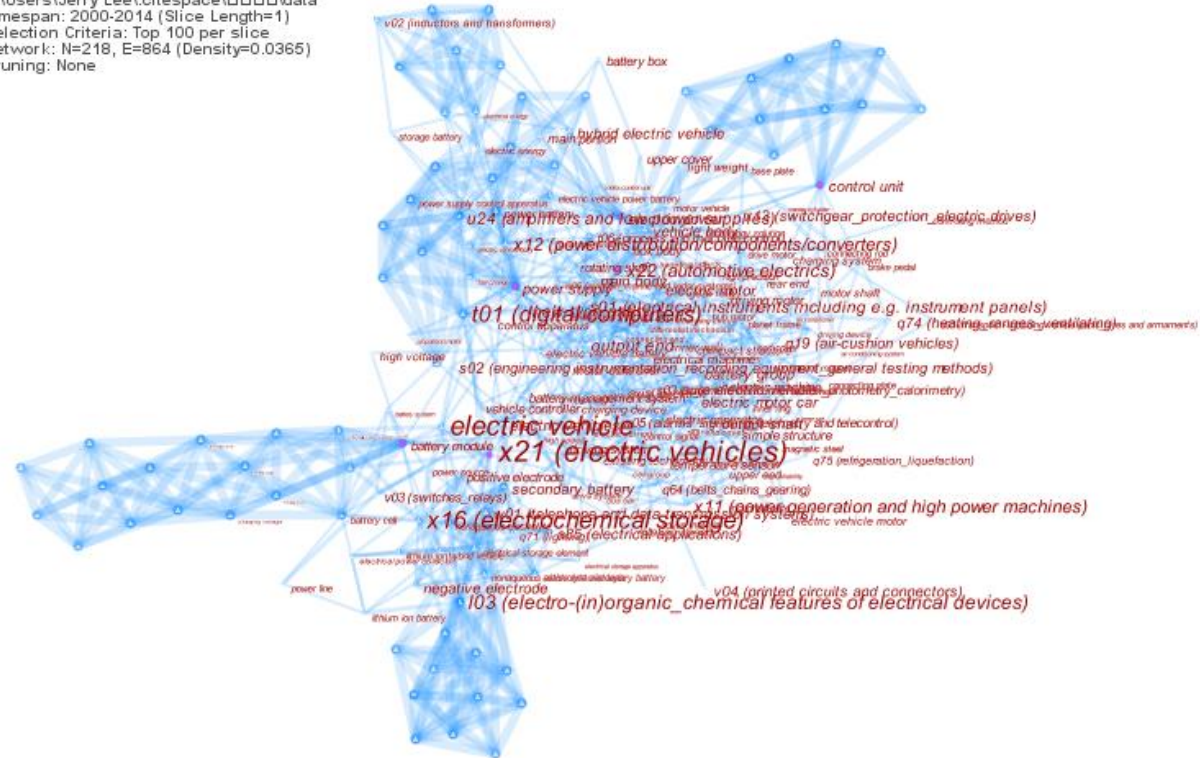
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

CiteSpace, v. 3.8.R7 (64-bit)
November 14, 2014 9:39:38 AM CST
C:\Users\Jerry Lee\citespace\data
Timespan: 2000-2014 (Slice Length=1)
Selection Criteria: Top 100 per slice
Network: N=218, E=864 (Density=0.0365)
Pruning: None

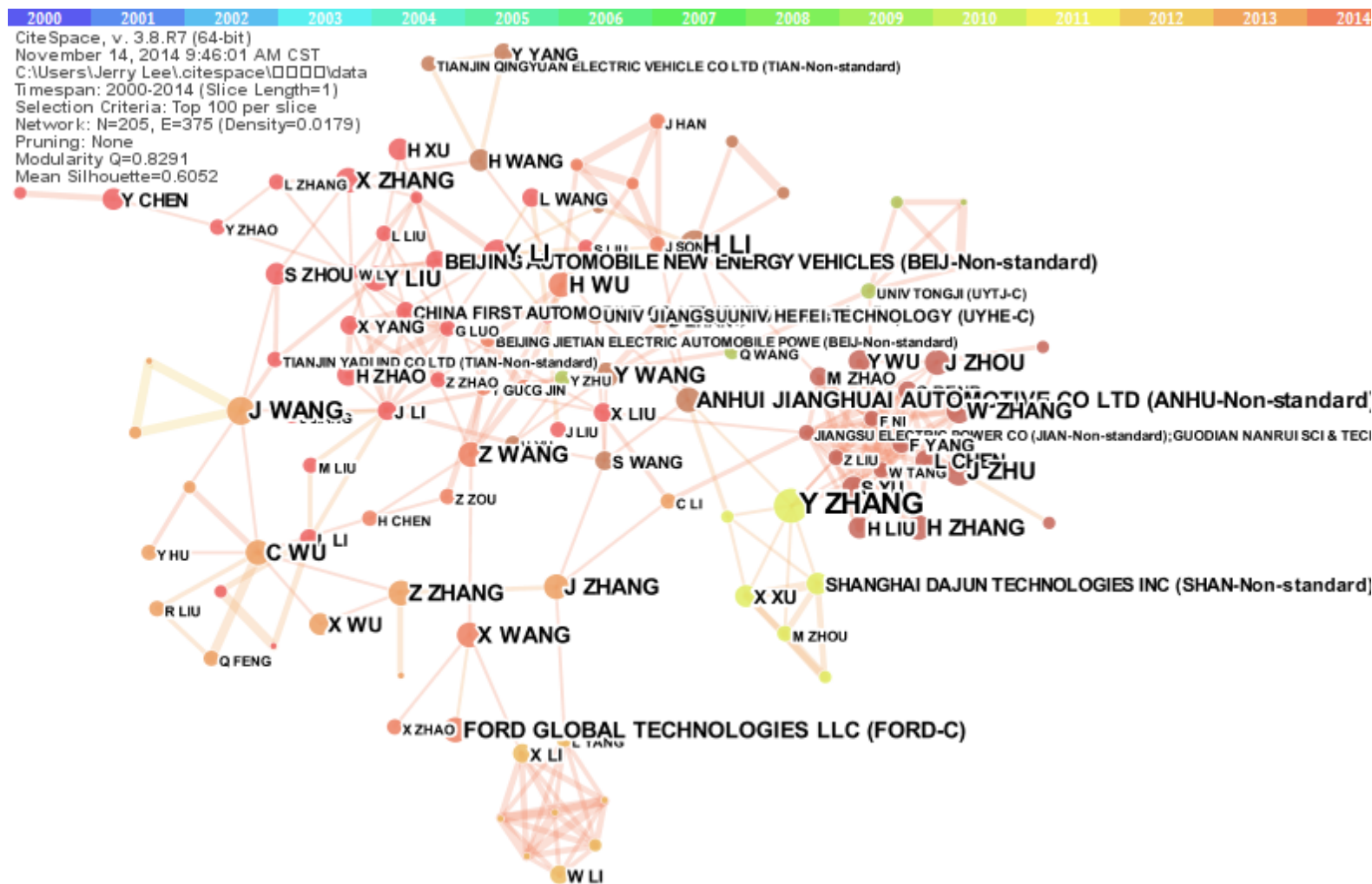


2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

CiteSpace, v. 3.8.R7 (64-bit)
November 14, 2014 9:39:38 AM CST
C:\Users\Jerry Lee\citespace\data
Timespan: 2000-2014 (Slice Length=1)
Selection Criteria: Top 100 per slice
Network: N=218, E=864 (Density=0.0365)
Pruning: None



4.结果： 作者（authors）-机构（institutions）网络



说明

- 由于收集的数据很少，这里就不展示共被引网络了。

更多CiteSpace学习资料参见

- 如何使用CiteSpace的一组示范及常见问题解答

<http://blog.sciencenet.cn/blog-496649-838067.html>

- CiteSpace手册

[http://cluster.ischool.drexel.edu/~cchen/citespace/CiteSpaceManual.p
df](http://cluster.ischool.drexel.edu/~cchen/citespace/CiteSpaceManual.pdf)