Electronic Supplementary Information

Triplet exciplexes as energy transfer photosensitisers

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ESI 2: Transient kinetic traces observed at 430 nm after laser flash photolysis (355 nm) of a deareated solution of **(*S*,*S*)-1** containing **(*S*)-5** and **(*R*)-5** in acetronitrile. Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*,*S*)-1** (0.7 mM) containing increasing amounts of **(*S*)-5** (A) and **(*R*)-5** (B).

ESI 3: Transient kinetic traces observed at 430 nm after laser flash photolysis (355 nm) of a deareated solution of **(*S*,*S*)-1** containing **(*S*)-6** and **(*R*)-6** in acetronitrile. Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*,*S*)-1** (0.7 mM) containing increasing amounts of **(*S*)-6** (A) and **(*R*)-6** (B).

ESI 4: Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*R*,*S*)-2** (0.7 mM) containing increasing amounts of **(*S*)-5** (A) and **(*R*)-5** (B).

ESI 5: Transient kinetic traces observed at 430 nm after laser flash photolysis (355 nm) of a deareated solution of **(*R*,*S*)-2** containing **(*S*)-6** and **(*R*)-6** in acetronitrile. Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*R*,*S*)-2** (0.7 mM) containing increasing amounts of **(*S*)-6** (A) and **(*R*)-6** (B).

ESI 6: Transient kinetic traces observed at 430 nm after laser flash photolysis (355 nm) of a deareated solution of **(*S*)-3** containing **(*S*)-5** and **(*R*)-5** in acetronitrile. Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*)-3** (1.1 mM) containing increasing amounts of **(*S*)-5** (A) and **(*R*)-5** (B).

ESI 7: Transient kinetic traces observed at 430 nm after laser flash photolysis (355 nm) of a deareated solution of **(*S*)-3** containing **(*S*)-6** and **(*R*)-6** in acetronitrile. Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*)-3** (1.1 mM) containing increasing amounts of **(*S*)-6** (A) and **(*R*)-6** (B).

ESI 8: Transient kinetic traces observed at 430 nm after laser flash photolysis (355 nm) of a deareated solution of **(*S*)-4** containing **(*S*)-5** and **(*R*)-5** in acetronitrile. Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*)-4** (1.1 mM) containing increasing amounts of **(*S*)-5** (A) and **(*R*)-5** (B).

ESI 9: Transient kinetic traces observed at 430 nm after laser flash photolysis (355 nm) of a deareated solution of **(*S*)-4** containing **(*S*)-6** and **(*R*)-6** in acetronitrile. Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*)-4** (1.1 mM) containing increasing amounts of **(*S*)-6** (A) and **(*R*)-6** (B).

ESI 10: (U)B3LYP/6-31G*-optimised geometry of an intramolecular ^{3}(BT-InH)* exciplex

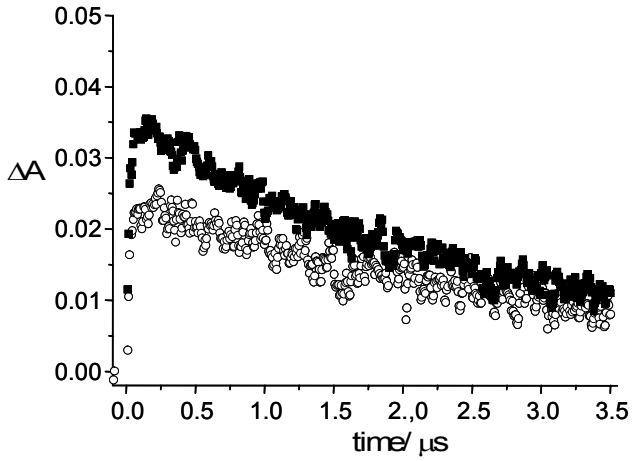

Fig. 4 Transient kinetic traces observed at 430 nm after the laser Flash photolysis (355 nm) of a deareated solution of **(*S*,*S*)-1** (0.7 mM) containing 9.9 mM of **(*R*)-5** (■) and **(*S*)-5** (○) in acetonitrile.

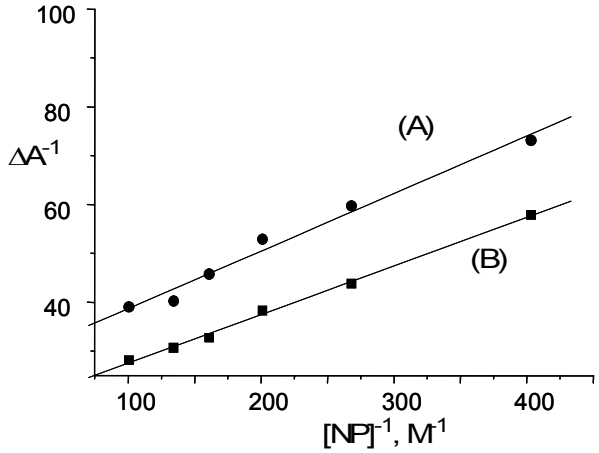

Fig. 5 Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*,*S*)-1** (0.7 mM) containing increasing amounts of **(*S*)-5** (A) and (***R***)**-5** (B).

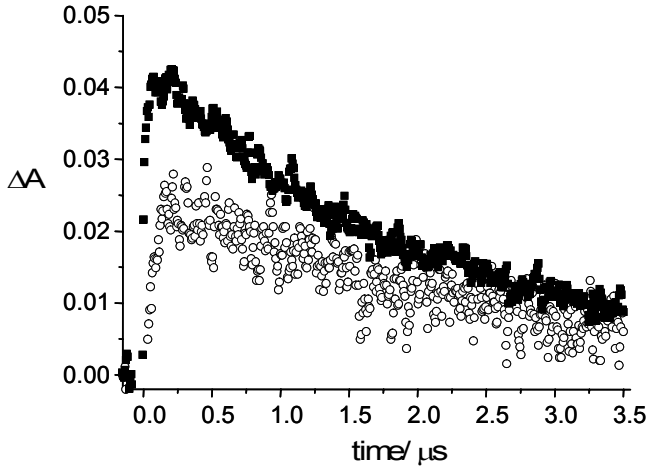

Fig. 6 Transient kinetic traces observed at 430 nm after the laser Flash photolysis (355 nm) of a deareated solution of **(*S*,*S*)-1** (0.7 mM) containing 9.9 mM of **(*R*)-6** (■) and **(*S*)-6** (○) in acetonitrile.

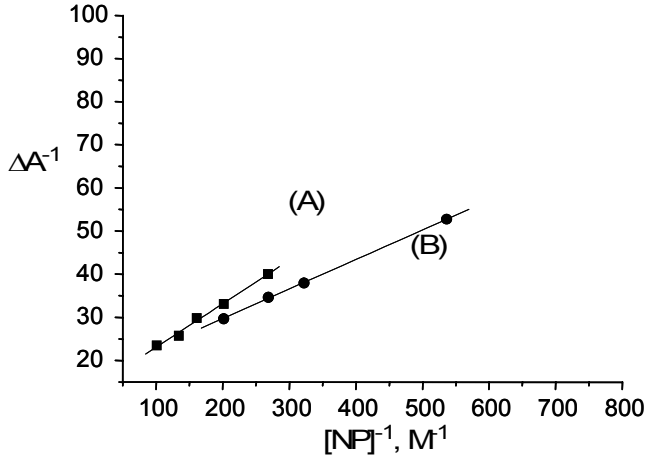

Fig. 7 Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*,*S*)-1** (0.7 mM) containing increasing amounts of **(*S*)-6** (A) and (***R***)**-6** (B).

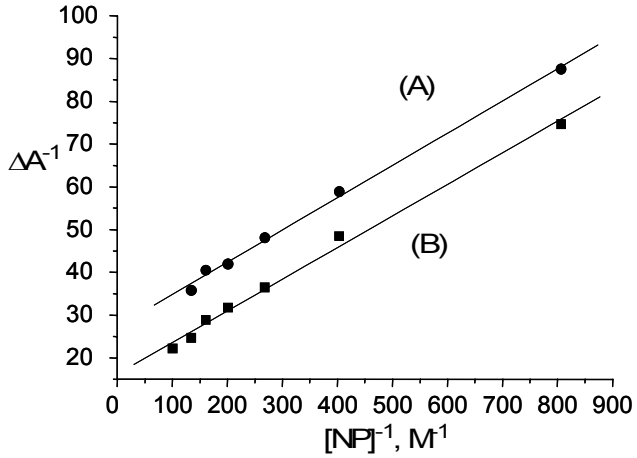

Fig. 8 Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*R*,*S*)-2** (0.7 mM) containing increasing amounts of **(*S*)-5** (A) and (***R***)**-5** (B).

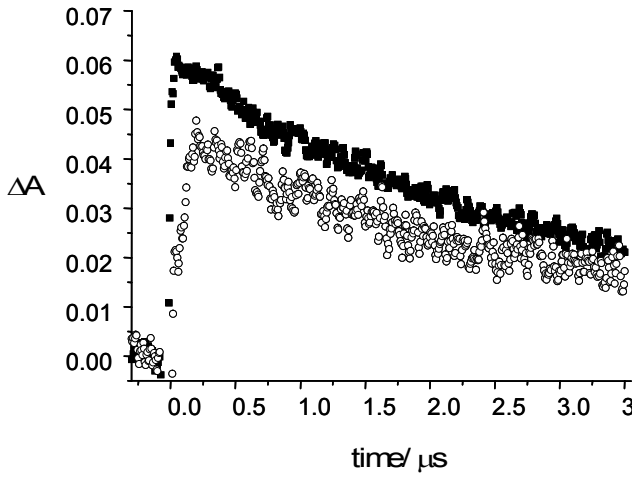

Fig. 9 Transient kinetic traces observed at 430 nm after the laser flash photolysis (355 nm) of a deareated solution of **(*R*,*S*)-2** (0.7 mM) containing 9.9 mM of **(*R*)-6** (■) and **(*S*)-6** (○) in acetonitrile.

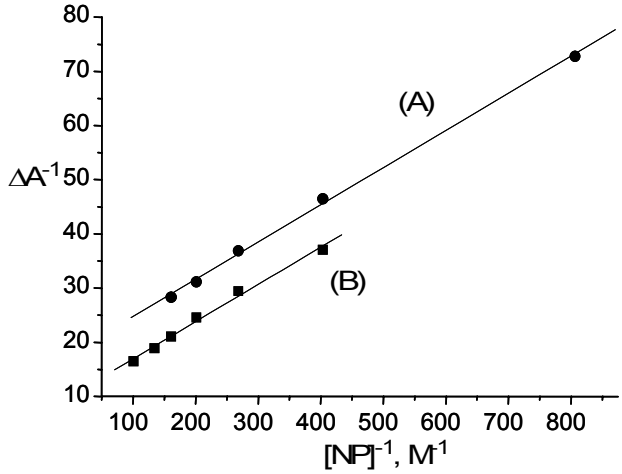

Fig. 10 Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*R*,*S*)-2** (0.7 mM) containing increasing amounts of **(*S*)-6** (A) and **(*R*)-6** (B).

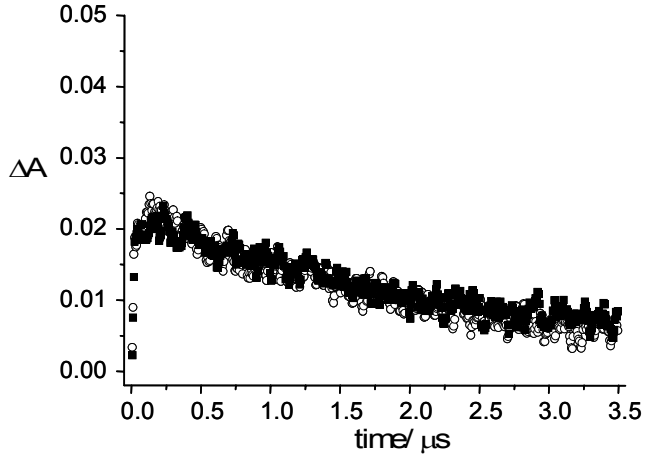

Fig. 11 Transient kinetic traces observed at 430 nm after the laser Flash photolysis (355 nm) of a deareated solution of **(*S*)-3** (1.1 mM) containing 9.9 mM of **(*R*)-5** (■) and **(*S*)-5** (○) in acetonitrile.

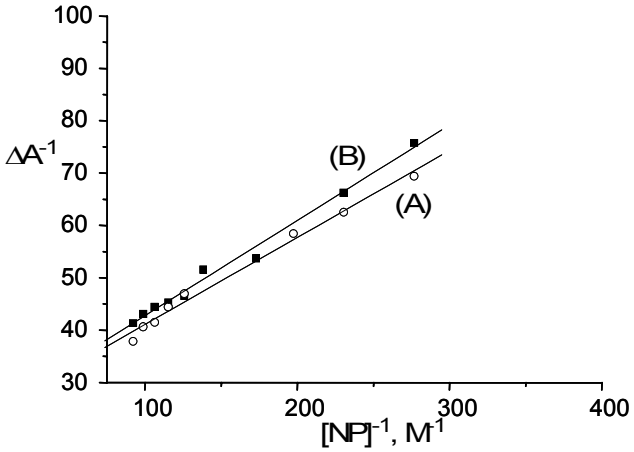

Fig. 12 Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*)-3** (1.1 mM) containing increasing amounts of **(*S*)-5** (A) and (***R***)**-5** (B).

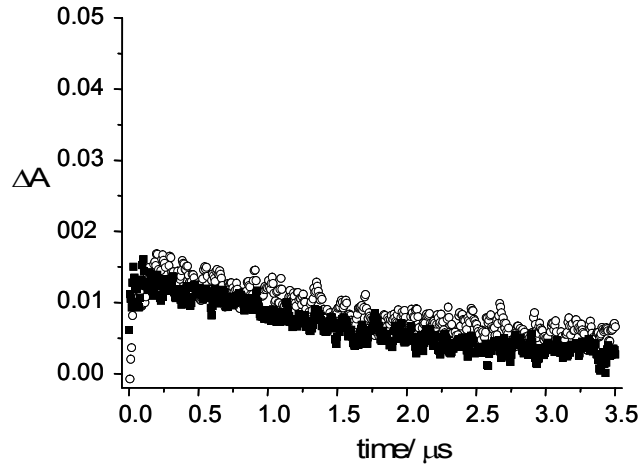

Fig. 13 Transient kinetic traces observed at 430 nm after the laser flash photolysis (355 nm) of a deareated solution of **(*S*)-3** (1.1 mM) containing 9.9 mM of **(*R*)-6** (■) and **(*S*)-6** (○) in acetonitrile.

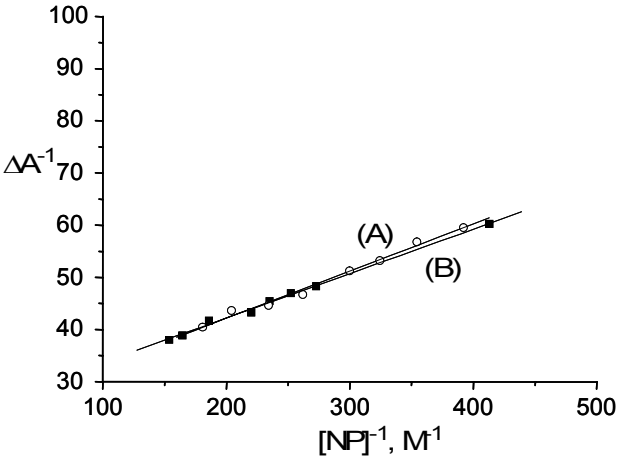

Fig. 14 Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*)-3** (1.1 mM) containing increasing amounts of **(*S*)-6** (A) and (***R***)**-6** (B).

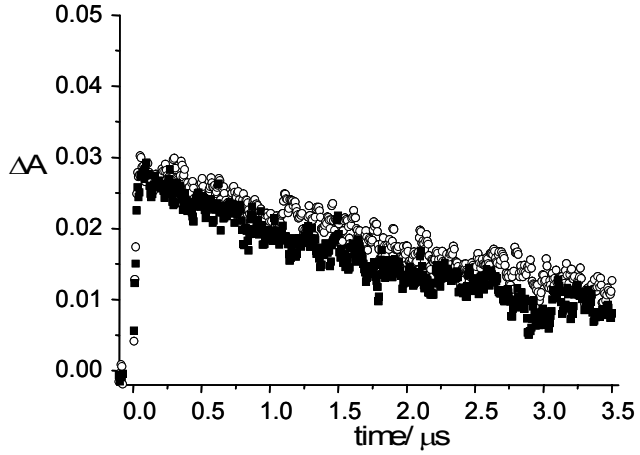

Fig. 15 Transient kinetic traces observed at 430 nm after the laser flash photolysis (355 nm) of a deareated solution of **(*S*)-4** (1.1 mM) containing 9.9 mM of **(*R*)-5** (■) and **(*S*)-5** (○) in acetonitrile.

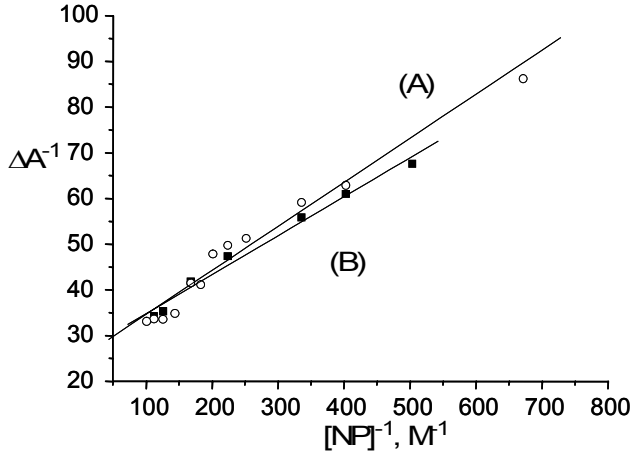

Fig. 16 Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*)-4** (1.1 mM) containing increasing amounts of **(*S*)-5** (A) and (***R***)**-5** (B).

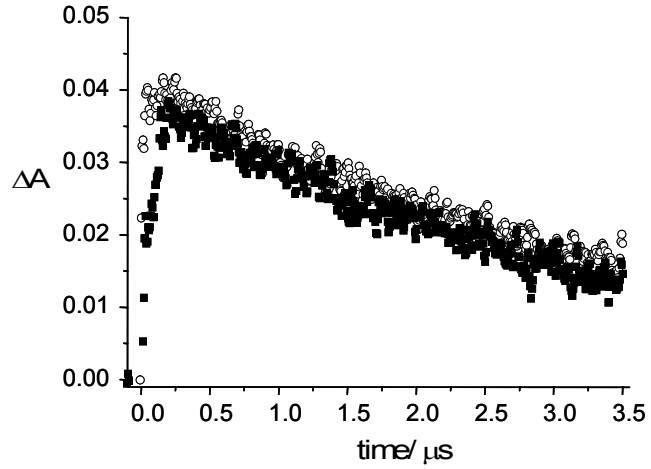

Fig. 17 Transient kinetic traces observed at 430 nm after the laser flash photolysis (355 nm) of a deareated solution of **(*S*)-4** (1.1 mM) containing 9.9 mM of **(*R*)-6** (■) and **(*S*)-6** (○) in acetonitrile.

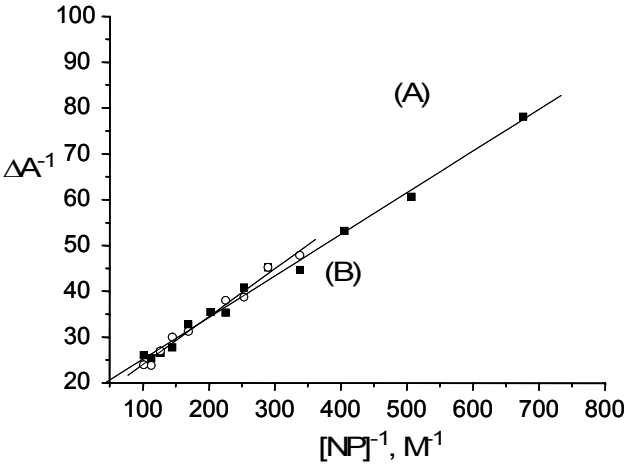

Fig. 18 Plot of ΔA^{-1} vs. $[NP]^{-1}$ for deareated acetonitrile solutions of **(*S*)-4** (1.1 mM) containing increasing amounts of **(*S*)-6** (A) and (***R***)-**6** (B).

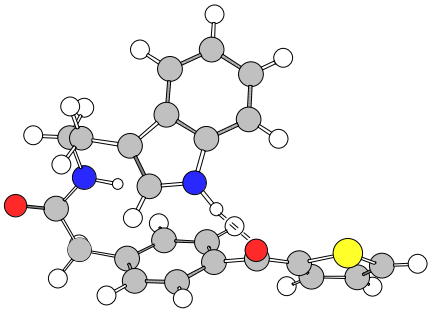

Fig. 19 (U)B3LYP/6-31G*-optimised geometry of an intramolecular ^{3}(BT-InH)* exciplex.