

TABLE 9. Companies reporting nanotechnology activity, by industry and size of company and by technology area and percentage of R&D attributable to nanotechnology: 2002

Industry and size of company	NAICS codes	Biotechnology		Software development	
		Less than 50%	50% or more	Less than 50%	50% or more
Distribution by industry:					
All industries	21-23, 31-33, 42, 44-81	90	400	487	989
Manufacturing	31-33	52	162	375	199
Food	311	4	18	7	3
Beverage and tobacco products	312	0	0	1	0
Textiles, apparel, and leather	313-16	0	0	6	2
Wood products	321	0	0	3	0
Paper, printing and support activities	322, 323	2	0	5	5
Petroleum and coal products	324	1	0	1	0
Chemicals	325	15	88	15	2
Basic chemicals	3251	5	11	2	0
Resin, synthetic rubber, fibers, and filament	3252	2	1	0	0
Pharmaceuticals and medicines	3254	5	64	7	1
Other chemicals	325 minus (3251-52, 3254)	3	12	6	1
Plastics and rubber products	326	2	0	5	0
Nonmetallic mineral products	327	1	0	3	1
Primary metals	331	1	1	5	1
Fabricated metal products	332	2	2	19	3
Machinery	333	2	5	48	13
Computer and electronic products	334	9	22	165	132
Computers and peripheral equipment	3341	1	1	34	42
Communications equipment	3342	0	1	33	32
Semiconductor and other electronic components	3344	4	1	18	9
Navigational, measuring, electromedical, and control instruments	3345	4	19	73	36
Other computer and electronic products	334 minus (3341-42, 3344-45)	0	0	7	13
Electrical equipment, appliances, and components	335	2	1	36	9
Transportation equipment	336	2	0	21	4
Motor vehicles, trailers, and parts	3361-63	1	0	11	0
Aerospace products and parts	3364	1	0	4	2
Other transportation equipment	336 minus (3361-64)	0	0	6	2
Furniture and related products	337	1	0	5	1
Miscellaneous manufacturing	339	8	25	30	23
Medical equipment and supplies	3391	6	24	22	7
Other miscellaneous manufacturing	339 minus (3391)	2	1	8	16
Other manufacturing	31-33 minus (311-16, 321-27, 331-37, 339)	--	--	--	--
Nonmanufacturing	21-23, 42, 44-81	38	238	112	790
Mining, extraction, and support activities	21	2	1	1	0
Utilities	22	1	1	4	1
Construction	23	0	0	2	2
Trade	42, 44, 45	9	22	23	54
Transportation and warehousing	48, 49	0	0	0	7
Information	51	1	0	4	295
Publishing	511	1	0	1	240
Newspaper, periodical, book, and database	5111	0	0	0	10
Software	5112	1	0	1	230

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Industry and size of company	NAICS codes	Biotechnology		Software development	
		Less than 50%	50% or more	Less than 50%	50% or more
Distribution by industry:					
Broadcasting and telecommunications	513	0	0	2	12
Radio and television broadcasting	5131	0	0	0	0
Telecommunications	5133	0	0	1	9
Other broadcasting and telecommunications	513 minus (5131, 5133)	0	0	1	3
Other information	51 minus (511, 513)	0	0	1	43
Finance, insurance, and real estate	52, 53	0	2	1	28
Professional, scientific, and technical services	54	24	183	71	382
Architectural, engineering, and related services	5413	8	12	20	38
Computer systems design and related services	5415	2	2	14	282
Scientific R&D services	5417	13	165	33	40
Other professional, scientific, and technical services	54 minus (5413, 5415, 5417)	1	4	4	22
Management of companies and enterprises	55	0	1	0	1
Health care services	621-23	1	25	0	1
Other nonmanufacturing	56, 61, 624, 71, 72, 81	0	3	6	19
Distribution by size of company (number of employees):					
Total	(na)	90	400	487	989
5 to 24	(na)	5	50	42	137
25 to 49	(na)	7	44	45	147
50 to 99	(na)	8	69	61	186
100 to 249	(na)	8	101	99	197
250 to 499	(na)	11	49	57	124
500 to 999	(na)	14	32	72	79
1,000 to 4,999	(na)	15	43	66	78
5,000 to 9,999	(na)	5	5	9	15
10,000 to 24,999	(na)	5	5	19	15
25,000 or more	(na)	12	2	17	11

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Industry and size of company	NAICS codes	Materials synthesis and processing		Other technology areas	
		Less than 50%	50% or more	Less than 50%	50% or more
All industries	21-23, 31-33, 42, 44-81	255	1,029	269	2,195
Manufacturing	31-33	202	924	177	1,742
Food	311	9	32	7	91
Beverage and tobacco products	312	2	0	0	13
Textiles, apparel, and leather	313-16	1	41	6	39
Wood products	321	2	19	1	19
Paper, printing and support activities	322, 323	6	22	2	44
Petroleum and coal products	324	1	10	0	8
Chemicals	325	25	181	22	151
Basic chemicals	3251	5	38	6	29
Resin, synthetic rubber, fibers, and filament	3252	3	23	3	14
Pharmaceuticals and medicines	3254	7	14	5	17
Other chemicals	325 minus (3251-52, 3254)	10	106	8	91
Plastics and rubber products	326	12	102	5	113
Nonmetallic mineral products	327	6	29	2	35
Primary metals	331	6	42	5	32
Fabricated metal products	332	10	63	13	116
Machinery	333	19	75	13	210
Computer and electronic products	334	47	116	62	394
Computers and peripheral equipment	3341	8	12	17	48
Communications equipment	3342	11	11	12	81
Semiconductor and other electronic components	3344	13	44	11	97
Navigational, measuring, electromedical, and control instruments	3345	14	44	21	137
Other computer and electronic products	334 minus (3341-42, 3344-45)	1	5	1	31
Electrical equipment, appliances, and components	335	12	42	7	139
Transportation equipment	336	20	63	11	134
Motor vehicles, trailers, and parts	3361-63	9	37	5	67
Aerospace products and parts	3364	6	13	4	24
Other transportation equipment	336 minus (3361-64)	5	13	2	43
Furniture and related products	337	0	18	3	48
Miscellaneous manufacturing	339	24	69	18	156
Medical equipment and supplies	3391	15	37	12	75
Other miscellaneous manufacturing	339 minus (3391)	9	32	6	81
Other manufacturing	31-33 minus (311-16, 321-27, 331-37, 339)	--	--	--	--
Nonmanufacturing	21-23, 42, 44-81	53	105	92	453
Mining, extraction, and support activities	21	2	2	2	11
Utilities	22	3	0	2	24
Construction	23	0	12	0	14
Trade	42, 44, 45	10	29	20	95
Transportation and warehousing	48, 49	1	2	3	2
Information	51	4	6	11	22
Publishing	511	4	5	5	9
Newspaper, periodical, book, and database	5111	0	1	0	5
Software	5112	4	4	5	4

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Broadcasting and telecommunications	513	0	1	1	4
Radio and television broadcasting	5131	0	0	0	2
Telecommunications	5133	0	0	1	2
Other broadcasting and telecommunications	513 minus (5131, 5133)	0	1	0	0
Other information	51 minus (511, 513)	0	0	5	9
Finance, insurance, and real estate	52, 53	0	3	3	7
Professional, scientific, and technical services	54	33	43	49	229
Architectural, engineering, and related services	5413	9	3	18	59
Computer systems design and related services	5415	6	7	6	28
Scientific R&D services	5417	18	31	23	130
Other professional, scientific, and technical services	54 minus (5413, 5415, 5417)	0	2	2	12
Management of companies and enterprises	55	0	3	0	4
Health care services	621-23	0	0	0	16
Other nonmanufacturing	56, 61, 624, 71, 72, 81	0	5	2	29
Distribution by size of company (number of employees):					
Total	(na)	255	1,029	269	2,195
5 to 24	(na)	18	91	35	192
25 to 49	(na)	24	62	18	191
50 to 99	(na)	16	123	48	248
100 to 249	(na)	46	232	41	473
250 to 499	(na)	38	163	22	323
500 to 999	(na)	24	143	28	280
1,000 to 4,999	(na)	47	163	44	351
5,000 to 9,999	(na)	14	27	9	65
10,000 to 24,999	(na)	15	13	12	50
25,000 or more	(na)	13	12	12	22

(-) = indicates data not collected.

(na) = not applicable.

NOTE: For information on sampling for 2002, see appendix A, Technical Notes.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2002.