

Vetenskaplig publicering – funktioner, former och mätningar

Olle Persson
Umeå universitet

Presentation vid:
Göteborgs UB
21 nov 2007

Publiceringens funktioner

”Science is Public Knowledge”

Ingen publicering, ingen vetenskap!



John Ziman

Publicering i ordnade former

- **Communism**
Resultaten tillhör alla – dela med dig!
- **Universalism**
Bedöm efter resultat och inte efter kön eller ras!
- **Disinterestedness**
Sök kunskap, inte makt och pengar!
- **Organized Scepticism**
Granska och kritisera i ordnade former!

CUDOS

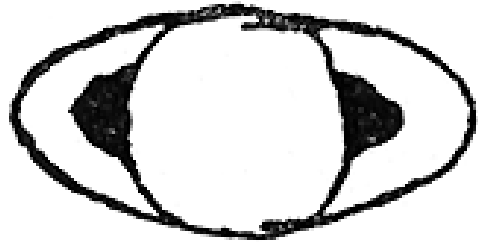


Robert K Merton (1950)

Priority of Discovery

Erkännade till upptäckter

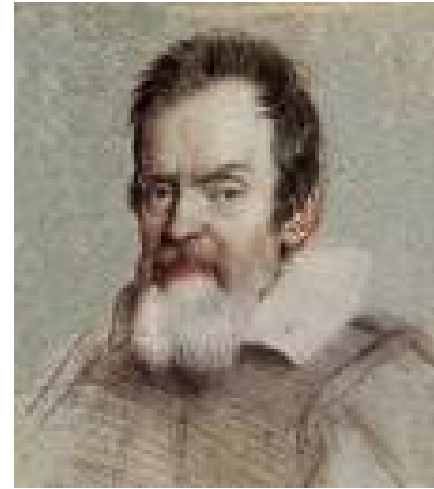
En upptäckt!



Saturnus



Galileo



smaismrmilmepoetalemibunenugttairas

Altissimum planetam tergeminum observavi

"I have observed the highest planet tri-form."

Anagram till Kepler 1610

Kepler



En gammal uppfinning!

UNITED STATES PATENT OFFICE.

JOHN ERICSSON, OF LONDON, ENGLAND.

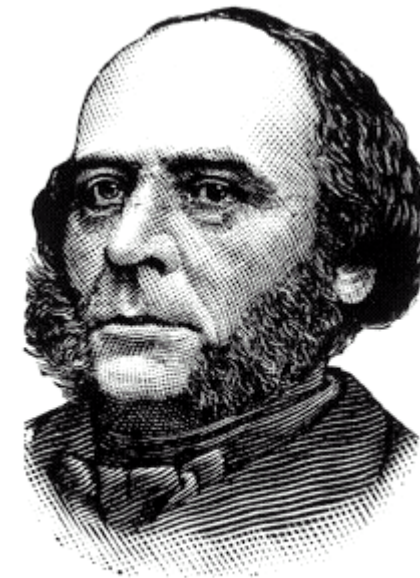
PROPELLING STEAM VESSELS.

Specification of Letters Patent No. 588, dated February 1, 1838.

To all whom it may concern:

Be it known that I, JOHN ERICSSON, a subject of the Kingdom of Sweden, residing at London, England, have invented a new and useful Propeller for the Purpose of Propelling Steamboats Effectually Notwithstanding Any Variations in Their Draft of Water, and that the following is a full and exact description of the construction and operation of the said propeller as invented by me.

This invention which I name as above consists in two thin broad metallic hoops short cylinders supported by spiral spokes and made to revolve in contact with each other but at different velocities



John Ericsson
Swedish-American Engineer & Inventor
1803-89

Quality assessment

Kvalitetssäkring

The Journal of Irreproducible Results®

The Science Humor Magazine

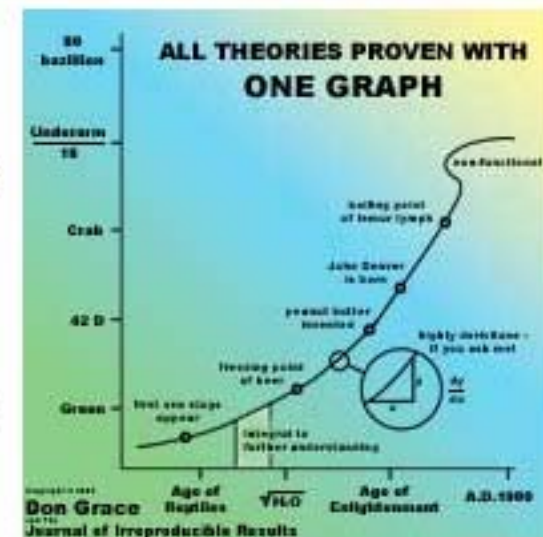
Contest: The Funniest Graph

The winner is *All Theories Proven With One Graph* by Don Grace of Florence, Alabama. Click the picture to see it in most of its glory. To get a copy professionally printed on paper suitable for a magazine cover, backed by page after page of more graphs and science humor, [subscribe!](#)

Second Prize: *Nate P. Leon's Trip to Las Vegas* by Keith Sealy, Austin, Texas

Third Prize: *Comparing Apples and Oranges: Normalizing Competitive Eating Records across Food Disciplines* by Mike Wooldridge, University of California, Berkeley

[And more ...](#)



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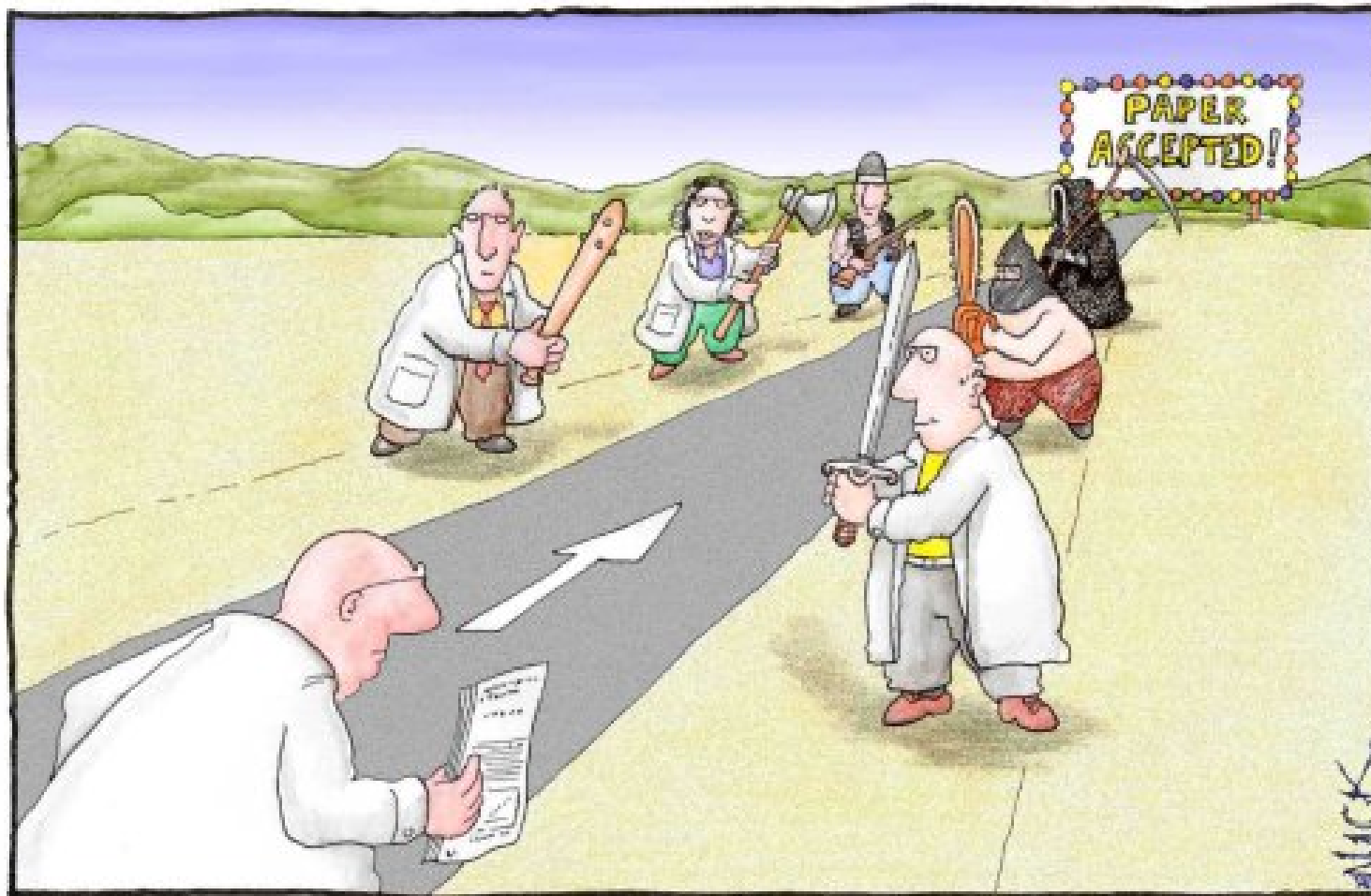
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Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

Communication

Sprida resultat

Little Science

Big Science

Derek J De Solla Price

1963

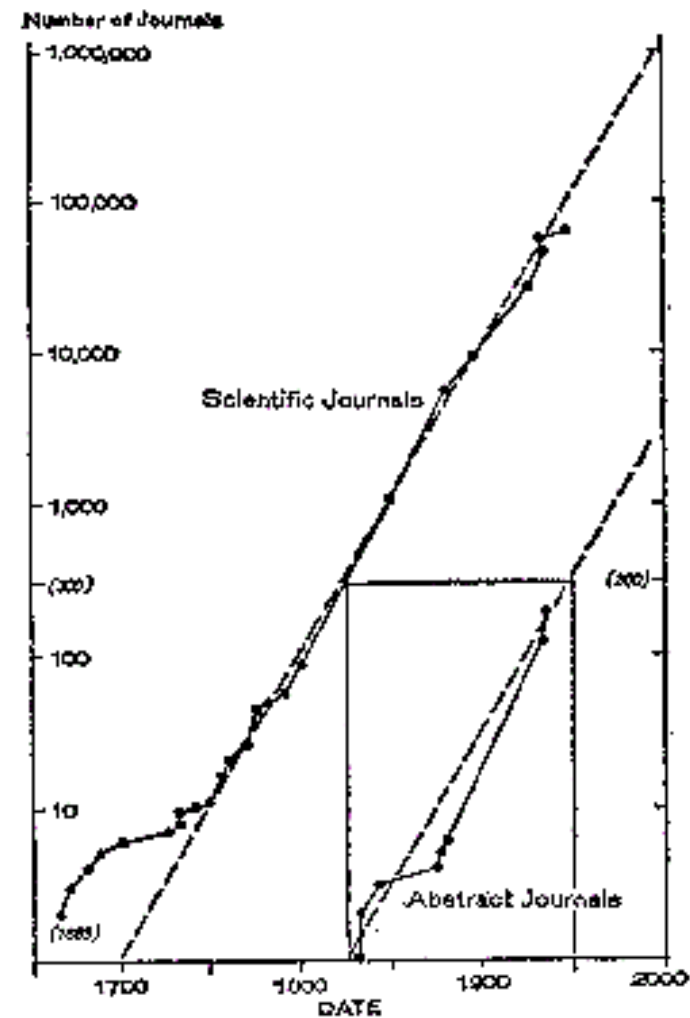


Fig. 1. TOTAL NUMBER OF SCIENTIFIC JOURNALS AND ABSTRACT JOURNALS FOUNDED, AS A FUNCTION OF DATE

Institute for Scientific Information

Eugene Garfield

Science Citation Index, Social Sciences Citation Index,
Arts & Humanities Citation Index



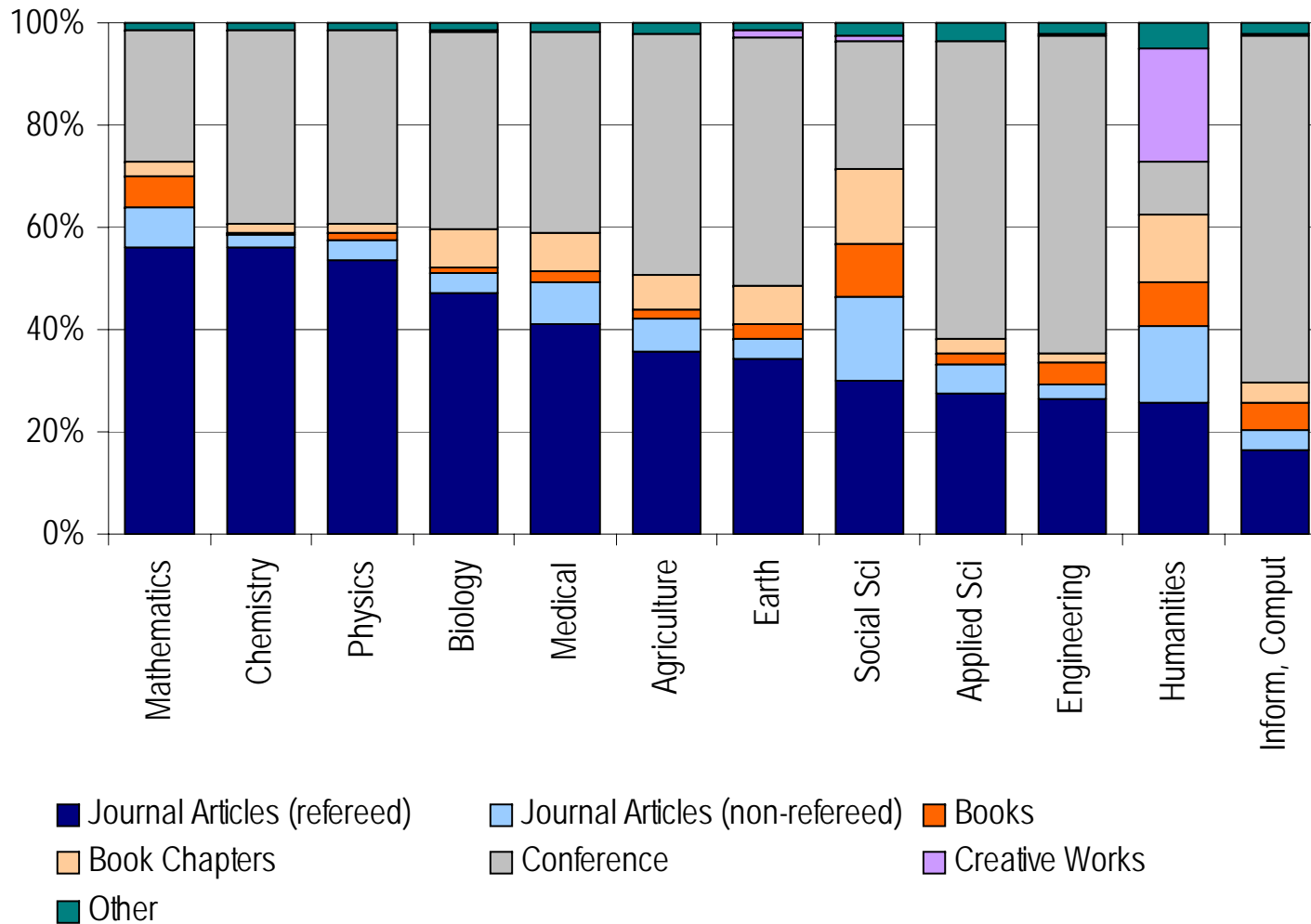
De författare som citerats mest av tidskriften Scientometrics under åren 1978-2004

Notera: Alla utom Price själv har fått Price Award. Pristagarna utses genom sluten omröstning.

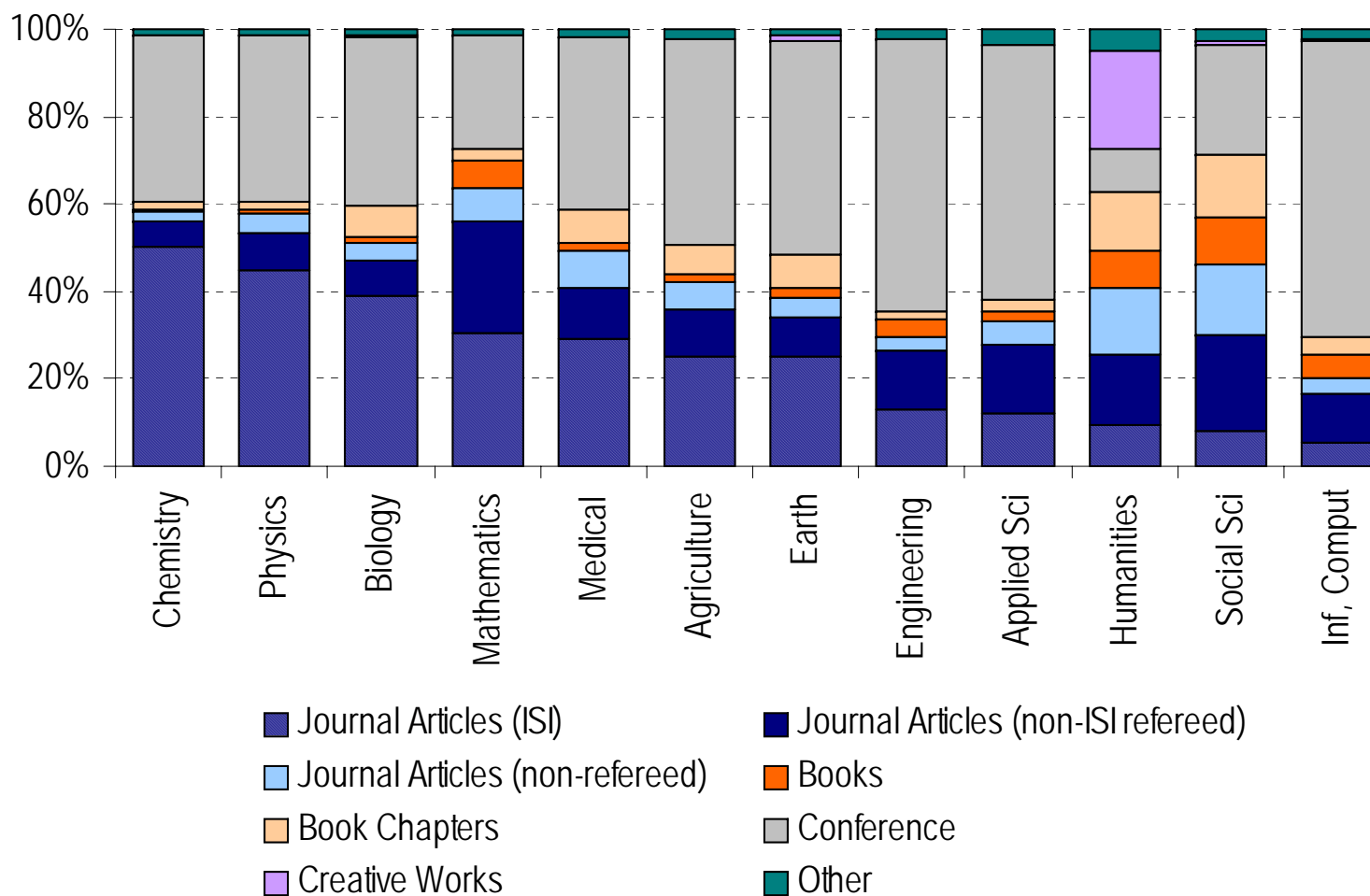
Citerad forskare	Citerad i antal artiklar
Price D	427
Garfield E	373
Narin F	270
Schubert A	239
Small H	219
Braun T	192
Moed H	188
Egghe L	156
Glanzel W	143
Leydesdorff L	121
Vanraan A	121

Publiceringens former

Academic output by field of research and publication type

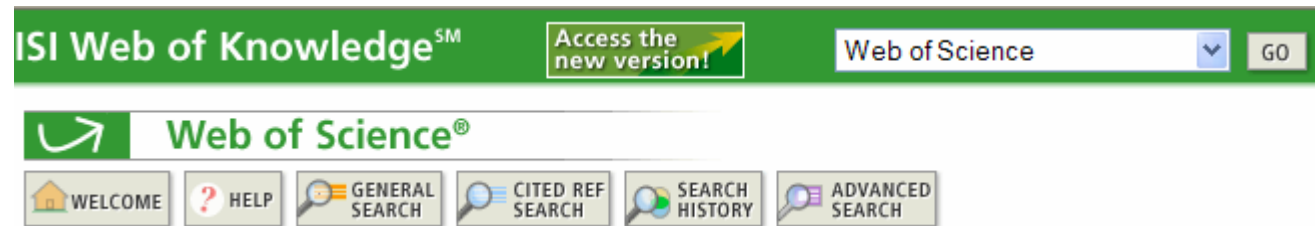


Proportion of output in ISI-indexed publications



Publiceringsmätning

Datakällor



refine your research
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GoogleTM
Patent Search BETA

Looking for the citation impact of Rothstein B 1996-2006

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Results found: 22

Sum of the Times Cited  : 82

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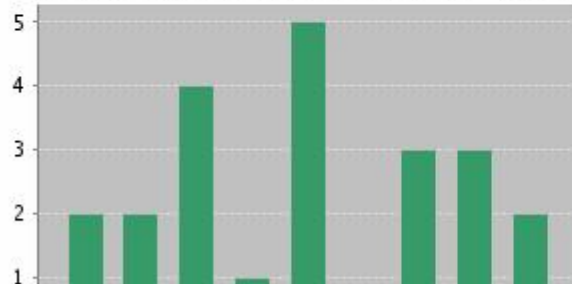
h-index  : 5

AU=(Rothstein B)

DocType=All document types; Language=All languages; Databases=SCI-EXPANDED, SSCI, A&HCI; Timespan=1986-2007

Pub Yr=2003, 2001, 2005, 2006, 1999, 2000, 2007, 2002


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Pub Yr=2006, 2005, 2001, 2004, 2003, 2002, 1998, 1999, 2000, 1997, 1996

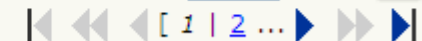
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1.	<input type="checkbox"/> Trust, social dilemmas and collective memories Abstract + Refs View at Publisher Show Abstract	Rothstein, B.	2000	<i>Journal of Theoretical Politics</i> 12 (4), pp. 477-501	39
2.	<input type="checkbox"/> Social capital in the social democratic welfare state Abstract + Refs View at Publisher Show Abstract	Rothstein, B.	2001	<i>Politics and Society</i> 29 (2), pp. 207-241	24
3.	<input type="checkbox"/> Introduction: Social capital in Scandinavia Abstract + Refs View at Publisher Show Abstract	Rothstein, B. , Stolle, D.	2003	<i>Scandinavian Political Studies</i> 26 (1), pp. 1-26	13

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Results

Papers:	179	Cites/paper:	9.63	h-index:	20	AWCR:	299.43
Citations:	1723	Cites/author:	1462.11	g-index:	39	AW-index:	17.30
Years:	12	Papers/author:	126.47	hc-index:	17	AWCRpA:	250.47
Cites/year:	143.58	Authors/paper:	1.47	hI-index:	13.33		
				hI norm:	15		

Cites	Per year	Rank	Authors	Title	Year	Publication	Pr
<input checked="" type="checkbox"/> 282	28.20	1	B Rothstein	Just Institutions Matter: The Moral a...	1998		bc
<input checked="" type="checkbox"/> 149	21.29	2	BO ROTHSTEIN	Social Capital in the Social Democrati...	2001	Politics & Society	pa
<input checked="" type="checkbox"/> 135	16.88	3	B Rothstein	Trust, Social Dilemmas and Collective...	2000	Journal of Theoretical Politics	jt
<input checked="" type="checkbox"/> 120	10.00	4	B Rothstein	Political Institutions: An Overview	1996	A New Handbook of Political ...	
<input checked="" type="checkbox"/> 100	50.00	15	B Rothstein	Vad bör staten göra?: om välfärdsst...	2006		SM
<input checked="" type="checkbox"/> 87	17.40	16	B Rothstein	Sociala fällor och tillitens problem	2003		ne
<input checked="" type="checkbox"/> 63	5.25	5	B Rothstein	The Social Democratic State: The Sw...	1996		Ur
<input checked="" type="checkbox"/> 52	5.78	18	B Rothstein, J Berg...	Korporatismens fall: och den svensk...	1999		SM
<input checked="" type="checkbox"/> 45	9.00	6	B Rothstein, D Stolle	Social Capital, Impartiality, and the ...	2003	Generating Social Capital: T...	
<input checked="" type="checkbox"/> 44	4.00	20	B Rothstein	Politik som organisation: förvaltnings...	1997		SM
<input checked="" type="checkbox"/> 40	13.33	7	B Rothstein	Social Traps and the Problem of Trust	2005		bc
<input checked="" type="checkbox"/> 34	11.33	8	S Kumlin, B Rothstein	Making and Breaking Social Capital: ...	2005	Comparative Political Studies	cp
<input checked="" type="checkbox"/> 34	5.67	9	B Rothstein, S Stein...	Restructuring the Welfare State: Pol...	2002		bc
<input checked="" type="checkbox"/> 32	5.33	10	B Rothstein, D Stolle	How Political Institutions Create and ...	2002	thMeeting of the American P...	ap
<input checked="" type="checkbox"/> 30	6.00	11	B ROTHSTEIN	Social Capital, Economic Growth and ...	2003	New Political Economy	in
<input checked="" type="checkbox"/> 29	3.63	22	P Blomqvist, B Roth...	Välfärdsstatens nya ansikte	2000	Demokrati och marknadsref...	
<input checked="" type="checkbox"/> 28	5.60	12	B Rothstein, D Stolle	Introduction: Social Capital in Scandi...	2003	Scandinavian Political Studies	Bl
<input checked="" type="checkbox"/> 27	3.86	13	B Rothstein, D Stolle	Social Capital and Street-Level Bure...	2001	Unpublished mimeo	ex
<input checked="" type="checkbox"/> 27	3.38	24	P Blomqvist, B Roth...	Välfärdsstatens nva ansikte: demokr...	2000		Ac

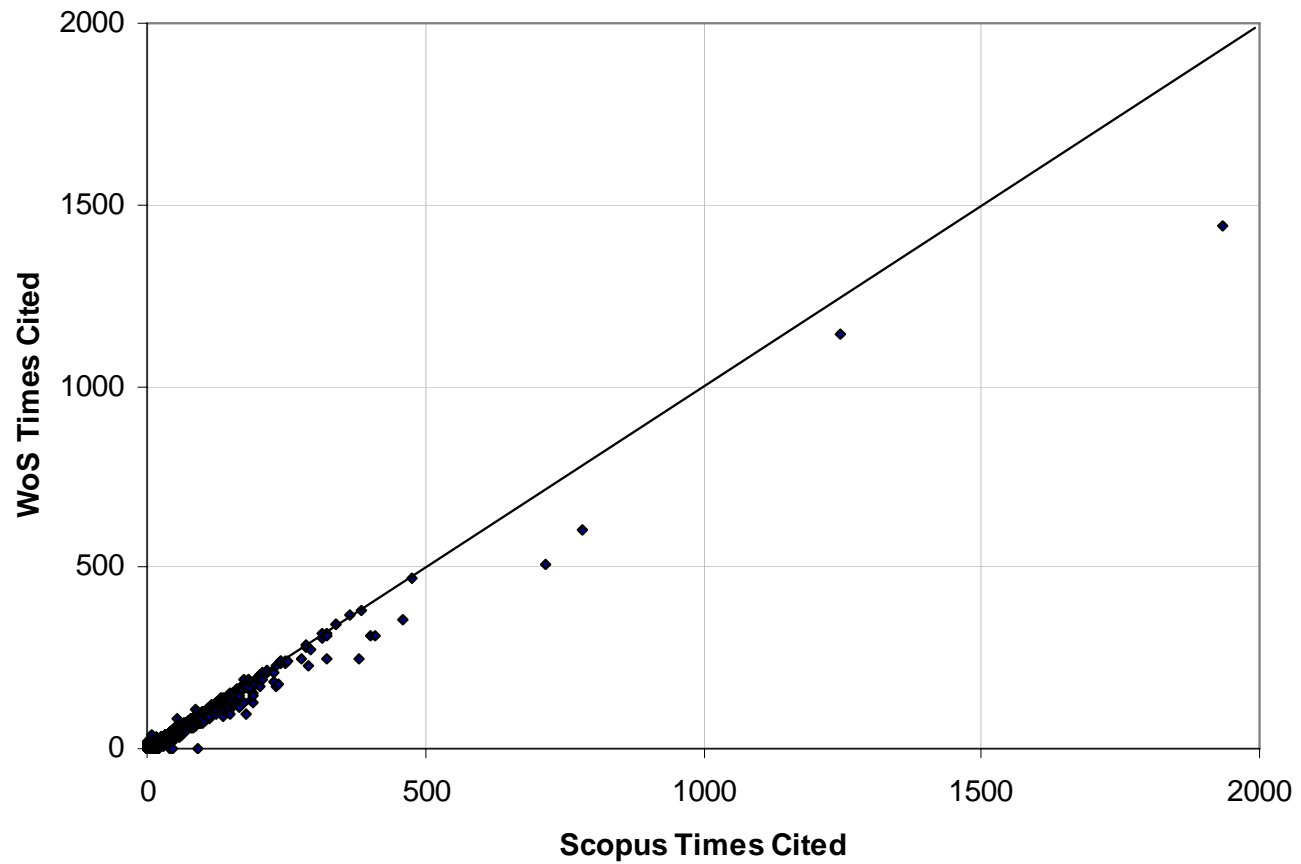
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papers=22, h-index=5, cites=82,
"all" cites=818, citing papers=428
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"all" cites=398, citing papers=118
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By Olle Persson, Inforsk, Umeå university



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The List

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1	Kelm, S.	0,200	46	1996	Glycoconjugate Journal	028200
1	Nilsson, B.	0,200	46	1996	Glycoconjugate Journal	
1	Schauer, R.	0,200	46	1996	Glycoconjugate Journal	
1	Wadstrom, T.	0,200	46	1996	Glycoconjugate Journal	
2	Jonsson, P.M.	0,167	14	1996	Diabetic Medicine	074230
2	Nystrom, L.	0,167	14	1996	Diabetic Medicine	074230
2	Ostman, J.	0,167	14	1996	Diabetic Medicine	074230
2	Rosenqvist, U.	0,167	14	1996	Diabetic Medicine	074230
2	Sterky, G.	0,167	14	1996	Diabetic Medicine	074230
2	Wall, S.	0,167	14	1996	Diabetic Medicine	07423071 (ISSN)
3	McEwan, N.R.	1,000	1	1996	Biochemistry and Molecular	
4	Asami, M.	0,250	21	1996	Journal of Molecular Catalysis A: Che	
4	Hashimoto, M.	0,250	21	1996	Journal of Molecular Cataly:	
4	Matsumoto, Y.	0,250	21	1996	Journal of Molecular Cataly:	
4	Misono, M.	0,250	21	1996	Journal of Molecular Cataly:	

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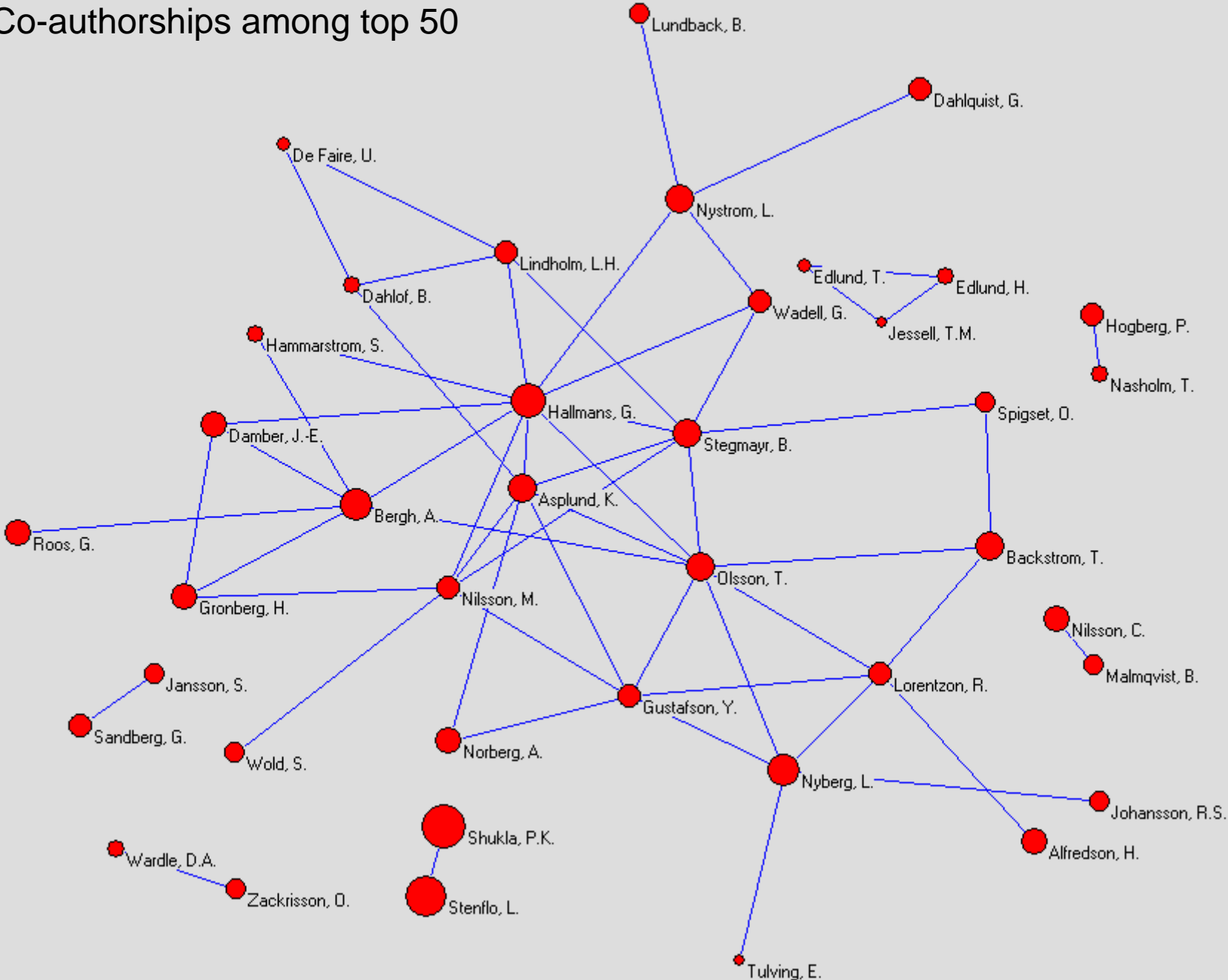
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4	1	Nilsson, B	0,2	46	1996	Glycoconjuga	02820080	13	1005	9,2	
5	1	Schauer, F	0,2	46	1996	Glycoconjuga	02820080	13	1005	9,2	
6	1	Wadstrom	0,2	46	1996	Glycoconjuga	02820080	13	1005	9,2	
7	2	Jonsson, F	0,167	14	1996	Diabetic Medi	07423071	13	1056	2,338	
8	2	Nystrom, L	0,167	14	1996	Diabetic Medi	07423071	13	1056	2,338	
9	2	Ostman, J	0,167	14	1996	Diabetic Medi	07423071	13	1056	2,338	
10	2	Rosenqvist	0,167	14	1996	Diabetic Medi	07423071	13	1056	2,338	
11	2	Sterky, G.	0,167	14	1996	Diabetic Medi	07423071	13	1056	2,338	
12	2	Wall, S.	0,167	14	1996	Diabetic Medi	07423071	13	1056	2,338	

Summa av Citation fraction	
Author	Totalt
Edlund, H.	1107
Nyberg, L.	887
Hogberg, P.	764
Wolf-Watz, H.	727
Alfredson, H.	630
Amqvist, G.	626
Lorentzon, R.	573
Kullman, L.	563
Lindholm, L.H.	534
Wold, S.	518
Asplund, K.	511
Edlund, T.	496

Co-authorships among top 50



Bibliometriska mätningar

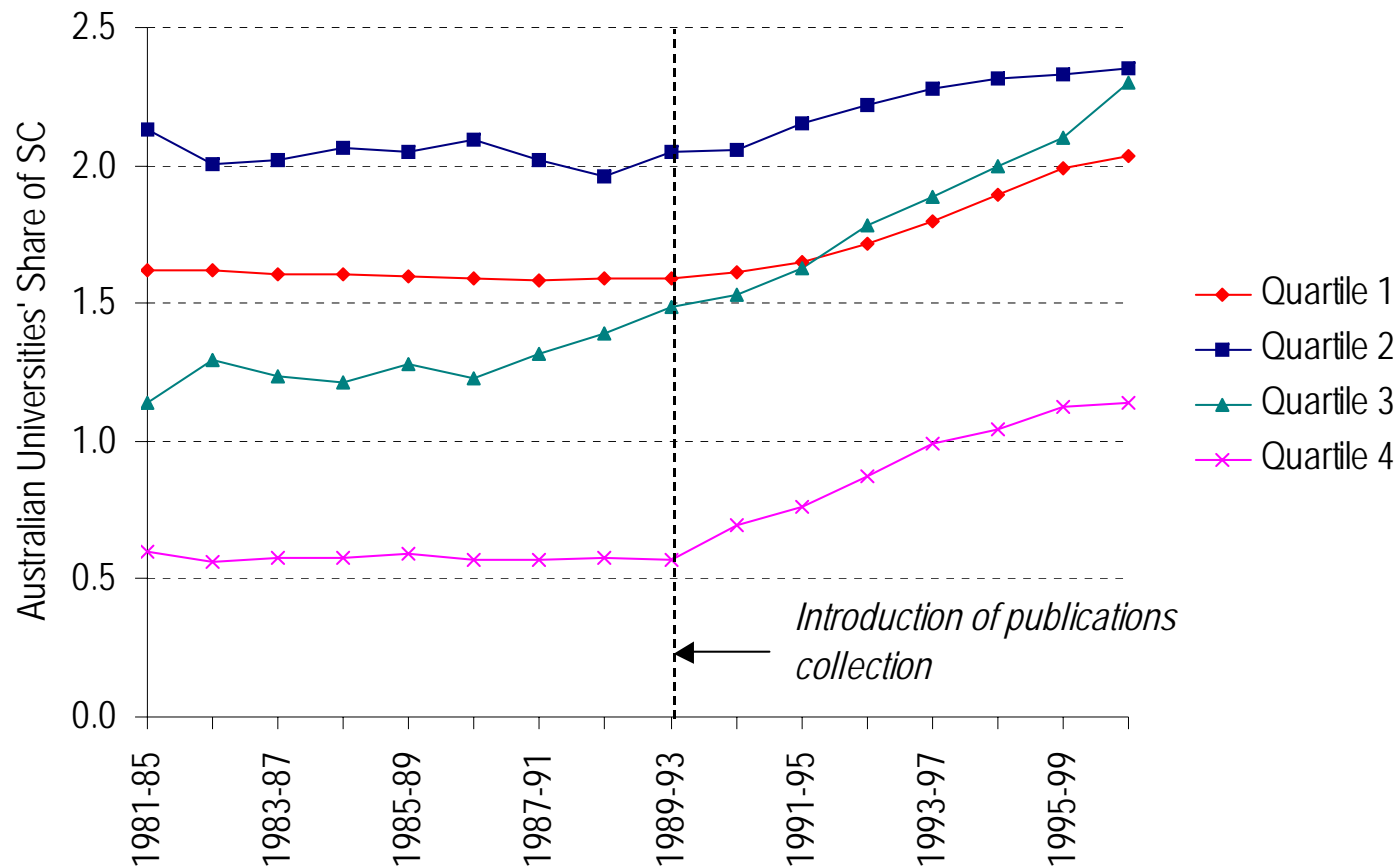
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Använd flera mått

Varning!

Publish or Perish!

Publicera till vilket pris som helst?

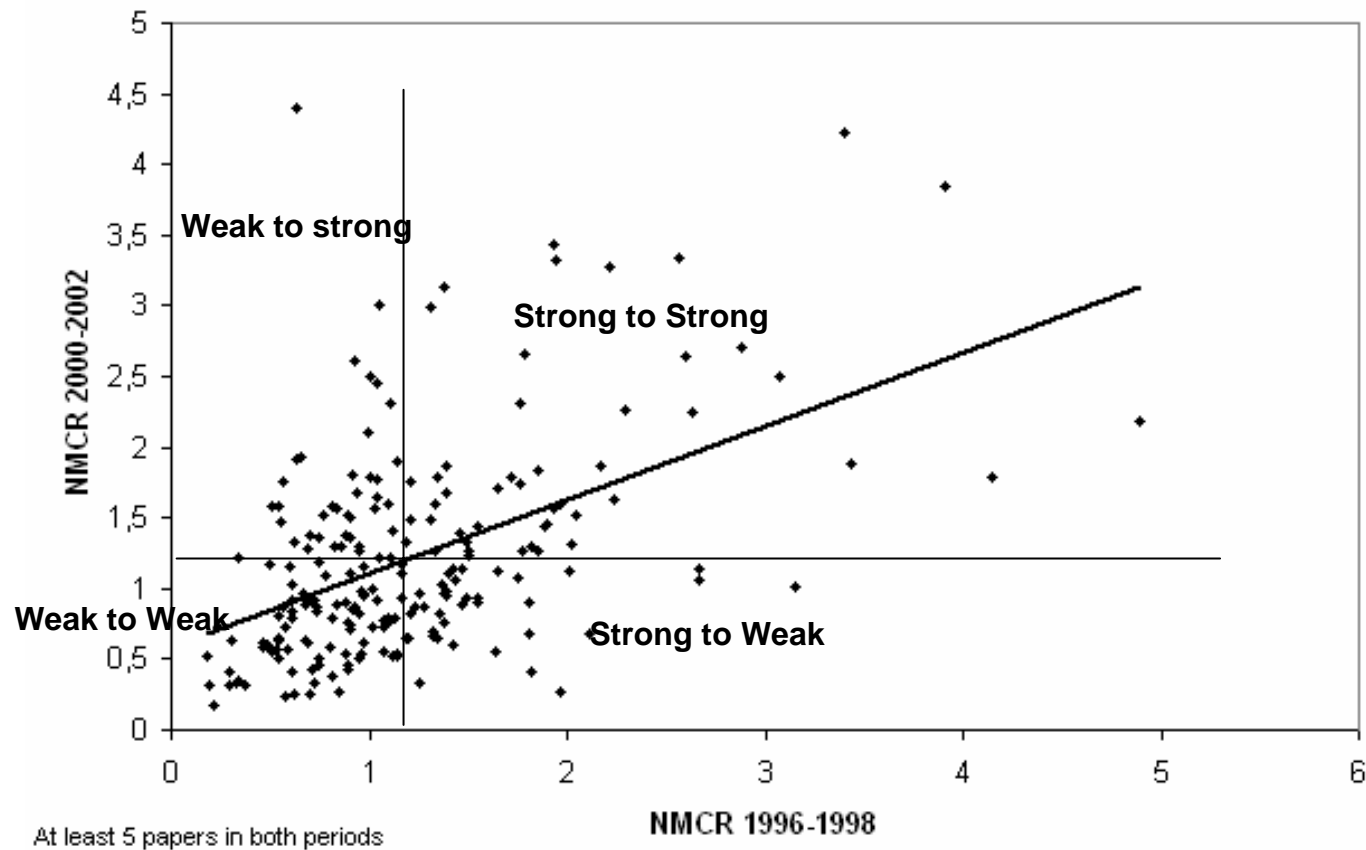
Australian universities' share of publications in the Science Citation Index, by journal impact quartile.



”Backa in i framtiden?”

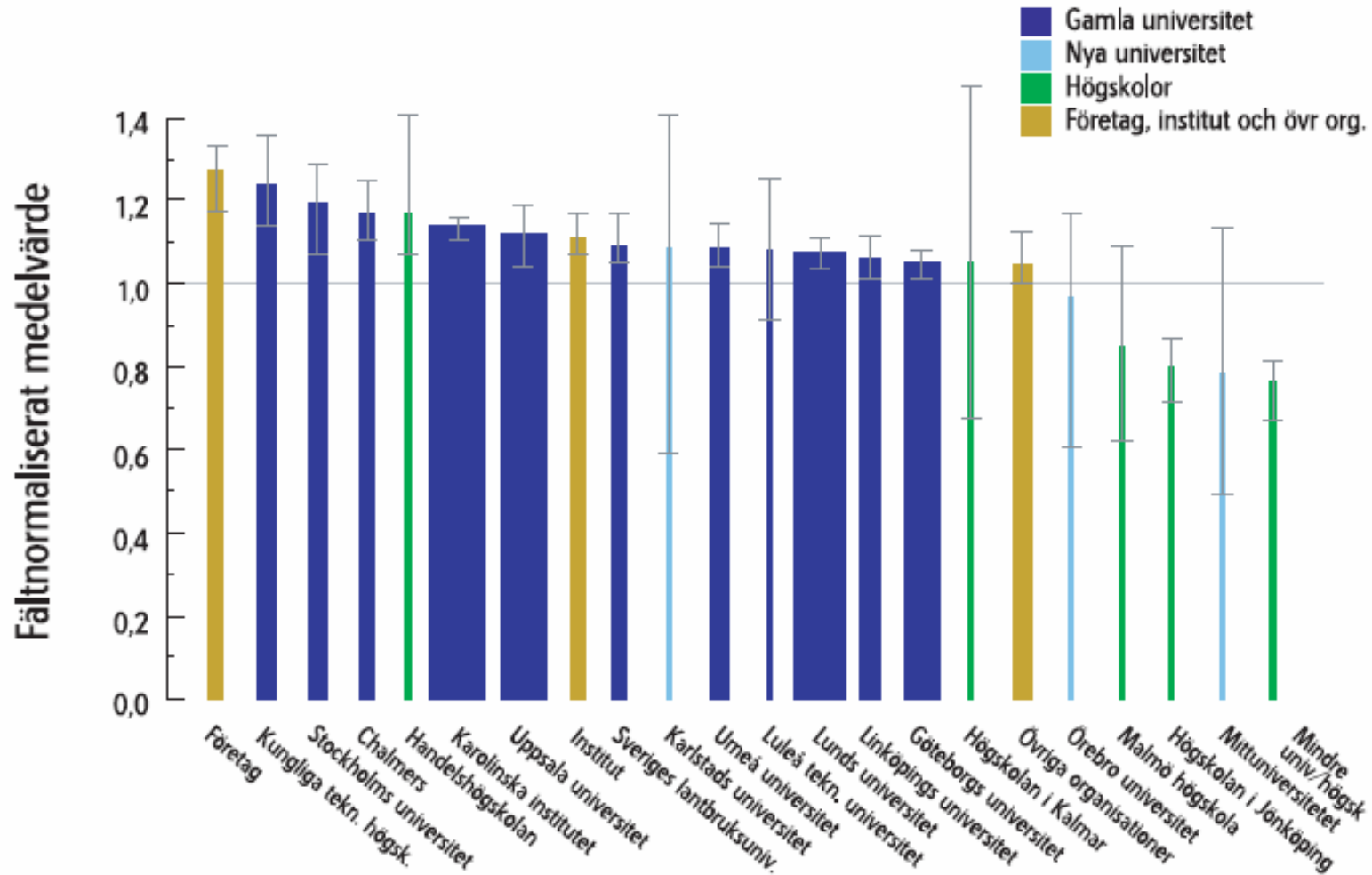
Bara för att man varit bra tidigare behöver det inte innebära att det går bra sen...

$$y = 0,5204x + 0,589; r^2 = 0,2444, r=0,49$$



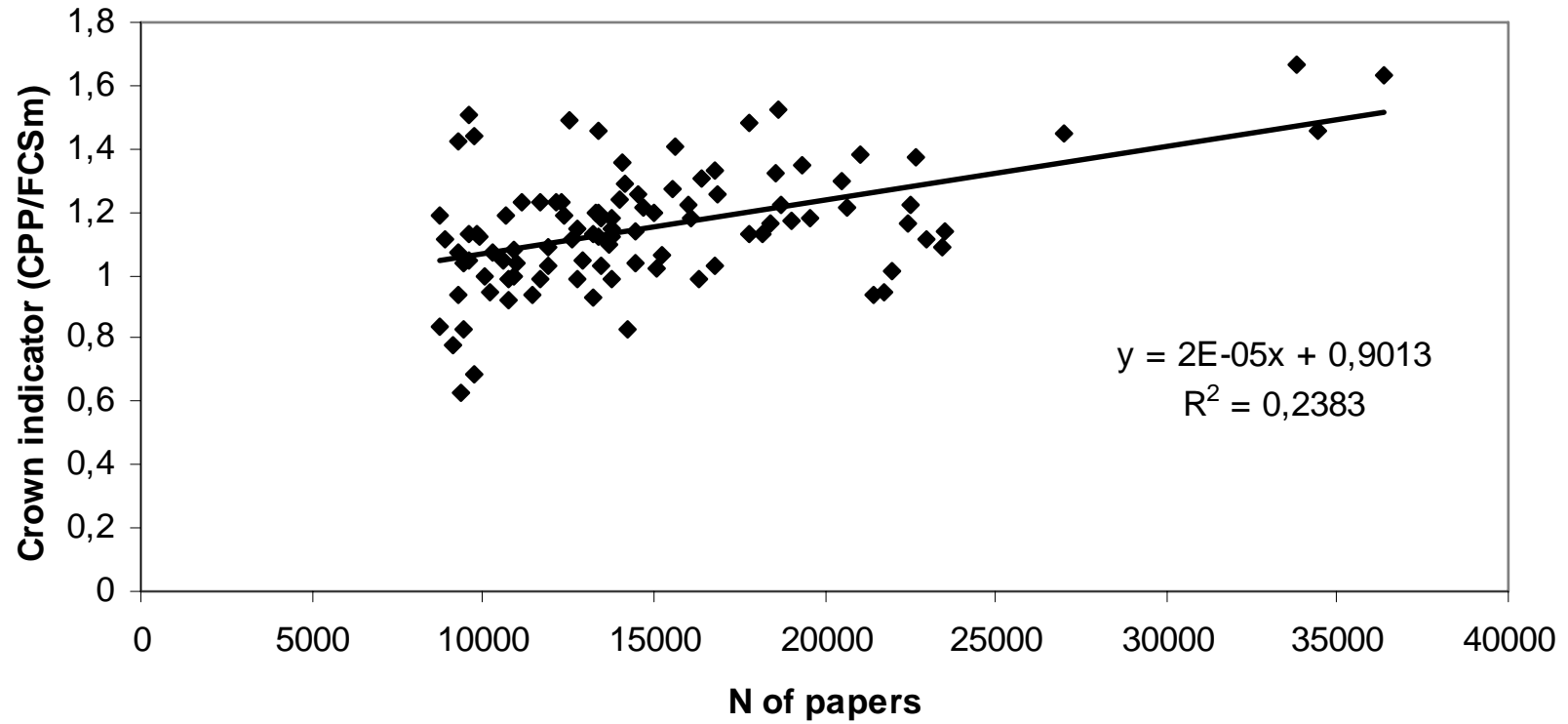
Storlekens betydelse

Figur 25. Medelcitering för svenska lärosäten (medelvärde för åren 1998–2002).



University Size and Impact

Leiden ranking of 100 biggest European universities 1997-2004



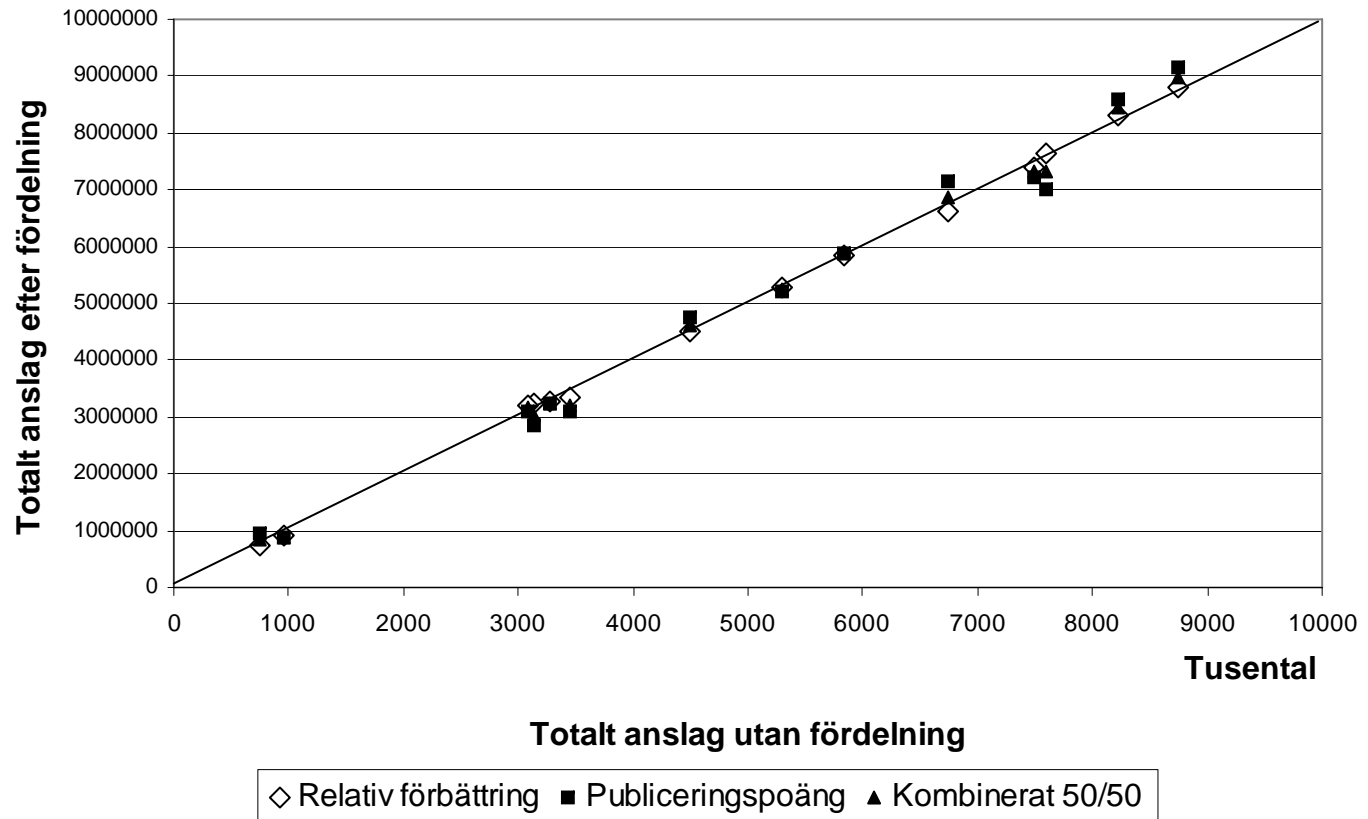
”Mycket skrik och lite ull?”

Om publiceringsbaserad
fördelning av fakultetsanslag

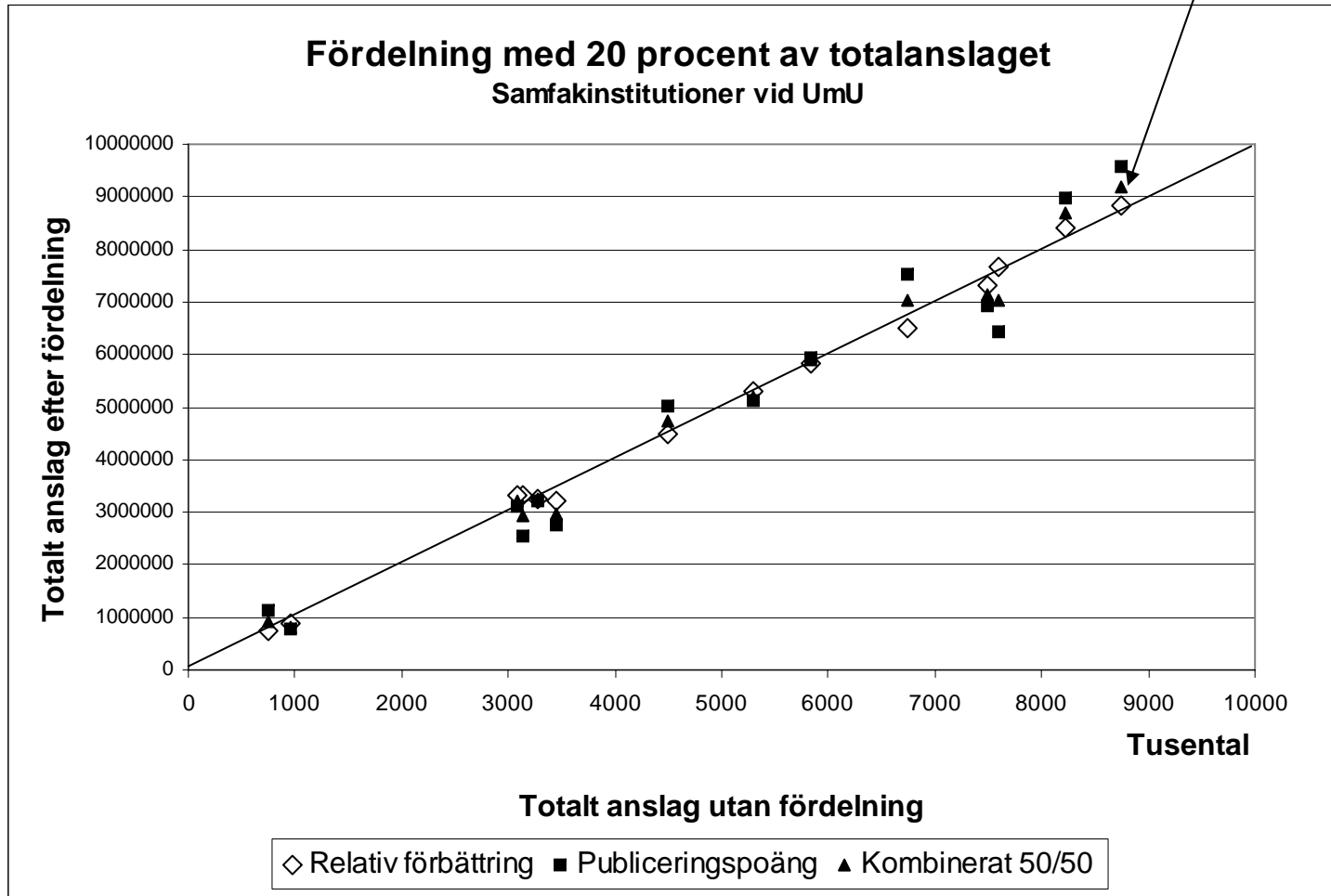
“Umeå-modellen”

Publikationstyp	Vikt
Engelska/Artikel i tidskrift	2
Engelska/Bok	4
Engelska/Kapitel i bok eller del av bok	2
Övriga språk/Artikel i tidskrift	1
Övriga språk/Bok	2
Övriga språk/Kapitel i bok eller del av bok	1

Fördelning med 10 procent av totalanslaget Samfakinstitutioner vid UmU



Cirka ½ miljon mer



Var det värt besväret?

Svar: JA!

- Att räkna på publiceringsdata kostar inte mycket
- Att bygga en publiceringsdatabas har många andra syften
- Små omfördelningar på kort sikt, men tillräckligt stark signal om vikten av publicering