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Graphene Research Profile: UK and US Publications, 2000-2010

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This document presents a profile of graphene research in the UK and US. The data source is the Web of Science (WOS).[1] Records are cleaned and analyzed using VantagePoint textmining software.[2] For more information contact:

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[2] http://www.thevantagepoint.com/

Overview

In this document we provide an overview of graphene research that appears in the Web of Science (WOS) during the timeframe 2000 to 2010, inclusive. WOS databases that contain graphene research articles include SCI-EXPANDED, SSCI and A&HCI. The search strategy used in this profile was a simple one: all WOS articles from 2000 to 2010 whose title contained the keyword 'graphene' were downloaded and analyzed using VantagePoint textmining software. The search strategy used resulted in a total of 4,706 publications spanning 11 years, 313 journals, 78 countries, 1,433 institutional affiliations and 7,617 authors. After a brief presentation of global results, there is a focus on graphene research in the UK and US.

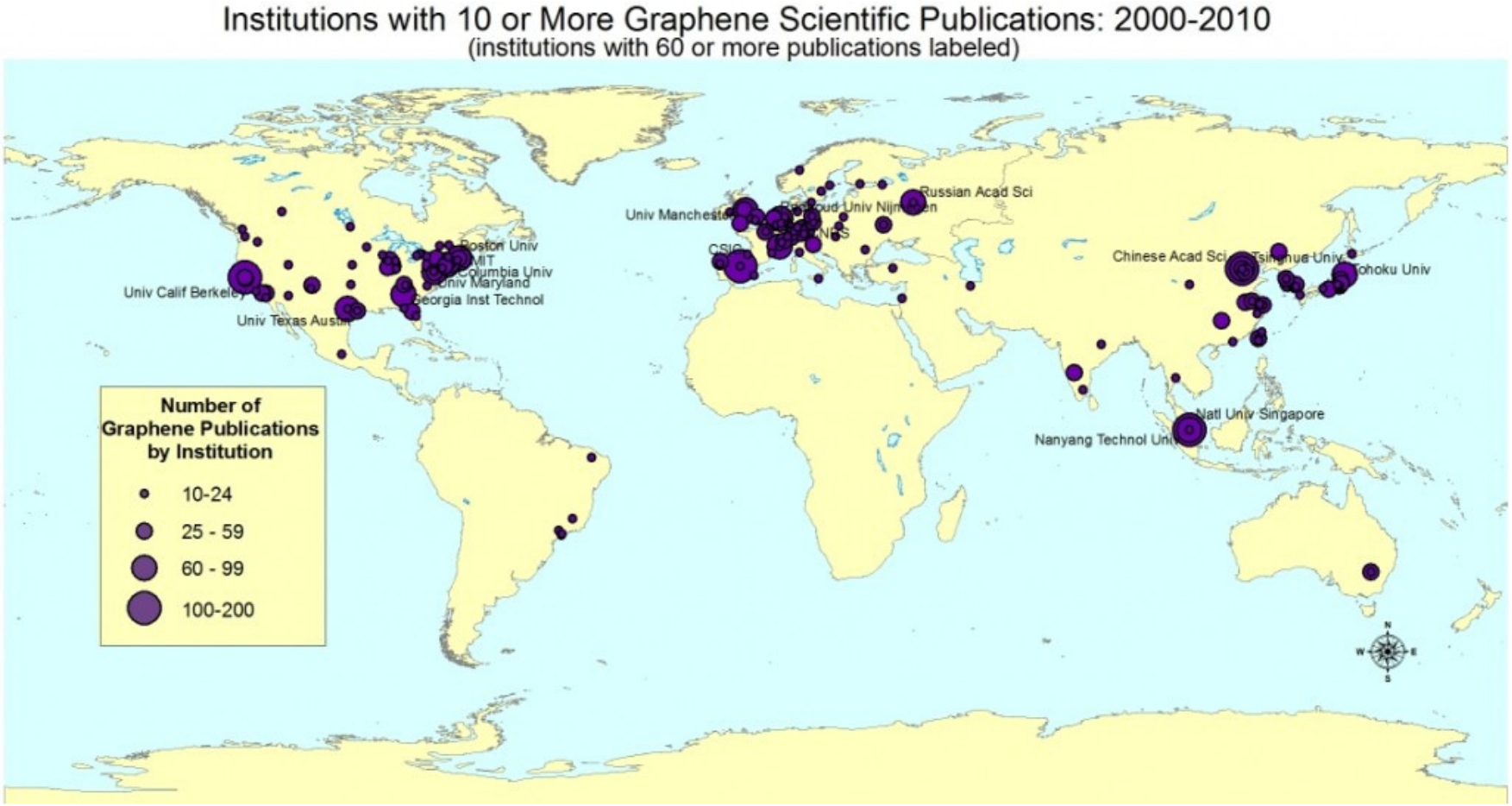
1. Global Results

Table 1 shows the top 50 global institutions (in terms of publication counts) involved in graphene research from 2000 to 2010. Figure 1 provides a global map of graphene research locations.

Table 1: Top 50 World-Wide Affiliations for Graphene Research (2000-2010)

Author Affiliations (Name Only)	# Records	Author Affiliations (Name Only)	# Records
Chinese Acad Sci	206	Univ Sci & Technol China	46
CSIC (Spain)	143	Peking Univ	45
Natl Univ Singapore	102	Indian Inst Sci	43
Univ Calif Berkeley	101	Univ Paris 11	42
CNRS (France)	94	Nanjing Univ	41
Univ Texas Austin	82	Rice Univ	39
Univ Manchester	81	Stanford Univ	39
Columbia Univ	80	Purdue Univ	38
Russian Acad Sci	79	Univ Calif Los Angeles	38
Georgia Inst Technol	77	Leiden Univ	37
Tohoku Univ	74	Princeton Univ	37
Nanyang Technol Univ	73	Univ Cambridge	37
Tsinghua Univ	73	Northwestern Univ	36
Boston Univ	71	Penn State Univ	36
Radboud Univ Nijmegen	69	Fudan Univ	35
Univ Maryland	69	Nankai Univ	35
MIT	68	Lawrence Berkeley Natl Lab	34
Univ Lancaster	56	Univ Illinois	34
Univ Antwerp	55	CNR (Italy)	33
Univ Minho	55	Max Planck Inst Festkorperforsch	33
Japan Sci & Technol Agcy	53	Univ Erlangen Nurnberg	32
Univ Calif Riverside	51	Harvard Univ	31
Korea Adv Inst Sci & Technol	50	Natl Cheng Kung Univ	31
Tokyo Inst Technol	47	Univ Tsukuba	31
Univ Tokyo	47	Univ Wollongong	31

Figure 1.



Source: Analysis of WoS publication records (N=4,706).

2. UK Graphene Profile (2000-2010)

Table 2.1 considers the top UK institutions involved in graphene research from 2000 to 2010.

Table 2.1: Top UK Affiliations for Graphene Research (2000-2010)

Author Affiliations (Name Only)	# Records
Univ Manchester	81
Univ Lancaster	56
Univ Cambridge	37
Univ Exeter	28
Univ Oxford	22
Imperial Coll Sci Technol	10
Univ Bristol	6
Daresbury Lab (CCLRC / STFC)	5
Heriot Watt Univ	5
Swansea Univ	5
UCL	5
Univ Leeds	5
Univ Loughborough	5
Univ Nottingham	5
Univ Surrey	5
Univ Newcastle	6
Univ Birmingham	4
Univ Sheffield	4
Univ Warwick	4
Graphene Ind Ltd	3
Univ Leicester	3
Univ Newcastle	3
Univ Ulster	3

Note: Includes organizations with 3 or more publications

Table 2.1a provides a more in-depth analysis of the UK institutions from Table 2.1.

Table 2.1a: Detailed Profile of the Top UK Affiliations involved in Graphene Research (2000-2010)

Author Affiliations (Name Only)	Publication Year	Authors	Journal	Keywords (author's) + Keywords Plus (Cleaned)
Top UK Affiliations	**Top Items**	**Top Items**	**Top Items**	**Top Items**
Univ Manchester[81]	2009 [24]; 2007 [19]; 2008 [19]; 2010 [13]; 2006 [5]	Geim, A K [59]; Novoselov, K S [55]; Katsnelson, M I [22]; Morozov, S V [17]; Blake, P [16]	Phys. Rev. B [13]; Phys. Rev. Lett [9]; Solid State Commun [6]; Appl. Phys. Lett [5]; Nano Lett [5]; Science [5]	graphite [35]; Graphene [17]; Berry phase [16]; film [16]; GAS [16]
Univ Lancaster[56]	2007 [16]; 2009 [15]; 2010 [12]; 2008 [8]; 2006 [5]	Fal'ko, V I [27]; McCann, E [19]; Altshuler, B L [8]; Cheianov, V V [8]; Kechedzhi, K [7]; Schomerus, H [7]	Phys. Rev. B [24]; Phys. Rev. Lett [8]; Solid State Commun [7]; Eur. Phys. J.-Spec. Top [4]; Appl. Phys. Lett [2]; Nat. Phys [2]	Berry phase [29]; graphite [22]; Bilayer graphene [13]; GAS [11]; FIELD [9]; Graphene [9]
Univ Cambridge[37]	2009 [12]; 2008 [10]; 2010 [8]; 2007 [6]	Ferrari, A C [26]; Novoselov, K S [10]; Geim, A K [8]; Piscanec, S [8]; Casiraghi, C [5]; Lombardo, A [5]	Phys. Rev. B [9]; ACS Nano [4]; Appl. Phys. Lett [3]; Nano Lett [3]; Nano Res [2]; Nat. Nanotechnol [2]; Phys. Status Solidi B-Basic Solid State Phys [2]	graphite [22]; Graphene [14]; film [10]; Scattering [9]; Carbon nanotube [8]

Univ Exeter[28]	2008 [10]; 2010 [9]; 2009 [7]; 2007 [2]	Savchenko, A K [12]; Tikhonenko, F V [8]; Briddon, P R [7]; Gorbachev, R V [7]; Horsell, D W [7]; Jones, R [7]	Phys. Rev. B [7]; Phys. Rev. Lett [6]; Phys. Status Solidi A-Appl. Mat [3]; Appl. Surf. Sci [2]; J. Phys.-Condes. Matter [2]; Philos. Trans. R. Soc. A-Math. Phys. Eng. Sci [2]; Physica E [2]	GAS [6]; graphite [6]; Graphene [5]; Carbon nanotube [4]; film [4]; surface [4]
Univ Oxford[22]	2009 [10]; 2010 [7]; 2008 [3]; 2007 [2]	Warner, J H [8]; Buchner, B [7]; Rummeli, M H [7]; Nicolosi, V [5]; Bachmatiuk, A [4]	Nano Lett [2]; Nano Res [2]; Nanotechnology [2]; Nat. Nanotechnol [2]	Graphene [7]; Carbon nanotube [6]; graphite [6]; GAS [5]; Epitaxial graphene [4]; film [4]; Graphene layer [4]; SHEET [4]
Imperial Coll Sci Technol[10]	2010 [4]; 2009 [3]; 2007 [2]	Chhowalla, M [3]; Eriksson, O [2]; Harrison, N M [2]; Montanari, B [2]; Sanyal, B [2]; Wessely, O [2]	Phys. Rev. B [3]	Carbon nanotube [3]; graphite [3]; Graphene [2]; transparent [2]
Univ Bristol[6]	2009 [3]; 2010 [3]	Adhikari, S [4]; Scarpa, F [4]; Gil, A J [2]; Mann, S [2]; Patil, A J [2]; Vickery, J L [2]	Adv. Mater [2]; Nanotechnology [2]	graphite [3]; strength [3]; Carbon nanotube [2]; CONSTANT [2]; Elastic Properties [2]; functionalized graphene [2]; graphite oxide [2]; simulation [2]; WALL CARBON NANOTUBE [2]
Heriot Watt Univ[5]	2010 [3]	Titov, M [4]; Gornyi, I V [2]; Ostrovsky, P M [2]	Phys. Rev. Lett [2]	CONDUCTION [2]; GAS [2]

Swansea Univ[5]	2010 [4]	Adhikari, S [3]; Scarpa, F [3]; Gil, A J [2]	Phys. Rev. B [2]	Carbon nanotube [3]; Elastic Properties [3]; graphite [2]; simulation [2]; strength [2]; Vibration [2]
UCL[5]	2009 [3]; 2010 [2]	Ellerby, M [3]; Alfe, D [2]; Howard, C A [2]	Phys. Rev. B [2]; Phys. Rev. Lett [2]	Carbon nanotube [3]; graphite [3]
Univ Leeds[5]	2008 [2]; 2009 [2]	Pachos, J K [5]; Benjamin, C [2]; Stone, M [2]	Phys. Rev. B [2]	FULLERENE [3]; C-60 [2]; CONTINUUM [2]; ELLIPTIC OPERATORS [2]; Graphene [2]; SYSTEM [2]; ZERO MODES [2]
Univ Loughborough[5]	2009 [4]	Nori, F [3]; Savel'ev, S [3]	Phys. Rev. B [3]	Graphene [4]; Carbon nanotube [2]; graphite [2]; QUANTUM [2]
Univ Nottingham[5]	2010 [3]; 2009 [2]	Beton, P H [3]; Pollard, A J [3]; Bichoutskaia, E [2]; Fischer, M [2]; Gsell, S [2]; Hufner, S [2]; Muller, F [2]; Perkins, E W [2]; Sachdev, H [2]; Schreck, M [2]	None	graphite [4]; BORON-NITRIDE NANOMESH [2]; Graphene [2]
Univ Surrey[5]	2008 [3]	Carey, J D [2]; Henwood, D [2]	Phys. Rev. B [2]	Carbon nanotube [2]; Electronic property [2]
Newcastle Univ[4]	2010 [2]	Briddon, P R [4]; Peres, N M R [2]; Ribeiro, R M [2]	Phys. Rev. B [2]	graphite [2]

Univ Birmingham[4]	2009 [3]	Fal'ko, V I [2]; Horsell, D W [2]; Kechedzhi, K [2]; Lerner, I V [2]; Savchenko, A K [2]; Tikhonenko, F V [2]	None	None
Univ Sheffield[4]	2009 [3]	De Souza, M M [2]; Peng, Y [2]; Zeng, J [2]; Zhang, H L [2]; Zhang, Y H [2]; Zhou, K G [2]	Nanotechnology [2]	Adsorption [2]; Carbon nanotube [2]; Doped graphene [2]; NO2 [2]
Univ Warwick[4]	2009 [4]	Dzyubenko, A B [2]; Fischer, A M [2]; Romer, R A [2]	None	None
Graphene Ind Ltd[3]	2008 [2]	Blake, P [3]; Booth, T J [3]; Geim, A K [3]; Hill, E W [3]; Jiang, D [3]; Novoselov, K S [3]	Nano Lett [2]	film [2]; graphite [2]; SHEET [2]
Univ Leicester[3]	2010 [2]	Giavaras, G [2]; Maksym, P A [2]; Roy, M [2]	None	None
Univ Newcastle[3]	None	Briddon, P R [3]; Jones, R [3]; Goss, J P [2]	None	C-60 [2]; Diamond [2]
Univ Ulster[3]	2010 [2]	Papakonstantinou, P [3]; Shang, N G [3]	J. Phys. Chem. C [2]	Chemical vapor deposition [2]

CCLRC Daresbury Lab[2]	None	Bangert, U [2]; Bleloch, A L [2]; Nair, R R [2]	Phys. Status Solidi A-Appl. Mat [2]	None
STFC Daresbury Lab[2]	2008 [2]	None	None	None
STFC Rutherford Appleton Lab[2]	None	Harrison, N M [2]; Montanari, B [2]	None	None
Univ Kent[2]	None	None	None	Adsorption [2]; graphite [2]
Univ Liverpool[2]	2010 [2]	None	Phys. Rev. B [2]	ENERGY [2]
Univ Newcastle Upon Tyne[2]	2008 [2]	Bangert, U [2]; Bleloch, A L [2]; Briddon, P R [2]; Eberlein, T [2]; Gass, M [2]; Geim, A [2]; Jones, R [2]; Nair, R R [2]; Novoselov, K S [2]	None	carbon [2]; graphite [2]; nanotube [2]; semimetal [2]; SOLIDS [2]; surface [2]

Table 2.2 lists the top authors affiliated with graphene research in the UK from 2000 to 2010.

Table 2.2. Top Authors Affiliated with Graphene Research in the UK (2000-2010)

Authors	# Records	Authors	# Records
Geim, A K	59	Gorbachev, R V	7
Novoselov, K S	55	Guinea, F	7
Fal'ko, V I	27	Horsell, D W	7
Ferrari, A C	26	Jones, R	7
Katsnelson, M I	23	Kechedzhi, K	7
McCann, E	19	Maan, J C	7
Morozov, S V	17	Peres, N M R	7
Blake, P	16	Rummeli, M H	7
Nair, R R	15	Schomerus, H	7
Savchenko, A K	12	Abergel, D S L	6
Ponomarenko, L A	11	Booth, T J	6
Briddon, P R	10	Pachos, J K	6
Zeitler, U	10	Bleloch, A L	5
Hill, E W	9	Casiraghi, C	5
Schedin, F	9	Cserti, J	5
Altshuler, B L	8	Fal'ko, V	5
Cheianov, V V	8	Kormanyos, A	5
Jiang, D	8	Lombardo, A	5
Piscanec, S	8	Mohiuddin, T M G	5
Tikhonenko, F V	8	Mucha-Kruczynski, M	5
Warner, J H	8	Nicolosi, V	5
Yang, R	8	Srivastava, G P	5
Bangert, U	7	Adhikari, S	4
Buchner, B	7	Bachmatiuk, A	4
Giesbers, A J M	7	Basko, D M	4

Table 2.2a provides an in-depth profile of the UK authors from Table 2.2.

Table 2.2a. Detailed Profile of Top Authors Affiliated with Graphene Research in the UK (2000-2010)

Authors	Publication Year	Co-Authors	Journal	Author Affiliations (Name Only)
Top UK Affiliated Authors	**Top Items**	**Top Items**	**Top Items**	**Top Items**
Geim, A K[59]	2009 [16]; 2007 [15]; 2008 [14]; 2010 [8]; 2006 [5]	Novoselov, K S [44]; Katsnelson, M I [19]; Morozov, S V [17]; Blake, P [14]	Phys. Rev. B [9]; Phys. Rev. Lett [8]; Science [5]; Appl. Phys. Lett [4]; Nano Lett [3]; Nat. Mater [3]; Nat. Phys [3]; Solid State Commun [3]	Univ Manchester [59]; Radboud Univ Nijmegen [19]; Russian Acad Sci [9]; Univ Cambridge [8]; CSIC [6]
Novoselov, K S[55]	2009 [16]; 2007 [14]; 2008 [13]; 2010 [7]; 2006 [4]	Geim, A K [44]; Morozov, S V [17]; Katsnelson, M I [16]; Blake, P [14]	Phys. Rev. B [10]; Phys. Rev. Lett [7]; Nano Lett [5]; Appl. Phys. Lett [4]; Science [4]; Solid State Commun [4]	Univ Manchester [55]; Radboud Univ Nijmegen [18]; Univ Cambridge [10]; Russian Acad Sci [9]; Boston Univ [4]; CSIC [4]; Inst Microelect Technol [4]; Univ Minho [4]
Fal'ko, V I[27]	2007 [9]; 2009 [6]; 2008 [5]; 2006 [4]; 2010 [3]	McCann, E [11]; Abergel, D S L [6]; Kechedzhi, K [6]; Altshuler, B L [5]; Cheianov, V V [5]; Mucha-Kruczynski, M [5]	Phys. Rev. B [6]; Phys. Rev. Lett [6]; Solid State Commun [5]; Eur. Phys. J.-Spec. Top [3]; Appl. Phys. Lett [2]	Univ Lancaster [27]; Columbia Univ [5]; Hokkaido Univ [2]; Tokyo Inst Technol [2]; Univ Birmingham [2]; Univ Exeter [2]; Univ Manchester [2]; Univ Oslo [2]; Univ Paris 11 [2]

Ferrari, A C[26]	2009 [9]; 2008 [6]; 2007 [5]; 2010 [5]	Novoselov, K S [10]; Geim, A K [8]; Piscanec, S [8]; Casiraghi, C [5]; Lombardo, A [5]	Phys. Rev. B [4]; ACS Nano [3]; Nano Lett [3]; Appl. Phys. Lett [2]; Nat. Nanotechnol [2]; Phys. Status Solidi B-Basic Solid State Phys [2]	Univ Cambridge [26]; Univ Manchester [10]; CNRS [4]; Univ Grenoble 1 [4]; Univ Munich [3]; Univ Paris 06 [3]; Univ Paris 07 [3]
Katsnelson, M I[23]	2007 [6]; 2008 [6]; 2009 [4]; 2006 [3]; 2010 [3]	Geim, A K [19]; Novoselov, K S [16]; Morozov, S V [8]; Ponomarenko, L A [6]; Schedin, F [6]	Phys. Rev. Lett [5]; Phys. Rev. B [4]; Nat. Phys [3]; Nano Lett [2]; Nature [2]; Science [2]; Solid State Commun [2]	Univ Manchester [22]; Radboud Univ Nijmegen [18]; Russian Acad Sci [6]; CSIC [3]; Inst Microelect Technol [2]; Max Planck Inst Solid State Res [2]; Univ Hamburg [2]; Univ Nijmegen [2]
McCann, E[19]	2007 [6]; 2009 [5]; 2006 [3]; 2010 [3]; 2008 [2]	Fal'ko, V I [11]; Abergel, D S L [4]; Koshino, M [4]; Mucha-Kruczynski, M [4]	Phys. Rev. B [6]; Phys. Rev. Lett [3]; Solid State Commun [3]; Eur. Phys. J.-Spec. Top [2]	Univ Lancaster [19]; Tokyo Inst Technol [6]; Columbia Univ [3]; Hokkaido Univ [2]

Morozov, S V[17]	2007 [4]; 2008 [4]; 2009 [4]; 2006 [2]; 2010 [2]	Geim, A K [17]; Novoselov, K S [17]; Katsnelson, M I [8]; Schedin, F [7]	Phys. Rev. Lett [4]; Nano Lett [2]; Science [2]	Univ Manchester [17]; Russian Acad Sci [9]; Radboud Univ Nijmegen [6]; Inst Microelect Technol [4]; Boston Univ [2]; CSIC [2]; Graphene Ind Ltd [2]; Univ Minho [2]; Univ Nijmegen [2]; Univ Nijmegen St Radboud Hosp [2]; Univ Porto [2]
Blake, P[16]	2009 [6]; 2007 [3]; 2008 [3]; 2010 [3]	Geim, A K [14]; Novoselov, K S [14]; Hill, E W [6]; Morozov, S V [6]; Nair, R R [6]	Appl. Phys. Lett [3]; Phys. Rev. B [3]; Nano Lett [2]; Science [2]	Univ Manchester [16]; Radboud Univ Nijmegen [4]; Russian Acad Sci [4]; Graphene Ind Ltd [3]; Univ Geneva [3]
Nair, R R[15]	2009 [7]; 2008 [6]; 2010 [2]	Geim, A K [12]; Novoselov, K S [10]; Bangert, U [6]; Blake, P [6]	Phys. Rev. B [3]; Phys. Status Solidi A-Appl. Mat [3]; ACS Nano [2]; Nano Lett [2]; Science [2]	Univ Manchester [15]; Russian Acad Sci [3]; Univ Cambridge [3]; CCLRC Daresbury Lab [2]; CNRS [2]; Graphene Ind Ltd [2]; Radboud Univ Nijmegen [2]; Univ Exeter [2]; Univ Newcastle Upon Tyne [2]

Savchenko, A K[12]	2008 [5]; 2009 [3]; 2010 [3]	Tikhonenko, F V [8]; Gorbachev, R V [7]; Horsell, D W [7]; Fal'ko, V I [2]; Kechedzhi, K [2]; Kozikov, A A [2]; Lerner, I V [2]; Mayorov, A S [2]	Phys. Rev. Lett [5]; Philos. Trans. R. Soc. A-Math. Phys. Eng. Sci [2]; Phys. Rev. B [2]; Physica E [2]	Univ Exeter [12]; Univ Birmingham [2]; Univ Lancaster [2]
Ponomarenko, L A[11]	2009 [4]; 2008 [3]; 2007 [2]	Geim, A K [9]; Novoselov, K S [9]; Katsnelson, M I [6]; Morozov, S V [6]	Phys. Rev. Lett [3]; Phys. Rev. B [2]	Univ Manchester [11]; Radboud Univ Nijmegen [8]; Inst Microelect Technol [3]; Russian Acad Sci [3]; Graphene Ind Ltd [2]
Briddon, P R[10]	2008 [5]; 2009 [2]; 2010 [2]	Jones, R [7]; Goss, J P [3]; Bangert, U [2]; Bleloch, A L [2]; Eberlein, T [2]; Eberlein, T A G [2]; Gass, M [2]; Geim, A [2]; Nair, R R [2]; Novoselov, K S [2]; Peres, N M R [2]; Pinto, H [2]; Ribeiro, R M [2]	Phys. Rev. B [4]; Phys. Status Solidi A-Appl. Mat [3]	Univ Exeter [7]; Newcastle Univ [4]; Univ Newcastle [3]; Univ Manchester [2]; Univ Minho [2]; Univ Newcastle Upon Tyne [2]

Zeitler, U[10]	2007 [3]; 2008 [3]; 2009 [2]	Novoselov, K S [8]; Geim, A K [7]; Giesbers, A J M [7]; Maan, J C [7]	Phys. Rev. B [2]; Phys. Rev. Lett [2]	Univ Manchester [10]; Radboud Univ Nijmegen [8]; Univ Nijmegen St Radboud Hosp [2]
Hill, E W[9]	2007 [3]; 2008 [3]; 2009 [2]	Geim, A K [9]; Novoselov, K S [8]; Blake, P [6]; Morozov, S V [5]; Schedin, F [5]	Nano Lett [2]	Univ Manchester [9]; Radboud Univ Nijmegen [4]; Russian Acad Sci [4]; Graphene Ind Ltd [3]
Schedin, F[9]	2006 [3]; 2008 [3]; 2009 [2]	Geim, A K [9]; Novoselov, K S [8]; Morozov, S V [7]; Katsnelson, M I [6]	Phys. Rev. Lett [3]	Univ Manchester [9]; Russian Acad Sci [6]; Radboud Univ Nijmegen [2]; Univ Nijmegen [2]
Altshuler, B L[8]	2007 [4]; 2009 [2]	Cheianov, V V [5]; Fal'ko, V I [5]; Kechedzhi, K [3]; McCann, E [3]; Syljuasen, O [3]	Phys. Rev. Lett [3]; Solid State Commun [2]	Columbia Univ [8]; Univ Lancaster [8]; Univ Oslo [3]; Hokkaido Univ [2]; Tokyo Inst Technol [2]
Cheianov, V V[8]	2007 [3]; 2006 [2]; 2009 [2]	Altshuler, B L [5]; Fal'ko, V I [5]; Syljuasen, O [3]; Fal'ko, V [2]	Phys. Rev. B [2]; Phys. Rev. Lett [2]	Univ Lancaster [8]; Columbia Univ [5]; Univ Oslo [3]

Jiang, D[8]	2006 [3]; 2007 [2]; 2008 [2]	Geim, A K [8]; Novoselov, K S [8]; Morozov, S V [5]; Blake, P [4]; Booth, T J [4]; Hill, E W [4]; Katsnelson, M I [4]	Nano Lett [2]; Phys. Rev. Lett [2]	Univ Manchester [8]; Graphene Ind Ltd [3]; Radboud Univ Nijmegen [3]; Russian Acad Sci [3]; Inst Microelect Technol [2]
Piscanec, S[8]	2008 [3]; 2009 [3]	Ferrari, A C [8]; Novoselov, K S [3]; Basko, D M [2]; Casiraghi, C [2]; Cervantes-Sodi, F [2]; Chakraborty, B [2]; Csanyi, G [2]; Das, A [2]; Geim, A K [2]; Lazzeri, M [2]; Mauri, F [2]; Pisana, S [2]; Sood, A K [2]	Phys. Rev. B [3]	Univ Cambridge [8]; Univ Manchester [3]; CNRS [2]; Indian Inst Sci [2]; Univ Grenoble 1 [2]; Univ Paris 06 [2]; Univ Paris 07 [2]
Tikhonenko, F V[8]	2008 [4]; 2009 [3]	Savchenko, A K [8]; Gorbachev, R V [7]; Horsell, D W [7]; Fal'ko, V I [2]; Kechedzhi, K [2]; Lerner, I V [2]; Mayorov, A S [2]	Phys. Rev. Lett [4]; Physica E [2]	Univ Exeter [8]; Univ Birmingham [2]; Univ Lancaster [2]

Warner, J H[8]	2009 [5]; 2010 [3]	Buchner, B [7]; Rummeli, M H [7]; Bachmatiuk, A [4]; Schaffel, F [3]	Nanotechnology [2]	Univ Oxford [8]; IFW Dresden [7]
Yang, R[8]	2009 [3]; 2007 [2]; 2008 [2]	Geim, A K [7]; Novoselov, K S [7]; Ponomarenko, L A [5]; Hill, E W [4]	Appl. Phys. Lett [2]	Univ Manchester [8]; Radboud Univ Nijmegen [5]; Russian Acad Sci [2]
Bangert, U[7]	2008 [4]; 2009 [2]	Nair, R R [6]; Bleloch, A L [5]; Gass, M H [4]; Gass, M [3]; Geim, A K [3]; Novoselov, K S [3]	Phys. Status Solidi A-Appl. Mat [3]; Phys. Rev. B [2]	Univ Manchester [7]; CCLRC Daresbury Lab [2]; Univ Exeter [2]; Univ Newcastle Upon Tyne [2]
Buchner, B[7]	2009 [5]; 2010 [2]	Rummeli, M H [7]; Warner, J H [7]; Bachmatiuk, A [4]; Schaffel, F [3]	None	IFW Dresden [7]; Univ Oxford [7]
Giesbers, A J M[7]	2008 [3]; 2009 [2]	Zeitler, U [7]; Maan, J C [6]; Novoselov, K S [5]; Ponomarenko, L A [5]	Phys. Rev. B [2]	Radboud Univ Nijmegen [7]; Univ Manchester [7]

Gorbachev, R V[7]	2008 [4]; 2009 [2]	Savchenko, A K [7]; Tikhonenko, F V [7]; Horsell, D W [6]; Mayorov, A S [2]	Phys. Rev. Lett [4]; Physica E [2]	Univ Exeter [7]
Guinea, F[7]	2010 [4]; 2009 [2]	Geim, A K [6]; Novoselov, K S [4]; Katsnelson, M I [3]; Peres, N M R [3]	Phys. Rev. B [3]	CSIC [7]; Univ Manchester [6]; Boston Univ [3]; Radboud Univ Nijmegen [3]; Univ Minho [3]
Horsell, D W[7]	2008 [4]; 2009 [2]	Savchenko, A K [7]; Tikhonenko, F V [7]; Gorbachev, R V [6]; Fal'ko, V I [2]; Kechedzhi, K [2]; Lerner, I V [2]; Mayorov, A S [2]	Phys. Rev. Lett [3]; Physica E [2]	Univ Exeter [7]; Univ Birmingham [2]; Univ Lancaster [2]
Jones, R[7]	2008 [4]	Briddon, P R [7]; Goss, J P [3]; Bangert, U [2]; Bleloch, A L [2]; Eberlein, T [2]; Eberlein, T A G [2]; Gass, M [2]; Geim, A [2]; Nair, R R [2]; Novoselov, K S [2]; Pinto, H [2]	Phys. Rev. B [3]; Phys. Status Solidi A-Appl. Mat [3]	Univ Exeter [7]; Univ Newcastle [3]; Univ Manchester [2]; Univ Newcastle Upon Tyne [2]

Kechedzhi, K[7]	2007 [3]; 2009 [2]	Fal'ko, V I [6]; Altshuler, B L [3]; McCann, E [3]; Ando, T [2]; Horsell, D W [2]; Lerner, I V [2]; Savchenko, A K [2]; Suzuura, H [2]; Tikhonenko, F V [2]	Phys. Rev. Lett [4]; Solid State Commun [2]	Univ Lancaster [7]; Columbia Univ [3]; Hokkaido Univ [2]; Tokyo Inst Technol [2]; Univ Birmingham [2]; Univ Exeter [2]; Univ Paris 11 [2]
Maan, J C[7]	2008 [3]; 2007 [2]; 2009 [2]	Zeitler, U [7]; Giesbers, A J M [6]; Novoselov, K S [5]; Geim, A K [4]; Ponomarenko, L A [4]	Phys. Rev. B [2]	Univ Manchester [7]; Radboud Univ Nijmegen [6]
Peres, N M R[7]	2008 [3]; 2009 [2]	Geim, A K [5]; Novoselov, K S [4]; Guinea, F [3]; Neto, A H C [3]	Phys. Rev. B [2]	Univ Minho [7]; Univ Manchester [5]; Boston Univ [4]; CSIC [3]; Newcastle Univ [2]; Univ Porto [2]
Rummeli, M H[7]	2009 [5]; 2010 [2]	Buchner, B [7]; Warner, J H [7]; Bachmatiuk, A [4]; Schaffel, F [3]	None	IFW Dresden [7]; Univ Oxford [7]

Schomerus, H[7]	2009 [3]; 2007 [2]	Prada, E [3]; San-Jose, P [3]; Oroszlany, L [2]; Robinson, J P [2]	Phys. Rev. B [5]; Phys. Rev. Lett [2]	Univ Lancaster [7]
Abergel, D S L[6]	2007 [5]	Fal'ko, V I [6]; McCann, E [4]	Eur. Phys. J.-Spec. Top [2]	Univ Lancaster [6]
Booth, T J[6]	2007 [3]; 2008 [3]	Geim, A K [6]; Novoselov, K S [6]; Blake, P [5]; Hill, E W [4]; Jiang, D [4]	Nano Lett [2]	Univ Manchester [6]; Graphene Ind Ltd [3]; Radboud Univ Nijmegen [3]
Pachos, J K[6]	2007 [2]; 2008 [2]; 2009 [2]	Stone, M [3]; Benjamin, C [2]	Phys. Rev. B [2]	Univ Leeds [5]; Univ Illinois [3]
Bleloch, A L[5]	2008 [3]; 2009 [2]	Bangert, U [5]; Nair, R R [5]; Gass, M H [3]; Briddon, P R [2]; Eberlein, T [2]; Gass, M [2]; Geim, A [2]; Geim, A K [2]; Jones, R [2]; Novoselov, K S [2]	Phys. Status Solidi A-Appl. Mat [3]	Univ Manchester [5]; CCLRC Daresbury Lab [2]; Univ Exeter [2]; Univ Newcastle Upon Tyne [2]

Casiraghi, C[5]	2007 [3]	Ferrari, A C [5]; Novoselov, K S [5]; Geim, A K [3]; Hartschuh, A [2]; Lazzeri, M [2]; Mauri, F [2]; Pisana, S [2]; Piscanec, S [2]; Qian, H [2]	Nano Lett [2]	Univ Cambridge [5]; Univ Manchester [5]; Univ Munich [2]; Univ Paris 06 [2]; Univ Paris 07 [2]
Cserti, J[5]	2008 [2]; 2010 [2]	Kormanyos, A [5]; Rakyta, P [4]; Oroszlany, L [2]	Phys. Rev. B [5]	Eotvos Lorand Univ [5]; Univ Lancaster [5]
Fal'ko, V[5]	2007 [2]; 2009 [2]	Altshuler, B L [2]; Cheianov, V V [2]	None	Univ Lancaster [5]; Columbia Univ [3]
Kormanyos, A[5]	2008 [2]; 2010 [2]	Cserti, J [5]; Rakyta, P [4]; Oroszlany, L [2]	Phys. Rev. B [5]	Eotvos Lorand Univ [5]; Univ Lancaster [5]
Lombardo, A[5]	2009 [4]	Ferrari, A C [5]; Bonetti, A [3]; Fasoli, A [2]; Geim, A K [2]; Nair, R R [2]; Novoselov, K S [2]	ACS Nano [2]	Univ Cambridge [5]; Univ Manchester [2]

Mohiuddin, T M G[5]	2009 [3]; 2008 [2]	Geim, A K [3]; Novoselov, K S [3]; Elias, D C [2]; Ferrari, A C [2]; Katsnelson, M I [2]; Morozov, S V [2]; Nair, R R [2]	None	Univ Manchester [5]; Radboud Univ Nijmegen [2]; Russian Acad Sci [2]; Univ Cambridge [2]
Mucha-Kruczynski, M[5]	2009 [2]; 2010 [2]	Fal'ko, V I [5]; McCann, E [4]	Phys. Rev. B [2]	Univ Lancaster [5]
Nicolosi, V[5]	2010 [3]	Blighe, F M [2]; Coleman, J N [2]; De, S [2]; Duesberg, G S [2]; Ferrari, A C [2]; Hernandez, Y [2]; Lotya, M [2]; McGovern, I T [2]	None	Univ Oxford [5]; Trinity Coll Dublin [3]; Univ Cambridge [2]
Srivastava, G P[5]	2009 [2]; 2010 [2]	AlZahrani, A Z [3]; Miwa, R H [2]; Veiga, R G A [2]	Appl. Surf. Sci [2]	Univ Exeter [5]; Univ Fed Uberlandia [2]
Adhikari, S[4]	2010 [3]	Scarpa, F [4]; Gil, A J [2]	Nanotechnology [2]	Univ Bristol [4]; Swansea Univ [3]

Bachmatiuk, A[4]	2009 [2]; 2010 [2]	Buchner, B [4]; Rummeli, M H [4]; Warner, J H [4]; Rellinghaus, B [2]; Schaffel, F [2]; Schultz, L [2]	None	IFW Dresden [4]; Univ Oxford [4]
Basko, D M[4]	2009 [3]	Ferrari, A C [4]; Novoselov, K S [2]; Piscanec, S [2]	Phys. Rev. B [2]	CNRS [4]; Univ Cambridge [4]; Univ Grenoble 1 [4]; Univ Manchester [2]

Table 2.3 lists the most highly cited UK graphene papers published between 2000 and 2010, inclusive.

Table 2.3. Top 25 Most Highly Cited UK Graphene Papers (2000-2010)

Title	TC
Two-dimensional gas of massless Dirac fermions in graphene	2,444
The rise of graphene	2,148
The electronic properties of graphene	998
Raman spectrum of graphene and graphene layers	615
Chiral tunnelling and the Klein paradox in graphene	539
Detection of individual gas molecules adsorbed on graphene	503
The structure of suspended graphene sheets	469
Unconventional quantum Hall effect and Berry's phase of 2 pi in bilayer graphene	440
Room-temperature quantum hall effect in graphene	358
Strong suppression of weak localization in graphene	260
Graphene: Status and Prospects	256
Giant intrinsic carrier mobilities in graphene and its bilayer	239
Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane	224
Fine structure constant defines visual transparency of graphene	218
Asymmetry gap in the electronic band structure of bilayer graphene	215
Biased bilayer graphene: Semiconductor with a gap tunable by the electric field effect	214
High-yield production of graphene by liquid-phase exfoliation of graphite	199
Weak-localization magnetoresistance and valley symmetry in graphene	192
Selective transmission of Dirac electrons and ballistic magnetoresistance of n-p junctions in graphene	185
Breakdown of the adiabatic Born-Oppenheimer approximation in graphene	180
Chaotic dirac billiard in graphene quantum dots	177
Raman spectroscopy of graphene and graphite: Disorder, electron-phonon coupling, doping and nonadiabatic effects	162
Monitoring dopants by Raman scattering in an electrochemically top-gated graphene transistor	161
Making graphene visible	157
The focusing of electron flow and a Veselago lens in graphene p-n junctions	153

Table 2.3a provides a more detailed listing of the papers listed in Table 2.3.

Table 2.3a. Detailed Profile of the Top 25 Most Highly Cited UK Graphene Papers Published Between 2000 and 2010

Title	Authors	Author Affiliations (Name Only)	Keywords (author's) + Keywords Plus (Cleaned)	Subject Category
Most Highly Cited UK Graphene Publications	**Top Items**	**Top Items**	**Top Items**	**Top Items**
Two-dimensional gas of massless Dirac fermions in graphene[1]	Dubonos, S V [1]; Firsov, A A [1]; Geim, A K [1]; Grigorieva, I V [1]; Jiang, D [1]	Radboud Univ Nijmegen [1]; Russian Acad Sci [1]; Univ Manchester [1]	graphite [1]; STATE [1]	Multidisciplinary Sciences [1]
The rise of graphene[1]	Geim, A K [1]; Novoselov, K S [1]	Univ Manchester [1]	Berry phase [1]; Bilayer graphene [1]; Dirac fermion [1]; Electronic structure [1]; film [1]	Chemistry, Physical [1]; Materials Science, Multidisciplinary [1]; Physics, Applied [1]; Physics, Condensed Matter [1]
The electronic properties of graphene[1]	Castro Neto, A H [1]; Geim, A K [1]; Guinea, F [1]; Novoselov, K S [1]; Peres, N M R [1]	Boston Univ [1]; CSIC [1]; Univ Manchester [1]; Univ Minho [1]	Bilayer graphene [1]; carbon [1]; d-Wave superconductor [1]; Dirac fermion [1]; DISORDERED DEGENERATE SEMICONDUCTORS [1]	Physics, Multidisciplinary [1]
Raman spectrum of graphene and graphene layers[1]	Casiraghi, C [1]; Ferrari, A C [1]; Geim, A K [1]; Jiang, D [1]; Lazzeri, M [1]	Max Planck Inst Solid State Res [1]; Univ Cambridge [1]; Univ Manchester [1]; Univ Paris 06 [1]; Univ Paris 07 [1]	Berry phase [1]; CRYSTAL [1]; GAS [1]; graphite [1]; ROUTE [1]	Physics, Multidisciplinary [1]

Chiral tunnelling and the Klein paradox in graphene[1]	Geim, A K [1]; Katsnelson, M I [1]; Novoselov, K S [1]	Radboud Univ Nijmegen [1]; Univ Manchester [1]	Berry phase [1]; Carbon nanotube [1]	Physics, Multidisciplinary [1]
Detection of individual gas molecules adsorbed on graphene[1]	Blake, P [1]; Geim, A K [1]; Hill, E W [1]; Katsnelson, M I [1]; Morozov, S V [1]	Russian Acad Sci [1]; Univ Manchester [1]; Univ Nijmegen [1]	Carbon nanotube [1]; sensor [1]; SHEET [1]	Chemistry, Physical [1]; Materials Science, Multidisciplinary [1]; Physics, Applied [1]; Physics, Condensed Matter [1]
The structure of suspended graphene sheets[1]	Booth, T J [1]; Geim, A K [1]; Katsnelson, M I [1]; Meyer, J C [1]; Novoselov, K S [1]	Max Planck Inst Solid State Res [1]; Radboud Univ Nijmegen [1]; Univ Manchester [1]	Carbon nanotube [1]; CRYSTALLINE [1]; film [1]; growth [1]; Membrane [1]	Multidisciplinary Sciences [1]
Unconventional quantum Hall effect and Berry's phase of 2 pi in bilayer graphene[1]	Fal'ko, V I [1]; Geim, A K [1]; Jiang, D [1]; Katsnelson, M I [1]; McCann, E [1]	Russian Acad Sci [1]; Univ Lancaster [1]; Univ Manchester [1]; Univ Nijmegen St Radboud Hosp [1]	graphite [1]	Physics, Multidisciplinary [1]
Room-temperature quantum hall effect in graphene[1]	Boebinger, G S [1]; Geim, A K [1]; Jiang, Z [1]; Kim, P [1]; Maan, J C [1]	Columbia Univ [1]; Natl High Magnet Field Lab [1]; Univ Manchester [1]; Univ Nijmegen St Radboud Hosp [1]	None	Multidisciplinary Sciences [1]
Strong suppression of weak localization in graphene[1]	Geim, A K [1]; Jiang, D [1]; Katsnelson, M I [1]; Morozov, S V [1]; Novoselov, K S [1]	Inst Microelect Technol [1]; Raboud Univ Nijmegen [1]; Univ Manchester [1]	Berry phase [1]; graphite [1]; magnetic field [1]; QUANTUM [1]	Physics, Multidisciplinary [1]

Graphene: Status and Prospects[1]	Geim, A K [1]	Univ Manchester [1]	film [1]; Graphene layer [1]; graphite [1]; Membrane [1]; SHEET [1]	Multidisciplinary Sciences [1]
Giant intrinsic carrier mobilities in graphene and its bilayer[1]	Elias, D C [1]; Geim, A K [1]; Jaszczak, J A [1]; Katsnelson, M I [1]; Morozov, S V [1]	Michigan Technol Univ [1]; Russian Acad Sci [1]; Univ Manchester [1]; Univ Nijmegen [1]	Berry phase [1]; GAS [1]; SHEET [1]; transport [1]	Physics, Multidisciplinary [1]
Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane[1]	Blake, P [1]; Boukhvalov, D W [1]; Elias, D C [1]; Ferrari, A C [1]; Geim, A K [1]	Radboud Univ Nijmegen [1]; Russian Acad Sci [1]; Univ Cambridge [1]; Univ Manchester [1]	Carbon nanotube [1]; graphite [1]; hydrogen atom [1]; Membrane [1]; oxide [1]	Multidisciplinary Sciences [1]
Fine structure constant defines visual transparency of graphene[1]	Blake, P [1]; Booth, T J [1]; Geim, A K [1]; Grigorenko, A N [1]; Nair, R R [1]	Univ Manchester [1]; Univ Minho [1]	None	Multidisciplinary Sciences [1]
Asymmetry gap in the electronic band structure of bilayer graphene[1]	McCann, E [1]	Univ Lancaster [1]	Berry phase [1]; Carbon nanotube [1]; CONDUCTION [1]; graphite [1]; INTERCALATION COMPOUNDS [1]	Physics, Condensed Matter [1]
Biased bilayer graphene: Semiconductor with a gap tunable by the electric field effect[1]	Castro, E V [1]; dos Santos, J M B L [1]; Geim, A K [1]; Guinea, F [1]; Morozov, S V [1]	Boston Univ [1]; CSIC [1]; Harvard Univ [1]; Univ Manchester [1]; Univ Minho [1]	Berry phase [1]; HALL [1]	Physics, Multidisciplinary [1]

High-yield production of graphene by liquid-phase exfoliation of graphite[1]	Blighe, F M [1]; Boland, J J [1]; Byrne, M [1]; Coleman, J N [1]; De, S [1]	Trinity Coll Dublin [1]; Univ Cambridge [1]; Univ Oxford [1]	AMIDE SOLVENTS [1]; Dispersion [1]; Epitaxial graphene [1]; film [1]; nanosheets [1]	Materials Science, Multidisciplinary [1]; Nanoscience & Nanotechnology [1]
Weak-localization magnetoresistance and valley symmetry in graphene[1]	Altshuler, B L [1]; Ando, T [1]; Fal'ko, V I [1]; Kechedzhi, K [1]; McCann, E [1]	Columbia Univ [1]; Hokkaido Univ [1]; Tokyo Inst Technol [1]; Univ Lancaster [1]	Berry phase [1]; Carbon nanotube [1]; GAS [1]; SYSTEM [1]; transport [1]	Physics, Multidisciplinary [1]
Selective transmission of Dirac electrons and ballistic magnetoresistance of n-p junctions in graphene[1]	Cheianov, V V [1]; Fal'ko, V I [1]	Univ Lancaster [1]	Berry phase [1]; graphite [1]	Physics, Condensed Matter [1]
Breakdown of the adiabatic Born-Oppenheimer approximation in graphene[1]	Casiraghi, C [1]; Ferrari, A C [1]; Geim, A K [1]; Lazzeri, M [1]; Mauri, F [1]	Univ Cambridge [1]; Univ Manchester [1]; Univ Paris 06 [1]; Univ Paris 07 [1]	METAL-SURFACE [1]; quantum theory [1]	Chemistry, Physical [1]; Materials Science, Multidisciplinary [1]; Physics, Applied [1]; Physics, Condensed Matter [1]
Chaotic dirac billiard in graphene quantum dots[1]	Geim, A K [1]; Hill, E W [1]; Katsnelson, M I [1]; Novoselov, K S [1]; Ponomarenko, L A [1]	Radboud Univ Nijmegen [1]; Univ Manchester [1]	nanoribbon [1]	Multidisciplinary Sciences [1]

Raman spectroscopy of graphene and graphite: Disorder, electron-phonon coupling, doping and nonadiabatic effects[1]	Ferrari, A C [1]	Univ Cambridge [1]	AMORPHOUS-CARBON [1]; carbon [1]; CRYSTAL [1]; DIAMOND-LIKE CARBON [1]; Dispersion [1]	Physics, Condensed Matter [1]
Monitoring dopants by Raman scattering in an electrochemically top-gated graphene transistor[1]	Chakraborty, B [1]; Das, A [1]; Ferrari, A C [1]; Geim, A K [1]; Krishnamurthy, H R [1]	Indian Inst Sci [1]; Jawaharlal Nehru Ctr Adv Sci Res [1]; Univ Cambridge [1]; Univ Manchester [1]	APPROXIMATION [1]; FIELD [1]; film [1]; graphite [1]; LAYER [1]	Materials Science, Multidisciplinary [1]; Nanoscience & Nanotechnology [1]
Making graphene visible[1]	Blake, P [1]; Booth, T J [1]; Geim, A K [1]; Hill, E W [1]; Jiang, D [1]	Boston Univ [1]; Univ Manchester [1]	film [1]	Physics, Applied [1]
The focusing of electron flow and a Veselago lens in graphene p-n junctions[1]	Altshuler, B L [1]; Cheianov, V V [1]; Fal'ko, V [1]	Columbia Univ [1]; NEC Labs Amer [1]; Univ Lancaster [1]	Berry phase [1]; Bilayer graphene [1]; graphite [1]; QUANTUM [1]	Multidisciplinary Sciences [1]

Table 2.4. Top UK Funding Agency Data for Graphene Research (based on the funding agency acknowledgements field of the publication)

Funding Organization	# Records
Engineering and Physical Sciences Research Council	65
Royal Society	34
European Union	22
European Research Council	15
National Science Foundation	11
Air Force	7
Department of Energy	7
Deutsche Forschungsgemeinschaft	7
Office of Naval Research	7
Stichting Fundamenteel Onderzoek der Materie (FOM)	6
Leverhulme Trust	5
Brasenose College	4
Army Reseach Office	3
Cambridge University	3
Comunidad de Madrid, through CITECNOMIK	3
Consolider	3
ESF CRP SpiCo	3
Glasstone Fund	3
Hungarian Science Foundation OTKA	3
Imperial College London	3
MEC-Spain	3
Palermo University	3
Science Foundation Ireland	3
Swiss National Science Foundation (SNSF)	3
University of Oxford	3

Note: Multiple funding sources can be acknowledged in a paper.

3. US Graphene Profile

Table 3.1. Top 50 US Affiliations for Graphene Research (2000-2010)

Author Affiliations (Name Only)	# Records	Author Affiliations (Name Only)	# Records
Univ Calif Berkeley	101	Rutgers State Univ	25
Univ Texas Austin	82	Indiana Univ	23
Columbia Univ	80	Natl Inst Stand & Technol	23
Georgia Inst Technol	77	Sandia Natl Labs	23
Boston Univ	71	Univ Utah	23
Univ Maryland	69	Pacific NW Natl Lab	21
MIT	68	Univ Penn	21
Univ Calif Riverside	51	Arizona State Univ	20
Rice Univ	39	N Carolina State Univ	18
Stanford Univ	39	Rensselaer Polytech Inst	17
Purdue Univ	38	Univ Houston	17
Univ Calif Los Angeles	38	Univ Minnesota	17
Princeton Univ	37	Natl High Magnet Field Lab	16
Northwestern Univ	36	Univ Washington	16
Penn State Univ	36	Oklahoma State Univ	15
Lawrence Berkeley Natl Lab	34	Univ Notre Dame	15
Univ Illinois	34	Univ Calif San Diego	13
Harvard Univ	31	Univ Nebraska	13
Cornell Univ	30	Univ Wisconsin	13
Oak Ridge Natl Lab	30	Argonne Natl Lab	12
USN	30	SUNY Buffalo	12
Los Alamos Natl Lab	27	Univ Texas	12
Brookhaven Natl Lab	26	Brown Univ	11
Univ Florida	26	Univ Cent Florida	11
IBM Corp	25	Florida State Univ	10

Note: Includes organizations with 10 or more publications.

Table 3.1a provides a more in-depth analysis of the US institutions from Table 5.

Table 3.1a. Detailed Profile of the Top US Affiliations involved in Graphene Research (2000-2010)

Author Affiliations (Name Only)	Publication Year	Authors	Journal	Keywords (author's) + Keywords Plus (Cleaned)
Top US Affiliations	**Top Items**	**Top Items**	**Top Items**	**Top Items**
Univ Calif Berkeley[101]	2010 [32]; 2008 [28]; 2009 [26]; 2007 [10]; 2006 [4]	Louie, S G [22]; Zettl, A [20]; Cohen, M L [18]; Park, C H [15]; Crommie, M F [13]	Phys. Rev. Lett [18]; Phys. Rev. B [16]; Nano Lett [14]; Appl. Phys. Lett [10]; Nat. Mater [4]; Nat. Phys [4]; Science [4]	graphite [34]; GAS [20]; Carbon nanotube [19]; film [18]; Graphene [17]
Univ Texas Austin[82]	2009 [32]; 2010 [31]; 2008 [18]	MacDonald, A H [31]; Ruoff, R S [31]; Park, S [14]; Zhu, Y W [13]; Piner, R D [12]	Phys. Rev. B [25]; Phys. Rev. Lett [7]; Nano Lett [6]; Appl. Phys. Lett [5]; J. Phys. Chem. C [4]	Graphene [21]; film [19]; graphite [19]; SHEET [14]; EXFOLIATED GRAPHITE OXIDE [11]
Columbia Univ[80]	2009 [23]; 2007 [22]; 2008 [19]; 2010 [11]; 2006 [4]	Kim, P [45]; Stormer, H L [18]; Heinz, T F [13]; Jiang, Z [12]; Zhang, Y [10]	Phys. Rev. Lett [23]; Phys. Rev. B [11]; Solid State Commun [8]; Nano Lett [6]; Nature [4]	graphite [31]; Graphene [16]; Berry phase [13]; GAS [12]; Carbon nanotube [10]; film [10]

Georgia Inst Technol[77]	2010 [27]; 2009 [19]; 2008 [16]; 2007 [12]; 2006 [2]	de Heer, W A [36]; Berger, C [33]; First, P N [22]; Sprinkle, M [16]; Conrad, E H [13]	Phys. Rev. B [18]; Phys. Rev. Lett [16]; Appl. Phys. Lett [8]; IEEE Electron Device Lett [4]; Science [4]	graphite [36]; GAS [29]; Graphene [21]; Epitaxial graphene [15]; film [15]
Boston Univ[71]	2009 [19]; 2008 [18]; 2007 [16]; 2006 [8]; 2010 [8]	Neto, A H C [49]; Peres, N M R [30]; Guinea, F [26]; Nilsson, J [14]; Pereira, V M [11]	Phys. Rev. B [32]; Phys. Rev. Lett [19]; EPL [5]; Nat. Mater [2]; Solid State Commun [2]	graphite [27]; GAS [14]; Berry phase [9]; Dirac fermion [8]; band structure [7]
Univ Maryland[69]	2008 [22]; 2007 [17]; 2009 [15]; 2010 [14]	Das Sarma, S [41]; Hwang, E H [23]; Adam, S [16]; Fuhrer, M S [12]; Chen, J H [9]	Phys. Rev. B [32]; Phys. Rev. Lett [13]; Solid State Commun [6]; Appl. Phys. Lett [2]; J. Appl. Phys [2]; Physica E [2]	Graphene [13]; graphite [12]; transport [11]; GAS [10]; SYSTEM [9]
MIT[68]	2010 [24]; 2009 [23]; 2007 [10]; 2008 [9]	Dresselhaus, M S [17]; Kong, J [16]; Levitov, L S [14]; Reina, A [12]; Abanin, D A [11]	Phys. Rev. B [13]; Phys. Rev. Lett [13]; Nano Lett [8]; ACS Nano [4]; Appl. Phys. Lett [4]; Nanotechnology [4]	Graphene [17]; graphite [17]; Carbon nanotube [16]; film [9]; spectroscopy [9]

Univ Calif Riverside[51]	2009 [28]; 2008 [8]; 2010 [8]; 2007 [6]	Lau, C N [26]; Balandin, A A [19]; Bao, W Z [13]; Bao, W [12]; Miao, F [12]	Appl. Phys. Lett [13]; Phys. Rev. B [6]; Nano Lett [5]; Phys. Rev. Lett [4]; New J. Phys [3]	PHASE [16]; film [13]; Graphene [13]; graphite [12]; transport [8]; WALL CARBON NANOTUBE [8]
Rice Univ[39]	2010 [19]; 2009 [11]; 2008 [5]; 2006 [2]; 2007 [2]	Tour, J M [15]; Yakobson, B I [9]; Kosynkin, D V [8]; Ajayan, P M [7]; Lomeda, J R [7]; Sinitskii, A [7]	Nano Lett [8]; ACS Nano [6]; Nano Res [5]; Chem. Mat [3]; Phys. Rev. B [3]	Graphene [17]; Carbon nanotube [15]; film [14]; WALL CARBON NANOTUBE [11]; graphite oxide [10]; nanoribbon [10]; SHEET [10]
Stanford Univ[39]	2009 [12]; 2008 [11]; 2010 [11]; 2007 [3]; 2006 [2]	Dai, H J [19]; Wang, X R [11]; Wang, H L [9]; Li, X L [8]; Goldhaber-Gordon, D [6]	Phys. Rev. B [11]; J. Am. Chem. Soc [5]; Nano Res [4]; Phys. Rev. Lett [4]; ACS Nano [2]; Appl. Phys. Lett [2]; Nano Lett [2]; Nat. Nanotechnol [2]; Science [2]	Graphene [8]; graphite [7]; oxide [7]; SHEET [7]; Carbon nanotube [6]; film [6]

Purdue Univ[38]	2009 [16]; 2008 [10]; 2010 [8]; 2007 [3]	Chen, Y P [9]; Capano, M A [8]; Ye, P D [5]; Bolen, M L [4]; Hu, J P [4]; Low, T [4]; Lundstrom, M S [4]; Shen, T [4]; Wu, Y Q [4]; Yu, Q K [4]	Appl. Phys. Lett [12]; Phys. Rev. B [9]; Nano Lett [6]; IEEE Trans. Electron Devices [2]	film [10]; Graphene [10]; PHASE [9]; graphite [7]; Carbon nanotube [6]
Univ Calif Los Angeles[38]	2010 [21]; 2009 [9]; 2007 [4]; 2008 [4]	Kaner, R B [16]; Bai, J W [9]; Duan, X F [9]; Yang, Y [9]; Allen, M J [8]; Huang, Y [8]; Tung, V C [8]; Wang, K L [8]	Nano Lett [6]; Appl. Phys. Lett [5]; Adv. Mater [4]; Nat. Nanotechnol [4]; ACS Nano [3]	film [15]; SHEET [9]; Graphene [8]; Carbon nanotube [7]; graphite oxide [6]; nanosheets [6]
Princeton Univ[37]	2009 [12]; 2008 [9]; 2010 [9]; 2007 [5]; 2006 [2]	Aksay, I A [16]; Liu, J [11]; Lin, Y H [8]; Wang, J [6]; Wu, H [6]	Phys. Rev. Lett [8]; ACS Nano [5]; Phys. Rev. B [5]; Appl. Phys. Lett [2]; Nano Lett [2]; Talanta [2]	Graphene [14]; Carbon nanotube [11]; graphite [9]; functionalized graphene [5]; GAS [5]; graphite oxide [5]; oxide [5]; SHEET [5]
Northwestern Univ[36]	2010 [14]; 2009 [8]; 2008 [7]; 2007 [5]; 2006 [2]	Ruoff, R S [15]; Nguyen, S T [13]; Dikin, D A [12]; Stankovich, S [11]; Piner, R D [9]	J. Phys. Chem. C [5]; Nano Lett [5]; Carbon [3]; Adv. Mater [2]; Chem. Mat [2]; J. Am. Chem. Soc [2]; Nature [2]	film [16]; graphite [12]; Carbon nanotube [10]; graphite oxide [10]; reduction [9]

Penn State Univ[36]	2010 [12]; 2009 [9]; 2008 [5]; 2007 [3]; 2000 [2]; 2006 [2]	Zhu, J [8]; Eklund, P C [7]; Zou, K [6]; Liu, Y [5]; Crespi, V H [4]; Gutierrez, H R [4]; Jain, J K [4]; Joshi, P [4]; Lammert, P E [4]; Radovic, L R [4]; Robinson, J A [4]	Phys. Rev. B [11]; ACS Nano [5]; Appl. Phys. Lett [3]; Nano Lett [3]; Abstr. Pap. Am. Chem. Soc [2]; J. Am. Chem. Soc [2]; J. Phys.-Condes. Matter [2]; Phys. Rev. Lett [2]	graphite [10]; Graphene [9]; Carbon nanotube [7]; film [7]; oxide [6]
Lawrence Berkeley Natl Lab[34]	2008 [13]; 2010 [8]; 2007 [7]; 2009 [3]; 2006 [2]	Bostwick, A [10]; Rotenberg, E [10]; Cohen, M L [8]; Horn, K [8]; Ohta, T [8]; Seyller, T [8]	Phys. Rev. B [8]; Phys. Rev. Lett [5]; Nano Lett [3]; Nat. Phys [3]; Appl. Phys. Lett [2]; New J. Phys [2]	graphite [13]; GAS [9]; Berry phase [7]; Electronic structure [7]; ENERGY [7]
Univ Illinois[34]	2009 [11]; 2010 [11]; 2008 [7]; 2006 [3]; 2007 [2]	Kral, P [4]; Neto, A H C [4]; Uchoa, B [4]; Lyding, J W [3]; Pachos, J K [3]; Stone, M [3]	Phys. Rev. B [6]; Nano Lett [4]; Appl. Phys. Lett [3]; Phys. Rev. Lett [3]; ACS Nano [2]; Int. J. Mod. Phys. B [2]; J. Phys. Chem. C [2]	graphite [9]; Graphene [8]; Carbon nanotube [7]; Epitaxial graphene [4]; GAS [4]; Molecular dynamics [4]; SHEET [4]; spectroscopy [4]; STATE [4]; transport [4]; WALL CARBON NANOTUBE [4]

Harvard Univ[31]	2009 [13]; 2008 [9]; 2010 [6]; 2007 [3]	Marcus, C M [5]; Muller, M [4]; Sachdev, S [4]; Williams, J R [4]; DiCarlo, L [3]; Fritz, L [3]; Kaxiras, E [3]; Martin, J [3]; Meng, S [3]; Wang, W L [3]; Westervelt, R M [3]; Yacoby, A [3]	Phys. Rev. B [9]; Phys. Rev. Lett [4]; Nano Lett [3]; Nanotechnology [3]; Nat. Phys [3]	GAS [7]; Berry phase [5]; FERMI-LIQUID BEHAVIOR [5]; Carbon nanotube [4]; FIELD [4]; nanoribbon [4]; PHASE [4]
Cornell Univ[30]	2009 [11]; 2008 [8]; 2010 [7]; 2007 [4]	Spencer, M G [8]; Rana, F [7]; Shivaraman, S [7]; McEuen, P L [6]; Chandrashekhar, M [5]; van der Zande, A M [5]	Nano Lett [9]; Phys. Rev. B [8]; Appl. Phys. Lett [3]; Phys. Rev. Lett [2]	carbon [7]; film [6]; GAS [5]; Graphene [5]; Carbon nanotube [4]
Oak Ridge Natl Lab[30]	2009 [11]; 2010 [10]; 2008 [4]; 2007 [3]	Dai, S [6]; Jiang, D E [6]; Nardelli, M B [6]; Kim, K W [5]; Meunier, V [4]; Sumpter, B G [4]	Phys. Rev. B [11]; Phys. Rev. Lett [3]; J. Chem. Phys [2]; J. Phys. Chem. B [2]; J. Phys. Chem. C [2]; J. Phys.-Condes. Matter [2]	AUGMENTED-WAVE METHOD [9]; TOTAL-ENERGY CALCULATIONS [8]; BASIS-SET [7]; graphite [6]; carbon [4]; Graphene [4]; STATE [4]

USN[30]	2010 [14]; 2008 [7]; 2007 [6]; 2009 [3]	Gunlycke, D [11]; White, C T [11]; Campbell, P M [7]; Gaskill, D K [7]; Tedesco, J L [7]	Nano Lett [11]; Appl. Phys. Lett [7]; Phys. Rev. B [4]	Carbon nanotube [9]; film [7]; Graphene [6]; STATE [6]; EDGE [5]; graphite [5]; transport [5]
Los Alamos Natl Lab[27]	2010 [10]; 2008 [7]; 2009 [6]; 2007 [3]	Balatsky, A V [12]; Wehling, T O [8]; Dahal, H P [6]; Lichtenstein, A I [6]; Katsnelson, M I [4]	Phys. Rev. B [15]; Phys. Rev. Lett [4]; J. Phys.-Condes. Matter [2]	graphite [6]; AUGMENTED-WAVE METHOD [4]; Carbon nanotube [3]; film [3]; GAS [3]; Graphene [3]; spectroscopy [3]; ULTRASOFT PSEUDOPOTENTIALS [3]
Brookhaven Natl Lab[26]	2009 [10]; 2008 [8]; 2007 [4]; 2010 [4]	Sutter, P [6]; Hybertsen, M S [5]; Stolyarova, E [5]; Heinz, T F [4]; Liu, L [4]; Rim, K T [4]; Sadowski, J T [4]; Sutter, E [4]	Phys. Rev. Lett [6]; Nano Lett [4]; Phys. Rev. B [4]; Appl. Phys. Lett [2]; Nat. Mater [2]; Proc. Natl. Acad. Sci. U. S. A [2]	graphite [8]; film [7]; Electronic structure [5]; Epitaxial graphene [4]; surface [4]
Univ Florida[26]	2008 [7]; 2009 [7]; 2010 [7]; 2007 [5]	Guo, J [19]; Ouyang, Y J [6]; Yoon, Y [6]; Dai, H J [4]; Wang, X R [3]; Zhao, P [3]	Appl. Phys. Lett [10]; Nano Res [3]; IEEE Trans. Electron Devices [2]; Nano Lett [2]; Phys. Rev. B [2]; Phys. Rev. Lett [2]	field effect transistor [7]; Graphene [6]; simulation [5]; graphite [4]; film [3]; quantum transport [3]

IBM Corp[25]	2010 [11]; 2009 [8]; 2008 [5]	Avouris, P [16]; Lin, Y M [13]; Farmer, D B [7]; Perebeinos, V [7]; Freitag, M [5]	Nano Lett [8]; Phys. Rev. B [5]; Appl. Phys. Lett [3]; Nat. Nanotechnol [3]	Graphene [10]; field effect transistor [7]; Carbon nanotube [5]; DEVICE [5]; graphite [5]; Transistor [5]
Rutgers State Univ[25]	2010 [10]; 2009 [9]; 2008 [6]	Chhowalla, M [13]; Eda, G [10]; Andrei, E Y [9]; Mattevi, C [6]; Du, X [5]; Skachko, I [5]	ACS Nano [3]; Nano Lett [3]; Phys. Rev. B [3]; Appl. Phys. Lett [2]; Nat. Nanotechnol [2]	transport [11]; SHEET [9]; transparent [7]; Graphene [6]; carbon [5]; film [5]; graphite [5]; graphite oxide [5]; nanosheets [5]
Indiana Univ[23]	2007 [7]; 2010 [6]; 2009 [4]; 2006 [3]; 2008 [3]	Fertig, H A [18]; Brey, L [15]; Li, L S [4]; Yan, X [4]; Iyengar, A [3]; Wang, J H [3]	Phys. Rev. B [11]; Phys. Rev. Lett [5]; Nano Lett [2]	STATE [5]; Carbon nanotube [3]; GAS [3]; Graphene [3]; PHASE [3]; STRONG MAGNETIC-FIELD [3]; SYSTEM [3]
Natl Inst Stand & Technol[23]	2010 [9]; 2009 [8]; 2008 [4]; 2007 [2]	First, P N [10]; Stroscio, J A [10]; Rutter, G M [8]; Crain, J N [6]; Guisinger, N P [6]	Phys. Rev. B [11]; J. Vac. Sci. Technol. A [2]; Science [2]	graphite [11]; film [6]; GAS [6]; Berry phase [4]; Electronic structure [4]; Epitaxial graphene [4]

Sandia Natl Labs[23]	2009 [13]; 2010 [6]; 2008 [2]	Bartelt, N C [7]; Feibelman, P J [7]; McCarty, K F [7]; Huang, J Y [4]; Li, J [4]; Loginova, E [4]; Qi, L [4]	Phys. Rev. B [7]; Carbon [3]; J. Phys. Chem. C [2]; New J. Phys [2]; Phys. Rev. Lett [2]	surface [8]; AUGMENTED-WAVE METHOD [7]; Carbon nanotube [7]; Epitaxial graphene [6]; Graphene [6]; graphite [6]
Univ Utah[23]	2009 [8]; 2008 [7]; 2007 [4]; 2010 [4]	Liu, F [14]; Mishchenko, E G [5]; Duan, W H [4]; Gao, H J [4]; Gu, B L [4]; Huang, B [4]; Wu, J [4]	Phys. Rev. Lett [7]; Appl. Phys. Lett [3]; Phys. Rev. B [3]; Nano Lett [2]; Nano Res [2]	carbon [4]; ribbon [4]; GAS [3]; Graphene [3]; band structure [2]; BEHAVIOR [2]; Electronic structure [2]; energy gap [2]; FIELD [2]; graphite [2]; magnetic [2]; nanotube [2]; p-n junction [2]; transport [2]; Transport property [2]; tunneling [2]
Pacific NW Natl Lab[21]	2010 [12]; 2009 [9]	Lin, Y H [13]; Liu, J [12]; Aksay, I A [10]; Shao, Y Y [7]; Wang, J [7]	ACS Nano [3]; J. Mater. Chem [3]; Electrochem. Commun [2]; J. Am. Chem. Soc [2]; J. Appl. Phys [2]; Talanta [2]	Graphene [11]; graphite [9]; Carbon nanotube [8]; functionalized graphene [7]; SHEET [5]

Univ Penn[21]	2009 [8]; 2010 [6]; 2007 [2]; 2008 [2]	Johnson, A T C [8]; Luo, Z T [6]; Mele, E J [6]; Huang, J Y [4]; Li, J [4]; Lu, Y [4]; Qi, L [4]	Nano Lett [5]; Phys. Rev. B [4]; Appl. Phys. Lett [3]	graphite [6]; Carbon nanotube [5]; Graphene [5]; film [4]; GAS [3]
Arizona State Univ[20]	2009 [14]; 2010 [4]; 2008 [2]	Ferry, D K [8]; Tao, N J [8]; Chen, F [7]; Xia, J L [5]; Huang, L [3]; Lai, Y C [3]; Shishir, R S [3]	J. Phys.-Condes. Matter [5]; Nano Lett [4]; Appl. Phys. Lett [2]	Graphene [4]; Transistor [4]; charged impurity scattering [3]; Ballistic transport [2]; Carbon nanotube [2]; DIFFERENTIAL CAPACITANCE [2]; film [2]; GAS [2]; MICROSCOPY [2]; POLAR PHONON-SCATTERING [2]; semiconductor [2]
N Carolina State Univ[18]	2010 [8]; 2009 [4]; 2005 [2]; 2007 [2]; 2008 [2]	Kim, K W [10]; Zavada, J M [7]; Nardelli, M B [6]; Semenov, Y G [6]; Paul, S [3]; Whangbo, M H [3]; Xiang, H J [3]; Yang, J L [3]	Appl. Phys. Lett [5]; Phys. Rev. B [3]; J. Nanosci. Nanotechnol [2]; J. Phys.-Condes. Matter [2]; Phys. Rev. Lett [2]	Graphene [5]; AUGMENTED-WAVE METHOD [3]; Carbon nanotube [3]; atomistic simulation [2]; BCC IRON [2]; CONDUCTION [2]; CRACK EXTENSION [2]; Diamond [2]; ferromagnetic materials [2]; Fracture [2]; half metal [2]; Molecular mechanics [2]; Nano [2]

Rensselaer Polytech Inst[17]	2009 [7]; 2010 [7]; 2008 [2]	Shur, M S [5]; Koratkar, N [4]; Mitin, V [4]; Rafiee, J [4]; Rafiee, M A [4]; Ryzhii, V [4]; Yu, Z Z [4]	Appl. Phys. Lett [7]; ACS Nano [2]	Graphene [7]; carbon [4]; functionalized graphene [4]; graphite oxide [4]; SHEET [4]
Univ Houston[17]	2010 [6]; 2008 [4]; 2009 [3]; 2006 [2]; 2007 [2]	Ting, C S [7]; Yan, X Z [7]; Yu, Q K [5]; Chen, Y P [4]; Pei, S S [4]	Phys. Rev. B [7]; Appl. Phys. Lett [3]; Phys. Rev. Lett [2]	Berry phase [5]; film [5]; CONDUCTION [4]; GAS [4]; graphite [4]
Univ Minnesota[17]	2007 [8]; 2008 [4]; 2009 [3]; 2010 [2]	Novikov, D S [5]; Kim, H [3]; Macosko, C W [3]; Mielke, S L [3]; Shklovskii, B I [3]	Phys. Rev. B [6]; Appl. Phys. Lett [2]; J. Phys. Chem. C [2]	GAS [6]; Electronic structure [4]; graphite oxide [4]; graphite [3]; LAYERED SILICATE NANOCOMPOSITES [3]; polymer nanocomposites [3]; transport [3]
Natl High Magnet Field Lab[16]	2007 [5]; 2008 [4]; 2010 [4]; 2009 [2]	Kim, P [13]; Jiang, Z [12]; Stormer, H L [11]; Henriksen, E A [5]; Zhang, Y [5]	Phys. Rev. Lett [7]; Appl. Phys. Lett [3]; Solid State Commun [2]	graphite [7]; GAS [5]; Berry phase [4]; Graphene [4]; PHASE [3]

Univ Washington[16]	2009 [7]; 2008 [4]; 2010 [3]; 2007 [2]	Drut, J E [4]; Lahde, T A [3]; Prezhdo, O V [3]; Son, D T [3]; Gazit, D [2]; Habenicht, B F [2]	Phys. Rev. B [8]; Appl. Phys. Lett [2]; J. Phys. Chem. C [2]; Nano Lett [2]	Graphene [5]; FERMI-LIQUID BEHAVIOR [4]; CONTINUUM-LIMIT [3]; TRANSITION [3]; DIMENSIONS [2]; FABRICATION [2]; film [2]; graphite [2]; LATTICE FERMIONS [2]; Monte Carlo methods [2]; neutrino [2]; oxide [2]; PHASE [2]; RENORMALIZATION-GROUP FLOW [2]; semiconductor [2]; SHEET [2]; STATE [2]
Oklahoma State Univ[15]	2007 [5]; 2010 [5]; 2009 [4]	Xie, X C [8]; Mintmire, J W [7]; Gunlycke, D [5]; Sun, Q F [5]; White, C T [5]	Nano Lett [3]; Phys. Rev. B [2]; Phys. Rev. Lett [2]	Carbon nanotube [6]; graphite [5]; PHASE [5]; STATE [5]; CONDUCTION [3]; nanoribbon [3]; ribbon [3]; SCHEME [3]; SYSTEM [3]
Univ Notre Dame[15]	2010 [7]; 2008 [5]; 2009 [2]	Kamat, P V [9]; Fang, T [5]; Jena, D [5]; Xing, H L [4]; Lightcap, I V [3]; Seger, B [3]	J. Phys. Chem. Lett [4]; Appl. Phys. Lett [3]; J. Phys. Chem. C [2]; Nano Lett [2]	graphite oxide [5]; SHEET [4]; WALL CARBON NANOTUBE [4]; CHEMICAL-REDUCTION [3]; Epitaxial graphene [3]; film [3]; Metal Nanoparticle [3]; nanosheets [3]

Univ Calif San Diego[13]	2008 [6]; 2009 [3]; 2010 [3]	Fogler, M M [8]; Basov, D N [3]; Guinea, F [3]; Hao, Z [3]; Li, Z Q [3]; Martin, M C [3]	Phys. Rev. B [6]; Phys. Rev. Lett [4]	GAS [3]; graphite [3]; Membrane [3]; Electronic structure [2]; FIELD [2]; Graphene [2]
Univ Nebraska[13]	2010 [8]; 2009 [3]	Zeng, X C [9]; Wu, X J [6]; Wu, M H [4]; Gao, Z X [3]; Lu, J [3]; Mei, W N [3]	J. Phys. Chem. C [4]; Nano Lett [3]; Phys. Rev. B [2]	film [3]; MOLECULE [3]; Stability [3]; Ab initio [2]; Defect [2]; Epitaxial graphene [2]; ferromagnet [2]; GAS [2]; Graphene nanoribbon [2]; graphite [2]; Molecular dynamics [2]; PHASE [2]; ribbon [2]; room temperature [2]; Spin [2]; STATE [2]; WALL CARBON NANOTUBE [2]; zigzag [2]
Univ Wisconsin[13]	2010 [5]; 2009 [4]; 2008 [3]	Chen, J H [4]; Lu, G H [4]; Hanson, G W [3]; Li, L [2]; Mao, S [2]; Ocola, L E [2]; Sun, G F [2]	J. Appl. Phys [2]; Nanotechnology [2]	film [6]; CONDUCTION [5]; reduction [4]; Carbon nanotube [3]; GAS [3]; graphite oxide [3]; nanoparticle [3]; transparent [3]

Argonne Natl Lab[12]	2009 [6]; 2010 [3]; 2008 [2]	Chen, J H [2]; Culcer, D [2]; Dikin, D A [2]; Feenstra, R M [2]; Fisher, P J [2]; Gu, G [2]; Guest, J R [2]; Guisinger, N P [2]; Jung, I [2]; Lu, G H [2]; Luxmi [2]; Ocola, L E [2]; Pelton, M [2]; Piner, R [2]; Ruoff, R S [2]; Stankovich, S [2]; Sun, Y G [2]; Winkler, R [2]	Nano Lett [3]; Appl. Phys. Lett [2]; J. Phys. Chem. C [2]; Phys. Rev. B [2]	film [5]; Graphene [4]; carbon [3]; GAS [3]; graphite [3]; reduction [3]; transparent [3]
SUNY Buffalo[12]	2009 [5]; 2010 [5]; 2008 [2]	Mitin, V [6]; Ryzhii, V [6]; Ryzhii, M [5]; Otsuji, T [4]; Shur, M S [3]	Appl. Phys. Express [2]; J. Appl. Phys [2]	GAS [4]; field effect transistor [2]; Graphene [2]; graphite [2]; PERFORMANCE [2]; Raman spectroscopy [2]; transport [2]
Univ Texas[12]	2007 [6]; 2006 [4]	MacDonald, A H [10]; Asgari, R [2]; Banerjee, S K [2]; Barlas, Y [2]; Das Sarma, S [2]; Geim, A K [2]; Hill, J E [2]; Hsu, H [2]; Min, H [2]; Pereg-Barnea, T [2]; Polini, M [2]; Reichl, L E [2]; Sinitsyn, N A [2]	Phys. Rev. B [5]; Phys. Rev. Lett [3]; Solid State Commun [2]	graphite [5]; 2-DIMENSIONAL ELECTRON-GAS [2]; BEHAVIOR [2]; Berry phase [2]; GAS [2]

Brown Univ[11]	2010 [6]; 2009 [3]	Shenoy, V B [10]; Zhang, Y W [5]; Ramasubramaniam, A [4]; Medhekar, N V [3]; Reddy, C D [3]	ACS Nano [2]; Carbon [2]; Nanotechnology [2]	SHEET [5]; Reactive Force Field [3]; ReaxFF [3]; TOTAL-ENERGY CALCULATIONS [3]; carbon [2]; graphite [2]; Molecular dynamics [2]; Molecular dynamics simulation [2]; nanoribbon [2]; transparent [2]; WAVE BASIS-SET [2]
Univ Cent Florida[11]	2010 [7]; 2009 [3]	Mucciolo, E R [4]; Chunder, A [3]; Lewenkopf, C H [3]; Zhai, L [3]; Aufray, B [2]; Kara, A [2]; Khondaker, S I [2]; Le Lay, G [2]; Loktev, V M [2]; Neto, A H C [2]; Oughaddou, H [2]; Turkowski, V [2]	Phys. Rev. B [4]; Appl. Phys. Lett [3]	film [3]; nanostructured materials [3]; SHEET [3]; graphite [2]; nanowire [2]; reduction [2]; scanning tunneling microscopy [2]; Silicon [2]; SYSTEM [2]
Florida State Univ[10]	2009 [4]; 2010 [3]	Yang, K [5]; Barlas, Y [4]; MacDonald, A H [4]; Vafek, O [3]; Cote, R [2]; Das Sarma, S [2]; Herbut, I F [2]; Juricic, V [2]; Lambert, J [2]	Phys. Rev. B [5]; Phys. Rev. Lett [2]; Solid State Commun [2]	MODEL [4]; graphite [3]; Landau level [3]; SYSTEM [3]; TRANSITION [3]

Table 3.2 lists the top 50 authors affiliated with graphene research in the US from 2000 to 2010, inclusive.

Table 3.2. Top 50 Authors Affiliated with Graphene Research in the US (2000-2010)

Authors	# Records	Authors	# Records
Neto, A H C	50	Dresselhaus, M S	17
Kim, P	45	Horn, K	17
Das Sarma, S	41	Piner, R D	17
MacDonald, A H	41	Aksay, I A	16
Ruoff, R S	39	Kaner, R B	16
de Heer, W A	36	Kong, J	16
Berger, C	33	Liu, F	16
Peres, N M R	32	Seyller, T	16
Guinea, F	31	Sprinkle, M	16
Lau, C N	26	Brey, L	15
Hwang, E H	23	Lin, Y M	15
First, P N	22	Ohta, T	15
Louie, S G	22	Park, C H	15
Avouris, P	20	Park, S	15
Zettl, A	20	Polini, M	15
Zhang, Y	20	Tour, J M	15
Balandin, A A	19	Jiang, Z	14
Bostwick, A	19	Levitov, L S	14
Dai, H J	19	Nilsson, J	14
Guo, J	19	Bao, W Z	13
Rotenberg, E	19	Chen, J H	13
Cohen, M L	18	Chhowalla, M	13
Fertig, H A	18	Conrad, E H	13
Stormer, H L	18	Crommie, M F	13
Adam, S	17	Gunlycke, D	13

Table 3.2a provides an in-depth profile of the top US authors from Table 3.2.

Table 3.2a. Detailed Profile of Top Authors Affiliated with Graphene Research in the US (2000-2010)

Authors	Publication Year	Authors	Journal	Author Affiliations (Name Only)
Top US Affiliated Authors	**Top Items**	**Top Items**	**Top Items**	**Top Items**
Neto, A H C[50]	2009 [15]; 2008 [12]; 2007 [10]; 2006 [7]; 2010 [6]	Peres, N M R [22]; Guinea, F [18]; Nilsson, J [12]; Uchoa, B [9]	Phys. Rev. B [21]; Phys. Rev. Lett [13]; EPL [5]; Nat. Mater [2]	Boston Univ [49]; Univ Minho [22]; CSIC [19]; Univ Porto [5]; Leiden Univ [4]; Univ Illinois [4]
Kim, P[45]	2007 [15]; 2008 [10]; 2009 [10]; 2010 [7]; 2006 [2]	Stormer, H L [18]; Jiang, Z [12]; Zhang, Y [10]; Henriksen, E A [7]	Phys. Rev. Lett [16]; Solid State Commun [6]; Nano Lett [3]; Nature [3]; Appl. Phys. Lett [2]; Nat. Nanotechnol [2]; Nat. Phys [2]; Phys. Rev. B [2]; Phys. Status Solidi B-Basic Solid State Phys [2]	Columbia Univ [45]; Natl High Magnet Field Lab [13]; Bell Labs [7]; Univ Maryland [4]; Alcatel Lucent [3]; Alcatel Lucent Technol [3]; Brookhaven Natl Lab [3]; Univ Manchester [3]
Das Sarma, S[41]	2008 [14]; 2007 [12]; 2009 [11]; 2010 [3]	Hwang, E H [20]; Adam, S [13]; Rossi, E [6]; Tse, W K [5]	Phys. Rev. B [23]; Phys. Rev. Lett [10]; Solid State Commun [5]; Physica E [2]	Univ Maryland [41]; Univ Akron [4]; Columbia Univ [3]; Cornell Univ [2]; Florida State Univ [2]; Univ Manchester [2]; Univ Texas [2]; Univ Texas Austin [2]

MacDonald, A H[41]	2008 [11]; 2010 [11]; 2009 [10]; 2007 [5]; 2006 [4]	Polini, M [12]; Asgari, R [10]; Barlas, Y [7]; Min, H [6]; Min, H K [6]	Phys. Rev. B [23]; Phys. Rev. Lett [8]; Solid State Commun [3]	Univ Texas Austin [31]; Scuola Normale Super Pisa [12]; Univ Texas [10]; NEST CNR INFM [6]; CNR [5]; Univ Maryland [5]
Ruoff, R S[39]	2009 [14]; 2010 [13]; 2008 [6]; 2007 [4]; 2006 [2]	Piner, R D [17]; Park, S [14]; Zhu, Y W [12]; Dikin, D A [11]; Stankovich, S [11]	Nano Lett [8]; Appl. Phys. Lett [4]; J. Phys. Chem. C [4]; Carbon [3]; ACS Nano [2]; Adv. Mater [2]; Chem. Mat [2]; Nano Res [2]; Nature [2]; Science [2]	Univ Texas Austin [31]; Northwestern Univ [15]; Korea Adv Inst Sci & Technol [3]; Texas Instruments Inc [3]; Argonne Natl Lab [2]; SW Texas State Univ [2]; Univ Massachusetts [2]
de Heer, W A[36]	2008 [9]; 2010 [9]; 2009 [8]; 2007 [7]; 2006 [2]	Berger, C [31]; Sprinkle, M [15]; First, P N [14]; Potemski, M [11]	Phys. Rev. Lett [10]; Appl. Phys. Lett [4]; Phys. Rev. B [4]; Science [3]; Solid State Commun [3]	Georgia Inst Technol [36]; CNRS [20]; Inst Neel [4]; NIST [4]; Univ Warsaw [3]
Berger, C[33]	2007 [8]; 2008 [8]; 2009 [7]; 2010 [7]; 2006 [2]	de Heer, W A [31]; Sprinkle, M [15]; Potemski, M [11]; First, P N [10]	Phys. Rev. Lett [11]; Appl. Phys. Lett [4]; Phys. Rev. B [4]; Solid State Commun [3]; Phys. Status Solidi A-Appl. Mat [2]; Science [2]	Georgia Inst Technol [33]; CNRS [21]; Inst Neel [4]; Univ Grenoble 1 [3]; Univ Warsaw [3]

Peres, N M R[32]	2009 [10]; 2006 [8]; 2007 [6]; 2008 [5]; 2010 [2]	Neto, A H C [22]; Guinea, F [17]; Nilsson, J [7]; dos Santos, J M B L [6]; Pereira, V M [6]	Phys. Rev. B [13]; Phys. Rev. Lett [8]; EPL [3]; New J. Phys [2]; Solid State Commun [2]	Univ Minho [32]; Boston Univ [30]; CSIC [16]; Univ Porto [6]; Univ Calif Riverside [4]
Guinea, F[31]	2006 [8]; 2007 [8]; 2010 [6]; 2008 [4]; 2009 [3]	Neto, A H C [18]; Peres, N M R [17]; Nilsson, J [6]; Castro, A H [4]; dos Santos, J M B L [4]	Phys. Rev. B [16]; Phys. Rev. Lett [7]	CSIC [30]; Boston Univ [26]; Univ Minho [17]; Univ Porto [4]; Univ Calif San Diego [3]; Univ Manchester [3]
Lau, C N[26]	2009 [13]; 2008 [5]; 2007 [4]; 2010 [4]	Bao, W Z [13]; Bao, W [12]; Miao, F [12]; Balandin, A A [7]	Appl. Phys. Lett [8]; Nano Lett [5]; Phys. Rev. B [4]; Phys. Rev. Lett [2]; Solid State Commun [2]	Univ Calif Riverside [26]; Univ Arizona [3]; CALTECH [2]
Hwang, E H[23]	2007 [8]; 2008 [8]; 2009 [5]; 2010 [2]	Das Sarma, S [20]; Adam, S [6]; Hu, B Y K [4]; Rossi, E [3]	Phys. Rev. B [14]; Phys. Rev. Lett [4]; Physica E [2]	Univ Maryland [23]; Univ Akron [4]

First, P N[22]	2010 [7]; 2007 [5]; 2008 [5]; 2006 [2]; 2009 [2]	de Heer, W A [14]; Berger, C [10]; Stroscio, J A [10]; Rutter, G M [8]	Phys. Rev. B [5]; Phys. Rev. Lett [3]; Science [3]; J. Vac. Sci. Technol. A [2]; Nano Lett [2]	Georgia Inst Technol [22]; NIST [8]; CNRS [6]; Inst Neel [2]; Natl Inst Stand & Technol [2]; Univ Maryland [2]; Univ Michigan [2]
Louie, S G[22]	2008 [6]; 2010 [6]; 2009 [5]; 2007 [3]; 2006 [2]	Cohen, M L [17]; Park, C H [15]; Yang, L [8]; Son, Y W [6]	Phys. Rev. Lett [9]; Nano Lett [5]; Phys. Rev. B [4]	Univ Calif Berkeley [22]; Lawrence Berkeley Natl Lab [7]; Konkuk Univ [3]; Korea Inst Adv Study [2]; Sandia Natl Labs [2]; Univ Oxford [2]
Avouris, P[20]	2009 [9]; 2010 [8]; 2008 [2]	Lin, Y M [13]; Farmer, D B [8]; Perebeinos, V [8]; Freitag, M [5]	Nano Lett [8]; Phys. Rev. B [4]; Appl. Phys. Lett [2]; Nat. Nanotechnol [2]	IBM Corp [16]; IBM Thomas J Watson Res Ctr [2]; IBM TJ Watson Res Ctr [2]; Purdue Univ [2]
Zettl, A[20]	2010 [8]; 2009 [6]; 2008 [5]	Crommie, M F [11]; Girit, C [10]; Girit, C O [7]; Meyer, J C [7]; Wang, F [7]; Zhang, Y B [7]	Science [3]; ACS Nano [2]; Appl. Phys. Lett [2]; Nat. Phys [2]; Nature [2]; Phys. Rev. Lett [2]	Univ Calif Berkeley [20]; Lanzhou Univ [3]; Lawrence Berkeley Natl Lab [2]; Politecn Milan [2]; Univ Calabria [2]

Zhang, Y[20]	2007 [10]; 2009 [4]; 2010 [3]; 2006 [2]	Kim, P [10]; Stormer, H L [7]; Jiang, Z [5]; Tan, Y W [5]	Phys. Rev. Lett [4]; Appl. Phys. Lett [2]; Phys. Status Solidi B-Basic Solid State Phys [2]; Science [2]	Columbia Univ [10]; Natl High Magnet Field Lab [5]; Univ Calif Berkeley [3]; Bell Labs [2]; Brookhaven Natl Lab [2]; Michigan Technol Univ [2]; Univ So Calif [2]
Balandin, A A[19]	2009 [10]; 2008 [4]; 2007 [3]; 2010 [2]	Calizo, I [8]; Teweldebrhan, D [8]; Ghosh, S [7]; Lau, C N [7]	Appl. Phys. Lett [8]; IEEE Electron Device Lett [2]; Nano Lett [2]	Univ Calif Riverside [19]; Rensselaer Polytech Inst [2]
Bostwick, A[19]	2007 [6]; 2008 [5]; 2009 [4]; 2010 [3]	Rotenberg, E [19]; Horn, K [17]; Seyller, T [15]; Ohta, T [14]	Phys. Rev. Lett [4]; New J. Phys [3]; Nat. Mater [2]; Phys. Rev. B [2]; Science [2]	Max Planck Gesell [16]; Univ Erlangen Nurnberg [15]; Lawrence Berkeley Natl Lab [10]; Univ Calif Berkeley [10]; Montana State Univ [6]
Dai, H J[19]	2010 [7]; 2008 [6]; 2009 [6]	Wang, X R [11]; Wang, H L [9]; Li, X L [8]; Diankov, G [4]; Guo, J [4]; Robinson, J T [4]; Zhang, L [4]	J. Am. Chem. Soc [5]; Nano Res [4]; Nat. Nanotechnol [2]; Science [2]	Stanford Univ [19]; Univ Florida [4]

Guo, J[19]	2008 [7]; 2009 [6]; 2007 [3]; 2010 [3]	Ouyang, Y J [6]; Yoon, Y [6]; Dai, H J [4]; Wang, X R [3]; Zhao, P [3]	Appl. Phys. Lett [9]; Nano Res [3]; IEEE Trans. Electron Devices [2]; Nano Lett [2]	Univ Florida [19]; Stanford Univ [4]; USN [2]
Rotenberg, E[19]	2007 [6]; 2008 [5]; 2009 [4]; 2010 [3]	Bostwick, A [19]; Horn, K [17]; Seyller, T [15]; Ohta, T [14]	Phys. Rev. Lett [4]; New J. Phys [3]; Nat. Mater [2]; Phys. Rev. B [2]; Science [2]	Max Planck Gesell [16]; Univ Erlangen Nurnberg [15]; Lawrence Berkeley Natl Lab [10]; Univ Calif Berkeley [10]; Montana State Univ [6]
Cohen, M L[18]	2008 [7]; 2009 [5]; 2007 [3]; 2006 [2]	Louie, S G [17]; Park, C H [11]; Yang, L [8]; Son, Y W [6]	Phys. Rev. Lett [8]; Nano Lett [4]; Phys. Rev. B [3]	Univ Calif Berkeley [18]; Lawrence Berkeley Natl Lab [8]; Konkuk Univ [3]; Korea Inst Adv Study [2]; Sandia Natl Labs [2]; Univ Oxford [2]
Fertig, H A[18]	2007 [6]; 2009 [4]; 2006 [3]; 2008 [3]; 2010 [2]	Brey, L [15]; Iyengar, A [3]; Wang, J H [3]	Phys. Rev. B [10]; Phys. Rev. Lett [5]	Indiana Univ [18]; CSIC [14]; Technion Israel Inst Technol [7]
Stormer, H L[18]	2007 [7]; 2008 [4]; 2009 [4]	Kim, P [18]; Jiang, Z [11]; Zhang, Y [7]; Tan, Y W [6]	Phys. Rev. Lett [8]; Nature [2]; Solid State Commun [2]	Columbia Univ [18]; Natl High Magnet Field Lab [11]; Bell Labs [6]; Alcatel Lucent [3]; Alcatel Lucent Technol [3]

Adam, S[17]	2008 [6]; 2007 [5]; 2009 [3]; 2010 [3]	Das Sarma, S [13]; Hwang, E H [6]; Fuhrer, M S [4]; Chen, J H [3]	Phys. Rev. B [7]; Phys. Rev. Lett [4]; Solid State Commun [2]	Univ Maryland [16]
Dresselhaus, M S[17]	2009 [6]; 2010 [6]; 2008 [4]	Dresselhaus, G [6]; Kong, J [6]; Reina, A [5]; Saito, R [5]	Nano Lett [5]; Phys. Rev. B [3]	MIT [17]; Tohoku Univ [4]; IPICYT [3]; Shinshu Univ [3]; Catholic Univ Louvain [2]; Peking Univ [2]; Tokyo Inst Technol [2]; Univ Carlos III Madrid [2]; Univ Fed Minas Gerais [2]
Horn, K[17]	2007 [6]; 2009 [4]; 2008 [3]; 2010 [3]	Bostwick, A [17]; Rotenberg, E [17]; Seyller, T [15]; Ohta, T [13]	Phys. Rev. Lett [4]; New J. Phys [3]; Nat. Mater [2]; Science [2]	Max Planck Gesell [16]; Univ Erlangen Nurnberg [15]; Univ Calif Berkeley [9]; Lawrence Berkeley Natl Lab [8]; Montana State Univ [6]
Piner, R D[17]	2009 [7]; 2008 [3]; 2010 [3]; 2006 [2]; 2007 [2]	Ruoff, R S [17]; Stankovich, S [7]; Zhu, Y W [7]; Cai, W W [6]; Dikin, D A [6]; Nguyen, S T [6]; Velamakanni, A [6]	Carbon [3]; Nano Lett [3]; Appl. Phys. Lett [2]; Nature [2]	Univ Texas Austin [12]; Northwestern Univ [9]; SW Texas State Univ [2]

Aksay, I A[16]	2010 [6]; 2009 [5]; 2008 [3]	Liu, J [11]; Lin, Y H [8]; Wang, J [6]; Wu, H [6]	ACS Nano [4]; Talanta [2]	Princeton Univ [16]; Pacific NW Natl Lab [10]; Guangdong Ocean Univ [2]
Kaner, R B[16]	2009 [6]; 2010 [6]; 2008 [3]	Tung, V C [8]; Yang, Y [8]; Allen, M J [7]; Gilje, S [5]	Adv. Mater [3]; ACS Nano [2]; Nano Lett [2]; Nat. Nanotechnol [2]	Univ Calif Los Angeles [16]; Aerosp Corp [2]; Northrop Grumman Corp [2]; RMIT Univ [2]; Univ Melbourne [2]; Univ Wollongong [2]
Kong, J[16]	2009 [7]; 2010 [7]; 2008 [2]	Reina, A [12]; Dresselhaus, M S [6]; Healey, P [2]; Hsu, P L [2]; Jia, X T [2]; Keast, C [2]; Kedzierski, J [2]; Kim, K K [2]; Li, L J [2]; Liu, Z F [2]; Nezich, D [2]; Park, H [2]; Shi, Y M [2]; Son, H B [2]; Thiele, S [2]; Wyatt, P [2]	Nano Lett [3]; ACS Nano [2]; IEEE Electron Device Lett [2]; Nanotechnology [2]	MIT [16]; Nanyang Technol Univ [2]; Peking Univ [2]; Tech Univ Ilmenau [2]
Liu, F[16]	2009 [5]; 2007 [4]; 2010 [4]; 2008 [3]	Duan, W H [4]; Gao, H J [4]; Gu, B L [4]; Huang, B [4]; Wu, J [4]	Appl. Phys. Lett [3]; Nano Lett [3]; Phys. Rev. B [3]; Nano Res [2]	Univ Utah [14]; Chinese Acad Sci [5]; Tsinghua Univ [3]; Univ Wollongong [2]

Seyller, T[16]	2007 [5]; 2009 [5]; 2008 [3]; 2010 [2]	Bostwick, A [15]; Horn, K [15]; Rotenberg, E [15]; Ohta, T [12]	Phys. Rev. Lett [4]; Nat. Mater [2]; New J. Phys [2]; Science [2]	Univ Erlangen Nurnberg [16]; Max Planck Gesell [14]; Lawrence Berkeley Natl Lab [8]; Univ Calif Berkeley [7]; Montana State Univ [5]
Sprinkle, M[16]	2009 [6]; 2008 [4]; 2010 [4]; 2007 [2]	Berger, C [15]; de Heer, W A [15]; Conrad, E H [6]; Potemski, M [6]	Phys. Rev. Lett [5]; J. Phys. D-Appl. Phys [2]; Phys. Rev. B [2]; Solid State Commun [2]	Georgia Inst Technol [16]; CNRS [12]; CEA [3]; Inst Neel [3]; Charles Univ Prague [2]; Univ Calif Riverside [2]; Univ Complutense [2]; Univ Paris 11 [2]; Univ Warsaw [2]
Brey, L[15]	2007 [6]; 2006 [3]; 2009 [3]; 2008 [2]	Fertig, H A [15]; Iyengar, A [3]; Wang, J H [2]	Phys. Rev. B [9]; Phys. Rev. Lett [3]	Indiana Univ [15]; CSIC [14]; Technion Israel Inst Technol [6]
Lin, Y M[15]	2009 [6]; 2010 [6]; 2008 [2]	Avouris, P [13]; Farmer, D B [8]; Jenkins, K A [4]; Xia, F N [4]	Nano Lett [7]; Appl. Phys. Lett [3]	IBM Corp [13]; IBM Semicond Res & Dev Ctr [2]; IBM TJ Watson Res Ctr [2]; Indian Inst Sci [2]; Purdue Univ [2]

Ohta, T[15]	2007 [6]; 2008 [4]; 2009 [2]; 2010 [2]	Bostwick, A [14]; Rotenberg, E [14]; Horn, K [13]; Seyller, T [12]	Nat. Mater [2]; New J. Phys [2]; Phys. Rev. B [2]; Phys. Rev. Lett [2]	Max Planck Gesell [12]; Univ Erlangen Nurnberg [12]; Lawrence Berkeley Natl Lab [8]; Univ Calif Berkeley [7]; Montana State Univ [6]
Park, C H[15]	2009 [5]; 2008 [4]; 2010 [4]; 2007 [2]	Louie, S G [15]; Cohen, M L [11]; Yang, L [6]; Giustino, F [5]	Phys. Rev. Lett [7]; Nano Lett [3]; Phys. Rev. B [2]	Univ Calif Berkeley [15]; Konkuk Univ [3]; Lawrence Berkeley Natl Lab [3]; Korea Inst Adv Study [2]; Sandia Natl Labs [2]; Univ Oxford [2]
Park, S[15]	2009 [6]; 2010 [6]; 2008 [3]	Ruoff, R S [14]; An, J H [5]; Piner, R D [5]; Velamakanni, A [5]	J. Phys. Chem. C [2]	Univ Texas Austin [14]; Northwestern Univ [5]; Korea Adv Inst Sci & Technol [2]; Sabanci Univ [2]
Polini, M[15]	2009 [5]; 2010 [5]; 2008 [3]; 2007 [2]	MacDonald, A H [12]; Asgari, R [10]; Borghi, G [4]; Barlas, Y [3]; Pereg-Barnea, T [3]; Vignale, G [3]	Phys. Rev. B [9]; Phys. Rev. Lett [2]; Solid State Commun [2]	Scuola Normale Super Pisa [15]; Univ Texas Austin [10]; CNR [7]; NEST CNR INFM [7]; IPM [4]
Tour, J M[15]	2010 [9]; 2009 [5]	Kosynkin, D V [8]; Lomeda, J R [7]; Sinitskii, A [7]; Sun, Z Z [6]	ACS Nano [5]; Chem. Mat [2]; Nano Res [2]	Rice Univ [15]

Jiang, Z[14]	2007 [5]; 2010 [4]; 2008 [3]	Kim, P [12]; Stormer, H L [11]; Henriksen, E A [5]; Zhang, Y [5]	Phys. Rev. Lett [7]; Appl. Phys. Lett [2]; Solid State Commun [2]	Columbia Univ [12]; Natl High Magnet Field Lab [12]; Bell Labs [5]; Georgia Inst Technol [4]; Alcatel Lucent [2]; Michigan Technol Univ [2]; Purdue Univ [2]; Univ Calif San Diego [2]; Univ Houston [2]
Levitov, L S[14]	2007 [7]; 2008 [2]; 2009 [2]; 2010 [2]	Abanin, D A [11]; Shytov, A V [5]; Lee, P A [4]; Katsnelson, M I [2]	Phys. Rev. Lett [9]; Phys. Rev. B [3]	MIT [14]; Princeton Univ [3]; Brookhaven Natl Lab [2]; Univ Calif Santa Barbara [2]; Univ Nijmegen St Radboud Hosp [2]; Univ Utah [2]
Nilsson, J[14]	2007 [5]; 2008 [4]; 2006 [2]; 2009 [2]	Neto, A H C [12]; Peres, N M R [7]; Guinea, F [6]; Malard, L M [3]; Pimenta, M A [3]	Phys. Rev. B [6]; Phys. Rev. Lett [5]	Boston Univ [14]; CSIC [7]; Univ Minho [7]; Leiden Univ [4]; Univ Fed Minas Gerais [3]
Bao, W Z[13]	2009 [6]; 2008 [3]; 2010 [3]	Lau, C N [13]; Miao, F [5]; Zhang, H [5]; Balandin, A A [4]; Liu, G [4]	Nano Lett [3]; Appl. Phys. Lett [2]; Solid State Commun [2]	Univ Calif Riverside [13]

Chen, J H[13]	2009 [5]; 2008 [3]; 2010 [3]; 2007 [2]	Fuhrer, M S [8]; Ishigami, M [6]; Jang, C [6]; Williams, E D [6]	Adv. Mater [2]; Phys. Rev. B [2]; Phys. Rev. Lett [2]	Univ Maryland [9]; Univ Wisconsin [4]; Argonne Natl Lab [2]; Tongji Univ [2]
Chhowalla, M[13]	2009 [5]; 2010 [5]; 2008 [3]	Eda, G [10]; Mattevi, C [6]; Yamaguchi, H [4]; Chen, C W [3]; Miller, S [3]	ACS Nano [3]; Appl. Phys. Lett [2]; Nano Lett [2]	Rutgers State Univ [13]; Natl Taiwan Univ [3]; Univ London Imperial Coll Sci Technol [2]; Univ Minnesota [2]
Conrad, E H[13]	2007 [3]; 2008 [3]; 2009 [3]; 2006 [2]	Berger, C [9]; de Heer, W A [9]; Hass, J [9]; First, P N [7]	Phys. Rev. B [3]; Phys. Rev. Lett [3]	Georgia Inst Technol [13]; CNRS [9]; CEA [3]; Univ Paris 11 [2]
Crommie, M F[13]	2009 [5]; 2008 [4]; 2010 [3]	Zettl, A [11]; Girit, C [7]; Zhang, Y B [6]; Brar, V W [4]; Meyer, J C [4]	Appl. Phys. Lett [2]; Nano Lett [2]; Nat. Phys [2]; Nature [2]; Science [2]	Univ Calif Berkeley [13]; Lawrence Berkeley Natl Lab [2]; UJF [2]
Gunlycke, D[13]	2007 [6]; 2010 [4]; 2008 [3]	White, C T [12]; Mintmire, J W [5]; Areshkin, D A [3]; Li, J W [3]	Nano Lett [5]; Appl. Phys. Lett [4]; Phys. Rev. B [3]	USN [11]; Oklahoma State Univ [5]; George Washington Univ [3]; Naval Res Lab [2]

Table 3.3 lists the most highly cited US graphene papers published between 2000 and 2010, inclusive.

Table 3.3. Top 25 Most Highly Cited US Graphene Papers (2000-2010)

Title	TC
Experimental observation of the quantum Hall effect and Berry's phase in graphene	2,122
The electronic properties of graphene	998
Electronic confinement and coherence in patterned epitaxial graphene	997
Graphene-based composite materials	718
Energy band-gap engineering of graphene nanoribbons	628
Ultrathin epitaxial graphite: 2D electron gas properties and a route toward graphene-based nanoelectronics	605
Half-metallic graphene nanoribbons	586
Energy gaps in graphene nanoribbons	583
Chemically derived, ultrasmooth graphene nanoribbon semiconductors	529
Controlling the electronic structure of bilayer graphene	522
Synthesis of graphene-based nanosheets via chemical reduction of exfoliated graphite oxide	412
Quantum spin Hall effect in graphene	400
Processable aqueous dispersions of graphene nanosheets	392
Room-temperature quantum hall effect in graphene	358
Large-scale pattern growth of graphene films for stretchable transparent electrodes	342
Measurement of the elastic properties and intrinsic strength of monolayer graphene	341
Substrate-induced bandgap opening in epitaxial graphene	303
Ultrahigh electron mobility in suspended graphene	301
Functionalized single graphene sheets derived from splitting graphite oxide	288
Electromechanical resonators from graphene sheets	274
Graphene nano-ribbon electronics	272
Preparation and characterization of graphene oxide paper	251
Quasiparticle dynamics in graphene	248
Electronic structure and stability of semiconducting graphene nanoribbons	247
Electronic states of graphene nanoribbons studied with the Dirac equation	244

Table 3.3a. Detailed Profile of the Top 25 Most Highly Cited US Graphene Papers Published Between 2000 and 2010

Title	Authors	Author Affiliations (Name Only)	Keywords (author's) + Keywords Plus (Cleaned)	Subject Category
Most Highly Cited US Graphene Publications	**Top Items**	**Top Items**	**Top Items**	**Top Items**
Experimental observation of the quantum Hall effect and Berry's phase in graphene[1]	Kim, P [1]; Stormer, H L [1]; Tan, Y W [1]; Zhang, Y B [1]	Columbia Univ [1]	Carbon nanotube [1]; graphite [1]	Multidisciplinary Sciences [1]
The electronic properties of graphene[1]	Castro Neto, A H [1]; Geim, A K [1]; Guinea, F [1]; Novoselov, K S [1]; Peres, N M R [1]	Boston Univ [1]; CSIC [1]; Univ Manchester [1]; Univ Minho [1]	Bilayer graphene [1]; carbon [1]; d-Wave superconductor [1]; Dirac fermion [1]; DISORDERED DEGENERATE SEMICONDUCTORS [1]	Physics, Multidisciplinary [1]
Electronic confinement and coherence in patterned epitaxial graphene[1]	Berger, C [1]; Brown, N [1]; Conrad, E H [1]; de Heer, W A [1]; First, P N [1]	CNRS [1]; Georgia Inst Technol [1]	Berry phase [1]; Carbon nanotube [1]; CONDUCTION [1]; film [1]; GAS [1]	Multidisciplinary Sciences [1]
Graphene-based composite materials[1]	Dikin, D A [1]; Dommett, G H B [1]; Kohlhaas, K M [1]; Nguyen, S T [1]; Piner, R D [1]	Northwestern Univ [1]; Purdue Univ [1]	Carbon nanotube [1]; ELECTRICAL APPLICATIONS [1]; GAS [1]; graphite oxide [1]; nanoplatelets [1]	Multidisciplinary Sciences [1]

Energy band-gap engineering of graphene nanoribbons[1]	Han, M Y [1]; Kim, P [1]; Ozyilmaz, B [1]; Zhang, Y B [1]	Columbia Univ [1]	ribbon [1]	Physics, Multidisciplinary [1]
Ultrathin epitaxial graphite: 2D electron gas properties and a route toward graphene-based nanoelectronics[1]	Berger, C [1]; Conrad, E H [1]; Dai, Z T [1]; de Heer, W A [1]; Feng, R [1]	CNRS [1]; Georgia Inst Technol [1]	50-2000-EV RANGE [1]; CONDUCTION [1]; field effect transistor [1]; HETEROEPITAXIAL GRAPHITE [1]; interference [1]	Chemistry, Physical [1]
Half-metallic graphene nanoribbons[1]	Cohen, M L [1]; Louie, S G [1]; Son, Y W [1]	Univ Calif Berkeley [1]	CHAIN [1]; EDGE [1]; ELECTRON [1]; ferromagnet [1]; GAS [1]	Multidisciplinary Sciences [1]
Energy gaps in graphene nanoribbons[1]	Cohen, M L [1]; Louie, S G [1]; Son, Y W [1]	Lawrence Berkeley Natl Lab [1]; Univ Calif Berkeley [1]	carbon [1]; EDGE [1]; ferromagnet [1]; GAS [1]; graphite [1]	Physics, Multidisciplinary [1]
Chemically derived, ultrasmooth graphene nanoribbon semiconductors[1]	Dai, H J [1]; Lee, S W [1]; Li, X L [1]; Wang, X R [1]; Zhang, L [1]	Stanford Univ [1]	capacitance [1]; field effect transistor [1]; film [1]; GAS [1]; graphite [1]	Multidisciplinary Sciences [1]
Controlling the electronic structure of bilayer graphene[1]	Bostwick, A [1]; Horn, K [1]; Ohta, T [1]; Rotenberg, E [1]; Seyller, T [1]	Max Planck Gesell [1]; Univ Calif Berkeley [1]; Univ Erlangen Nurnberg [1]	band structure [1]; Berry phase [1]; Carbon nanotube [1]; graphite [1]; superconductivity [1]	Multidisciplinary Sciences [1]

Synthesis of graphene-based nanosheets via chemical reduction of exfoliated graphite oxide[1]	Dikin, D A [1]; Jia, Y [1]; Kleinhammes, A [1]; Kohlhaas, K A [1]; Nguyen, S T [1]	Dept Chem [1]; Northwestern Univ [1]; Univ N Carolina [1]	CHEMISTRY [1]; Composite [1]; CONDUCTION [1]; DERIVATIVES [1]; Dispersion [1]	Chemistry, Physical [1]; Materials Science, Multidisciplinary [1]
Quantum spin Hall effect in graphene[1]	Kane, C L [1]; Mele, E J [1]	Univ Penn [1]	graphite [1]	Physics, Multidisciplinary [1]
Processable aqueous dispersions of graphene nanosheets[1]	Gilje, S [1]; Kaner, R B [1]; Li, D [1]; Muller, M B [1]; Wallace, G G [1]	Univ Calif Los Angeles [1]; Univ Wollongong [1]	CHEMISTRY [1]; Composite [1]; EXFOLIATED GRAPHITE OXIDE [1]; film [1]; nanoplatelets [1]	Materials Science, Multidisciplinary [1]; Nanoscience & Nanotechnology [1]
Room-temperature quantum hall effect in graphene[1]	Boebinger, G S [1]; Geim, A K [1]; Jiang, Z [1]; Kim, P [1]; Maan, J C [1]	Columbia Univ [1]; Natl High Magnet Field Lab [1]; Univ Manchester [1]; Univ Nijmegen St Radboud Hosp [1]	None	Multidisciplinary Sciences [1]
Large-scale pattern growth of graphene films for stretchable transparent electrodes[1]	Ahn, J H [1]; Choi, J Y [1]; Hong, B H [1]; Jang, H [1]; Kim, J M [1]	Columbia Univ [1]; Pohang Univ Sci & Technol [1]; Samsung Adv Inst Technol [1]; Sungkyunkwan Univ [1]	Epitaxial graphene [1]; oxide [1]; Silicon [1]	Multidisciplinary Sciences [1]
Measurement of the elastic properties and intrinsic strength of monolayer graphene[1]	Hone, J [1]; Kysar, J W [1]; Lee, C [1]; Wei, X D [1]	Columbia Univ [1]	Carbon nanotube [1]; CONSTANT [1]; graphite [1]; Mechanical property [1]; MODULUS [1]	Multidisciplinary Sciences [1]

Substrate-induced bandgap opening in epitaxial graphene[1]	de Heer, W A [1]; Fedorov, A V [1]; First, P N [1]; Guinea, F [1]; Gweon, G H [1]	Boston Univ [1]; CSIC [1]; Georgia Inst Technol [1]; Lawrence Bekeley Natl Lab [1]; Lawrence Berkeley Natl Lab [1]	Dirac fermion [1]; film [1]; GAS [1]; graphite [1]; MICROSCOPY [1]	Chemistry, Physical [1]; Materials Science, Multidisciplinary [1]; Physics, Applied [1]; Physics, Condensed Matter [1]
Ultrahigh electron mobility in suspended graphene[1]	Bolotin, K I [1]; Fudenberg, G [1]; Hone, J [1]; Jiang, Z [1]; Kim, P [1]	Alcatel Lucent Technol [1]; Columbia Univ [1]; Natl High Magnet Field Lab [1]	Electron transport [1]; GAS [1]; Graphene [1]; nanofabrication [1]; SHEET [1]	Physics, Condensed Matter [1]
Functionalized single graphene sheets derived from splitting graphite oxide[1]	Adamson, D H [1]; Aksay, I A [1]; Car, R [1]; Herrera-Alonso, M [1]; Li, J L [1]	Princeton Univ [1]	None	Chemistry, Physical [1]
Electromechanical resonators from graphene sheets[1]	Bunch, J S [1]; Craighead, H G [1]; Frank, I W [1]; McEuen, P L [1]; Parpia, J M [1]	Cornell Univ [1]; Pomona Coll [1]	None	Multidisciplinary Sciences [1]
Graphene nano-ribbon electronics[1]	Avouris, P [1]; Chen, Z H [1]; Lin, Y M [1]; Rooks, M J [1]	IBM Corp [1]	1/f noise [1]; Carbon nanotube [1]; Edge state [1]; FET [1]; Graphene [1]	Nanoscience & Nanotechnology [1]; Physics, Condensed Matter [1]

Preparation and characterization of graphene oxide paper[1]	Dikin, D A [1]; Dommett, G H B [1]; Evmenenko, G [1]; Nguyen, S T [1]; Piner, R D [1]	Northwestern Univ [1]	Dispersion [1]; film [1]; FLEXIBLE GRAPHITE [1]; graphite oxide [1]; Mechanical property [1]	Multidisciplinary Sciences [1]
Quasiparticle dynamics in graphene[1]	Bostwick, A [1]; Horn, K [1]; Ohta, T [1]; Rotenberg, E [1]; Seyller, T [1]	Lawrence Berkeley Natl Lab [1]; Max Planck Gesell [1]; Univ Erlangen Nurnberg [1]	angle resolved photoemission [1]; Berry phase [1]; Dirac fermion [1]; effective mass [1]; Electronic structure [1]	Physics, Multidisciplinary [1]
Electronic structure and stability of semiconducting graphene nanoribbons[1]	Barone, V [1]; Hod, O [1]; Scuseria, G E [1]	Rice Univ [1]	optical transition [1]; PERIODIC-SYSTEMS [1]; ribbon [1]; STATE [1]; WALL CARBON NANOTUBE [1]	Chemistry, Multidisciplinary [1]; Materials Science, Multidisciplinary [1]; Nanoscience & Nanotechnology [1]
Electronic states of graphene nanoribbons studied with the Dirac equation[1]	Brey, L [1]; Fertig, H A [1]	CSIC [1]; Indiana Univ [1]	Carbon nanotube [1]	Physics, Condensed Matter [1]

Table 3.4 provides funding agency data by number of publications for the US, from 2000 to 2010, inclusive.

Table 3.4. Top US Funding Agency Data for Graphene Research (based on the funding agency acknowledgements field of the publication) (2000-2010)

Funding Organization	# Records
National Science Foundation	424
Department of Energy	305
Office of Naval Research	138
Semiconductor Research Corporation	114
Defense Advanced Research Projects Agency	79
Air Force	67
National Science Foundation of China	54
Army Reseach Office	48
Robert A. Welch Foundation	36
973 National Basic Research Program of China	23
National Institutes of Health	21
W. M. Keck Foundation	21
Deutsche Forschungsgemeinschaft	18
New York State Office of Science, Technology, and Academic Research (NYSTAR)	18
Intel	17
European Union	15
Office of Basic Energy Sciences	15
University of Texas at Austin	13
FCRP Center on Functional Engineered Nano Architectonics (FENA)	11
Korean Government	11
Nebraska Research Initiative	11
Engineering and Physical Sciences Research Council	10
MEC-Spain	10
State of Florida	10
American Chemical Society	9

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