

Appendix table 5-44

Regional and country portfolio of S&E articles, by field: 1996

(Percent distribution)

(Page 1 of 3)

Region and country/economy	Articles (number)	All fields	Clinical medicine	Biomedical research	Biology	Chemistry	Physics	Earth/space sciences	Engineering/ technology	Mathematics	Psychology	Social sciences	Health sciences	Professional fields
All countries/economies.....	593,568	100.0	29.1	14.9	6.8	12.1	14.2	5.1	7.0	1.7	2.5	3.2	1.3	2.3
Major S&E article producers.....	467,036	100.0	31.1	15.4	6.1	11.0	13.2	4.9	7.0	1.6	2.6	3.2	1.4	2.5
United States.....	201,798	100.0	31.2	16.8	6.1	7.5	9.4	5.5	6.4	1.6	4.1	4.7	2.2	4.5
EU-15.....	193,172	100.0	32.9	15.1	6.3	12.4	14.0	5.2	5.7	1.8	1.7	2.7	0.9	1.3
Austria.....	3,618	100.0	41.9	14.2	5.3	9.3	14.2	3.5	5.2	1.6	1.2	2.8	0.1	0.7
Belgium.....	5,583	100.0	34.5	15.1	7.4	12.3	14.2	4.1	5.5	1.7	1.4	2.2	0.4	1.2
Denmark.....	4,477	100.0	40.5	17.8	8.5	6.5	10.9	6.4	3.3	1.2	0.9	2.5	0.4	1.2
Finland.....	4,354	100.0	43.6	13.5	9.0	7.4	8.6	4.9	5.5	1.0	2.1	1.3	1.4	1.5
France.....	29,755	100.0	28.4	16.7	5.6	14.0	16.7	6.4	6.0	3.2	0.9	1.6	0.2	0.4
Germany.....	39,123	100.0	28.3	15.1	5.3	15.8	19.2	4.6	5.7	1.7	1.7	1.7	0.3	0.7
Greece.....	2,265	100.0	28.6	8.5	7.8	14.6	13.5	8.2	11.7	2.5	0.5	2.3	0.4	1.4
Ireland.....	1,269	100.0	34.9	17.6	8.3	9.5	8.9	4.3	4.7	1.8	2.7	4.2	1.2	2.0
Italy.....	19,342	100.0	38.4	13.3	4.3	12.7	16.5	4.9	5.9	1.7	0.7	1.0	0.2	0.4
Luxembourg.....	20	100.0	46.0	20.5	2.5	5.7	5.7	6.5	0.0	0.0	0.0	4.1	0.0	9.0
Netherlands.....	12,438	100.0	37.3	15.2	7.1	9.4	10.4	5.3	4.4	1.2	3.5	3.4	1.2	1.7
Portugal.....	1,090	100.0	16.8	13.5	10.4	17.5	15.3	4.8	13.5	2.5	1.4	2.8	0.2	1.2
Spain.....	12,234	100.0	27.3	14.9	10.6	19.4	13.0	4.9	4.9	2.3	0.9	1.1	0.2	0.6
Sweden.....	9,697	100.0	41.7	15.5	7.0	8.2	10.2	5.2	5.0	1.0	1.8	1.8	1.6	1.0
United Kingdom.....	47,904	100.0	33.5	15.0	6.3	9.3	10.1	5.3	6.1	1.2	2.6	5.3	2.3	2.9
Japan.....	50,392	100.0	29.8	14.0	6.3	15.6	20.4	2.3	9.6	0.8	0.6	0.4	0.1	0.1
East Asia-4.....	21,675	100.0	16.5	7.5	3.7	19.8	25.3	3.4	17.5	2.7	0.5	1.6	0.3	1.2
China.....	10,070	100.0	13.5	5.1	3.3	22.5	29.6	4.0	14.5	3.6	0.8	1.4	0.3	1.4
Singapore.....	1,181	100.0	18.0	10.3	3.3	12.7	14.4	2.8	25.6	4.2	0.4	3.9	0.3	4.1
South Korea.....	4,728	100.0	12.3	10.0	2.7	22.2	28.2	2.4	18.1	1.6	0.3	1.2	0.2	0.7
Taiwan.....	5,696	100.0	24.8	9.1	5.1	14.5	17.4	3.5	20.8	1.8	0.3	1.5	0.2	0.8
Other regions/countries														
Other Western Europe														
Croatia.....	614	100.0	22.1	6.8	3.7	25.5	12.7	5.6	3.3	2.1	2.4	14.6	0.4	0.7
Cyprus.....	54	100.0	8.4	9.2	9.3	1.9	19.2	11.5	10.9	9.0	0.0	6.5	0.0	14.0
Iceland.....	149	100.0	43.8	9.0	12.9	4.0	5.4	10.6	1.3	0.9	4.9	3.0	2.4	1.7
Norway.....	2,950	100.0	36.2	11.5	10.9	8.4	5.6	9.4	6.2	1.2	2.6	5.2	1.3	1.4
Switzerland.....	7,489	100.0	34.2	17.7	4.6	12.2	17.5	4.8	4.2	1.2	1.3	1.5	0.3	0.5
Turkey.....	2,206	100.0	41.6	6.7	4.5	16.6	8.7	5.7	11.2	0.7	1.0	2.0	0.2	1.1
Yugoslavia.....	568	100.0	22.2	8.9	3.5	18.7	19.8	3.7	18.8	2.1	0.4	0.7	0.5	0.6
All others.....	91	100.0	19.6	5.3	10.9	26.0	17.8	6.0	10.7	0.0	0.0	3.6	0.2	0.0
Other Asia														
Bangladesh.....	155	100.0	21.0	9.2	11.7	17.3	10.8	4.2	10.2	0.6	0.0	13.6	1.2	0.0
India.....	9,736	100.0	11.9	13.9	6.8	26.8	20.4	4.6	12.0	1.1	0.3	1.7	0.1	0.5
Indonesia.....	137	100.0	18.9	11.2	26.7	3.4	7.0	11.2	5.1	0.0	0.9	10.2	3.0	2.4
Malaysia.....	372	100.0	20.1	9.6	17.6	29.1	4.4	4.5	5.3	0.9	0.9	4.3	0.9	2.3
Pakistan.....	274	100.0	24.2	7.4	11.4	20.0	15.9	4.7	5.6	1.3	0.3	6.0	1.8	1.2
Philippines.....	153	100.0	12.7	10.1	52.1	1.5	4.3	6.9	1.3	0.0	0.7	7.4	0.4	2.6
Sri Lanka.....	78	100.0	20.0	19.7	23.3	8.1	10.5	4.3	0.6	0.0	0.0	7.7	2.6	3.2

Regional and country portfolio of S&E articles, by field: 1996

(Percent distribution)

Region and country/economy	Articles (number)	All fields	Clinical medicine	Biomedical research	Biology	Chemistry	Physics	Earth/space sciences	Engineering/ technology	Mathematics	Psychology	Social sciences	Health sciences	Professional fields
Thailand.....	386	100.0	44.1	12.3	15.5	7.0	3.5	3.0	8.5	0.3	1.0	2.8	1.1	1.0
Vietnam.....	113	100.0	17.7	7.4	3.2	10.3	23.6	4.4	6.7	21.3	0.0	3.2	2.2	0.0
All others.....	74	100.0	23.7	7.1	16.4	8.6	6.1	18.4	1.7	0.0	4.2	10.8	1.1	2.0
Eastern Europe/former USSR.....	35,074	100.0	7.3	12.3	4.8	26.3	32.8	5.0	7.0	1.9	0.8	1.5	0.1	0.3
Armenia.....	179	100.0	3.4	19.6	2.0	10.4	54.0	5.6	1.7	3.1	0.0	0.0	0.3	0.0
Azerbaijan.....	125	100.0	2.0	5.1	3.6	40.8	40.6	0.4	5.5	1.2	0.0	0.8	0.0	0.0
Bulgaria.....	968	100.0	11.4	9.9	6.1	28.2	23.1	4.7	10.5	3.4	1.2	0.8	0.4	0.5
Belarus.....	597	100.0	3.9	12.1	3.1	23.5	47.9	0.9	6.5	1.2	0.0	0.5	0.0	0.4
Czech Republic.....	2,249	100.0	11.1	14.4	7.3	31.6	15.3	6.1	5.9	1.8	2.3	4.0	0.1	0.2
Estonia.....	248	100.0	19.8	10.1	6.5	16.2	28.6	11.9	3.6	1.1	0.8	1.2	0.0	0.1
Georgia.....	126	100.0	3.6	8.1	1.2	18.2	48.6	4.8	7.5	4.5	2.0	1.6	0.0	0.0
Hungary.....	1,839	100.0	18.9	13.0	5.1	29.2	17.3	4.6	5.0	2.4	1.1	2.3	0.2	1.0
Kazakhstan.....	143	100.0	0.0	4.3	8.1	46.1	25.0	7.2	6.5	0.0	0.1	2.8	0.0	0.0
Latvia.....	168	100.0	7.1	10.1	3.3	29.1	32.4	7.8	7.0	2.0	0.0	0.0	0.0	1.4
Lithuania.....	196	100.0	7.9	8.7	3.8	25.5	37.8	4.1	10.1	1.4	0.0	0.5	0.2	0.0
Moldova.....	136	100.0	1.5	6.1	2.2	40.9	43.5	0.0	1.8	2.6	0.7	0.7	0.0	0.0
Poland.....	4,597	100.0	13.6	8.6	4.8	28.5	29.1	4.2	6.7	2.4	0.6	0.9	0.1	0.5
Romania.....	871	100.0	3.8	4.3	0.9	38.5	33.9	1.7	10.2	5.5	0.0	0.8	0.2	0.2
Russia.....	18,464	100.0	4.4	14.5	5.2	23.9	36.4	5.4	6.4	1.7	0.8	1.1	0.0	0.2
Slovakia.....	1,175	100.0	14.7	16.7	3.3	29.4	14.2	4.0	4.3	1.5	2.7	8.9	0.0	0.3
Ukraine.....	2,600	100.0	3.0	5.2	2.1	23.2	45.0	4.7	14.7	1.5	0.3	0.3	0.0	0.2
Uzbekistan.....	347	100.0	1.4	3.5	1.7	57.1	32.2	2.4	0.7	0.9	0.0	0.1	0.0	0.0
All others.....	45	100.0	2.2	19.3	5.5	22.8	22.3	20.2	3.3	2.2	0.0	2.2	0.0	0.0
Near East/North Africa.....	9,706	100.0	30.1	10.0	7.4	13.7	14.6	4.0	9.5	2.9	2.1	2.9	0.9	1.9
Algeria.....	156	100.0	7.4	8.8	7.3	21.7	29.2	6.9	13.5	3.4	0.0	1.6	0.0	0.2
Egypt.....	1,359	100.0	18.5	5.2	7.6	36.0	12.2	4.6	13.8	0.8	0.2	1.0	0.2	0.1
Iran.....	312	100.0	23.0	5.0	6.9	33.7	15.1	2.6	10.7	1.9	0.0	1.0	0.0	0.1
Israel.....	5,815	100.0	33.0	12.2	7.0	6.8	16.3	3.1	7.3	3.5	3.3	3.8	1.2	2.5
Jordan.....	167	100.0	25.9	5.3	6.5	18.2	14.4	6.4	16.6	0.6	0.5	3.0	0.6	2.1
Kuwait.....	240	100.0	23.9	15.0	5.2	14.9	4.4	10.3	18.7	1.0	1.0	3.1	0.8	1.8
Lebanon.....	68	100.0	39.9	7.1	6.8	4.4	8.5	2.2	12.6	3.7	2.9	8.5	0.0	3.4
Morocco.....	256	100.0	11.3	6.1	7.7	27.7	21.1	8.2	8.8	7.1	0.2	1.1	0.0	0.8
Oman.....	63	100.0	39.7	2.3	26.0	7.6	7.2	5.1	4.9	3.2	0.0	1.6	0.8	1.6
Saudi Arabia.....	754	100.0	44.1	9.0	5.5	9.5	7.8	4.1	13.6	1.6	0.1	1.1	0.9	2.6
Syria.....	52	100.0	10.8	1.8	63.7	8.7	9.1	1.9	1.0	1.0	0.0	1.9	0.0	0.0
Tunisia.....	159	100.0	27.0	6.9	5.9	23.9	15.9	6.7	5.2	6.4	0.0	0.7	0.0	1.5
United Arab Emirates.....	145	100.0	48.5	8.5	3.7	9.5	2.5	9.3	5.2	1.7	3.4	4.1	1.7	1.7
All others.....	159	100.0	23.1	2.7	10.0	18.5	10.6	9.5	17.2	1.9	0.0	3.0	2.0	1.6
Central/South America.....	10,468	100.0	23.4	15.7	12.6	12.7	18.0	6.0	4.8	1.8	1.2	1.6	1.8	0.5
Argentina.....	2,212	100.0	23.2	16.4	14.9	14.3	17.3	5.6	5.2	1.2	0.7	1.0	0.1	0.2
Brazil.....	3,830	100.0	22.2	17.9	9.4	11.7	21.4	5.2	5.2	2.3	0.7	1.5	1.9	0.4
Chile.....	928	100.0	33.3	12.5	11.3	16.9	6.4	9.6	4.5	2.3	0.4	1.6	0.6	0.5
Colombia.....	196	100.0	23.5	13.3	22.2	8.1	14.5	3.8	4.9	1.4	3.3	1.7	0.6	2.6

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Costa Rica.....	72	100.0	24.2	21.4	34.4	6.1	0.0	6.5	2.1	0.7	1.4	2.8	0.0	0.5
Cuba.....	194	100.0	25.7	16.7	9.0	18.6	18.9	2.8	4.0	0.9	0.8	1.1	1.4	0.3
Mexico.....	2,124	100.0	20.3	12.1	13.5	11.1	22.6	6.6	4.3	1.5	2.1	1.7	4.1	0.3
Peru.....	72	100.0	34.2	14.1	25.5	0.5	6.7	2.9	2.4	0.0	0.7	8.3	3.6	1.2
Uruguay.....	115	100.0	36.4	19.6	9.0	7.6	13.5	6.6	1.7	3.0	0.0	1.0	1.0	0.5
Venezuela.....	432	100.0	16.8	18.1	13.0	21.4	11.7	5.6	6.2	2.1	2.7	1.7	0.5	0.3
All others.....	724	100.0	22.3	15.9	17.6	14.5	7.8	7.0	4.6	1.4	2.9	3.6	1.1	1.3
Sub-Saharan Africa.....	3,982	100.0	33.1	11.4	20.2	7.8	4.5	7.2	3.5	0.9	1.9	5.3	1.7	2.5
Botswana.....	45	100.0	6.5	13.5	28.0	3.4	0.0	4.1	2.2	2.2	0.0	24.7	2.2	13.1
Cameroon.....	60	100.0	33.7	9.0	23.3	5.6	10.9	6.8	5.0	0.0	2.5	0.6	2.5	0.0
Ethiopia.....	88	100.0	39.4	8.6	32.2	6.2	0.0	3.3	0.0	0.0	0.0	3.8	0.3	6.3
Ghana.....	77	100.0	40.9	5.6	25.5	3.9	3.9	3.6	2.6	0.0	0.3	3.5	3.0	7.2
Kenya.....	275	100.0	48.2	10.1	24.8	1.1	0.2	4.5	0.7	0.0	0.8	6.8	1.3	1.5
Nigeria.....	433	100.0	26.2	11.6	27.4	13.0	3.0	4.7	1.9	0.6	0.6	3.9	2.9	4.1
Senegal.....	64	100.0	41.9	15.8	13.6	2.0	2.8	5.5	3.7	0.8	0.0	10.5	3.5	0.0
South Africa.....	2,282	100.0	27.7	12.4	17.0	10.0	6.3	9.1	4.7	1.1	2.9	5.7	0.9	2.2
Tanzania.....	107	100.0	53.2	9.6	21.0	0.5	0.0	6.3	2.3	0.0	0.2	4.1	2.0	0.9
Uganda.....	43	100.0	59.8	5.2	22.0	0.0	0.0	3.1	0.0	0.0	0.0	2.3	4.6	2.9
Zimbabwe.....	119	100.0	47.7	9.7	19.9	1.1	1.3	5.7	1.3	0.4	2.0	4.5	4.4	2.1
All others.....	392	100.0	47.3	9.0	22.6	1.6	2.5	4.8	2.1	1.3	0.6	2.9	4.0	1.7
Other														
Australia.....	13,911	100.0	29.7	12.6	14.6	8.0	8.1	7.0	5.3	1.6	3.1	4.9	2.8	2.2
Canada.....	24,583	100.0	27.1	14.8	11.6	8.7	7.7	7.5	7.6	1.8	4.2	4.7	1.9	2.6
New Zealand.....	2,684	100.0	28.0	10.2	23.7	6.7	3.9	8.7	3.2	1.1	4.5	4.7	1.5	3.8
All others.....	49	100.0	41.5	8.7	24.0	2.0	0.0	8.4	2.0	2.0	0.0	5.1	0.4	5.8

EU = European Union; USSR = Union of Soviet Socialist Republics

NOTES: Publication counts from set of journals classified and covered by *Science Citation Index (SCI)* and *Social Sciences Citation Index (SSCI)*. Articles assigned to region/country/economy on basis of institutional address(es) listed on article. Articles on fractional-count basis, i.e., for articles with collaborating institutions from multiple countries/economies, each country/economy receives fractional credit on basis of proportion of its participating institutions. Countries with article output <0.0% of world output in 2003 grouped in "all others" except Luxembourg. China includes Hong Kong.

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