### **CURRICULUM VITAE**

### PERSONAL DETAILS

Dr. Mudasir Hassan Dar Assistant Professor Department of Physics Govt. Degree College, Anantnag J&K-192101, India

Phone: +917006688934 E-mail: mhdar09@gmail.com Date of appointment 17-08-2016



#### **EDUCATION**

**PhD:** School of Physics, Hyderabad Central University, Hyderabad, India, 500046.

Thesis Mentor: Prof. D. Narayana Rao Dr. V. S. Ashoka.

**M. Phil:** Department of Physics, Pondicherry Central University, Pondicherry, India, 605014. Advisor: Dr. Alok Sharan

M. Sc: Department of Physics, University of Kashmir, Srinagar, J&K, 190006.

### FELLOWSHIPS/AWARDS

- Qualified CSIR-NET (AIR: 90), conducted by Council of Scientific and Industrial Research (CSIR), New Delhi, India (December, 2013).
- Awarded Junior Research Fellowship through the DST sponsored India Trento project on advanced research (ITPAR Phase III) collaborative research project entitled "Green Photonics using Semiconductor nanostructures" 2014-2016.
- Best Poster Presentation award in National Seminar on Advances in Materials Sciences NSAMS-2012 held at M S University, Tirunalveli, 23-26 January 2012.

### **RESEARCH PUBLICATIONS:**

Citations: 125 H Index: 6

- 1) Nabil A Saad, **Mudasir H. Dar,** E. Ramya, Sri Ram G. Naraharisetty and D. Narayana Rao, "Saturable and Reverse Saturable Absorption of a Cu<sub>2</sub>O-Ag nanoheterostructure", Journal of materials Science, DOI:10.1007/s10853-018-2811-5, Issue 1/2019
- 2) RO. MU. Jauhar, **Mudasir H. Dar**, P. Vivek, D. Narayana Rao,P. Murugakoothan, "Investigations on the growth, linear, nonlinear, dielectric tensorand thermal properties of an acidic molecule: diphenylacetic acid single crystal", Journal of Optics DOI 10.1007/s12596-017-0418-x (2017)
- 3) V. Saikiran, **Mudasir H. Dar** and D. Narayana Rao "Femtosecond laser induced nanostructuring of graphite for the fabrication of quasi-periodic nanogratings and novel carbon nanostructures", Applied surface science **428** (2018) 177-185. Impact factor 3.15
- 4) **Mudasir H Dar,** Nabil A Saad, Chakradhar Sahoo, Sri Ram G Naraharisetty and Narayana Rao Desai "Ultrafast laser induced reproducible nanogratings on a molybdenum surface", Laser Physics Letters **14** (2017) 026101(5pp). Impact factor 2.39
- 5) **Mudasir H Dar**, R. Kuladeep, V. Saikiran and D. Narayana Rao "Femtosecond laser nanostructuring of titanium metal towards fabrication of low-reflective surfaces", Applied Surface Science 371 (2016) 479–487. Impact factor 3.15.
- 6) Rajamudili Kuladeep, **Mudasir H. Dar,** K. L. N. Deepak, and D. Narayana Rao "Ultrafast laser induced periodic sub-wavelength aluminum surface structures and nanoparticles in air and liquids" Journal of Applied Physics 116, 113107 (2014). Impact factor 2.183
- 7) V. Saikiran, **Mudasir H Dar**, R. Kuladeep and Narayana Rao Desai, "Ultrafast Laser Induced Subwavelength Periodic Surface Structures on Semiconductors/Metals and Application to SERS Studies", MRS Advances, June 2016, pp 1 11.
- 8) Saikiran Vadavalli, Sreeramulu Valligatla, Bharati Neelamraju, **Mudasir H. Dar**, Alessandro Chiasera, Maurizio Ferrari and Narayana Rao Desai "Optical properties of germanium nanoparticles synthesized by pulsed laser ablation in acetone" Front. Phys. Vol 2, Article 57 page 1-9.
- 9) Srinivasa Rao Allam, **Mudasir H Dar**, N Venkatramaiah, R Venkatesan, Alok Sharan. "Study of spatial rings in TPPOH<sub>4</sub> doped in boric acid glass" IOP Conf. Series: Materials Science and Engineering 73 (2015) 012023.
- 10) A Srinivasa Rao, **Mudasir H Dar,** N Venkatramaiah, R Venkatesan and Alok Sharan "Third order optical nonlinear studies and its use to estimate thickness of sandwiched films of tetra-phenyl porphyrin derivatives", Journal of Nonlinear Optical Physics and Materials, Vol. 25, No. 3 (2016) 1650039 (15 pages).

#### LIST OF CONFERENCE PROCEEDINGS:

- "Degenerate Four Wave Mixing in Porphyrin Doped Boric Acid Glass" Mudasir H Dar, A Srinivasa Rao, Alok Saran National Seminar on Advances in Materials Sciences NSAMS-2012 held at M S University, Tirunalveli during 23-26 January 2012 (BEST POSTER AWARD)
- 2) "Periodic sub-wavelength surface structuring on bulk Aluminum by femtosecond laser direct writing technique" **Mudasir H Dar**, R Kuladeep, D Narayana Rao

POSTER presentation at DAE-National Laser Symposium-23 held at Sri Venkateswara University Tirupathi during 3-6 December 2014 (23rd DAE NLS).

## Book/chapter published

Nanomaterials Synthesis Design, Fabrication and Applications
Chapter
Elsevier Publishers
Nanomaterials
1
149-199
978012815751
2019

# Area of specialization

Nonlinear optics, ultrafast optics, laser induced sub-wavelength structures, laser ablation.

#### **Orientation/Refresher Course Attended:**

- 1. 72<sup>nd</sup> "General Orientation Programme for Assistant Professors" from 7<sup>th</sup> November, 06<sup>th</sup> December, 2016 conducted at Institute of Advanced Studies in Education (IASE) in collaboration with Human Resource Development Centre (HRDC), University of Kashmir.
- 2. Refresher Course in Physics & Astronomy from February 17 29, 2020, conducted by UGC-Human Resource Development Centre (HRDC), University of Lucknow-Lucknow 226 007, (U.P.) India

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