

CV of Balázs Gombkötő

Personal data

Name Balázs Gombkötő
Position Assistant professor
Current institution Department of Physics,
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Date of birth 08.09.1977

Education

2001 MSc degree in physics, BME, Hungary
2004 PhD in Physics “New possibilities of comparative displacement-field measurement in coherent optical metrology”, BME Hungary

Employment

2005-2007 Scientific co-worker BME, Hungary
2008-2015 Assistant professor BME, Hungary

Research interest

- Holography, digital holography, holographic data storage
- Optical metrology, speckle metrology
- Phase retrieval
- Optical vortices

Teaching activity

- Practical Course in Experimental Physics 1
- Practical Course in Physics 1i and 2i
- Physics laboratory 3-4.

Students supervised

- Bsc students: Bálint Somogyi (2010), Miklós Vécsei (2010)

Grants, fellowships, projects (since 2000)

2007	Öveges József program HEF-06-2-BMEHOLO1 (OMFB-01610/2006)
2005-2006	OTKA T-046667
2005-2007	EU funding (ATHOS) IST 511626
2005-2007	EU funding (MICROHOLAS) IST 511437
2001-2004	DISCO - Distant Shape Control (grant No. 13N8095), German Ministry for Education

Languages

English (master), German (master reading, conversational speaking)

Scientific impact (as of 06/2015)

10 papers in refereed journals

Total number of independent citations: 47

H-index: 6

Complete list of publications: <https://vm.mtmt.hu//search/slist.php?lang=1&AuthorID=10042005>

Five selected publications

1. B Gombkötő, P Koppa, A Sütő, E Lőrincz, "Computer simulation of reflective volume grating holographic data storage", *JOSA A*:(7) pp. 2075-2081. (2007)
2. B Gombkoto, J Kornis, Z Fuzessy, "Difference displacement measurement using digital holography", *OPTICS COMMUNICATIONS* 214:(1-6) pp. 115-121. (2002)
3. B Gombkötő, R Séfel, J Kornis, "Full field deformation measurement of centimeter sized objects using optical phase retrieval", *OPTICS COMMUNICATIONS* 284:(12) pp. 2633-2637. (2011)
4. B Gombkoto, J Kornis, Z Fuzessy, "Difference displacement measurement by digital holography by use of simulated wave fronts", *APPLIED OPTICS* 43:(8) pp. 1621-1624. (2004)
5. B Gombkoto, Z Nagy, P Koppa, E Lorincz, "Modeling high density microholographic data storage: Using linear, quadratic, thresholding and hard clipping material characteristics", *OPTICS COMMUNICATIONS* 281:(17) pp. 4261-4267. (2008)