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| Title: | Optical trapping with femtosecond laser pulses |
| Authors: | Devi, A. (/jspui/browse?type=author&value=Devi%2C+A.) Dhamija, S. (/jspui/browse?type=author&value=Dhamija%2C+S.) De, A.K. (/jspui/browse?type=author&value=De%2C+A.K.) |
| Keywords: | Optical tweezers Femtosecond phenomena Luminescence Refractive index CMOS cameras Kerr effect |
| Issue Date: | 2017 |
| Publisher: | SPIE. Digital Library |
| Citation: | Proceedings of SPIE - The International Society for Optical Engineering, 10347 |
| Abstract: | Laser trapping of 100nm diameter polystyrene bead under high repetition rate ultrafast pulsed excitation is studied theoretically as well as experimentally. In our theoretical analysis, we explore the role of optical Kerr effect at 50mW average power under pulsed excitation. In our experiment, we use a CMOS camera to record two-photon fluorescence signal from the trapped particle which decays with time due to photo-bleaching. |
| URI: | https://www.spiedigitallibrary.org/conference-proceedings-of-spie/10347/1034737/Optical-trapping-with-femtosecond-laser-pulses/10.1117/12.2273839.short?SSO=1 (https://www.spiedigitallibrary.org/conference-proceedings-of-spie/10347/1034737/Optical-trapping-with-femtosecond-laser-pulses/10.1117/12.2273839.short?SSO=1) http://hdl.handle.net/123456789/2630 (http://hdl.handle.net/123456789/2630) |
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