

## List of posters at NNUM2024

| Nr | Presenter             | Title of poster  |
|----|-----------------------|--|
| 1  | Jehona Salaj          | Fabrication of free-standing waveguides with microstructured 2D subwavelength cladding using maskless lithography  |
| 2  | Marte Stalsberg       | Atomically Sharp and High-Density Sb Doping in Si for use in Quantum Devices   |
| 3  | Erlend Ousdal         | Controlling directionality of emission from quantum defects through microstructures in Silicon Carbide   |
| 4  | Angelos Bouchouri     | Grayscale Lithography for Infrared Si Fresnel Lens   |
| 5  | Karola Neeleman       | Photolithography of Self-Assembled Monolayers for Selective Area Deposition of Oxides  |
| 6  | Travis Gustafson      | All-Electrical Characterization of Thin-Film Magnonic Devices  |
| 7  | Gopana Sripalan       | The GreinDisc  |
| 8  | Alessia Garibaldi     | Fabrication and ex-situ techniques effects on transport properties of Grain-Boundary YBCO based SQUID magnetometers                                      |
| 9  | David Urban           | Light-responsive polymers  |
| 10 | Núria Alcalde Herraiz | Engineering underdoped CuO <sub>2</sub> nanoribbons in nm-thick <i>a</i> -axis YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> films |
| 11 | Rajesh K. Rajagopal   | Vacancy engineered nickel ferrite forming-free low-voltage resistive switches for neuromorphic circuits  |
| 12 | Rucha Deshpande       | Ultrafast photoinduced wettability switching   |
| 13 | Jose M. Amenedo       | Deposition of Copper Tungstate by Magnetron Sputtering   |
| 14 | Marcus Hufe           | Thin Film Phase Plate Fabrication and Characterization for TEM Imaging   |
| 15 | Jairo Ramirez Sarabia | Fabrication and testing of conformable implantable devices   |
| 16 | Lisette H. Gonzalez   | Cu-(Sn-Bi) SLID bond microstructure under different temperatures   |
| 17 | Gayathry Thampi       | Effect of temperature on the die shear strength of Au-In-Bi Solid Liquid Interdiffusion (SLID) bonds.  |

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|-----------|-------------------------|--|
| 18        | Shuangyue Yang          | Microfabricated Planar Inductor for High Power DC-DC Converter'  |
| 19        | Mattias Ekström         | Challenges of via etch and CMP process for multi-level metallisation   |
| 20        | Osman Urper             | Advanced Sustainable TiO <sub>2</sub> and ZnO Biocar Nanocomposites: Transforming Water Decontamination and Bacterial Inactivation     |
| 21        | Patrick Ewerhardt       | Fabrication of Interdigitated Electrodes for Proton Ceramic Electrochemical Cells  |
| 22        | Mustafa Aboulsaad       | Vibrational and Optical Properties of Perovskite Nanoplatelets   |
| 23        | Kunalsinh Rathod        | Novel interface-engineered and doped memristors  |
| 24        | Yuyan Liu               | Micropatterned polymeric chips for enhanced production of the antibacterial compound TDA by <i>Phaeobacter inhibens</i> biofilms       |
| 25        | Maria Serra González    | Nanofabrication and Electron Beam Characterization of Plasmonic Metasurfaces   |
| 26        | Erik Strandberg         | Metasurface-integrated vertical-cavity surface-emitting laser for efficient oblique emission   |
| 27        | Sarah Zayouna           | Tuning The Effective Refractive Index of Crystalline Si Thin Films With Controlled Modification of Nanoholes Dimensions by Dry-Etching |
| 28        | Marthe Linnerud         | Fabrication of TEM Chips through Back-Etching  |
| 29        | Jessika Jessika         | Multiphoton Lithography for 3D Biohybrid Microstructures Fabrication   |
| 30        | Alexander Grötsch       | Fully hybrid microscale 3D metal-ceramic metamaterials   |
| 31        | Ulrich Vogt             | Metal-assisted chemical etching for high-aspect ratio x-ray optics   |
| 32        | Inês Diogo              | Rapid Thermal Processing: Unlocking the Potential of Si Atom Migration   |
| 33        | Anjali Choubey          | Exploring nickelate perovskites for tandem solar applications  |
| 34        | Snorre Braathen Kjeldby | Tunable properties of II-IV-nitrides for optoelectronic applications   |
| 35        | Andrius Jurgilaitis     | FemtoMAX a nordic beamline to study nanomaterial dynamics  |
| 36        | Thorstein Wang          | Thermal losses to air from 1D heat sources   |
| 37        | Andreas Rosnes          | Combinatorial approach to study redox exsolution processes   |
| 38        | Hanna Karlsson-Fernberg | Fabrication process optimization of neuroelectronic implants   |

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|-----------|----------------------------|--|
| 39        | Mahdi Shanei               | Fabrication of rotary swimmer based on silicon metagratings  |
| 40        | Alan Eduardo Avila Ramirez | Sustainable Fabrication of Organic Electrochemical Transistors and Complementary Amplifiers for Bioelectronics                     |
| 41        | Muhammad Akram             | Grayscale lithography and binary lithography of Si for wafer scale Infrared lenses.  |
| 42        | Nilamani Behera            | Ultra-low current 10 nm spin Hall nano-oscillators   |
| 43        | Guido Sordo                | Spray coating litho into cavities  |
| 44        | Nicolai Winter-Hjelm       | Advanced Interfaces for Investigating the Impact of Topology on the Functional Dynamics of Engineered, Biological Neural Networks  |
| 45        | Xiaofan Ma                 | Deep plasma etching for SiC and the hard mask choice   |
| 46        | Oksana Busel               | DMTJ fabrication   |
| 47        | Kartik Totlani             | Double emulsion picoreactors for unravelling bacterial in-vitro transcription  |
| 48        | Saloua Saghir              | Integration of biomaterials in microfabrication for neuroelectronic interfaces   |
| 49        | Nassim Mahammedi           | Laser writing-induced color centers in 4H-SiC  |
| 50        | Sonia Guehairia            | The contribution of APT to computational materials design framework for precipitation-hardened high-performance martensitic steels |
| 51        | Spyridon Korkos            | Structure formation in thin bimetallic films synthesized by temporally modulated vapor fluxes                                      |
| 52        | Payel Chatterjee           | Epitaxial Growth and In-depth Characterization of Antiferromagnetic FeSn Thin Films  |
| 53        | Yingying Li                | Integrated NEM switches for harsh environment computing  |
| 54        | Cherrie Lee                | Coecive field engineering for periodic domain switching  |
| 55        | Mattias Åstrand            | Simple proximity effect correction for 50 kV electron-beam lithography on thick resist layers for the fabrication of X-ray optics  |
| 56        | Shruti Jain                | 'Spotting & Bonding' – A novel method for Multi stack, Wafer-level bonding of PiezoMEMS devices                                    |
| 57        | Naveen Shetty              | Scalable Fabrication of Edge Contacts to 2D Materials  |