SciVal Spotlight

country **Romania**
year   **2011**

Competency EC #1   Heat transfer; Fluids; Natural convection

Why is EC #1 an emerging competency of Romania?

SciVal Spotlight identified EC #1 as an **emerging competency** of Romania because it is a field of research in which **Romania has a significant presence.**

More details »

Why is EC #1 not a distinctive competency of Romania?

This field met the following criterion:

> **Significantly large field of research**
>
> 2,485 articles were published worldwide in this field over the period 2007-2011. These articles add up to a total fractionalized article count of 1,321.8.
>
> More details »

but it did not meet any of the following three criteria:

> **Publication leader** ✕
>
> Romania is ranked #2 in this field by number of published articles.
>
> More details »

> **Reference leader** ✕
>
> Romania is ranked #5 by number of highly cited articles.
>
> More details »

> **Innovation leader** ✕
>
> Romania is citing more recent work than the country ranked #1 in this field, but is not a significantly large enough contributor to this field.
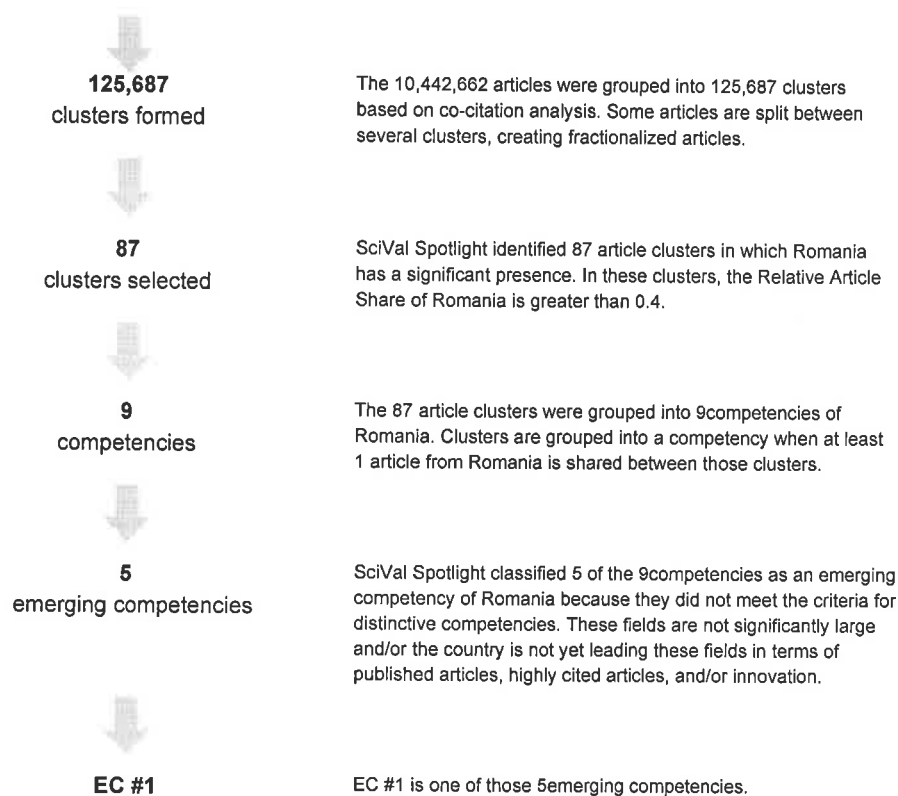>
> More details »

EC #1 is not a distinctive competency

This field is significantly large in terms of published articles, but Romania is not a publication, reference or innovation leader in this field.

What were the steps to create EC #1?

| **10 million** articles | 10,442,662 articles published over the period 2007-2011 were extracted from SciVerse Scopus. |

125,687
clusters formed

The 10,442,662 articles were grouped into 125,687 clusters based on co-citation analysis. Some articles are split between several clusters, creating fractionalized articles.

87
clusters selected

SciVal Spotlight identified 87 article clusters in which Romania has a significant presence. In these clusters, the Relative Article Share of Romania is greater than 0.4.

9
competencies

The 87 article clusters were grouped into 9competencies of Romania. Clusters are grouped into a competency when at least 1 article from Romania is shared between those clusters.

5
emerging competencies

SciVal Spotlight classified 5 of the 9competencies as an emerging competency of Romania because they did not meet the criteria for distinctive competencies. These fields are not significantly large and/or the country is not yet leading these fields in terms of published articles, highly cited articles, and/or innovation.

EC #1

EC #1 is one of those 5emerging competencies.

What does EC #1 look like?

This emerging competency is made up of **17 article clusters**. The graph on the left shows these clusters and how they are connected through shared articles.

View the graph at full size »

How to read this graph

Each circle represents an article cluster. The size of each circle indicates the number of articles in that cluster. The colour indicates the dominant subject area in that cluster.

The lines between the circles show how clusters are connected through shared articles.

In the full-size graph, you can examine each cluster in detail, as well as the connections between them.

SciVal Spotlight

country **Romania**
year **2011**

Competency EC #1 Heat transfer; Fluids; Natural convection

All contributing countries

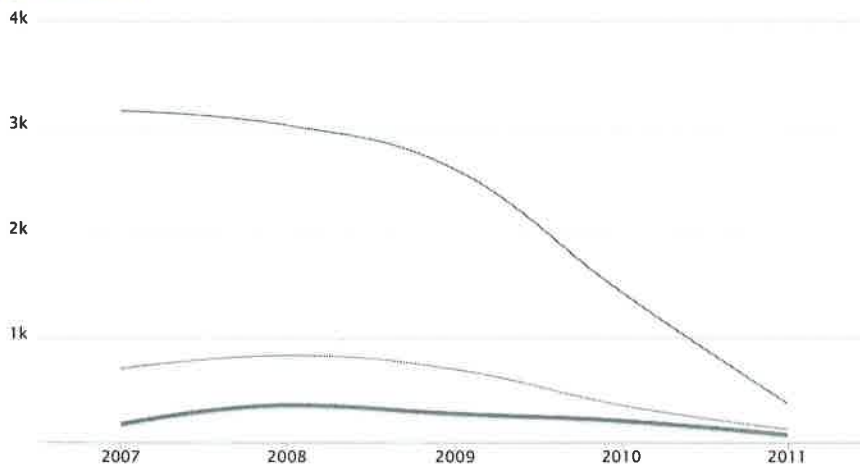| Country		Articles published in this field	Fractionalized article count
1. India	Asia Pacific	451	252.6
2. Romania	Europe	244	196.6
3. Malaysia	Asia Pacific	240	193.1
4. United States	North America	317	146.8
5. Iran	Middle East	193	90.6
6. Egypt	Africa	140	89.3
7. Pakistan	Asia Pacific	169	75.9
8. China	Asia Pacific	166	71.7
9. United Kingdom	Europe	107	62.9
10. Turkey	Middle East	100	52.5

SciVal Spotlight

country **Romania**
year **2011**

Competency EC #1 Heat transfer; Fluids; Natural convection

Show: Overall trend

☑ Worldwide
☑ Europe
☑ Romania

Articles published in this field, by year (2007-2011)

country Romania
year 2011

Competency EC #1   Heat transfer; Fluids; Natural convection

Show: Overall trend

- Worldwide —
- Europe —
- Romania —

Citations   in this field, by year (2007-2011)

country **Romania**
year   **2011**

Competency DC #2   Fixed point theorem; Fixed point; Result

Why is DC #2a distinctive competency of Romania?

SciVal Spotlight identified this field as a **distinctive competency** of Romania because it meets the following criterion:

Significantly large field of research ✓

2,409 articles were published worldwide in this field over the period 2007-2011.
These articles add up to a total fractionalized article count of 1,167.0.

More details »

---

and it meets **at least one** of the following three criteria:

Publication leader ✕

Romania is ranked #2 in this field by number of published articles.

More details »

Reference leader ✕

Romania is ranked #2 by number of highly cited articles.

More details »

Innovation leader ✓

Romania is a major contributor to in this field, and is citing more recent work than the country ranked #1.

More details »

✓ DC #2 is a distinctive competency
because it is a significantly large field of research, and Romania is an innovation leader in this field.
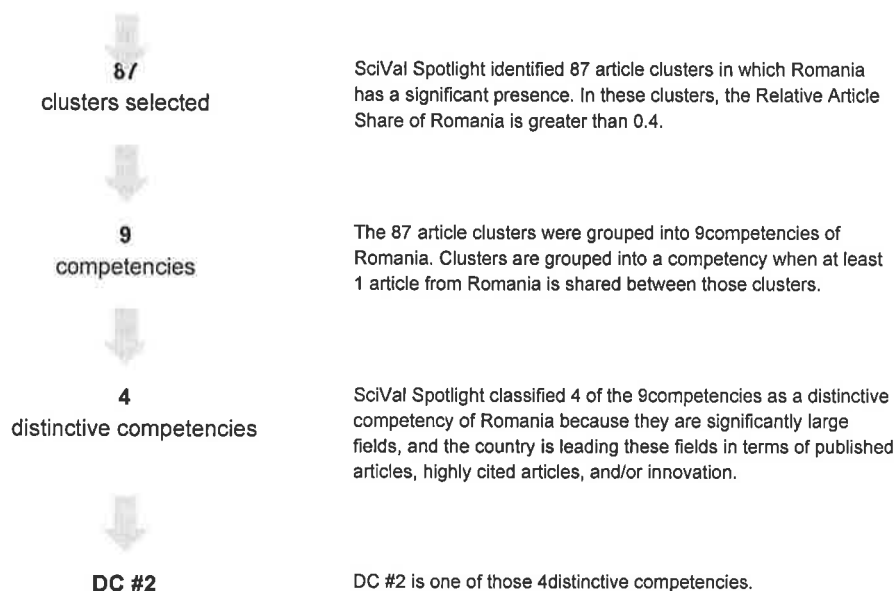
What were the steps to create DC #2?
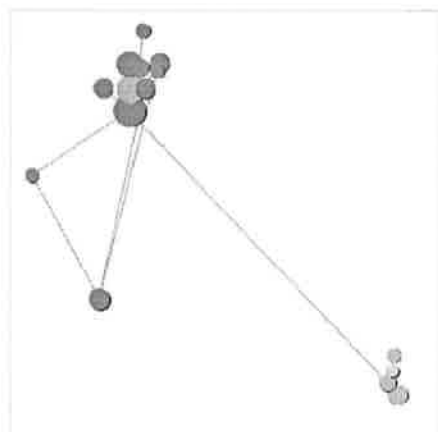
10 million articles	10,442,662 articles published over the period 2007-2011 were extracted from SciVerse Scopus.
↓	
125,687 clusters formed	The 10,442,662 articles were grouped into 125,687 clusters based on co-citation analysis. Some articles are split between several clusters, creating fractionalized articles.

87
clusters selected

SciVal Spotlight identified 87 article clusters in which Romania has a significant presence. In these clusters, the Relative Article Share of Romania is greater than 0.4.

9
competencies

The 87 article clusters were grouped into 9competencies of Romania. Clusters are grouped into a competency when at least 1 article from Romania is shared between those clusters.

4
distinctive competencies

SciVal Spotlight classified 4 of the 9competencies as a distinctive competency of Romania because they are significantly large fields, and the country is leading these fields in terms of published articles, highly cited articles, and/or innovation.

DC #2

DC #2 is one of those 4distinctive competencies.

What does DC #2 look like?

This distinctive competency is made up of **15 article clusters**. The graph on the left shows these clusters and how they are connected through shared articles.

View the graph at full size »

How to read this graph

Each circle represents an article cluster. The size of each circle indicates the number of articles in that cluster. The colour indicates the dominant subject area in that cluster.

The lines between the circles show how clusters are connected through shared articles.

In the full-size graph, you can examine each cluster in detail, as well as the connections between them.

country Romania
year **2011**

Competency DC #2 Fixed point theorem; Fixed point; Result

All contributing countries

Country		Articles published in this field	Fractionalized article count
1. China	Asia Pacific	440	208.7
2. Romania	Europe	262	177.9
3. United States	North America	232	91.1
4. Taiwan	Asia Pacific	120	68.3
5. Poland	Europe	134	64.9
6. India	Asia Pacific	117	61.8
7. Italy	Europe	117	55.5
8. Iran	Middle East	97	39.9
9. Spain	Europe	97	37.6
10. Pakistan	Asia Pacific	50	37.6

SciVal Spotlight

country **Romania**
year **2011**

Competency DC #2 Fixed point theorem; Fixed point; Result

Show: Overall trend ▾

☑ Worldwide ━
☑ Europe ━
☑ Romania ━

Articles published ▾ in this field, by year (2007-2011)

SciVal
Spotlight
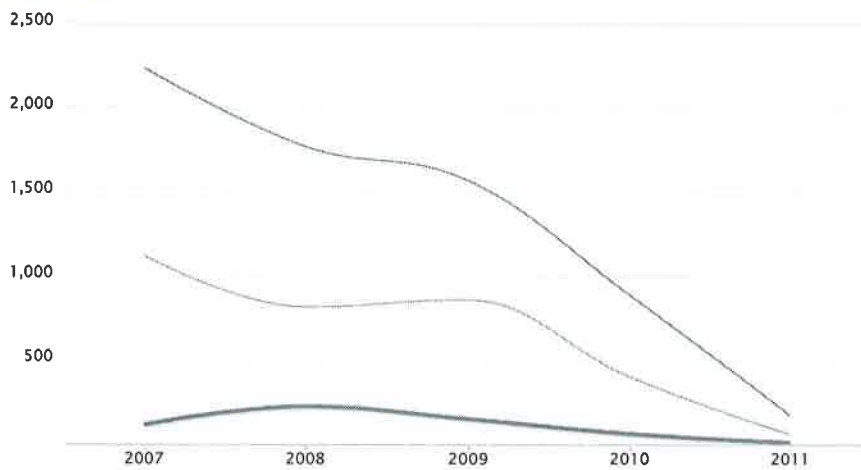
country Romania
year **2011**

Competency DC #2 Fixed point theorem; Fixed point; Result

Show: Overall trend

☑ Worldwide   ▬
☑ Europe   ▬
☑ **Romania**   ▬

Citations   ▾ in this field, by year (2007-2011)

country **Romania**
year **2011**

Competency EC #3   Membranes; Formal languages; Models

Why is EC #3an emerging competency of Romania?

SciVal Spotlight identified EC #3 as an **emerging competency** of Romania because it is a field
of research in which Romania has a significant presence.

More details »

Why is EC #3 not a distinctive competency of Romania?

This field met the following criterion:

Significantly large field of research   ✓

1,423 articles were published worldwide in this field over the period 2007-2011.
These articles add up to a total fractionalized article count of 779.7.

More details »

but it did not meet any of the following three criteria:

Publication leader   ✕

Romania is ranked #3 in this field by number
of published articles.

More details »

Reference leader   ✕

Romania is ranked #2 by number of highly
cited articles.

More details »

Innovation leader   ✕

Romania is not a significantly large enough
contributor to this field, and is not citing more
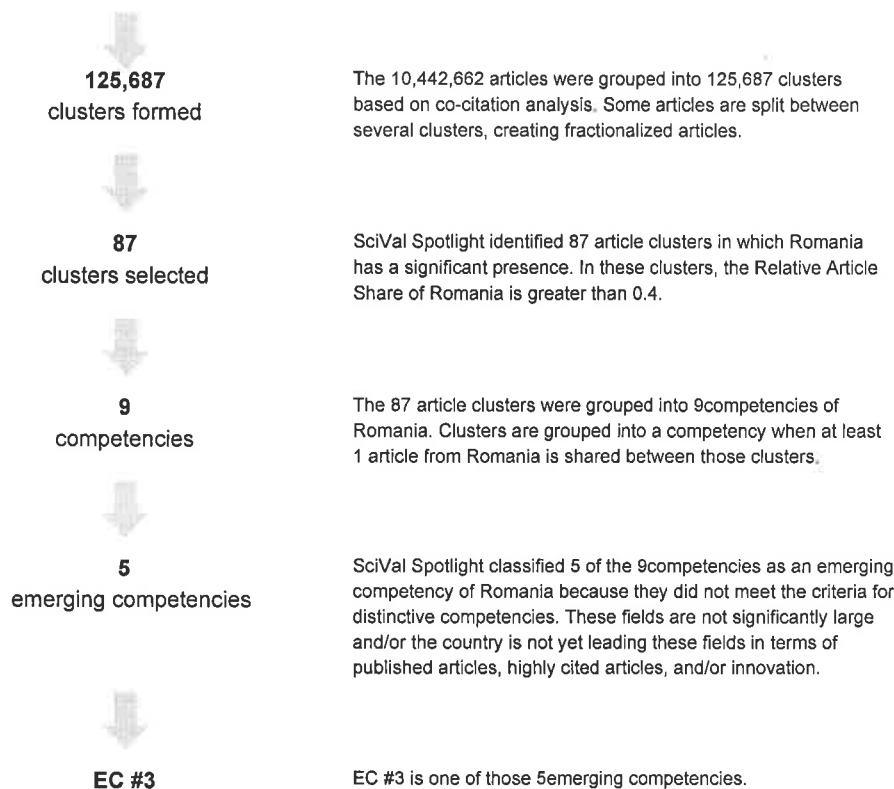recent work than the country ranked #1.

More details »

EC #3 is not a distinctive competency

This field is significantly large in terms of published articles, but Romania is not a publication,
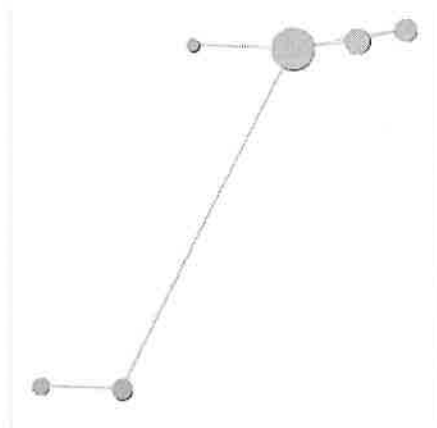reference or innovation leader in this field.

What were the steps to create EC #3?

10 million
articles

10,442,662 articles published over the period 2007-2011 were
extracted from SciVerse Scopus.

125,687
clusters formed

The 10,442,662 articles were grouped into 125,687 clusters based on co-citation analysis. Some articles are split between several clusters, creating fractionalized articles.

87
clusters selected

SciVal Spotlight identified 87 article clusters in which Romania has a significant presence. In these clusters, the Relative Article Share of Romania is greater than 0.4.

9
competencies

The 87 article clusters were grouped into 9competencies of Romania. Clusters are grouped into a competency when at least 1 article from Romania is shared between those clusters.

5
emerging competencies

SciVal Spotlight classified 5 of the 9competencies as an emerging competency of Romania because they did not meet the criteria for distinctive competencies. These fields are not significantly large and/or the country is not yet leading these fields in terms of published articles, highly cited articles, and/or innovation.

EC #3

EC #3 is one of those 5emerging competencies.

What does EC #3 look like?

This emerging competency is made up of **6 article clusters**. The graph on the left shows these clusters and how they are connected through shared articles.

View the graph at full size »

How to read this graph

Each circle represents an article cluster. The size of each circle indicates the number of articles in that cluster. The colour indicates the dominant subject area in that cluster.

The lines between the circles show how clusters are connected through shared articles.

In the full-size graph, you can examine each cluster in detail, as well as the connections between them.

SciVal Spotlight

country Romania
year **2011**

Competency EC #3 Membranes; Formal languages; Models

All contributing countries

Country		Articles published in this field	Fractionalized article count
1. Spain	Europe	215	167.2
2. China	Asia Pacific	195	122.3
3. Romania	Europe	138	110.3
4. Italy	Europe	147	86.8
5. Japan	Asia Pacific	94	63.0
6. United States	North America	187	61.5
7. United Kingdom	Europe	131	59.1
8. Germany	Europe	100	45.1
9. India	Asia Pacific	61	43.9
10.Czech Republic	Europe	56	42.4

country **Romania**

year   **2011**

Competency EC #3   Membranes; Formal languages; Models

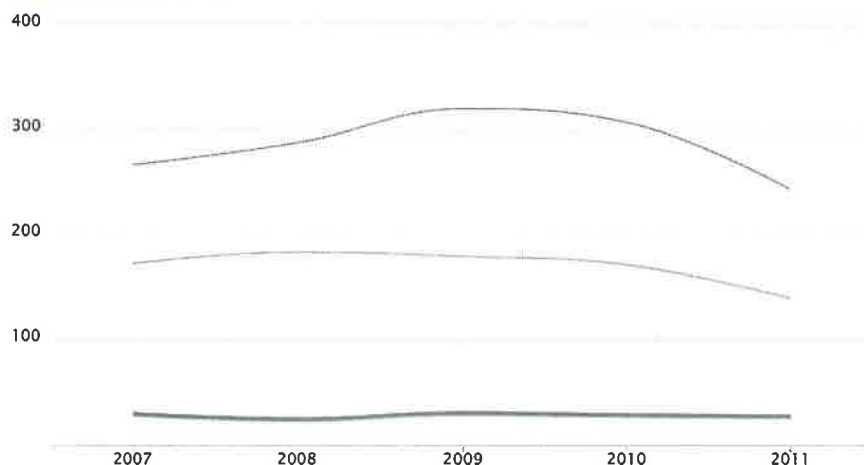**Show:** Overall trend

- Worldwide   —
- Europe   —
- Romania   —

Articles published   in this field, by year (2007-2011)

SciVal
Spotlight

country **Romania**
year **2011**

Competency EC #3 Membranes; Formal languages; Models

Show: Overall trend

- Worldwide —
- Europe =
- Romania —

Citations in this field, by year (2007-2011)

country **Romania**
year **2011**

Competency EC #4   nuclei; decay; neutrons

Why is EC #4 an emerging competency of Romania?

SciVal Spotlight identified EC #4 as an **emerging competency** of Romania because it is a field
of research in which Romania has a significant presence.

More details »

Why is EC #4 not a distinctive competency of Romania?

This field met the following criterion:

Significantly large field of research   ✓

1,464 articles were published worldwide in this field over the period 2007-2011.
These articles add up to a total fractionalized article count of 732.5.

More details »

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but it did not meet any of the following three criteria:

Publication leader   ✕

Romania is ranked #9 in this field by number
of published articles.

More details »

Reference leader   ✕

Romania is ranked #10 by number of highly
cited articles.

More details »

Innovation leader   ✕

Romania is not a significantly large enough
contributor to this field, and is not citing more
recent work than the country ranked #1.

More details »

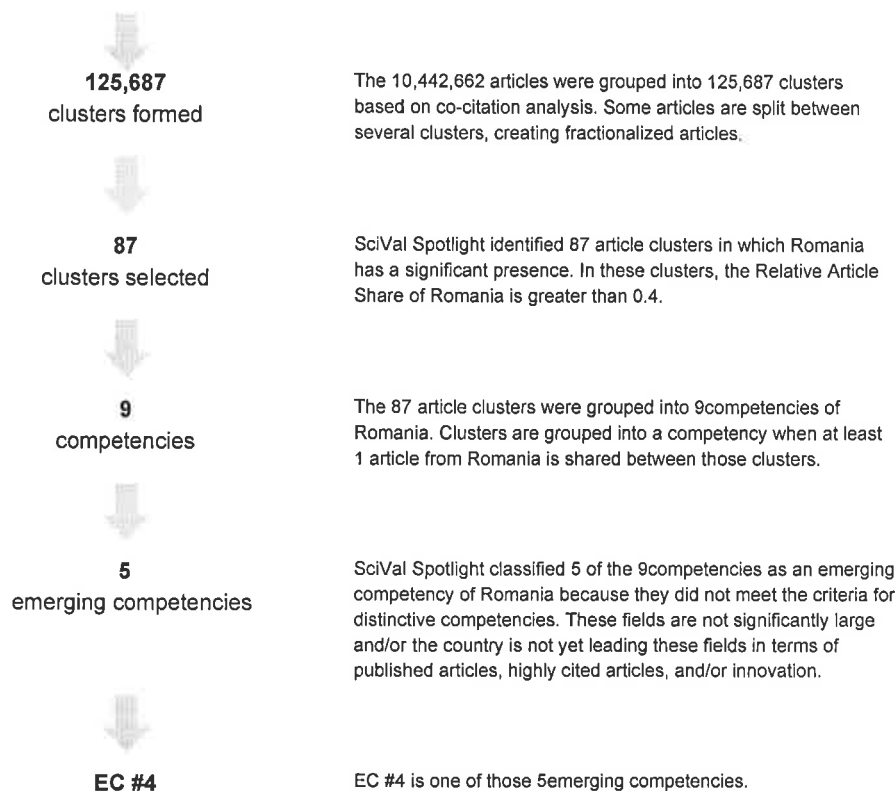
EC #4 is not a distinctive competency

This field is significantly large in terms of published articles, but Romania is not a publication,
reference or innovation leader in this field.
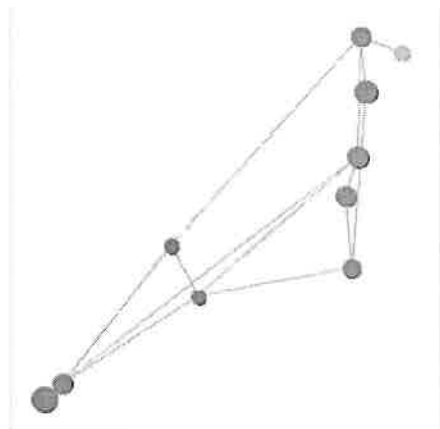
What were the steps to create EC #4?

10 million   10,442,662 articles published over the period 2007-2011 were
articles   extracted from SciVerse Scopus.

125,687
clusters formed

The 10,442,662 articles were grouped into 125,687 clusters based on co-citation analysis. Some articles are split between several clusters, creating fractionalized articles.

87
clusters selected

SciVal Spotlight identified 87 article clusters in which Romania has a significant presence. In these clusters, the Relative Article Share of Romania is greater than 0.4.

9
competencies

The 87 article clusters were grouped into 9competencies of Romania. Clusters are grouped into a competency when at least 1 article from Romania is shared between those clusters.

5
emerging competencies

SciVal Spotlight classified 5 of the 9competencies as an emerging competency of Romania because they did not meet the criteria for distinctive competencies. These fields are not significantly large and/or the country is not yet leading these fields in terms of published articles, highly cited articles, and/or innovation.

EC #4

EC #4 is one of those 5emerging competencies.

What does EC #4 look like?

This emerging competency is made up of **10 article clusters**. The graph on the left shows these clusters and how they are connected through shared articles.

View the graph at full size »

How to read this graph

Each circle represents an article cluster. The size of each circle indicates the number of articles in that cluster. The colour indicates the dominant subject area in that cluster.

The lines between the circles show how clusters are connected through shared articles.

In the full-size graph, you can examine each cluster in detail, as well as the connections between them.

SciVal Spotlight

country Romania
year 2011

Competency EC #4 nuclei; decay; neutrons

All contributing countries

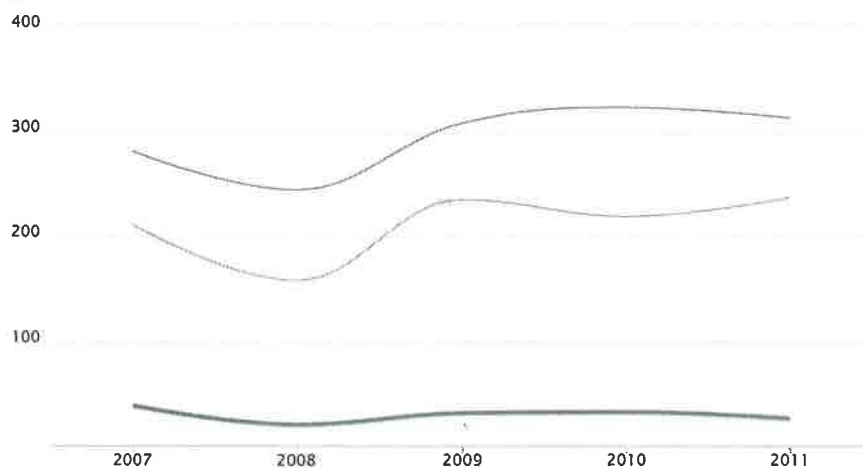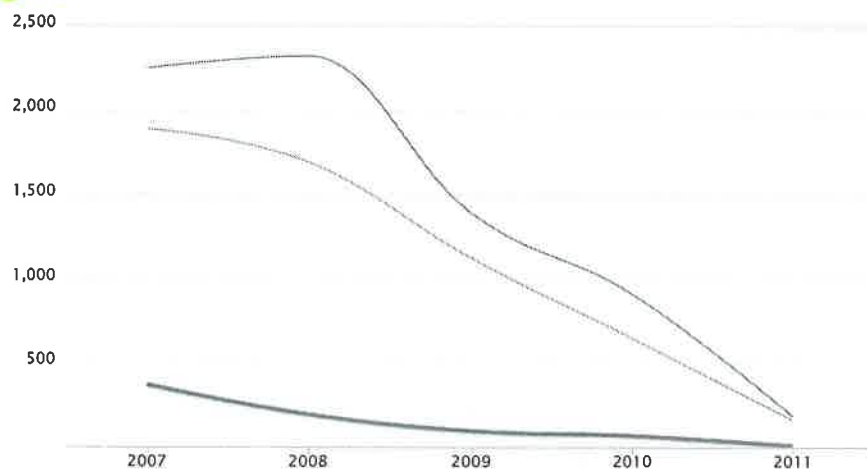| Country		Articles published in this field	Fractionalized article count
1. United States	North America	431	203.4
2. Germany	Europe	370	183.9
3. Italy	Europe	276	164.3
4. France	Europe	290	160.7
5. United Kingdom	Europe	254	144.7
6. Poland	Europe	196	124.9
7. Russian Federation	Europe	187	111.8
8. Spain	Europe	201	111.0
9. Romania	Europe	147	99.4
10. Sweden	Europe	105	69.8

country Romania
year 2011

Competency EC #4 nuclei; decay; neutrons

Show: Overall trend

- ☑ Worldwide —
- ☑ Europe —
- ☑ **Romania** —

Articles published in this field, by year (2007-2011)

400

300

200

100

2007   2008   2009   2010   2011

SciVal Spotlight

country **Romania**
year   **2011**

Competency EC #4   nuclei; decay; neutrons

Show: Overall trend ▾

☑ Worldwide   ——
☑ Europe   ——
☑ **Romania**   ——

Citations ▾   in this field, by year (2007-2011)

country **Romania**
year   **2011**

Competency EC #5   Variable exponent; Existence; p (x)-Laplacian

Why is EC #5an emerging competency of Romania?

SciVal Spotlight identified EC #5 as an **emerging competency** of Romania because it is a field
of research in which Romania has a significant presence.

More details »

Why is EC #5 not a distinctive competency of Romania?

This field met the following criterion:

Significantly large field of research   ✓

1,241 articles were published worldwide in this field over the period 2007-2011.
These articles add up to a total fractionalized article count of 730.2.

More details »

---

but it did not meet any of the following three criteria:

Publication leader   ✕

Romania is ranked #3 in this field by number
of published articles.

More details »

Reference leader   ✕

Romania is ranked #3 by number of highly
cited articles.

More details »

Innovation leader   ✕

Romania is not a significantly large enough
contributor to this field, and is not citing more
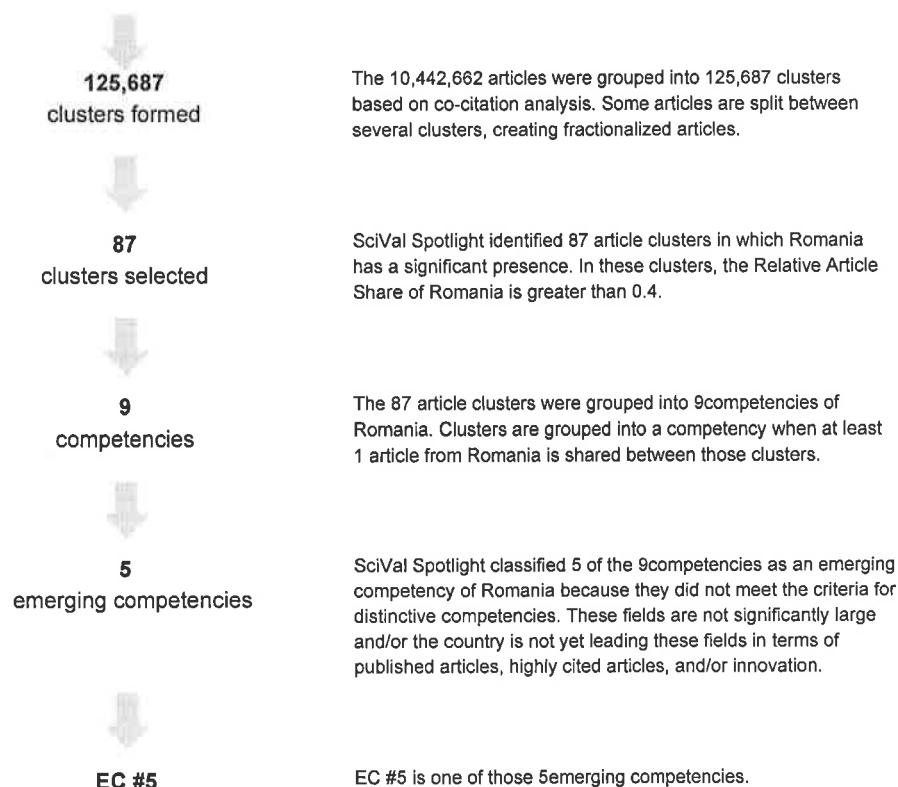recent work than the country ranked #1.

More details »

EC #5 is **not a distinctive competency**

This field is significantly large in terms of published articles, but Romania is not a publication,
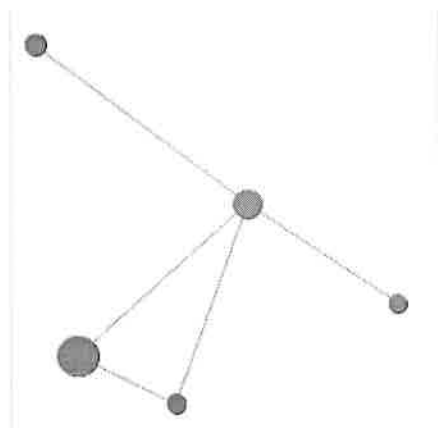reference or innovation leader in this field.

What were the steps to create EC #5?

10 million   10,442,662 articles published over the period 2007-2011 were
articles   extracted from SciVerse Scopus.

125,687
clusters formed

The 10,442,662 articles were grouped into 125,687 clusters based on co-citation analysis. Some articles are split between several clusters, creating fractionalized articles.

87
clusters selected

SciVal Spotlight identified 87 article clusters in which Romania has a significant presence. In these clusters, the Relative Article Share of Romania is greater than 0.4.

9
competencies

The 87 article clusters were grouped into 9competencies of Romania. Clusters are grouped into a competency when at least 1 article from Romania is shared between those clusters.

5
emerging competencies

SciVal Spotlight classified 5 of the 9competencies as an emerging competency of Romania because they did not meet the criteria for distinctive competencies. These fields are not significantly large and/or the country is not yet leading these fields in terms of published articles, highly cited articles, and/or innovation.

EC #5

EC #5 is one of those 5emerging competencies.

What does EC #5 look like?

This emerging competency is made up of **5 article clusters**. The graph on the left shows these clusters and how they are connected through shared articles.

View the graph at full size »

How to read this graph

Each circle represents an article cluster. The size of each circle indicates the number of articles in that cluster. The colour indicates the dominant subject area in that cluster.

The lines between the circles show how clusters are connected through shared articles.

In the full-size graph, you can examine each cluster in detail, as well as the connections between them.

SciVal Spotlight

country **Romania**
year   **2011**

Competency EC #5 Variable exponent; Existence; p (x)-Laplacian

All contributing countries

Country		Articles published in this field	Fractionalized article count
1. China	Asia Pacific	310	189.0
2. Italy	Europe	147	94.7
3. Romania	Europe	113	85.5
4. France	Europe	91	42.8
5. Portugal	Europe	65	41.7
6. Germany	Europe	75	34.9
7. Turkey	Middle East	35	26.7
8. Iran	Middle East	30	25.8
9. Poland	Europe	46	24.5
10.Hungary	Europe	32	24.4

SciVal Spotlight

country Romania
year 2011

Competency EC #5 Variable exponent; Existence; p (x)-Laplacian

Show: Overall trend

- Worldwide ——
- Europe ——
- Romania ——

Articles published in this field, by year (2007-2011)

SciVal
Spotlight

country Romania
year   2011

Competency EC #5 Variable exponent; Existence; p (x)-Laplacian

Show: Overall trend

☑ Worldwide   ‑‑
☑ Europe   ‑‑
☑ Romania   ‑‑

Citations   in this field, by year (2007-2011)

country **Romania**
year   **2011**

Competency DC #6   Polymers; Polyimides; Polyurethanes

Why is DC #6a distinctive competency of Romania?

SciVal Spotlight identified this field as a **distinctive competency** of Romania because it meets the following criterion:

Significantly large field of research   ✓

1,644 articles were published worldwide in this field over the period 2007-2011.
These articles add up to a total fractionalized article count of 667.0.

More details »

---

and it meets **at least one** of the following three criteria:

Publication leader   ✓

Romania is ranked #1 in this field by number of published articles.

More details »

Reference leader   ✓

Romania is ranked #1 by number of highly cited articles.

More details »

Innovation leader   ✗

Romania is the publication leader this field, but is not citing more recent work than the country ranked #2.

More details »

✓ **DC #6 is a distinctive competency**
because it is a significantly large field of research, and Romania is apublication andreference leader in this field.
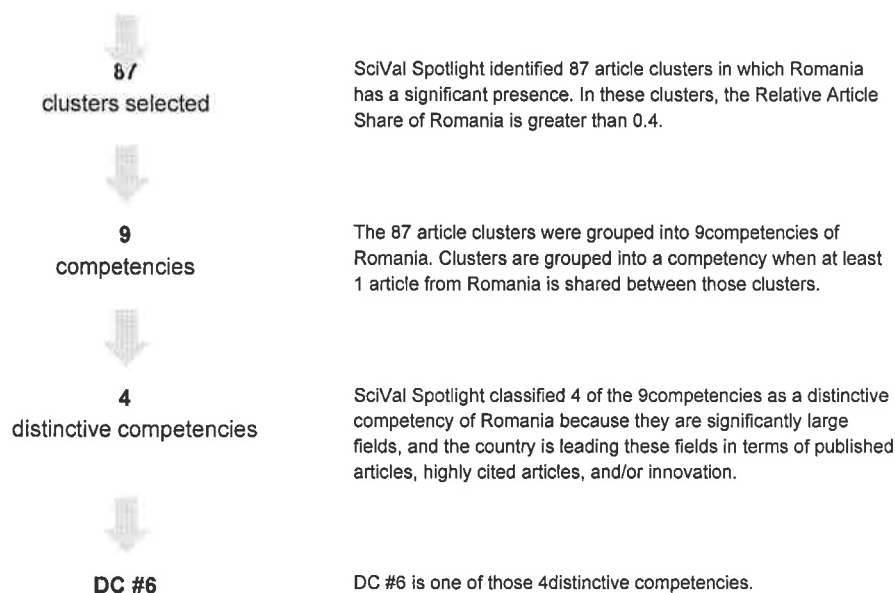
What were the steps to create DC #6?

10 million
articles

10,442,662 articles published over the period 2007-2011 were extracted from SciVerse Scopus.
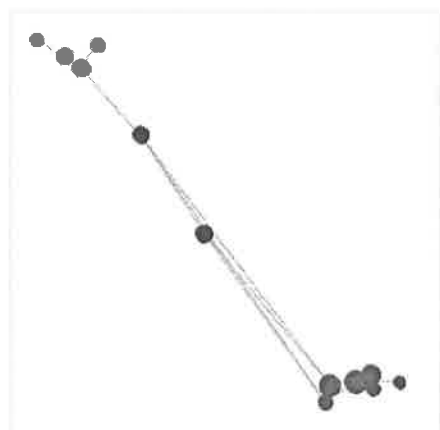
⬇

125,687
clusters formed

The 10,442,662 articles were grouped into 125,687 clusters based on co-citation analysis. Some articles are split between several clusters, creating fractionalized articles.

87
clusters selected

SciVal Spotlight identified 87 article clusters in which Romania has a significant presence. In these clusters, the Relative Article Share of Romania is greater than 0.4.

9
competencies

The 87 article clusters were grouped into 9competencies of Romania. Clusters are grouped into a competency when at least 1 article from Romania is shared between those clusters.

4
distinctive competencies

SciVal Spotlight classified 4 of the 9competencies as a distinctive competency of Romania because they are significantly large fields, and the country is leading these fields in terms of published articles, highly cited articles, and/or innovation.

DC #6

DC #6 is one of those 4distinctive competencies.

What does DC #6 look like?

This distinctive competency is made up of **12 article clusters**. The graph on the left shows these clusters and how they are connected through shared articles.

View the graph at full size »

How to read this graph

Each circle represents an article cluster. The size of each circle indicates the number of articles in that cluster. The colour indicates the dominant subject area in that cluster.

The lines between the circles show how clusters are connected through shared articles.

In the full-size graph, you can examine each cluster in detail, as well as the connections between them.

SciVal Spotlight

country Romania
year 2011

Competency DC #6   Polymers; Polyimides; Polyurethanes

All contributing countries

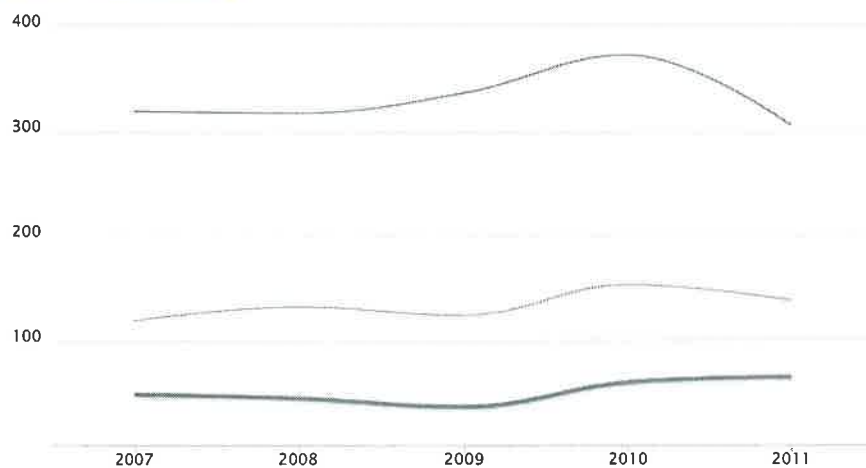| Country		Articles published in this field	Fractionalized article count
1. Romania	Europe	251	180.0
2. China	Asia Pacific	328	118.8
3. United States	North America	163	55.2
4. India	Asia Pacific	107	44.6
5. Poland	Europe	82	37.5
6. Iran	Middle East	66	28.5
7. Germany	Europe	75	28.4
8. Russian Federation	Europe	40	22.0
9. Japan	Asia Pacific	54	21.0
10.Taiwan	Asia Pacific	66	18.0

SciVal Spotlight

country Romania
year 2011

Competency DC #6 Polymers; Polyimides; Polyurethanes

Show: Overall trend ▾

☑ Worldwide ▬
☑ Europe ▬
☑ **Romania** ▬

Articles published ▾ in this field, by year (2007-2011)

SciVal Spotlight

country **Romania**
year **2011**

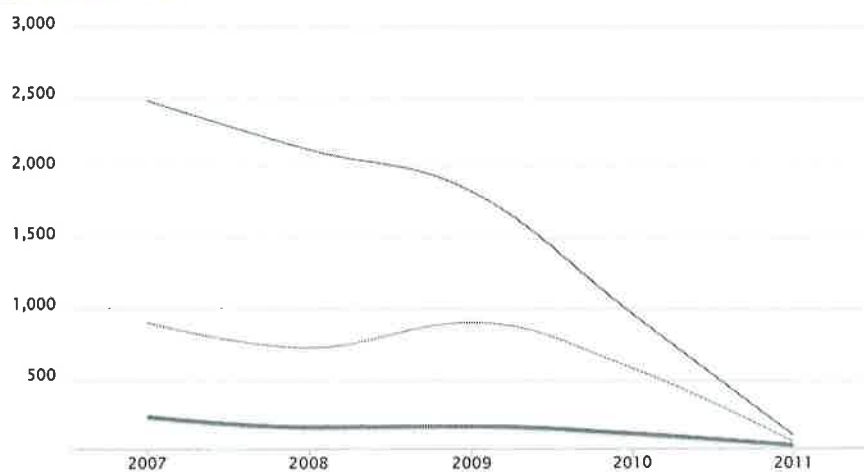## Competency DC #6 Polymers; Polyimides; Polyurethanes

Show: Overall trend

☑ Worldwide ⎯
☑ Europe ⎯
☑ Romania ⎯

Citations in this field, by year (2007-2011)

country **Romania**
year   **2011**

Competency EC #7   Analytic function; Unit disk; Subordination

Why is EC #7an emerging competency of Romania?

SciVal Spotlight identified EC #7 as an **emerging competency** of Romania because it is a field
of research in which Romania has a significant presence.

More details »

Why is EC #7 not a distinctive competency of Romania?

This field met the following criterion:

Significantly large field of research   ✓

907 articles were published worldwide in this field over the period 2007-2011.
These articles add up to a total fractionalized article count of 621.7.

More details »

---

but it did not meet any of the following three criteria:

Publication leader   ✕

Romania is ranked #3 in this field by number
of published articles.

More details »

Reference leader   ✕

Romania is ranked #3 by number of highly
cited articles.

More details »

Innovation leader   ✕

Romania is not a significantly large enough
contributor to this field, and is not citing more
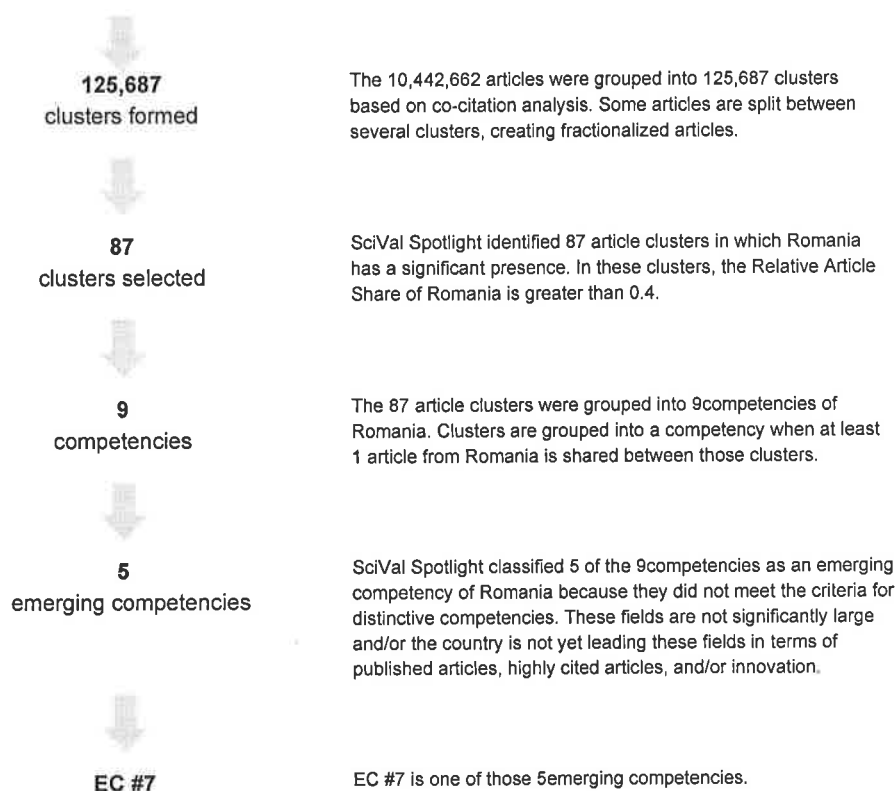recent work than the country ranked #1.

More details »

EC #7 is not a distinctive competency

This field is significantly large in terms of published articles, but Romania is not a publication,
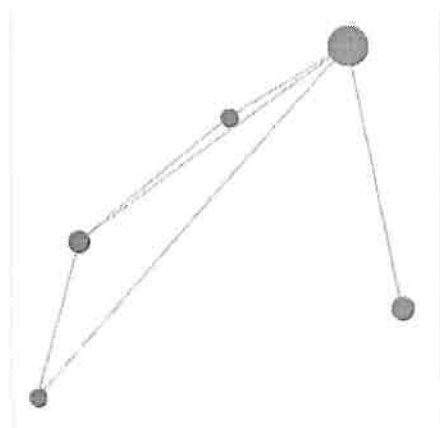reference or innovation leader in this field.

What were the steps to create EC #7?

10 million   10,442,662 articles published over the period 2007-2011 were
articles   extracted from SciVerse Scopus.

125,687
clusters formed

The 10,442,662 articles were grouped into 125,687 clusters based on co-citation analysis. Some articles are split between several clusters, creating fractionalized articles.

87
clusters selected

SciVal Spotlight identified 87 article clusters in which Romania has a significant presence. In these clusters, the Relative Article Share of Romania is greater than 0.4.

9
competencies

The 87 article clusters were grouped into 9 competencies of Romania. Clusters are grouped into a competency when at least 1 article from Romania is shared between those clusters.

5
emerging competencies

SciVal Spotlight classified 5 of the 9 competencies as an emerging competency of Romania because they did not meet the criteria for distinctive competencies. These fields are not significantly large and/or the country is not yet leading these fields in terms of published articles, highly cited articles, and/or innovation.

EC #7

EC #7 is one of those 5 emerging competencies.

What does EC #7 look like?

This emerging competency is made up of **5 article clusters**. The graph on the left shows these clusters and how they are connected through shared articles.

View the graph at full size »

How to read this graph

Each circle represents an article cluster. The size of each circle indicates the number of articles in that cluster. The colour indicates the dominant subject area in that cluster.

The lines between the circles show how clusters are connected through shared articles.

In the full-size graph, you can examine each cluster in detail, as well as the connections between them.

SciVal Spotlight

country **Romania**
year   **2011**

Competency EC #7   Analytic function; Unit disk; Subordination

All contributing countries

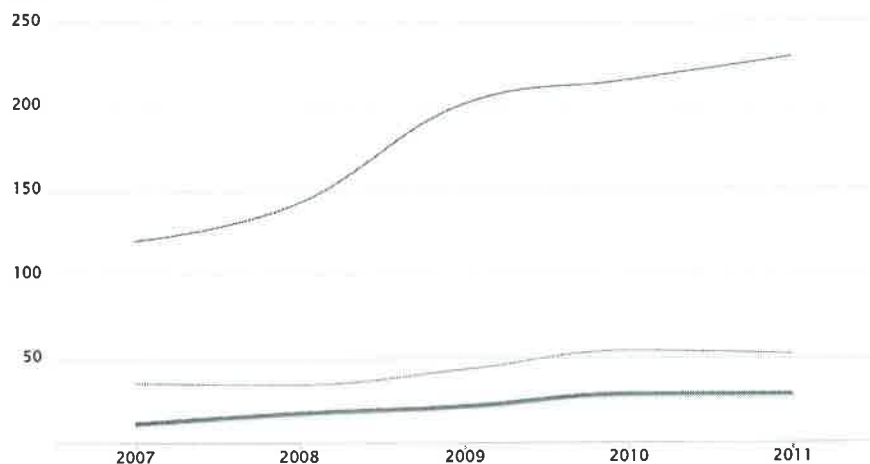| Country		Articles published in this field	Fractionalized article count
1. India	Asia Pacific	163	117.9
2. Malaysia	Asia Pacific	137	106.1
3. Romania	Europe	105	90.6
4. China	Asia Pacific	111	76.2
5. Egypt	Africa	85	64.8
6. Japan	Asia Pacific	69	49.4
7. Turkey	Middle East	67	41.9
8. United States	North America	77	40.4
9. Canada	North America	51	31.5
10. Saudi Arabia	Middle East	33	24.0

SciVal Spotlight

country **Romania**
year **2011**

Competency EC #7 Analytic function; Unit disk; Subordination

Show: Overall trend

☑ Worldwide   ▬
☑ Europe   ▬
☑ Romania   ▬

Articles published ▾ in this field, by year (2007-2011)

SciVal Spotlight

country **Romania**
year **2011**

Competency EC #7   Analytic function; Unit disk; Subordination

Show: Overall trend

☑ Worldwide   —
☑ Europe   —
☑ **Romania**   —

Citations   in this field, by year (2007-2011)

country **Romania**
year   **2011**

Competency DC #8   Azobenzene; gratings; polymers

Why is DC #8a distinctive competency of Romania?

SciVal Spotlight identified this field as a **distinctive competency** of Romania because it meets the
following criterion:

Significantly large field of research   ✓

1,503 articles were published worldwide in this field over the period 2007-2011.
These articles add up to a total fractionalized article count of 555.3.

More details »

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and it meets **at least one** of the following three criteria:

Publication leader   ✓

Romania is ranked #1 in this field by number
of published articles.

More details »

Reference leader   ✓

Romania is ranked #1 by number of highly
cited articles.

More details »

Innovation leader   ✕

Romania is the publication leader this field,
but is not citing more recent work than the
country ranked #2.

More details »

✓ **DC #8 is a distinctive competency**
because it is a significantly large field of research, and Romania is apublication andreference
leader in this field.

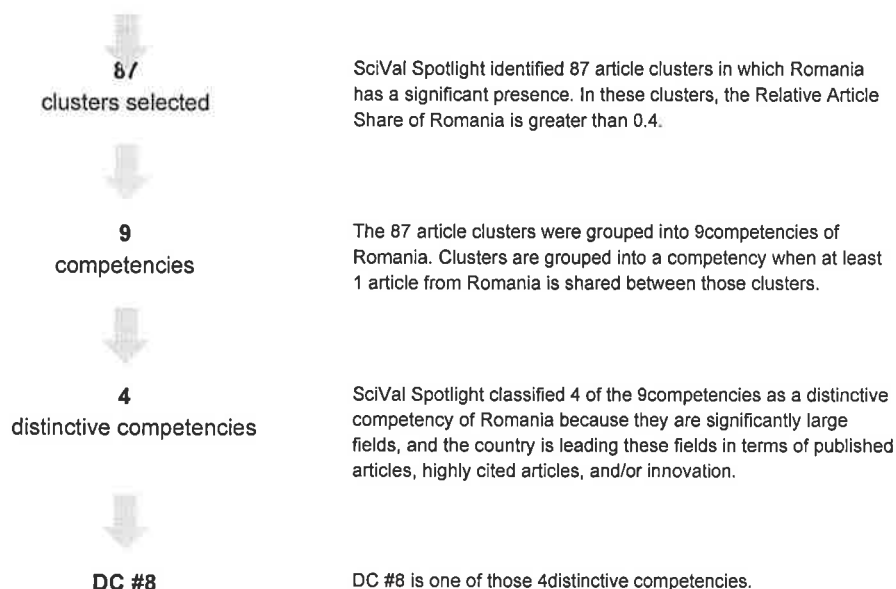**What were the steps to create DC #8?**
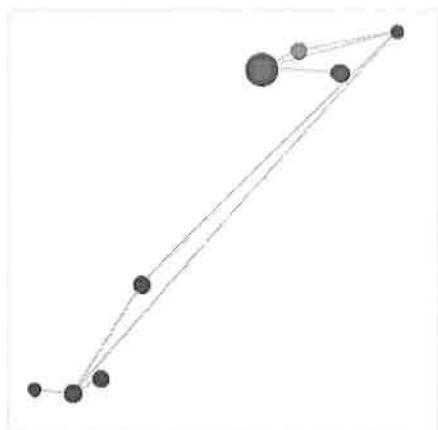
10 million
articles

10,442,662 articles published over the period 2007-2011 were
extracted from SciVerse Scopus.

⬇

125,687
clusters formed

The 10,442,662 articles were grouped into 125,687 clusters
based on co-citation analysis. Some articles are split between
several clusters, creating fractionalized articles.

8/
clusters selected

SciVal Spotlight identified 87 article clusters in which Romania has a significant presence. In these clusters, the Relative Article Share of Romania is greater than 0.4.

9
competencies

The 87 article clusters were grouped into 9competencies of Romania. Clusters are grouped into a competency when at least 1 article from Romania is shared between those clusters.

4
distinctive competencies

SciVal Spotlight classified 4 of the 9competencies as a distinctive competency of Romania because they are significantly large fields, and the country is leading these fields in terms of published articles, highly cited articles, and/or innovation.

DC #8

DC #8 is one of those 4distinctive competencies.

What does DC #8 look like?

This distinctive competency is made up of **8 article clusters**. The graph on the left shows these clusters and how they are connected through shared articles.

View the graph at full size »

How to read this graph

Each circle represents an article cluster. The size of each circle indicates the number of articles in that cluster. The colour indicates the dominant subject area in that cluster.

The lines between the circles show how clusters are connected through shared articles.

In the full-size graph, you can examine each cluster in detail, as well as the connections between them.

SciVal Spotlight

country Romania
year 2011

Competency DC #8   Azobenzene; gratings; polymers

All contributing countries

Country		Articles published in this field	Fractionalized article count
1. Romania	Europe	117	82.4
2. China	Asia Pacific	274	79.2
3. Japan	Asia Pacific	149	62.8
4. United States	North America	158	46.1
5. France	Europe	90	40.5
6. Germany	Europe	104	40.0
7. Poland	Europe	55	29.8
8. Korea (Republic of)	Asia Pacific	80	27.9
9. Canada	North America	59	27.0
10. India	Asia Pacific	112	26.8

SciVal Spotlight

country Romania

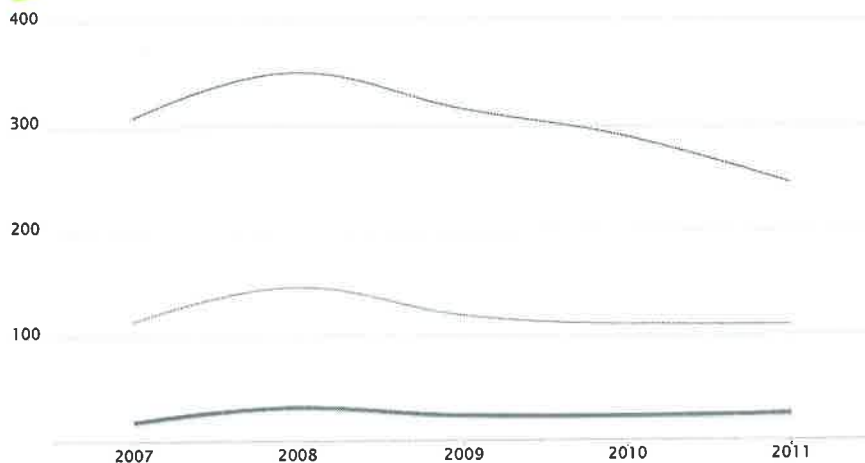year 2011

Competency DC #8 Azobenzene; gratings; polymers

Show: Overall trend

☑ Worldwide ⎯

☑ Europe ⎯

☑ Romania ⎯

Articles published in this field, by year (2007-2011)

SciVal
Spotlight

country **Romania**
year **2011**

Competency DC #8   Azobenzene; gratings; polymers

Show: Overall trend

☑ Worldwide   ―――
☑ Europe   ―――
☑ Romania   ―――

Citations   ▾ in this field, by year (2007-2011)

country **Romania**
year   **2011**

Competency DC #9   Glass; Ions; Chemical analysis

Why is DC #9a distinctive competency of Romania?

SciVal Spotlight identified this field as a **distinctive competency** of Romania because it meets the following criterion:

Significantly large field of research   ✓

1,028 articles were published worldwide in this field over the period 2007-2011.
These articles add up to a total fractionalized article count of 522.0.

More details »

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and it meets **at least one** of the following three criteria:

Publication leader   ✓

Romania is ranked #1 in this field by number of published articles.

More details »

Reference leader   ✓

Romania is ranked #1 by number of highly cited articles.

More details »

Innovation leader   ✓

Romania is the publication leader in this field, and is citing more recent work than the country ranked #2.

More details »

DC #9 is a distinctive competency

because it is a significantly large field of research, and Romania is apublication,reference and innovation leader in this field.

What were the steps to create DC #9?

10 million
articles

10,442,662 articles published over the period 2007-2011 were extracted from SciVerse Scopus.

125,687
clusters formed

The 10,442,662 articles were grouped into 125,687 clusters based on co-citation analysis. Some articles are split between several clusters, creating fractionalized articles.

87
clusters selected

SciVal Spotlight identified 87 article clusters in which Romania has a significant presence. In these clusters, the Relative Article Share of Romania is greater than 0.4.

9
competencies

The 87 article clusters were grouped into 9competencies of Romania. Clusters are grouped into a competency when at least 1 article from Romania is shared between those clusters.

4
distinctive competencies

SciVal Spotlight classified 4 of the 9competencies as a distinctive competency of Romania because they are significantly large fields, and the country is leading these fields in terms of published articles, highly cited articles, and/or innovation.

DC #9

DC #9 is one of those 4distinctive competencies.

What does DC #9 look like?

This distinctive competency is made up of **9 article clusters**. The graph on the left shows these clusters and how they are connected through shared articles.

View the graph at full size »

How to read this graph

Each circle represents an article cluster. The size of each circle indicates the number of articles in that cluster. The colour indicates the dominant subject area in that cluster.

The lines between the circles show how clusters are connected through shared articles.

In the full-size graph, you can examine each cluster in detail, as well as the connections between them.

SciVal Spotlight

country **Romania**
year **2011**

Competency DC #9   Glass; Ions; Chemical analysis

All contributing countries

Country		Articles published in this field	Fractionalized article count
1. Romania	Europe	138	105.9
2. India	Asia Pacific	175	92.6
3. China	Asia Pacific	152	59.5
4. Japan	Asia Pacific	88	44.2
5. Egypt	Africa	86	38.0
6. France	Europe	76	34.7
7. Bulgaria	Europe	43	28.2
8. United States	North America	56	24.1
9. Germany	Europe	44	20.6
10.Russian Federation	Europe	33	17.6

country **Romania**
year **2011**

Competency DC #9 Glass; Ions; Chemical analysis

Show: Overall trend

☑ Worldwide —
☑ Europe —
☑ Romania —

Articles published ▾ in this field, by year (2007-2011)
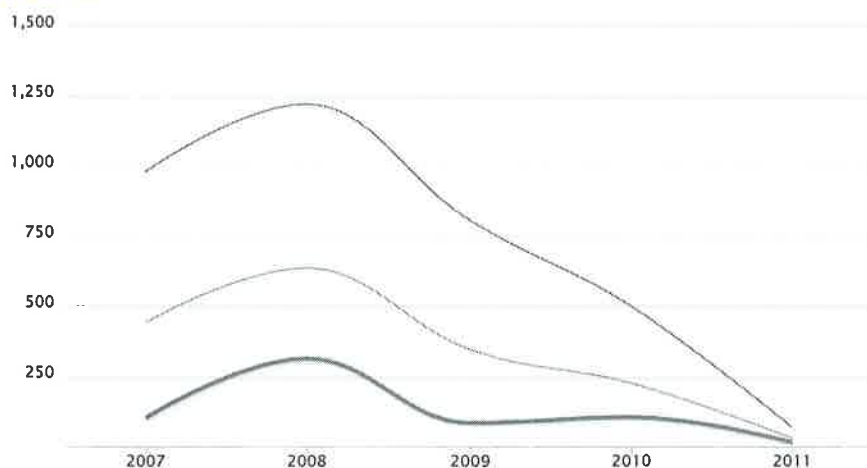
SciVal Spotlight

country **Romania**
year **2011**

Competency DC **#9** Glass; Ions; Chemical analysis

Show: Overall trend

☑ Worldwide —
☑ Europe —
☑ Romania —

Citations in this field, by year (2007-2011)