

# List of publications

Claudiu Daniel Stanciu

## Patents

- 1) **C. D. Stanciu**, F. Hansteen, A. V. Kimel, A. Kirilyuk, A. Tsukamoto, A. Itoh, and Th. Rasing, **International Patent** pending, P77323PC00: "Magneto-optical switching device and method for switching a magnetizable medium", filed - May 2006, (accepted – to be published in November 2007).
- 2) **C. D. Stanciu**, Zeno Schlett, Romanian Patent pending, "Air purification installation", filed - 2003.

## Journal Articles

- 1) **C. D. Stanciu**, A. Tsukamoto, A. V. Kimel, F. Hansteen, A. Kirilyuk, A. Itoh, and Th. Rasing, "Sub-picosecond Magnetization Reversal Across Ferrimagnetic Compensation Points" **Phys. Rev. Lett.** 99, 217204 (2007).
- 2) **C. D. Stanciu**, F. Hansteen, A. V. Kimel, A. Kirilyuk, A. Tsukamoto, A. Itoh, and Th. Rasing, "All-optical magnetic recording by circularly polarized light.", **Phys. Rev. Lett.** 99, 047601 (2007).
- 3) **C. D. Stanciu**, F. Hansteen, A. V. Kimel, A. Tsukamoto, A. Itoh, A. Kirilyuk, and Th. Rasing, "Ultrafast Interaction of the Angular Momentum of Photons with Spins in the Metallic Amorphous Alloy GdFeCo", **Phys. Rev. Lett.** 98, 207401 (2007).
- 4) A. V. Kimel, **C. D. Stanciu**, P. A. Usachev, R. V. Pisarev, V. N. Gridnev, A. Kirilyuk, and Th. Rasing, "Optical excitation of antiferromagnetic resonance in TmFeO<sub>3</sub>", **Phys. Rev. B** 74, 060403 (2006) (**Rapid Communications**).
- 5) **C. D. Stanciu**, A. V. Kimel, F. Hansteen, A. Tsukamoto, A. Itoh, A. Kirilyuk, and Th. Rasing, "Ultrafast spin dynamics across compensation points in ferrimagnetic GdFeCo: The role of angular momentum compensation", **Phys. Rev. B** 73, 220402 (2006) (**Rapid Communications**).

## Others

- 1) **C. D. Stanciu**, F. Hansteen, A. V. Kimel, A. Kirilyuk, A. Tsukamoto, A. Itoh, and Th. Rasing, "Breaking the Speed Limit of Magnetic Recording", **Highlights in the Annual Report** of the **Institute for Molecules and Materials**, Nijmegen, The Netherlands, 2006.

The article Nr. 2 has been selected as "Editors' Suggestions" and presented on the **Cover of Physical Review Letters**.

This article has been also cited in the **World Press News**:

**Science** - ScienceNOW Daily News, 28 June 2007, *Lighting a Fire Under Hard Drives* by Phil Berardelli

**Nature** - *As quick as light*, by David Gevaux (to be published in the September edition of Nature Photonics).

**Physics News Update** - The American Institute of Physics Bulletin of Physics News Number 830 June 27, 2007 *All-Optical Magnetic Recording* by Phillip F. Schewe, Ben Stein

**PCWorld** - *Lasers Give Disk Drives a Huge Boost* by Chris Mellor, Techworld

**PhysicsWorld** - *Laser flips magnetic bit without any help* by Hamish Johnston

**Heise** - 28.06.2007 *Laser schreibt auf Festplatte*

**Optics.org** - IOP Publishing on Jul 19, 2007, *Lasers speed up magnetic data recording* by Marie Freebody

**ZDNet.com** - *Laser innovation speeds up hard disks* by Matt Loney

**Noorderlicht** - *Bliksemsnelle harde schijf: Magnetisch schrijven met laserlicht* by Ronald Veldhuizen