

## *List of Abbreviations and Symbol*

A	Acceptor
Å	Ångstrom
Ar	Aryl
Al	Aluminium
ACQ	Aggregation caused quenching
AIE	Aggregation induced emission
AIEE	Aggregation induced emission enhancement
au	Arbitrary unit
BODIPY	Boron dipyrromethene
CDCl <sub>3</sub>	Deuterated chloroform
CHEF	Chelation enhancement of fluorescence
CHEQ	Chelation enhancement of quenching
cm <sup>-1</sup>	Wavenumbers
cm	Centimetre
°C	Degrees celsius
CH <sub>3</sub> OH	Methanol
CH <sub>3</sub> CN	Acetonitrile
δ	Chemical shift
<i>d</i>	Diameter
ε	Molar absorptivity
Φ	Fluorescence quantum efficiency
λ	Wavelength
λ <sub>ab</sub>	Absorption wavelength
λ <sub>em</sub>	Emission wavelength
λ <sub>ex</sub>	Excitation wavelength
ν	Frequency
τ	Emission lifetime
d	Doublet
D	Donor
DFT	Density functional theory
DNT	2,4-dinitrotoluene
DMF	Dimethyl formamide
DSA	Distyreneanthracene
DDPD	<i>N,N</i> -Dicyclohexyl-1,7-dibromo-3,4,9,10-perylenetetracarboxylic diimide
DLS	Dynamic light scattering
E	Energy band gap
ESI	Electron spray ionization
ESIPT	Excited-state intramolecular proton transfer
Eq	Equation
Hg	Mercury
HPS	Hexaphenylsilole

HOMO	Highest occupied molecular orbital
<sup>1</sup> H-NMR	Proton nuclear magnetic resonance
HRMS	High resolution mass spectra
Hz	Hertz
I	Intensity of emission
IUPAC	International union of pure and applied chemistry
ICT	Intramolecular charge transfer
IR	Infra-red
<i>f</i> <sub>w</sub>	Water fraction
FT-IR	Fourier transform infrared
FL	Fluorescence
FCs	Fluorescent chemosensors
FRET	Förster resonance energy transfer
<i>J</i>	Coupling constant
<i>k</i> <sub>q</sub>	Quenching rate constant
<i>K</i> <sub>SV</sub>	Stern-Volmer constant
LOD	Limit of detection
LUMO	Lowest unoccupied molecular orbital
LMCT	Ligand to metal charge transfer
MeCN	Acetonitrile
MeOH	Methanol
MLCT	Metal to ligand charge transfer
MS	Mass spectrometry
M	Molar
μM	Micromolar
mM	Millimolar
mM	Millilitre
μL	Microlitre
mmol	Millimole
μm	Micrometer
m	Multiplet
m/z	Mass-to-charge ratio
MHz	Megahertz
nm	Nanometer
NMR	Nuclear magnetic resonance
OLEDs	Organic light-emitting diodes
pH	Logarithmic scale of concentration of hydronium ions ( $-\log[\text{H}_3\text{O}^+]$ )
PMMA	Poly(methyl methacrylate)
PL	Photoluminescence
PET	Photoinduced electron transfer
PCT	Photoinduced charge transfer
ppm	Part per million
PA	Picric Acid

RIR	Restriction of intramolecular rotation
RIV	Restriction of intramolecular vibration
RIM	Restriction of intramolecular motion
r.t.	Room temperature
SEM	Scanning electron microscopy
S	Singlet
S <sub>0</sub>	Singlet ground state
S <sub>1</sub>	Singlet excited state
TLC	Thin layer chromatography
TPE	Tetraphenylethylene
TNT	2,4,6-trinitrotoluene
TICT	Twisted intramolecular charge transfer
THF	Tetrahydrofuran
TMS	Trimethylsilyl
TNP	2,4,6-Trinitrophenol
T <sub>1</sub>	Triplet excited state
T	Triplet
TCSPC	Time correlated single photon counting
UV-Vis	Ultraviolet-visible
Zn	Zinc

