WSe_2		
Property	**Description/Value**	
	Bulk	**Monolayer**
Lattice constant (a)	3.28 Å [1]	3.32 Å [2]
Molar mass	341.76 g/mol [3, 4]	341.76 g/mol [3, 4]
Band gap type	Indirect [5]	Direct [5]
Band gap energy	1.2 eV (experimental) [6]	1.65 eV (experimental) [5] 1.25 eV (calculation) [2]
Coordination geometry	Trigonal prismatic (W^{IV}), Pyramidal (Se^{-2}) [3, 4, 7]	Trigonal prismatic (W^{IV}), Pyramidal (Se^{-2}) [3, 4,7]
Crystal structure	hP6, space group $P6_3/mmc$, No 194 [3,7]	hP6, space group $P6_3/mmc$, No 194 [3, 7]
Appearance	Grey to black solid [3, 7]	----------
Group	Transition Metal Dichalcogenide [7]	Transition Metal Dichalcogenide [7]
Spin-orbit splitting	----------	0.47 eV [2]
Poisson's ratio	----------	0.19 [2]
Cohesive energy per unit cell	----------	15.45 eV [2]
Charge transfer of W atom	0.96 e [2]	0.96 e [2]
In-plane stiffness	----------	115.52 N/m [2]
Density	9.32 g/cm^3 [3]	9.32 g/cm^3 [3]
Melting point	1500 °C [8]	----------
Exciton binding energy	----------	0.79 eV [9]
W-Se bond length	----------	2.55 Å [2]
Dielectric constant (ε)	----------	Real part (ε1)=~22, Imaginary part (ε2)=~10 (at 1.7 eV incident photon energy) [10]
Effective masses	----------	m_e= 0.53 m_o, m_h= 0.52 m_o [11]
Effective Bohr radius	----------	----------
Thermal expansion coefficient		11.08×10^{-6} /ºC [12]
Bulk Modulus (B)		----------
Refractive Index	----------	5.68 [13]
Carrier mobility in WSe_2		
Thicknesses	**BN/SiO_2/Si substrate**	**SiO_2/Si Substrate**
8 nm	----------	~350 cm^2/V.Sec (hole) [14]
Monolayer	~31 cm^2/V.Sec [15]	----------
Bulk	----------	----------

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