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Scientific research competitiveness of world universities in computer science

A, C AO N, N

Research Center for Chinese Science Evaluation, Wuhan University, Wuhan (P. R. China)

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10 , o 01/01/1996 o 08/31/2006. b
fo w o of f o o , f ,
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Introduction

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30, 2007

Address for correspondence:
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Methods

Data source

A w f o E I (EI)of o o f w of 10 , f o 01/01/1996 o 08/31/2006. EI b o o o b o of o b f . b w- o o o b . B w o w b - f o w EI , o o o o o , , .

Objects

o o o b w fo o w w :

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O b of f , o f of , o o b of b o . o of b of 100, w o , f (o), f o b b o f w f . b of b o , o w f ' , w o o o [E CE A , 2005 . F , Co of o o b 10 b EI 11 b b o o b of 851 , w Co of o ' o 85, w f b f . bo o o o ,f , 233 f o . B w ' f o

E b w o ' . E ff
, fo , fo C fo
, E o V CA F B K E, E , V CA FI O A E, E
. w o . B fo , E o
wo o ' o .

Indicators

o o of fo
o o . B o o o o
w o o w o w . Dff o
ff o o w . Fo , w
o ; E w(o)
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b w , w o o o fo o o
w , w o w b 1.
f o o b b o o ,
b of b o w ,
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30%. ' o b o o ob
o . A b E w b o
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f f b b w o ,
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o w f b . A o o f o b E ,
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b o o of o 1%b f b o o o
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o o o f [O O E C, 2007 .
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A & A .: □ f o of w o
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(f). bo w of 5% . A o
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o b w o .

b 1.

Primary Indicator	Secondary Indicator	Weights (%)
Scientific Research Production		30
Scientific Research Influence	o C o	30
	C	20
Scientific Research Innovation	o	10
Scientific Research Development		5
	A C o	5

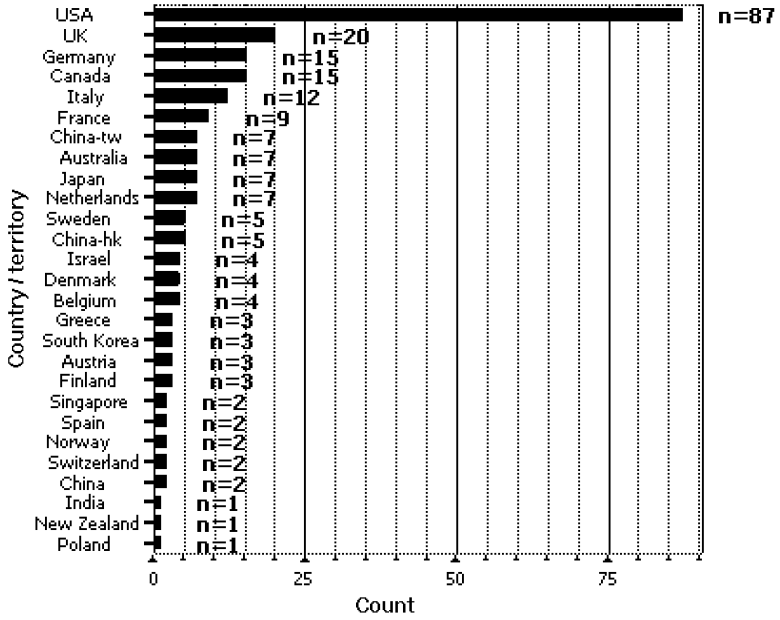
Results

General situation

O b of w , w of 233 o . o b 127418 , o 468244 o , o w 1856 57 o . o / b o of o w F 1.

A F 1 o w, 27 o / o . □A o o w 87of 233 . fo o w of o 5 K S(20), (25), C (15), (12). E of 10 o o of o 64%. o o , o f of 5 o . fo o w o , w w f o of 27 o / .

A & A . : □ f o of w o



F 1. Co / b o of 233

Country/territory competitiveness

b of w o
o w o b 1 , wob
27 o / f o b 2 o w o
o ' f , w b f
fo o w : f , of of b of
; o , of f 100, w o
of of b 100. "□" f of of of
o / ; " f of of o / . Fo
b 2, w ' f of o / f
w .
Co b F 1 b 2, wf o o / .
□A o o o / . o of □A 80 o
S of K 2 . . S of o 5
K , C , D , . □A 1 A ,
o o K E o , A , A S O .

A & A .: □ f o of w o

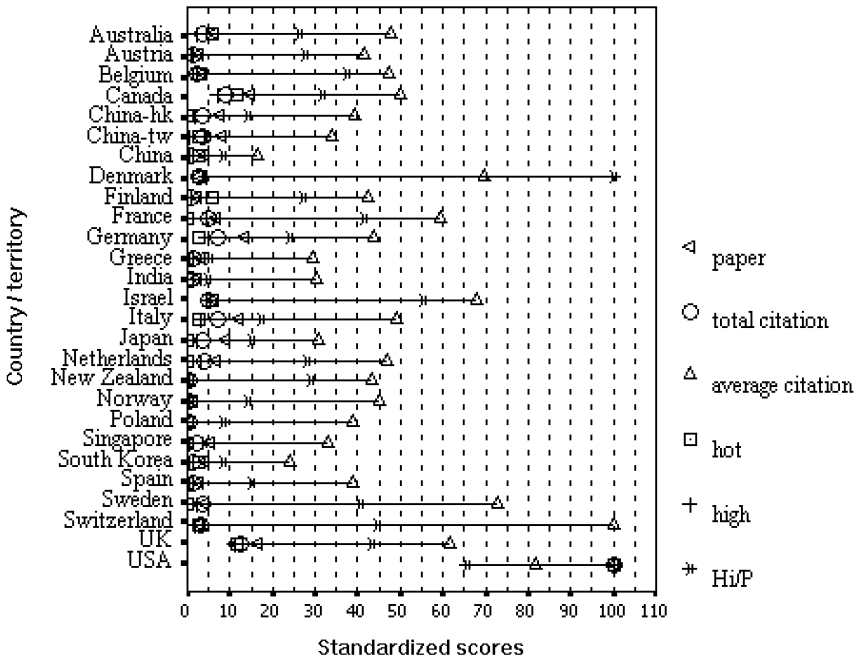
b 2. Co / o o f o o D o

	o	Co /	o o				f				o o				D o					
							o o				o				A o					
1	100.00	A	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	86.81	2	82.00	2	65.60	2		
2	17.91	K	16.73	2	12.02	2	12.63	2	11.10	2	11.40	2	62.07	6	61.80	6	43.60	5		
3	14.12	C	14.67	3	8.22	3	8.97	3	7.10	3	11.40	2	48.17	9	50.00	8	31.80	9		
4	11.58	D	2.90	19	3.26	9	2.47	15	4.45	6	2.90	7	100.00	1	69.80	4	100.00	1		
5	11.47		6.17	11	5.16	6	5.13	6	5.20	4	5.70	4	72.67	4	68.00	5	55.40	3		
6	11.05		13.23	4	6.20	4	7.10	5	4.85	5	2.90	7	40.05	15	43.80	14	24.20	15		
7	10.30		12.03	5	5.60	5	7.20	4	3.20	8	2.90	7	39.22	16	49.00	9	17.60	16		
8	9.82	w	2.57	21	2.56	14	3.13	14	1.75	14	2.90	7	85.16	3	100.00	1	44.60	4		
9	9.71	F	6.87	10	4.70	7	4.97	7	4.35	7	0.00	8	59.36	7	59.20	7	41.60	6		
10	8.62	w	3.90	16	3.06	11	3.47	11	2.45	10	0.00	8	66.90	5	72.80	3	40.80	7		
11	7.87	A	6.10	12	3.12	10	3.57	10	2.45	10	5.70	4	43.58	11	48.00	10	26.20	14		
12	7.82		6.90	9	3.56	8	3.97	8	2.95	9	0.00	8	44.29	10	47.20	12	28.00	11		
13	6.86	B	3.63	17	2.10	16	2.10	17	2.10	12	2.90	7	50.06	8	47.40	11	37.60	8		
14	6.61		8.97	6	2.88	12	3.40	12	2.10	12	0.00	8	27.33	21	31.00	23	15.20	18		
15	6.53	C -	7.50	8	2.82	13	3.60	9	1.65	15	0.00	8	31.80	19	39.60	18	14.40	20		
16	5.96	C - w	8.13	7	2.26	15	3.37	13	0.60	18	2.90	7	22.85	22	33.80	21	5.00	25		
17	5.33	F	2.07	24	1.00	19	1.07	22	0.85	17	5.70	4	41.22	13	42.60	16	27.60	13		
18	4.91	A	2.50	22	1.18	18	1.27	18	1.05	16	0.00	8	40.64	14	41.60	17	27.60	12		
19	4.33	□	5.43	13	1.46	17	2.20	16	0.35	22	0.00	8	21.91	23	33.00	22	4.20	27		
20	4.10	□	2.60	20	0.98	20	1.23	19	0.60	18	0.00	8	32.04	18	39.00	19	15.40	17		
21	4.05	wZ	0.60	27	0.28	26	0.30	27	0.25	23	0.00	8	42.64	12	43.20	15	29.20	10		
22	3.67	w	1.17	25	0.50	25	0.67	25	0.25	23	0.00	8	34.98	17	45.00	13	14.60	19		
23	3.66	K	3.97	15	0.90	21	1.17	20	0.50	20	2.90	7	19.20	26	24.00	26	8.60	21		
24	3.16	C	3.97	14	0.68	23	0.80	24	0.50	20	2.90	7	14.84	27	16.60	27	8.60	22		
25	3.15		3.17	18	0.78	22	1.13	21	0.25	23	0.00	8	20.49	25	29.40	25	5.40	24		
26	2.83		2.37	23	0.60	24	0.87	23	0.15	26	0.00	8	20.61	24	30.20	24	4.80	26		
27	2.75	o	0.67	26	0.24	27	0.33	26	0.10	27	0.00	8	27.92	20	38.80	20	8.60	23		

A f ”, f f o o ,
o 5 A w 51221 , K w 8569, C w 7520, w
6779, w 6160 , w o o
5 o o .

A & A. :□ f o of w o

o o o o of ff ' f w o /* . □, , w o ob F 2 b ' f of o /* b . ff o o b ff F 2 o w .



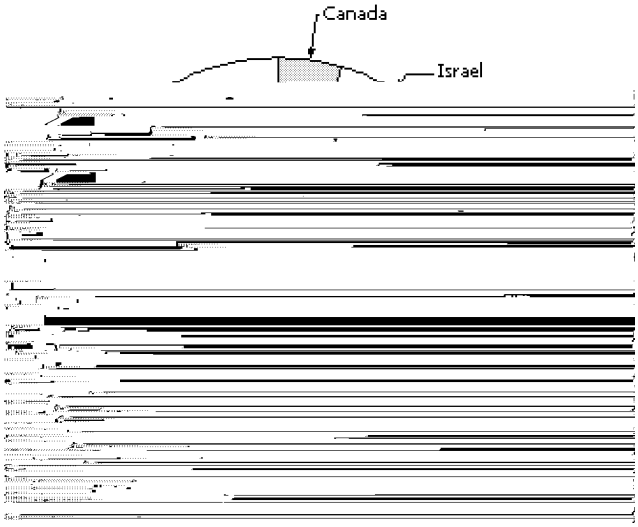
F 2. □ of o /*

F 2, f o /* , w f ' . o of o /* , , o o , . f . F , f , of ff o o of o , , o o , , o . f w w w , w ob o b o b of o o b o , w o of □A 60 o o /* . o , wf o f o w D f o o b o o □A.

University competitiveness

, w o 10% (o 23, b 3) o o o o . 23 o o o .

o b o of 23 o w F 3. f A o w 17 o , bo 74% of o 10% , w o o / o A w o o b . 2 o w 2 o 10% . C , w , , K o w l; .



F 3. Co b o of o 10%

A b 3 o w, ob o , w f o of A D V , , V CA F E K E. E o A of bo 90 o bo bo 1%. fo o w V E A V O . o of b w 70 80. o of b o w60. b of o of 23 28188, 22 of of ; o o , 146248, 31 ; o , 30, 53 ; , 727, 39 ; o of o 5.22, 1.43 of 233 ; b of 0.03, 3 of 233 .

A fo , o 5 W E A w 2108 , w 2031, W I O w 1933, A R D W 1681, E E E I O W w 1656. A fo o o , o 5 W CA F BE K E E w 13242, w 12889, A R D W w 12009, W I O w 10307, W E A w 8767; A fo , o 5 A R D W w 82, W CA F BE K E E w 71, w 66, W E A w 45; Co b w ob w of f , wf o 5 f W CA F BE K E E , A R D W , , W I O , W E A A fo o , o w o 3 o A R D W w 6, W CA F BE K E E w 4, w 4 P A R D W w 4. A fo o , o 5 B I A O W w o of 27.2, W O E E w 12, W CA F A A C Z w 10.2, W A w 9.78, W O R D w 8.93; A fo , o 5 EC W DE A K w 9.04%, A I O W w 5.52%, W H E EFE D w 5.06%, A R D W w 4.88%, CA EC w 4.87%; Co b w o , o 5 o EC W DE A K , B I A O W , A I O W , W H E EFE D, A R D W .

, w o of o 10% o (b 4), o 10% o w bo . f of A R D W , , W CA F BE K E E o o 10%, w o b o . o f o of wo of o o o 10% o o of o 10% o fo of o o w , AI, W I A E wo b o w . A o wof b 4 o w, of o o 10%, o of o o 10% o . Fo , 78%of o o o 10% o o 10% o o ; fo o o , o o 55%, w o o of o 10% .

A & A. :□ f o of w o

b 3. o 10% o

	o		Co /	o o			f		o o		D o			
					□		o		o		□		A o	
1	100.00	A R D W	□A	79.74	99.77	2	90.69	100.00	100.00	66.39	5	26.25	53.95
2	98.46		□A	96.35	95.73	3	97.33	80.49	66.67	49.06	20	23.32	35.94
3	95.49	W CA F K E E	□A	78.18	100.00	1	100.00	86.59	66.67	63.89	8	29.52	47.64
4	73.74	W E A□	□A	100.00	65.17	5	66.21	54.88	0.00	32.20	52	15.28	23.61
5	72.41	W J O □	□A	91.70	67.91	4	77.84	43.90	0.00	33.27	47	19.59	20.60
6	56.56	A E E J O W	□A	78.56	45.14	7	51.68	29.27	16.67	25.84	75	15.18	16.03
7	50.44	W CA F A D E O	□A	51.85	45.35	6	46.32	37.80	33.33	43.04	27	20.62	31.37
8	48.57	A □ EC O	□A	60.63	41.07	9	40.39	36.59	16.67	34.22	44	15.37	25.96
9	47.47	W A J A D	□A	65.09	40.44	10	44.27	29.27	0.00	29.01	62	15.70	19.34
10	46.60	Z G	□ w	50.52	43.70	8	54.30	21.95	16.67	36.01	38	24.80	18.69
11	42.04	EC O A E □ EC O		59.58	34.61	17	40.77	20.73	0.00	25.47	79	15.79	14.97
12	41.07	CE O W	□A	33.02	38.43	12	37.84	34.15	33.33	58.73	11	26.45	44.49
13	40.88	W A O	□A	38.99	38.75	11	36.72	36.59	16.67	51.41	19	21.74	40.36
14	40.48	A W W		52.28	32.48	22	35.79	23.17	16.67	28.87	63	15.80	19.07
15	39.84	A V A D W	□A	30.93	30.72	25	24.06	36.59	66.67	56.99	12	17.95	50.88
16	39.37	W O O	C	47.06	32.76	21	29.72	32.93	16.67	36.99	34	14.57	30.10
17	38.83	W CA H O A E E □	□A	46.44	35.49	16	34.84	31.71	0.00	38.65	33	17.32	29.37
18	38.63	W G A	□A	44.50	33.07	20	33.45	28.05	16.67	36.82	36	17.35	27.12
19	37.96	W O CA F	□A	47.11	34.08	18	36.67	25.61	0.00	34.24	43	17.97	23.39
20	37.57	W E O A	□A	39.42	36.69	13	36.72	31.71	0.00	46.45	24	21.50	34.60
21	35.85	A W E A E	□	73.72	16.89	52	26.64	0.00	0.00	6.91	218	8.34	0.00
22	35.73	A W	□A	33.97	35.68	15	32.69	35.37	0.00	55.48	13	22.21	44.79
23	35.49	W CA D E	K	37.57	31.06	24	29.47	29.27	16.67	42.74	28	18.11	33.51

o , w o o ’ o o ff b w w o b o of 233 ob b 5 o w.

Fo b 5, wf o ff b w , o o , o , f o w , f w o , o , o f o w , o o , o ,b . o b of ’ of , o . of o ff b w o o , o o , o o , , o 0.7. b , o o o o o w.

A & A .:□ f o of o

b 4. o of o 10%

		Co /						
				o o	A o	o		
1	□ A D V	□A	**4**	**3**	**12**	**1**	**1**	**4**
2		□A	**2**	**2**	**17**	**2**	**3**	**21**
3	V CA F K E E	□A	**6**	**1**	**7**	**2**	**2**	**9**
4	V E A□	□A	**1**	**5**	60	40	**4**	45
5	V J O □	□A	**3**	**4**	34	40	**5**	56
6	E E J O V	□A	**5**	**7**	62	**9**	**18**	83
7	V CA F A D E O	□A	**17**	**8**	30	**5**	**7**	24
8	A □ E C	□A	**10**	**12**	58	**9**	**8**	37
9	V A J A D	□A	**8**	**9**	57	40	**18**	62
10	Z C	□ w	**19**	**6**	**14**	**9**	29	67
11	C O A E □ E C O		**11**	**11**	56	40	31	90
12	CE O V	□A	52	**14**	**10**	**5**	**12**	**12**
13	V A □ O	□A	34	**15**	24	**9**	**8**	**17**
14	E A V V		**16**	**18**	55	**9**	27	66
15	A V A D V	□A	62	40	38	**2**	**8**	**7**
16	V O O	C	24	27	70	**9**	**13**	27
17	V CA H O □A E E □	□A	25	**20**	44	40	**14**	28
18	V C A	□A	27	**21**	43	**9**	**22**	33
19	V □O CA F	□A	**23**	**17**	37	40	25	46
20	V E □O A	□A	33	**15**	26	40	**14**	**22**
21	A V E A E	□	**7**	32	193	40	218	218
22	C B A V	□A	46	24	**23**	40	**11**	**10**
23	V CA B D E	K	37	28	36	**9**	**18**	**23**
Co			13	18	6	14	18	9

A & A . : □ f o of w o

b 5. o b w o

				o o		o	A o	
o		Co ff o Co ff	1	0.727(**)	0.446(**)	0.232(**)	–0.029	0.032
	o o	Co ff o Co ff	0.727(**)	1	0.761(**)	0.282(**)	0.595(**)	0.510(**)
		Co ff o Co ff	0.446(**)	0.761(**)	1	0.356(**)	0.678(**)	0.881(**)
	o	Co ff o Co ff	0.232(**)	0.282(**)	0.356(**)	1	0.261(**)	0.311(**)
	A o	Co ff o Co ff	–0.029	0.595(**)	0.678(**)	0.261(**)	1	0.806(**)
		Co ff o Co ff	0.032	0.510(**)	0.881(**)	0.311(**)	0.806(**	1

** Co o f 0.01 (2-).

Conclusion

o f o of ob o , b o fo b o E w o w . A o , w o / o o o .

o of o / , □A o w o of o o o w o . o o 5 o K , C , D , . A o b of D o w o o b , o , o , . o , C b , b fo of o w . o C o , o o o o o o o w fo o of . □ , o o b o o / o o C .

o of , w o o of o 10% . o 10% , □A o w o of f o w b o o . fo of □ A D V , , V CA F B K E E . o of o o o o o o 10% w o o 10% . o , fo CE O V A V A D V , o o , w o □ ' o o ff b w

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o , . E , o ff b w
o o , o o , o ,
0.7, w o b , o
w o w.
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o o o .
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o o . , w o o 21 b
E b . E o / o f f
o w o . b f f
f o .

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w o o w o o Fo o of C
(70673071/ 0309) o o w .

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