

Table S2. Unit cell parameters and unit cell volume of Bm6 and Al-Bm11

	run No.	Pt	Pv				
		P (GPa)	<i>a</i> (Å)	<i>a</i> (Å)	<i>b</i> (Å)	<i>c</i> (Å)	<i>V</i> (Å ³)
Bm6	first	0		4.7880(2)	4.9339(2)	6.8983(3)	162.96(1)
		2.5(1)	3.9117(6)	4.7714(2)	4.9234(2)	6.8808(3)	161.64(1)
		3.4(1)	3.9077(5)	4.7644(3)	4.9179(2)	6.8784(4)	161.17(2)
		4.1(1)	3.9046(5)	4.7587(3)	4.9129(3)	6.8723(4)	160.67(2)
		5.7(1)	3.8975(6)	4.7454(2)	4.9025(3)	6.8684(3)	159.79(1)
		6.7(2)	3.8935(6)	4.7434(2)	4.8970(3)	6.8609(5)	159.37(2)
		9.7(2)	3.8810(6)	4.7242(3)	4.8789(3)	6.8341(4)	157.52(2)
		12.4(3)	3.8705(7)	4.7103(2)	4.8698(3)	6.8108(5)	156.23(2)
		13.0(2)	3.8681(7)	4.7032(3)	4.8655(4)	6.8052(4)	155.73(2)
		15.8(3)	3.8580(8)	4.6886(3)	4.8571(3)	6.7751(5)	154.29(2)
		20.0(4)	3.8429(8)	4.6646(3)	4.8401(3)	6.7505(4)	152.40(2)
		22.9(5)	3.8333(8)	4.6523(3)	4.8342(3)	6.7203(5)	151.14(2)
		27.1(5)	3.8197(7)	4.6420(2)	4.8180(3)	6.6686(6)	149.15(2)
		30.2(6)	3.8101(7)	4.6278(4)	4.8099(4)	6.6485(5)	147.99(2)
		32.7(7)	3.8026(7)	4.6173(5)	4.7966(4)	6.6405(6)	147.07(2)
		40.4(7)	3.7808(10)	4.5988(4)	4.7705(6)	6.5720(6)	144.18(3)
		45.3(9)	3.7680(12)	4.5724(4)	4.7591(3)	6.5441(5)	142.40(2)
		51.7(10)	3.7520(12)	4.5419(5)	4.7407(4)	6.5156(6)	140.29(2)
		55.5(12)	3.7428(14)	4.5259(4)	4.7264(5)	6.5059(7)	139.17(2)
		60.1(11)	3.7322(11)	4.5081(7)	4.7107(6)	6.4877(5)	137.78(3)
		65.2(13)	3.7209(13)	4.4902(4)	4.7016(5)	6.4479(7)	136.12(2)
		71.9(13)	3.7068(13)	4.4659(6)	4.6844(6)	6.4206(6)	134.32(3)
		76.4(14)	3.6977(14)	4.4532(5)	4.6767(7)	6.4001(8)	133.29(3)
		78.4(15)	3.6940(15)	4.4499(5)	4.6699(9)	6.3952(8)	132.90(3)
	second	5.0(1)	3.9005(5)	4.7540(2)	4.9067(2)	6.8716(4)	160.29(1)
		8.5(2)	3.8859(6)	4.7270(2)	4.8862(3)	6.8507(4)	158.23(1)
		11.5(2)	3.8741(7)	4.7139(3)	4.8762(3)	6.8158(3)	156.67(2)
		14.9(3)	3.8611(8)	4.6907(3)	4.8609(3)	6.7864(4)	154.74(2)
		16.9(4)	3.8540(8)	4.6837(4)	4.8545(3)	6.7639(4)	153.79(2)
		18.4(4)	3.8485(9)	4.6755(2)	4.8455(3)	6.7559(4)	153.05(1)
		23.9(5)	3.8300(8)	4.6502(4)	4.8261(3)	6.7122(5)	150.64(2)
		25.7(5)	3.8241(8)	4.6470(3)	4.8208(3)	6.6873(5)	149.81(2)
		29.4(6)	3.8126(8)	4.6343(4)	4.8170(4)	6.6462(3)	148.37(2)
		32.0(6)	3.8046(8)	4.6185(4)	4.8030(4)	6.6489(6)	147.49(2)
		37.2(7)	3.7896(9)	4.6030(4)	4.7801(5)	6.6065(6)	145.36(2)
		42.7(8)	3.7748(11)	4.5827(3)	4.7643(5)	6.5592(6)	143.21(2)
		47.4(9)	3.7627(11)	4.5606(4)	4.7545(5)	6.5333(7)	141.67(2)
		53.5(10)	3.7476(12)	4.5337(3)	4.7310(4)	6.5105(8)	139.64(2)

Al-Bm11	first	56.7(10)	3.7400(12)	4.5173(5)	4.7208(5)	6.4981(6)	138.57(2)
		58.5(11)	3.7360(11)	4.5148(6)	4.7183(5)	6.4853(8)	138.15(3)
		64.7(12)	3.7222(13)	4.4946(5)	4.7055(7)	6.4510(6)	136.44(3)
		69.3(14)	3.7123(14)	4.4786(3)	4.6906(3)	6.4260(8)	134.99(2)
		71.4(13)	3.7080(13)	4.4700(4)	4.6854(5)	6.4222(6)	134.50(2)
		75.3(14)	3.7001(14)	4.4587(4)	4.6796(7)	6.4069(8)	133.68(3)
		0.0001		4.7867(2)	4.9569(2)	6.9141(4)	164.05(1)
		2.5(1)	3.9114(4)	4.7699(2)	4.9403(2)	6.8865(4)	162.27(2)
		4.8(1)	3.9012(4)	4.7589(2)	4.9294(2)	6.8602(6)	160.93(2)
		8.0(2)	3.8880(5)	4.7378(3)	4.9122(3)	6.8327(7)	159.12(2)
		10.6(2)	3.8775(6)	4.7254(3)	4.9043(3)	6.8078(7)	157.94(1)
		14.5(2)	3.8628(7)	4.7053(3)	4.8881(3)	6.7761(9)	156.05(2)
		15.4(3)	3.8595(8)	4.7002(3)	4.8812(3)	6.7726(9)	155.38(2)
		17.5(3)	3.8519(8)	4.6876(3)	4.8724(3)	6.7601(8)	154.40(2)
		18.1(3)	3.8497(8)	4.6836(3)	4.8699(3)	6.7524(8)	154.01(1)
		20.6(3)	3.8411(8)	4.6744(4)	4.8559(4)	6.7391(7)	152.97(2)
		22.5(4)	3.8346(8)	4.6608(4)	4.8503(5)	6.7362(6)	152.28(2)
		25.5(4)	3.8246(8)	4.6443(4)	4.8306(5)	6.7229(7)	150.83(2)
		26.8(4)	3.8205(8)	4.6396(5)	4.8226(5)	6.7161(7)	150.27(3)
		30.1(5)	3.8105(8)	4.6240(6)	4.8132(5)	6.6980(8)	149.07(2)
		36.5(5)	3.7917(8)	4.5937(5)	4.7897(7)	6.6703(7)	146.76(2)
		43.1(5)	3.7737(9)	4.5685(4)	4.7654(5)	6.6286(6)	144.31(2)
		49.5(6)	3.7574(9)	4.5451(6)	4.7437(7)	6.5998(6)	142.30(3)
		54.1(7)	3.7462(9)	4.5254(6)	4.7312(7)	6.5809(8)	140.90(3)
		60.5(7)	3.7314(9)	4.5106(6)	4.7190(8)	6.5328(9)	139.05(2)
		68.7(8)	3.7136(10)	4.4836(3)	4.6943(6)	6.5070(8)	136.96(2)
		74.9(10)	3.7009(12)	4.4604(7)	4.6815(7)	6.4830(9)	135.37(2)
		77.4(10)	3.6958(13)	4.4556(7)	4.6802(8)	6.4601(8)	134.71(2)
		83.4(12)	3.6843(15)	4.4397(7)	4.6676(7)	6.4390(7)	133.44(2)
		90.7(14)	3.6708(16)	4.4170(6)	4.6459(9)	6.4169(10)	131.68(2)
		92.2(14)	3.6682(16)	4.4098(5)	4.6455(8)	6.4079(9)	131.27(2)
		95.4(15)	3.6609(16)	4.4022(6)	4.6381(7)	6.3896(10)	130.46(2)
		103.7(16)	3.6484(17)	4.3850(8)	4.6202(8)	6.3604(13)	128.86(2)
		109.4(17)	3.6426(17)	4.3742(7)	4.6104(7)	6.3417(14)	127.89(2)
		110.6(17)	3.6372(18)	4.3676(6)	4.6092(8)	6.3357(13)	127.54(2)
	second	2.2(1)	3.9130(4)	4.7707(2)	4.9426(2)	6.8896(4)	162.46(1)
		5.4(1)	3.8987(5)	4.7537(3)	4.9257(3)	6.8551(5)	160.51(1)
		6.5(1)	3.8940(5)	4.7487(3)	4.9208(3)	6.8506(5)	160.08(1)
		11.8(2)	3.8730(6)	4.7202(3)	4.9001(3)	6.7945(8)	157.25(2)
		13.2(2)	3.8674(7)	4.7102(3)	4.8927(3)	6.7890(7)	156.65(2)
		14.9(3)	3.8610(8)	4.7032(3)	4.8846(3)	6.7757(9)	155.66(2)
		17.0(3)	3.8536(8)	4.6904(3)	4.8753(3)	6.7631(8)	154.65(2)
		19.5(3)	3.8447(8)	4.6791(3)	4.8610(3)	6.7434(9)	153.38(2)
		20.0(3)	3.8431(8)	4.6777(4)	4.8604(4)	6.7407(8)	153.25(2)

21.2(3)	3.8388(8)	4.6697(4)	4.8541(4)	6.7402(7)	152.78(2)
23.0(4)	3.8329(8)	4.6579(4)	4.8459(5)	6.7348(7)	152.02(2)
24.4(4)	3.8282(8)	4.6520(4)	4.8381(5)	6.7282(8)	151.43(2)
25.7(4)	3.8239(8)	4.6424(5)	4.8286(6)	6.7217(9)	150.68(2)
26.2(5)	3.8224(9)	4.6419(3)	4.8270(4)	6.7210(8)	150.59(2)
28.3(4)	3.8158(8)	4.6333(5)	4.8182(6)	6.7084(6)	149.76(2)
33.9(5)	3.8017(8)	4.6109(7)	4.8021(5)	6.6876(9)	148.07(2)
38.5(5)	3.7860(8)	4.5820(4)	4.7806(2)	6.6612(8)	145.91(2)
40.3(5)	3.7810(8)	4.5802(3)	4.7769(3)	6.6350(9)	145.17(2)
52.1(6)	3.7509(9)	4.5321(4)	4.7355(8)	6.5848(8)	141.32(3)
56.0(8)	3.7416(9)	4.5205(5)	4.7256(9)	6.5754(9)	140.46(2)
64.3(8)	3.7229(10)	4.4950(5)	4.7082(7)	6.5101(9)	137.96(2)
71.1(10)	3.7086(12)	4.4720(4)	4.6872(8)	6.5106(8)	136.47(2)
73.5(10)	3.7036(12)	4.4649(5)	4.6855(7)	6.4903(8)	135.78(2)
80.6(12)	3.6897(15)	4.4506(6)	4.6729(11)	6.4416(7)	133.97(2)
84.4(13)	3.6823(15)	4.4350(5)	4.6615(9)	6.4319(9)	132.97(2)
87.6(14)	3.6755(16)	4.4290(5)	4.6550(10)	6.4177(11)	132.31(2)
93.5(15)	3.6659(16)	4.4095(5)	4.6450(9)	6.3943(14)	130.97(2)
100.3(16)	3.6541(16)	4.3935(5)	4.6308(7)	6.3651(10)	129.50(2)
