

Coauthorship share of United States, EU-15, Japan, and East Asia-4 on international S&E articles of indicated region and country/economy: 1996

(Percent)

Region and country/economy	S&E articles (number)		United States	EU-15							Japan	East Asia-4		
	Total	International		Total	France	Germany	Italy	Netherlands	Spain	UK		Total	China	South Korea
Major S&E article producers														
United States.....	221,414	39,046	na	46.9	6.9	9.9	5.6	3.1	2.4	10.2	8.3	6.6	2.6	2.0
EU-15.....	215,494	58,576	41.4	na	na	na	na	na	na	na	4.9	3.0	2.2	0.3
Austria.....	4,902	2,194	18.2	50.9	5.0	25.0	4.5	2.5	2.0	6.6	1.5	1.2	1.0	0.2
Belgium.....	7,641	3,514	15.8	60.6	17.1	8.5	5.0	10.4	3.4	9.1	1.9	0.9	0.7	0.1
Denmark.....	6,036	2,632	20.3	54.1	5.6	8.9	5.8	3.6	2.7	11.0	1.9	0.9	0.4	0.1
Finland.....	5,456	1,950	22.8	46.0	4.2	7.6	3.7	2.7	1.5	7.2	3.0	1.3	0.9	0.1
France.....	36,933	13,105	21.0	43.2	na	9.3	7.3	2.9	4.9	8.7	2.3	1.1	0.8	0.1
Germany.....	48,333	16,464	24.6	38.1	7.4	na	4.9	3.9	2.3	8.4	3.3	2.1	1.7	0.2
Greece.....	2,910	1,106	21.3	58.6	11.3	11.1	8.1	2.1	2.5	15.8	0.9	1.2	0.7	0.3
Ireland.....	1,666	695	15.6	68.1	6.2	8.0	4.9	5.1	2.8	33.0	0.7	1.1	0.5	0.1
Italy.....	23,581	8,011	25.8	46.2	11.1	8.7	na	3.4	4.0	10.4	2.2	1.2	1.0	0.1
Netherlands.....	15,638	5,604	22.4	52.3	6.8	11.3	5.3	na	2.4	12.1	2.2	0.8	0.6	0.1
Portugal.....	1,549	807	10.9	70.0	13.9	7.2	5.0	5.3	9.8	19.1	1.5	1.4	1.0	0.1
Spain.....	14,901	4,771	19.8	55.5	13.9	8.1	8.2	3.2	na	12.2	1.1	0.6	0.4	0.1
Sweden.....	12,461	4,875	21.8	44.6	5.3	7.9	4.2	2.9	2.0	8.3	3.3	1.9	1.4	0.3
United Kingdom.....	56,923	16,292	25.4	39.8	7.2	8.4	5.7	4.0	3.5	na	3.4	2.6	1.7	0.3
Japan.....	54,614	7,973	41.7	27.3	3.6	6.8	2.3	1.6	0.7	7.0	na	9.5	4.9	3.2
East Asia-4.....	24,923	6,085	46.5	23.9	2.8	5.8	2.2	0.8	0.4	7.8	13.4	na	na	na
China.....	11,923	3,341	32.8	31.2	3.8	8.2	3.0	1.1	0.5	9.1	13.0	5.1	na	1.6
Singapore.....	1,430	449	25.1	25.6	1.5	1.6	0.7	0.2	0.3	16.0	6.4	16.0	12.5	0.2
South Korea.....	5,566	1,490	55.7	13.1	1.5	2.9	2.4	0.5	0.4	3.3	16.6	4.0	3.3	na
Taiwan.....	6,302	1,103	65.6	10.8	2.0	1.9	1.1	0.4	0.4	3.5	7.3	7.2	5.0	0.7
Other regions/countries														
Other Asia														
Bangladesh.....	223	117	30.7	34.7	0.7	1.7	2.9	2.8	0.0	12.5	8.3	0.5	0.3	0.1
India.....	10,688	1,719	34.9	37.6	6.5	10.3	3.5	1.8	1.5	10.2	6.1	2.2	1.2	0.3
Indonesia.....	269	220	23.7	25.4	7.5	4.5	0.0	5.5	0.0	4.0	26.1	3.3	2.1	0.1
Malaysia.....	486	207	10.9	30.8	2.0	1.3	0.6	1.0	0.1	23.3	14.6	16.3	13.5	0.2
Pakistan.....	368	166	32.0	44.8	1.1	8.8	2.3	2.8	0.6	21.8	1.1	3.7	2.8	0.0
Philippines.....	251	163	29.0	23.9	3.0	3.1	0.2	6.0	0.6	7.0	12.3	5.0	3.2	0.0
Sri Lanka.....	109	58	16.3	61.5	5.2	2.7	0.0	1.6	0.0	36.0	6.9	0.0	0.0	0.0
Thailand.....	599	376	30.8	25.5	2.7	2.7	0.5	1.8	0.0	11.0	19.2	3.1	1.6	0.3
Vietnam.....	182	124	9.1	58.1	13.5	11.6	4.0	8.2	0.0	7.8	9.9	4.3	1.3	1.1
Other Western Europe														
Croatia.....	771	278	21.4	53.1	4.9	17.4	13.5	2.6	1.1	5.0	2.4	0.8	0.4	0.0
Cyprus.....	93	57	20.5	56.8	4.8	6.2	12.5	5.4	2.1	10.2	0.0	2.2	1.4	0.6
Iceland.....	221	115	19.4	64.9	1.8	8.2	0.1	2.4	0.7	12.7	2.1	0.4	0.4	0.0
Macedonia.....	52	27	11.7	38.8	0.0	26.6	7.8	0.0	0.0	0.0	0.0	2.2	2.2	0.0
Norway.....	3,850	1,553	19.4	60.7	5.1	7.5	3.3	3.4	2.1	9.3	2.2	1.0	0.8	0.1
Slovenia.....	666	309	18.1	55.0	6.0	12.3	11.1	2.7	1.3	6.4	1.0	1.0	0.7	0.0

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(Percent)

Region and country/economy	S&E articles (number)		United States	EU-15						Japan	East Asia-4			
	Total	International		Total	France	Germany	Italy	Netherlands	Spain		UK	Total	China	South Korea
Switzerland	10,540	5,028	22.9	57.9	10.8	16.7	9.3	3.6	1.5	8.2	2.5	0.9	0.5	0.2
Turkey	2,513	569	30.7	43.2	3.4	7.7	3.8	2.8	0.9	17.7	4.0	1.1	0.6	0.4
Yugoslavia	678	202	22.4	39.7	4.8	9.6	4.1	0.3	4.3	9.0	4.1	1.3	0.7	0.0
Eastern Europe/former USSR	42,102	13,624	20.6	61.8	10.5	18.5	6.9	3.4	2.3	7.7	3.5	1.1	0.5	0.4
Armenia	245	107	18.3	41.8	7.7	10.4	4.1	2.2	4.4	2.5	0.0	0.5	0.5	0.0
Azerbaijan	156	55	4.3	11.6	0.0	4.0	6.0	0.0	0.0	0.0	3.0	1.6	1.6	0.0
Bulgaria	1,253	503	11.1	61.5	9.8	18.3	10.3	2.0	4.6	5.2	3.9	0.7	0.6	0.1
Belarus	759	283	4.4	45.7	5.7	16.5	6.2	1.9	1.4	6.6	1.5	3.2	2.5	0.2
Czech Republic	3,094	1,481	15.4	54.5	9.6	15.4	5.0	3.5	2.7	7.2	2.4	0.4	0.2	0.0
Estonia	373	216	14.6	69.0	9.3	11.7	2.6	1.5	1.1	2.9	0.5	0.2	0.2	0.0
Georgia	176	83	9.4	35.9	6.6	11.8	6.0	2.0	1.6	2.0	2.0	0.2	0.2	0.0
Hungary	2,618	1,343	24.5	50.7	7.2	13.4	5.9	2.7	1.4	8.1	4.0	0.6	0.3	0.2
Kazakhstan	169	43	14.2	13.1	0.0	1.5	1.9	0.0	0.0	0.0	1.9	0.8	0.8	0.0
Latvia	228	105	11.8	64.5	6.8	14.2	2.8	2.2	1.7	5.8	3.9	0.0	0.0	0.0
Lithuania	272	128	12.0	64.0	9.3	13.6	7.0	2.4	1.3	5.7	1.3	0.0	0.0	0.0
Moldova	184	84	2.1	34.0	4.7	13.1	8.7	0.2	1.9	0.0	0.0	0.0	0.0	0.0
Poland	6,239	2,865	18.4	53.7	10.6	14.9	6.6	2.8	2.2	6.4	2.4	0.7	0.3	0.3
Romania	1,169	508	14.6	63.4	15.1	13.8	12.6	2.0	2.2	8.1	1.7	0.9	0.6	0.1
Russia	21,776	5,827	19.5	52.8	8.6	17.7	6.0	3.0	1.7	6.6	3.4	1.3	0.5	0.6
Slovakia	1,558	650	12.5	53.9	8.4	14.4	6.3	2.4	1.9	5.9	1.5	0.3	0.2	0.0
Ukraine	3,195	1,060	9.3	41.6	7.7	12.6	3.6	4.2	1.9	5.1	2.7	0.8	0.3	0.3
Uzbekistan	384	65	7.6	27.4	4.2	12.6	2.2	0.0	0.3	5.3	5.1	3.6	1.9	1.3
Central/South America	13,360	5,484	39.5	43.3	9.9	5.7	4.5	1.3	8.1	8.0	1.8	0.7	0.5	0.1
Argentina	2,720	916	29.1	44.7	9.0	5.6	4.7	1.4	13.9	4.5	1.1	0.7	0.4	0.2
Brazil	5,005	2,090	35.7	39.7	10.3	5.7	5.6	1.2	2.6	8.8	2.2	1.0	0.7	0.1
Chile	1,291	612	31.4	39.8	9.4	8.1	2.7	1.8	6.4	5.3	1.3	0.4	0.4	0.0
Colombia	327	212	35.3	32.2	6.9	3.8	3.4	0.9	11.8	4.8	0.5	1.3	0.7	0.6
Costa Rica	145	121	50.0	30.7	5.3	7.2	0.3	1.1	3.7	7.8	1.0	0.2	0.1	0.0
Cuba	280	157	10.4	44.0	4.1	4.3	4.1	0.1	25.1	1.9	2.6	0.7	0.7	0.0
Mexico	2,759	1,119	40.1	29.6	5.8	3.2	2.4	0.9	7.4	6.9	0.9	0.7	0.4	0.1
Peru	128	97	49.5	28.8	8.1	2.1	0.9	0.0	7.7	4.2	0.0	0.6	0.0	0.0
Uruguay	183	111	19.7	42.4	5.8	6.4	3.9	1.2	8.5	3.9	2.9	0.4	0.0	0.4
Venezuela	574	247	32.7	34.9	9.2	1.9	4.7	1.0	9.4	6.3	1.1	0.9	0.8	0.0
Near East/North Africa	12,329	4,782	39.9	40.8	14.3	8.4	3.2	1.9	1.6	7.3	2.1	0.8	0.4	0.2
Algeria	259	181	4.5	82.2	68.5	2.3	1.3	1.0	1.3	4.2	0.5	0.5	0.5	0.0
Egypt	1,650	535	33.3	33.9	2.6	10.4	3.6	3.0	0.7	7.2	5.1	0.6	0.6	0.1
Iran	393	142	26.5	27.6	5.1	4.2	0.5	0.8	0.8	14.7	8.9	1.1	0.0	0.2
Israel	7,429	2,853	49.3	31.0	5.4	10.0	3.3	2.1	1.4	5.1	1.7	0.9	0.4	0.2
Jordan	209	76	22.1	37.3	3.2	11.2	3.2	0.0	0.6	17.0	1.2	1.2	1.2	0.0
Kuwait	304	114	33.0	33.0	3.3	9.7	0.0	0.7	0.0	11.6	1.3	0.8	0.8	0.0
Lebanon	93	42	54.0	18.6	11.2	2.1	2.2	0.0	0.0	3.0	2.0	5.8	2.4	2.8

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	Total	International		Total	France	Germany	Italy	Netherlands	Spain	UK		Total	China	South Korea
Morocco.....	472	377	8.2	81.3	66.2	1.9	3.4	0.2	4.6	2.0	0.7	0.1	0.0	0.0
Oman.....	87	40	33.0	27.7	5.6	1.1	0.5	2.1	0.0	14.9	0.0	0.0	0.0	0.0
Saudi Arabia.....	872	216	31.2	31.8	5.3	2.1	1.3	3.0	0.6	16.2	1.9	0.4	0.4	0.0
Tunisia.....	228	125	5.1	81.0	69.4	1.2	3.0	0.5	0.9	2.6	0.6	0.0	0.0	0.0
United Arab Emirates.....	196	89	18.1	35.3	1.4	4.6	0.2	0.0	0.0	26.1	0.5	0.0	0.0	0.0
Sub-Saharan Africa.....	5,252	2,332	25.6	53.4	10.9	6.3	2.9	3.3	0.6	17.5	1.8	1.1	0.6	0.2
Cameroon.....	102	73	10.5	64.2	37.2	2.4	1.2	5.6	0.0	11.4	1.2	0.0	0.0	0.0
Ethiopia.....	131	77	9.4	62.5	2.9	11.2	1.5	2.9	0.0	16.1	1.7	0.0	0.0	0.0
Ghana.....	114	67	16.7	54.8	0.0	11.3	3.6	4.4	0.0	28.5	3.8	0.0	0.0	0.0
Kenya.....	448	301	29.5	42.7	1.7	2.4	2.0	2.1	0.4	24.8	1.6	0.3	0.3	0.0
Nigeria.....	529	177	25.6	45.3	5.2	6.5	5.1	0.8	0.3	22.4	2.7	1.3	0.3	1.0
Senegal Republic.....	111	82	12.0	71.1	47.6	3.2	2.5	4.1	0.0	4.0	0.4	0.0	0.0	0.0
South Africa.....	2,733	808	29.4	38.3	5.3	9.3	2.4	1.3	1.1	14.2	2.0	2.3	1.3	0.3
Tanzania.....	190	148	15.2	59.9	0.8	0.8	4.0	6.8	0.6	16.0	2.4	0.8	0.8	0.0
Uganda.....	72	48	40.7	38.6	2.5	14.7	5.4	1.9	0.2	12.7	0.0	0.0	0.0	0.0
Zimbabwe.....	190	122	24.2	45.6	3.8	2.6	0.7	4.9	0.0	17.1	0.0	1.1	1.1	0.0
Other														
Australia.....	29,556	9,065	47.5	29.3	6.7	4.7	2.2	1.9	1.4	7.2	5.1	4.8	2.8	0.5
Canada.....	16,354	4,394	30.5	37.2	4.3	6.6	2.0	2.1	0.6	15.6	3.6	3.1	2.3	0.4
New Zealand.....	3,289	1,082	31.7	31.7	3.6	5.6	1.0	0.7	0.3	15.2	3.9	2.8	1.8	0.3

na = not applicable

EU = European Union; UK = United Kingdom; USSR = Union of Soviet Socialist Republics

NOTES: Data are region/country/economy's share of internationally coauthored articles with indicated region/country/economy. Authorship based on institutional address. International articles are those with at least one author at institutional address in given country/economy and one author at foreign address. Share based on article counts calculated on whole-count basis, i.e., each collaborating institution is credited one count. EU-15 consists of 15 EU countries before expansion of member countries on May 1, 2004 (listed countries plus Luxembourg). China data include Hong Kong. Eastern Europe consists of Bulgaria, Czech Republic, Hungary, Poland, and Romania.

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