

A Nuclear Isotope Effect for Interfacial Electron Transfer: Excited State Electron Injection from Ru Amine Compounds to Nanocrystalline TiO₂

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Table S1. Electron Injection Quantum Yields of Natural Isotopic and Deuterated Compounds Anchored to TiO₂ and Statistical T-test Results^a.

Sensitizer	417 nm excitation			532 nm exciation		
	ϕ_{inj}	95% Confidence Interval of ϕ_{inj}	SEM ^b	ϕ_{inj}	95% Confidence Interval of ϕ_{inj}	SEM ^b
Ru(NH ₃) ₄ deeb] ²⁺	0.19	(0.19, 0.20)	2.04E-3	0.10	(0.10, 0.11)	1.72E-3
[Ru(ND ₃) ₄ deeb] ²⁺	0.28	(0.28, 0.29)	3.26E-3	0.13	(0.13, 0.14)	3.20E-3
[Ru(en) ₂ deeb] ²⁺	0.31	(0.29, 0.33)	7.00E-3	0.24	(0.22, 0.26)	8.44E-3
[Ru(en-D ₄) ₂ deeb] ²⁺	0.39	(0.38, 0.40)	3.62E-3	0.33	(0.32, 0.34)	1.19E-2
[Ru(NH ₃) ₅ (eina)] ²⁺	0.14	(0.11, 0.15)	3.19E-3	0.09	(0.08, 0.10)	2.01E-3
[Ru(ND ₃) ₅ (eina)] ²⁺	0.20	(0.20, 0.21)	4.00E-3	0.13	(0.13, 0.14)	3.12E-3

^a: In the T-test for the electron injection quantum yields for the deuterated and natural isotopic compounds anchored to TiO₂, all the P values are less than 0.001.

^b: SEM: standard error of the mean.