**Publications**

* T. Schwartz, Y. Ganor, T. Carmo, R. Uzdin, **S. Shwartz**, M. Segev, and U. El-Hanany, “Photorefractive solitons and light-induced resonance control in semiconductor CdZnTe”, Optics Letters, 27 1229 (2002).
* **S. Shwartz**, M. Segev, and U. El-Hanany, “Self-deflection and all-optical beam steering in CdZnTe”, Optics letters, 29 760 (2004).
* **S. Shwartz**, R. Weil, M. Segev, E. Lakin, E. Zolotoyabko, V. M. Menon, S. R. Forrest, and U. El-Hanany, “Light-induced symmetry breaking and related giant enhancement of nonlinear properties in CdZnTe:V crystals”, Optics Express 14, 9385 (2006).
* **S. Shwartz,** M. Segev, E. Zolotoyabko, and U. El-Hanany, “Spatial modulation instability driven by light-enhanced nonlinearities in semiconductor CdZnTe:V crystals”, Applied Physics Letters 93, 101116 (2008).
* **S. Shwartz**, M. Segev, S. Berger, E. Zolotoyabko, and U. El-Hanany, “Light-induced ionic polarization in CdZnTe:V semiconductors giving rise to giant nonlinearities”, Physical Review B 79, 193202 (2009).
* **S. Shwartz** and S. E Harris, “Polarization Entangled Photons at X-Ray Energies”, Physical Review Letters,106, 080501 (2011).
* **S. Shwartz**, K.V. Adarsh, M. Segev, E. Lakin, E. Zolotyoyabko, and U. El-Hanany, “Giant light-induced band-gap shift and reversible control over the band gap in bulk semiconductor crystals”, Physical Review B (Rapid Communication), 83, 241201(R), (2011).
* **S. Shwartz**, R. N. Coffee, J. M. Feldkamp, Y. Feng, J. B. Hastings, G. Y. Yin, and S. E. Harris, “X-ray Parametric Down-Conversion in the Langevin Regime”, Physical Review Letters,109, 013602 (2012).
* T.E. Glover, D.M. Fritz, M. Cammarata, T.K. Allison, Sinisa Coh, J.M. Feldkamp, H. Lemke, D. Zhu, R.N. Coffee, M. Fuchs, S. Ghimire, J. Chen, **S. Shwartz**, D.A. Reis, S.E. Harris, and J. B. Hastings, “X-ray and optical wave mixing”, Nature, 488, 603 (2012)