



## Self-reconstructing all-optical poling in polymer fibers

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Auteur	Barille, Régis [1], Samoc, Anna [2], Luther-Davies, Barry [3], Samoc, Marek [4], Nunzi, Jean-Michel [5]
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Résumé en anglais	Self-sustained all-optical poling second-harmonic generation (SHG) experiments are conducted in single-core and multicore dye-doped poly(methyl methacrylate) optical fibers. By tuning the polarization of the fundamental beam, the SHG signal is degraded and is reconstructed spontaneously up to its initial level. We found a new situation in which the photo-induced self-organization of azo polymers creates a well-ordered periodic structure.
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### Liens

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