List of Publication

A. Book Article

- 1. S Sunderlal, S N Joshi, Alika Khare (2015), 'Laser Induced micromachining & preliminary experiments on manufacturing of microchannel', Book chapter pp 179-200 in Laser based micromachining, Ed. S N Joshi and US Dixit, Springer, ISBN 978-81-322.
- 2. A Nath and **Alika Khare**, (2012), Laser Induced Breakdown in Liquid and solid-Liquid Interface, Book Chapter 18, pp 947-1011, in Laser Ablation in Liquid: Principles and Applications in Preparation of Nanomaterials, Ed. Guowei Yang, Pan Stanford Publishing ISBN 978-981-4310-95-6.
- 3. One of the author of NCERT Class XII book On Physics, (edition 2008).
- 4. Kamlesh Alti and **Alika Khare** (2008), 'Maneuvering atoms for lithography using near resonant spatially varying laser field', Book chapter in Progress in Non Linear Optics Research, Nova Publishers **ISBN**: 978-1-60456-668-0.
- Kamlesh Alti, A. S. Patra and Alika Khare (2007), 'A Novel Single Shot Technique of Micro-Nano Patterning in Single Step via Selective Laser Ablation,' Progress in Optics Research, Nova Publishers, Edi. by Maximilian N. Schulz (2008 – 1st Quarter, ISBN: 978-1-60456-110-4).
- 6. Alika Khare (2006), 'Pulsed Operation of a CW diode Laser', Electronics Projects, 22, 127-128 (Published by EFY, ISBN 81-88152-17-X).
- **B** Papers in Journals/Published proceedings

- 1. Partha P Dey, Rahul Kesarwani and Alika Khare (2018), 'Efficacy of Raman mapping over ellipsometric spectroscopy and XRD for characterization of structurally heterogeneous PLD nc-Si thin films', Optical Matreials, **84** 221-226.
- 2. Gyan Prakash Bharti, Partha Pratim Dey and Alika Khare (2018), 'Pulsed laser deposited Zn_{1-x}Ti_xO (0.000≤x≤0.050) thin films for tunable refractive index and nonlinear optical applications, Mat Chem and Physics, **216**, 206-212.
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- 4. Rasmi Ranjan Behera, Mamilla Ravi Sankar, Prahlad Kumar Baruah, Ashwini Kumar Sharma and Alika Khare (2018), 'Experimental investigations of nanosecond-pulsed Nd:YAG laser beam micromachining on 304 stainless steel ', Journal of Micromanufacturing , 1(1) 62–75.
- 5. Prahlad K. Baruah, Moghe A. Raman, Ishani Chakrabartty, Latha Rangan, Ashwini K. Sharma, Alika Khare (2018), 'Antibacterial Effect of Silk Treated with Silver and Copper Nanoparticles Synthesized by Pulsed Laser Ablation in Distilled Water', AIP Conference Proceedings **1953**, 030064.
- 6. Rahul Kesarwani, and **Alika Khare** (2018), 'Compositional study of pulsed laser deposited semitransparent Cu thin film using', AIP Conference Proceedings **1942**, 080045.
- Prahlad K. Baruah, Ashwini K. Sharma, and Alika Khare (2018, april), 'Effect of laser energy on the SPR and size of silver nanoparticles synthesized by pulsed laser ablation in distilled water, AIP Conference Proceedings 1942, 050036 (2018).
- 8. Pankaj Singh, Eshita Mal, **Alika Khare**, Sukanya Sharma, 'A study of archaeological pottery of Northeast India using laser induced breakdown spectroscopy' J Cultural Heritage XX,XXX (accepted).

- 9. Gyan Prakash Bharti and Alika Khare (2018, **May**), 'Single and multiphoton induced photoluminescence in pulsed laser deposited Zn_{1-x} Al_xO ($0 \le x \le 0.10$) thin films', J of luminescence, **197**, 135-141.
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- 12. Arpita Nath, Pooja Sharma and Alika Khare (2018, Jan), 'Laser-induced metastable phases in liquids', Laser Phys Letter, **15**, 026001.

- 13. Partha P Dey and **Alika Khare** (2017), 'Nonlinear optical and optical limiting response of PLD nc-Si thin films', J of Mat chem C, **5** 12211-12220
- 14. Partha P Dey and Alika Khare (2017), 'Fabrication of Photoluminescent nc-Si:SiO2 Thin Films prepared by PLD' Phys Chem Chem Phys, **19**, 21436-21445.
- 15. Kh. Shantakumar Singh, Alika Khare, and A. K. Sharma, Effect of uniform magnetic field on laserproduced Cu plasma and the deposited particles on the target surface. Laser Part. Beams, **35**, 313 (2017).
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- 31. S Kumari and Alika Khare (2015), 'Pulsed laser deposited barium titanate thin film for tunable optical delay application', Applied Surface Science, **347**, 619-623.
- 32. A. T. T. Mostakoa, Alika Khare, C. V. S. Rao, Sudhirsinh Valab, R. J. Makwanab and T. K. Basub (2015), 'Effect of deuterium ion beam irradiation onto the mirror-like pulsed laser deposited thin films of rhodium', Nuc Inst and Methods in Phys Res B, **342**, 150-157.

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C. Papers in conference proceedings.

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- Sasmita Behera, Amandeep Kaur and Alika Khare, "Structural and optical properties of SrTiO3 thin films fabricated by Pulsed Laser Deposition Technique National conference on Recent Advances in Science and Technology (NCRAST-2018), Assam Science and Technology University, Assam, India, March 15-17, 2018.
- 3. Prahlad K. Baruah, Ashwini K. Sharma and Alika Khare, "Particle size, surface plasmon resonance and stoichiometry of silver nanoparticles synthesized by pulsed laser ablation in distilled water, National Conference on Recent Advances in Science and Technology (NCRAST-2018), Assam Science and Technology University, Guwahati, March 15-17, 2018.
- 4. Partha P. Dey and Alika Khare, 'Third order Nonlinear optical properties of Si, SiOx and a-SiC PLD thin films using Z-Scan technique', National conference on Recent Advances in Science and Technology (NCRAST-2018), Assam Science and Technology University, Assam, India, March 15-17, 2018.
- 5. Presented a paper entitled "Dynamic Phase manipulation and wavefront estimation of a laser beam using Computer Generated Hologram" in 'Research Conclave'18' (An amalgamation of Academia, Industry & Startup),8th-11th March 2018.
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- Rahul Kesarwani and Alika Khare, Characterization of PLD thin film via spectroscopic ellipsometry, International Conference on Sophisticated Instruments in Modern Research (ICSIMR-2017), IIT Guwahati, June 30 – July 1, 2017.
- 8. Sasmita Behera and Alika Khare, "Effect of Substrate Temperature on BaTiO3 thin films fabricated by Pulsed Laser Deposition Technique", International conference on thin films (ICTF 2017), Department of Physics, CSIR-National Physical Laboratory New Delhi, India, November 14-17,2017.
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