

TABLE 21
Companies with domestic R&D paid for by the company and others and performed by the company in the nanotechnology focus area, by industry and company size: 2018

(Millions of U.S. dollars)

Industry and company size	NAICS code	Domestic R&D		Nanotechnology R&D							
				Total		Paid for by company		Paid for by others			
		Companies ^a (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount		
All industries	21-23, 31-33, 42-81	26,313	441,036	957	i 16,799	i 842	i 14,820	i 184	i 1,979	i	
Manufacturing industries	31-33	15,205	274,075	772	i 14,783	i 709	i 13,169	i 111	i 1,614	i	
Food	311	808	4,654	D	1	D	1	0	0		
Chemicals	325	2,713	84,137	203	i 607	199	i 540	17	68		
Basic chemicals	3251	328	2,443	68	i 108	66	i 99	4	i 9	i	
Pharmaceuticals and medicines	3254	1,334	74,592	55	i 401	54	353	9	48		
Other chemicals	other 325	1,052	7,102	80	i 98	79	i 88	3	10		
Plastics and rubber products	326	912	2,751	76	i 71	75	i 67	D	4		
Nonmetallic mineral products	327	228	1,385	36	i 78	i 36	i 73	D	5		
Fabricated metal products	332	1,485	2,327	10	20	10	19	D	*	i	
Machinery	333	2,072	14,799	34	i 1,028	i 28	969	7	i 59	i	
Agricultural implement	33311	238	1,872	0	0	0	0	0	0		
Semiconductor machinery	333242	47	4,166	D	970	D	910 - 970	D	0 - 60		
Engine, turbine, and power transmission equipment	3336	71	2,483	D	*	D	*	0	0		
Other machinery	other 333	1,718	6,278	20	58	i D	0 - 59	D	0 - 59	i	
Computer and electronic products	334	2,340	83,697	267	i 12,545	i 221	i 11,079	i 76	i 1,466	i	
Semiconductor and other electronic components	3344	648	31,052	114	i 12,330	i 82	i 10,880	i 47	i 1,450	i	
Other electronic products	other 334	1,692	52,645	154	i 214	i 139	i 198	i 29	i 16	i	
Electrical equipment, appliances, and components	335	761	4,487	42	i 59	i 42	i 59	0	0		
Transportation equipment	336	1,105	52,629	7	33	i 6	29	i D	4		
Motor vehicles, bodies, trailers, and parts	3361-63	661	25,586	D	5	D	1	D	4		
Other transportation	other 336	445	27,044	D	28	i D	28	i 0	0		
Miscellaneous	339	1,251	17,209	66	i 308	i 62	i 300	D	8	i	
Other manufacturing	312-16, 321-24, 331, 337	1,546	5,999	D	34	D	33	D	*		
Nonmanufacturing industries	21-23, 42-81	11,116	166,961	185	i 2,016	i 133	i 1,651	i 73	i 365	i	
Mining, quarrying, oil and gas extraction, and support activities	21	153	1,905	D	36	D	36	D	*		
Utilities	22	61	275	0	0	0	0	0	0		
Wholesale trade	42	778	906	i 17	i 6	i 17	i 6	0	0		
Information	51	2,660	94,349	11	1,095	i 11	1,093	i D	2		
Publishing	511	987	32,770	D	1,090	i D	1,088	i D	2		
Telecommunications	517	183	3,696	0	0	0	0	0	0		

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		Companies ^a (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount				
Data processing, hosting, and related services	518	1,201	23,306	D	5	D	5	0	0						
Other information	other 51	290	34,576	0	0	0	0	0	0						
Professional, scientific, and technical services	54	6,224	44,860	149	i	878	i	97	i	515	D	362	i		
Architectural, engineering, and related services	5413	1,283	3,961	17	i	187	i	15	i	23	i	D	164	i	
Scientific research and development services	5417	1,469	20,185	106	i	214	i	68	i	112	51	103	i		
Research and development in biotechnology	541711	272	5,857	28	i	38	i	19	i	21	9	16	i		
Other scientific research and development	other 5417	1,197	14,327	78	i	177	i	49	i	90	42	86	i		
Other professional, scientific, and technical services	other 54	3,472	20,714	27	i	477		15	i	381	D	96	i		
Health care services	621-23	229	1,476	0		0		0		0	0	0			
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	1,015	23,191	i	D	1		D		1	0	0			
All companies (number of domestic employees)	-	26,313	441,036	957	i	16,799	i	842	i	14,820	i	184	i	1,979	i
Small companies															
10-19 ^c	-	4,294	4,390	182	i	138	i	150	i	118	i	48	i	20	i
20-49	-	7,386	11,252	292	i	354	i	262	i	271	i	43	i	83	i
Medium companies															
50-99	-	4,591	12,321	137	i	330	i	119	i	243	i	28		87	i
100-249	-	5,004	18,547	132	i	463		116	i	276	25	187	i		
Large companies															
250-499	-	2,060	19,645	75		732		66		514	15	217			
500-999	-	1,152	17,657	40		581	i	35		311	8	269	i		
1,000-4,999	-	1,263	68,578	57		3,517		54		2,734	7	783	i		
5,000-9,999	-	241	45,337	16		3,787		15		3,566	5	220			
10,000-24,999	-	207	84,420	13		2,020	i	13		1,966	D	53	i		
25,000 or more	-	114	158,889	12		4,877	i	12		4,819	D	58	i		

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Beginning in survey year 2018, these statistics include an adjustment to the weight to account for unit nonresponse. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^b Beginning in survey year 2018, these statistics include an adjustment to the weight to account for unit nonresponse. These company count estimates reflect an imputation process implemented for survey year 2014. This change has affected the comparability of these company count estimates with estimates published for years prior to 2014. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^c Business Research and Development Survey does not include companies with fewer than 10 domestic employees.

Note(s):

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018. Companies could report R&D in one, more than one, or no application area. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.