# Program Schedule of the 6th ICFMS 2022

| 1st Day: 29 November 2022: ICFMS 2022 and RIKEN Symposium | | |
|---|---|---|
| | | |
| **TIME** | **AGENDA** | |
| | **Room 1 (Meranti and Mahogani Room) - OPENING** | |
| 08:15 - 08:20 | M.C. : Opening Ceremony | |
| 08:20 - 08:30 | Darminto (ITS) + Fadlilatul Taufany (DRPM-ITS) | Greetings from Indonesia |
| | Isao Watanabe (RIKEN) | Greetings from Japan |
| | **Room 1 (Meranti and Mahogani Room) – Plenary Talks** | |
| | **Moderator: Dita Puspita Sari** | |
| 08:30 - 09:10 | PLN-01: Katsuya Inoue (Hiroshima University) | |
| 09:10 - 09:50 | PLN-02: Ariando (National University of Singapore) | |
| 09:50 - 10:30 | PLN-03: Kazushi Kanoda (The University of Tokyo) | |
| 10:30 - 10:45 | **Coffee Break** | |
| | **Room 1 (Meranti and Mahogani Room) - Plenary Talks** | |
| | **Moderator: Kazuki Ohishi / Darminto** | |
| 10:45 - 11:25 | PLN-04: Koichiro Shimomura (KEK) | |
| 11:25 - 12:05 | PLN-05: Tsuyoshi Sasaki (Toyota Central Lab.) | |
| 12:05 - 13:15 | **Group Photo: The 6th ICFMS 2022 and the RIKEN Symposium + Lunch** | |
| | **Moderator: Irwan Ramli** | |
| 13:15 - 13:55 | PLN-06: Izui Umegaki (KEK) | |
| 13:55 - 14:25 | PLN-07: Masaki Mizuguchi (Nagoya University) | |
| 14:25 - 14:50 | PLN-08: Shukri Sulaiman (Universiti Sains Malaysia) | |
| 14:50 - 15:15 | PLN-09: Koichi Ichimura (Hokkaido University) | |
| 15:15 - 15:30 | **Coffee Break** | |

| | Parallel Session | | | |
|---|---|---|---|---|
| | **Room 1-A (Meranti Room)<br>Moderator: Masaki Fujita** | **Room 1-B (Mahogani Room)<br>Moderator: Yugo Oshima** | **Room 2 (Eboni Room)<br>Moderator: M. Abdan Syakuur** | **Room 3 (Jati Room)<br>Moderator: Wan Nurfadhilah Zaharim** |
| 15:30 - 15:50 | **Room Setting** | **Room Setting** | PLN-12: Budi Purnama (Universitas Negeri Sebelas Maret) | PLN-13: Takuya Kobayashi (Saitama University) |
| 15:50 - 16:05 | | | AFM-04: AJAY Singh Jethoo (Malaviya National Institute of Technology) | AFM-05: Masruroh (Universitas Brawijaya) |
| 16:05 - 16:20 | PLN-10: Takayuki Goto (Sophia University) | PLN-11: Dita Puspita Sari (Sibaura Institute of Technology) | AFM-06: Faried Latief (Institut Teknologi Sepuluh Nopember) | AFM-07: Aulia Anisa Firdaus (Institut Teknologi Sepuluh Nopember) |
| 16:20 - 16:35 | MM-01: Dede Djuhana (Universitas Indonesia) | AFM-08: Andi Dian Permana (Universitas Hasanuddin) | AFM-09: Jonathan Aditomo (Universitas Indonesia) | AFM-10: Amalia Rohmah Fajariah (Universitas Padjadjaran) |
| 16:35 - 16:50 | AFM-29: Apang Djafar Shieddieque (Universitas Padjadjaran) | AFM-11: Nurfina Yudasari (National Research and Innovation Agency (BRIN)) | AFM-12: Arun Gaur (Malaviya National Institute of Technology) | AFM-13: Cahyaning Fajar Kresna Murti (Institut Teknologi Sepuluh Nopember) |
| 16:50 - 17:05 | AFM-01: Shohei Kajiwara (Sophia University) | AFM-14: Detak Yan Pratama (Institut Teknologi Sepuluh Nopember) | AFM-15: Endhah Purwandari (Institut Teknologi Sepuluh Nopember) | AFM-16: Inovasari Islami (Universitas Padjadjaran) |
| 17:05 - 17:20 | AFM-17: Nur Muhammad Ariq Athallah (Universitas Indonesia) | MM-02: Anita Eka Putri (RIKEN/Universitas Indonesia) | AFM-22: Muhammad Tegar Pambudi (Institut Teknologi Bandung) | AFM-19: Diky Anggoro (Institut Teknologi Sepuluh Nopember) |
| 17:20 - 17:35 | AFM-20: Fatimatul Munawaroh (Institut Teknologi Sepuluh Nopember) | AFM-21: Yuniar Mughayyirah (Institut Teknologi Sepuluh Nopember) | AFM-02: Kaede Isomura (Tohoku University/IMR) | AFM-26: Rudiawan Edwin (Universitas Padjadjaran) |
| 17:35 - 17:50 | MM-08: Irma Kartika Kusumaningrum (Universitas Negeri Malang) | AFM-23: Sri Hartati (Nano Center Indonesia) | AFM-18: Sandeep Shrivastava (Malaviya National Institute of Technology) | AFM-30: Malik Anjelh Baqiya (Institut Teknologi Sepuluh Nopember) |

| 2nd Day: 30 November 2022: ICFMS 2022 and RIKEN Symposium | |
|---|---|
| | |
| **TIME** | **AGENDA** |
| | |
| | **Room 1 (Meranti and Mahogani Room)** |
| | **Moderator: Risdiana** |
| 8:00 - 9:00 | **Short Poster Presentation** |
| | **Room 1 (Meranti and Mahogani Room) - Plenary Talks** |
| | **Moderator: A. A. Nugroho** |
| 9:10 - 9:50 | PLN-14: Shinichi Komaba (Tokyo University of Science) |
| 9:50 - 10:20 | PLN-15: Taishi Takenobu (Nagoya University) |
| | |
| 10:20 -10:30 | **Coffee Break** |
| | **Moderator: Fahmi Astuti** |
| 10:30 - 11:05 | PLN-16: Tadashi Adachi (Sophia University) |
| 11:05 - 11:40 | PLN-17: Andrivo Rusydi (National University of Singapore) |
| 11:40 - 12:15 | PLN-18: Hiroyuki Yamase (NIMS) |
| | |
| 12:15 - 13:00 | **Lunch** |
| 13:00 - 14:00 | **Poster Session** |

| | | | |
|---|---|---|---|
| | **Parallel Session** | | |
| | **Room 1 (Meranti and Mahogani Room)**<br>**Moderator: Retno Asih** | **Room 2 (Eboni Room)**<br>**Moderator: Anita Eka Putri / Kaede Isomura** | **Room 3 (Jati Room)**<br>**Moderator: Muhammad Hanif Che / Phanthip Jaikaew** |
| 14:00 - 14:20 | PLN-19: Haruhiko Kuroe (Sophia University) | PLN-20: Kazuki Ohishi (CROSS) | PLN-21: Wan Nurfadhilah Zaharim (USM) |
| 14:20 - 14:35 | PLN-22: Utami Widyaiswari (RIKEN/Hokkaido University) | AFM-24: Susilo Indrawati (Institut Teknologi Sepuluh Nopember) | BM-02: Andi Dian Permana (Universitas Hasanuddin) |
| 14:35 - 14:50 | AFM-03: Muhammad Abdan Syakuur (RIKEN/UNPAD) | AFM-25: Munaji (Institut Teknologi Sepuluh Nopember) | BM-03: Diba Grace Auliya (Universitas Padjadjaran) |
| 14:50 - 15:05 | MM-03: Bagas Haqi Arrosyid (Nano Center Indonesia) | AFM-27: Mochamad Zainuri (Institut Teknologi Sepuluh Nopember) | BM-04: Fahmi Mubarok (Institut Teknologi Sepuluh Nopember) |
| 15:05 - 15:20 | MM-04: Rosaldi Pratama (Universitas Padjadjaran) | AFM-28: Syarifa Nur'aini (Nano Center Indonesia) | BM-05: Hartatiek (Universitas Negeri Malang) |
| 15:20 - 15:35 | MM-05: Dicky Rezky Munazat (Universitas Indonesia) | NME-01: Mudzakkir Dioktyanto (Nano Center Indonesia) | BM-06: Revani Widjaya (Universitas Padjadjaran) |
| 15:35 - 16:00 | **Coffee Break** | | |
| | **Parallel Session** | | |
| | **Room 1 (Meranti and Mahogani Room)**<br>**Moderator: M. Zainuri / Diba Grace Auliya** | **Room 2 (Eboni Room)**<br>**Moderator: Utami Widyaiswari / Supparat Charoenphon** | **Room 3 (Jati Room)**<br>**Moderator: Wan Nurfadhilah Zaharim** |
| 16:00 - 16:15 | PLN-23: Shoichiro Nishimura (KEK) | MD-01: Faridawati (Institut Teknologi Sepuluh Nopember) | SAM-03: Pramitha Yuniar Diah Maulida (Nano Center Indonesia) |

| | | | |
|---|---|---|---|
| 16:15 - 16:30 | SAM-01: Phanthip Jaikaew (Chiang Mai University) | MM-09: Dewi Santi (Universitas Negeri Malang) | BM-01: Muhammad Hanif Che Lah (RIKEN/USM) |
| 16:30 - 16:45 | MM-07: Zulkarnain (Universitas Indonesia) | MD-05: Yusroniya Eka Putri Rachman Waliulu (Institut Teknologi Sepuluh Nopember) | MD-02: Paula Santi Rudati (Politeknik Negeri Bandung) |
| 16:45 - 17:00 | MM-06: Candra Kurniawan (Universitas Indonesia) | SFM-01: Supparat Charoenphon (RIKEN/Kasetsart) | SAM-02: Kotaro Osato (Tohoku University/IMR) |
| 17:00 - 17:15 | MD-03: Zaenal Arifin (Institut Teknologi Sepuluh Nopember) | SFM-02: NEHA SHRIVASTAVA (Malaviya National Institute of Technology) | MM-15: Muhammad Fadhil Falhan (Universitas Padjadjaran) |
| 17:15 - 17:30 | MD-04: Muh. Sapri. S (Institut Teknologi Sepuluh Nopember) | SFM-03: Mariya Al Qibtiya (Universitas Pendidikan Indonesia) | BM-07: Taat Guswantoro (Universitas Kristen Indonesia) |
| | | | |
| 17:30 - 18:00 | **Room 1 (Meranti and Mahogani Room) – Award and Closing** | | |

**NOTE:**

PLN: Keynote/Invited Speakers

AFM; Advanced and Functional Materials

BM: Biomaterials

MM: Magnetic Materials

MD: Materials and Devices

NME: New Materials for Energy and Energy Conversion

SAM: Spectroscopy for Advanced Materials

SFM: Theoretical/Modeling/Computer/ Simulations of Functional Materials

# Short Oral Presentation for Poster Presenters

| 2nd Day: 30 November 2022 | | | |
|---|---|---|---|
| **Room I** | | | |
| **Time** | **Code** | **Presenter Name** | **Institution/University** |
| 08:00 – 08:03 | SFM-04 | Irwan Ramli | Universitas Cokroaminoto Palopo |
| 08:03 – 08:05 | SFM-05 | Asmarita Sari | Universitas Cokroaminoto Palopo |
| 08:05 – 08:07 | SFM-06 | Siti Nurasiah Sani | Universitas Cokroaminoto Palopo |
| 08:07 – 08:09 | AFM-31 | Linda Silvia | Institut Teknologi Sepuluh Nopember |
| 08:09 – 08:11 | AFM-32 | Deril Ristiani | Institut Teknologi Sepuluh Nopember |
| 08:11 – 08:14 | AFM-33 | Diana Rakhmawaty Eddy | Universitas Padjadjaran |
| 08:14 – 08:16 | AFM-34 | Euis Siti Nurazizah | Universitas Padjadjaran |
| 08:16 – 08:18 | AFM-35 | Fatimatul Munawaroh | Institut Teknologi Sepuluh Nopember |
| 08:18 – 08:20 | AFM-36 | Rudiawan Edwin | Universitas Padjadjaran |
| 08:20 – 08:22 | AFM-37 | Santhy Wyantuti | Universitas Padjadjaran |
| 08:22 – 08:24 | BM-08 | Ivan Rizoputra | Institut Teknologi Sepuluh Nopember |
| 08:24 – 08:26 | BM-09 | Muhamad Dwi Cahya | Universitas Padjadjaran |
| 08:26 – 08:29 | BM-10 | Nabillah Fa'diyyah Zahra | Universitas Padjadjaran |
| 08:29 – 08:31 | BM-11 | Syifa Syauqiyah | Universitas Brawijaya |
| 08:31 – 08:33 | MD-06 | Sudarsono | Institut Teknologi Sepuluh Nopember |
| 08:33 – 08:35 | MM-10 | Apang Djafar Shieddieque | Universitas Padjadjaran |
| 08:35 – 08:37 | MM-11 | Irma Kartika Kusumaningrum | Universitas Negeri Malang |
| 08:37 – 08:39 | MM-12 | Rahma Sundaya Effendi | Universitas Padjadjaran |
| 08:39 – 08:41 | MM-13 | Togar Saragi | Universitas Padjadjaran |
| 08:41 – 08:43 | MM-14 | Yati Maryati | Universitas Padjadjaran |
| 08:43 – 08:45 | MM-16 | Lusi Safriani | Universitas Padjadjaran |
| 08:45 – 08:47 | NME-02 | Budhi Priyanto | Universitas Muhammadiyah Malang |
| 08:47 – 08:49 | NME-03 | Fahmi Astuti | Institut Teknologi Sepuluh Nopember |
| 08:49 – 08:52 | NME-04 | Otong Nurhilal | Universitas Padjadjaran |
| 08:52 – 08:54 | NME-05 | M. Y. P. Akbar | Institut Teknologi Bandung |
| 08:54 – 08:56 | SAM-04 | Retno Asih | Institut Teknologi Sepuluh Nopember |
| 08:56 – 08:58 | SAM-05 | Soni Prayogi | Universitas Pertamina |
| 08:58 – 09:00 | SAM-06 | Phanthip Jaikaew | Chiang Mai University |

# List of Keynote and Invited Speakers

| No. | Code | Name | Institution/Univ. | Abstract Title | Page |
|---|---|---|---|---|---|
| 1 | PLN-01 | Katsuya Inoue | Hiroshima University | Chiral Materials | 22 |
| 2 | PLN-02 | Ariando | National University of Singapore | The Rise of a New Superconducting Era - The Nickel Age | 23 |
| 3 | PLN-03 | Kazushi Kanoda | The University of Tokyo | Emergent Charge Instabilities in Molecular Materials | 24 |
| 4 | PLN-04 | Koichiro Shimomura | KEK | Invitation to Muon and Other Quantum Beam Science | 25 |
| 5 | PLN-05 | Tsuyoshi Sasaki | Toyota Central Lab. | Recent Research and Progress in Lithium-Ion Battery for Sustainable Society | 26 |
| 6 | PLN-06 | Izui Umegaki | KEK | Research on Li-ion Battery with Muon Beam | 27 |
| 7 | PLN-07 | Masaki Mizuguchi | Nagoya University | Energy Conversion Materials with Magnetic Nano-structures | 28 |
| 8 | PLN-08 | Shukri Sulaiman | Universiti Sains Malaysia | Progress of DFT Studies on Muon Hyperfine Interactions in DNA Molecules | 29 |
| 9 | PLN-09 | Koichi Ichimura | Hokkaido University | Charge Disproportionation in Organic Conductors $\alpha$-(BEDT-TTF)$_2$X | 30 |
| 10 | PLN-10 | Takayuki Goto | Sophia University | NMR and $\mu$-SR study on the sugar recognition complex | 31 |
| 11 | PLN-11 | Dita Puspita Sari | Sibaura Institute of Technology | mSR Study of $\kappa$-(ET)$_4$Hg$_{2.89}$Br$_8$ and $\kappa$-(ET)$_4$Hg$_{2.78}$Cl$_8$ | 32 |
| 12 | PLN-12 | Budi Purnama | Universitas Negeri Sebelas Maret | Tuning structural and magnetic properties in strontium substituted cobalt ferrite produced by coprecipitation methods | 33 |
| 13 | PLN-13 | Takuya Kobayashi | Saitama University | Antiferromagnetic Ordering and Pressure-Induced Anomalous Electronic Phases in $\lambda$-(BEDSe-TTF)$_2$GaCl$_4$ Revealed by $\mu$SR and NMR | 34 |

| No. | Code | Name | Institution/Univ. | Abstract Title | Page |
|---|---|---|---|---|---|
| 14 | PLN-14 | Shinichi Komaba | Tokyo University of Science | Materials Chemistry for Na- and K-Ion Batteries | 35 |
| 15 | PLN-15 | Taishi Takenobu | Nagoya University | Thermoelectric Properties of van der Waals Materials | 36 |
| 16 | PLN-16 | Tadashi Adachi | Sophia University | Possible Chiral Superconductivity in $BaPtAs_{1-x}Sb_x$ with Honeycomb Network | 37 |
| 17 | PLN-17 | Andrivo Rusydi | National University of Singapore | | 38 |
| 18 | PLN-18 | Hiroyuki Yamase | NIMS | Compton Scattering Imaging of Fermi Surface in High-$T_c$ Cuprates | 39 |
| 19 | PLN-19 | Haruhiko Kuroe | Sophia University | Modulation of magnetization curve induced by electric field in $Cu_3Mo_2O_9$ | 40 |
| 20 | PLN-20 | Kazuki Ohishi | CROSS | Battery Materials Studied by Small-Angle Neutron Scattering and Muon Spin Relaxation | 41 |
| 21 | PLN-21 | Wan Nurfadhilah Zaharim | USM | Density Functional Theory Investigation of the Electronic Structure and Muon Hyperfine Interaction in Isolated Guanine | 42 |
| 22 | PLN-22 | Utami Widyaiswari | RIKEN/Hokkaido University | Investigation on the Effect Of Excess $RuO_2$ in the Magnetic Properties of $Nd_2Ru_2O_7$ | 43 |
| 23 | PLN-23 | Shoichiro Nishimura | KEK | Transient μSR: Efficient Use of J-PARC High-Intensity Muon Beam | 44 |

# List of Contributed Speakers

| No. | Code | Name | Institution/Univ. | Abstract Title | Page |
|---|---|---|---|---|---|
| 1 | AFM-01 | Shohei Kajiwara | Sophia University | Anatase/rutile phase control of titanium oxide nanoparticles synthesized from potassium titanium oxalate by homogeneous precipitation and hydrothermal methods | 46 |
| 2 | AFM-02 | Kaede Isomura | Tohoku University/IMR | Toward a unified understanding of superconductivity in 214 cuprates | 47 |
| 3 | AFM-03 | Muhammad Abdan Syakuur | RIKEN/UNPAD | Sample Synthesis of a Single Phase $Nd_2Ru_2O_7$ | 48 |
| 4 | AFM-04 | AJAY Singh Jethoo | Malaviya National Institute of Technology | C-S-H Formation in Concrete by Using Waste Glass | 49 |
| 5 | AFM-05 | Masruroh | Universitas Brawijaya | Functionalized Copper Phthalocyanine and zinc phthalocyanine as a coating layer on the sensitivity of QCM based VOCs sensor | 50 |
| 6 | AFM-06 | Faried Latief | Institut Teknologi Sepuluh Nopember | Synthesis and Characterization of $BiFeO_3$-$BaTiO_3$ Lead Free System Though Low Melting Temperature $KVO_3$ Addition | 51 |
| 7 | AFM-07 | Aulia Anisa Firdaus | Institut Teknologi Sepuluh Nopember | Optical Properties and Morphology of Boron Doped Graphenic Carbon (B-GC) Film Prepared by Nanospray Methods | 52 |
| 8 | AFM-08 | Andi Dian Permana | Universitas Hasanuddin | Hydroxypropyl beta cyclodextrin decorating solid lipid nanoparticles incorporated floating gel in situ for controlled release of Safflower bioactive compounds | 53 |
| 9 | AFM-09 | Jonathan Aditomo | Universitas Indonesia | Effect of Wood Sawdust Addition on The Morphology, Mechanical Properties, and Thermal Properties of Mullite-Based Porous Ceramic Filters for Aluminum Casting Process | 54 |
| 10 | AFM-10 | Amalia Rohmah Fajariah | Universitas Padjadjaran | Synthesis of $TiO_2$ Nanofiber as Photoanode of Dye Sensitized Solar Cells (DSSC) | 55 |
| 11 | AFM-11 | Nurfina Yudasari | National Research and Innovation Agency (BRIN) | Comparison of Laser Ablation in Liquids for the Synthesis of ZnO-Ag Nanocomposite in Single Step and Sequential Modes | 56 |
| 12 | AFM-12 | Arun Gaur | Malaviya National Institute of Technology | Inspection of thermo-mechanical behavior on sintered fly ash aggregate in pavement quality | 57 |

| No. | Code | Name | Institution/Univ. | Abstract Title | Page |
|---|---|---|---|---|---|
| | | | | concrete | |
| 13 | AFM-13 | Cahyaning Fajar Kresna Murti | Institut Teknologi Sepuluh Nopember | The Effect of Zirconia Content on Physical and Mechanical Properties of $Al_2O_3/ZrO_2$ Composites | 58 |
| 14 | AFM-14 | Detak Yan Pratama | Institut Teknologi Sepuluh Nopember | The effect of HCl temperature and molarity on the synthesized zircon crystal cells | 59 |
| 15 | AFM-15 | Endhah Purwandari | Institut Teknologi Sepuluh Nopember | N-Doped Graphenic Carbon Derived from Coconut Shell as a Candidate of n-Type Semiconducting Layer | 60 |
| 16 | AFM-16 | Inovasari Islami | Universitas Padjadjaran | Synthesis of ZnO:Al/$TiO_2$ Materials and Their Characterization as Photocatalyst Compounds | 61 |
| 17 | AFM-17 | Nur Muhammad Ariq Athallah | Universitas Indonesia | Effect of Starch Content on The Morphology, Mechanical Properties, and Thermal Properties of Mullite-Based Porous Ceramic as A Filter In Aluminum Casting | 62 |
| 18 | AFM-18 | Sandeep Shrivastava | Malaviya National Institute of Technology | Economic analysis and life cycle assessment of waste cement concrete and glass powder based geopolymers | 63 |
| 19 | AFM-19 | Diky Anggoro | Institut Teknologi Sepuluh Nopember | Carbonization at Varying Tempertures of PVA – Derived Nanofibers Fabricated by Electrospinning | 64 |
| 20 | AFM-20 | Fatimatul Munawaroh | Institut Teknologi Sepuluh Nopember | Thermal Decomposition Analysis of Indonesian Natural Dolomite in Air | 65 |
| 21 | AFM-21 | Yuniar Mughayyirah | Institut Teknologi Sepuluh Nopember | The Effect of Silica Powder Based on Methyltrimethoxysilane and Silica Sand as a Hydrophobic Material | 66 |
| 22 | AFM-22 | Muhammad Tegar Pambudi | Institut Teknologi Bandung | Fabrication of Densely-Packed Janus Gold Nanoparticles Layer by Self-Assembly for a Potential Molecular Sensing Probe | 67 |
| 23 | AFM-23 | Sri Hartati | Nano Center Indonesia | Vibrational and Structural Properties of Two-dimensional Tin mixed-Halide Perovskites | 68 |
| 24 | AFM-24 | Susilo Indrawati | Institut Teknologi Sepuluh Nopember | Effect of fiber's size on acoustic absorbance of Abaca fiber/epoxy resin composites | 69 |
| 25 | AFM-25 | Munaji | Institut Teknologi Sepuluh Nopember | The conductivity of PANI-zirconia composites: effect of amorphous | 70 |

| No. | Code | Name | Institution/Univ. | Abstract Title | Page |
|---|---|---|---|---|---|
| | | | | and crystalline fillers | |
| 26 | AFM-26 | Rudiawan Edwin | Universitas Padjadjaran | Montmorillonite purification and pre-lithiation as a filler for polyimide composite membrane separator for lithium-ion battery | 71 |
| 27 | AFM-27 | Mochamad Zainuri | Institut Teknologi Sepuluh Nopember | The Effect of Ni Doping Variations on the Microstructure and Conductivity of $LiNi_xFe_{1-x}PO_4/C$ Composite Materials | 72 |
| 28 | AFM-28 | Syarifa Nur'aini | Nano Center Indonesia | Waste Acrylonitrile Butadiene Styrene (ABS) Incorporated with Polyvinylpyrrolidone (PVP) for Potential Water Filtration Membrane | 73 |
| 29 | AFM-29 | Apang Djafar Shieddieque | Universitas Padjadjaran | A Rapid Synthesis of MAF-5 For Surface Modification of $LiFePO_4$ as Lithium-Ion Battery Cathode Material | 74 |
| 30 | AFM-30 | Malik Anjelh Baqiya | Institut Teknologi Sepuluh Nopember | In the used of Fourier Synthesis and Maximum Entropy Method to Investigate Crystalline Defects of the T'-$Pr_{2-x}Ce_xCuO_4$ nanocrystals | 75 |
| 31 | AFM-31 | Linda Silvia | Institut Teknologi Sepuluh Nopember | Hierarchical Structure of $SiO_2$ by in-situ Modification Combining Quartz Sand and Methyltrimethoxysilane | 76 |
| 32 | AFM-32 | Deril Ristiani | Institut Teknologi Sepuluh Nopember | Probing the Magnetic Properties of Boron-doped Graphenic-based Carbon Materials | 77 |
| 33 | AFM-33 | Diana Rakhmawaty Eddy | Universitas Padjadjaran | Rapid Probing of Self-cleaning Activity on Polyester Coated by Nanocomposite Titania-Natural Silica using Digital Image-based Colorimetry | 78 |
| 34 | AFM-34 | Euis Siti Nurazizah | Universitas Padjadjaran | Effect of ZnO Addition to $TiO_2$ as Photoanode on Performance of Dye-Sensitized Solar Cells (DSSCs) | 79 |
| 35 | AFM-35 | Fatimatul Munawaroh | Institut Teknologi Sepuluh Nopember | Structural and Thermal Analysis of $CaCO_3$:$ZrO_2$ Composites | 80 |
| 36 | AFM-36 | Rudiawan Edwin | Universitas Padjadjaran | A Rapid synthesis of ZIF-14 (Co) for surface modification of $LiFePO_4$ as lithium-ion battery cathode material | 81 |
| 37 | AFM-37 | Santhy Wyantuti | Universitas Padjadjaran | Optimization of Hydrothermal Synthesis of Dysprosium Oxide Nanoparticles-attached-Polyethyleneglycol | 82 |

| No. | Code | Name | Institution/Univ. | Abstract Title | Page |
|---|---|---|---|---|---|
| | | | | Template using Response Surface Methodology- Box-Behnken | |
| 38 | BM-01 | Muhammad Hanif Che Lah | RIKEN/USM | Electron Transfer in DNA of Parkinson's Disease Model Studied by Scanning Tunneling Microscopy | 83 |
| 39 | BM-02 | Andi Dian Permana | Universitas Hasanuddin | Improved Pharmacokinetic Profiles of Albendazole using Combination Approach of Nanocrystal and Dissolving Microneedles to Avoid First Pass Metabolism | 84 |
| 40 | BM-03 | Diba Grace Auliya | Universitas Padjadjaran | Stability Test and Storage of PDMS as A Biomaterial for Vitreous Humour Substitution in Vitreoretinal Surgery | 85 |
| 41 | BM-04 | Fahmi Mubarok | Institut Teknologi Sepuluh Nopember | Holding Time Influence During Thermal Cycling of Cold Rolled Stainless Steel AISI 316L | 86 |
| 42 | BM-05 | Hartatiek | Universitas Negeri Malang | Effect of Aging Time and Sonication Treatment on Hydroxyapatite Nanostructures from Limestone | 87 |
| 43 | BM-06 | Revani Widjaya | Universitas Padjadjaran | A Coin-Shaped Polypropylene Bio-carrier Fabricated using Filament-Based 3D Printer for Wastewater Treatment | 88 |
| 44 | BM-07 | Taat Guswantoro | Universitas Kristen Indonesia | Determination of effective atomic number and radiation mass attenuation coefficient of the bolus from Alginate impression material | 89 |
| 45 | BM-08 | Ivan Rizoputra | Institut Teknologi Sepuluh Nopember | Characterization of glucomannan and ca-oxalate from Porang flour (Amorphophallus muelleri Blume) | 90 |
| 46 | BM-09 | Muhamad Dwi Cahya | Universitas Padjadjaran | The Effect of Fermentation on Increasing the Physico-Chemical Quality of Fish Feed based on Food Waste | 91 |
| 47 | BM-10 | Nabillah Fa'diyyah Zahra | Universitas Padjadjaran | Study of NMR Characterization of PMHS Using DCM and DE Solvent | 92 |
| 48 | BM-11 | Syifa Syauqiyah | Universitas Brawijaya | The Design of a Piston Extruder for the Production of Gelatin Filaments Available for Hydroxyapatite Biocomposite 3D printing | 93 |
| 49 | MD-01 | Faridawati | Institut Teknologi Sepuluh Nopember | Optical Dynamic Properties Based On Absorption Spectroscopy of $SiO_2$/rGO – Like Carbon Films | 95 |
| 50 | MD-02 | Paula Santi Rudati | Politeknik Negeri | Biopolymer Kappa Carrageenan with Ammonium Chloride as | 96 |

| No. | Code | Name | Institution/Univ. | Abstract Title | Page |
|---|---|---|---|---|---|
| | | | Bandung | Electrolyte for Potential Application in Organic Battery | |
| 51 | MD-03 | Zaenal Arifin | Institut Teknologi Sepuluh Nopember | Effect of Temperature and $CaCO_3$ Concentration on the $CO_2$ Corrosion Behavior of Carbon Steel in Seawater Media | 97 |
| 52 | MD-04 | Muh. Sapri. S | Institut Teknologi Sepuluh Nopember | Mechanical-Thermal Stability of Micro Composite Based Porous Carbon from Coconut Shell (Cocoa Nucifera) Charcoal | 98 |
| 53 | MD-05 | Yusroniya Eka Putri Rachman Waliulu | Institut Teknologi Sepuluh Nopember | Visualization and Volume Calculation Accuracy of Flexible Pavement Damage Based on Low-Cost LiDAR | 99 |
| 54 | MD-06 | Sudarsono | Institut Teknologi Sepuluh Nopember | Optical Absorbance of Graphenic Carbon from Coconut Shells in Different Solvents for Film Preparation | 100 |
| 55 | MM-01 | Dede Djuhana | Universitas Indonesia | Investigation of Harmonic and Inharmonic Domain Wall Oscillation by Sinusoidal Magnetic Field in the Notched Permalloy Nanowire using Micromagnetic Approach | 101 |
| 56 | MM-02 | Anita Eka Putri | RIKEN/UI | Particle-Size Effect of Magnetic Properties on $La_2CuO_4$ Nanoparticles | 102 |
| 57 | MM-03 | Bagas Haqi Arrosyid | Nano Center Indonesia | The Effect of Zn Addition on $Zn_xFe_{3-x}O_4$@Silica Core-Shell Nanoparticles Fabrication as Promising Drug Delivery Materials | 103 |
| 58 | MM-04 | Rosaldi Pratama | Universitas Padjadjaran | Study of Magnetics Properties in The Normal State of Electron-Doped $Eu_{2-x}Ce_xCu_{0.97}Zn_{0.03}O_{4+\alpha-\delta}$ in Overdoped Regime | 104 |
| 59 | MM-05 | Dicky Rezky Munazat | Universitas Indonesia | Effect of Chromium Substitution on Microstructure and Magnetic Properties of $La_{0.7}Sr_{0.2}Ba_{0.1}Mn_{1-x}Cr_xO_3$ (x = 0, 0.03, 0.05, 0.07, 0.1) | 105 |
| 60 | MM-06 | Candra Kurniawan | Universitas Indonesia | Micromagnetic Study of Bloch to Néel type Domain Wall Transition in Perpendicular Magnetization CoFeB Nanowire under Relaxed Condition | 106 |
| 61 | MM-07 | Zulkarnain | Universitas | Microstructure, Magnetic and Electrical Transport Properties of | 107 |

| No. | Code | Name | Institution/Univ. | Abstract Title | Page |
|---|---|---|---|---|---|
| | | | Indonesia | Sol-Gel Synthesized $La_{0.7}Sr_{0.2}Ca_{0.1}MnO_3$:$TiO_2$ Composite | |
| 62 | MM-08 | Irma Kartika Kusumaningrum | Universitas Negeri Malang | Synthesis of Silica Coated Nanomagnetite Ethylene Diamine Tetra Acetic Acid Functionalized | 108 |
| 63 | MM-09 | Dewi Santi | Universitas Negeri Malang | Development Application of Ferrofluid $Mn_{1-x}Zn_xFe_2O_4$ as Energy Harvesting | 109 |
| 64 | MM-10 | Apang Djafar Shieddieque | Universitas Padjadjaran | Characterization Of Artificial Barium Hexaferrite ($BaFe_{12}O_{19}$) From Nitrate Compound With Sol-Gel Method For Barium Hexaferrite Magnetic Materials | 110 |
| 65 | MM-11 | Irma Kartika Kusumaningrum | Universitas Negeri Malang | Silica Coated Nanomagnetite as Crystal Violet Dye Adsorbent | 112 |
| 66 | MM-12 | Rahma Sundaya Effendi | Universitas Padjadjaran | The Study of Crystal Structures and Magnetic Properties of the Electron-Doped Cuprates $Eu_{2-x}Ce_xCuO_{4+\alpha-\delta}$ in the Overdoped Regime | 113 |
| 67 | MM-13 | Togar Saragi | Universitas Padjadjaran | Surface Modification of Nanoparticle Iron Oxide | 114 |
| 68 | MM-14 | Yati Maryati | Universitas Padjadjaran | Magnetic and superconducting phase diagram of electron-doped $Eu_{2-x}Ce_xCuO_{4+\alpha-\delta}$ | 115 |
| 69 | MM-15 | Muhammad Fadhil Falhan | Universitas Padjadjaran | Investigation of Dependence of Magnetic Properties on Sintering Temperature of $Eu_{1.85}Ce_{0.15}CuO_{4+a-d}$ Prepared by Sol-Gel Method | 116 |
| 70 | MM-16 | Lusi Safriani | Universitas Padjadjaran | Magnetic Properties of P3BT and P3HT:ZnO Derived from SQUID Measurements | 117 |
| 71 | NME-01 | Mudzakkir Dioktyanto | Nano Center Indonesia | Characterization and performance evaluation of yttria-stabilized zirconia (YSZ) thickness on ZnO Nanorods-based Photoelectrochemical Cell | 118 |
| 72 | NME-02 | Budhi Priyanto | Universitas Muhammadiyah Malang | Photovoltaic characteristics of the a-C/a-C:B homojunction from palmyra sugar with nano-spray method | 119 |
| 73 | NME-03 | Fahmi Astuti | Institut Teknologi Sepuluh Nopember | $NaFePO_4$ Particles as a Cathode of Sodium Ion-Battery via Sol-Gel Method: A Review on Synthesis | 120 |
| 74 | NME-04 | Otong Nurhilal | Universitas | Natural Biomass-Derived Porous Carbons from Water Hyacinth Used | 121 |

| No. | Code | Name | Institution/Univ. | Abstract Title | Page |
|---|---|---|---|---|---|
| | | | Padjadjaran | as Composite Cathode for Lithium-Sulfur Batteries | |
| 75 | NME-05 | M. Y. P. Akbar | Institut Teknologi Bandung | Growth, Characterization and DFT Study of β-$NaFeO_2$ Single Crystal for Potential Thermoelectric Application | 122 |
| 76 | SAM-01 | Phanthip Jaikaew | Chiang Mai University | Overview of Electron Linear Accelerator Laboratory of Plasma and Beam Physics Research Facility at Chiang Mai University, Thailand | 123 |
| 77 | SAM-02 | Kotaro Osato | Tohoku University/IMR | Muon spin relaxation study in heavy fermion compound $YbCu_4Ni$ | 124 |
| 78 | SAM-03 | Pramitha Yuniar Diah Maulida | Nano Center Indonesia | Angular-Dependent Polarization of Manganese-Based Hybrid Perovskite Studied by X-Ray Absorption Spectroscopy | 125 |
| 79 | SAM-04 | Retno Asih | Institut Teknologi Sepuluh Nopember | Interaction of Hydrogen with Reduced Graphene Oxide Probed by Muon-spin Relaxation Technique | 126 |
| 80 | SAM-05 | Soni Prayogi | Universitas Pertamina | Structure Analysis of the N-Type a-Si:H Thin Layer Using Plasma Enhanced Chemical Deposition | 127 |
| 81 | SAM-06 | Phanthip Jaikaew | Chiang Mai University | Overview of Electron Linear Accelerator Laboratory of Plasma and Beam Physics Research Facility at Chiang Mai University, Thailand | 128 |
| 82 | SFM-01 | Supparat Charoenphon | RIKEN/Kasetsart | Density Functional Theory Calculations with Different Electronic Correlational Functionals Applied to $La_2CuO_4$ | 129 |
| 83 | SFM-02 | NEHA SHRIVASTAVA | Malaviya National Institute of Technology | Parametric Study of Mechanically Stabilised Earth Wall using PLAXIS | 130 |
| 84 | SFM-03 | Mariya Al Qibtiya | Universitas Pendidikan Indonesia | Optical properties of Ta-doped $TiO_2$ as a solar cell active layer using first-principles calculation | 131 |
| 85 | SFM-04 | Irwan Ramli | Universitas Cokroaminoto Palopo | Study of ion Diffusion in $NaFePO_4$ and $LiFePO_4$ | 132 |
| 86 | SFM-05 | Asmarita Sari | Universitas Cokroaminoto Palopo | The role Hubbard and Spin-Orbit Coupling in Electronic Properties of $Eu_2Ir_2O_7$ | 133 |
| 87 | SFM-06 | Siti Nurasiah Sani | Universitas Cokroaminoto Palopo | Study Of Electronic Properties Of Graphene Quantum Dot Using DFT | 134 |