

Neat Ionic liquids and Deep Eutectic Solvents in Photonics: Status Quo and Future Directions

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Supporting Information

Table S1. Summary of the abbreviations and full name of compounds and various processes discussed in the manuscript.

Sr. No.	Abbreviation	Full name
1	NIL	Neat ionic liquid
2	NDES	Neat deep eutectic solvent
3	HBD	Hydrogen bond donor
4	HBA	Hydrogen bond acceptor
5	[C ₄ mim] ⁺ Cl ⁻	1-butyl-3-methylimidazolium chloride
6	[C ₄ mim] ⁺ [C ₈ OSO ₃] ⁻	1-butyl-3-methylimidazolium octylsulfate
7	[Cho] ⁺ Cl ⁻	Choline chloride
8	NH ₂ CONH ₂	Urea
9	[C _n mim] ⁺	n-alkyl-3-methylimidazolium
10	[C _{nR} mim] ⁺	n-alkyl-diphenylacrylonitrile-3-methylimidazolium
11	[(C ₄) ₄ N] ⁺	Tetrabutylammonium
12	[C ₁₄ (C ₆) ₃ P] ⁺	Trihexyl(tetradecyl)phosphonium
13	[(C ₄) ₃ P] ⁺	Tetrabutylphosphonium
14	[C ₁₄ (C ₂) ₃ P] ⁺	Triethyl(tetradecyl)phosphonium
15	[C ₄ mPyr] ⁺	Butylmethylpyridinium
16	[C ₄ Pyr] ⁺	Butylpyrrolidinium
17	[Pro] ⁻ , [Val] ⁻ , [Asp] ⁻	Prolinate, Valinate, Aspartate
18	[PF ₆] ⁻	Hexafluorophosphate
19	[BF ₄] ⁻	Tetrafluoroborate
20	[NTf ₂] ⁻	bis(trifluoromethylsulfonyl)imide
21	[N(CN) ₂] ⁻	Dicyanamide
22	[PbX ₄] ⁻	Lead tetrahalide
23	[HP-SO ₃] ⁻	4-(pyren-1-yloxy)butane-1-sulfonate
24	[C ₁₂ -FL] ⁻	9-(2-((dodecyloxy)carbonyl)phenyl)-3-oxo-3H-xanthen-6-olate
25	[DPASO ₃] ⁻	9,10-diphenylanthracene-2-sulfonate
26	[PPOSO ₃] ⁻	3-(5-phenyloxazol-2-yl)benzenesulfonate
27	[C ₂ OSO ₃] ⁻	Ethylsulfate
28	[ClO ₄] ⁻	Chlorate
29	REE	Red edge effect
30	FRET	Förster resonance energy transfer
31	DET	Dexter energy transfer
32	TTA-UC	Triplet-triplet annihilation photon upconversion
33	SRS	Stimulated Raman scattering
34	CPL	Circularly polarized luminescence
35	WGM	Whispering gallery modes

36	BODIPY	Boron-Dipyrromethene
37	ESPT	Excited state proton transfer
38	PtOEP	Platinum (II) octaethylporphyrin
39	PdOEP	Palladium (II) octaethylporphyrin
40	DPA	9,10-Diphenylanthracene
41	$h\nu$	Light of certain frequency
42	S_0	Ground singlet state
43	S_1	Excited singlet state
44	LSC	Luminescent solar concentrator
45	DSSCs	Dye sensitized solar cells
46	MOST	Molecular solar thermal energy storage