**Table S1**. Transient PL characteristic and rate constants of the emitting system that contains DBP emitter, TAZTRZ-PXZ sensitizer and CBP host at a concentration ratio of *x*: 10: 100 (298 K).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Film | *x* | *Φ*PL[%] | *τ*p[ns] | *τ*d[μs] | *k*RISC[105 s-1] | *k*ISC[107 s-1] | *k*FET[108 s-1] | *k*DET[106 s-1] |
| BinaryTernary | 02 | 55- | 23.44.9 | 0.840.26 | 10.0- | 2.75- | -1.61 | -2.66 |

**Table S2**. Detailed calculation data for *R*0.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| [nm6 mol-1] | *J*(λ)[M-1 cm-1 nm4] |  | *n* | *Φ*PL[%] | *R*0[nm] |
| 5.71×1034 | 5.71×1013 | 0.67 | 1.7 | 0.68 | 8.0 |