# Electronic supplementary information (ESI)

# Structural and Up-conversion Properties of $Er^{3+}$ and $Yb^{3+}$ co-doped $Y_2Ti_2O_7$ phosphors†

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**Table S 1**. Variation of CIE coordinates with input laser powers

| Power (w) | x | y |
|---|---|---|
| 0.3 | 0.372 | 0.569 |
| 0.4 | 0.370 | 0.607 |
| 0.5 | 0.371 | 0.611 |
| 0.6 | 0.364 | 0.621 |
| 0.7 | 0.364 | 0.621 |
| 0.8 | 0.361 | 0.624 |
| 0.9 | 0.356 | 0.630 |
| 1.0 | 0.351 | 0.636 |
| 1.1 | 0.347 | 0.639 |
| 1.2 | 0.343 | 0.643 |
| 1.3 | 0.339 | 0.646 |
| 1.4 | 0.337 | 0.648 |
| 1.5 | 0.337 | 0.649 |
| 1.6 | 0.336 | 0.649 |
| 1.7 | 0.336 | 0.649 |
| 1.8 | 0.335 | 0.650 |
| 1.9 | 0.336 | 0.650 |
| 2.0 | 0.335 | 0.650 |
| 2.1 | 0.334 | 0.651 |
| 2.2 | 0.333 | 0.652 |
| 2.3 | 0.333 | 0.651 |
| 2.4 | 0.334 | 0.651 |

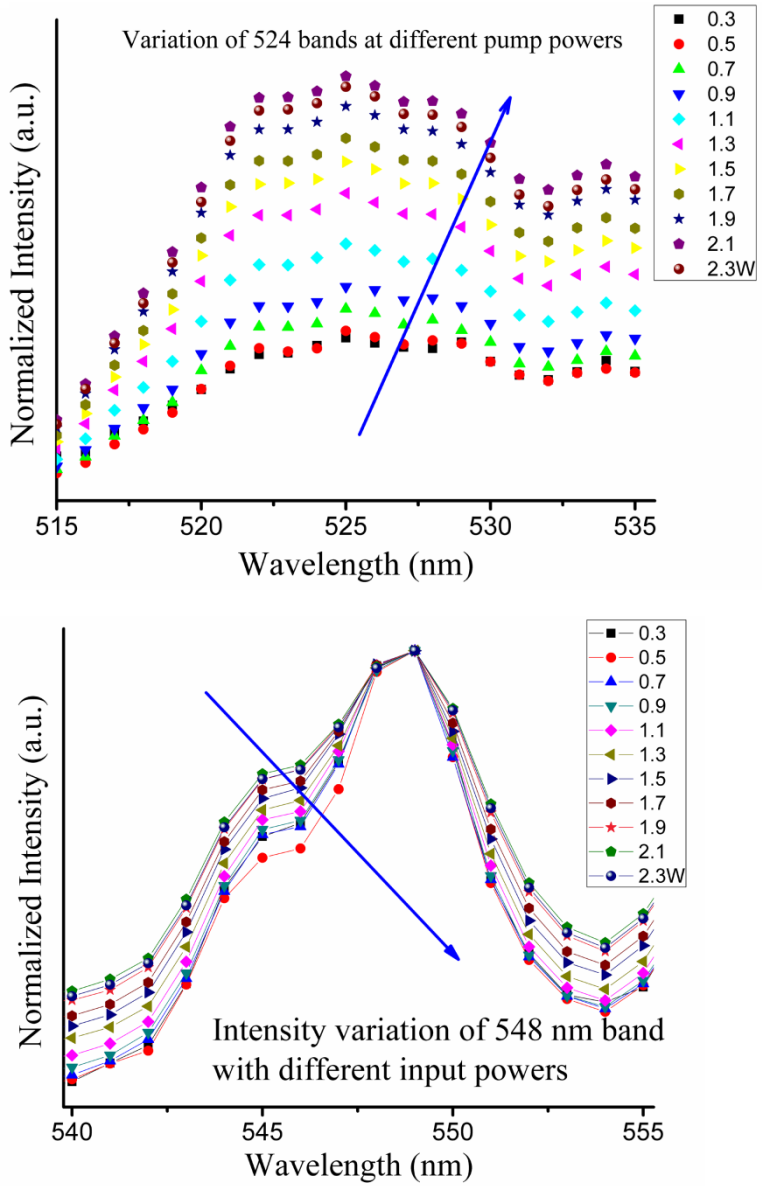


**Fig. S1** The variation in intensity with different input powers for (a) 524 and (b) 661 nm after normalizing the emission intensity at 548 nm.

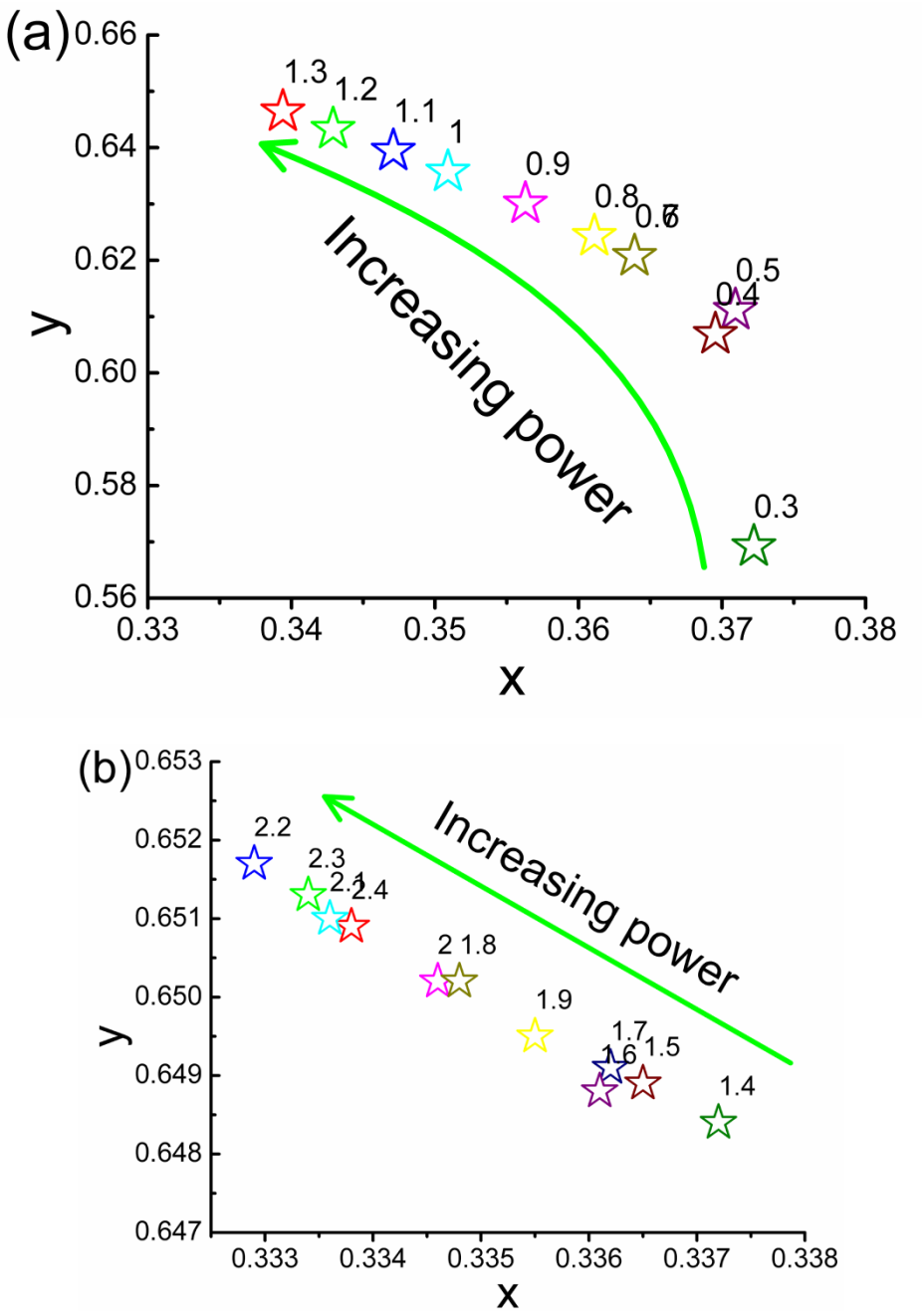


**Fig. S2** The variation of CIE coordinates with input laser powers.