

Appendix table 5-41

S&E articles in all fields combined, by coauthorship attribute and selected country/economy: 1997–2012

Country/economy and coauthorship attribute	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
World																
Total articles	581,845	605,160	619,163	619,680	636,832	627,805	683,947	656,099	743,180	728,451	736,501	816,314	809,889	777,525	814,152	852,110
with multiple institutions	301,971	320,106	335,791	341,514	361,448	363,036	403,997	394,763	454,625	452,410	467,750	525,630	535,070	522,873	556,464	586,520
with domestic institutions only	490,978	506,736	513,061	510,054	518,103	507,026	548,854	524,312	591,365	576,441	577,251	635,531	622,781	592,222	615,311	640,269
with international institutions	90,867	98,424	106,102	109,626	118,729	120,779	135,093	131,787	151,815	152,010	159,250	180,783	187,108	185,303	198,841	211,841
Canada																
Total articles	27,541	27,535	28,447	28,006	28,194	28,399	31,399	30,333	35,638	35,765	36,832	40,409	41,301	39,386	40,543	42,424
with multiple institutions	16,932	17,425	18,287	18,306	18,873	19,241	21,465	21,086	24,911	25,265	26,602	29,553	30,670	29,701	30,954	32,766
with domestic institutions only	18,306	18,060	18,379	17,849	17,310	17,120	18,683	17,555	20,476	20,428	20,514	21,986	21,966	20,614	20,670	21,138
with international institutions	9,235	9,475	10,068	10,157	10,884	11,279	12,716	12,778	15,162	15,337	16,318	18,423	19,335	18,772	19,873	21,286
Mexico																
Total articles	2,939	3,460	3,857	3,977	4,374	4,466	4,978	5,013	5,543	5,439	5,584	6,200	6,069	5,871	6,024	6,398
with multiple institutions	1,914	2,394	2,761	2,884	3,203	3,297	3,614	3,721	4,192	4,151	4,259	4,821	4,806	4,712	4,874	5,213
with domestic institutions only	1,733	1,923	2,178	2,132	2,314	2,442	2,775	2,765	3,015	2,899	2,968	3,157	3,094	2,954	2,875	3,083
with international institutions	1,206	1,537	1,679	1,845	2,060	2,024	2,203	2,248	2,528	2,540	2,616	3,043	2,975	2,917	3,149	3,315
United States																
Total articles	209,898	211,834	214,066	212,781	219,879	214,737	233,211	223,073	249,152	242,216	240,491	263,092	256,758	245,235	255,040	262,666
with multiple institutions	123,239	126,322	130,081	131,272	138,510	137,312	151,759	147,485	166,729	164,603	167,272	185,655	185,209	179,124	189,455	196,725
with domestic institutions only	169,479	168,580	167,722	164,785	167,705	161,855	173,914	165,034	182,878	176,329	171,417	184,744	176,348	165,654	169,529	171,483
with international institutions	40,419	43,254	46,344	47,996	52,174	52,882	59,297	58,039	66,274	65,887	69,074	78,348	80,410	79,581	85,511	91,183
Argentina																
Total articles	2,976	3,187	3,395	3,553	3,803	4,038	4,019	3,762	4,424	4,310	4,460	5,108	5,177	5,100	5,325	5,653
with multiple institutions	1,794	1,989	2,205	2,354	2,608	2,759	2,804	2,778	3,270	3,204	3,372	3,891	4,078	4,062	4,346	4,602
with domestic institutions only	1,983	2,030	2,121	2,180	2,220	2,408	2,307	2,018	2,365	2,328	2,386	2,725	2,673	2,656	2,727	2,870
with international institutions	993	1,157	1,274	1,373	1,583	1,630	1,712	1,744	2,059	1,982	2,074	2,383	2,504	2,444	2,598	2,783
Brazil																
Total articles	5,632	6,642	7,521	7,897	9,050	9,607	10,739	11,265	12,595	13,289	13,490	16,981	15,862	15,490	16,383	18,574
with multiple institutions	3,857	4,545	5,157	5,509	6,362	6,850	7,653	8,053	9,191	9,694	10,218	12,945	12,354	12,348	13,368	15,116
with domestic institutions only	3,337	4,028	4,633	4,780	5,690	6,006	6,956	7,338	8,224	8,837	8,758	11,303	10,177	9,861	10,073	11,515
with international institutions	2,295	2,614	2,888	3,117	3,360	3,601	3,783	3,927	4,371	4,452	4,732	5,678	5,685	5,629	6,310	7,059
Chile																
Total articles	1,324	1,347	1,503	1,582	1,763	1,903	2,214	2,023	2,582	2,550	2,562	3,004	3,075	3,030	3,368	3,801
with multiple institutions	911	933	1,058	1,177	1,299	1,460	1,698	1,585	2,064	2,114	2,132	2,449	2,590	2,606	2,964	3,320
with domestic institutions only	706	714	735	746	817	824	990	848	1,114	997	969	1,201	1,151	1,072	1,110	1,228
with international institutions	618	633	768	836	946	1,079	1,224	1,175	1,468	1,553	1,593	1,803	1,924	1,958	2,258	2,573
Austria																
Total articles	5,255	5,653	5,836	5,921	6,442	6,318	7,009	6,697	7,450	7,040	7,426	8,308	8,301	8,242	8,960	9,206
with multiple institutions	3,555	3,806	4,132	4,228	4,658	4,627	5,184	5,114	5,853	5,487	5,906	6,669	6,753	6,867	7,533	7,859
with domestic institutions only	2,862	3,102	3,045	3,059	3,165	3,046	3,404	3,031	3,182	2,990	2,934	3,128	3,048	2,796	2,963	2,883
with international institutions	2,393	2,551	2,791	2,862	3,277	3,272	3,605	3,666	4,268	4,050	4,492	5,180	5,253	5,446	5,997	6,323

Appendix table 5-41

S&E articles in all fields combined, by coauthorship attribute and selected country/economy: 1997–2012

Country/economy and coauthorship attribute	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Belgium																
Total articles	7,614	8,126	8,499	8,270	8,713	8,871	9,800	9,587	11,060	10,442	10,902	12,135	12,158	12,109	12,811	13,301
with multiple institutions	5,195	5,621	6,058	5,979	6,325	6,574	7,330	7,211	8,543	8,131	8,698	9,802	10,103	10,295	10,936	11,330
with domestic institutions only	3,942	4,104	4,059	3,889	4,036	3,879	4,319	4,201	4,651	4,272	4,367	4,717	4,488	4,146	4,313	4,425
with international institutions	3,672	4,022	4,440	4,381	4,677	4,992	5,481	5,386	6,409	6,170	6,535	7,418	7,670	7,963	8,498	8,876
Czech Republic																
Total articles	3,064	3,301	3,298	3,396	3,717	3,836	4,185	4,206	4,949	4,965	5,238	5,950	5,994	5,974	6,387	6,585
with multiple institutions	2,041	2,281	2,259	2,388	2,708	2,752	3,176	3,118	3,738	3,777	4,077	4,596	4,755	4,853	5,166	5,346
with domestic institutions only	1,597	1,629	1,619	1,698	1,786	1,897	2,046	2,055	2,351	2,452	2,498	2,884	2,773	2,667	2,853	2,795
with international institutions	1,467	1,672	1,679	1,698	1,931	1,939	2,139	2,151	2,598	2,513	2,740	3,066	3,221	3,307	3,534	3,790
Denmark																
Total articles	6,210	6,642	6,846	6,884	7,068	6,768	7,532	7,005	7,906	7,646	7,941	8,649	8,700	8,853	9,777	10,497
with multiple institutions	4,308	4,625	4,889	4,952	5,150	5,034	5,650	5,280	6,059	5,982	6,331	6,996	7,165	7,312	8,163	8,788
with domestic institutions only	3,274	3,478	3,519	3,512	3,488	3,304	3,696	3,366	3,671	3,396	3,404	3,611	3,449	3,561	3,872	4,042
with international institutions	2,936	3,164	3,327	3,372	3,580	3,464	3,836	3,639	4,235	4,250	4,537	5,038	5,251	5,292	5,905	6,455
Finland																
Total articles	5,667	5,812	6,266	6,441	6,625	6,408	6,937	6,484	7,091	6,932	6,953	7,679	7,545	7,204	7,467	7,802
with multiple institutions	4,090	4,270	4,722	4,925	5,039	4,955	5,450	5,074	5,672	5,548	5,634	6,253	6,261	6,036	6,356	6,619
with domestic institutions only	3,505	3,454	3,642	3,575	3,775	3,574	3,714	3,521	3,690	3,580	3,384	3,734	3,444	3,093	3,151	3,085
with international institutions	2,162	2,358	2,624	2,866	2,850	2,834	3,223	2,963	3,401	3,352	3,569	3,945	4,101	4,111	4,316	4,717
France																
Total articles	37,681	40,110	40,923	40,208	41,191	39,793	43,030	39,180	44,624	42,821	42,809	47,904	47,802	45,305	47,088	48,332
with multiple institutions	25,014	26,957	28,152	28,124	29,384	28,848	31,729	29,550	34,169	33,244	34,216	38,746	39,582	38,278	40,293	41,701
with domestic institutions only	23,614	24,817	24,760	23,412	23,352	22,052	23,217	20,314	22,692	21,367	20,481	22,807	21,766	19,821	20,140	20,182
with international institutions	14,067	15,293	16,163	16,796	17,839	17,741	19,813	18,866	21,932	21,454	22,328	25,097	26,036	25,484	26,948	28,150
Germany																
Total articles	50,614	54,859	55,265	55,648	56,871	55,374	59,177	55,718	63,767	60,672	60,961	66,390	67,065	64,682	67,579	70,533
with multiple institutions	29,000	32,048	33,398	34,473	36,407	36,511	39,714	38,375	44,439	42,989	44,314	48,922	50,864	50,184	53,022	55,575
with domestic institutions only	32,651	34,990	34,081	33,684	33,057	31,226	32,590	29,997	34,016	31,535	30,501	32,849	31,814	29,813	30,635	31,372
with international institutions	17,963	19,869	21,184	21,964	23,814	24,148	26,587	25,721	29,751	29,137	30,460	33,541	35,251	34,869	36,944	39,161
Greece																
Total articles	3,086	3,417	3,521	3,753	4,328	4,313	4,895	4,907	5,770	6,190	6,524	6,959	6,931	6,396	6,504	6,730
with multiple institutions	1,925	2,230	2,332	2,457	2,889	2,809	3,317	3,355	4,019	4,372	4,726	5,036	5,159	4,849	4,950	5,275
with domestic institutions only	1,872	2,065	2,058	2,223	2,529	2,641	2,890	2,938	3,487	3,674	3,773	3,961	3,750	3,359	3,221	3,113
with international institutions	1,214	1,352	1,463	1,530	1,799	1,672	2,005	1,969	2,283	2,516	2,751	2,998	3,181	3,037	3,283	3,617
Hungary																
Total articles	2,821	3,104	3,352	3,376	3,613	3,421	3,753	3,500	4,136	3,759	3,722	4,129	3,945	3,491	3,907	4,140
with multiple institutions	2,036	2,266	2,482	2,606	2,782	2,685	2,928	2,840	3,293	3,006	3,084	3,341	3,293	2,954	3,307	3,528
with domestic institutions only	1,302	1,457	1,547	1,498	1,631	1,488	1,621	1,493	1,828	1,664	1,499	1,736	1,541	1,325	1,407	1,492
with international institutions	1,519	1,647	1,805	1,878	1,982	1,933	2,132	2,007	2,308	2,095	2,223	2,393	2,404	2,166	2,500	2,648

Appendix table 5-41

S&E articles in all fields combined, by coauthorship attribute and selected country/economy: 1997–2012

Country/economy and coauthorship attribute	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ireland																
Total articles	1,745	1,999	2,045	2,161	2,234	2,281	2,486	2,649	3,216	3,365	3,651	4,291	4,424	4,648	4,883	5,040
with multiple institutions	1,086	1,215	1,310	1,402	1,503	1,581	1,748	1,876	2,300	2,485	2,654	3,213	3,447	3,700	3,905	4,142
with domestic institutions only	987	1,140	1,132	1,162	1,178	1,172	1,231	1,303	1,554	1,561	1,675	1,872	1,877	1,991	2,044	2,007
with international institutions	758	859	913	999	1,056	1,109	1,255	1,346	1,662	1,804	1,976	2,419	2,547	2,657	2,839	3,033
Italy																
Total articles	23,614	25,324	26,150	26,422	28,281	28,290	31,433	30,312	33,928	33,018	34,121	37,914	37,506	35,946	36,604	38,527
with multiple institutions	17,152	18,528	19,493	19,799	21,266	21,534	24,052	23,472	26,704	26,002	27,083	30,069	30,325	29,353	30,167	32,075
with domestic institutions only	15,091	15,805	16,045	16,214	17,037	17,044	18,808	17,915	19,507	18,931	19,012	20,778	19,855	18,535	18,300	18,830
with international institutions	8,523	9,519	10,105	10,208	11,244	11,246	12,625	12,397	14,421	14,087	15,109	17,136	17,651	17,411	18,304	19,697
Netherlands																
Total articles	16,039	16,231	16,331	16,443	16,799	16,796	18,329	17,826	20,415	19,926	20,113	22,260	22,920	22,849	23,773	25,509
with multiple institutions	10,611	11,020	11,313	11,820	12,325	12,535	13,881	13,661	15,982	15,734	16,204	18,118	18,981	19,196	20,120	21,802
with domestic institutions only	9,934	9,810	9,571	9,117	9,216	8,964	9,583	9,214	10,481	9,936	9,729	10,642	10,428	10,068	10,177	10,322
with international institutions	6,105	6,421	6,760	7,326	7,583	7,832	8,746	8,612	9,934	9,990	10,384	11,618	12,492	12,781	13,596	15,187
Poland																
Total articles	6,095	6,676	7,155	7,368	7,876	8,311	9,318	8,864	10,072	9,911	9,690	10,904	10,541	10,188	10,631	11,647
with multiple institutions	3,768	4,142	4,592	4,704	5,167	5,390	6,084	5,966	6,822	6,724	6,569	7,320	7,328	7,145	7,557	8,217
with domestic institutions only	3,212	3,577	3,749	3,911	4,085	4,412	5,001	4,591	5,290	5,192	5,150	5,919	5,524	5,284	5,644	6,123
with international institutions	2,883	3,099	3,406	3,457	3,791	3,899	4,317	4,273	4,782	4,719	4,540	4,985	5,017	4,904	4,987	5,524
Portugal																
Total articles	1,733	1,976	2,481	2,574	3,026	3,091	3,733	3,892	4,358	5,186	4,805	5,767	6,251	6,099	6,778	7,744
with multiple institutions	1,235	1,429	1,813	1,909	2,209	2,351	2,867	3,053	3,422	4,128	3,827	4,734	5,156	5,100	5,786	6,660
with domestic institutions only	864	966	1,194	1,212	1,421	1,412	1,737	1,780	2,014	2,384	2,187	2,542	2,774	2,601	2,817	3,190
with international institutions	869	1,010	1,287	1,362	1,605	1,679	1,996	2,112	2,344	2,802	2,618	3,225	3,477	3,498	3,961	4,554
Spain																
Total articles	15,869	17,014	18,398	18,491	19,695	20,146	21,558	21,309	24,892	25,744	26,699	30,691	30,579	30,178	32,440	34,394
with multiple institutions	9,611	10,513	11,485	11,776	12,803	13,258	14,597	14,650	17,304	18,167	19,148	22,554	23,261	23,606	25,830	27,691
with domestic institutions only	10,681	11,162	11,897	11,761	12,219	12,418	12,979	12,640	14,513	14,882	15,095	16,905	16,105	15,191	15,853	16,349
with international institutions	5,188	5,852	6,501	6,730	7,476	7,728	8,579	8,669	10,379	10,862	11,604	13,786	14,474	14,987	16,587	18,045
Sweden																
Total articles	12,426	12,945	13,354	13,136	13,956	13,500	14,205	13,296	15,060	14,278	14,558	15,356	15,211	14,886	15,218	16,307
with multiple institutions	8,554	8,858	9,355	9,195	10,096	9,932	10,526	9,909	11,336	10,912	11,390	12,149	12,238	12,229	12,661	13,533
with domestic institutions only	7,371	7,555	7,538	7,232	7,475	6,992	7,180	6,766	7,529	6,905	6,630	6,755	6,341	5,904	5,793	6,148
with international institutions	5,055	5,390	5,816	5,904	6,481	6,508	7,025	6,530	7,531	7,373	7,928	8,601	8,870	8,982	9,425	10,159
United Kingdom																
Total articles	54,323	56,940	58,730	59,855	58,846	56,884	60,894	58,200	64,452	62,801	63,524	68,850	68,063	65,797	67,777	71,156
with multiple institutions	30,135	32,404	34,274	35,462	36,498	36,120	39,330	38,581	43,399	42,853	44,484	49,197	49,800	48,772	51,368	54,053
with domestic institutions only	37,504	38,580	38,913	39,027	36,816	34,495	36,279	33,558	36,243	34,532	33,635	34,902	33,196	31,136	31,052	31,929
with international institutions	16,819	18,360	19,817	20,828	22,030	22,389	24,615	24,642	28,209	28,269	29,889	33,948	34,867	34,661	36,725	39,227

Appendix table 5-41

S&E articles in all fields combined, by coauthorship attribute and selected country/economy: 1997–2012

Country/economy and coauthorship attribute	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Norway																
Total articles	3,936	4,123	4,173	4,248	4,436	4,324	4,694	4,732	5,507	5,693	5,889	6,763	6,960	6,721	7,373	7,871
with multiple institutions	2,668	2,885	2,924	2,996	3,217	3,220	3,572	3,698	4,322	4,505	4,793	5,510	5,839	5,636	6,296	6,710
with domestic institutions only	2,281	2,315	2,324	2,383	2,344	2,181	2,326	2,228	2,670	2,687	2,617	3,048	2,966	2,821	2,988	3,072
with international institutions	1,655	1,808	1,849	1,865	2,092	2,143	2,368	2,504	2,837	3,006	3,272	3,715	3,994	3,900	4,385	4,799
Russia																
Total articles	22,022	21,731	21,253	22,568	20,320	20,396	20,589	19,069	19,909	16,856	18,999	19,172	18,928	17,485	18,142	18,272
with multiple institutions	9,357	9,908	10,225	11,004	10,752	11,180	11,706	10,914	11,883	10,237	11,136	11,335	11,147	10,449	11,053	11,531
with domestic institutions only	15,523	14,866	13,976	15,049	12,556	12,370	12,238	11,310	11,446	9,321	11,544	11,363	11,520	10,694	11,141	10,859
with international institutions	6,499	6,865	7,277	7,519	7,764	8,026	8,351	7,759	8,463	7,535	7,455	7,809	7,408	6,791	7,001	7,413
Switzerland																
Total articles	11,261	11,600	12,146	12,235	11,996	11,785	13,239	12,938	14,611	14,549	15,098	16,502	16,786	16,570	17,812	18,726
with multiple institutions	7,206	7,635	8,148	8,195	8,183	8,417	9,580	9,443	10,839	10,979	11,785	13,123	13,458	13,636	14,713	15,593
with domestic institutions only	5,680	5,750	5,774	5,922	5,567	5,090	5,579	5,379	5,944	5,757	5,449	5,774	5,645	5,280	5,585	5,695
with international institutions	5,581	5,850	6,372	6,313	6,429	6,695	7,660	7,559	8,667	8,792	9,649	10,728	11,141	11,290	12,227	13,031
Iran																
Total articles	440	626	804	961	1,154	1,461	2,092	2,299	3,183	3,749	4,864	6,093	7,288	7,875	9,127	10,628
with multiple institutions	262	343	427	508	672	808	1,190	1,321	1,891	2,263	3,093	3,788	4,543	4,969	5,877	6,897
with domestic institutions only	304	433	606	711	859	1,104	1,544	1,732	2,346	2,829	3,614	4,579	5,559	6,001	6,791	7,994
with international institutions	136	193	198	250	295	357	548	567	837	920	1,250	1,514	1,729	1,874	2,336	2,634
Israel																
Total articles	7,655	7,798	7,708	8,024	8,317	8,211	8,909	8,235	8,847	8,538	8,600	9,471	8,951	8,488	8,721	8,950
with multiple institutions	5,070	5,189	5,299	5,561	5,867	5,824	6,351	5,947	6,440	6,216	6,320	6,873	6,649	6,438	6,661	6,911
with domestic institutions only	4,786	4,774	4,603	4,740	4,814	4,753	5,154	4,700	4,997	4,812	4,884	5,206	4,797	4,295	4,280	4,392
with international institutions	2,869	3,024	3,105	3,284	3,503	3,458	3,755	3,535	3,850	3,726	3,716	4,265	4,154	4,193	4,441	4,558
Saudi Arabia																
Total articles	795	818	760	731	717	730	761	707	775	758	770	950	1,127	1,746	2,753	3,802
with multiple institutions	393	389	394	383	376	390	435	406	441	463	456	626	815	1,418	2,321	3,310
with domestic institutions only	570	594	527	483	474	468	429	413	463	414	426	457	448	509	644	754
with international institutions	225	224	233	248	243	262	332	294	312	344	344	493	679	1,237	2,109	3,048
Turkey																
Total articles	2,744	3,154	3,679	3,946	4,675	5,699	6,991	7,989	9,152	9,012	9,317	10,243	9,716	9,091	9,585	10,358
with multiple institutions	1,584	1,837	2,175	2,365	2,820	3,502	4,392	5,060	5,897	5,742	6,023	6,652	6,523	6,190	6,745	7,498
with domestic institutions only	2,144	2,514	2,859	3,065	3,605	4,496	5,495	6,430	7,446	7,284	7,467	8,046	7,411	6,870	7,036	7,361
with international institutions	600	640	820	881	1,070	1,203	1,496	1,559	1,706	1,728	1,850	2,197	2,305	2,221	2,549	2,997
Egypt																
Total articles	1,503	1,569	1,647	1,695	1,852	1,906	2,145	1,980	2,181	2,248	2,367	2,703	3,079	3,313	3,602	3,839
with multiple institutions	771	806	873	910	963	1,037	1,217	1,099	1,275	1,333	1,412	1,688	2,087	2,335	2,730	2,960
with domestic institutions only	1,031	1,083	1,126	1,110	1,299	1,291	1,388	1,290	1,398	1,461	1,491	1,640	1,685	1,763	1,690	1,701
with international institutions	472	486	521	585	553	615	757	690	783	787	876	1,063	1,394	1,550	1,912	2,138

Appendix table 5-41

S&E articles in all fields combined, by coauthorship attribute and selected country/economy: 1997–2012

Country/economy and coauthorship attribute	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
South Africa																
Total articles	2,683	2,773	2,907	2,810	2,998	3,129	3,132	2,994	3,554	3,737	3,809	4,558	4,410	4,487	4,867	5,542
with multiple institutions	1,548	1,650	1,769	1,733	1,866	1,976	2,077	2,044	2,402	2,556	2,675	3,240	3,303	3,418	3,829	4,368
with domestic institutions only	1,827	1,815	1,860	1,713	1,750	1,813	1,655	1,494	1,810	1,890	1,876	2,176	1,940	1,900	1,877	2,190
with international institutions	856	958	1,047	1,097	1,248	1,316	1,477	1,500	1,744	1,847	1,933	2,382	2,470	2,587	2,990	3,352
China																
Total articles	14,420	15,972	18,676	20,900	24,293	27,345	33,768	38,143	50,050	55,690	62,847	77,279	87,417	90,653	102,748	116,633
with multiple institutions	8,128	9,078	10,630	12,138	14,502	16,405	20,667	23,423	31,137	35,369	40,517	50,697	59,000	62,084	71,763	81,996
with domestic institutions only	10,721	11,744	13,756	15,429	17,736	20,022	24,766	28,342	37,615	41,821	47,268	57,979	65,021	66,489	74,964	85,552
with international institutions	3,699	4,228	4,920	5,471	6,557	7,323	9,002	9,801	12,435	13,869	15,579	19,300	22,396	24,164	27,784	31,081
India																
Total articles	10,303	11,155	11,735	11,281	12,514	13,088	14,465	14,635	17,348	18,829	19,768	22,842	23,479	23,794	25,740	28,083
with multiple institutions	4,032	4,540	4,959	4,955	5,609	6,158	6,855	6,941	8,649	9,547	10,325	12,309	13,226	13,701	15,022	16,711
with domestic institutions only	8,654	9,133	9,575	8,971	9,838	10,197	11,293	11,444	13,472	14,603	15,413	17,633	17,897	17,761	19,150	20,751
with international institutions	1,649	2,022	2,160	2,310	2,676	2,891	3,172	3,191	3,876	4,226	4,355	5,209	5,582	6,033	6,590	7,332
Japan																
Total articles	54,852	59,883	61,817	61,343	63,980	61,618	67,627	61,034	66,180	61,436	60,035	62,365	60,233	54,082	55,659	55,316
with multiple institutions	30,620	34,229	36,389	36,819	39,563	38,726	43,468	40,386	44,413	41,768	41,681	43,910	42,874	39,324	40,696	40,916
with domestic institutions only	45,841	49,883	50,868	49,941	51,386	49,081	53,124	47,291	50,968	46,542	45,245	46,327	44,144	38,938	39,565	38,725
with international institutions	9,011	10,000	10,949	11,402	12,594	12,537	14,503	13,743	15,212	14,894	14,790	16,038	16,089	15,144	16,094	16,591
Singapore																
Total articles	1,569	1,898	2,378	2,713	3,092	3,243	3,803	4,044	4,770	5,019	4,937	5,815	6,122	6,191	6,764	7,338
with multiple institutions	759	924	1,268	1,425	1,705	1,842	2,318	2,571	3,136	3,435	3,544	4,262	4,502	4,700	5,204	5,810
with domestic institutions only	1,064	1,312	1,562	1,843	2,024	2,080	2,372	2,480	2,830	2,872	2,629	2,912	2,975	2,767	2,960	2,979
with international institutions	505	586	816	870	1,068	1,163	1,431	1,564	1,940	2,147	2,308	2,903	3,147	3,424	3,804	4,359
South Korea																
Total articles	6,587	8,172	9,651	10,734	12,715	13,549	15,977	16,705	20,364	20,366	21,173	25,486	27,159	27,580	30,322	32,770
with multiple institutions	4,342	5,327	6,317	7,135	8,781	9,660	11,560	12,151	14,843	15,025	15,715	19,015	20,358	21,093	23,469	25,535
with domestic institutions only	4,774	6,117	7,238	8,171	9,459	9,994	11,532	12,164	14,740	14,579	15,138	18,170	19,523	19,516	21,165	22,691
with international institutions	1,813	2,055	2,413	2,563	3,256	3,555	4,445	4,541	5,624	5,787	6,035	7,316	7,636	8,064	9,157	10,079
Taiwan																
Total articles	6,430	7,090	7,536	7,758	9,004	8,982	10,268	10,757	12,865	13,477	14,031	16,193	16,477	16,087	17,049	16,730
with multiple institutions	3,503	3,888	4,387	4,590	5,650	5,714	6,781	7,298	8,981	9,606	10,317	12,165	12,654	12,608	13,356	13,245
with domestic institutions only	5,302	5,900	6,143	6,239	7,137	7,143	8,129	8,596	10,216	10,790	10,984	12,460	12,534	12,055	12,646	12,071
with international institutions	1,128	1,190	1,393	1,519	1,867	1,839	2,139	2,161	2,649	2,687	3,047	3,733	3,943	4,032	4,403	4,659
Australia																
Total articles	16,282	17,307	17,915	17,581	18,124	18,152	19,752	19,175	22,059	22,289	22,970	26,786	26,962	26,725	28,880	31,605
with multiple institutions	9,173	10,022	10,550	10,779	11,724	11,847	13,390	13,275	15,411	15,838	16,815	19,873	20,769	20,842	23,003	25,320
with domestic institutions only	11,493	11,995	12,359	11,727	11,513	11,322	12,047	11,384	13,030	12,979	12,788	14,675	13,983	13,537	14,003	15,030
with international institutions	4,789	5,312	5,556	5,854	6,611	6,830	7,705	7,791	9,029	9,310	10,182	12,111	12,979	13,188	14,877	16,575

Appendix table 5-41

S&E articles in all fields combined, by coauthorship attribute and selected country/economy: 1997–2012

Country/economy and coauthorship attribute	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
New Zealand																
Total articles	3,253	3,578	3,543	3,743	3,623	3,585	3,882	3,670	4,396	4,298	4,438	5,066	4,814	5,076	5,199	5,783
with multiple institutions	1,743	2,014	1,995	2,226	2,151	2,208	2,488	2,376	3,013	2,989	3,181	3,643	3,512	3,812	3,999	4,350
with domestic institutions only	2,175	2,306	2,283	2,339	2,222	2,086	2,213	2,027	2,287	2,140	2,175	2,433	2,246	2,245	2,210	2,627
with international institutions	1,078	1,272	1,260	1,404	1,401	1,499	1,669	1,643	2,109	2,158	2,263	2,633	2,568	2,831	2,989	3,156

NOTES: Article counts are from the set of journals covered by the Science Citation Index (SCI) and Social Sciences Citation Index (SSCI). Articles are classified by the year they entered the database, rather than the year of publication, and are assigned to a country/economy on the basis of the institutional address(es) listed in the article. Articles are credited on a whole-count basis (i.e., each collaborating country/economy is credited with one count). Countries/economies with less than 1% of internationally coauthored articles in 2012 are omitted. Articles with multiple institutions are counts of articles with two or more institutional addresses. Articles with domestic institutions only are counts of articles with one or more institutional addresses all within the country/economy. Articles with international institutions are counts of articles with one or more institutional addresses outside the country/economy.

SOURCES: National Science Foundation, National Center for Science and Engineering Statistics, and The Patent Board™, special tabulations (2013) from Thomson Reuters, SCI and SSCI, http://thomsonreuters.com/products_services/science/.