

No.	Code	Title – Material Sciences	Author
1	OM0101	Exploring the configuration of atomic defects and the multi-path migration of Mo adatoms in atomically thin MoS ₂ by statistic ADF-STEM	Jinhua Hong, Zhixin Hu, Yuhao Pan, Wei Ji, Chuanhong Jin, Jun Yuan, Ze Zhang
2	OM0102	Real-time Study of the Growth Behavior of InAs Nanorods Using <i>in situ</i> RHEED Transmission mode and TEM	Janghyun Jo, Youngbin Tchoe, Hwangsun Kim, Gyu-Chul Yi, Miyoung Kim
3	OM0103	Exploring the Composition-related Stability for Layered Cathode Material for Lithium Ion Battery by Analytical STEM	Wei Huang, Chunyang Wu, Yuewu Zeng, Chuanhong Jin, Ze Zhang
4	OM0104	Interacting magnetic nanoparticles of three dimensional magnetic vortex in different configuration assemblies	Min-Kwan Kim, Prasanta Dhak, Ha-Youn Lee, Jae-Hyeok Lee, Myoung-Woo Yoo, Jehyun Lee, Kyoungsuk Jin, Arim Chu, Ki Tae Nam, Hyun Soon Park, Shinji Aizawa, Toshiaki Tanigaki, Daisuke Shindo, Miyoung Kim, and Sang-Koog Kim
5	OM0201	Investigation on defect related luminescence in semi-polar InGaN/GaN quantum well by using TEM-CL	Mi-Hyang Sheen, Sung-Dae Kim, Jongjin Jang, Okhyun Nam, Young-Woon Kim
6	OM0202	Strain analysis by STEM moiré method	Yukihito Kondo, Noriaki Endo
7	OM0301	Challenges in HR-SEM: Direct observation of Micro-, Meso- and Macro- pore openings and fine structure details of nanostructured materials	Shunsuke ASAHINA, Yusuke SAKUDA, Shunai CHE, Osamu TERASAKI
8	OM0302	Metallography Techniques for Microscopy of Electrogalvanized Coatings: Effectiveness of Mechanical, Electrochemical, and Ion polishing	Narin Jantaping, Chaayasit Banjongprasert, Torranin Chairuangstri, Christopher A. Schuh, Yuttanant Boonyongmaneerat
9	OM0303	Characterization of the Interface between Metal and Glass Produced by Cold Spray	Minghui Song, Hiroshi Araki, Seiji Kuroda, Kazuhiko Sakaki
10	OM0304	In-situ Observation of Mutual Reduction between ceramics in TEM	N.Ishikawa, T.Kimura, M.Takeguchi, T Aizawa, T.Inam
11	OM0305	Real time observation of the reconstructing TiO ₂ (001) surface via an Environmental TEM	Wentao Yuan, Hengbo Li, Hanglong Wu, Ze Zhang, Annabella Selloni, Chenghua Sun, Yong Wang
12	OM0306	In-situ TEM study of oxidation in a nickel-based single crystal superalloy	Qingqing Ding, Tian He, Jixue Li, Ze Zhang
13	OM0401	Aging Strengthening of Interphase-Precipitated Strengthened Copper-Bearing Dual-Phase Steels	Cheng-Han Li, Shao-Pu Tsai, Jer-Ren Yang
14	OM0402	Multi-dimensional analysis of bainite in Cu-Al-Mn alloy by advanced electron	S. Motomura, T. Omori, R. Kainuma, M. Nishida, T.

		microscopy techniques	Hara
15	OM0403	Spinodal decomposition in CoCuFeMnNi and CuFeMnNiZn high-entropy alloys observed by electron microscopy	Ruangdaj Tong Sri, Ussadawut Patakham, Nattaya Tosangthum, Pennapa Muthitamongkol, Plaichumpon Paha, Panida Surawongsakul, Piyanuch Nakpong, Panita Choeychom, Pinai Mungsantisuk
16	OM0404	Analytical Investigation of Rapidly Solidified Braze Ribbons for Transient Liquid Phase Bonding	Riza Iskandar, Ludwig Pongratz, Stefanie Wiesner, Memet Öte, Alexander Schwedt, Kirsten Bobzin, Joachim Mayer
17	OM0405	Heat-treated microstructure and property of sintered of Fe-0.85Mo + 4 wt. % SiC + 0.4 wt.% C materials	Dhriti Tanprayoon, Kittikhun Ruangchai, Amporn Wiengmoon, Rungtip Krataitong, Thanyaporn Yotkaew, Ussadawut Patakham, Ruangdaj Tong Sri
18	OM0406	Sintered Ductile Iron/Compacted Graphite Iron-like Fe-Mo-Si-C alloy	Kittikhun Ruangchai, Amporn Wiengmoon, Monnapas Morakotjinda, Rungtip Krataitong, Dhriti Tanprayoon, Thanyaporn Yotkaew, Nattaya Tosangthum, Ussadawut Patakham, Ruangdaj Tong Sri
19	OM0407	Evidences of Sympathetic Nucleation and Ledgewise Growth Revealed by Scanning Electron Microscopy	Wananurat Srijampa, Amporn Wiengmoon, Ruangdaj Tong Sri
20	OM0408	Characterization of CoCuFeMnNi alloy	Panita Choeychom, Pinai Mungsantisuk, Nattaya Tosangthum, Rungtip Krataitong, Thanyaporn Yotkaew, Ussadawut Patakham, Ruangdaj Tong Sri
21	OM0501	In situ Studies of Heat Induced Precipitation of Ytria Precursor using Liquid-Cell Transmission Electron Microscopy	Sašo Šturm, Bojan Ambrožič, Nina Kostevšek, Marjan Bele, Kristina Ž. Rožman
22	OM0502	Synthesis and characterization of mixed phase TiO ₂ (B)/anatase TiO ₂ thin films on a number of different substrates by a modified low pressure chemical vapour deposition (LPCVD)	Yothin Chimupala, Robert Simpson, Patcharanan Junploy and Rik Brydson
23	OM0503	Microstructural evolution of hydroxy/fluoroapatite in the different precursor solution under hydrothermal process	Wisarat Ngoenthong, Upsorn Boonyang
24	OM0801	Preparation of Electrospun Polystyrene Fibrous Membranes Containing Silver Nanoparticles	Chutima Srisitthiratkul, Nuttaporn Pimpha and Wiyong Kangwansupamonkon
25	OM0802	Quick Evaluation of Electric Field Surrounding a Charged Particle	Katsuhiro Sasaki, Tomoharu Tokunaga, Takahisa Yamamoto
26	OM0803	Inclusion Complex between water-soluble quaternized β-cyclodextrin grafted chitosan and α-mangostin: Influence of degree of β-CD substituted on chitosan	Sarunya Phunpee, Somsak Saesoo, Anchalee jintapattanakit, Uracha Rungsardthong Ruktanonchai

27	OM0901	Comparison of Bio-oil and Extracted Residue from Acid and Enzyme Hydrolysis Processes of Microalgae	Nuapon Duongbia, Suraphon Chaiwongsar, Chatchawan Chaichana, Suparin Chaiklangmuang
28	OM1101	Scanning Electron Microscopes with Integrated Raman Spectrometer Revealing New Complementary Information	Stefanie Freitag, Fang Zhou
29	OM1102	Surface Sensitive Imaging using Energy Filtered SEM at low kV	Fang Zhou and Markus Böse
30	OM1103	Origin of dramatic oxygen solute strengthening effect in Titanium	Qian Yu
	PM01	Bamboo Charcoal Powder Made from Culms of <i>Bambusa multiplex</i>	Visittapong Yordsri, Chanchana Thanachayanont, Chabaiporn Junin, Masahiro Kawasaki, Tetsuo Oikawa, and Makoto Shiojiri
	PM02	Graphene- and N-doped graphene-based gas sensor for ethanol detection	Sumet Sakulsermsuk, Pisith Singjai, Surachet Phadungdhitihada and Supab Choopun
	PM03	Controlled Release Urea Fertilizer via Polymer-layer Silicate Nanocomposite	Kannika Sitthisuwannakul, Wiyong Kangwansupamonkon
	PM04	Microstructural Characterization of Gold Nanoparticles Impregnated on Mesocellular Silica Foam	Nithi Thananukool, Bralee Chayasombat, Chanchana Thanachayanont, Seeroong Prichanont
	PM05	Estimation of Edge Structure of Triangular Graphene on SiC (0001) Using Moiré Pattern on STM Image	Akkawat Ruammaitree
	PM06	Non-vacuum Locally Patterned N ⁺ and P ⁺ Doped Layers for Interdigitated Back Contact Solar Cells by Ultrasonic Spray Technique	Sung-Yen Wei, Jian-Wei Liao, Shen-Ming Yu, Wen-Chin Sun, Shen-Chuan Lo
	PM07	The Surface Morphology Analysis of Rolled Ag-Sheath Bi,Pb-Sr-Ca-Cu-O Superconducting Wire	Hendrik, Pius Sebleku, Sigit Dwi Yudanto, Bintoro Siswayanti, Andika Widya Pramono and Agung Imaduddin
	PM08	The effect of aging treatment on the in-situ transformation of precipitates in AA7050 aluminum alloys	Tsai-Fu Chung, Bo-Ming Huang, Jer-Ren Yang and T. Ohmura
	PM09	Comparative Nanostructure Analysis of Lithium Titanate Composite Material Synthesized by Solid State Reaction for Lithium Ion Battery Application	Fadli Rohman, Achmad Subhan, Riza Iskandar, Arbi Dimiyati, Bambang Prihandoko
	PM10	Microstructural Characterization of Y _x Gd _{1-x} Ba ₂ Cu ₃ O _y Coated Conductors with Different Film Thicknesses of One Coating in Multiple Coating TFA-MOD Process	Ryuji Yoshida, Takeharu Kato, Ko-ichi Nakaoka, Kazunari Kimura, Takato Machi, Teruo Izumi, Yuh Shiohara

	PM11	FIB/SEM/TEM study of $\text{EuBa}_2\text{Cu}_3\text{O}_y$ coated conductor with BaHfO_3 nanorods	Takeharu Kato, Daisaku Yokoe, Ryuji Yoshida, Akira Ibi, Tomo Yoshida, Teruo Izumi, Tsukasa Hirayama, Yuh Shiohara
	PM12	Sample preparation techniques for studying Wheat Gluten and Poly (butylene succinate) blended morphology by the scanning electron microscope	Warunee Borwornkiatkaew, Onuma Santawitee, Sudsiri Hemsri, Chanchai Thongpin
	PM13	Microstructure and electrochemical corrosion behavior of electroplating trivalent chromium coating on stainless steel 304	Surassawadee Paliphot, Sankum Nusen, Torranin Chairuangstri, Thapanee Sarakonsri, Siriporn Daopiset
	PM14	Visualization of Active Reaction Sites on Gold Nanoparticulate Catalysts	Tadahiro Kawasaki, Kaname Yoshida, Takafumi Ishida, Takayoshi Tanji
	PM15	Characterization of Thermal Sprayed Nicko-Shield 200 Coating	Phuangphaga Daram, Suphitcha Moonngam, Chaiyasit Banjongprasert
	PM16	Microstructural investigation of CuAgZr alloy processed by severe plastic deformation	Waraporn Piyawit and Panya Bauhombura
	PM17	Effects of Austenite Reversion on Impact Toughness of Martensitic Steels in High Temperature Tempering	Hung-Wei Yen, Yu-Chen Lin, Meng-Hsuan Chiang, Delphic Chen, Yuan-Tsung Wang, Ching-Yuan Huang, Hsin-Chih Lin
	PM18	In-depth Study of the Deformation Microstructure in an Austenitic Stainless Steel upon Shot peening	Yinsheng He, Keesam Shin
	PM19	Ex-situ EBSD Study on Abnormal Grains in 6063 Aluminium Billets	Kanokwan Uttararak, Wanchai Chongchitnan, Julathap Kajornchaiyakul, Chaiyasit Banjongprasert
	PM20	Microstructure and Hardness of Ag Alloys for Invisible- Setting Jewelry	Natthaphol Chomsaeng, Titaree Chumrod, Suttawan Imurai, Pornkiat Churnjitapirom, Chutimun Chanmuang
	PM21	Microtexture of Cu-based Shape Memory Alloy	Chutimun Chanmuang, Bamika Kumnerdphonpittaya, Oumaporn Juntakool, Saisamorn Niyomsoan
	PM22	Scanning Electron Microscopy of ZSM-5 Zeolite from Hydrothermal Synthesis for Use as a Reforming Catalyst	Nongkhran Chaiwong, Nongnuch Rueangjitt
	PM23	Preparation and Characterization of $\text{Bi}_2\text{VO}_{5.5}$ Nanopowder	Prakasit Intaphong, Jitrephan Phanmalee, Suchanya Kojinok, Sukon Phanichphant, Wiyong Kangwansupamonkon, Pusit Pookmanee
	PM24	Electrochemical Fabrication of Bismuth Ferric Oxide (BFO) Thin Film for High Photoelectrocatalytic Activity of Water Oxidation under Visible Light Irradiation	Chotiwid Wiriyachalerd, Chatchai Ponchio
	PM25	Enhanced Photoelectrocatalytic Activity of CuO Electrode by Coupling with TiO_2 for Water Reduction under Visible Light	Wannasiri Srevarit, Sanchai Kuboon, Annop Klamchuen, Chatchai Ponchio

	PM26	Photoelectrocatalytic Performance of FTO/Cu ₂ O for Nitrite Degradation under Visible Light	Chatchai Ponchio, Pattaranit Thongthep, Suporn wongchatee, Pattaraporn Temchuen
	PM27	Effect of Carbon and Cooling Rate on Phase Transformation and Hardness in Sintered FeCrMo Steels	Amporn Wiengmoon, Wananurat Srijampan, Ruangdaj Tongsri
	PM28	Physical and Electrical Properties of Ternary System Bi _{0.5} (Na _{0.80} K _{0.20}) _{0.5} TiO ₃ -0.005LiNbO ₃ - Ba(Ti _{0.90} Sn _{0.10})O ₃ Lead-Free Piezoelectric Ceramics	Pimpilai Wannasut, Pharatree Jaita, Anucha Watcharapasorn, Sukanda Jiansirisomboon
	PM29	Electron Diffraction Study of Bismuth Borate Glasses	Nattapol Laorodphan, Torranin Chairuangisri, Kenji Tsuda
	PM30	Raman study of ion-irradiated FIB foils of zircon (ZrSiO ₄)	Lutz Nasdala, Shavkat Akhmadaliev, Andreas Artač, Chutimun Chanmuang, Gerlinde Habler, Christoph Lenz
	PM31	Crystal-to-Amorphous-to-Crystal (C-A-C) transition in Cr ₂ M (M = Hf or Zr) Laves phase	Takeshi Nagase
	PM32	Microanalysis Study on Thai Historical Glasses	Pisutti Dararutana
	PM33	Environment-friendly Disposable Nonvolatile Resistive Switching Memory Composed of Biodegradable Nanocellulose	Kazuki Nagashima, Umberto Celano, Hirotaka Koga, Masaya Nogi, Fuwei Zhuge, Gang Meng, Yong He, Jo De Boeck, Malgorzata Jurczak, Wilfried Vandervorst, Takeshi Yanagida
	PM34	Momentum-resolved electron energy-loss spectroscopy of MoS ₂	Chien-Ting Wu, Ming-Wen Chu
	PM35	Direct observation of inhomogeneous growth and dissolution of silver nanoparticles using in situ liquid TEM	Tae-Young Ahn, Seung-Pyo Hong, Seong-II Kim, Young-Woon Kim
	PM36	Effect of Ti diffusion on the microstructure of Ge ₂ Sb ₂ Te ₅ in phase-change memory cell	Jucheol Park, JunSoo Bae, Sang-Hoon Lee
	PM37	Synthesis of Black Phosphorus nano-powder and TEM studies of structural evolution	Jonghan Won, Chang Geun Song, Hyung Joong Yoon, Cheul Jong Choi, Jucheol Park
	PM38	Backscattered Electron Technique for Carbon Nanotube Characterization	Visittapong Yordsri, Winadda Wongwiriyanpan, Chanchana Thanachayanont
	PM39	Three dimensional shape analysis of palladium nanoparticles by DART	Tomokazu Yamamoto, Koji Shigematsu, Syo Matsumura

	PM40	Substructure of nanometer-sized unit of lath martensite in low carbon steel by ausforming	Ya-Ling Chang, Shao-Pu Tsai, Po-Yu Chen and Jer-Ren Yang
	PM41	Mechanism of nodule particle formation in sintered Fe-Mo + SiC alloys revealed by SEM and SXES	Ussadawut Patakham, Bralee Chayasombat, Dhritti Tanprayoon, Kittikhun Ruangchai, Amporn Wiengmoon, Ruangdaj Tongsri
	PM42	<i>In Situ</i> Observation of Electrochemical Reactions in All-Solid-State Li-Ion Batteries by Electron Holography and Spatially-Resolved TEM EELS	Kazuo Yamamoto, Atsushi Shimoyamada, Yasutoshi Iriyama, Tsukasa Hirayama
	PM43	Electron Microscopy Study of Pure Zn and Zn-(0.5-3)wt.%Mg Alloys Related to Their Electrochemical Behavior in KOH Solution	Sankum Nusen, Manut Jaimasit, Torranin Chairuang Sri
	PM44	Preparation of Silicon-Germanium-Tin Nanocomposites on Nitrogen Doped Graphene for Use as Anode Materials in Lithium-ion Batteries	Thanapat Autthawong, Thapanee Sarakonsri
	PM45	Preparation of Coral-like Magnesium Aluminium Layered Double Hydroxides on Activated Carbon for Waste Water Treatment Application	Patsaya Songkhum, Kritapas Laohhasurayotin
	PM46	Texture Orientation of Ag Thin films grown via Gas-Timing RF Magnetron Sputtering and their SERS Activity	Pongbordin Ukahapanyakul, Annop Klamchuen, Chaweewan Sapcharoenkun, Alongkot Tritong, Panita Kasamechonchung, Mati Horprathum, Supanit Porntheeraphat, Jiti Nukeaw, Nurak Gridsadanurak
	PM47	Alumina Thin Film Coating by DC Magnetron Sputtering	Saisamorn Niyomsoan, Paramet Laphasampan, Thanchanok Sricum, Kodchaporn Chotikaphukkana, Nirun Witit-anun
	PM48	Modification of sintered Fe-Mo-Si-C alloy by Cu and Ni additions	Monnapas Morakotjinda, Rungtip Krataitong, Thanyaporn Yotkaew, Nattaya Tosangthum, Bhanu Vetayanugul, Ussadawut Patakham, Ruangdaj Tongsri
	PM49	Cs-corrected STEM Study on Sr-doped Lanthanum Cobaltite Thin Films	Yoonkoo Kim, Miyoung Kim
	PM50	Direct Determination of Ferroelastic Structure in Tungsten Oxide Thin Film	Kyung Song, Gi-Yeop Kim, Sung Dae Kim, Shinhee Yun, Chan-Ho Yang, Si-Young Choi
	PM51	Influences of Heat Treatment on Microstructure and Mechanical Strength of Nickel Laterite Steel	Satrio Herbirowo, Bintang Adjiantoro, Pius Sebleku
	PM52	Crystal Structure Identification on New Ferritic 73%Fe 24%Cr2%Si0.8%Mn0.1%Ni Steel Type for Structure Materials	Parikin, A. K. Jahja, M. Dani, R. Iskandar
	PM53	Microstructure Investigation on the Experimental Ferritic Fe-24Cr-2Si-0.8Mn Alloy for Structure Material Applications	Mohammad Dani, Parikin, Aziz K. Jahja, Arbi Dimiyati, Riza Iskandar