

Table S1: Top 10 country ranking, based on the number of papers P , the number of citations C , the number of citations per paper C/P , and the scientific fitness K .

Rank	P 2007-2009	P 2007-2009	C 2007-2009	C 2007-2009	C/P 2007-2009	C/P 2007-2009	K 2007-2009	K 2007-2009
1	USA	1263487	USA	1922559	Switzerland	1.795	USA	0.0299
2	China	315616	United Kingdom	397207	Denmark	1.601	United Kingdom	0.0205
3	United Kingdom	291110	Germany	354975	Netherlands	1.582	Germany	0.0170
4	Germany	247151	China	335800	USA	1.522	Canada	0.0108
5	Japan	239669	Japan	283537	Sweden	1.489	Netherlands	0.0100
6	France	161873	France	217867	Germany	1.436	Switzerland	0.0099
7	Canada	155552	Canada	202639	Belgium	1.411	France	0.0086
8	Italy	148259	Italy	184793	Singapore	1.404	Sweden	0.0049
9	Spain	120244	Spain	139274	Finland	1.366	Italy	0.0040
10	India	110937	Australia	131016	United Kingdom	1.364	Denmark	0.0035

Rank	P 2000-2002	P 2000-2002	C 2000-2002	C 2000-2002	C/P 2000-2002	C/P 2000-2002	K 2000-2002	K 2000-2002
1	USA	1042779	USA	1389778	Switzerland	1.653	USA	0.0375
2	United Kingdom	258447	United Kingdom	277907	Netherlands	1.351	Germany	0.0177
3	Japan	222299	Germany	236317	Denmark	1.345	United Kingdom	0.0144
4	Germany	194759	Japan	233676	USA	1.333	Switzerland	0.0125
5	France	132401	France	149633	Sweden	1.298	Netherlands	0.0099
6	Canada	111299	Canada	115394	Finland	1.219	France	0.0095
7	Italy	97039	Italy	101893	Germany	1.213	Canada	0.0077
8	China	95736	Netherlands	73377	Belgium	1.152	Sweden	0.0063
9	Spain	68825	Australia	65409	Austria	1.137	Denmark	0.0035
10	Australia	68182	Spain	63406	France	1.130	Belgium	0.0024

Table S2: Top 50 city ranking, based on the number of papers P , the number of citations C , the number of citations per paper C/P , and the scientific fitness K .

Rank	P 2007-2009	P 2007-2009	C 2007-2009	C 2007-2009	C/P 2007-2009	C/P 2007-2009	K 2007-2009	K 2007-2009
1	London, UK	62624	Boston, MA, USA	100205	Martinsried, Germany	5.234	Boston, MA, USA	0.0117
2	Beijing, China	59449	London, UK	90641	Muelheim, Germany	5.207	Cambridge, MA, USA	0.0074
3	New York City, NY, USA	45992	New York City, USA	79585	Charlestown, MA, USA	4.396	New York City, NY, USA	0.0062
4	Seoul, South Korea	44934	Beijing, China	69537	La Jolla, CA, USA	3.240	Bethesda, MD, USA	0.0061
5	Tokyo, Japan	44058	Tokyo, Japan	55884	Versailles, France	3.206	La Jolla, CA, USA	0.0052
6	Boston, MA, USA	41988	Cambridge, MA, USA	53558	Pasadena, CA, USA	3.095	Cambridge, UK	0.0043
7	Chicago, IL, USA	39732	Baltimore, MD, USA	47244	Bethesda, MD, USA	3.026	Baltimore, MD, USA	0.0042
8	Paris, France	34581	Paris, France	46567	Cambridge, MA, USA	2.985	Stanford, CA, USA	0.0041
9	Shanghai, China	33179	Bethesda, MD, USA	46069	Greenbelt, MD	2.886	London, UK	0.0037
10	Moscow, Russia	30132	Seoul, South Korea	44518	Garching, Germany	2.814	Berkeley, CA, USA	0.0037
11	Madrid, Spain	26958	Los Angeles, CA, USA	43810	Sutton, England	2.758	Atlanta, GA, USA	0.0036
12	Philadelphia, PA, USA	26259	Philadelphia, PA, USA	43673	Villejuif, France	2.739	Seattle, WA, USA	0.0035
13	Toronto, Canada	25710	Houston, TX, USA	43249	Yorktown Heights, NY, USA	2.733	Houston, TX, USA	0.0033
14	Washington, D.C., USA	25554	Shanghai, China	40797	Frederick, MD, USA	2.698	Los Angeles, CA, USA	0.0032
15	Los Angeles, CA, USA	25317	Cambridge, UK	40596	Rehovot, Israel	2.686	Ann Arbor, MI, USA	0.0031
16	Baltimore, MD, USA	23831	Toronto, Canada	39311	Kawachi, Japan	2.654	Philadelphia, PA, USA	0.0029
17	Houston, TX, USA	23624	Seattle, WA, USA	39104	Stanford, CA, USA	2.637	San Francisco, CA, USA	0.0029
18	Taipei, Taiwan	22165	Atlanta, GA, USA	38562	Harlow, UK	2.612	New Haven, CO, USA	0.0026
19	Berlin, Germany	22145	La Jolla, CA, USA	37999	Rahway, NJ, USA	2.510	Oxford, UK	0.0025
20	Rome, Italy	21084	Chicago, IL, USA	37805	Upton, NY, USA	2.504	Durham, NC, USA	0.0023
21	Barcelona, Spain	20972	Ann Arbor, MI, USA	35103	Berkeley, CA, USA	2.486	Toronto, Canada	0.0020
22	Montreal, Canada	20948	Madrid, Spain	32626	Tarragona, Spain	2.467	Pasadena, CA, USA	0.0020
23	Seattle, WA, USA	19960	San Francisco, CA, USA	32269	Cambridge, UK	2.416	Zurich, Switzerland	0.0020
24	Atlanta, GA, USA	19668	Stanford, CA, USA	31863	Abbott Park, IL, USA	2.390	St. Louis, MO, USA	0.0019
25	Singapore	19182	Berkeley, CA, USA	30718	Boston, MA, USA	2.387	Dallas, TX, USA	0.0018
26	Sao Paulo, Brazil	19021	Montreal, Canada	30612	Evanston, IL, USA	2.289	Maddison, WI, USA	0.0017
27	Tehran, Iran	18896	Oxford, UK	30168	Illkrich, France	2.266	Heidelberg, Germany	0.0017
28	Pittsburgh, PA, USA	18065	Berlin, Germany	29976	Santa Barbara, CA, USA	2.256	Princeton, NJ, USA	0.0016
29	Cambridge, MA, USA	17944	Zurich, Switzerland	28700	Princeton, NJ, USA	2.240	Chapel Hill, NC, USA	0.0016
30	Milan, Italy	17628	Pittsburgh, PA, USA	28270	Oak Ridge, TN, USA	2.237	Amsterdam, The Netherlands	0.0016
31	Ann Arbor, MI, USA	17590	Amsterdam, The Netherlands	27480	Golden, CO, USA	2.227	Pittsburgh, PA, USA	0.0015
32	Nanjing, China	17549	Singapore, Singapore	27365	Boulder, CO, USA	2.226	Rochester, MN, USA	0.0013
33	San Francisco, CA, USA	17339	Barcelona, Spain	27130	New Haven, CO, USA	2.206	Utrecht, The Netherlands	0.0013
34	Munich, Germany	17165	Rome, Italy	25806	Santa Cruz, CA, USA	2.198	Evanston, IL, USA	0.0013
35	Cambridge, UK	16804	Milan, Italy	24786	Palo Alto, CA, USA	2.197	Boulder, CO, USA	0.0012
36	Sidney, Australia	16282	St. Louis, MO, USA	24466	Gif Sur Yvette, France	2.180	Kyoto, Japan	0.0012
37	Amsterdam, The Netherlands	16237	New Haven, CO, USA	24299	Dallas, TX, USA	2.175	Stockholm, Sweden	0.0012
38	Ankara, Turkey	16224	Kyoto, Japan	24105	Duarte, CA, USA	2.173	Geneve, Switzerland	0.0011
39	Oxford, UK	15956	Durham, NC, USA	23904	Potsdam, Germany	2.148	Cleveland, OH, USA	0.0011
40	Wuhan, China	15246	Chinese Taipei, Taiwan	23547	Rockville, MD, USA	2.132	Minneapolis, MN, USA	0.0010
41	Bethesda, MD, USA	15225	Maddison, WI, USA	23165	Göttingen, Germany	2.127	Santa Barbara, CA, USA	0.0010
42	Vienna, Austria	15162	Munich, Germany	23043	Neuburg, Germany	2.120	Montreal, Canada	0.0010
43	Zurich, Switzerland	14618	Stockholm, Sweden	22133	Argonne, IL, USA	2.105	Basel, Switzerland	0.0010
44	Kyoto, Japan	14374	Vancouver, Canada	20877	Dundee, Scotland	2.104	Göttingen, Germany	0.0010
45	San Diego, CA, USA	14064	Sydney, Australia	20317	Richtland, WA, USA	2.090	Rotterdam, The Netherlands	0.0010
46	Hangzhou, China	13942	Vienna, Austria	20015	Reykjavik, ICELAND	2.065	Vancouver, Canada	0.0010
47	Athens, Greece	13743	Cleveland, OH, USA	19724	Heidelberg, Germany	2.062	Lausanne, Switzerland	0.0009
48	Stockholm, Sweden	13552	Heidelberg, Germany	19468	West Point, PA, USA	2.050	Leiden, The Netherlands	0.0009
49	Vancouver, Canada	13334	Rochester, MN, USA	19051	Roskilde, Denmark	2.050	Rehovot, Israel	0.0009
50	St. Louis, MO, USA	13219	Washington, DC, USA	18999	Durham, NC, USA	2.047	Copenhagen, Denmark	0.0009

Rank	P 2000-2002	P 2000-2002	C 2000-2002	C 2000-2002	C/P 2000-2002	C/P 2000-2002	K 2000-2002	K 2000-2002
1	London, UK	55119	Boston, MA, USA	74420	S San Francisco, CA, USA	4.838	Boston, MA, USA	0.0143
2	New York City, NY, USA	38575	London, UK	67093	Martinsried, Germany	4.576	Bethesda, MD, USA	0.0092
3	Tokyo, Japan	37642	New York City, NY, USA	60276	Charlestown, MA, USA	4.286	La Jolla, CA, USA	0.0078
4	Boston, MA, USA	32677	Tokyo, Japan	44847	Illkrich, France	3.565	New York City, NY, USA	0.0082
5	Moscow, Russia	28262	Bethesda, MD, USA	42047	Muelheim, Germany	3.357	Cambridge, MA, USA	0.0077
6	Paris, France	28248	Baltimore, MD, USA	37426	La Jolla, CA, USA	3.223	Baltimore, MD, USA	0.0060
7	Chicago, IL, USA	24125	San Diego, CA, USA	36513	Murray Hill, NJ, USA	2.973	Stanford, CA, USA	0.0050
8	Beijing, China	23024	Cambridge, MA, USA	35686	Frederick, MD, USA	2.931	Cambridge, UK	0.0048
9	Los Angeles, CA, USA	22714	Paris, France	34930	Bethesda, MD, USA	2.836	San Francisco, CA, USA	0.0048
10	Philadelphia, PA, USA	22120	Philadelphia, PA, USA	33544	Rockville, MD, USA	2.805	Seattle, WA, USA	0.0046
11	Baltimore, MD, USA	19684	Los Angeles, CA, USA	32742	Harlow, UK	2.682	Philadelphia, PA, USA	0.0040
12	Seoul, South Korea	19485	Seattle, WA, USA	30007	West Point, PA, USA	2.677	Berkeley, CA, USA	0.0040
13	Washington, D.C., USA	19353	Houston, TX, USA	29383	Pasadena, CA, USA	2.553	Evanston, IL, USA	0.0039
14	Houston, TX, USA	18754	Cambridge, UK	29370	Yorktown Heights, NY, USA	2.404	London, UK	0.0038
15	Toronto, Canada	17750	Chicago, IL, USA	26061	Stanford, CA, USA	2.377	Houston, TX, USA	0.0034
16	Berlin, Germany	17395	San Francisco, CA, USA	24659	Cambridge, MA, USA	2.359	Los Angeles, CA, USA	0.0034
17	Madrid, Spain	17248	Toronto, Canada	24533	Villejuif, France	2.322	St. Louis, MO, USA	0.0028
18	Seattle, WA, USA	15927	Stanford, CA, USA	23520	Rahway, NJ, USA	2.301	Oxford, UK	0.0027
19	Cambridge, MA, USA	15129	Berkeley, CA, USA	21938	Basel, Switzerland	2.278	Dallas, TX, USA	0.0026
20	Cambridge, UK	15054	Oxford, UK	21718	Boston, MA, US	2.277	Toronto, Canada	0.0025
21	Bethesda, MD, USA	14827	Berlin, Germany	21504	Garching, Germany	2.276	Pasadena, CA, USA	0.0024
22	Montreal, Canada	14742	Ann Arbor, MI, USA	20560	Rehovot, Israel	2.231	Ann Arbor, MI, USA	0.0024
23	Atlanta, GA, USA	14409	St. Louis, MO, USA	20240	Dallas, TX, USA	2.230	Atlanta, GA, USA	0.0022
24	Oxford, UK	14048	New Haven, CT, USA	20196	San Francisco, CA, USA	2.180	Princeton, NJ, USA	0.0022
25	Rome, Italy	13931	Atlanta, GA, USA	20196	Kashiwa, Japan	2.178	Rockville, MD, USA	0.0021
26	Ann Arbor, MI, USA	13755	Madrid, Spain	18292	New Haven, CO, USA	2.147	Heidelberg, Germany	0.0021
27	Pittsburgh, PA, USA	13421	Pittsburgh, PA, USA	18001	Palo Alto, CA, USA	2.110	Durham, NC, USA	0.0019
28	Taipei, Taiwan	12345	Kyoto, Japan	17564	Chapel Hill, NC, USA	2.105	Zurich, Switzerland	0.0018
29	Kyoto, Japan	12018	Amsterdam, The Netherlands	17492	Greenbelt, MD, USA	2.097	Geneve, Switzerland	0.0018
30	Tsukuba, Japan	11925	Montreal, Canada	17331	Okazaki, Japan	2.057	Maddison, WI, USA	0.0017
31	Vienna, Austria	11684	Zurich, Switzerland	16502	Duarte, CA, USA	2.032	Amsterdam, The Netherlands	0.0016
32	Barcelona, Spain	11643	Madison, WI, USA	15659	Upton, NY, USA	2.006	Basel, Switzerland	0.0016
33	Munich, Germany	11553	Cleveland, OH, USA	15356	Heidelberg, Germany	1.981	Chapel Hill, NC, USA	0.0016
34	Cleveland, OH, USA	11503	Munich, Germany	15290	Princeton, NJ, USA	1.970	Paris, France	0.0015
35	Milan, Italy	11402	Stockholm, Sweden	15225	Cambridge, UK	1.951	Rochester, MN, USA	0.0015
36	St. Louis, MO, USA	11395	Milan, Italy	15215	Huddinge, Sweden	1.946	Nashville, TN, USA	0.0014
37	San Diego, CA, USA	11328	Washington, DC, USA	14859	Berkeley, CA, USA	1.937	Pittsburgh, PA, USA	0.0014
38	Berkeley, CA, USA	11327	Tsukuba, Japan	14572	Baltimore, MD, USA	1.901	Cleveland, OH, USA	0.0014
39	San Francisco, CA, USA	11309	Seoul, South Korea	14515	Farmington, CT, USA	1.886	Kyoto, Japan	0.0013
40	Singapore	11307	Durham, NC, USA	14405	Seattle, WA, USA	1.884	Stockholm, Sweden	0.0013
41	Amsterdam, The Netherlands	11232	Dallas, TX, USA	14248	Piscataway, NJ, USA	1.864	Garching, Germany	0.0012
42	Madison, WI, USA	10640	Vienna, Austria	14056	Geneve, Switzerland	1.848	Minneapolis, MN, USA	0.0012
43	Stockholm, Sweden	10613	Rome, Italy	13921	Wilrijk, Belgium	1.843	Charlestown, MA, USA	0.0012
44	Shanghai, China	10034	Heidelberg, Germany	13913	Gif Sur Yvette, France	1.842	Ithaca, NY, USA	0.0011
45	Stanford, CA, USA	9893	Minneapolis, MN, USA	12913	Versailles, France	1.838	San Diego, CA, USA	0.0011
46	Minneapolis, MN, USA	9815	Barcelona, Spain	12850	King of Prussia, PA, USA	1.827	Osaka, Japan	0.0011
47	Zurich, Switzerland	9662	Beijing, China	12687	Dundee, Scotland	1.793	Murray Hill, NJ, USA	0.0011
48	Sidney, Australia	9471	Rochester, MN, USA	12658	Sutton, UK	1.784	Denver, CO, USA	0.0011
49	New Haven, CT, USA	9405	Chapel Hill, NC, USA	12607	Valhalla, NY, USA	1.782	Rehovot, Israel	0.0011
50	Sao Paulo, Brazil	9236	Princeton, NJ, USA	12244	St. Louis, MO, USA	1.776	Munich, Germany	0.0011