Transnational media discourse on nuclear energy before and after the Fukushima accident

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The Project “WP12-SER-ACIF-1: Public Discourse about Nuclear Energy before and after Fukushima accident” was launched in 2012 and drew upon methodological approach and findings from the previous sociological study Social Field of ITER: The Analysis of Discourse and the Question of Public Acceptability accomplished in 2011 within the EFDA-SER Programme (Task: WP10-SER-ACIF-3).

The preliminary assumption of the study

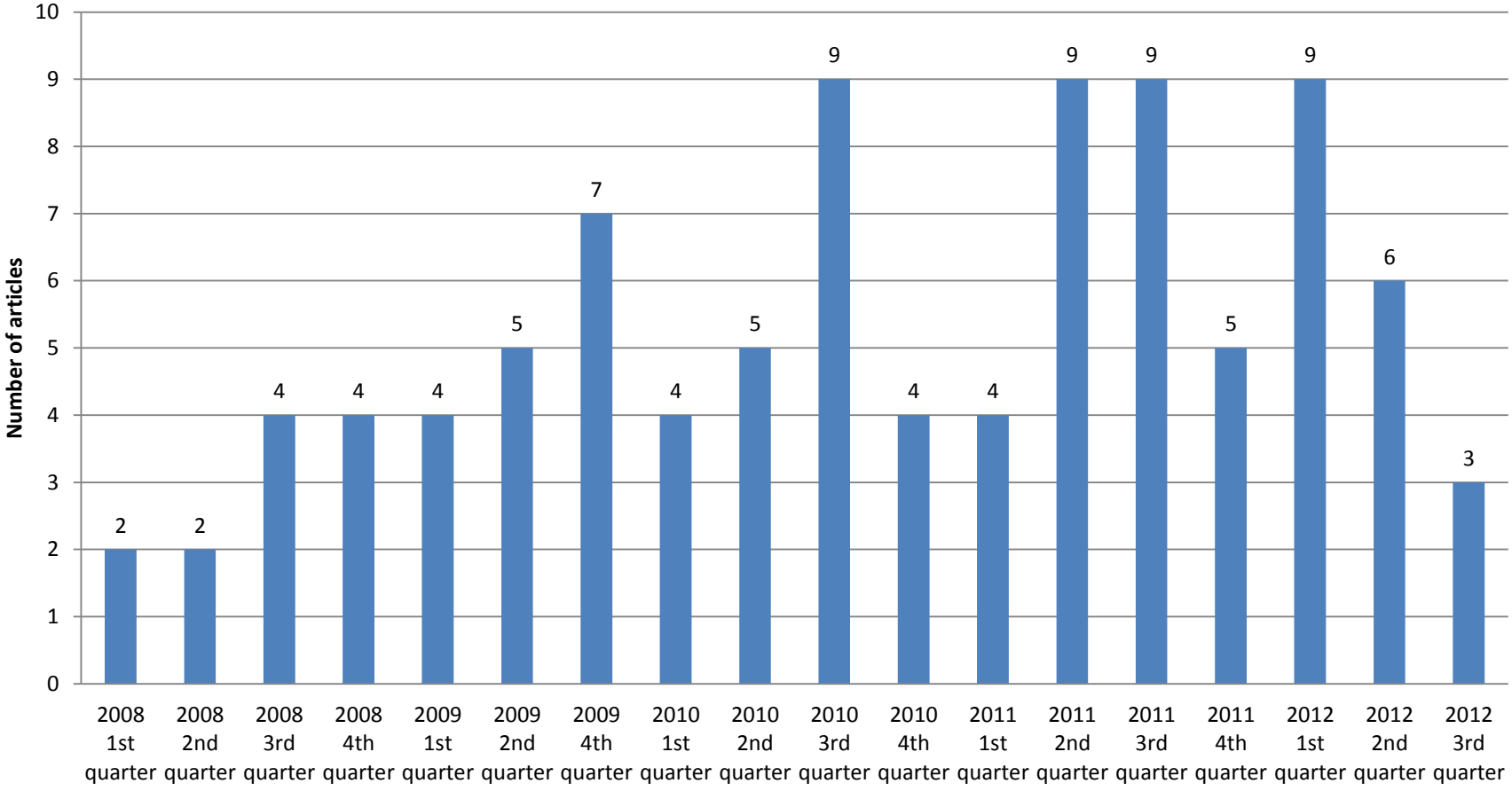
Fission can be regarded as a benchmark for fusion (in the meaning of main characteristic of the discourse). The current discussion on fission, following the Fukushima accident, may have a significant influence on the future debate on fusion.

Main goals

1. Analysis of nuclear energy and fusion energy discursive representations
2. Reconstruction of main styles and grades of valuation
3. Impact of the Fukushima accident

Fusion sample - composition

Total sample of fusion related articles from transnational press contains 95 articles published between the first quarter of 2008 and the third quarter of 2012.



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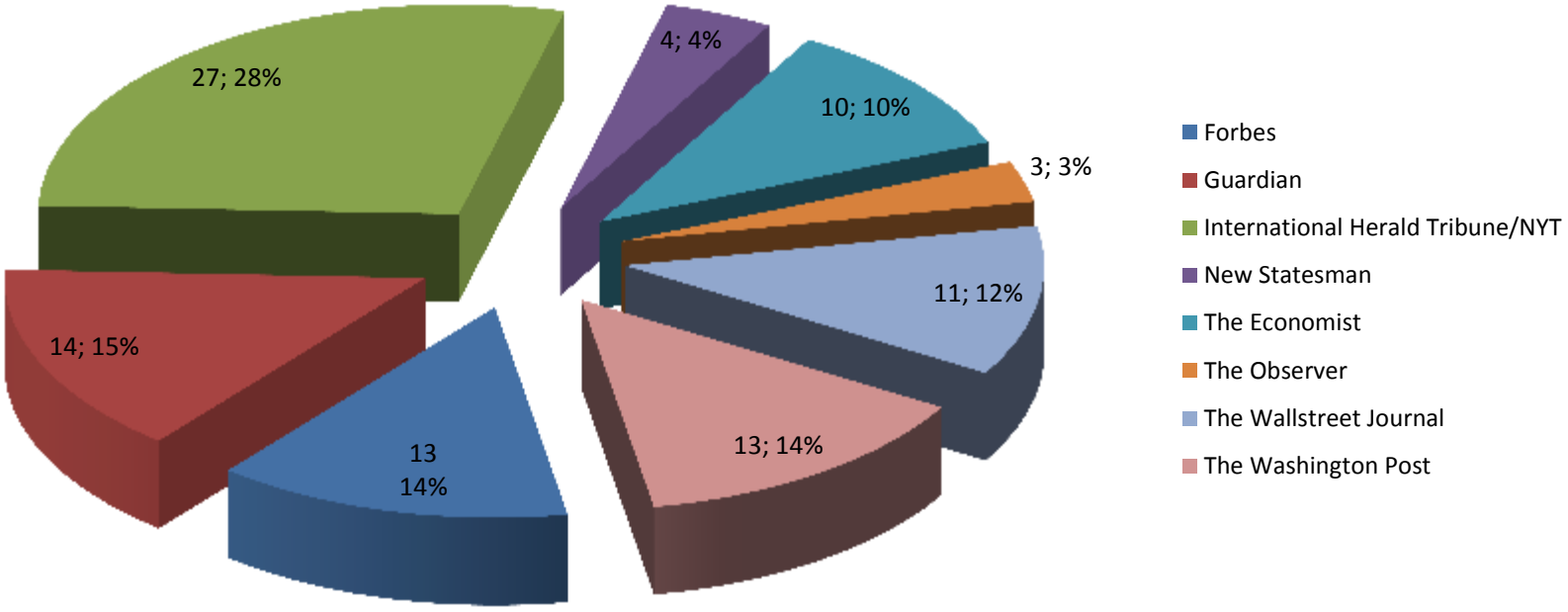
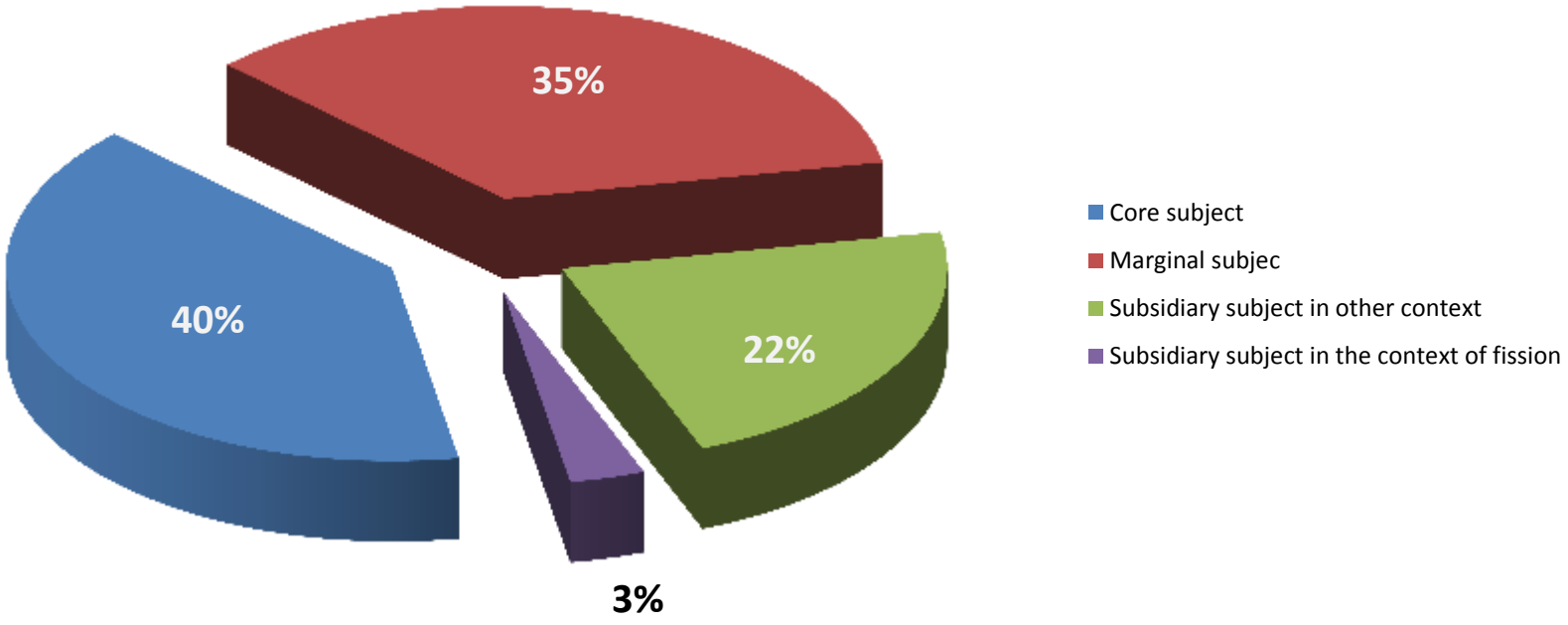


1. Is fusion a core subject of the article?
2. Does the article explain the basic science behind fusion energy?
3. What forms of fusion are being mentioned?

Fusion sample
Is fusion or fusion research the core of the report?
N=95



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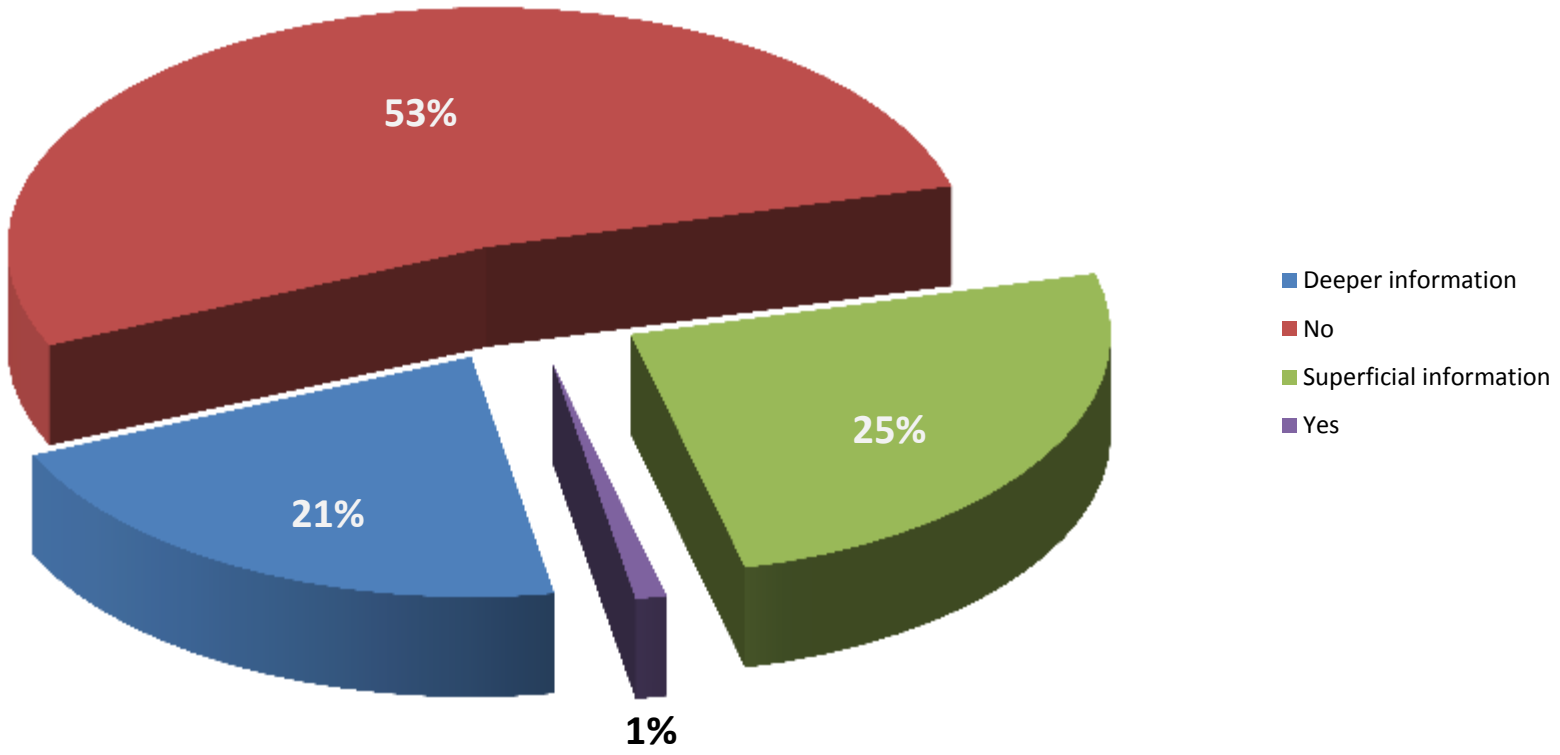

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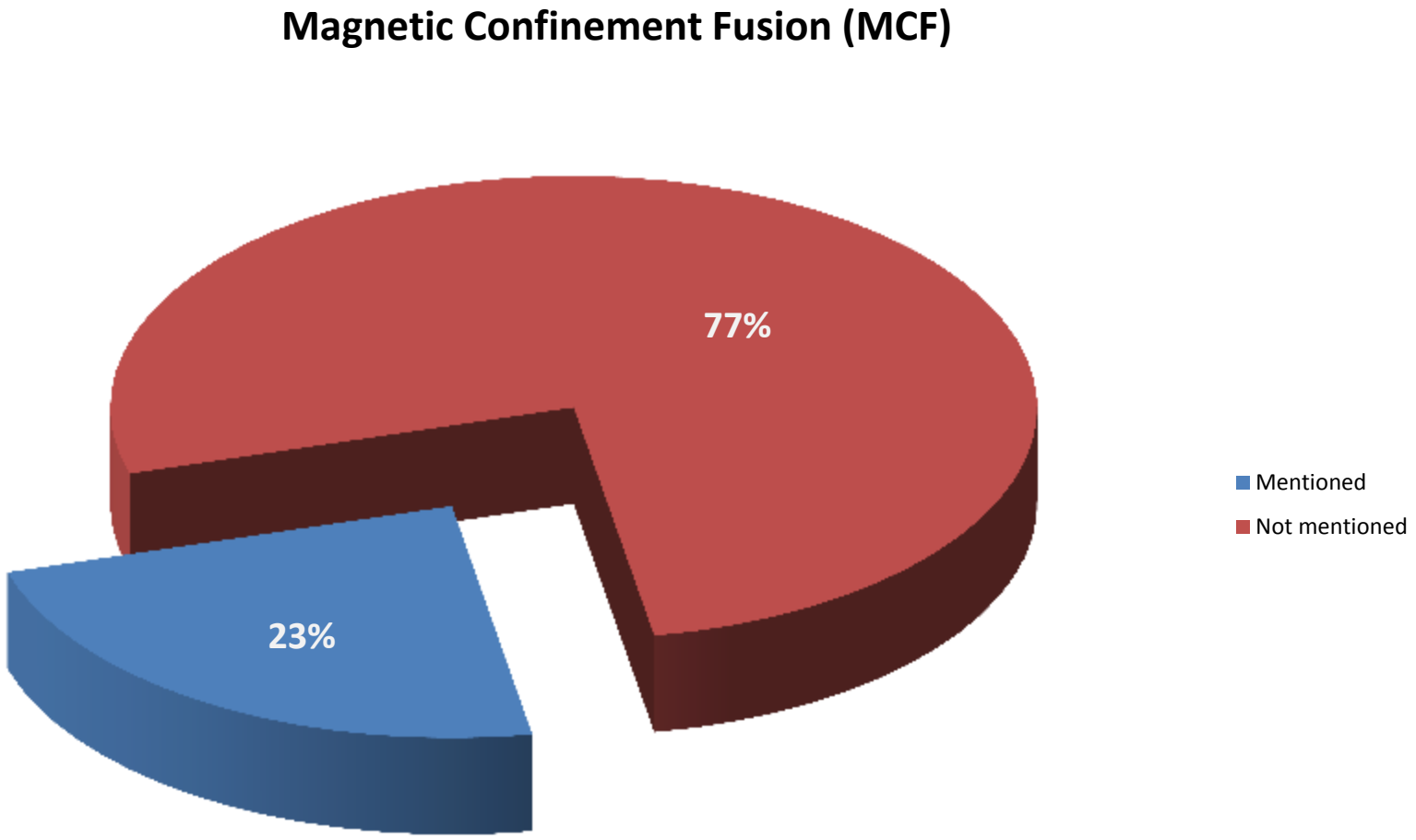
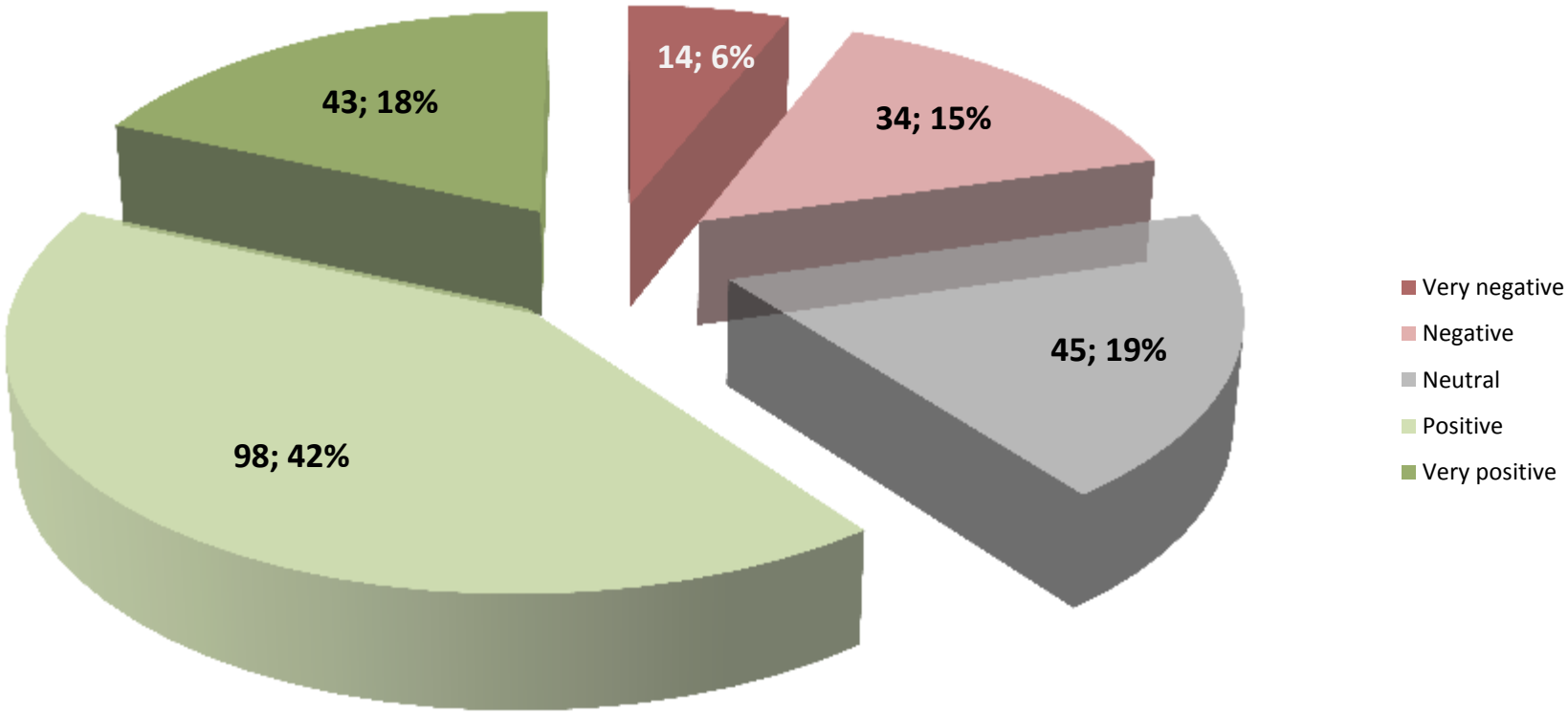
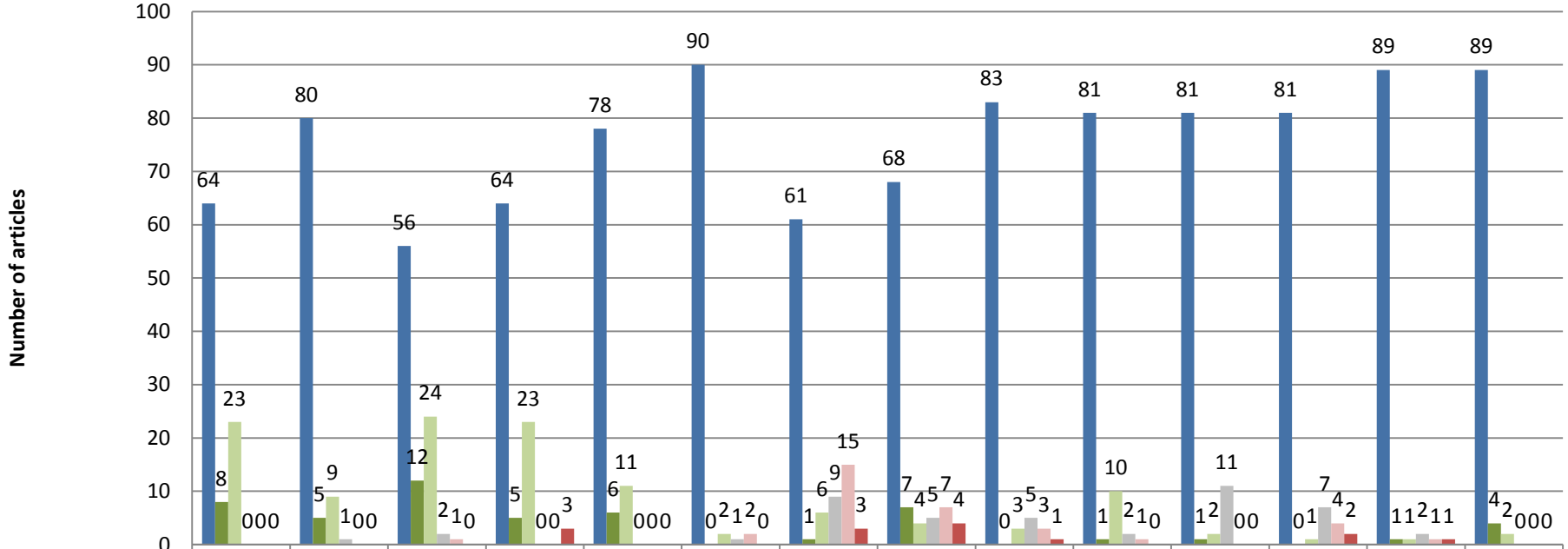


Image of fusion based on various fusion-related costs/benefits in print media with fusion energy related content (2008/2012)
n= 234 references

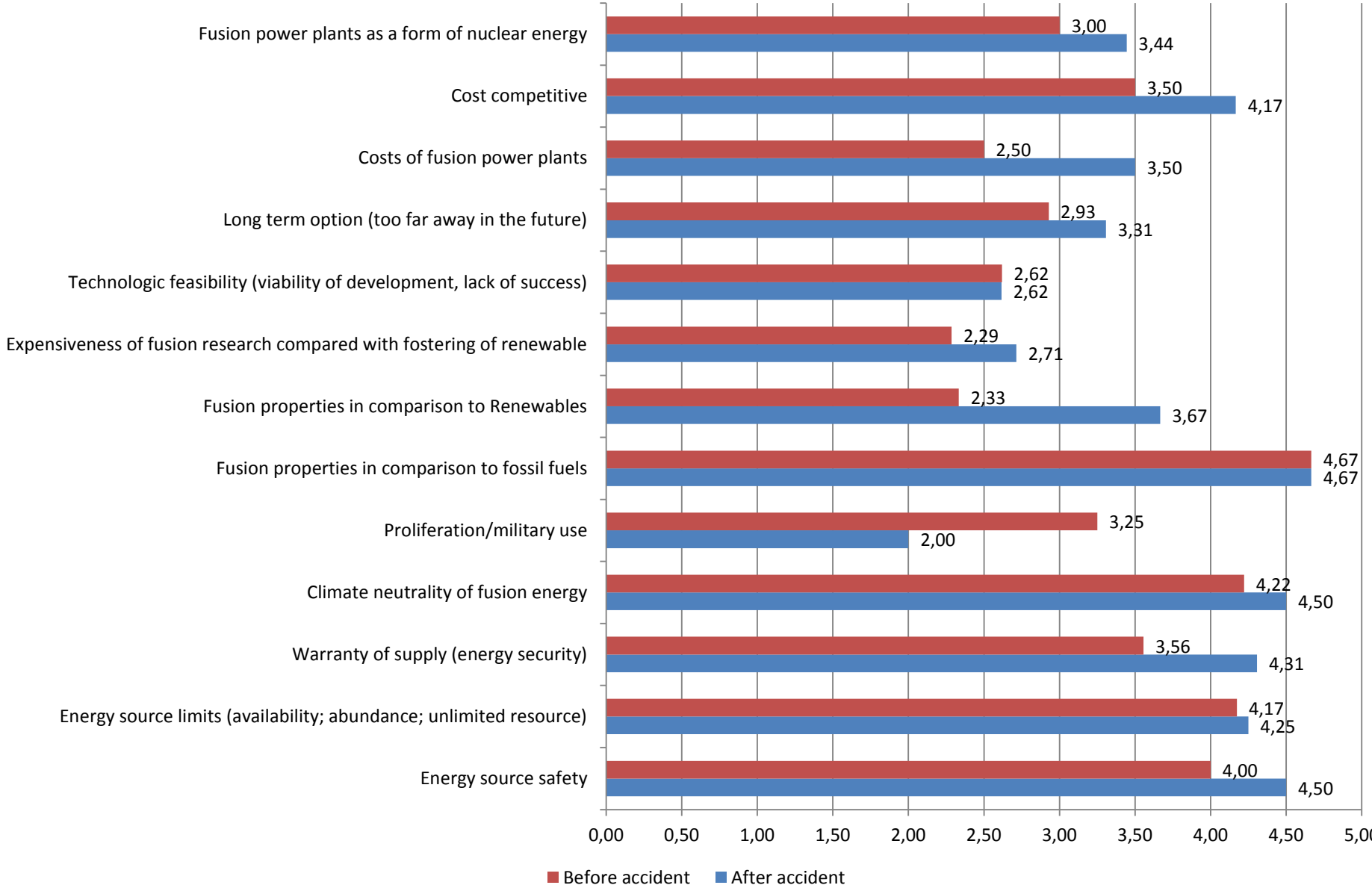


General statements of fusion and their valuation.



	Energy source cleanliness	Energy source safety	Energy source limits (availability; abundance; unlimited resource)	Warranty of supply (energy security)	Climate neutrality of fusion energy	Proliferation/military use	Technologic feasibility (viability of development, lack of success)	Long term option (too far away in the future)	Costs of fusion power plants	Cost competitive	Fusion power plants as a form of nuclear energy	Expensiveness of fusion research compared with fostering of renewable	Fusion properties in comparison to renewables	Fusion properties in comparison to fossil fuels
Not mentioned	64	80	56	64	78	90	61	68	83	81	81	81	89	89
1.Very positive	8	5	12	5	6	0	1	7	0	1	1	0	1	4
2.Positive	23	9	24	23	11	2	6	4	3	10	2	1	1	2
3.Neutral	0	1	2	0	0	1	9	5	5	2	11	7	2	0
4.Negative	0	0	1	0	0	2	15	7	3	1	0	4	1	0
5.Very negative	0	0	0	3	0	0	3	4	1	0	0	2	1	0

References to various fusion-related costs/benefits in print media with fusion energy related content published before and after Fukushima accident (2008/2012)



Some general results from transnational discourse analysis

1. Nuclear energy is shifting from being perceived as scientific issue towards becoming a industrial/technological problem (black-boxing) while fusion is still framed mainly as scientific or even science-fiction issue.

2. At the same time the decision making process becomes more and more economical than political in nature – surprising with no difference between fusion and nuclear energy.

3. There are still important and far reaching differences in perception of nuclear energy between EU and USA

4. Everything else being equal – future battleground concerning nuclear energy will concentrate around:

- problem of subsidizing nuclear industry;
- rejecting/establishing its low-carbon technology status;
- problems of management and implementing safety standards.

5. Fukushima impact on fusion discourse seems to be negligable apart from the general rise of interest in alternatives to fission as energy source

Thank you!