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Title:	Theoretical Estimation of Optimal Parameters for Maximum Fluorescence under Pulsed Excitation
Authors:	Kayanattil, Meghanad (/jspui/browse?type=author&value=Kayanattil%2C+Meghanad) De, A.K. (/jspui/browse?type=author&value=De%2C+A.K.)
Keywords:	excitation parameters fluorescence model system pulsed excitation theoretical chemistry
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Publisher:	Wiley-VCH Verlag
Citation:	ChemPhysChem, 19(20), pp. 2796-2803
Abstract:	We present a detailed theoretical study on choosing optimum excitation parameters for maximizing the fluorescence yield. Using a model system, we show how the time-averaged emission (fluorescence) is modulated as the excitation conditions are changed from continuous wave excitation to pulsed excitation with various combinations of pulse widths and pulse repetition-rates for the same time-averaged excitation intensity. We conclude that depending on the excitation intensity, different pulse parameters are required for generating maximum fluorescence output. Our method can be implemented for other more sophisticated models without much difficulty.
URI:	https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/cphc.201800243 (https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/cphc.201800243) http://hdl.handle.net/123456789/1755 (http://hdl.handle.net/123456789/1755)
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