Properties of Common Organic Materials

	Unit	Alq_3	Anthracene	C_{60}	CuPc	Pentacene	$Ir(ppy)_3$	PTCDA
Chemical formula		$C_{27}H_{18}AlN_3O_3$	$C_{14}H_{10}$	C_{60}	$C_{32}H_{16}CuN_8$	$C_{22}H_{14}$	$C_{33}H_{24}IrN_3$	$C_{24}H_8O_6$
Density	g/cm^3	1.31	1.24	1.62	1.98	1.3	1.73	1.7
Energy gap[(a)]	eV	2.77	3.59	3.55	2.03	2.1	3.41	2.2
Molecular weight	gm/M	459.4	178.2	720.6	576.1	278.4	654.8	392.3
Rel. dielectric constant		3.5	2.35	4.08	3.6	4.0	2.9	3.6
Crystal structure		triclinic	monoclinic	fcc	triclinic	triclinic	triclinic	monoclinic
Crystal space group		$P\bar{1}$	$P2_1/b$	$Fm\bar{3}m$	$P\bar{1}$	$P\bar{1}$	$P\bar{3}$	$P2_1/c$
Crystal point group[(b)]		C_3 (*f*), C_1(*m*)	D^5_{2h}	I_h	D_{4h}	D_{2h}	C_3 (*f*), C_1(*m*)	2/*m*

(a) Nominally quoted as the energy of the π-π* transition, or HOMO-LUMO gap
(b) *f*=facial, *m*=meridonal isomers