

Appendix table 5-38

## Regional and country portfolio of S&amp;E articles, by field: 2001

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Region and country/economy	Articles	All fields	Clinical medicine	Biomedical research	Biology	Chemistry	Physics	Earth/space sciences	Engineering/technology	Mathematics	Psychology	Social sciences	Health sciences	Professional fields
	Number	Percent distribution												
Worldwide .....	649,795	100.0	28.4	14.2	6.8	11.9	13.4	5.4	9.0	2.2	3.1	2.3	1.4	2.0
OECD.....	551,402	100.0	30.7	15.0	6.8	10.3	11.9	5.4	8.2	2.0	3.3	2.6	1.6	2.2
North America .....	226,704	100.0	31.3	16.7	6.7	7.2	8.6	5.8	7.0	1.8	4.6	3.9	2.5	3.7
Canada.....	22,626	100.0	29.3	15.2	10.3	7.8	6.6	7.3	7.9	1.9	4.7	4.4	2.2	2.4
Mexico.....	3,209	100.0	18.7	12.0	14.8	10.5	21.2	7.6	7.7	2.1	1.7	1.5	1.8	0.5
United States.....	200,870	100.0	31.7	16.9	6.2	7.1	8.7	5.6	6.9	1.8	4.7	3.9	2.5	3.9
Western Europe .....	229,173	100.0	32.0	14.0	6.6	11.5	12.7	5.7	8.1	2.4	2.8	1.8	1.2	1.3
Austria.....	4,526	100.0	42.5	13.0	5.6	10.0	11.3	4.6	6.1	2.7	2.2	1.2	0.3	0.6
Belgium.....	5,984	100.0	32.9	14.6	8.0	11.0	12.5	4.5	7.8	2.1	2.7	2.0	0.7	1.3
Croatia.....	710	100.0	23.4	7.5	6.2	20.5	11.3	4.6	5.0	3.1	16.4	1.3	0.3	0.3
Cyprus.....	74	100.0	7.7	5.3	4.0	12.2	8.7	2.0	24.0	9.4	13.1	1.9	0.0	11.7
Denmark.....	4,988	100.0	34.2	17.9	11.7	7.8	9.3	6.2	5.3	1.4	3.3	1.0	0.9	1.0
Finland.....	5,098	100.0	37.8	14.1	10.1	7.5	8.5	5.5	7.3	1.3	1.8	1.8	2.0	1.9
France.....	31,317	100.0	27.1	15.2	5.7	12.9	16.1	6.6	9.0	4.4	1.4	0.9	0.2	0.5
Germany.....	43,623	100.0	30.9	14.1	5.2	12.7	16.3	5.0	8.5	2.2	1.8	2.0	0.6	0.7
Greece.....	3,329	100.0	31.3	8.1	9.2	12.5	14.1	6.3	11.4	3.0	2.1	0.5	0.4	1.1
Iceland.....	174	100.0	31.9	10.2	16.2	3.3	4.6	16.2	2.9	2.1	5.8	3.9	2.3	0.7
Ireland.....	1,665	100.0	30.7	14.6	14.0	8.4	10.3	3.0	6.9	2.4	4.1	1.7	1.6	2.5
Italy.....	22,313	100.0	35.1	12.0	4.5	11.9	16.2	6.0	8.8	2.9	1.3	0.7	0.2	0.4
Macedonia.....	74	100.0	11.7	6.8	1.4	51.2	13.4	2.0	12.2	1.4	0.0	0.0	0.0	0.0
Netherlands.....	12,602	100.0	37.5	14.2	6.0	8.6	8.8	5.5	6.4	1.4	3.9	3.6	1.8	2.2
Norway.....	3,252	100.0	33.4	12.7	12.9	6.3	5.0	10.1	6.2	2.3	4.4	3.1	2.0	1.7
Portugal.....	2,142	100.0	14.5	12.5	11.0	20.5	16.8	4.7	13.1	3.5	1.4	0.9	0.1	1.0
Slovenia.....	876	100.0	19.9	13.7	4.3	16.3	16.7	2.9	17.4	3.1	3.5	0.7	0.3	1.2
Spain.....	15,570	100.0	24.7	13.9	10.7	18.5	11.7	5.7	7.8	3.3	1.7	0.9	0.4	0.6
Sweden.....	10,314	100.0	36.7	15.5	7.4	8.3	10.5	4.4	8.1	1.2	1.9	1.7	3.1	1.1
Switzerland.....	8,107	100.0	32.7	16.1	5.8	12.8	13.4	6.4	6.6	1.4	2.1	1.4	0.6	0.7
Turkey.....	4,098	100.0	44.3	6.3	5.2	14.2	8.9	4.6	11.2	1.3	1.9	1.1	0.5	0.6
United Kingdom.....	47,660	100.0	32.8	14.2	6.2	8.5	9.0	5.9	7.4	1.6	5.7	3.0	2.7	3.0
Yugoslavia.....	547	100.0	19.1	8.8	3.8	17.5	17.2	4.3	23.9	3.9	0.8	0.5	0.0	0.2
All others.....	129	100.0	34.2	8.9	5.9	12.2	4.6	6.8	11.7	1.5	6.6	0.8	2.5	4.5
Asia.....	113,575	100.0	22.2	11.9	5.5	18.2	19.8	3.6	14.5	2.0	1.0	0.4	0.2	0.6
Bangladesh.....	177	100.0	21.5	8.0	12.2	17.4	14.0	4.8	8.7	0.3	6.6	0.0	3.9	2.7
China.....	20,978	100.0	10.7	8.0	3.8	26.3	23.4	4.4	16.3	3.9	1.1	0.5	0.4	1.3
India.....	11,076	100.0	14.3	13.4	6.5	25.5	18.6	5.2	13.0	1.2	1.5	0.2	0.2	0.4
Indonesia.....	207	100.0	22.0	10.3	19.3	8.8	7.7	9.6	10.0	0.2	8.5	0.6	1.0	1.9
Japan.....	57,420	100.0	28.7	14.0	6.1	14.9	19.1	3.0	11.6	1.4	0.5	0.5	0.1	0.1
Malaysia.....	494	100.0	20.4	7.6	15.1	28.4	6.4	2.9	12.1	1.0	2.9	0.5	0.8	2.0
Pakistan.....	282	100.0	19.4	9.3	15.6	16.2	20.6	2.8	8.9	1.7	2.1	0.0	2.4	1.1
Philippines.....	158	100.0	15.8	10.6	39.5	1.3	12.0	4.0	3.2	1.9	5.3	1.9	1.4	3.3
Singapore.....	2,603	100.0	14.3	9.1	2.6	11.4	21.0	2.0	27.8	3.4	3.5	0.8	0.3	3.8
South Korea.....	11,037	100.0	17.9	11.3	3.3	17.7	22.4	3.0	20.7	1.7	1.0	0.3	0.2	0.6
Sri Lanka.....	76	100.0	27.4	9.1	31.3	11.1	9.2	3.4	2.4	0.0	2.4	0.0	0.7	3.0

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## Regional and country portfolio of S&amp;E articles, by field: 2001

Region and country/economy	Articles	All fields	Clinical medicine	Biomedical research	Biology	Chemistry	Physics	Earth/space sciences	Engineering/technology	Mathematics	Psychology	Social sciences	Health sciences	Professional fields
	Number	Percent distribution												
Taiwan.....	8,082	100.0	24.1	8.5	5.1	14.0	16.0	5.0	21.8	2.1	1.2	0.5	0.5	1.2
Thailand.....	727	100.0	36.6	10.5	16.2	15.2	3.3	4.6	8.4	0.4	1.9	0.5	1.8	0.5
Vietnam.....	158	100.0	16.2	7.2	13.7	8.6	22.2	3.9	8.8	15.4	0.7	0.0	1.5	1.7
All others.....	101	100.0	31.0	6.1	18.9	4.5	3.0	15.4	2.0	1.5	10.7	1.3	2.1	3.5
Eastern Europe/Central Asia.....	33,686	100.0	8.2	8.8	4.4	26.0	30.3	5.9	10.2	3.7	1.4	0.6	0.1	0.3
Armenia .....	152	100.0	8.2	5.2	1.0	24.0	49.4	4.7	5.7	1.3	0.3	0.0	0.0	0.0
Azerbaijan .....	68	100.0	2.0	1.6	0.7	39.4	28.1	8.8	11.5	7.8	0.0	0.0	0.0	0.0
Belarus.....	528	100.0	4.2	8.5	4.1	29.0	40.2	1.2	8.4	3.3	0.3	0.8	0.0	0.2
Bulgaria.....	784	100.0	12.8	12.3	6.3	24.4	19.5	5.6	13.2	4.3	0.6	0.2	0.4	0.4
Czech Republic.....	2,622	100.0	14.5	16.0	7.7	22.9	16.2	4.5	8.2	3.9	3.1	1.5	0.0	1.3
Estonia.....	339	100.0	16.4	15.2	10.5	9.2	19.1	8.2	12.2	2.0	3.1	1.2	2.1	0.6
Georgia .....	110	100.0	6.8	3.5	4.7	21.1	36.6	7.6	7.8	9.3	2.6	0.0	0.0	0.0
Hungary .....	2,479	100.0	26.7	13.1	5.2	23.5	15.0	2.8	7.0	3.9	1.6	0.8	0.1	0.3
Kazakhstan .....	116	100.0	3.5	0.9	2.2	44.7	22.1	9.5	8.5	7.6	0.0	0.0	0.0	0.9
Latvia.....	157	100.0	10.8	11.5	5.5	27.2	25.1	2.5	14.2	1.6	0.6	0.6	0.3	0.0
Lithuania.....	272	100.0	7.2	14.3	7.5	19.4	27.7	4.4	12.5	3.3	2.9	0.4	0.4	0.0
Moldova .....	77	100.0	1.7	2.5	4.5	39.7	40.7	0.4	9.2	1.3	0.0	0.0	0.0	0.0
Poland.....	5,686	100.0	13.2	8.6	4.8	26.7	26.5	4.1	11.0	3.9	0.5	0.3	0.1	0.4
Romania.....	997	100.0	3.5	2.5	1.1	34.9	29.0	2.5	18.3	7.4	0.5	0.2	0.1	0.0
Russia.....	15,846	100.0	3.2	7.5	4.0	27.1	35.6	8.1	8.9	3.4	1.3	0.6	0.1	0.2
Slovakia.....	955	100.0	12.2	17.5	4.8	22.5	15.9	3.4	8.5	3.4	8.2	3.2	0.1	0.3
Ukraine .....	2,256	100.0	3.4	2.5	2.1	20.6	44.9	4.2	19.5	2.6	0.1	0.2	0.0	0.0
Uzbekistan .....	204	100.0	1.4	1.8	1.9	43.5	36.2	4.8	5.7	2.9	2.0	0.0	0.0	0.0
All others.....	39	100.0	4.7	2.2	8.2	18.3	21.2	19.5	5.1	12.7	3.0	2.5	2.5	0.0
Near East/North Africa .....	11,777	100.0	29.0	9.6	6.6	14.5	14.2	3.8	11.6	3.8	2.3	2.0	1.0	1.6
Algeria.....	225	100.0	5.2	2.1	3.1	16.0	34.5	5.9	27.6	5.4	0.0	0.0	0.0	0.2
Egypt.....	1,548	100.0	20.2	5.1	6.4	29.9	17.7	3.6	15.4	0.5	0.6	0.4	0.1	0.1
Iran .....	995	100.0	19.5	3.7	3.7	39.6	13.5	2.9	12.3	3.9	0.4	0.3	0.1	0.1
Israel.....	6,487	100.0	32.9	12.7	6.9	7.6	13.6	3.4	8.3	4.0	3.5	3.3	1.5	2.4
Jordan.....	240	100.0	18.7	6.6	12.1	9.6	11.6	10.9	25.0	0.4	1.9	1.2	1.5	0.4
Kuwait.....	257	100.0	35.6	10.4	6.8	10.3	3.8	3.7	21.2	3.0	0.4	0.8	1.0	2.8
Lebanon.....	202	100.0	48.2	7.5	6.5	4.3	8.5	4.8	6.9	3.0	5.6	1.1	1.5	2.0
Morocco.....	469	100.0	12.1	5.0	6.7	23.5	21.9	7.6	12.5	10.1	0.5	0.0	0.0	0.2
Oman .....	96	100.0	41.5	5.3	11.7	4.6	8.9	5.0	17.4	1.6	2.1	1.0	0.0	1.0
Saudi Arabia .....	580	100.0	40.8	5.9	4.7	12.3	10.1	2.8	17.2	4.0	0.7	0.2	0.2	1.2
Tunisia .....	344	100.0	22.9	11.3	5.3	15.2	14.1	3.7	14.5	11.9	0.8	0.0	0.0	0.2
United Arab Emirates .....	159	100.0	45.8	9.1	3.4	6.6	6.8	5.1	14.0	1.6	1.6	2.5	0.8	2.8
All others.....	174	100.0	25.4	7.3	17.3	13.3	8.9	5.6	17.5	1.1	1.4	1.0	0.2	0.9
Pacific .....	17,743	100.0	28.2	12.6	16.2	6.6	6.4	8.1	6.4	1.7	4.8	3.8	2.6	2.6
Australia .....	14,788	100.0	28.7	13.1	14.7	6.8	6.9	7.8	6.6	1.7	4.8	3.7	2.7	2.6
New Zealand .....	2,903	100.0	25.9	10.5	23.6	5.7	4.2	9.3	5.2	1.8	4.4	4.4	2.5	2.5
All others.....	53	100.0	30.9	4.6	35.5	1.9	0.0	6.4	1.4	0.0	9.6	0.9	1.5	7.2

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## Regional and country portfolio of S&amp;E articles, by field: 2001

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Region and country/economy	Articles	All fields	Clinical medicine	Biomedical research	Biology	Chemistry	Physics	Earth/space sciences	Engineering/technology	Mathematics	Psychology	Social sciences	Health sciences	Professional fields
	Number	Percent distribution												
Central/South America.....	13,147	100.0	22.7	14.1	12.7	13.4	17.9	5.4	7.6	2.3	1.8	0.6	1.0	0.5
Argentina .....	2,930	100.0	23.4	15.0	16.1	12.7	16.0	6.0	6.4	1.8	1.5	0.6	0.2	0.2
Brazil.....	7,205	100.0	21.4	13.8	10.3	13.5	21.6	4.3	8.8	2.4	1.6	0.5	1.4	0.3
Chile.....	1,203	100.0	26.8	11.6	12.3	17.3	8.0	11.2	5.9	3.0	2.0	0.3	0.6	1.1
Colombia.....	324	100.0	24.2	12.4	18.8	8.4	16.6	3.5	4.7	2.4	4.3	2.1	1.4	1.1
Costa Rica.....	92	100.0	21.1	14.9	37.9	10.9	4.9	4.5	1.8	0.0	2.5	0.3	0.0	1.1
Cuba .....	299	100.0	25.0	20.1	9.4	15.9	17.0	3.6	6.0	0.3	0.0	2.3	0.4	0.0
Peru .....	93	100.0	31.4	9.5	24.2	3.1	8.9	9.4	4.0	1.1	6.2	1.1	0.8	0.3
Uruguay .....	155	100.0	21.3	24.2	13.2	8.9	16.7	4.7	3.1	3.9	0.9	1.8	0.0	1.3
Venezuela.....	535	100.0	19.3	14.2	12.6	17.4	13.7	4.5	9.3	3.9	2.7	0.2	0.4	1.7
All others.....	310	100.0	29.4	13.3	26.0	6.8	4.2	6.1	3.6	0.5	5.5	1.3	1.8	1.7
Sub-Saharan Africa .....	3,990	100.0	29.8	12.0	21.2	6.6	4.4	7.7	5.0	1.5	5.7	1.8	2.3	1.9
Cameroon .....	75	100.0	34.1	9.2	26.5	4.2	5.3	6.6	2.0	3.1	6.2	0.0	1.3	1.3
Ethiopia.....	93	100.0	54.2	6.9	21.5	3.8	5.1	3.4	0.3	0.0	2.6	0.4	2.0	0.0
Ghana .....	90	100.0	40.3	9.6	16.0	5.0	2.3	4.1	2.8	0.0	13.0	1.1	1.2	4.5
Kenya.....	230	100.0	36.0	13.3	31.3	2.2	0.9	3.4	0.9	0.0	8.1	0.6	2.9	0.2
Nigeria .....	332	100.0	29.7	11.5	29.9	3.9	2.4	4.0	4.6	2.1	5.4	0.1	2.4	4.1
Senegal.....	62	100.0	33.8	9.8	30.1	2.7	5.4	4.4	1.9	1.6	6.2	0.0	2.5	1.6
South Africa.....	2,327	100.0	24.5	12.7	18.0	8.9	5.9	10.3	6.8	1.7	5.2	2.7	1.5	1.8
Tanzania.....	87	100.0	53.7	6.5	22.0	0.0	0.6	3.5	2.1	0.0	1.0	2.0	5.2	3.5
Uganda.....	91	100.0	45.6	9.4	21.8	0.0	0.0	2.3	1.1	0.0	4.4	2.1	11.7	1.6
Zimbabwe .....	113	100.0	29.5	11.4	27.5	2.3	0.0	4.0	5.3	0.4	10.2	2.2	6.3	0.9
All others.....	490	100.0	37.6	12.6	23.0	4.2	2.7	4.2	2.0	2.2	5.8	0.4	3.4	1.9

OECD Organisation for Economic Co-operation and Development

NOTES: Article counts are from a set of journals classified and covered by the Institute of Scientific Information's Science Citation and Social Sciences Citation Indexes. Article counts are based on fractional assignments; for example, an article with two authors from different countries is counted as one-half of an article for each country. Countries with article output of less than 0.01 percent of world output in 2001 are grouped in "All others." China's data include articles from the Hong Kong economy for 2001. Articles are assigned to fields based on journal field classifications developed by CHI Research, Inc.

SOURCES: Institute for Scientific Information, Science Citation Index and Social Sciences Citation Index; CHI Research, Inc.; and National Science Foundation, Division of Science Resources Statistics, special tabulations.

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