

## Regional and country portfolio of S&amp;E articles, by field: 1988

Region and country/economy	Articles	All fields	Clinical	Biomedical	Biology	Chemistry	Physics	Earth/space	Engineering/	Mathematics	Psychology	Social	Health	Professional
			medicine	research				sciences	technology			sciences	sciences	fields
	Number		Percent distribution											
Worldwide .....	466,419	100.0	29.3	15.2	7.5	12.3	13.3	4.1	6.7	2.1	3.4	2.5	0.9	2.5
OECD.....	398,238	100.0	31.1	15.2	7.7	10.8	12.0	4.1	6.7	2.1	3.7	2.8	1.0	2.8
North America .....	199,937	100.0	30.4	15.3	8.1	7.5	9.9	4.7	6.8	2.2	4.9	4.1	1.6	4.5
Canada.....	21,391	100.0	25.9	14.3	14.6	8.1	8.0	5.8	8.1	2.3	4.6	4.4	1.3	2.6
Mexico.....	884	100.0	24.5	14.9	15.7	11.1	15.7	6.5	4.0	3.4	2.7	1.2	0.1	0.4
United States.....	177,662	100.0	31.0	15.5	7.2	7.4	10.1	4.5	6.7	2.2	4.9	4.0	1.6	4.8
Western Europe .....	143,882	100.0	34.6	15.4	6.6	13.1	13.0	3.8	5.6	2.1	2.6	1.7	0.5	1.1
Austria.....	2,241	100.0	42.1	10.6	6.3	13.8	12.4	2.5	4.4	2.4	2.8	1.4	0.3	1.0
Belgium.....	3,586	100.0	38.4	17.1	5.4	10.4	11.9	3.0	5.5	2.3	2.8	1.7	0.4	1.2
Cyprus.....	15	100.0	16.4	8.2	52.5	0.0	0.0	6.6	3.3	0.0	13.1	0.0	0.0	0.0
Denmark.....	3,445	100.0	54.6	15.9	6.0	4.8	8.6	2.6	2.3	1.7	1.7	1.1	0.2	0.6
Finland.....	2,789	100.0	51.1	14.3	7.1	6.1	7.0	3.7	4.3	1.8	1.6	1.4	0.6	1.1
France.....	21,409	100.0	29.1	16.6	5.9	15.3	17.2	4.7	4.7	3.0	1.8	1.1	0.1	0.4
Germany (East).....	3,626	100.0	23.7	13.4	8.9	25.5	14.9	2.0	6.6	1.4	0.7	1.4	0.1	1.4
Germany (West).....	25,666	100.0	29.0	15.4	6.2	15.7	16.5	3.3	6.7	2.2	1.8	2.3	0.3	0.7
Greece.....	1,239	100.0	20.4	8.1	9.3	14.7	16.3	7.9	14.7	4.3	2.4	0.6	0.2	0.9
Iceland.....	69	100.0	45.0	12.3	6.2	0.0	3.4	17.6	2.2	2.2	1.5	3.6	1.5	4.6
Ireland.....	790	100.0	35.8	11.9	11.9	9.2	8.7	4.7	3.9	4.5	5.8	1.5	0.6	1.6
Italy.....	11,229	100.0	38.0	13.4	3.8	15.4	16.2	3.6	5.2	2.3	1.0	0.8	0.1	0.3
Netherlands.....	8,581	100.0	36.6	15.5	8.2	10.8	11.9	4.1	4.3	1.5	2.7	2.7	0.6	1.0
Norway.....	2,192	100.0	40.3	13.8	12.8	8.0	4.9	6.4	4.4	2.1	3.9	2.2	0.4	0.8
Portugal.....	429	100.0	15.7	11.4	6.4	17.6	20.1	5.0	16.0	2.4	2.2	0.9	0.2	2.2
Spain.....	5,432	100.0	23.3	18.8	8.9	23.8	12.4	3.3	4.2	3.1	1.1	0.7	0.2	0.2
Sweden.....	7,573	100.0	48.2	17.2	6.9	7.5	7.5	3.2	3.9	1.2	1.8	1.2	0.8	0.6
Switzerland.....	5,316	100.0	36.3	18.5	4.1	11.9	16.5	2.7	4.2	1.6	1.7	1.7	0.3	0.6
Turkey.....	507	100.0	33.1	6.0	5.4	15.8	12.4	6.2	13.4	3.3	2.6	0.9	0.0	1.1
United Kingdom.....	36,509	100.0	36.6	14.8	7.4	9.9	9.1	4.0	6.3	1.5	4.5	2.4	1.2	2.5
Yugoslavia.....	1,211	100.0	21.3	15.0	3.3	22.1	20.7	3.4	9.2	3.0	0.9	0.4	0.2	0.5
All others.....	28	100.0	31.2	2.5	6.0	10.0	31.5	10.9	0.0	3.0	3.6	0.0	0.0	1.2
Asia.....	51,765	100.0	22.4	13.7	7.5	18.2	19.7	2.7	11.6	1.8	1.3	0.5	0.1	0.4
Bangladesh.....	95	100.0	26.3	6.5	12.8	11.4	15.1	0.5	4.2	1.4	15.8	3.2	1.6	1.1
China.....	4,001	100.0	13.8	6.7	2.9	13.0	39.1	5.1	13.0	3.9	0.1	1.7	0.1	0.5
Hong Kong.....	618	100.0	45.3	9.3	2.4	11.3	7.2	1.7	7.2	3.0	3.5	3.8	1.6	3.7
India.....	8,882	100.0	12.9	13.6	10.3	24.2	17.4	5.1	11.1	1.8	2.6	0.4	0.1	0.5
Indonesia.....	59	100.0	21.2	9.6	28.5	4.3	5.9	10.6	6.4	0.8	9.2	1.7	1.7	0.0
Japan.....	34,435	100.0	25.6	15.2	6.9	17.7	19.1	1.9	11.1	1.4	0.5	0.5	0.0	0.1
Malaysia.....	208	100.0	31.3	10.3	23.1	12.4	4.1	2.2	3.1	2.6	7.7	0.0	1.0	2.3
Pakistan.....	235	100.0	8.0	4.6	20.9	34.6	12.6	3.8	11.0	1.3	1.9	0.1	0.6	0.4
Philippines.....	127	100.0	12.8	3.9	58.0	1.6	0.8	4.7	1.8	2.4	10.2	2.6	0.5	0.8
Singapore.....	410	100.0	30.4	9.0	7.1	12.1	8.5	2.7	12.7	4.5	7.0	2.4	0.4	3.1
South Korea.....	771	100.0	10.0	4.6	3.7	30.5	18.2	1.5	24.9	2.7	2.5	0.1	0.0	1.3
Sri Lanka.....	107	100.0	27.9	15.6	21.2	12.0	3.4	6.2	3.7	0.0	5.4	0.5	2.8	1.4
Taiwan.....	1,414	100.0	19.7	8.7	9.2	12.8	16.3	0.9	25.4	2.7	3.8	0.2	0.0	0.5

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			medicine	research				sciences	technology			sciences	sciences	fields
	Number		Percent distribution											
Thailand .....	287	100.0	42.4	19.4	12.8	3.7	2.6	4.7	4.7	0.9	6.3	0.8	0.5	1.1
Vietnam.....	52	100.0	1.9	1.6	6.8	9.0	41.3	1.0	2.6	35.8	0.0	0.0	0.0	0.0
All others.....	64	100.0	41.2	15.2	13.8	3.9	5.3	4.4	6.2	1.6	7.0	1.6	0.0	0.0
Eastern Europe/Central Asia.....	41,597	100.0	14.4	17.1	3.0	27.2	25.8	3.7	4.8	1.6	1.1	0.7	0.0	0.5
Bulgaria.....	1,089	100.0	9.0	39.2	2.2	20.6	17.7	2.2	5.4	2.8	0.2	0.3	0.0	0.3
Czechoslovakia .....	2,746	100.0	16.5	13.9	4.6	29.0	14.5	3.6	5.3	1.5	7.9	2.9	0.1	0.3
Hungary .....	1,714	100.0	21.2	19.5	3.7	27.3	12.0	1.7	4.3	6.2	2.2	0.7	0.1	1.1
Poland.....	4,030	100.0	12.4	9.3	5.3	27.1	28.4	1.9	9.1	4.4	1.0	0.6	0.1	0.6
Romania.....	393	100.0	10.0	3.7	1.3	38.3	18.2	1.5	15.1	9.6	1.3	0.8	0.0	0.3
USSR.....	31,625	100.0	14.3	17.7	2.6	27.1	27.6	4.1	4.1	0.9	0.6	0.6	0.0	0.4
Near East/North Africa .....	7,893	100.0	30.1	10.9	9.2	13.0	12.0	4.5	8.9	3.1	3.4	2.1	0.5	2.3
Algeria.....	66	100.0	17.1	7.5	7.9	17.9	23.9	9.1	2.3	4.6	6.8	2.3	0.0	0.8
Egypt.....	1,130	100.0	13.5	5.5	11.4	39.7	10.1	4.6	12.8	1.2	0.8	0.3	0.0	0.2
Iran .....	86	100.0	26.0	7.5	20.5	9.1	6.2	4.8	9.8	8.2	3.9	1.2	0.0	2.9
Israel.....	4,916	100.0	33.6	13.6	8.8	5.8	13.7	3.4	6.2	3.5	4.7	3.1	0.7	3.0
Jordan.....	161	100.0	31.6	3.7	6.3	19.4	13.2	2.8	14.0	1.9	3.4	0.6	0.6	2.5
Kuwait.....	304	100.0	38.4	12.3	4.5	7.6	3.1	9.9	16.8	2.8	1.0	0.7	0.7	2.1
Lebanon.....	54	100.0	41.8	15.4	9.9	6.2	16.0	1.8	6.5	0.0	1.8	0.0	0.6	0.0
Morocco.....	113	100.0	12.1	2.3	16.1	24.5	18.2	9.7	9.1	4.9	2.7	0.4	0.0	0.0
Oman .....	13	100.0	1.9	1.5	18.7	16.8	9.0	41.0	3.7	7.5	0.0	0.0	0.0	0.0
Saudi Arabia.....	569	100.0	39.2	8.0	6.8	11.4	5.9	4.6	16.2	3.3	1.2	0.4	1.1	1.9
Tunisia .....	96	100.0	37.5	5.9	5.5	20.7	12.8	4.1	1.0	10.7	1.6	0.0	0.0	0.0
United Arab Emirates.....	23	100.0	33.0	4.3	0.0	13.0	0.0	2.2	43.2	4.3	0.0	0.0	0.0	0.0
All others.....	362	100.0	18.4	3.4	14.3	27.3	8.2	11.0	14.7	1.0	0.3	0.0	0.0	1.4
Pacific .....	12,054	100.0	29.6	13.1	18.3	7.8	6.7	6.3	4.4	2.1	4.9	3.5	0.8	2.4
Australia .....	9,896	100.0	29.9	13.8	16.1	8.2	7.1	6.3	4.5	2.2	5.2	3.3	0.9	2.5
New Zealand .....	2,075	100.0	28.4	10.1	28.6	6.1	4.6	6.1	3.8	1.5	3.2	4.6	0.6	2.3
All others.....	83	100.0	33.8	5.5	25.1	3.8	0.6	12.4	3.6	1.2	8.0	1.2	1.2	3.6
Central/South America.....	4,748	100.0	24.3	16.6	11.6	11.4	16.2	5.0	5.3	2.2	3.6	1.7	1.3	0.6
Argentina .....	1,423	100.0	21.9	17.6	11.6	14.9	18.5	4.3	6.2	1.3	2.2	1.3	0.0	0.2
Brazil.....	1,766	100.0	20.4	15.8	9.1	9.9	22.1	5.3	5.9	3.6	2.2	2.3	3.0	0.4
Chile.....	682	100.0	38.7	19.1	9.5	11.1	5.8	6.2	3.5	2.4	2.1	1.0	0.0	0.7
Colombia.....	86	100.0	26.6	11.8	23.6	2.4	2.4	6.0	5.8	0.0	7.3	5.8	4.7	3.5
Costa Rica.....	55	100.0	19.0	9.1	36.2	4.1	9.1	1.1	2.1	0.0	14.6	2.7	0.0	1.8
Cuba .....	67	100.0	21.4	15.3	10.8	20.5	21.3	2.5	1.5	0.0	6.0	0.0	0.7	0.0
Peru .....	68	100.0	24.0	10.3	31.0	3.8	1.6	12.9	2.2	0.0	12.5	1.5	0.2	0.0
Uruguay .....	42	100.0	39.4	22.3	18.1	7.2	2.4	6.0	2.4	0.0	0.0	0.0	2.4	0.0
Venezuela.....	292	100.0	21.4	19.9	11.2	13.8	17.0	3.7	6.0	2.2	3.3	0.5	0.0	1.0
All others.....	268	100.0	27.6	11.0	20.3	5.4	1.6	4.8	2.3	0.7	18.7	3.0	1.9	2.5
Sub-Saharan Africa .....	4,544	100.0	37.6	12.1	18.7	7.1	3.6	6.0	4.1	1.8	5.0	1.0	1.0	2.1
Cameroon .....	35	100.0	15.0	18.0	25.6	9.8	0.0	2.7	2.9	14.5	4.3	0.0	7.2	0.0
Ethiopia.....	71	100.0	39.2	2.1	30.5	8.4	2.8	11.7	0.5	1.4	0.7	0.0	2.8	0.0
Ghana .....	37	100.0	32.5	9.4	27.6	2.7	0.0	6.9	1.3	0.0	11.6	2.7	0.0	5.3

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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												
Kenya.....	291	100.0	56.4	12.2	19.7	1.2	0.7	1.7	0.7	0.3	4.9	1.4	0.3	0.3
Nigeria .....	886	100.0	31.6	9.0	24.7	6.7	2.0	2.9	4.2	2.1	7.4	0.6	2.6	6.2
Senegal.....	72	100.0	35.2	23.7	12.5	6.0	0.5	14.5	0.0	3.5	3.5	0.0	0.7	0.0
South Africa.....	2,523	100.0	35.0	14.4	15.7	8.8	5.3	7.6	5.3	2.0	3.0	1.1	0.4	1.2
Tanzania.....	64	100.0	38.7	5.7	28.3	0.0	0.8	4.3	3.1	0.0	12.1	0.8	0.0	6.2
Uganda.....	21	100.0	53.3	0.0	25.7	2.3	0.0	9.3	0.0	0.0	4.7	4.7	0.0	0.0
Zimbabwe .....	116	100.0	56.4	2.9	22.2	0.4	0.0	3.4	0.9	0.9	8.2	0.9	1.7	2.2
All others.....	425	100.0	48.6	8.3	18.6	4.6	1.4	3.8	1.8	0.6	10.0	0.7	0.9	0.7

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." Article and field data, however, are included for the former U.S.S.R. for 1988. 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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