New Area of Research in OLEDs -Aggregation-Induced Emission (AIE)

Aggregation-Induced Emission (AIE) is a novel photophysical phenomenon which offers a new platform for researchers to look into the light-emitting processes from luminogen aggregates, from which useful information on structure—property relationships may be collected and mechanistic insights may be gained. The discovery of the AIE effect opens a new avenue for the development of new luminogen materials in the aggregate or solid state. By enabling light emission in the practically useful solid state, AIE has the potential to expand significantly the technological applications of luminescent materials.

The further information of new materials below,



Product Specifications

LT-N778 ED

(E)-2-(2-(4-(dimethylamino)styryl)-1-ethylquinolin-4(1H)-ylidene) malononitrile

 CAS No.
 1334739-85-3

 Grade
 > 99% (HPLC)

 Formula
 $C_{24}H_{22}N_4$

Molecular Weight 366.4680 g/mole

Fluorescence $\lambda = 614 \text{ nm (solid state)}$ Reference: ACS Appl. Mater. Interfaces 2013, 5, 192

CN

NC.

LT-N779 QM-5

 $\label{eq:energy} $$(E)-2-(2-(2-(4-(bis(4-methoxyphenyl)amino)phenyl)-2,3-dihydrothieno[3,4-b][1,4]dioxin-5-yl)vinyl)-1-ethylquinolin-4(1H)-ylidene)malononitrile$

CAS No.1651166-05-0Grade> 99% (HPLC)Formula $C_{42}H_{34}N_4O_4S$ Molecular Weight690.8180 g/moleFluorescence $\lambda = 708$ nm (solid state)

Reference: Angew. Chem. Int. Ed. 2015, DOI: 10.1002/anie.201501478

