

Supporting Information

Cationic and Thiol-Ene Photopolymerization Upon Red Lights Using Anthraquinone Derivatives as Photoinitiators.

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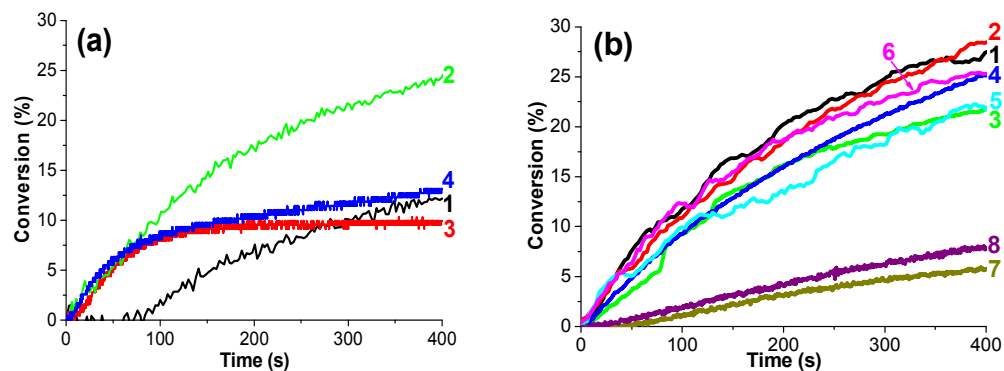


Figure S1. Photopolymerization profile of TMPTA in laminate (a) in the presence of OBN/Iod (0.5%/2%, w/w) (curves 1 and 3) or OBN/Iod/NVK (0.5%/2%/3%, w/w/w) (curves 2 and 4) upon the halogen lamp (curves 1 and 2) or the laser diode at 635 nm exposure (curves 3 and 4); (b) in the presence of OBN/MDEA (0.5%/2%, w/w) (curves 1 and 3), OBN/MDEA/R-Br (0.5%/2%/3%, w/w/w) (curves 2 and 4), OBN (2%, w) (curve 5 and 7) or OBN/R-Br (2%/3%, w/w) (curves 6 and 8) upon the halogen lamp (curves 1, 2, 5 and 6) or the laser diode at 635 nm exposure (curves 3, 4, 7 and 8).

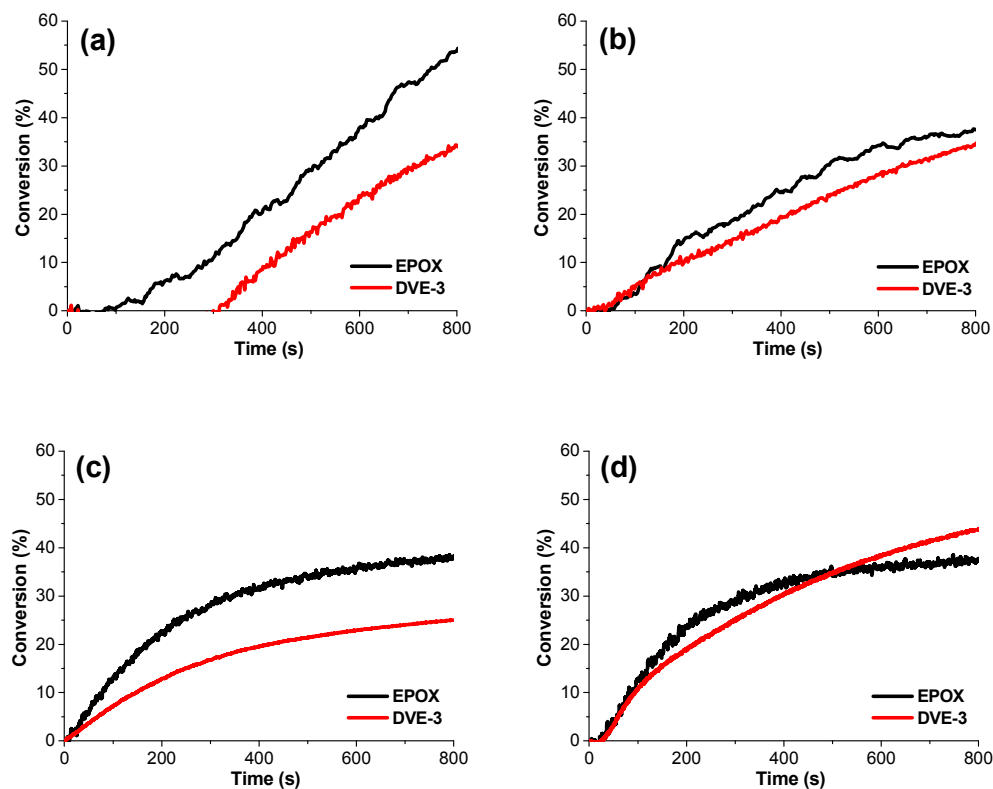


Figure S2. Photopolymerization profile of an EPOX/DVE-3 blend (50%/50%, w/w) in the presence of OBN/Iod/NVK (0.5%/2%/3%, w/w/w) under air (a, c) and in laminate (b, d); halogen lamp exposure (a, b); laser diode exposure at 635 nm (c, d).

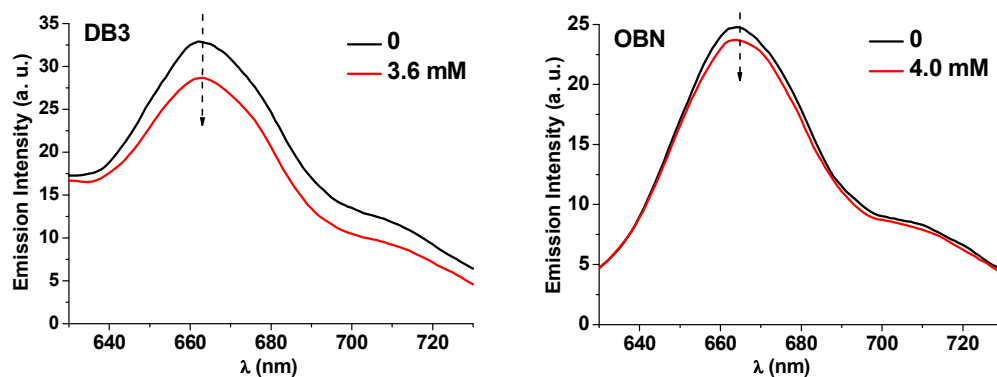


Figure S3. Typical fluorescence spectra for the quenching of DB3 and OBN by Iod in acetonitrile.

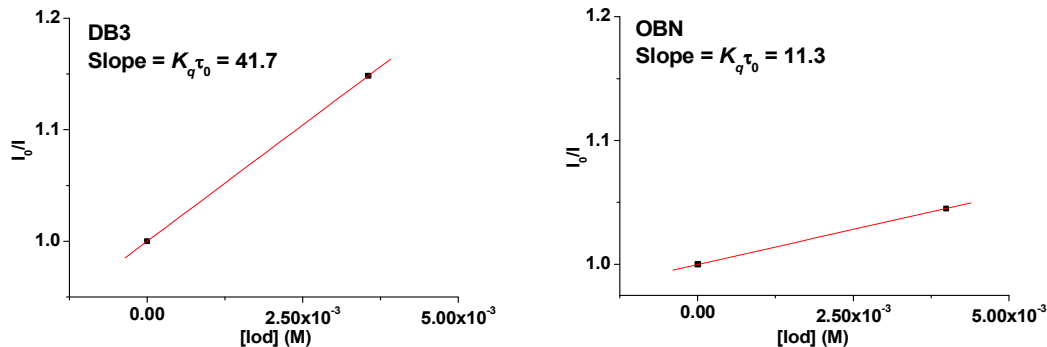


Figure S4. Examples of fluorescence quenching of DB3 or OBN by Iod in acetonitrile (fluorescence lifetime determined from time-resolved fluorescence experiments).

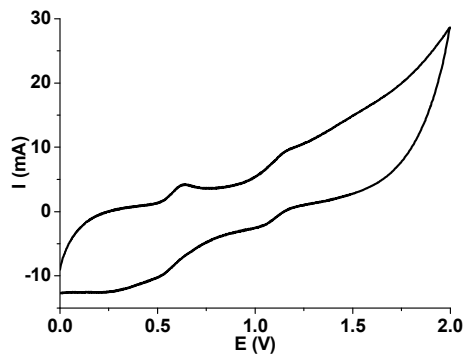


Figure S5. Cyclic voltammogram of OBN (measured in acetonitrile with tetrabutylammonium hexafluorophosphate as a supporting electrolyte).

Table S1. EPOX and DVE-3 final conversions obtained from the photopolymerization of an EPOX/DVE-3 blend (50%/50%, w/w) under air or in laminate upon exposure to the halogen lamp or the laser diode at 635 nm for 800 s in the presence of OBN/Iod/NVK (0.5%/2%/3%, w/w/w).

	EPOX conversion (%)		DVE-3 conversion (%)	
	Under air	In laminate	Under air	In laminate
Halogen lamp	54%	37%	34%	35%
Laser diode at 635 nm	38%	37%	25%	44%