Table I. UWBG semiconductors discovered identified by theory and progress of material synthesis. SC no., E_g, method for E_g, $m_{e/h}$, and $\mu_{e/h}$ indicate space group, calculated band gap, type of functional used to calculate band gap within density functional theory, calculated electron/hole effective mass, and calculated electron/hole mobility, respectively. The theory data is from refs.[1–5]

Materials	Crystal structure	SG no.	E_g (eV)	Method for E_g	Carrier Type	$m_{e/h}$ (m_e)	$\mu_{e/h}$($cm^2 V^{-1} s^{-1}$)	Type of sample for synthesized material	Ref.
$HfGeO_4$	Orthorhombic	88	6.62	GW	*n*	0.067	-	Bulk	[6]
$Y_2Si_2O_7$	Monoclinic	12	7.55		*n*	0.077	-	Bulk	[7]
$MgSiN_2$	Orthorhombic	33	6.13		*n*	0.044	-	Thin film (epitaxy)	[8]
Al_4CaO_7	Monoclinic	15	7.28		*n*	0.058	-	Bulk	[9]
$ZnSiO_3$	Rhombohedral	148	6.46		*n*	0.048	-	Bulk	[10]
$In_2Si_2O_7$	Monoclinic	12	5.47		*n*	0.049	-	Bulk	[11]
$HfSiO_4$	Tetragonal	141	8.34		*n*	4.053	-	Bulk	[12]
Al_2ZnO_4	Spinel	227	6	GGA+ U	*n*	0.24	1284	Powder	[13]
GeO_2	Orthorhombic	58	3.9		*n*	0.23	1513	Bulk	[14]
$GaInO_3$	Orthorhombic	194	3.3		*n*	0.24	1235	Powder	[15]
$In_2Ge_2O_7$	Spinel	227	3.2		*n*	0.33	616	Bulk	[16]
$In_2Ge_2O_7$	Monoclinic	12	4		*n*	0.27	691	Thin film (poly-crystalline)	[17]
$In_2Si_2O_7$	Spinel	227	3.8		*n*	0.32	811	Bulk	[18]
$InBO_3$	Rhombohedral	167	4.8		*n*	0.25	959	Thin film (poly-crystalline)	[19]
Mg_2GeO_4	Spinel	227	5.3		*n*	0.23	1293	Bulk	[20]
Zn_2SiO_4	Rhombohedral	122	4.7		*n*	0.21	1335	Thin film (poly-crystalline)	[21]
$ZnSnO_3$	Rhombohedral	148	3.4		*n*	0.24	953	Powder	[22]
$ZnSnO_3$	Rhombohedral	161	3.2		*n*	0.23	1269	Thin film (epitaxy)	[23]
$Zn_4B_6O_{13}$	Cubic	217	5.4		*n*	0.37	435	Bulk	[24]
Ba_2GeHfO_6	Double perovskite	225	3.94	Meta-GGA	*n*	0.45	-	-	
Ba_2PrTaO_6		225	3.74		*n*	0.69	-	-	
Ba_2PmSbO_6		225	4.28		*n*	0.38	-	-	
Ba_2SnHfO_6		225	4.36		*n*	0.37	-	-	
GeO_2	Rutile	136	4.68	HSE	*n* *p*	0.27 1.31	288.33 27.98	Thin film (epitaxy)	[25]
SiO_2	Rutile	136	8.57	HSE	*p*	1.31	-	Bulk	[26]
$LiGaO_2$	Orthorhombic	33	5.1	HSE	*n*	0.4	-	Thin film (epitaxy)	[27]

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