

List of Publications:

SCI Journals:

- [1] Amala Jose, **Sourav Das Chowdhury**, Sudharsan Balasubramanian, Katarzyna Krupa, Zhiqiang Wang, B. N. Upadhyay, Philippe Grelu, and Nithyanandan Kanagaraj. "Noise-Like Pulse Seeded Supercontinuum Generation: An In-Depth Review for High-Energy Flat Broadband Sources." *Laser & Photonics Reviews* 2400511 (2024)
- [2] Uttam Kumar Samanta, **Sourav Das Chowdhury**, and Mukul Chandra Paul. "Modelling of a Lyot filter based Mamyshev oscillator." *Optical Fiber Technology* 83, 103650 (2024)
- [3] Uttam Kumar Samanta, **Sourav Das Chowdhury**, and Mukul Ch Paul. "Pump power induced instability and hysteresis in an all-normal dispersion linear mode-locked fiber laser." *Laser Physics* 33, 075101 (2023)
- [4] Uttam Kumar Samanta, **Sourav Das Chowdhury**, and Mukul Chandra Paul. "Generation of stable Q-switched pulses at 1566 nm by using a segment of erbium-doped fiber as saturable absorber." *Laser Physics* 32, 085104 (2022)
- [5] Debparna Majumder, **Sourav Das Chowdhury**, and Atasi Pal, "Design and fabrication of a tapered fiber bundle for a pump combiner with a uniform splicing region," *J. Opt. Soc. Am. B* 39, 1871-1878 (2022)
- [6] Debparna Majumder, **Sourav Das Chowdhury**, and Atasi Pal, "Mode-Field Matched Pump-Signal Combiner for High Power Fiber Laser in Advanced Manufacturing," in *IEEE Journal of Selected Topics in Quantum Electronics*, vol. 27, no. 6, pp. 1-9 (2021)
- [7] Nilotpal Choudhury, Sajib Chowdhury, **Sourav Das Chowdhury**, Nishant Kumar Shekhar, Deepak Jain, Ranjan Sen, and Anirban Dhar. "Novel dopant tailored fibers using vapor phase chelate delivery technique." *physica status solidi (a)* 219, 2100484 (2022)
- [8] **Sourav Das Chowdhury**, Bhaswar Dutta Gupta, Sayan Chatterjee, Ranjan Sen, and Mrinmay Pal. "Explosion induced rogue waves and chaotic multi-pulsing in a passively mode-locked all-normal dispersion fiber laser." *Journal of Optics* 22, 065505 (2020)
- [9] **Sourav Das Chowdhury**, Bhaswar Dutta Gupta, Mrinmay Pal, "Multi-Wavelength, Nano-Second Actively Mode-locked Yb-Fiber Oscillator with 100 nm Wide Raman Broadened Spectrum", *Optics & Laser Technology* 123, 105905 (2020)
- [10] Bhaswar Dutta Gupta, **Sourav Das Chowdhury**, Devnath Dhirhe, and Mrinmay Pal, "Intermittent events due to spectral filtering induced multi-pulsing instability in a mode-locked fiber laser," *J. Opt. Soc. Am. B* 37, 2278-2286 (2020)
- [11] **Sourav Das Chowdhury**, Bhaswar Dutta Gupta, Sayan Chatterjee, Ranjan Sen, and Mrinmay Pal, "Rogue waves in a linear cavity Yb-fiber laser through spectral filtering induced pulse instability," *Opt. Lett.* 44, 2161-2164 (2019).
- [12] **Sourav Das Chowdhury**, Subrata Manna, Sayan Chatterjee, Ranjan Sen, and Mrinmay Pal. "Mega-Hertz repetition rate broadband nano-second pulses from an actively mode-locked Yb-fiber laser." *Laser Physics* vol. 29, 035102 (2019).
- [13] Debasis Pal, **Sourav Das Chowdhury**, Anirban Dhar, Siddharth Saraf, Krishnendu Maiti, Dilip Kumar Pal, Ranjan Sen, and Atasi Pal, "Ex vivo testing of air-cooled CW/modulated 30 W thulium fiber laser for lithotripsy," *Appl. Opt.* 58, 6720-6724 (2019)
- [14] Debasis Pal, Aritra Paul, Nishant Kumar Shekhar, **Sourav Das Chowdhury**, Ranjan Sen, Kabita Chatterjee, Atasi Pal, "COM Stone Dusting and Soft Tissue Ablation with Q-Switched

Thulium Fiber Laser," in IEEE Journal of Selected Topics in Quantum Electronics, vol. 25, 1-8 (2019)

- [15] **Sourav Das Chowdhury**, Atasi Pal, Sayan Chatterjee, Ranjan Sen, and Mrinmay Pal, "Multipulse Dynamics of Dissipative Soliton Resonance in an All-Normal Dispersion Mode-Locked Fiber Laser," J. Lightwave Technol. 36, 5773-5779 (2018)
- [16] **Sourav Das Chowdhury**, Atasi Pal, Sayan Chatterjee, Ranjan Sen, and Mrinmay Pal, "Diverse mode of operation of an all-normal-dispersion mode-locked fiber laser employing two nonlinear loop mirrors," Appl. Opt. 57, 1225-1230 (2018)
- [17] Debasis Pal, Aritra Paul, **Sourav Das Chowdhury**, Mrinmay Pal, Ranjan Sen, and Atasi Pal, "Hybrid pumped gain-switched thulium fiber laser at a high repetition rate," Appl. Opt. 57, 3546-3550 (2018)
- [18] **Sourav Das Chowdhury**, Atasi Pal, Debasis Pal, Sayan Chatterjee, Mukul C. Paul, Ranjan Sen, and Mrinmay Pal, "High repetition rate gain-switched 1.94 μm fiber laser pumped by 1.56 μm dissipative soliton resonance fiber laser," Opt. Lett. 42, 2471-2474 (2017)
- [19] Maitreyee Saha, **Sourav Das Chowdhury**, Nishant Kumar Shekhar, Atasi Pal, Mrinmay Pal, Chandan Guha, and Ranjan Sen, "Yb-Doped Pedestal Silica Fiber Through Vapor Phase Doping for Pulsed Laser Applications," in IEEE Photonics Technology Letters, vol. 28, 1022-1025, (2016).
- [20] Anirban Dhar, Mukul Chandra Paul, **Sourav Das Chowdhury**, Mrinmay Pal, Atasi Pal, and Ranjan Sen, "Fabrication and properties of rare-earth-doped optical fiber using barium as an alternate codopant", Phys. Status Solidi A, 1–7 (2016)
- [21] Aditi Ghosh, Arpita Sinha Roy, **Sourav Das Chowdhury**, Ranjan Sen, Atasi Pal, All-fiber tunable ring laser source near 2 μm designed for CO₂ sensing, Sensors and Actuators B: Chemical, 235, 547-553 (2016).
- [22] Ranjan Sen, Maitreyee Saha, **Sourav Das Chowdhury**, Nishant Kumar Shekhar, Debasis Pal, Aditi Ghosh, Anirban Dhar, Atasi Pal and Mrinmay Pal, "High Power Fiber Lasers: Fundamentals to Applications", in Indian Science and Culture, Vol. 81, 291 – 298 (December 2015).

International Conference Proceedings:

- [1] **Sourav D. Chowdhury**; Nishant Shekhar; Maitreyee Saha; Ranjan Sen; Mrinmay Pal, "Broadband generation by multiple four-wave mixing process due to ASE Q-switching in high power double-clad ytterbium-doped fiber amplifier", Proc. SPIE 9266, High-Power Lasers and Applications VII, 926610, 2014 (Oral Presentation)
- [2] **S. Das Chowdhury**, D. K. Mahato, S. Chatterjee, R. Sen, and M. Pal, "Dissipative Soliton Resonance Dynamics in a Non-linear Amplifying Loop Mirror Based Mode-locked Cavity," in 13th International Conference on Fiber Optics and Photonics, OSA Technical Digest (online) (Optical Society of America, 2016), paper Th2C.3. (Oral Presentation)
- [3] **S. D. Chowdhury**, N. K. Shekhar, M. Saha, R. Sen, and M. Pal, "Spatial, Spectral and Temporal Study of Self-pulsing in CW Yb-Fiber Laser due to Saturable Absorption Effect," in 12th International Conference on Fiber Optics and Photonics, OSA Technical Digest (online) (Optical Society of America, 2014), paper S5A.41. (SPIE - Best Paper Award)
- [4] **S. Das Chowdhury**, Atasi Pal, Debasis Pal, Sayan Chatterjee, Mukul C. Paul, Ranjan Sen, and Mrinmay Pal, "Sub 100 NS TM Gain-Switched Fiber Laser Pumped by Rectangular Pulse Er: Yb Fiber Laser and Effect on Tissue Ablation," 2017 IEEE Workshop on Recent Advances in Photonics (WRAP), Hyderabad, India, 2017, pp. 1-3. (IEEE Photonics Society - Best Poster Award)

- [5] **S. D. Chowdhury**, B. D. Gupta, and M. Pal, "Observation of Rogue Waves in Stretched Pulse Train from a Linear Cavity Mode-locked Fiber Laser," in Nonlinear Optics (NLO), OSA Technical Digest (Optical Society of America, 2019), paper NTu4A.21

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