

G&G Data Depository: Diamond and colored stone localities active in the period 2000–2010, organized by country, to accompany J. E. Shigley et al., “Gem Localities of the 2000s,” Fall 2010 G&G, pp. 188–216.

Note: This table lists active mining localities of the decade for the more important colored stones, with references to publications in the contemporary literature and personal communications. The country name is followed by the province/state/region, then the district or mining area, and finally (in italics) the name of the closest town or mine/deposit/occurrence when known. Towns or mines that the authors believe were important producers during the past decade are shown in boldface text. The references cited can be found in a master reference list in the G&G Data Depository (gia.edu/gandg).

Continent/ country	Gem material/locality	Reference
Africa Angola	<u>Diamond</u>	Gordon (2004), Chapman (2005), Egorov et al. (2005), A. Janse (pers. comm., 2010)
	Lunda Sul—Saurimo: <i>Catoca</i>	Zinchenko (2008), Read and Janse (2009), Robles-Cruz et al. (2009)
	Lunda Norte—Cafunfo: <i>Luremo</i> ; Cuango-Luzamba: <i>Tazua</i> ; Dundo: <i>Cassanguidi</i> , <i>Faucama</i> ; Lucapa: <i>Calonda</i> , <i>Camatchia</i> , <i>Camafuca</i> , <i>Camatue</i> , <i>Camazuanza</i> , <i>Luana</i> , <i>Luarica</i> , <i>Mafuto</i> , <i>Yetwene</i> ; Nzaji (Andrada): <i>Chimbongo</i> , <i>Chitotolo</i> , <i>Maludi</i>	
Botswana	<u>Diamond</u>	Field et al. (2008), A. Janse (pers. comm., 2010)
	Central—Francistown: <i>Damtshaa</i> , <i>Lerala</i> , <i>Letlhakane</i> , <i>Orapa</i> North-east— <i>Lerala</i> Southern— <i>Jawweng</i>	Deines et al. (2009) Richardson et al. (2004), du Plessis and Sewawa (2005), Brown et al. (2008)
Central African Republic	<u>Diamond</u>	Dietrich (2003), Censier et al. (2006)
	Haute-Kotto— <i>Kotto River</i> Mambéré-Kadéï— <i>Mambéré River</i>	
Democratic Republic of Congo	<u>Diamond</u>	Dietrich (2004), Giresse (2005), Batumike et al. (2009a,b), Pivin et al. (2009), Posukhova and Kolumbe (2009), A. Janse (pers. comm., 2010)
	Kasai Orientale—Mbuji-Mayi: <i>Bushimaie River</i> ; Tshikapa: <i>Kasai River</i>	Long (2007)
	<u>Quartz—Amethyst/Citrine/Ametrine</u>	Fritz and Laurs (2007a)
	<u>Tourmaline</u> Katanga—Manono Nord Kivu—Virunga, Walikale	Glas (2000) Laurs et al. (2004), Michelou (2006)
Eritrea	<u>Garnet—Andradite/Demantoid</u> Northern Red Sea—Sciumagalle	Milisenda and Hunziker (1999), Furuya (2007b)
Ethiopia	<u>Garnet—Almandine/Rhodolite</u> Sidamo—Agere Maryam, Chumba	Quinn and Laurs (2005a)
	<u>Opal</u>	Gaillou et al. (2008)

Continent/ country	Gem material/locality	Reference
	Shewa—Mezezo	Mazzero (2003), Gauthier et al. (2004a), Tucci (2005), Staebler and Neumeier (2007)
	Wollo—Wegel Tena	Mazzero et al. (2009), Rondeau et al. (2009a,2010)
Ghana	<u>Diamond</u> Eastern—Akwatia: <i>Birim</i>	Amankwah and Anim-Sackey (2003), Konstantinovskii (2003), Asiedu et al. (2004,2007), Dampare et al. (2005), Yelapaala and Ali (2005)
Guinea	<u>Diamond</u> Forest Region—Banankoro: <i>Aredor, Bomkolo River</i> ; Kissidougou: <i>Mandala River</i>	Stachel et al. (2000,2002), Skinner et al. (2004), Janse (2009), Weiss et al. (2009)
Ivory Coast	<u>Diamond</u> Northern—Korhogo: <i>Tortiya</i>	Teeuw (2002), Konstantinovskii (2003), Janse (2009)
Kenya	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Eastern—Embu <u>Corundum—Ruby</u> Coast—Kuranze: <i>Ushindi</i> ; Mangare : <i>Rockland (John Saul)</i> Rift Valley— Eldoret : <i>Baringo</i> ; West Pokot: <i>Alale</i> <u>Corundum—Sapphire</u> Coast—Kisoli Eastern—Garba Tula (Dusi), Kitui: <i>Kisou</i> Rift Valley— Eldoret : <i>Baringo</i> ; Turkana: <i>Kanakurdio</i> <u>Feldspar</u> <u>Garnet—Almandine/Rhodolite</u> Coast—Chawia, Kamtonga, Kisoli, Kuranze, Mangare, Manoa, Mgama-Mindi, Mukongonyi, Mwachango: <i>Kambanga</i> Rift Valley—Kajiado <u>Garnet—Grossular/ Hessonite/Tavorite</u> Coast—Chawia, Kamtonga, Kisoli, Kuranze, Mangare, Manoa, Mgama-Mindi, Mukongonyi, Mwachango: <i>Kambanga</i> Rift Valley—Kajiado	Cairncross (2005a) Garnier et al. (2004a), C. Simonet (pers. comm., 2009) Mercier et al. (1999), Pardieu and Senoble (2005d), Michelou (2006), Laurs (2008), Pardieu (2008) Laurs (2002c), Blauwet and Laurs (2005), Pardieu and Senoble (2005d), Pardieu (2008) Garnier et al. (2004a), C. Simonet (pers. comm., 2009) Sutherland and Schwarz (2001), Simonet et al. (2004) Blauwet and Laurs (2005) Chadwick et al. (2008b) C. Simonet (pers. comm., 2009) C. Simonet (pers. comm., 2009) Levinson et al. (2001d), Pardieu and Senoble (2005d), Michelou (2006), Pardieu (2008), Pardieu and Hughes (2009), Jang-Green and Beaton (2009)

Continent/ country	Gem material/locality	Reference
	<u>Garnet—Spessartine</u> Coast—Kamtonga	Beaton (2009a)
	<u>Iolite (Cordierite)</u> Eastern—Kitui	C. Simonet (pers. comm., 2009)
	<u>Quartz—Amethyst/Citrine/Ametrine</u> Eastern—Kitui	C. Simonet (pers. comm., 2009)
	<u>Spinel</u> Coast—Rukanga	C. Simonet (pers. comm., 2009)
	<u>Tourmaline</u> Coast—Kambanga, Kamtonga, Kisoli, Kuranze, Lasamba Hill, Mangare: <i>Rockland (John Saul)</i> , <i>Yellow</i> ; Mgama-Mindi, Mukongonyi, Mwakinsunzuru, Ngombeni Rift Valley—Narok: <i>Osarara</i>	C. Simonet (pers. comm., 2009) Simonet (2000,2006)
Lesotho	<u>Diamond</u> Butha Buthe— <i>Koa</i> , <i>Liqhobong</i> Mokhotlong— <i>Letšeng-la-Terae</i>	Field et al. (2008), Bowen et al. (2009), Read and Janse (2009)
Liberia	<u>Diamond</u> Lofa—Weasua: <i>Lofa River</i> Nimba— Sanniquellie: <i>Nimba</i>	Skinner et al. (2004), Janse (2009)
Madagascar	<u>Amber/Copal</u> <u>Apatite</u> Antsiranana—Ambilobe, Ankarafa, Daraina, Manambato, Milanoa Toliara—Mitsinjo <u>Beryl—Emerald</u> Fianarantsoa— Mananjary : <i>Ambodibakoly</i> , <i>Ifanadiana</i> , <i>Irondro</i> , <i>Kianjavato</i> , <i>Morafeno</i> Toliara—Ianapera: <i>Sakalava</i> <u>Beryl—Aquamarine/Heliodor/Morganite</u> Antananarivo—Ambohidrano, Anjanabonoina, Ankazobe, Antsirabe, Betafo, Mahaiza, Mount Bity, Vohitrakanga Antsiranana—Andapa Fianarantsoa—Ambatovita, Isahara, Voandambo Mahajanga—Andriamena, Boriziny, Mahajamba Toamasina—Ambatondrazaka Toliara—Amboasary <u>Chrysoberyl (Including cat's-eye)</u>	Laurs (2001h) F. Danet and F. Pezzotta (pers. comm., 2009) Laurs (2000) Gründmann and Giuliani (2002), Kanis and Schwarz (2002) , Groat et al. (2008), F. Danet (pers. comm., 2009) Henn and Milisenda (2001), Moine et al. (2004), Vapnik et al. (2006) Vapnik et al. (2005), Andrianjakavah et al. (2009) Henn and Milisenda (2001), F. Danet and F. Pezzotta (pers. comm., 2009) Pezzotta (2001b), Danet (2007) Pezzotta (2001b) Laurs and Quinn (2002a) Pezzotta (2001b) F. Danet (pers. comm., 2009)

Continent/ country	Gem material/locality	Reference
	Antananarivo—Ankazobe Fianarantsoa—Ambositra, Ilakaka	Henn and Milisenda (2001) Milisenda et al. (2001b), Pezzotta (2001f,g,h), Schmetzer et al. (2002b) Pezzotta (2001b)
	Toamasina—Ambatondrazaka	
	<u>Chrysoberyl—Alexandrite</u> Fianarantsoa—Ilakaka	F. Danet (pers. comm., 2009) Milisenda et al. (2001b), Pezzotta (2001f,g,h), Schmetzer (2002)
	<u>Corundum—Ruby</u>	Giuliani et al. (2007a,b), Rakontondrazafy et al. (2008), F. Danet (pers. comm., 2009) Pardieu and Senoble (2005c), Rakotosamizanany et al. (2009) Rakotosamizanany et al. (2009) Laurs (2000), Cartier (2009)
	Antananarivo—Antanifotsy, Antsahanandriana, Faratsiho, Soamiakatra Antsiranana—Ambondromifehy Fianarantsoa—Marosely, Miarinarivo, Sakeny Mahajanga—Andriba Toamasina—Ambatondrazaka, Ambodilalona, Amboditavolo, Ambodivandrika, Andilamena , Beforona, Didy, Moramanga, Tetezampaho, Vatomandry	Hänni (2001), Hänni et al. (2001), Leuenberger (2001), Schwarz and Schmetzer (2001), Pardieu and Senoble (2005c), Rakotosamizanany et al. (2009)
	<u>Corundum—Sapphire</u>	Garnier et al. (2004a,b), Giuliani et al. (2007a,b), Rakontondrazafy et al. (2008), F. Danet (pers. comm., 2009) Rakotosamizanany et al. (2009) Laurs (2000,2003a), Schwarz et al. (2000), Pardieu and Senoble (2005c), Rakotosamizanany et al. (2009), Ramdohr and Milisenda (2004, 2006) Laurs (2000,2003a), Milisenda et al. (2001b), Pardieu and Senoble (2005c), Pezzotta (2001f,g,h,2006), Ralantoarison et al. (2006), Cartier (2009) Pardieu and Senoble (2005c), Rakotosamizanany et al. (2009) Milisenda et al. (2001a), Pardieu and Senoble (2005c)
	Antananarivo—Anjomakely, Antanifotsy, Mandrosohasina Antsiranana—Amboahangimamy, Ambondromifehy , Antserasera, Anivorano, Befotaka	
	Fianarantsoa—Ambinda, Andranolava, Ilakaka , Marosely, Sahambano, Sakalalina, Zazafotsy	
	Toamasina— Andilamena , Vatomandry	
	Toliara—Amboasary, Andranondambo , Bekily, Betroka, Iankaroka, Sakaraha , Voronkafatra	
	<u>Danburite</u> Antananarivo—Anjanabononina, Mount Bity Fianarantsoa—Ambatovita	F. Danet (pers. comm., 2009)
	<u>Euclase</u> Antananarivo—Ambohidrano	F. Danet (pers. comm., 2009)
	<u>Feldspar</u> Antananarivo—Ambohimambola Fianarantsoa—Ambositra, Sahambano Mahajanga—Kandreho Toamasina—Ambatondrazaka Toliara—Betioiky, Mahabo, Mahaso	Henn and Milisenda (2001) Quinn and Laurs (2006c) Pezzotta (2001a)

Continent/ country	Gem material/locality	Reference
	<u>Garnet—Almandine/Rhodolite</u>	Henn and Milisenda (2001), F. Danet (pers. comm., 2009)
	Antananarivo—Betafo	
	Fianarantsoa—Ambositra, Ankaditany, Ilakaka , Ranohira	
	Toamasina—Ambatondrazaka, Andreba, Marolambo	Schmetzer et al. (2002c)
	Toliara—Ambovombe, Ampanihy, Bekily, Betioky, Betroka, Fotodrevo, Sakaraha , Taolagnaro, Tranoroa	Schmetzer et al. (2001,2002b)
	<u>Garnet—Andradite/Demantoid</u>	
	Antsiranana—Antetezambato	F. Danet (pers. comm., 2009)
		Danet (2009a), Mocquet et al. (2009), Rondeau and Fritsch (2009), Rondeau et al. (2009b), Schmetzer and Karampelas (2009), Pezzotta (2010), Praszker and Gajowniczek (2010)
	<u>Garnet—Grossular/ Hessonite/Tsavorite</u>	
	Toliara—Behara, Bekily, Berenty, Ejeda, Gogogogo	F. Danet (pers. comm., 2009)
		Henn and Milisenda (2001), Laurs (2003a), Pardieu and Hughes (2008-2009)
	<u>Garnet—Pyrope</u>	
	Toamasina—Marolambo	F. Danet (pers. comm., 2009)
	Toliara—Ampanihy, Antaratra, Bekily, Fotodrevo, Sakoandroa, Tranoroa	Schmetzer et al. (2001,2002b), Krzemnicki et al. (2001), Laurs (2003a), Schmetzer (2003)
	<u>Garnet—Spessartine</u>	
	Fianarantsoa—Ilakaka	F. Danet (pers. comm., 2009)
	Mahajanga—Ambohimaranitra	
	Toliara—Antaratra, Sakoandroa	
	<u>Iolite (Cordierite)</u>	
	Toliara—Anbatomanaho	Henn and Milisenda (2001), F. Danet (pers. comm., 2009)
	<u>Kornerupine</u>	
	Toliara—Betroka	Henn and Milisenda (2001)
	<u>Opal</u>	
	Toliara—Beraketa, Tsivory	Simoni and Caucia (2009)
		Holzhey (2000), Henn and Milisenda (2001)
	<u>Phenakite</u>	
	Antananarivo—Anjanabonoina	Danet (2009c)
	<u>Quartz—Amethyst/Citrine/Ametrine</u>	
	Antananarivo—Andongologo, Bevitsika Mountain, Mahasolo, Soavinandriana	Henn and Milisenda (2001), F. Danet (pers. comm., 2009)
	Antsiranana—Ambakirano, Andapa	Danet (2009)
	Fianarantsoa—Ambatofinandrahana, Ambositra, Isahara, Mangataboahangy, Vondrozo, Vorondolo	
	Mahajanga—Boriziny, Tsaratanana	Pezzotta (2001e)
	Toamasina—Antanimbohibe, Didy, Vatomandry	
	Toliara—Ifotaka	E. Granon (pers. comm., 2009)

Continent/ country	Gem material/locality	Reference
	<u>Quartz—Rose</u> Antananarivo—Ambohimanitra, Antsirabe, Betafo, Faratsiho, Mahaiza, Tsiroanomandidy Fianarantsoa—Ambositra Toamasina—Ambatomafana, Ambatondrazaka, Analangoaika, Antanimenabaka, Didy, Lakato, Moramanga, Ranomafana, Sahaviavy Fito	Henn and Milisenda (2001), F. Danet (pers. comm., 2009) Pezzotta (2001c) E. Granon and R. Gobert (pers. comm., 2009)
	<u>Rhodonite</u> Toliara—Ampanihy	Henn and Milisenda (2001)
	<u>Sphene (Titanite)</u> Antsiranana—Ankarafa, Daraina	Laurs (2000), Pezzotta (2001d), F. Danet (pers. comm., 2009)
	<u>Spinel</u> Fianarantsoa—Ilakaka	Henn and Milisenda (2001) Schmetzer (2000), Milisenda et al. (2001b), Pezzotta (2001f,g,h)
	Spodumene—Kunzite/Hiddenite Antananarivo—Anjanabonoina, Antsirabe, Betafo, Mount Bity Fianarantsoa—Ambatovita, Ambositra, Ilakaka, Voandambo	Henn and Milisenda (2001), F. Danet (pers. comm., 2009) Danet (2007) Pezzotta (2001f,g,h)
	<u>Topaz</u> Antananarivo—Faratsiho Antsiranana—Andapa Fianarantsoa—Ambositra, Ilakaka, Isahara	Henn and Milisenda (2001), F. Danet (pers. comm., 2009) Milisenda et al. (2001b), Pezzotta (2001f,g,h)
	<u>Tourmaline</u> Antananarivo—Anjanabonoina, Antandrokomby, Antsikoza, Antsirabe, Betafo, Manjaka, Mount Bity, Vohitrakanga Fianarantsoa—Alakamisy Itenina, Ambatofinandrahana, Ambatovita, Bevaondrano, Ilakaka, Isahara, Valozoro Toamasina—Ambatondrazaka, Mananara Toliara—Taolagnaro	Henn and Milisenda (2001), Glas (2002), F. Danet (pers. comm., 2009), Scovil (2010) Laurs (2000), Pezzotta (2001b), Dirlam et al. (2002), De Vito et al. (2006), Danet (2007), Praszkie (2010) Milisenda et al. (2001b), Danet (2006), Pezzotta (2001f,g,h,2006) Pezzotta and Jobin (2004)
	<u>Zircon</u> Antananarivo—Antanifotsy Fianarantsoa—Ilakaka Toliara—Amboasary, Betroka	Henn and Milisenda (2001), F. Danet (pers. comm., 2009)
Malawi	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Northern— Mzimba	Cairncross (2005a), Michelou (2006), Dill (2007)
	<u>Corundum—Ruby</u>	

Continent/ country	Gem material/locality	Reference
	Southern—Ntcheu: <i>Chimwadzulu Hill</i>	Emmett (2000), Boehm (2004), Laurs (2004c), Dill (2005,2007), Michelou (2006), Dill and Ludwig (2008)
	<u>Corundum—Sapphire</u> Southern—Ntcheu: <i>Chimwadzulu Hill</i>	Emmett (2000), Rankin (2002), Laurs (2004c), Dill (2005,2007), Michelou (2006), Dill and Ludwig (2008)
Mali	<u>Garnet—Grossular/ Hessonite/Tsavorite</u> Kayes—Sandaré	Dameron (2008)
Morocco	<u>Quartz—Amethyst/Citrine/Ametrine</u> Tata—Tata	Beaton (2009b)
Mozambique	<u>Beryl—Emerald</u> Zambézia—Gilé: <i>Niane, Rio Maria</i> ; Ile: <i>Maria III</i> ; Uape: <i>Maria Norte</i>	Kanis and Schwarz (2002), J. Marques (pers. comm., 2009) Bettencourt-Dias and Wilson (2000), Gründmann and Giuliani (2002), Kanis and Schwarz (2002), Vapnik and Moroz (2002), Schappmann (2005), Groat et al. (2008)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Nampula—Chalaua (Moma), Lalaua: <i>Lalaua</i> ; Malema: <i>Mutuáli</i> Tete—Marávia: <i>Marironguè</i> ; Mutarara: <i>Nhaphali</i> ; Zumbo: <i>Mese River</i> Zambézia—Alto Molócuè: <i>Namacotche</i> ; Gilé: <i>Marropino, Naipa</i> ; Milange, Mocuba, Muiane, Murrua	J. Marques (pers. comm., 2009) Bettencourt-Dias and Wilson (2000), Schäfer and Arlt (2000), Cairncross (2005a), Schappmann (2005)
	<u>Corundum—Ruby</u> Cabo Delgado—Montepuez: <i>Namahaca, Namahumbire</i> Niassa—Marrupa: <i>Luambéze River</i> ; Mavango: <i>M'Sawize</i> Tete—Changara: <i>Dombe Mountain, Nhaponzo</i>	J. Marques (pers. comm., 2009) Hänni and Krzemnicki (2009), Pardieu et al. (2009b,c,e) McClure and Koivula (2009), Pardieu et al. (2009b,c,e)
	<u>Corundum—Sapphire</u> Manica—Chimoio: <i>Chimoio</i> Tete—Mutarara: <i>Nhaphali</i>	J. Marques (pers. comm., 2009)
	<u>Feldspar</u> Tete—Marávia: <i>Marironguè</i>	J. Marques (pers. comm., 2009)
	<u>Garnet—Almandine/Rhodolite</u> Niassa—Cuamba: <i>Cuamba</i>	J. Marques (pers. comm., 2009)
	<u>Quartz—Amethyst/Citrine/Ametrine</u> Nampula—Namapa: <i>Namapa</i> Tete—Zumbo: <i>Catizane River</i> Zambézia—Alto Molócuè: <i>Molócuè</i> ; Milange: <i>Milange</i> ; Murrua	J. Marques (pers. comm., 2009) Bettencourt-Dias and Wilson (2000)
	<u>Quartz—Rose</u>	

Continent/ country	Gem material/locality	Reference
	Zambézia—Alto Molócuè: <i>Naquillite, Naquissupa, Nuaparra</i>	Bettencourt-Dias and Wilson (2000)
	<u>Scapolite</u> Nampula—Malema: <i>Mutuáli</i> Zambézia—Gilé	J. Marques (pers. comm., 2009) Gomes et al. (2004) Michelou (2006)
	<u>Spodumene—Kunzite/Hiddenite</u> Zambézia—Gilé: <i>Muhano</i> ; Murrua	J. Marques (pers. comm., 2009)
	<u>Topaz</u> Tete—Marávia: <i>Marironguè</i> Zambézia—Gilé: <i>Naípa</i>	J. Marques (pers. comm., 2009)
	<u>Tourmaline</u> Cabo Delgado Manica—Nhampassa, Pataguenha Nampula —Namelit: <i>Mogovolás</i> ; Moma: <i>Mavuco</i> ; Nacala-a-Velha: <i>Nacala</i> Tete—Marávia: <i>Marironguè</i> Zambézia—Alto Molócuè: <i>Namacotche</i> ; Gilé: <i>Muhano, Naípa</i> ; Mocuba, Muiane, Naquissupa	Glas (2002), Rondeau and Delaunay (2007), J. Marques (pers. comm., 2009) Fritz et al. (2007a) Bettencourt-Dias and Wilson (2000), Schäfer and Arlt (2000), Abduriyim and Kitawake (2005), Schappmann (2005), Abduriyim et al. (2006), Michelou (2006), Milisenda et al. (2006), Laurs and Zwaan (2007), Laurs et al. (2008a,b), Neves (2009), Pardieu et al. (2009d)
Namibia	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Erongo—Erongo Mountains, Klein Spitzkoppe, Rössing Mountain	G. Schneider (pers. comm., 2009) Jahn (2000), Jahn and Bahmann (2000), Glas (2002), Laurs (2002a), Cairncross (2005a), Cairncross and Bahmann (2006)
	<u>Diamond</u> Coastal waters near Lüderitz Karras—Oranjemund: <i>Auchas, Daberas, Diamond Area 1</i>	Miller (2001), Garnett (2002), Rogers and Lee (2002), Leost et al. (2003), Harris et al. (2004), Moore and Moore (2004), Bluck et al. (2005,2007), Jacob et al. (2006), Phillips and Harris (2009), A.. Janse (pers. comm., 2009) Kampf (2007) Spaggiari et al. (2006), Kampf (2007)
	<u>Garnet—Andradite/Demantoid</u> Erongo—near Erongo Mountain, Tubussis	Laurs (2002e), Cairncross and Bahmann (2006), Fritz et al. (2007c), Furuya (2007b), Stephenson and Kouznetsov (2009)
	<u>Garnet—Spessartine</u> Kunene—Hartmann Mountains: <i>Marienfluss</i>	G. Schneider (pers. comm., 2009) Palfi (2005), Staebler (2008), Cook (2010b), Milisenda et al. (2010)
	<u>Quartz—Amethyst/Citrine/Ametrine</u>	G. Schneider (pers. comm., 2009)

Continent/ country	Gem material/locality	Reference
	Erongo—Erongo Mountains, Goboboseb, Otjiwarongo: <i>Platveld</i> Kunene—Namib Desert: <i>Sarusas</i>	Michelou (2006) Laurs (2005a)
	<u>Topaz</u> Erongo—Klein Spitzkoppe	Cairncross (2005b), Haapala et al. (2007), G. Schneider (pers. comm., 2009)
	<u>Tourmaline</u> Erongo—Eausiro, Kubas, Neu Schwaben, Omapyo, Otjua, Uis, Usakos	Jahn et al. (2001), Glas (2002) Keller et al. (1999), Laurs (2002a), Mossman (2002), Rustemeyer and Deyer (2003), Trumbull et al. (2008), G. Schneider (pers. comm., 2009), C. Johnston (pers. comm., 2010)
	<u>Beryl—Emerald</u> Nassarawa—Nassarawan Eggon Kaduna—Gwantu: <i>Ankara</i> ; Nandu: <i>Nandu</i>	Kanis and Schwarz (2002), J. Michelou (pers. comm., 2009) Michelou (2007) Vapnik and Moroz (2000), Gründmann and Giuliani (2002)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Kaduna—Kwoi Kogi—Egbe, Okene Nassarawa—Akwanga Niger—Paikolo Ogun—Ijebu Igbo, Igbo Ora Oyo—Olonde: <i>Concord, Gbayo</i> Plateau—Bomo	Michelou (2006,2007), J. Michelou (pers. comm., 2009)
	<u>Corundum—Sapphire</u> Bauchi —Tafawa Balewa Borno—Gunda Kaduna —Antang, Gidan Waya, Godogodo Taraba—Ganye, Gembu: <i>Karim Lamido</i>	Michelou (2006,2007), J. Michelou (pers. comm., 2009) Sutherland and Schwarz (2001)
	<u>Garnet—Grossular/ Hessonite/Tsavorite</u> Cross River Kogi—Makutu Kwara—Babana Plateau	J. Michelou (pers. comm., 2009)
	<u>Garnet—Spessartine</u> Oyo—Komu, Ogbomosho, Iseyin	Lind and Henn (2000), J. Michelou (pers. comm., 2009) Michelou (2007), Staebler (2008), Milisenda et al. (2010)
	<u>Phenakite</u> Edo—Okuta Plateau—Jos	J. Michelou (pers. comm., 2009) Laurs (2009d)
	<u>Quartz—Amethyst/Citrine/Ametrine</u>	Michelou (2006,2007)

Continent/ country	Gem material/locality	Reference
	Bauchi Cross River Gombe Kaduna Kano Oyo Taraba—Jalingo	Laurs and Koivula (2003)
	<u>Spodumene—Kunzite/Hiddenite</u> Kaduna Oyo—Komu Niger—Pandagari	Michelou (2006,2007) Laurs (2001e)
	<u>Topaz</u> Bauchi—Magama Plateau—Bomo Nassarawa—Shabu	Michelou (2006,2007), J. Michelou (pers. comm., 2009)
	<u>Tourmaline</u> Ekiti—Ijero Ekiti Jigawa Kaduna—Kagarko Kwara—Babana, Lemo, Ndeji, Ora, Oro Nassarawa —Akwandoka, Garatu, Keffi Niger—Kontagora, Pandogari, Sarkin Pawa Oyo —Are, Budo, Ilorin: <i>Edeko</i> ; Iseyin, Itasa, Komu, Ogbomosho	Glas (2002), Laurs et al. (2002a,b), Michelou (2006,2007), Breeding et al. (2007), Rondeau and Delaunay (2007), Laurs (2009a), J. Michelou (pers. comm., 2009)
	Zamfara	Michelou (2008-2009). Befi et al. (2009)
	<u>Zircon</u> Bauchi Kaduna Plateau Taraba	Henn (2001), Laurs (2001c, 2009c), Milisenda and Henn (2001), Smith et al. (2001), Laurs et al. (2002a,b), Abduriyim et al. (2006)
Sierra Leone	<u>Diamond</u> Eastern—Kenema, Koidu: <i>Pipes 1, 2 and 3</i> ; Zimmi: <i>Magna Egoli</i>	Siyanbola et al. (2005), Michelou (2006)
		Gberie (2004,2006), Skinner et al. (2004), Maconachie and Binns (2007), Posukhova and Kolume (2009)
Somalia	<u>Beryl—Emerald</u> Awdal—Alihiley, Simodi	Kinnard (2001)
	<u>Opal</u> Jodha—Qabri Baxar	Kinnaird (2002)

South Africa	<u>Diamond</u>	Moore and Moore (2004), Bluck et al. (2005,2007), Damarupushad (2006), Wilson et al. (2006,2007), Field et al. (2008), A. Janse (pers. comm., 2010)
	Coastal waters—Cape Town: <i>SASA</i> ; Port Nolloth: <i>B concessions</i>	
	Free State—Kimberley: <i>Blaauwbosch, Loxtondal</i> ; Koffiefontein: <i>Koffiefontein</i> ; Kroonstad: <i>Lace, Voorspoed</i> ; Theunissen: <i>Star</i>	Naidoo et al. (2004)
	Gauteng—Pretoria: <i>Cullinan</i>	
	Limpopo—Messina: <i>Venetia</i> ; Mokopane (Potgietersrus): <i>Klipspringer, Marsfontein, The Oaks</i> ; Pretoria: <i>Palmietgat</i>	Barton et al. (2003), Kurszlaukis and Barnett (2003), Richardson et al. (2009)
	Northern Cape—Alexander Bay: <i>Alexkor, Baken, Bloeddrif, Oena, Reuning</i> ; Barkly West: <i>Klipdam</i> ; Douglas: <i>Saxendrift, Wouterspan</i> ; Kimberley: <i>Bellsbank, Elandslaagte, Frank Smith, Kamfersdam, Kimberley, Newlands, Nooitgedacht, Schmidtsdrift, Schutsekama, Sedibeng, Simolotse</i>	Appleyard et al. (2004), de Wit (2004)
	Postmasburg: <i>Finsch</i> ; Prieska: <i>Silverstreams</i> ; Springbok: <i>Avontuur, Bontekoe, Buffels inland, Hondeklip, Kleinzee, Koiingnaas</i>	
	North West—Bloemhof: <i>Kareepan</i> ; Lichtenburg: <i>Bakerville</i> ; Reivilo: <i>Savanna</i> ; Schweizer-Reineke: <i>London</i> ; Swartruggens: <i>Helam</i> ; Ventersdorp: <i>Tirisano</i>	McKenna et al. (2004), Marshall and Norton (2009)
	Western Cape—Vredendal: <i>Graauwduinen</i>	
	<u>Beryl—Emerald</u>	Kanis and Schwarz (2002)
Tanzania	Limpopo—Gravelotte	Gründmann and Giuliani (2002)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u>	
	Northern Cape—Keimoes	Cairncross (2005a)
	<u>Axinite</u>	
	Arusha—Merelani Hills	Andreozzi et al. (2000), Jang-Green et al. (2007), Wilson et al. (2009)
	<u>Diamond</u>	
	Shinyanga—Shinyanga: <i>Mwadui</i>	Tassell (2003), Stiefenhofer and Farrow (2004), Mutagwabe et al. (2007), Scalie et al. (2007), A. Janse (pers. comm., 2010)
	<u>Beryl—Emerald</u>	Kanis and Schwarz (2002), W. Balmer and M. Saul (pers. comm., 2009)
	Manyara—Mangola, Mayoka	Moroz et al. (2001), Gründmann and Giuliani (2002), Cairncross (2005a), Michelou (2006), Groat et al. (2008)
	Rukwa—Sumbawanga	Moroz et al. (2001), Michelou (2006), Groat et al. (2008)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u>	Michelou (2006), D. Mantheakis (pers. comm., 2009)
	Arusha—Loliondo	
	Rukwa—Sumbawanga	
	Ruvuma—Nyamtumbo, Songea, Tunduru	Laurs (2002b)
	<u>Chrysoberyl (Including cat's-eye)</u>	
		Michelou (2006), W. Balmer, D. Mantheakis, and M. Saul (pers. comm., 2009)

Continent/ country	Gem material/locality	Reference
	Manyara—Mayoka Mtwara—Lumesule River Ruvuma—Muhuvesi River, Mtetesi River, Tunduru	Pardieu (2007a)
	<u>Chrysoberyl—Alexandrite</u> Manyara—Mayoka	Michelou (2006), D. Mantheakis (pers. comm., 2009)
	<u>Chrysoprase/Prase Opal</u> Dodoma—Haneti: <i>Iyobo Mountain</i>	Shigley et al. (2009)
	<u>Corundum—Ruby</u> Arusha—Landanai, Lossongonoi, Wundarara Dodoma— Winza Kilimanjaro—Longido: <i>Mundarara</i> Morogoro—Epanko, Lukande, Mahenge, Matombo , Uluguru Mountains Rukwa—Chala Ruvuma—Amanimakoro, Mtetesi River, Muhuvesi River, Ngapa, Songea, Tunduru Tanga—Kalalani, Umba Valley	Garnier et al. (2004a,b), W. Balmer, D. Mantheakis, and M. Saul (pers. comm., 2009) Pardieu (2007b), Le Goff et al. (2008) Hänni (2008), Laurs and Pardieu (2008), Schwarz et al. (2008), Schmetzer et al. (2010) Pardieu and Senoble (2005e), Michelou (2006), Le Goff et al. (2010) Pardieu and Senoble (2005e), Michelou (2006), Pardieu (2007a)
	<u>Corundum—Sapphire</u> Dodoma— Winza Morogoro—Lukande, Mahenge, Matombo, Uluguru Mountains Ruvuma—Amanimakoro, Mtetesi River, Muhuvesi River, Ngapa, Songea, Tunduru Tanga—Kalalani, Kigwase, Umba Valley	Hamid et al. (2000), Pardieu and Senoble (2005e) Garnier et al. (2004a), W. Balmer, D. Mantheakis, and M. Saul (pers. comm., 2009) Garnier et al. (2004a,b), W. Balmer, D. Mantheakis, and M. Saul (pers. comm., 2009,2010) Laurs and Pardieu (2008), Schwarz et al. (2008), Schmetzer et al. (2010) Pardieu and Senoble (2005e), Michelou (2006), Pardieu (2007a) Pardieu and Senoble (2005e), Michelou (2006), Pardieu (2007a) Michelou (2006)
	<u>Danburite</u> Morogoro—Uluguru Mountains	Chadwick and Laurs (2008), W. Balmer (pers. comm., 2009)
	<u>Feldspar</u> Arusha—Engare Naibor Kilimanjaro—Longido Manyara—Narujuruju Morogoro—Geiro, Kilosa Tanga—Mbaromo	Hänni et al. (2003), Henn (2005a), Henn et al. (2005), Michelou (2006), Chadwick et al. (2008), W. Balmer, D. Mantheakis, and S. Merishaki (pers. comm., 2009) Laurs (2002i) Quinn et al. (2005)

Continent/ country	Gem material/locality	Reference
	<u>Garnet—Almandine/Rhodolite</u>	W. Balmer, D. Mantheakis, and M. Saul (pers. comm., 2009.2010)
	Arusha—Komolo, Merelani Hills Kilimanjaro—Hedaru, Mwembe Lindi—Namungo Manyara—Lelatema Mountains Morogoro—Mahenge, Matombo, Mvuha, Uluguru Mountains Mtwara—Namaputa Ruvuma—Mtetesi River, Muhuwesi River, Tunduru Tanga—Kalalani, Kigwase, Mwakijembe, Umba Valley	Quinn-Darenius and Laurs (2008)
	<u>Garnet—Grossular/ Hessonite/Tsavorite</u>	Blodgett et al. (2007)
	Arusha— Komolo: <i>Lemeshuko</i> ; Loliondo, Merelani Hills Lindi—Mbekenyeru, Namungu Hill Manyara—Lelatema Mountains, Naberera, Namalulu Ruvuma—Mtetesi River, Muhuwesi River, Tunduru Tanga—Kalalani, Umba Valley	Levinson et al. (2001d), W. Balmer, D. Mantheakis, S. Merisheki, and M. Saul (pers. comm., 2009) Pardieu (2007b), Pardieu and Hughes (2009) Pardieu (2007a). Pardieu and Hughes (2009) Mayerson and Laurs (2004), Zang (2008b), Pardieu and Hughes (2009), Beaton (2009c), Pardieu et al. (2010) Pardieu (2007a), Pardieu and Hughes (2009)
	<u>Garnet—Pyrope</u> Lindi—Namtamba Tanga— Umba Valley	Laurs and Quinn (2006a) Blodgett et al. (2007)
	<u>Garnet—Spessartine</u> Arusha—Loliondo: <i>Nani</i> Iringa Lindi—Namtamba Tanga—Kalalani, Umba Valley	D. Mantheakis and W. Balmer (pers. comm., 2009) Pardieu (2007b), Chadwick et al. (2008a), Staebler (2008), Milisenda et al. (2010) Laurs (2002b) Laurs and Quinn (2006a), Quinn- Darenius and Laurs (2008) Staebler (2008)
	<u>Iolite (Cordierite)</u> Dodoma—Mpwapwa Kilimanjaro—Pare Mountains	W. Balmer (pers. comm., 2009)
	<u>Kornerupine</u> Tanga—Usambara Mountains	Cevalhos (2009)
	<u>Kyanite</u> Arusha—Loliondo: <i>Nani</i>	Chadwick and Rossman (2009)
	<u>Scapolite</u> Dodoma—Mpwapwa	Henn (2005b) Mayerson et al. (2003), Michelou (2006)
	<u>Taaffeite</u> Ruvuma—Tunduru	Schmetzer et al. (2007)

Continent/ country	Gem material/locality	Reference
	<u>Spinel</u>	Michelou (2006), W. Balmer, D. Mantheakis, and M. Saul (pers. comm., 2009,2010) S. Merisheki (pers. comm., 2009)
	Arusha—Komolo Morogoro—Chipa, Epanko, Kituti, Mahenge , Matombo, Mbarabanga , Mvuha, Uluguru Mountains	Hyršl (2001b), Quinn and Laurs (2004d), Pardieu and Senoble (2005e), Laurs (2006), Pardieu and Hughes (2008)
	Mtwara—Lumesule River Ruvuma—Mtetesi River, Muhuwaesi River, Tunduru	Pardieu and Senoble (2005e)
	<u>Tourmaline</u>	Glas (2002), W. Balmer, D. Mantheakis, and M. Saul (pers. comm., 2009) Pardieu (2007b)
	Arusha—Landenai Manyara—Lengasti	Simonet (2006), S. Merisheki (pers. comm., 2009)
	Morogoro—Mkuyuni, Uluguru Mountains Tanga—Daluni, Mnazi	Quinn and Laurs (2006b)
	<u>Zircon</u>	W. Balmer, D. Mantheakis, S. Merisheki, and M. Saul (pers. comm., 2009)
	Kilimanjaro—Same Singida—Kipuma, Kisiriri Tanga—Kalalani, Korogwe, Mwakijembe, Uмба Valley	Henn (2009a)
	<u>Zoisite (Includes tanzanite)</u> Arusha— Merelani Hills	Malisa (2003), Scheepers and Scheepers (2003), Zancanella (2004,2006,2007), Pardieu and Senoble (2005e), Smuts (2005), Michelou (2006), Pardieu (2007b), Giuliani et al. (2008), Pardieu et al. (2009a), Wilson et al. (2009), Schroeder (2010)
Zambia	<u>Beryl—Emerald</u> Copperbelt— Luanshya-Kafubu : <i>Chantete, Grizzly, Kagem, Piralá</i>	Kanis and Schwarz (2002) Milisenda et al. (1999), Gründmann and Giuliani (2002), Taupitz (2003a), Laurs (2004c), Seifert et al. (2004), Cairncross (2005a), Zachariáš et al. (2005), Zwaan et al. (2005), Groat et al. (2008), Lees (2009b), Behling and Wilson (2010), Cook (2010a)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Central —Mkushi Eastern —Chama, Lundazi	C. Milisenda (pers. comm., 2009)
	Southern—Itezhi-Tezhi	Milisenda et al. (2000), Carranza et al. (2005)
	<u>Chrysoberyl (Including cat's-eye)</u> Eastern—Muyombe: <i>Kalanga Hill</i>	Žáček and Vrána (2002)
	<u>Garnet—Pyrope</u>	

Continent/ country	Gem material/locality	Reference
	Eastern—Sangu	Seifert and Vrána (2003)
	<u>Garnet—Spessartine</u> Eastern—Lundazi	Laurs et al. (2009)
	<u>Phenakite</u> Copperbelt—Luanshya-Kafubu	J. Hyršl (pers. comm., 2009)
	<u>Quartz—Amethyst/Citrine/Ametrine</u> Central—Mumbwa Southern— Kalomo : <i>Mapatizya</i>	C. Milisenda (pers. comm., 2009) Milisenda et al. (2001c), Anckar (2006)
	<u>Topaz</u> Copperbelt—Kareengerenge	S. Vrána (pers. comm, 2009)
	<u>Tourmaline</u> Central—Kabwe: <i>Jagoda, Kumanga</i> ; Mkushi Eastern—Lundazi: <i>Aries, Canary, Kalungabeba</i> ; Nyimba: <i>Hofmeyer</i>	Glas (2002) Milisenda et al. (2000), Laurs (2004c) Milisenda et al. (2000), Laurs (2004c), Laurs et al. (2007,2009)
	<u>Diamond</u> Manicaland—Mutare: <i>Marange</i> Midlands—Zvishavane: <i>Murowa</i>	Field et al. (20080), Elliott (2009), A. Janse (pers. comm., 2010)
	<u>Beryl—Emerald</u> Mashonaland West—Karo: <i>Rukomechi</i> ; Mwami: <i>Simu, Swallow</i> Masvingo—Gutu: <i>Chikwanda, Novello</i> ; Masvingo: <i>Brentwood, Mayfield</i> Midlands—Somabhula, Mberengwe : <i>Hyabert, Khanya Hlaza, Lodge, Machingwe, Mtombeni, Pandora, Pearzam, Sihande, Vidan East, Venus, Zeus (Sandawana)</i>	Kanis and Schwarz (2002), L.F. Marsh and F. Mugumbate (pers. comm., 2009) Zwaan and Touret (2000), Gründmann and Giuliani (2002), Taupitz (2003b), Zwaan et al. (2004), Zwaan (2006), Groat et al. (2008)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Mashonaland Central—Rushinga: <i>First Try, God's Gift</i> Mashonaland East—Mutoko: <i>Benson</i> Mashonaland West—Mwami: <i>Baboon Hill, Gwati, JLM, Saint Ann's, Simu, Swallow, Green Walking Stick</i> Masvingo—Gutu: <i>Novello</i> Matabeleland South—Filabusi, Zvishavane	Cairncross (2005a), L.F. Marsh and F. Mugumbate (pers. comm., 2009) Milisenda et al. (2000), Cairncross (2005b), Wise (2005) Cairncross (2005a) Cairncross (2005a)
	<u>Chrysoberyl (Including cat's-eye)</u> Mashonaland West—Kadoma: <i>Rattis</i> ; Mwami: <i>Green Walking Stick, Haslemere, Pearl, Spider</i> Masvingo—Gutu: <i>Novello</i> ; Masvingo: <i>Brentwood</i> Midlands—Somabhula	L.F. Marsh and F. Mugumbate (pers. comm., 2009)
Zimbabwe	<u>Chrysoberyl—Alexandrite</u> Masvingo—Gutu: <i>Novello</i>	L.F. Marsh and F. Mugumbate (pers. comm., 2009)

Continent/ country	Gem material/locality	Reference
	Midlands—Somabhula	
	<u>Corundum—Ruby</u>	L.F. Marsh and F. Mugumbate (pers. comm., 2009)
	Midlands—Somabhula	
	<u>Corundum—Sapphire</u>	L.F. Marsh and F. Mugumbate (pers. comm., 2009)
	Midlands—Somabhula	
	<u>Euclase</u>	
	Mashonaland West—Kadoma: <i>Rattis</i> ; Mwami: <i>Last Hope</i>	L.F. Marsh and F. Mutugumbate (pers. comm., 2009)
	<u>Iolite (Cordierite)</u>	L.F. Marsh and F. Mutugumbate (pers. comm., 2009)
	Mashonaland West—Makuti	
	Matabeleland South—Zvishavane: <i>Malala</i>	
	Midlands—Beitbridge: <i>Nsingo</i>	
	<u>Quartz—Amethyst/Citrine/Ametrine</u>	
	Bulawayo—Nyamandlovu: <i>Chikodzi, Manzinyama</i>	L.F. Marsh and F. Mutugumbate (pers. comm., 2009)
	<u>Topaz</u>	L.F. Marsh and F. Mutugumbate (pers. comm., 2009)
	Mashonaland West—Guruwe: <i>Dungusha</i> ; Mwami: <i>Gwati, Saint Ann's, Topaz</i>	
	Midlands—Somabhula	
	<u>Tourmaline</u>	L.F. Marsh and F. Mutugumbate (pers. comm., 2009)
	Mashonaland West—Mwami: <i>Gwati, Saint Ann's</i>	
	Matabeleland South—Gwanda	
Asia		
Afghanistan	<u>Beryl—Emerald</u>	Schwarz and Giuliani (2002c), Kalukiewicz (2005), D. Blauwet (pers. comm., 2009)
	Badakhshan—Khash	
	Laghman—Shamya	
	Nuristan—Gamitha, Korgun, Lamonda, Titin	
	Panjshir— Panjshir Valley : <i>Bismal</i>	Laurs (2001a), Groat et al. (2008) Laurs (2001a), Groat et al. (2008) Gründmann and Giuliani (2002), Fijał et al. (2004), Pardieu and Soubiraa (2006a), Groat et al. (2008)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u>	D. Blauwet (pers. comm., 2009)
	Kunar—Darra-i-Pech, Kala	Glas (2002)
	Nuristan—Grangal, Mawi, Papra, Paprook, Waigon, Watata	
	<u>Corundum—Ruby</u>	Hammer (2003b), Garnier et al. (2008)
	Badakhshan—Khash	Laurs (2007b), D. Blauwet (pers. comm., 2009)
	Kabul—Jegdalek: <i>Mirkhalwat, Warmankai</i>	Bowersox et al. (2000), Garnier et al. (2006), Pardieu and Soubiraa (2006a)

Continent/ country	Gem material/locality	Reference
	<u>Corundum—Sapphire</u> Kabul—Jegdalek Wardak—Maidan Shahr	Hammer (2003b), Garnier et al. (2008) Bowersox et al. (2000) Laurs (2002d), Quinn and Laurs (2004a)
	<u>Garnet—Almandine/Rhodolite</u> Kunar—Darra-i-Pech	Quinn and Laurs (2004bf)
	<u>Garnet—Grossular/ Hessonite/Tsavorite</u> Kunar—Kantiwa, Munjagal	Laurs and Quinn (2004), Blauwet (2008)
	<u>Garnet—Spessartine</u> Kunar—Darra-i-Pech	Quinn and Laurs (2004b)
	<u>Lapis Lazuli (Lazurite)</u> Badakhshan—Kokcha Valley: <i>Sar-e-Sang</i>	Henn and Braun (2001), Faryad (2002), Hammer (2003c), Heflik and Natkaniec- Nowak (2003), Lo Giudice et al. (2009)
	<u>Quartz—Amethyst/Citrine/Ametrine</u> Ghazni—Zarkishen Mountain: <i>Moqor</i>	Laurs (2002g)
	<u>Scapolite</u> Badakhshan	McClure et al. (2005b)
	<u>Sodalite</u> Badakhshan	Kondo and Beaton (2009)
	<u>Sphene (Titanite)</u> Badakhshan—Kokcha Valley: <i>Fargon Meeru</i>	Quinn and Laurs (2006a), D. Blauwet (pers. comm., 2009)
	<u>Spinel</u>	Hammer (2003b)
	<u>Spodumene—Kunzite/Hiddenite</u> Kunar Nuristan—Khauraz, Mawi, Nilaw-Kolum, Wadigram	Glas (2002) Laurs and Quinn (2002b), Chadwick et al. (2007)
	<u>Topaz</u> Nuristan—Paprook	D. Blauwet (pers. comm., 2009)
	<u>Tourmaline</u> Nuristan—Chatrus, Diwaneh Baba, Gamitha, Golmata, Kalaigal, Kanalook, Kantiwa, Kurgal, Konquwa, Masey, Mawi, Nilaw- Kolum, Nishai, Papra, Paprook, Rhodisht, Wama Kunar—Gur-Salak, Kala, Khana Khana, Paroon Valley	D. Blauwet (pers. comm., 2009) Glas (2002), Natkaniec-Nowak et al. (2009) Glas (2002)
	<u>Zoisite (Includes tanzanite)</u> Nuristan—Shinwari	Beaton and Lu (2009)
Cambodia	<u>Corundum—Ruby</u>	Pardieu (2009)

Continent/ country	Gem material/locality	Reference
China	Pailin—Pailin	Sutherland et al. (2009a)
	<u>Corundum—Sapphire</u>	Sutherland and Schwarz (2001), Pardieu (2009) Sutherland et al. (2009a)
	Pailin—Pailin	
	<u>Moldavite / Tektite</u>	McCall (2006)
	<u>Zircon</u>	
	Pailin—Pailin	Pardieu (2009)
	Ratanakiri—Bong Long	Smith and Balmer (2009)
	<u>Amber/Copal</u>	Ou Yang (2005)
	Fujian	
	Hainan	
	Henan	
	Liaoning—Fushun	
	Tibet	
	Yunnan	
	<u>Beryl—Emerald</u>	Ou Yang (2005), Smith et al. (2005), X. Yuan (pers. comm., 2009) B. Ottens (pers. comm., 2009) Gründmann and Giuliani (2002), Wu (2004), Liu (2005), Li (2009), Marshall et al. (2009) Blauwet et al. (2005), Michelou and Pardieu (2009), Schwarz and Pardieu (2009)
	Heilongjiang—Boli, Heihe, Jiamusi Yunnan—Malipo: <i>Dayakou Mountain</i>	
	Xinjiang Uygur—Taxkorgan: <i>Davdar</i>	
	<u>Beryl—Aquamarine/Heliodor/Morganite</u>	Ou Yang (2005), Smith et al. (2005), Michelou (2006), X. Yuan (pers. comm., 2009) Liu (2005) Wu (2004), Liu (2005), Marshall et al. (2009) Tang et al. (2004), Liu (2005), Li (2009)
	Sichuan—Xuebaoding Mountain Yunnan—Ailaoshan Mountains, Gaoligongshan Mountains	
	Xinjiang Uygur—Altai Mountains: <i>Koktokay</i>	
	<u>Corundum—Ruby</u>	Ou Yang (2005), Smith et al. (2005), Michelou (2006), B. Ottens and X. Yuan (pers. comm., 2009) Wu (2004), Li (2009)
	Yunnan—Ailaoshan Mountains, Jinping, Yuanjiang, Yuxi	
	<u>Corundum—Sapphire</u>	Sutherland and Schwarz (2001), Liu (2004), Ou Yang (2005), Smith et al. (2005), Michelou (2006), X. Yuan (pers. comm., 2009) Li (2009) Li (2009) Li (2009) Li (2009) Tang et al. (2004)
	Fujian—Mingxi: <i>Gaiyang</i> Hainan—Penglai, Wenchang Jiangsu—Liuhe: <i>Lianshan</i> Shandong—Changle: <i>Wutu</i> Xinjiang Uygur—Taxkorgan	
	<u>Diamond</u>	Tompkins et al. (1999), Ou Yang (2005), A. Janse (pers. comm., 2010)

Hunan—Changde: *Yuan River*
Liaoning—Wafangdian: *Pipe 50, Toudaogou*
Shandong—Mengyin: *Shengli*

Feldspar

Inner Mongolia—Baotou

Tibet—Xigazê

Yunnan

Xinjiang Uygur

Garnet—Andradite/Demantoid

Garnet—Pyrope
Heilongjiang—Shuangyashan

Garnet—Spessartine
Fujian—Tongbei: *Wushan*

Garnet—Uvarovite
Tibet—Bomi: *Yi Gong*

Jade—Nephrite

Gansu—Altun Mountains
Jiangsu—Shuyang
Liaoning—Xiuyan
Qinghai/Gansu—Qilian Mountains
Sichuan—Wenxi
Xinjiang Uygur—**Kunlun Mountains**: *Yutian*
Taiwan—**Fengtien**

Moldavite/Tektite
Guangdong—Zhanjiang

Peridot (Olivine)

Hebei—Zhangjiakou: *Damaping*
Jilin—Jiaohe

Rhodochrosite
Guangxi Zhuang—Wuzhou: *Wudong*

Spinel
Yunnan—Ailaoshan Mountains, Jinping, Yuanjiang, Yuxi

Topaz

Inner Mongolia—Alaxianzuanqi

Ying et al. (2006), Wang et al. (2010),
Zhang et al. (2010)

Ou Yang (2005), B. Ottens (pers.
comm., 2009)
Abduriyim (2008), Aburiyim and
Kobayashi (2008)
Laurs (2005d), Abduriyim (2008,2009),
Aburiyim and Kobayashi (2008)

Renfro and Laurs (2010)

Ou Yang (2005)
Li (2009)

Ou Yang (2005)
Ottens (2004)

He et al. (2000)

Harlow and Sorensen (2001), He
(2001), Ou Yang (2005), Smith et al.
(2005), Michelou (2006), Li (2009), X.
Yuan (pers. comm., 2009)

Li (2005)

Harlow and Sorensen (2001), Li (2005)
Adams and Beck (2009)

Kim and Kim (2006)

Liu (2004), Ou Yang (2005), Smith et al.
(2005), Michelou (2006), X. Yuan (pers.
comm., 2009)
Henn (1999), Li (2009)

Lees (2009a)

Liu (2004), Ou Yang (2005)
Laurs and Shigley (2005), B. Ottens
(pers. comm., 2009)

Liu (2004), Ou Yang (2005), Smith et al.
(2005)
Li (2009)

Continent/ country	Gem material/locality	Reference
	Jiangxi—Dayu: <i>Piaotang</i> Yunnan—Gaoligongshan Mountains	B. Ottens (pers. comm., 2009) Wu (2004), X. Yuan (pers. comm., 2009)
	Xinjiang Uygur—Altai Mountains: <i>Koktokay</i>	B. Ottens (pers. comm., 2009)
	<u>Tourmaline</u>	Liu (2004), Ou Yang (2005), Smith et al. (2005), Michelou (2006), X. Yuan (pers. comm., 2009)
	Guangxi—Huangbao Inner Mongolia—Jiaoligetai Shanxi—Wutaishan Mountains, Yunzhongshan Mountains Sichuan—Kangding, Wenchuan, Xiaojin Yunnan—Fugong, Gaoligongshan Mountains, Lushui Xinjiang Uygur—Altai Mountains: <i>Koktokay</i>	Glas (2002) Glas (2002) Glas (2002)
	<u>Turquoise</u>	Wu (2004) Tang et al. (2004), Wang et al. (2007), Zhang et al. (2008), Li (2009)
	Anhui—Hefei, Ma'anshan Hubei—Yunyang, Zhushan Shaanxi—Baihe	Liu (1999), Henn and Quintens (2001), Smith et al. (2005), B. Ottens and X. Yuan (pers. comm., 2009) Yang et al. (2003), Michelou (2006) Liu (1999), Yan et al. (2000) Yan et al. (2000)
	<u>Zircon</u> Fujian—Mingxi Hainan—Penglai	Liu (2004), Ou Yang (2005)
India	<u>Apatite</u> Andhra Pradesh—Borra, Vishakhapatnam Bihar—Baraganda Orissa—Kalahandi Rajasthan—Ajmer, Bhilwara, Rajgarh Tamil Nadu—Namakkal, Salem	G. Choudhary and J. Panjekar (pers. comm., 2009) Sarker and Guru (2010)
	<u>Beryl—Emerald</u> Orissa—Balangir, Phulabani, Sambalpur Rajasthan—Ajmer, Kaliguman, Rajgarh, Udaipur Tamil Nadu—Salem	Sarker and Guru (2010)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Jammu and Kashmir—Sunjam, Zanskar Jharkhand—Hazaribag Kerala—Uzhamalakkal Orissa—Balangir, Kantabanji, Phulabani, Sambalpur, Subarnapur Rajasthan—Ajmer, Panwar, Sarwad, Shahpura, Tonk: <i>Rajmahal</i> Tamil Nadu—Coimbatore, Dindigul, Kadavur, Kangayam, Kanniyakamuri, Karur, Kurumbapatti, Madurai, Padiyur, Salem, Sivapuram, Tarapuram, Tharagampatti, Tiruchchirappalli,	Schwarz and Giuliani (2002c), G. Choudhary, J. Panjekar, and A. Dholakia (pers. comm., 2009) Michelou (2006) Gründmann and Giuliani (2002), Michelou (2006)
		Quinn-Darenius (2008), G. Choudhary and J. Panjekar (pers. comm., 2009)
		Boehm (2000)
		Michelou (2006), Win (2009) Boehm (2000), Michelou (2006)

Continent/ country	Gem material/locality	Reference
	Tiruppur, Varusha Nadu	
	<u>Chrysoberyl (Including cat's-eye)</u>	G. Choudhary and J. Panjkar (pers. comm., 2009)
	Andhra Pradesh—Addatigala, Araku Valley, Chintapalli, Godavari, Khammam, Paderu, Srikakulam, Vishakhapatnam, Vizianagaram	Michelou (2006), Sarkar and Guru (2010)
	Kerala—Quilon	Michelou (2006)
	Orissa —Balangir, Kalahandi, Kantabanji, Koraput, Rayagada, Sambalpur	Michelou (2006), A. Dholakia (pers. comm., 2009)
	Tamil Nadu—Dindigul, Kanniyakumari, Kangayam, Karur, Madurai, Tirunelveli	Michelou (2006)
	<u>Chrysoberyl—Alexandrite</u>	G. Choudhary and J. Panjkar (pers. comm., 2009)
	Andhra Pradesh—Addatigala, Araku Valley, Godavari, Khammam, Srikakulam, Vishakhapatnam, Vizianagaram	Michelou (2006)
	Chattisgarh—Raipur	
	Kerala—Aruvikkara, Kulathupuzha, Ooruttambalam	Michelou (2006)
	Madhya Pradesh—Deobhog	
	Orissa —Sambalpur	
	Tamil Nadu—Dindigul, Kangayam, Kanniyakumari, Karur, Madurai, Palni, Tirunelveli	Sarkar and Guru (2010)
	<u>Corundum—Ruby</u>	G. Choudhary and J. Panjkar (pers. comm., 2009)
	Andhra Pradesh—Anantapur, Chittoor, Guntur, Khammam, Nalgonda, Vishakhapatnam, Warangal	Michelou (2006)
	Chattisgarh—Bastar, Raipur	Michelou (2006)
	Karnataka—Channapatna, Chikmagalur, Coorg, Durgadahalli, Hassan, Somvarpet, Maddur, Madikeri, Mysore, Pavagada, Subrahmanya (Puttur), Ramanahalli, Tumkur	Michelou (2006)
	Kerala—Kulathapuzha	
	Orissa—Angul, Balangir, Hinjlibahal, Kalahandi	Michelou (2006)
	Tamil Nadu—Kangayam, Karur, Namakkal, Padiyur, Palni, Paramatti, Salem, Vellore	Sarkar and Guru (2010)
	<u>Corundum—Sapphire</u>	Garnier et al. (2004a,2008), G. Choudhary and J. Panjkar (pers. comm., 2009)
	Andhra Pradesh—Anantapur, Hindupur, Ratnagiri Hills	
	Jammu and Kashmir—Doda, Sunjam	Michelou (2006)
	Kerala—Quilon, Trivandrum	Santosh et al. (2002)
	Orissa —Balangir, Nawapara, Sambalpur	
	Tamil Nadu—Kangayam, Kanniyakamuri, Karur, Padiyur, Venkatpuram	McClure et al. (2005a), Michelou (2006)
	<u>Diamond</u>	Konstantinovskii (2003), Panjkar and Ramchandran (2005), Fareeduddin and Rao (2007), A. Janse (pers. comm., 2010)
	Chhattisgarh—Raipur: <i>Behradih</i>	
	Madhya Pradesh—Panna: <i>Majhgawan</i>	Chalapathi-Rao (2006)

Continent/ country	Gem material/locality	Reference
	<u>Feldspar</u>	Henn (2006b), G. Choudhary and J. Panjekar (pers. comm., 2009)
	Andhra Pradesh—Nellore	
	Bihar—Indarwa	
	Jammu and Kashmir—Baramulla, Kaj-i-Nag, Wangtu	
	Jharkhand—Hazaribag, Kodarma	
	Karnataka—Bangalore, Dhakshina, Kannada, Mysore	
	Kerala—Nayyar, Trivandrum	
	Orissa	Quinn and Laurs (2005c)
	Rajasthan—Ajmer, Bhilwara	
	Tamil Nadu—Dindigul, Kangayam, Karur, Kiranur, Madurai, Salem	Michelou (2006)
	West Bengal—Manbhum	
	<u>Garnet—Almandine/Rhodolite</u>	G. Choudhary and J. Panjekar (pers. comm., 2009)
	Andhra Pradesh—Bhadrachalam, Chittoor	
	Orissa—Angul, Balangir, Deogarh, Kalahandi, Koraput, Phulabani, Nuapada, Sambalpur, Subarnapur	
	Rajasthan—Ajmer, Bendria, Bhilwara, Kakaoria, Sangwa, Sarwad, Tonk, Udaipur	
	Tamil Nadu—Karur, Madurai, Nilgiri, Salem, Tiruchchirappalli	
	<u>Garnet—Grossular/ Hessonite/Tsavorite</u>	J. Panjekar (pers. comm., 2009)
	Andhra Pradesh—Nellore	
	Bihar—Hazaribagh	
	Karnataka—Hassan, Mysore, Shimoga	
	Orissa—Angul, Balangir, Deogarh, Ghatpara, Jharposi, Kalahandi, Koraput, Phulabani	
	Rajasthan—Ajmer, Shahpura	
	Tamil Nadu—Nilgiri	
	<u>Garnet—Pyrope</u>	J. Panjekar (pers. comm., 2009)
	Andhra Pradesh —Bhadrachalam, Chittoor	
	Orissa —Angul, Balangir, Deogarh, Kalahandi, Koraput, Phulabani, Sambalpur	
	Rajasthan —Bendria, Kakaoria, Sangwa, Sarwad, Udaipur	
	Tamil Nadu—Karur, Madurai, Nilgiri, Salem, Tiruchchirappalli	
	<u>Iolite (Cordierite)</u>	G. Choudhary and J. Panjekar (pers. comm., 2009)
	Karnataka	
	Kerala—Tiruvalla, Trivandrum	
	Orissa—Kalahandi, Sambalpur	
	Tamil Nadu—Kangayam, Karur, Kiranur, Madurai	
	<u>Kyanite</u>	G. Choudhary and J. Panjekar (pers. comm., 2009)
	Jammu and Kashmir	
	Karnataka—Mysore, Nagamangala	
	Orissa—Balangir, Kalahandi	
	<u>Quartz—Rose</u>	J. Panjekar and A. Dholakia (pers. comm., 2009)

Continent/ country	Gem material/locality	Reference
	Chattisgarh—Raipur Maharashtra—Aurangabad Rajasthan Tamil Nadu—Kangayam, Karur, Salem	
	<u>Scapolite</u> Tamil Nadu—Kangayam, Karur	G. Choudhary (pers. comm., 2009)
	<u>Sillimanite</u> Andhra Pradesh—Araku Valley, Bobbili, Chintapalli, Paderu Orissa—Rayagada Tamil Nadu—Namakkal	G. Choudhary (pers. comm., 2009) Sarkar and Guru (2010) Milisenda and Henn (2006) Sarkar and Guru (2010)
	<u>Sphene (Titanite)</u> Tamil Nadu—Karur, Kunjampalayam	G. Choudhary and J. Panjekar (pers. comm., 2009)
	<u>Spinel</u> Orissa Tamil Nadu—Kangayam, Karur	G. Choudhary (pers. comm., 2009)
	<u>Topaz</u> Orissa—Balangir, Boudh, Subarnapur Tamil Nadu—Kangayam, Kanniyakamuri, Karur, Tirunelveli West Bengal—Singhbhum	G. Choudhary and J. Panjekar (pers. comm., 2009) Sarkar and Guru (2010)
	<u>Tourmaline</u> Andhra Pradesh—Araku Valley, Borra, Vishakhapatnam Orissa—Boudh, Jharsuguda, Sambalpur	G. Choudhary and J. Panjekar (pers. comm., 2009) Sarkar and Guru (2010)
	<u>Zircon</u> Assam—Cherrapunji Orissa—Balangir, Kalahandi, Sambalpur Tamil Nadu—Kangayam, Kanniyakamuri, Karur, Ramanathapuram, Tiruchchirappalli, Tirunelveli	J. Panjekar (pers. comm., 2009) Sarkar and Guru (2010)
Indonesia	<u>Amber/Copal</u> Sarawak	Thielemann et al. (2001)
	<u>Diamond</u> Kalimantan—Martapura: <i>Cempaka</i> ; Pontianak: <i>Landak River</i> , <i>Sekayam River</i> , <i>Kapuas River</i>	Sun et al. (2005), Smith et al. (2009), A. Janse (pers. comm., 2009)
	<u>Opal</u> Java—Jawa Barat: <i>Banten</i> , <i>Lebak</i>	Laurs (2001b), Milisenda and Wild (2004), Sujatmiko et al. (2004,2005), Staebler and Neumeier (2007), Sun et al. (2009)
Iran	<u>Garnet—Andradite/Demantoid</u>	

Continent/ country	Gem material/locality	Reference
	Kerman—Jiroft: <i>Sogdan</i>	Laurs (2002f), Douman and Dirlam (2004), Furuya (2007b), Karampelas et al. (2007), Zang (2008a), Stephenson and Kouznetsov (2009)
	<u>Jade—Jadeite</u> Hormozgan—Sorkhan	Oberhänsli et al. (2007)
	<u>Opal</u> Kerman—Shahr-e-Babak	Nagle (2007)
	<u>Turquoise</u> Kerman—Bardsir Khorasan—Neyshabur: <i>Maaden</i> Yazd—Taft: <i>Ali-Abad, Darreh-Zeresh</i>	Douman and Fritz (2008) Gübelin (1999), Meister (1999), Michelou (2006) Zarasvandi et al. (2005), Taghipour and Noorbehesht (2007)
Japan	<u>Garnet—Andradite/Demantoid</u> Nara—Tenkawa: <i>Kouse</i> <u>Jade—Jadeite</u> Niigata—Omi: <i>Himekawa, Kotaki and Omi Rivers</i>	Hainschwang and Notari (2006) Chihara (1999), Harlow and Sorensen (2001), Morishita et al. (2007)
Kazakhstan	<u>Apatite</u> East Kazakhstan—Akzhailyau Mountains <u>Chrysoprase/Prase Opal</u> Karkaralinsk—Sarykul Boldy	Hyršl (2002b), Zharinov et al. (2008) Sachanbiński et al. (2001)
Laos	<u>Corundum—Ruby</u> Bokeo—Ban Huayxai <u>Corundum—Sapphire</u> Bokeo—Ban Huayxai <u>Spinel</u> Bokeo—Ban Huayxai	Michelou (2006), Graham et al. (2008) Sutherland et al. (2002) Sutherland and Schwarz (2001), Garnier et al. (2004a), Michelou (2006) Sutherland et al. (2002a) Michelou (2006)
Mongolia	<u>Garnet—Pyrope</u> Khangai Mountains—Shavryn Tsaram <u>Peridot (Olivine)</u> Khangai Mountains—Shavryn Tsaram	Dill et al. (2004,2006) Dill et al. (2004,2006)
Myanmar (Burma)	<u>Amber/Copal</u> Kachin—Hukawng Valley Sagaing—Hkamti <u>Amblygonite</u>	Hlaing (1999), Zherikhin and Ross (2000), T. Hlaing (pers. comm., 2009) Levinson (2001), Cruickshank and Ko (2003) Poinar et al. (2007)

Continent/ country	Gem material/locality	Reference
	Mandalay—Mogok: <i>Sakangyi</i>	T. Hlaing (pers. comm., 2009)
	<u>Andalusite</u> Mandalay—Kyauksin	Hlaing (2000)
	<u>Apatite</u> Mandalay—Mogok, Singu: <i>Letpanthla</i> Shan—Momeik	M. Smith and K. Thu (pers. comm., 2009) Kyi et al. (2005)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Karen Mandalay—Kabaing, Kume, Mogok: <i>Sakhangyi</i> Shan—Molo: <i>Katchay</i> ; Momeik	M. Smith, K. Thu, and T. Hlaing (pers. comm., 2009) Kyi et al. (2005), Hlaing (2009) Kyi et al. (2005)
	<u>Corundum—Ruby</u> Kachin—Nanyaseik, Nam Phyu Mandalay— Mogok , Thabeikkyin Shan— Mong Hsu	Barley et al. (2003), Garnier et al. (2004b,2008), Thein (2008), M. Smith, K. Thu, and T. Hlaing (pers. comm., 2009) Smith and Bosshart (2001), Hlaing (2008), Hlaing and Win (2008) Garnier et al. (2006), Mitchell et al. (2007), Searle et al. (2007), Yui et al. (2008)
	<u>Corundum—Sapphire</u> Kachin—Nanyaseik Mandalay—Kyauksin, Mogok , Thabeikkyin Shan—Mong Hkak, Mong Hsu	Barley et al.(2003), Garnier et al. (2004b,2008), Thein (2008), M. Smith. K. Thu, and T. Hlaing (pers. comm., 2009) Mitchell et al. (2007), Searle et al. (2007) Hlaing (2008)
	<u>Danburite</u> Kachin—Momeik Mandalay—Kyatpyin	Kyi et al. (2005), T. Hlaing (pers. comm., 2009) Kiefert (2007)
	<u>Diaspore</u> Shan—Mong Hsu	Kyi and Win (2004)
	<u>Garnet—Almandine/Rhodolite</u> Shan—Mong Hsat	T. Hlaing (pers. comm., 2009)
	<u>Garnet—Grossular/ Hessonite/Tsavorite</u> Mandalay—Kume	T. Hlaing (pers. comm., 2009)
	<u>Garnet—Spessartine</u> Mandalay—Mogok: <i>Sakhangyi</i>	Kyi et al. (2005), T. Hlaing, N. Schlusel, and R. Schlusel (pers. comm., 2009)

Continent/ country	Gem material/locality	Reference
	<u>Jade—Jadeite</u>	Hughes et al. (2000), Qiu et al. (2008), Shi et al. (2009a,b,2010)
	Kachin— Hpakant	Harlow and Sorensen (2001), Levinson et al. (2001b), Ou Yang (2001a,b), Shi et al. (2003,2005), T. Hlaing (pers. comm., 2009)
	Sagaing— Hkamti	Levinson et al. (2001b), T. Hlaing (pers. comm., 2009)
	<u>Kornerupine</u>	
	Mandalay—Mogok	T. Hlaing (pers. comm., 2009)
	<u>Kyanite</u>	
	Kachin—Mohnyin	Hlaing (2009)
	<u>Lapis Lazuli (Lazurite)</u>	
	Mandalay—Mogok	T. Hlaing (pers. comm., 2009)
	<u>Maw-Sit-Sit</u>	
	Kachin—Kansi: <i>Maw-sit</i>	Colombo et al. (2000), T. Hlaing (pers. comm., 2009)
	<u>Opal</u>	
	Mandalay—Natogyi	T. Hlaing (pers. comm., 2009)
	<u>Peridot (Olivine)</u>	
	Mandalay— Bernardmyo	Krzemnicki and Groenenboom (2008), T. Hlaing (pers. comm., 2009)
	<u>Phenakite</u>	
	Shan—Molo: <i>Katchay</i> ; Momeik	M. Smith, U. Thu, and T. Hlaing (pers. comm., 2009)
	<u>Scapolite</u>	
	Mandalay—Mogok	J. Hyršl (pers. comm., 2009)
	<u>Sodalite</u>	
	Mandalay—Mogok	Hlaing (2009), Kondo and Beaton (2009)
	<u>Spinel</u>	
	Kachin—Nanyaseik	M. Smith, K. Thu, and T. Hlaing (pers. comm., 2009)
	Kayah—Hsataw	Smith and Bosshart (2001), Hlaing and Win (2008), Pardieu and Hughes (2008)
	Mandalay—Mogok	Hlaing (2004) Pardieu and Hughes (2008)
	<u>Taaffeite</u>	Schmetzer et al. (2000)
	<u>Topaz</u>	
	Mandalay—Kume, Mogok: <i>Sakhangyi</i>	M. Smith, K. Thu, and T. Hlaing (pers. comm., 2009)
	Shan—Molo: <i>Katchay</i>	Kyi et al. (2005), Hlaing (2009)

Continent/ country	Gem material/locality	Reference
	<u>Tourmaline</u>	Kane (2002), T. Hlaing (pers. comm., 2009)
	Karen	
	Kayah—Pawn Chaung	Hlaing (2008)
	Mandalay—Singu: <i>Letpanthla</i>	Hlaing (2007)
	Shan—Makmai, Molo, Mong Hsu, Mong Long, Mong Pan, Momeik	Glas (2002), Kyi et al. (2005)
	<u>Zircon</u>	
	Mandalay—Mogok, Thabeikkyin	T. Hlaing (pers. comm., 2009)
	<u>Kyanite</u>	Henn (2003a), Laurs and Quinn (2005)
Nepal	<u>Corundum—Ruby</u>	
	Bagmati—Ganesh Himal: <i>Dhading</i>	Garnier et al. (2006,2008)
	<u>Corundum—Sapphire</u>	Garnier et al. (2008)
	Bagmati—Ganesh Himal: <i>Dhading</i>	
Pakistan	<u>Apatite</u>	
	Gilgit-Baltistan—Basha Valley: <i>Niaslo</i> ; Hunza Valley: <i>Chumar Bakhoor</i>	D. Blauwet (pers. comm., 2009)
	<u>Axinite</u>	
	Baluchistan—Taftan Mountains	Fritz et al. (2007)
	<u>Beryl—Emerald</u>	
	Federally Administered Tribal Areas—Bajaur, Mohmand: <i>Gandao</i>	Schwarz and Giuliani (2002c), Groat et al. (2008), D. Blauwet (pers. comm., 2009)
	Gilgit-Baltistan—Basha Valley: <i>Doko</i>	Einfalt (2002), Hammer (2004a)
	North-West Frontier— Swat Valley : <i>Charbagh, Gujar Kili, Makad, Mingora</i>	Gründmann and Giuliani (2002), Hammer (2004a,d)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u>	Einfalt (2002), Gründmann and Giuliani (2002), Hammer (2004a), Pardieu and Soubiraa (2006b), Arif et al. (2010)
	Gilgit-Baltistan—Basha Valley: <i>Bien, Biensla, Dogoro, Sibiri, Thorgu</i> ; Braldu Valley: <i>Apo Ali Gun, Baha, Byansahpi, Chhappu, Dassu, Foljo, Gone, Hoh Nala, Nyet, Nyet Bruk, Teston, Toshu</i> ; Hunza Valley: <i>Chumar Bakhoor, Nagar</i> ; Indus Valley: <i>Baluchi, Baralooma, Dassu, Drot, Haramosh, Khargulook, Raikot, Rhondu, Sabsar, Saichais, Sassi, Shengus</i> ; Shigar Valley: <i>Haiderabad, Mungo, Sildi, Yuno</i>	D. Blauwet (pers. comm., 2009)
	<u>Corundum—Ruby</u>	Hammer (2003b,2004d), Garnier et al. (2005a,2008), Laurs (2007b), D. Blauwet (pers. comm., 2009)
	Azad Kashmir—Neelum Valley: <i>Nangimali</i>	Pêcher et al. (2001,2002), Chamberlain et al. (2002), Beesley (2004), Garnier et al. (2004c), Pardieu and Soubiraa (2006b)
	Gilgit-Baltistan—Basha Valley: <i>Bisil</i> ; Hunza Valley: <i>Ahmedabad, Bajouri, Ganesh, Hachindar, Hassanabad</i>	Hammer (2004a), Garnier et al. (2006)

Continent/ country	Gem material/locality	Reference
	North-West Frontier—Kaghan Valley, Batakundi	Pardieu et al. (2009f)
	<u>Corundum—Sapphire</u>	
	Gilgit-Baltistan—Astore Valley: <i>Batwash Gah</i> ; Hunza Valley: <i>Ganesh</i>	Hammer (2003b,2004d), Henn and Milisenda (2005), Garnier et al. (2008), D. Blauwet (pers. comm., 2009) Hammer (2004a)
	North-West Frontier—Batakundi, Kohistan: <i>Sapat</i>	Quinn and Laurs (2004a), Pardieu et al. (2009f)
	<u>Feldspar</u>	
	Gilgit-Baltistan—Basha Valley: <i>Niaslo</i> ; Indus Valley: <i>Shengus</i>	D. Blauwet (pers. comm., 2009)
	<u>Garnet—Andradite/Demantoid</u>	
	Baluchistan	D. Blauwet (pers. comm., 2009) Fritz and Laurs (2007b)
	Federally Administered Tribal Areas—Bajaur: <i>Mana</i>	Milisenda et al. (2001a), Quinn and Laurs (2005b)
	Gilgit-Baltistan—Nanga Parbat	Furuya (2007b)
	North-West Frontier—Kaghan Valley	Milisenda et al. (2001a), Quinn and Laurs (2005b)
	<u>Garnet—Grossular/ Hessonite/Tsavorite</u>	
	North-West Frontier—Mohmand: <i>Ungade</i>	D. Blauwet (pers. comm., 2009)
	<u>Garnet—Spessartine</u>	
	Azad Kashmir—Neelum Valley: <i>Donga Nar</i>	D. Blauwet (pers. comm., 2009) Beesley (2004), Blauwet (2008), Milisenda et al. (2010)
	Federally Administered Tribal Areas—Bajaur: <i>Mana</i>	Blauwet (2008)
	Gilgit-Baltistan—Braldu Valley: <i>Byanno, Hoh Nala</i> ; Indus Valley: <i>Shengus</i>	
	<u>Lapis Lazuli (Lazurite)</u>	
	Gilgit-Baltistan—Indus Valley: <i>Haramosh Mountains</i>	D. Blauwet (pers. comm., 2009)
	<u>Peridot (Olivine)</u>	
	North-West Frontier— Kohistan : <i>Sapat</i>	Hammer (2004c), Bouilhol et al. (2009)
	<u>Sphene (Titanite)</u>	
	Federally Administered Tribal Areas—Khyber Agency, Mohmand Agency: <i>Mullah Ghani Baba</i>	Laurs and Quinn (2006b), D. Blauwet (pers. comm., 2009)
	<u>Spinel</u>	
	Gilgit-Baltistan—Hunza Valley: <i>Ganesh, Hassanabad, Muchara Nala</i>	D. Blauwet (pers. comm., 2009) Hammer (2004a)
	<u>Topaz</u>	
	Gilgit-Baltistan—Basha Valley: <i>Sibiri</i> ; Braldu Valley: <i>Apo Ali Gun, Baha, Chhappu, Dassu, Goiyngo Foljo, Gone, Nyet, Nyet Bruk, Teston</i> ; Hunza Valley: <i>Hassanabad</i> ; Indus Valley: <i>Baluchi, Chhamachhu, Drot, Ishkapul, Kaotoonery, Khargulook, Sabsar, Saischais, Sassi, Shengus</i> ; Shigar Valley: <i>Haiderabad, Mungo, Yuno</i>	D. Blauwet (pers. comm., 2009) Hammer and Muhammad (2004), Blauwet (2004), Blauwet and Muhammad (2004)
	North-West Frontier—Katlang: <i>Ghundao Hill</i>	Einfalt (2002), Hammer (2004c), Morteani and Voropaev (2007)

Continent/ country	Gem material/locality	Reference
	<u>Tourmaline</u> Azad Kashmir—Neelum Valley: <i>Dongar Nar</i> Gilgit-Baltistan—Astore Valley: <i>Harchoo Nirai, Mir Malik, Nanga Parbat</i> ; Braldu Valley: <i>Dassu, Hoh Nala, Toshu</i> ; Hunza Valley: <i>Nagar</i> ; Indus Valley: <i>Baluchi, Baralooma, Gochalay, Kaatoonery, Khargulook, Shengus, Stak Nala</i>	Obodda (2003), Hammer and Muhammad (2004), Blauwet (2004), Blauwet and Muhammad (2004), D. Blauwet (pers. comm., 2009) Beesley (2004) Laurs (2001d), Glas (2002)
	<u>Zoisite (Includes tanzanite)</u> Gilgit-Baltistan—Shigar Valley: <i>Alchuri</i>	D. Blauwet (pers. comm., 2009) Blauwet (2006b)
Republic of Korea	<u>Jade—Nephrite</u> Gangwon—Chuncheon	Yui and Kwon (2002), Kim (2007)
	<u>Quartz—Amethyst/Citrine/Ametrine</u> Kangwŏn—Eonyang	Yang et al. (2001)
Russia	<u>Amber/Copal</u> Kaliningrad—Sambian Peninsula	Kosmowska-Ceranowicz (2009), P. Sokolov and V. Zboykov (pers. comm., 2009)
	<u>Axinite</u> Northern Ural Mountains—Neroika Mountain: <i>Puiva</i>	J. Hyršl (pers. comm., 2009)
	<u>Beryl—Emerald</u> Middle Ural Mountains—Asbest: <i>Marinskiy, Izumrud, Cheremshansk, Krasnobolotnoe, Malyshevsk, Sverdlovsk</i>	Zolotukhin (1999), Gründmann and Giuliani (2002), Kupriyanova (2002), Hochleitner (2005a), Kozlov (2005), Lyckberg (2005a), Groat et al. (2008), P. Lyckberg (pers. comm., 2009)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Middle Ural Mountains—Asbest: <i>Marinskiy, Yekaterinburg: Aduy, Alabashka</i> Transbaikalia—Borzya: <i>Sherlova Gora</i> ; Krasnyy Chikoy: <i>Malkhan Mountains</i>	P. Lyckberg (pers. comm., 2009) Hochleitner (2005a,b), Lyckberg (2005a), Badanina et al. (2008), P. Lyckberg (pers. comm., 2009), Zaraisky et al. (2009)
	<u>Charoite</u> Yakutia (Sakha Republic)—Chara River: <i>Murun Massif</i>	P. Lyckberg, P. Sokolov, and V. Zboykov (pers. comm., 2009)
	<u>Chrome Diopside</u> Yakutia (Sakha Republic)—Aldan: <i>Inagli</i>	Naumov et al. (2008), P. Lyckberg, P. Sokolov, and V. Zboykov (pers. comm., 2009)
	<u>Chrysoberyl—Alexandrite</u> Middle Ural Mountains—Izumrud: <i>Malyshevsk, Sverdlovsk</i>	Hochleitner (2005a), Kozlov (2005), Lyckberg (2005a)

Continent/ country	Gem material/locality	Reference
	<u>Chrysoprase/Prase Opal</u> Southern Ural Mountains	Mikhailov (2000)
	<u>Corundum—Ruby</u> Northern Ural Mountains—Polyarnyy: <i>Rai-Iz</i> Middle Ural Mountains—Yekaterinburg: <i>Alabashka, Lipovka</i>	P. Lyckberg (pers. comm., 2009) Grygoriev et al. (2000)
	<u>Corundum—Sapphire</u> Far East—Primorsky: <i>Kedrovka River, Krasnoarmeisky, Nezametnoye</i>	Khanchuk (2002), Pakhomova et al. (2006), Nechaev et al. (2009)
	<u>Danburite</u> Far East—Primorsky: <i>Dalnegorsk</i>	Grant and Wilson (2001), Solyanik and Pakhomova (2007)
	<u>Diamond</u> Arkhangelsk—Arkhangelsk: <i>Arkhangelskaya</i> Perm—Perm: <i>Krasnovishensk</i> Yakutia (Sakha Republic)—Ebelyakh: <i>Anabar</i> ; Mirnyy: <i>International, Mir, Nyurba</i> ; Udachnyy: <i>Aikhal, Jubilee, Komsomolsk, Krasnopresnensk, Leningradskaya, Sytykansкая, Udachnaya, Zarnitsa</i>	Konstantinovskii (2003), Taylor et al. (2003), Payette (2004), Sobolev et al. (2004), Janse (2005,2006), Anastasenko and Leybov (2008), Read and Janse (2009), A. Janse (pers. comm., 2010) Verzhak and Garanin (2005), Galimov et al. (2008), Palazchenko (2008), Strack (2008) Laiginhas (2008) Zinchuk and Koptil (2004), Rolandi et al. (2006), Stepanov et al. (2007), Kurszlaukis et al. (2009), Grakhanov et al. (2010)
	<u>Feldspar</u> Murmansk—Kola Peninsula: <i>Parusnaya and Ploskaya Mountains</i> Southern Ural Mountains—Chelyabinsk: <i>Ilmen Mountains</i>	V. Zboykov (pers. comm., 2009)
	<u>Garnet—Almandine/Rhodolite</u> Karelia—Sortavala: <i>Kitelskoe</i>	P. Lyckberg (pers. comm., 2009)
	<u>Garnet—Andradite/Demantoid</u> Middle Ural Mountains— Nizhniy-Tagil: <i>Bobrowka River</i> ; Verkhnyy Ufaley: <i>Korkodino, Kladovka</i>	Laurs (2003b), Hochleitner (2005a), Korchevskaya (2006), Furuya (2007b), Zang (2008a), P. Lyckberg (pers. comm., 2009), Stephenson and Kouznetsov (2009)
	<u>Garnet—Pyrope</u> Yakutia (Sakha Republic)—Mirnyy: <i>Mir</i> ; Udachnyy: <i>Udachnaya</i>	P. Lyckberg (pers. comm., 2009)
	<u>Garnet—Uvarovite</u> Middle Ural Mountains—Perm: <i>Saranovskoye</i>	P. Lyckberg (pers. comm., 2009)
	<u>Jade—Jadeite</u> Northern Ural Mountains—Ketchpel River Siberia—Sayan Mountains: <i>Borusskoye</i> ; Vitim River	V. Zboykov (pers. comm., 2009) Harlow and Sorensen (2001) Harlow and Sorensen (2001), Adams and Beck (2009)

Continent/ country	Gem material/locality	Reference
	<u>Jade—Nephrite</u> Siberia— Sayan Mountains , Vitim River, Zakamensk	V. Zboykov (pers. comm., 2009) Harlow and Sorensen (2001), Lapot (2004)
	<u>Lapis Lazuli (Lazurite)</u> Siberia—Irkutsk: <i>Slyudyanka</i>	Reznitskii et al. (2000), Henn and Braun (2001)
	<u>Peridot (Olivine)</u> Kola Peninsula—Kovdor	Sokolov et al. (2006)
	<u>Quartz—Amethyst/Citrine/Ametrine</u> Far East—Magadan: <i>Kedon</i> Northern Ural Mountains—Khasavarka Middle Ural Mountains—Yekaterinburg: <i>Aduy</i> Yakutia (Sakha Republic)—Aldan: <i>Obman</i>	P. Lyckberg (pers. comm., 2009)
	<u>Topaz</u> Middle Ural Mountains—Yekaterinburg: <i>Alabashka</i> Southern Ural Mountains—Plast: <i>Kamenka and Sanarka Rivers</i> Transbaikalia—Borzya: <i>Sherlova Gora</i>	P. Lyckberg (pers. comm., 2009)
	<u>Tourmaline</u> Transbaikalia—Borzya: <i>Sherlova Gora</i> ; Chita: <i>Adun-Chilon</i> , <i>Borshchovochnyy Ridge</i> ; Krasnyy Chikoy: <i>Malkan Mountains</i>	Simmons et al. (2001), Glas (2002), Smirnov et al. (2003), Peretyazhko et al. (2004), Hochleitner (2005b), Lyckberg (2005b), Zagorsky et al. (2005), Zagorsky and Peretyazhko (2006), Badanina et al. (2008), Zagorsky (2010)
	<u>Zircon</u> Far East—Primorsky: <i>Kedrovka River</i> , Krasnoarmeisky, <i>Nezametnoye</i> Southern Ural Mountains—Kyshtym: <i>Potaniny Mountains</i> Yakutia (Sakha Republic)—Udachnyy: <i>Udachnaya</i>	Khanchuk et al. (2002), Nechaev et al. (2009) P. Lyckberg (pers. comm., 2009) P. Lyckberg (pers. comm., 2009)
Sri Lanka	<u>Apatite</u> Central—Eppawala, Mahiyangana Sabaragamuwa—Ratnapura Southern—Deniyaya, Morawaka Uva—Okkampitiya	G. Zoysa (pers. comm., 2009)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Central—Hatton, Nawalapitiya, Rattota Sabaragamuwa—Balangoda, Opanayaka, Ratnapura Southern—Hambantota, Lunugamwehera, Mitiyagoda	G. Zoysa (pers. comm., 2009) Dissanayake et al. (2000) Laurs et al. (2006b), Michelou (2006)
	<u>Chrysoberyl (Including cat's-eye)</u> Sabaragamuwa—Balangoda, Kalawana, Niwitigala, Pelmadulla, Rakwana, Ratnapura Southern—Akuressa, Deniyaya, Morawaka, Pattara	G. Zoysa (pers. comm., 2009) Dissanayake et al. (2000) Michelou (2006)

Continent/ country	Gem material/locality	Reference
	<u>Chrysoberyl—Alexandrite</u> Sabaragamuwa—Kalawana, Niwitigala, Pelmadulla, Rakwana, Ratnapura Southern—Akuressa, Deniyaya, Morawaka, Pattara	G. Zoysa (pers. comm., 2009)
	<u>Corundum—Sapphire</u> Central—Elahera, Lunugala, Passara, Polonnaruwa Sabaragamuwa—Balangoda, Eheliyagoda, Embilipitiya, Niwitigala, Pelmadulla, Rakwana, Ratnapura Southern—Kataragama, Matara, Ridiyagama Uva—Bibile, Haputale, Moneragala, Okkampitiya, Wellawaya Western—Akurana, Horana, Ingiriya, Kiriella, Pelpola, Pugoda	Dharmaratne (2003), Garnier et al. (2004a,b), G. Zoysa (pers. comm., 2009) Dissanayake et al. (2000), Pardieu and Senoble (2005b) Dissanayake et al. (2000), Pardieu and Senoble (2005b)
	<u>Feldspar</u> Central—Elahera Sabaragamuwa—Balangoda, Ratnapura Southern—Ambalangoda, Mitiyagoda	G. Zoysa (pers. comm., 2009) Michelou (2006) Pardieu and Senoble (2005b), Michelou (2006)
	<u>Garnet—Almandine/Rhodolite</u> Central—Elahera, Kongahawela, Maskeliya, Polonnaruwa Sabaragamuwa—Ratnapura	G. Zoysa (pers. comm., 2009)
	<u>Garnet—Grossular/ Hessonite/Tavorite</u> Sabaragamuwa—Eheliyagoda, Ratnapura Southern—Kamburupitiya, Kataragama, Lunugamwehera, Matara, Tanamalwila, Thelioya, Tissamaharama Uva—Okkampitiya	G. Zoysa (pers. comm., 2009)
	<u>Iolite (Cordierite)</u> Central—Elahera Sabaragamuwa—Eheliyagoda, Ratnapura Uva—Okkampitiya	G. Zoysa (pers. comm., 2009)
	<u>Kornerupine</u> Central—Elahera Sabaragamuwa—Kolonne, Ratnapura Uva—Okkampitiya	G. Zoysa (pers. comm., 2009)
	<u>Opal</u> Uva—Wellawaya	G. Zoysa (pers. comm., 2009)
	<u>Peridot (Olivine)</u> Sabaragamuwa—Kolonne	Graziani et al. (2002), G. Zoysa (pers. comm., 2009)
	<u>Quartz—Rose</u> Central—Kaikawala, Matale Southern—Galle	G. Zoysa (pers. comm., 2009) Schmetzer and Glas (2003)

Continent/ country	Gem material/locality	Reference
	<u>Scapolite</u> Sabaragamuwa—Eheliyagoda, Kolonne, Ratnapura	G. Zoysa (pers. comm., 2009)
	<u>Sphene (Titanite)</u> Central—Elahera Southern—Akuressa, Galle, Kataragama	G. Zoysa (pers. comm., 2009)
	<u>Spinel</u> Central—Elahera Sabaragamuwa—Balangoda, Eheliyagoda, Embilipitiya, Kuruwita, Rakwana, Ratnapura Southern—Kataragama Uva—Okkampitiya Western—Kiriella, Horana	G. Zoysa (pers. comm., 2009) Dissanayake et al. (2000) Dissanayake et al. (2000)
	<u>Spodumene—Kunzite/Hiddenite</u> Southern—Kataragama	G. Zoysa (pers. comm., 2009)
	<u>Taaffeite</u>	Schmetzer et al. (2000,2005a,b, 2006)
	<u>Topaz</u> Central—Elahera, Nawalapitiya, Polonnaruwa, Rattota Sabaragamuwa—Balangoda, Ratnapura	G. Zoysa (pers. comm., 2009)
	<u>Tourmaline</u> Central—Badulla, Elahera, Passara, Polonnaruwa Sabaragamuwa—Balangoda, Embilipitiya, Kolonne, Ratnapura Uva—Okkampitiya Western—Avisawella	G. Zoysa (pers. comm., 2009)
	<u>Zircon</u> Central—Elahera Sabaragamuwa—Balangoda, Embilipitiya, Ratnapura Southern—Deniyaya, Kataragama, Morawaka	G. Zoysa (pers. comm., 2009)
	<u>Corundum—Ruby</u> Kuhistoni-Badakhshon—Murgab: <i>Snijnie</i> ; Muzkol	Pardieu (2006), Dufour et al. (2007)
	<u>Lapis Lazuli (Lazurite)</u> Kuhistoni-Badakhshon—Pamir Mountains	Henn and Braun (2001)
Tajikistan	<u>Peridot (Olivine)</u> Kuhistoni-Badakhshon—Pamir Mountains: <i>Kuh-i-Lal</i>	Kondo (2008)
	<u>Spinel</u> Kuhistoni-Badakhshon—Pamir Mountains: <i>Kuh-i-Lal</i>	Pardieu (2006), Pardieu and Hughes (2008), P. Lyckberg (pers. comm., 2009)
	<u>Corundum—Ruby</u> East —Bo Rai, Bo Waen, Khao Saming, Welu Klang, Nong Bon, Tok Phrom	Sutthirat et al. (2001), Garnier et al (2004b), Graham et al. (2008), P. Wathanakul (pers. comm., 2009) Yui et al. (2006)
Thailand		

Continent/ country	Gem material/locality	Reference
Turkey	North-East—Nong Khon, Nam Yuen	
	<u>Corundum—Sapphire</u>	Sutherland and Schwarz (2001), Garnier et al. (2004a,b), Graham et al. (2008), P. Wathanakul (pers. comm., 2009)
	East —Khao Ploi Waen	Prompted et al. (2003), Yui et al. (2006)
	North-East—Nong Khon, Nam Yuen	Wathanakul et al. (2007)
	North—Chiang Khong, Den Chai, Wang Chin	Limtrakun et al. (2001), Yui et al. (2003)
	West—Bo Phloi, Kanchanaburi	Choowong (2002)
	<u>Moldavite/Tektite</u>	McCall (2006)
	<u>Diaspore</u> Muğla—Ilbir Mountains	Hatipoğlu and Akgün (2009), Henn (2009b), Hatipoğlu et al. (2010a,b)
	<u>Garnet—Andradite/Demantoid</u> Erzincan—Erzincan	Inns and Laurs (2009)
	<u>Jade—Jadeite</u> Bursa—Orhaneli	Okay (2002)
Vietnam	<u>Opal</u> Kütahya—Simav	Esenli et al. (2001,2003), Mutlu et al. (2005), Fischer (2007), Hatipoğlu (2009)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u>	Pham et al. (2004a), D. Blauwet (pers. comm., 2009)
	Nghe An—Qui Phong, Qui Vinh	Michelou (2006)
	Phu Tho—Lu Phu, Phu Tho	
	Thanh Hoa—Xuan Loc	
	Yen Bai—Minh Tien, Luc Yen	
	<u>Corundum—Ruby</u>	Garnier et al.(2002,2004a,2005b,c, 2006,2008), Giuliani et al. (2003), Pham et al. (2004a,b,c), Michelou (2006), Graham et al. (2008), D. Blauwet (pers. comm., 2009)
	Binh Thuan—Da Ban, Dak Ton, Ma Lam	Nguyen et al. (2007)
	Nghe An— Qui Chau , Qui Hoop	Pham et al. (2004d)
	Quang Nam—Phuoc Hiep	Nguyen et al. (2007)
	Yen Bai—An Phu, Luc Yen , Minh Xuan, Tan Huong, Thac Ba, Truc Lau, Yen Bai	Pardieu and Senoble (2005a), Blauwet (2006a)
	<u>Corundum—Sapphire</u>	Sutherland and Schwarz (2001), Garnier et al. (2004a,b,2005b,c, 2008), Pham et al. (2004a,b), Michelou (2006), Graham et al. (2008), D. Blauwet (pers. comm., 2009)
	Binh Thuan—Da Ban, Dak Ton, Ma Lam, Phan Thiet	Nguyen et al. (2007)
	Dak Lak—Dak Nong	
	Dong Nai—Xa Gia Kiem, Xuan Loc	

Continent/ country	Gem material/locality	Reference
	Lam Dong—Bao Lac, Di Linh Nghe An— Qui Chau , Qui Hoop Quang Nam—Phuoc Hiep Yen Bai—An Phu, Bai Da Lan, Luc Yen , Yen Bai	Nguyen et al. (2007) Pardieu and Senoble (2005a), Blauwet (2006)
	<u>Feldspar</u> Yen Bai—Luc Yen	D. Blauwet (pers. comm., 2009) Levinson et al. (2001c), Laurs et al. (2005)
	<u>Moldavite/Tektite</u>	
	<u>Peridot (Olivine)</u> Gia Lai—Bien Ho, Ham Rong	Pham et al. (2004a), D. Blauwet (pers. comm., 2009)
	<u>Spinel</u> Nghe An—Qui Chau Yen Bai—An Phu, Luc Yen, Tan Huong, Thac Ba, Truc Loc	Pham et al. (2004a), D. Blauwet (pers. comm., 2009) Pardieu and Senoble (2005a), Blauwet (2006a)
	<u>Topaz</u> Lam Dong—Bao Lac Thanh Hoa—Xuan Le Yen Bai—Tu Le	Pham et al. (2004a), D. Blauwet (pers. comm., 2009)
	<u>Tourmaline</u> Yen Bai—An Phu, Khai Trung, Luc Yen, Minh Tien, Tan Lap	Pham et al. (2004a), D. Blauwet (pers. comm., 2009)
	<u>Zircon</u> Nghe An—Qui Chau Yen Bai—Luc Yen	Pham et al. (2004a)
Australia and Oceania		
Australia	<u>Beryl—Emerald</u> New South Wales—New England Range: <i>Emmaville, Torrington</i> Queensland—Mount Surprise Western Australia—Menzies, Pilbara, Poona, Wodgina	Henry (2005), Sutherland (2006), Groat et al. (2008) Gründmann and Giuliani (2002) Gründmann and Giuliani (2002)
	<u>Chrysoberyl (Including cat's-eye)</u> Western Australia—Dowerin	Downes and Bevan (2006)
	<u>Chrysoberyl—Alexandrite</u> Western Australia—Dowerin	Downes and Bevan (2006)
	<u>Chrysoprase/Prase Opal</u> Queensland—Marlborough Western Australia—Yerilla Station	Brown (2000,2002), Sutherland (2006), Downing (2007)

Continent/ country	Gem material/locality	Reference
	<u>Corundum—Ruby</u>	Brown (2002), Sutherland (2006), Sutherland and Webb (2007), Graham et al. (2008)
	New South Wales—Barrington, Bingara, Cudgegong and Macquarie Rivers, Gloucester , Swanbrook, Tumbarumba	McClure and Smith (2001), Sutherland and Fanning (2001,2007), Sutherland et al. (2003,2009b), Roberts et al. (2004), Webb (2007), Graham et al. (2008), B. Birch (pers. comm., 2009), Sutherland and Abduriyim (2009)
	Victoria	Sutherland and Abduriyim (2009)
	<u>Corundum—Sapphire</u>	Sutherland and Schwarz (2001), Brown (2002), Garnier et al. (2004a,b), Jaques and Milligan (2004), Sutherland (2006), Sutherland and Webb (2007), Graham et al. (2008)
	New South Wales—Barrington, Bingara, Cudgegong and Macquarie Rivers, Gloucester, New England Range: <i>Glen Innes, Inverell, Yarrowitch</i> ; Oberon, Tumbarumba, Vulcan State Forest	McClure and Smith (2001), Sutherland and Fanning (2001), Sutherland et al. (2002b,2003,2009b), Roberts et al. (2004), Zaw et al. (2006), Webb (2007), Sutherland and Abduriyim (2009)
	Queensland—Anakie, Rubyvale	Sutherland and Abduriyim (2009)
	Tasmania—Weldborough	Zaw et al. (2006), Sutherland and Abduriyim (2009)
	Victoria	Sutherland and Abduriyim (2009)
	<u>Diamond</u>	Brown (2002), O’Neil et al. (2005), Sutherland (2006), Downes and Bevan (2007), A. Janse (pers. comm., 2010) McInnes et al. (2009)
	Northern Territory—Borroloola: <i>Merlin</i>	Shigley et al. (2001a), Luguët et al. (2009), Bosshart and Chapman (2010)
	Western Australia—Derby: <i>Ellendale</i> ; Kununurra: <i>Argyle</i>	
	<u>Feldspar</u>	
	Queensland—Hughenden	Bracewell (2000)
	<u>Jade—Nephrite</u>	
	South Australia— Cowell	Brown (2002), Sutherland (2006) Nichol (2000), Harlow and Sorensen (2001), Adams and Beck (2009)
	<u>Moldavite/Tektite</u>	McCall (2006)
	<u>Opal</u>	Townsend (2001), Brown (2002), Horton (2002), Thiry et al. (2006), Sutherland (2006), Pecover (2007), Gaillou et al. (2008)
	New South Wales— Lightning Ridge, White Cliffs	Thomas et al. (2006), Frasier and Frasier (2007), Smith (2007), Roskin (2008)
	Queensland—Bulgroo, Davenport-Palpara, Eromanga, Jundah, Koroit, Kynuna, Opalton, Quilpie , Toompine, Yaraka, Yowah	Cooper and Neville (2007)
	South Australia— Andamooka, Coober Pedy, Lambina, Mintabie , Stuart Creek	Townsend (2006,2009), Cody (2007), R. Coenraads (pers. comm., 2009)

Continent/ country	Gem material/locality	Reference
	<u>Rhodonite</u> New South Wales—Broken Hill	Milstead et al. (2005), Milstead (2006), Sutherland (2006)
	<u>Zircon</u> New South Wales—New England Range Queensland—Anakie, Rubyvale	L. Sutherland (pers. comm., 2009)
New Zealand	<u>Corundum—Sapphire</u> South Island—Dunedin	Kiefert et al. (2006)
	<u>Jade—Nephrite</u> South Island —Arahura River, Caples, Dun Mountain, Maitai River, Mount Torlesse, Taramakau River	Harlow and Sorensen (2001) Wilkins et al. (2003), Adams et al. (2007)
Oceania	<u>Jade—Nephrite</u> New Caledonia—Tiwaka River	Adams and Beck (2009)
Europe		
Austria	<u>Garnet—Almandine/Rhodolite</u> Tirol—Ziller Valley	Staebler and Pohwat (2008)
Czech Republic	<u>Garnet—Pyrope</u> Severocesky—České Středohoří Mountains: <i>Podsedice</i> Východočeský—Krkonoše Mountains: <i>Vestřev</i> <u>Moldavite/Tektite</u> Jihočeský—Budějovice: <i>Besednice, Chlum, Vrábče</i>	Novák (2001), Seifert and Vrána (2005), Kouřimský and Hyršl (2008), Zang and Gilg (2008) Trnka and Houzar (2002), McCall (2006) J. Hyršl (pers. comm., 2009)
Finland	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Kymi—Luumäki <u>Jade—Nephrite</u> Itä-Suomen—Paakkila Etelä-Suomen—Hakkila, Stansvik	Lyckberg (2004a,b,2005b), Wise (2005) Nichol (2004) Nichol (2004)
Germany	<u>Amber/Copal</u> Saxony-Anhalt—Bitterfeld <u>Zircon</u> Bavaria—Fichtelgebirge Saxony—Erzgebirge: <i>Seufzergründel</i> ; Vogtland	Fuhrmann (2005), Yamamoto et al. (2006) Meier and Weiss (2007) Tietz (2003), Tietz and Büchner (2007), Seifert et al. (2008), Modaleck et al. (2009)
Hungary	<u>Opal</u> Zemplén Mountains	Rondeau et al. (2004)
Italy	<u>Garnet—Andradite/Demantoid</u>	

Continent/ country	Gem material/locality	Reference
	Lombardy—Sondrio: <i>Malenco Valley</i>	Zang (2008a), Adamo et al. (2009b), Stephenson and Kouznetsov (2009)
	<u>Garnet—Pyrope</u> Piedmont—Ala Valley, Varaita Valley	Guastoni et al. (2001), Simon (2008)
	<u>Jade—Jadeite</u> Piedmont—Po Valley	Adamo et al. (2006)
	<u>Jade—Nephrite</u> Liguria—Sestri Levante Lombardy—Mastabia: <i>Malenco Valley</i>	Nichol (2003) Nichol and Giess (2005a)
	<u>Peridot (Olivine)</u> Sardinia—Sardegna: <i>Pozzomaggiore</i>	Adamo et al. (2009a)
Poland	<u>Amber/Copal</u> Baltic Sea Coast	Kosmowska-Ceranowicz (2004, 2009)
	<u>Jade—Nephrite</u> Lower Silesia—Jordanów Slaski	Nichol (2001)
	<u>Chrysoprase/Prase Opal</u> Lower Silesia—Szklary	Sachanbiński et al. (2001)
Slovakia	<u>Opal</u> Košice—Prešov: <i>Dubník</i>	Huber (2007)
Switzerland	<u>Jade—Nephrite</u> Graubünden—Faller Valley: <i>Mulegns, Poschiavo Valley, Scortaseo</i>	Nichol and Giess (2005b,c)
Ukraine	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Zhytomyr—Volodarsk-Volynskiy	Lyckberg (2005a), Lyckberg et al. (2009)
North America		
Canada	<u>Beryl—Emerald</u> Northwest Territories—Tungsten: <i>Lened</i>	Wilson (2007,2010) Marshall et al. (2004), Groat et al. (2008)
	Ontario—Dryden: <i>Taylor</i> Yukon Territory—Finlayson Lake: <i>Tsa da Glisza (Regal Ridge)</i>	Groat et al. (2002, 2008), Rohtert (2002b), Marshall et al. (2003), Wight (2003), Groat (2005)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> British Columbia—Atlin, Bennett: <i>Mount Foster</i> , Passmore: <i>B-Q Claim</i> Ontario—Quadeville Yukon Territory—Watson Lake: <i>True Blue</i>	Wilson (2007,2010) Groat (2005) Groat (2005), Turner et al. (2007)
	<u>Corundum—Sapphire</u> British Columbia—Slocan Valley: <i>Blu Moon, Blu Starr, Sapphire Hill</i>	Wilson (2007,2010) Coenraads and Laird (2000),

Continent/ country	Gem material/locality	Reference
	Nunavut—Baffin Island: <i>Kimmirut</i> Ontario—Bancroft	LeCheminant et al. (2004) Wight (2004)
	<u>Diamond</u> Northwest Territories—Yellowknife: <i>Diavik, Ekati, Snap Lake</i>	Boyd (2006), Kjarsgaard and Levinson (2002), A. Janse (pers. comm., 2010) Couch (2002), Gurney et al. (2004), Jakubec et al. (2004), Menzies et al. (2004), Nowicki et al. (2004), Pokhilenko et al. (2004), Klein-BenDavid et al. (2007), Van Rythoven and Schulze (2009)
	Nunavut—Yellowknife: <i>Jericho</i> Ontario—Moosonee: <i>Victor</i>	Webb et al. (2004)
	<u>Garnet—Almandine/Rhodolite</u> British Columbia—Passmore: <i>B-Q Claim</i> Nunavut—Baffin Island	Wilson (2007,2010)
	<u>Garnet—Andradite/Demantoid</u> Quebec—Black Lake: <i>Lac D'Amiante</i> Yukon Territory—Swift River	Wilson (2007,2010) Amabili et al. (2009)
	<u>Garnet—Grossular/ Hessonite/Tsavorite</u> Quebec—Asbestos: <i>Jeffrey</i> ; Bancroft: <i>York River</i> ; Black Lake: <i>Lac d'Amiante</i> ; St.-Denis-de-Brompton: <i>Orford</i>	Wilson (2010) Amabili et al. (2004,2008), Wilson (2007), Horváth and Spertini (2008), Zang (2008b)
	<u>Iolite (Cordierite)</u> British Columbia—Slocan Valley	Simandl et al. (2000), Wilson (2007)
	<u>Jade—Nephrite</u> British Columbia —Cassiar, Cry Lake, Dease Lake, Mount Ogden	Wilson (2010) Nichol (2000), Harlow and Sorensen (2001), Simandl et al. (2001), Makepeace and Simandl (2004), Kim (2007), Adams and Beck (2009)
	<u>Opal</u> British Columbia—Vernon: <i>Klinker</i>	Wilson (2010) Downing (2003), Wilson (2005), Michelou (2006), Gaber (2007)
	<u>Peridot (Olivine)</u> British Columbia—Cherryville, Hendrix Lake, Lumby, Williams Lake	Wilson (2005,2007)
	<u>Quartz—Amethyst/Citrine/Ametrine</u> Ontario— Thunder Bay	Garland (2004), Kerr (2006), Wilson (2007,2010)
	<u>Topaz</u> British Columbia—Atlin, Bennett: <i>Mount Foster</i> Yukon Territory—Swift River, Teslin	Wilson (2007,2010)
	<u>Tourmaline</u> Northwest Territories—O'Grady Lake	Ercit et al. (2003), Wilson (2007,2010)

Continent/ country	Gem material/locality	Reference
Cuba	<u>Jade—Jadeite</u> Guantanamo—Sierra del Convento	García-Casco et al. (2009)
Dominican Republic	<u>Amber/Copal</u>	Iturralde-Vinent (2001), Cattaneo (2008), Corday and Dittrich (2009)
Guatemala	<u>Jade—Jadeite</u> El Progreso— Motagua Valley : <i>Manzanal</i>	Harlow and Sorensen (2001), Cleary and Rohtert (2002), Gendron et al. (2002), Miller (2002), Sisson (2002), Harlow et al. (2004), Marroni et al. (2009), Simons et al. (2010), Yui et al. (2010)
Honduras	<u>Opal</u> Lempira—Erandique: <i>San Andres, Tablon</i> ; San Antonio, Sosual: <i>Las Colinas</i>	Banerjee and Wenzel (1999), Vogt (2004), Michelou (2006), Dabdouh (2007), Gaillou et al. (2008) Viti and Gemmi (2009)
Mexico	<u>Amber/Copal</u> Chiapas—Simojovel de Allende <u>Apatite</u> Durango—Durango: <i>Cerro de Mercado</i> <u>Danburite</u> San Luis Potosi—Charcas <u>Feldspar</u> Chihuahua—Naica, Nuevo Casas Grandes, Valle de Allende <u>Garnet—Andradite/Demantoid</u> Sonora—Hermosillo <u>Opal</u> Hidalgo—Zimapán: <i>Leopard</i> Jalisco—Magdalena Querétaro —Colon, Ezequiel Montes, Tequisquiapan <u>Quartz—Amethyst/Citrine/Ametrine</u> Guerrero—Amatitlan <u>Spinel</u> Nayarit—Acaponeta <u>Turquoise</u> Sonora—Cananea, Nacozeni	Cruz-Ocampo et al. (2007), Kraemer (2007) Megaw and Barton (1999), Cruz-Ocampo et al. (2007) J. Hyršl (pers. comm., 2009) Laurs et al. (2006), Ostrooumov and Camacho (2007) Boehm (2006) Fritsch et al. (2002b), Cruz-Ocampo et al. (2007), Schütz (2007), Gaillou et al. (2008) Coenraads and Zenil (2006) Michelou (2006) Michelou (2006) Ontiveros et al. (2004) Rohtert (2002a) Lieber (1999) Fritz et al. (2007b)

Continent/ country	Gem material/locality	Reference
United States	<u>Benitoite</u> California (San Benito)—New Idria: <i>Benitoite Gem</i>	Laurs (2002h), Van Baalen (2004), Veevaert (2006), Wilson (2008), White (2010)
	<u>Beryl—Emerald</u> North Carolina (Alexander)—Hiddenite	Wise (2002,2009), Potucek (2005), Wise and Anderson (2006), Cook (2007), Groat et al. (2008), Mychaluk (2008), Speer (2008), Wise (2009), White (2010)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> California (San Diego)—Chihuahua Valley, Jacumba, Mesa Grande, Pala, Ramona, Rincon Colorado (Chaffee)—Buena Vista: <i>Mount Antero</i> Connecticut (Middlesex)—East Hampton: <i>Slocum</i> Idaho—Sawtooth Mountains Maine (Oxford)—Buckfield, Oxford; (Paris)—Paris: <i>Mount Mica</i> ; Stoneham; (Sagadahoc)—Topsham New Hampshire (Cheshire)—Keene, Grafton; (Groton)—North Groton: <i>Palermo</i>	White (2010) Fisher (2005), Mauthner (2008) Jacobsen (2005), Potucek (2005) Jarnot (2005), Wise (2005) Potucek (2005) Jarnot (2005) Wise (2005)
	<u>Corundum—Sapphire</u> Montana (Deer Lodge)— <i>Dry Cottonwood Creek</i> ; (Granite)— <i>Rock Creek</i> ; (Judith)— <i>Yogo Gulch</i> ; (Lewis and Clark)— <i>American Bar</i> , <i>Dana Bar</i> , <i>Eldorado Bar</i> , <i>Emerald Bar</i> , <i>French Bar</i> , <i>Magpie Gulch</i> , <i>Metropolitan Bar</i> , and <i>Spokane Bar along the Missouri River</i>	Mychaluk (2001), Berg (2004), Garnier et al. (2004a), Berger and Berg (2006), White (2010)
	<u>Feldspar</u> Alaska (Ketchikan-Gateway)— <i>Ketchikan</i> Oregon (Harney)— <i>Ponderosa</i> ; (Lake)—Plush: <i>Dust Devil</i> , <i>Spectrum</i>	White (2010) Jang-Green (2009) Henn (2004), Segel et al. (2007)
	<u>Garnet—Almandine/Rhodolite</u> Alaska—Wrangell Mountains: <i>Wrangell</i> Idaho (Benewah)—Clarkia: <i>Emerald Creek</i>	Wilson (2010) Crawford et al. (2005), Staebler and Pohwat (2008) Ream (2000), Gunter (2008)
	<u>Garnet—Spessartine</u> California (San Diego)—Ramona: <i>Little Three</i>	White (2010) Laurs and Knox (2001), Staebler (2008), Milisenda et al. (2010)
	<u>Opal</u> Mississippi (Claiborne) Nevada (Humboldt)— <i>Virgin Valley</i> Oregon (Klamath)— <i>Juniper Ridge</i> ; (Lake)—Plush; (Morrow)— <i>Opal Butte</i> Wyoming—Granite Mountains	Gaber (2007), White (2010) Castor and Henry (2000), Clark (2005), Huber (2008) Laurs and Quinn (2003)
	<u>Peridot (Olivine)</u> Arizona (Gila)— <i>San Carlos</i>	White (2010)

Continent/ country	Gem material/locality	Reference
	<u>Phenakite</u> Colorado (Chaffee)—Buena Vista: <i>Mount Antero</i>	Cook (2009)
	<u>Quartz—Amethyst/Citrine/Ametrine</u> Arizona (Maricopa)— <i>Four Peaks</i> Georgia (Wilkes)—Jacksons Crossroads	Wilson (2010) Lowell and Koivula (2004) Laurs (2005b), Bowling et al. (2005)
	<u>Red Beryl</u> Utah (Beaver)—Milford: <i>Wah Wah Mountains</i>	Shigley et al. (2003), Macri (2009), White (2010)
	<u>Rhodochrosite</u> Colorado (Park)—Alma: <i>Sweet Home</i>	White (2010) Bartos et al. (2007)
	<u>Spodumene—Kunzite/Hiddenite</u> North Carolina (Alexander)—Hiddenite California (San Diego)—Pala: <i>Elizabeth R, Oceanview, Pala Chief, Stewart</i>	White (2010) Brown and Wilson (2001), Laurs et al. (2003), Wise (2009) Laurs (2001f), Fisher (2002,2008), Evans (2008), Mauthner (2010)
	<u>Topaz</u> California (San Diego)—Ramona: <i>Little Three</i> Colorado (Park)—Topaz Mountain New Hampshire (Carroll); (Coos)	White (2010) Fisher (2002,2008)
	<u>Tourmaline</u> California (San Diego)—Pala: <i>Pala Chief, Stewart</i> ; Ramona: <i>Little Three</i> ; Warner Springs: <i>Cryo-Genie</i> Maine (Androscoggin)—Auburn: <i>Mount Apatite</i> ; (Oxford)— Newry: <i>Newry</i> ; (Paris)—Paris: <i>Mount Mica</i>	White (2010) Morgan and London (1999), Laurs (2001f, 2001i, 2002j, 2004b), Simmons et al. (2001), Fisher (2002,2008), Swoboda and Larson (2006), Symons et al. (2009), Ertl et al. (2010) Simmons et al. (2001,2005a,b), Freeman (2005), Laurs and Freeman (2005)
	<u>Turquoise</u> Arizona (Mohave)— <i>Ithaca Peak</i>	Lieber (1999) Williams (2000)
South America		
Argentina	<u>Opal</u> <u>Rhodochrosite</u> Catamarca—Capillitas	Fritsch et al. (2009) Michelou (2006)
Bolivia	<u>Quartz—Amethyst/Citrine/Ametrine</u> Santa Cruz— Sandoval : <i>Anahi, Ayoreita, Mina Pobre</i> <u>Sodalite</u> Cochabamba—Independencia: <i>Cerro Sapo</i>	Laurs (2001g,2010a), Weldon (2009) Hyršl and Juchem (1999), J. Hyršl (pers. comm., 2009)
Brazil	<u>Amblygonite</u> Minas Gerais—Divino das Laranjeiras: <i>Linópolis</i>	J. Hyršl (pers. comm., 2009)

Continent/ country	Gem material/locality	Reference
	<u>Andalusite</u> Minas Gerais—Itinga: <i>Jenipapo</i>	Fernandes and Choudhary (2009) J. Hyršl (pers. comm., 2009)
	<u>Apatite</u>	J. Hyršl (pers. comm., 2009)
	<u>Beryl—Emerald</u> Bahia—Anajé, Brumado: <i>Serra das Eguas</i> ; Campo Formoso : <i>Socotó</i> ; Pilão Arcado: <i>Salininha</i> ; Pindobaçu : <i>Carnaíba</i> Goiás—Pirenópolis, Santa Teresinha : <i>Campos Verdes</i> , <i>Santa Teresinha</i> Minas Gerais—Conselheiro Pena: <i>Itatiaia</i> , <i>Hematita</i> , <i>Itinga</i> ; Itabira: <i>Belmont</i> , <i>La Rocha</i> , <i>Nova Era</i> , <i>Piteiras</i> Rio Grande do Norte—Lajes Tocantins—Monte Santo, Paraíso do Tocantins	Pinto and Pedrosa-Soares (2001), Schwarz and Giuliani (2002b), Groat et al. (2008) Couto (2000) D'el-Rey Silva and Neto (2002), Gründmann and Giuliani (2002) Kanis (2001,2002), Levinson et al. (2001a), Mossman (2001), Gründmann and Giuliani (2002), Preinfalk et al. (2002), Rondeau et al.(2003) Milisenda (2007), B. Cook (pers. comm., 2009) Gründmann and Giuliani (2002), J. Hyršl (pers. comm., 2009)
	<u>Beryl—Aquamarine/Heliodor/Morganite</u> Bahia—Alcobaça: <i>Juerana</i> ; Itambé: <i>Morro da Gloria</i> , <i>Paraíso</i> ; Itanhém: <i>Jaquetô</i> ; Macarani: <i>Lajedinho</i> ; Maiquinique: <i>Jagarauna</i> ; Vitória da Conquista: <i>Cercadinho</i> Espírito Santo—Baixo Guandu: <i>Santa Cruz (Itapina)</i> ; Castelo: <i>Forno Grande</i> ; Itaguaçu: <i>Boa Vista</i> ; Mimoso do Sul: <i>Concórdia</i> ; Muqui: <i>São Domingos</i> ; Pancas Minas Gerais—Conselheiro Pena-Galiléia-Resplendor; Medina-Pedra Azul; Santa Maria de Itabira-Ferros; Teófilo Otoni-Topázio-Catuji-Padre Paraíso-Caraí; Coronel Murta: <i>Paineira</i> , <i>Pau Alto</i> , <i>Terra Corrida</i> ; Virgem da Lapa Rio Grande do Norte—Acari, Lajes Pintadas, São João do Sabuji, Tenente Ananias	César-Mendes et al. (2001), Pinto and Pedrosa-Soares (2001) Couto (2000), Menezes (2005) Menezes (2005) Mossman (2001), Viana et al. (2002), Laurs (2004a), Ferreira et al. (2005), Menezes (2005), Milisenda and Bank (2005), Steger (2006), L. Barbosa (pers. comm., 2009) Bhaskara-Rao (2002), Bhakara-Rao et al. (2004), B. Cook (pers. comm., 2009)
	<u>Brazilianite</u> Minas Gerais—Divino das Laranjeiras: <i>Linópolis</i> ; Itinga: <i>Jenipapo</i>	Cook (2008), J. Hyršl (pers. comm., 2009)
	<u>Chrysoberyl (Including cat's-eye)</u> Espírito Santo—Colatina: <i>Pancas</i> Minas Gerais—Padre Paraíso	Pinto and Pedrosa-Soares (2001) J. Hyršl (pers. comm., 2009) L. Barbosa (pers. comm., 2009)
	<u>Chrysoberyl—Alexandrite</u> Bahia—Pindobaçu: <i>Carnaíba</i> Goiás—Minaçu: <i>Pela Ema</i> Minas Gerais—Hematita, Malacacheta, Manhauçu	Pinto and Pedrosa-Soares (2001) Petersen et al. (2002) Mossman (2001), Michelou (2006), L. Barbosa and J. Hyršl (pers. comm., 2009)
	<u>Corundum—Ruby</u> Minas Gerais—Indaiá, Malacacheta, Palmeiras, Sapucaia	Liccardo et al. (2005)

Continent/ country	Gem material/locality	Reference
	<u>Corundum—Sapphire</u> Minas Gerais—Indaiá, Malacacheta, Manhuaçu, Palmeiras, Sapucaia	Henn and Petsch (2000), Liccardo et al. (2005)
	<u>Diamond</u> Bahia—Lençóis: <i>Chapada</i> Mato Grosso—Cuiabá: <i>Chapada, Paranatinga</i> ; Juina: <i>Juina</i> Minas Gerais—Coromandel: <i>Paranaíba River</i> ; Diamantina: <i>Duas Barras</i> Pará—Marabá: <i>Tocantins River</i> Piauí—Gilbués: <i>Serra da Chapada</i> Rondônia—Pimenta Buena: <i>Roosevelt</i> Roraima—Boa Vista: <i>Filomena – Bom Jesus</i>	Konstantinovskii (2003), Blore (2005), Tappert et al. (2006), Farrar (2009), Hoover and Karfunkel (2009) Kaminsky et al. (2001,2009,2010), Walter et al. (2008) Chaves et al. (2001) Battilani et al. (2007)
	<u>Euclase</u> Minas Gerais—Conselheiro Pena, Ouro Preto Rio Grande do Norte—Equador	Ferreira et al. (2008), B. Cook (pers. comm., 2009) J. Hyršl (pers. comm., 2009)
	<u>Garnet—Almandine/Rhodolite</u> Rio Grande do Norte—Carnaúba dos Dantas: <i>Marimbondo</i> Tocantins—Peixe: <i>Fazenda Balisto</i>	Ferreira et al. (2007) Eeckhout et al. (2004)
	<u>Garnet—Grossular/ Hessonite/Tsavorite</u> Minas Gerais—Galiléia: <i>Barra do Cuieté</i> Paraíba—Santa Luzia: <i>Água Fria</i>	Eeckhout et al. (2004) Eeckhout et al. (2004), Ferreira et al. (2006)
	<u>Garnet—Spessartine</u> Minas Gerais—Conselheiro Pena: <i>Navegador</i> ; Galiléia: <i>Barra do Cuieté, Escondido</i> ; São José da Safira: <i>Poaia</i> Rio Grande do Norte—Carnaúba dos Dantas: <i>Alto Mirador, Pedra Bonita</i> ; Marimbondo Tocantins—Peixe: <i>Fazenda Balisto</i>	Eeckhout et al. (2002,2004)), L. Barbosa and J. Hyršl (pers. comm., 2009), White (2009) Eeckhout et al. (2002,2004), Ferreira et al. (2007) Eeckhout et al. (2004), J. Hyršl (pers. comm., 2009)
	<u>Iolite (Cordierite)</u> Minas Gerais—Virgolândia Rio Grande do Norte—Parelhas: <i>Santa Barbara</i>	L. Barbosa (pers. comm., 2009) Laurs (2005c), Michelou (2006)
	<u>Kyanite</u> Bahia—Vitória da Conquista Minas Gerais	Laurs (2001j) Cook (2008)
	<u>Opal</u> Bahia Pará—São Geraldo do Araguaia	Pinto and Pedrosa-Soares (2001), Caucia et al. (2008b), Gaillou et al. (2008) Hyršl (2002a) Collyer and Kotschoubey (2000), Gauthier et al. (2004b), Farrar (2007)

Continent/ country	Gem material/locality	Reference
	Piauí—Pedro II: <i>Boi Morto</i>	Hyršl (2002a), Laurs (2007a), Caucia et al. (2009)
	<u>Quartz—Amethyst/Citrine/Ametrine</u> Bahia—Caetité: <i>Brejinho das Ametistas</i> Minas Gerais—Coronel Murta-Itinga: <i>Jenipapo, Morro Redondo, Piauí</i> ; Galiléia-Conselheiro Pena-São Geraldo do Baixo: <i>Macaco, Sapo</i> Pará— Marabá : <i>Alto Bonito</i> ; Pau d'Arco : <i>Villa Esperança</i> Rio Grande do Sul— Paraná Basin	Pinto and Pedrosa-Soares (2001) Couto (2000) Macri et al. (2006) Mossman and Juchem (2000), Gilg et al. (2003), Proust and Fontaine (2007a,b), Duarte et al. (2009), Commin-Fischer et al. (2010)
	<u>Quartz—Rose</u> Minas Gerais—Sapuçaia Rio Grande do Norte—Carnaúba dos Dantas: <i>Taboa</i> ; Parelhas	Pinto and Pedrosa-Soares (2001) Wilson (1999) Barreto et al. (2009), B. Cook (pers. comm., 2009)
	<u>Rhodonite</u> Minas Gerais—Conselheiro Lafaiete: <i>Morro da Mina</i>	Henn and Bank (2000), Quinn and Laurs (2004c), Leverett et al. (2008), L. Barbosa (pers. comm., 2009), Laurs (2010b)
	<u>Scapolite</u> Espírito Santo—Aracruz	J. Hyršl (pers. comm., 2009)
	<u>Sphene (Titanite)</u> Minas Gerais—Capelinha	J. Hyršl (pers. comm., 2009)
	<u>Spodumene—Kunzite/Hiddenite</u> Minas Gerais—Galiléia: <i>Urucum</i>	J. Hyršl (pers. comm., 2009)
	<u>Topaz</u> Minas Gerais—Carai, Itinga, Medina, Nova Era, Ouro Preto : <i>Antonio Pereira, Boa Vista, Capão, Dom Bosco, Vermelhão</i> ; Padre Paraíso-Catuji: <i>Marambaia</i> ; Pedra Azul, Virgem da Lapa Rondônia—Massangana River	Pinto and Pedrosa-Soares (2001), L. Barbosa and J. Hyršl (pers. comm., 2009) Mossman (2001), da Costa et al. (2000), Morteani et al. (2002), Schott et al. (2003), Ferreira et al. (2005), Sapalski-Roselló (2005)
	<u>Tourmaline</u> Ceará—Solonópole-Quixeramobim	César-Mendes et al. (2001), Pinto and Pedrosa-Soares (2001), Neves (2009)

Continent/ country	Gem material/locality	Reference
	Minas Gerais—Araçuaí-Itinga-Santa Clara: <i>Baixão, Jenipapo, Piauí, Pirineus, Teixeira, Urubú</i>; Coronel Murta: <i>Aqua Branca, Barra de Salinas, Baixa Grande, Barra de Salinas, Lavrinha, Lorena, Morro Redondo, Ouro Fino, Paineira, Pau Alto</i>; Salinas: <i>Salinas</i>; Virgem da Lapa: <i>Campinho, Manoel Mutuca</i>; Conselheiro Pena-Divino das Laranjeiras-Governador Valadas-Galiléia: <i>Jairo, Pamaro, Sapo</i>; Malacacheta—Franciscópolis-Resplendor-Santa Rosa: <i>Mutuca, Nova Santa Rosa</i>; São José da Safira-Agua Boa; <i>Aricanga, Chiá, Cruzeiro, Pederneira, Santa Rosa</i> Paraíba—Frei Martinho: <i>Alto Quixaba</i>; Pedra Lavrada: <i>Serra Branca</i>; Salgadinho: <i>Mina da Batalha, Mineração Batalha</i> Rio Grande do Norte—Parelhas: <i>Alto da Cabeça, Bulandeira, Mulungu (Boqueirãozinho/Capoeira), Quintos de Baixo</i>	Bilal et al. (2000), Mossman (2001), Bastos (2002), Karfunkel et al. (2002), Steger (2006), Viana et al. (2007), Menezes (2009)
	<u>Turquoise</u> Pará—Itacupim	Shigley et al. (2001b), Cook (2002), Wilson (2002), Ferreira et al. (2005), Abduriyim et al. (2006), Michelou (2006), Furuya (2007a), Beurlen et al. (2009a,b) Johnson et al. (2000b), Laurs and Shigley (2000), Shigley et al. (2001b), Milisenda (2005), Abduriyim et al. (2006), Baumgartner et al. (2006), Michelou (2006), Furuya (2007a), Soares et al. (2008), Beurlen et al. (2009a,b)
Chile	<u>Lapis Lazuli (Lazurite)</u> Limari—El Polvo: <i>Flor de Los Andes, San Marcelo, Seguridad</i>	da Costa et al. (2004) Coenraads and Canut de Bon (2000), Henn and Braun (2001)
Colombia	<u>Beryl—Emerald</u> Boyacá—Chivor, Cosquez, Muzo, Pava; Maripí (La Pita): <i>Polveros</i>; San Pablo de Borbur: <i>Peñas Blancas</i> Cundinamarca—Gachalá, Yacopí <u>Corundum—Sapphire</u> Cauca—Mercaderes: Rio Mayo	Banks et al. (2000), Giuliani et al. (2000), Schwarz and Giuliani (2002a) Johnson et al. (2000a), Michelou (2001,2005,2006), Boehm (2002a), Fritsch et al. (2002a), Gründmann and Giuliani (2002), Vuillet et al. (2002), Campos-Alvarez and Roser (2007) Johnson et al. (2000c), Romero-Ordóñez and Rodríguez-Vargas (2002), Duroc-Danner (2003), Sutherland et al. (2008)
	<u>Euclase</u> Boyacá—Chivor: <i>Chivor</i>	Notari et al. (2000), Sauer and Laurs (2006)
Guyana	<u>Diamond</u> Cuyuni-Mazaruni—Bartica: <i>Mazaruni River</i> Potaro-Siparuni—Issano: <i>Potaro River</i>; Lethem: <i>Ireng River</i>	Blore (2006a)
Peru	<u>Opal</u>	Gaillou et al. (2008)

Continent/ country	Gem material/locality	Reference
	Arequipa—Nazca: <i>Acari</i>	Hyršl (2001a,2007), Quinn and Laurs (2003), Henn (2006a), Brajkovic et al. (2007), Caucia et al. (2008a)
	Ica—Ica: <i>Monte Rosa</i>	Hyršl (2006)
	<u>Rhodochrosite</u>	Hyršl (2001a)
	Junin—Yauli: <i>Manuelita</i>	Hyršl and Rosales (2005)
	Lima—Oyón: <i>Uchucchacua</i>	
Uruguay	<u>Quartz—Amethyst/Citrine/Ametrine</u> Artigas— Artigas	Gilg et al. (2003), Michelou (2006), Duarte et al. (2009), Morteani et al. (2009)
Venezuela	<u>Diamond</u> Bolivar—Caicara: <i>Guaniamo</i> ; Eldorado: <i>Upper Cuyuni River</i> ; Santa Elena de Uairen: <i>Upper Caroni River</i>	Heylmun (2001), Konstantinovskii (2003), Blore (2006b) Kaminsky et al. (2000), Sandoval et al. (2006), Schulze et al. (2006)