POSTER PRESENTATION

Poster session Monday 15th

33 - Designing highly lithiophilic interlayers to inhibit lithium dendrite formation in solid-state batteries with garnet-type electrolytes
Choi, Sung Ryul; Yoo, Seojeong; Park, Jun-young*

157 – Understanding Li Ions Diffusion in Sulphide- and Oxide-based Conductors from NMR
Blanc, Frédéric, Duff, Benjamin; Elliott, Stuart J.; Gamon, Jacinthe; Daniels, Luke M.; Rosseinsky, Matthew J.

280 – Influence of Microstructure on the Material Properties Derived by Brick Layer Model Analysis – A Case Study for LLZO Ceramics
Eckhardt, Janis K.*; Kremer, Sascha; Fuchs, Till; Minnmann, Philip; Schubert, Johannes; Burkhardt, Simon; Elm, Matthias T.; Klar, Peter J.; Heiliger, Christian; Janek, Jürgen

378 – Cyclic voltammetry for batteries: Differences between liquid-state and solid-state
Xiao, Chuanlian*; Usiskin, Robert; Maier, Joachim

474 – Precursor-based gradient doping for stabilization of cathode/sulfide electrolyte interface
Park, Yong Joon*; Ji, Yong Jun

489 – Silicon/graphite anodes for lithium solid-state batteries: How Si content alters the battery performance
Le Pham, Phuong Nam; Zeier, Wolfgang*

501 – Nanoporous silicon fibers enabling superior cycling performance in sulfied-based all-solid-state batteries
Yamamoto, Mari*; Takatsu, Mika; Okuno, Ryota; Kato, Atsutaka; Takahashi, Masanari

504 – Standardized Processing, Measuring and automated Evaluation of Solid Electrolyte Impedance Data for reliable Characterization of Solid Electrolytes
Pescara, Lars*; Kalyk, Fariza; Drüschler, Marcel; Vargas Barbosa, Nella; Zeier, Wolfgang

505 – Electrochemical activation of Fe-LiF conversion cathodes in thin-film solidstate batteries
Casella, Joel*; Morzy, Jedrzej; Gilshtein, Evgeniia; Yarema, Maksym; Futscher, Moritz H.; Romanyuk, Yaroslav

507 – 100% Silicon Nanowire Paper Anodes for Solid-State Lithium-Ion Batteries
Sánchez Ahijón, Elena*; Pendashteh, Afshin*; Vilatela, Juan José*

514 – Variable Temperature Phonon Dynamics of Superionic Li Conductor Li7La3Zr2O12
Narun, Leah*; Chueh, Will; Lindenberg, Aaron

522 – Assessing transport limitations of battery materials using thin film model systems
Morzy, Jedrzej*; Aribia, Abdessalem; Futscher, Moritz; Romanyuk, Yaroslav

524 – LiF-Doped Sulfide Solid Electrolytes with Stabilized α-Li3PS4 Analog Phase for All-Solid-State Li Metal Batteries
Asakura, Taichi; Izawa, Ryo; Kimura, Takuya; Hotehama, Chie; Kowada, Hiroe; Motohashi, Kota; Sakuda, Atsushi; Tatsumisago, Masahiro; Hayashi, Akitoshi*

530 – Ion dynamics of multicationic Substituted High-Entropy Lithium Argyrodite Superionic Conductors
Schaller, Mareen*; Lin, Jing; Strauss, Florian; Indris, Sylvio

533 – Preparation of Amorphous Li2O-LiI-MoO3 Solid Electrolytes and Application to All-Solid-State Batteries
Fujita, Yushi; Asakura, Taichi; Motohashi, Kota; Sakuda, Atsushi*; Hayashi, Akitoshi

535 – Cycling Protocol For Mn-Based Disordered Rock-Salt Li-Ion Cathodes For Improved Cycling Stability
Park, Sang-Wook; Seo, Dong-Hwa*

543 – Superior ionic conductivity of Zr-doped LiTa2PO8 ceramics
Kwatek, Konrad*; Ślubowska-Walkusz, Wioleta; Nowiński, Jan; Krawczyńska, Agnieszka; Sobrados, Isabel; Diez-Gomez, Virginia; Sanz, Jesus

547 – First-principles calculation study on lithium-ion conduction mechanisms in halide solid electrolytes
Lee, Chang-Dae; Seo, Dong-Hwa*

548 – Improvement of Electrode Processability and Energy Density in LFP batteries
Park, Yoo-Jong; Kim, Hyun-Woo; Seo, Dong-Hwa*

549 – Investigating the Crystallinity and Ionic Conductivity of LiNbOCl4
Newnham, Jon*; Rosenbach, Carolin; Hartel, Johannes; de Irujo-Labalde, Xabier Martinez; Zeier, Wolfgang*

552 – Extracting Ion Density and Mobility - Transient Current Method Revisited
Jenatsch, Sandra*; Futscher, Moritz*; Moia, Davide; Schiller, Andreas; Blülle, Balthasar; Romanyuk, Yaroslav; Ruhstaller, Beat

555 – Inducing Partial Cation Disorder Stabilizes Layered Battery Cathode
Lee, Junghwa; Jiang, Zhelong*; Liang, Nicolas; Park, Jungjin*; Chueh, William*

556 – Substantial Oxygen Loss and Chemical Expansion in Lithium-Rich Layered Oxides at Moderate Delithiation
Rivera, Diego; Csernica, Peter; Chueh, William*; McColl, Kit; Busse, Grace; Shapiro, David; Islam, Saiful*

558 – (Electro-)Chemical Stability of Fully Reduced Sulphide Solid Electrolytes against Lithium Metal Anode
Campoy-Félix, Ramón H.; Sayed, Farheen N.; Vema, Sundeep; Grey, Clare P.*

563 – Preparation of LGPS-Type Li10SnP2S12 Electrolyte by Liquid Phase Process Using Water
Hayashi, Akitoshi*; Tanigaki, Hayata; Kimura, Takuya; Motohashi, Kota; Tatsumisago, Masahiro; Sakuda, Atsushi

564 – Elucidating the role of the central metal substitution of li2mcl6 solid state electrolytes by combining neutron powder diffraction and high frequency electrochemical impedance spectroscopy
Artal, Raül*; Barker, Kit; Andersen, Henrik L.; Alonso, Jose A.; Jiménez, Ricardo; Seymour, Ieuan; Aguadero, Ainara

565 – Multi-technique Approach to Identify the Onset of Degradation at the Interface of NMC and LLZO during Sintering
Ramos-Díaz, Ángela; Vema, Sundeep; Sayed, Farheen N.; Grey, Clare P.*

567 – Dual Doping For Improved Electronic Conductivity In Lithium Garnet Electrolyte Li7La3Zr2O12
Pachulska, Klaudia*; Winkowska-Struzik, Magdalena; Struzik, Michał

568 – Exploring electrochemical properties of high conductive Li2.25Fe0.25Zr0.75Cl6 halide depending on its synthesis route
Arianna, Pesce*; Golov, Andrei; Xiang Lian, Jian; Lannelongue, Pierre; Carrasco, Javier; Lopez-Aranguren, P

569 – Self-Diffusion Mechanism of Li+, Na+, and K+ Ions in Prussian Blue by First-Principles Calculations
Ito, Dan*; Jang, Seong-Hoon; Ando, Hideo; Momma, Toshiyuki; Tateyama, Yoshitaka*

575 – Characterization of all-solid-state Li metal batteries using self-supported C/Au film as interface layer
Kitaura, Hirokazu*; Asakura, Taichi; Deguchi, Minako; Kowada, Hiroe; Hotehama, Chie; Sakuda, Atsushi; Hayashi, Akitoshi; Tatsumisago, Masahi

577 – Kinetics of Mixed Ion-Electron Transport in Composite Electrodes
Lin, Le-Yen*; Chen, Chia-Chin

578 – Space Charge Storage in Mixed Ionic-Electronic Conducting Materials
Chen, Shu-Han*; Chen, Chia-Chin

584 – Understanding Low-Temperature Direct Liquid-to-Solid Synthesis and Chemistry of Li-Garnet Electrolytes for Hybrid and Solid-State Batteries
Quincke, Lucie*; Rupp, Jennifer L.M.

586 – Solid-State (Cryo-)NMR and Conductivity Spectroscopy: A Complementary Approach to Characterize Ion Dynamics in Solid Electrolytes
Stainer, Florian; Jodlbauer, Anna; Spychala, Jonas; Marko, Annika; Hogrefe, Katharina; Gadermaier, Bernhard*; Wilkening, H. Martin

587 – Li ion distribution and local structure in LiTa2PO8
Ren, Peng; Kwatek, Konrad; Abrahams, Isaac*

589 – Cathode Particles Studied by Scanning Force Microscopy based Infrared Nano-Spectroscopy
Weber, Franjo; Shi, Bing-Xuan; Muenchinger, Andreas; Kreuer, Klaus-Dieter; Richter, Felix H.; Berger, Rüdiger*

591 – Achieving > 1 mScm-1 ionic conductivity in garnet solid-state electrolytes through comprehensive understanding of dopant local structure and synthesis methodology
Vema, Sundeep*; Grey, Clare

592 – Understanding the defect chemistry and Li+ transportation of Ta-doped Li7La3Zr2Ta0.5O12-δ by active ML learning Raman spectroscopy image
Li, Siqi; Weinmann, Steffen; Prein, Thorben; Chu, Hyunwon; Rupp, Jennifer L.M.*

596 – Enhanced Solid Electrolyte Characterization through Solid-State NMR
Samanta, Bibek; Martinez de Irujo Labalde, Xabier; Helm, Bianca; Banik, Ananya; Zeier, Wolfgang G.*; Hansen, Michael Ryan

597 – Investigation of Ion Dynamics and Structure of Li10B10S(20-x)Ix via Solid-State NMR
Kondek, Jędrzej*; Holmes, Sarah; Newnham, Jon; Faka, Vasiliki; Maus, Oliver; Gronych, Lara; Nazmutdinowa, Elina; Cui, Yi; Zeier, Wolfgang; Hansen, Michael

601 – Enhanced Lithium Exchange through Indium Layering: Progress in LLZO-Ta Solid Electrolyte Technology
Sharma, Prince*; Hasegawa, Gen; Kuwata, Naoaki*

602 – Discontinuous Phase Transitions in Graphite Dilute Stages – Single Particle Operando Microscopy Study
Han, Jiho; Merryweather, Alice; Schnedermann, Christoph; Grey, Clare; Rao, Akshay*

604 – The new niobate and tantalate phases: A combined diffraction, EXAFS and NMR spectroscopy study
Sayed, Farheen N.*; Jacquet, Quentin; Groszewicz, Pedro; Nagendran, Supreeth; Emge, Steffen P.; Magusin, P. C. M. M.; O'Keefe, Chris; Dey, Sunita; Grey, Clare P.*

605 – Strain dependent Li-ion conductivity modulation in model amorphous LiPON glassy-type solid electrolyte
Chandra, Subhash; Yildiz, Bilge*

606 – Engineering high conductive percolating networks in Li6PS5Cl tapes for solid-state batteries
Tran, Quoc-Anh; Agrawal, Meenal; Häusler, Michael; Todt, Juraj; Fadillah, Laras; Ud Din, Mir Mehraj; Zettl, Roman; Henninge, Volker; Keckes, Jozef; Brunner, Roland; Vullum, Per Erik; Rettenwander, Daniel

609 – Lithium Photo-extraction using all-solid-state photo-rechargeable battery for photo energy conversion and storage
Yoshimoto, Masataka; Tamura, Kazuhisa; Watanabe, Kenta; Shimizu, Keisuke; Horisawa, Yuhei; Suzuki, Kota; Kanno, Ryoji; Hirayama, Masaaki*

612 – Sinter-Free Interface Formation of Oxide-Based TiO2 Anode Composite for All-Solid-State Batteries
Takahashi, Masanari*; Arai, C.; Yamamoto, M.; Kato, A.

623 – Study of structural and electrochemical evolution of LPSCL during "cold sintering" process
Korjus, Ove*; Mitra, Saptarshee; Berrod, Quentin; Vanpeene, Victor; Appel, Markus; Suard, Emanuelle; Lyonnard, Sandrine; Villevieille, Claire

515 – Inducing cation disordering in sodium layered oxides
Edelman, Dylan; Ramachandran, Hari; Chueh, William*

542 – A Zn2+ substituted NaAlCl4 with enhanced sodium ionic conductivity for solid state batteries
Guo, Hao; Grüninger, Helen*; Haefner, Michael*; Bianchini, Matteo*

553 – Synthesis of Sodium-ion Conducting Sulfide Solid Electrolytes Using Sodium Polysulfides as Self-Flux
Sakuda, Atsushi*; Otono, Tomoya; Asakura, Taichi; Nasu, Akira; Motohashi, Kota; Hayashi, Akitoshi

561 – Mechanochemical Synthesis of Sodium-Ion Conducting Oxychloride in the System NaCl–TaCl5–Ta2O5
Motohashi, Kota*; Tsukasaki, Hirofumi; Sakuda, Atsushi; Mori, Shigeo; Hayashi, Akitoshi

585 – Unlocking Enhanced Na+-Ion Conductivity in Co-Doped NASICONs: Insights from Total Neutron Scattering Analysis of Local Structures
Huang, Xuankai*; Qi, Xin; Krok, Franciszek; Abrahams, Isaac

598 – Analysis of the anion redox and ionic diffusion in Na2MS2 (M = Fe and Co) active materials with chained tetrahedra
Nasu, Akira*; Miyamoto, Riki; Kobayashi, Hiroaki; Matsui, Masaki

599 – Multi-Scale Analysis of Commercially Available Sodium-Ion Cells
Sander, Luise; Fellinger, Tim-Patrick*; Leonhardt, Robert; Riedel, Jens; Winckelmann, Alexander; Al-Shabbagh, Dominik; Prinz, Carsten; Scholl, Juliane; Krug von Nidda, Jo

607 – Revealing the reaction mechanism and chemo-mechanics of solid-state Na-S batteries
Nguyen, Quoc Hung; Todt, Juraj; Boles, Steven; Keckes, Jozef; Rettenwander, Daniel

500 – Structure - transport correlations in W-substituted K3SbS4 as K+-conducting solid electrolytes
Hartmann, Matthias*; Zeier, Wolfgang

511 – Electrochemical Characterization of Ti-Doped Zinc Ferrite
Hopster, Julia; Krämer, Susanna; Jüstel, Thomas; Winter, Martin; Neuhaus, Kerstin*

541 – Ion Dynamics Analysis of Superionic Conducting Glass AgI-As2Se3 by Machine Learning Force Field
Arakawa, Taisei; Usuki, Takeshi; Kasamatsu, Shusuke*

Poster session Tuesday 16th

49 – Accelerating Discoveries: a Comprehensive Online Analytical System with Standardized Data Pipeline for CO2 Electroreduction
Senocrate, Alessandro*; Bernasconi, Francesco; Kraus, Peter; Battaglia, Corsin

57 – Achieving high electrocatalytic activities by improvement of triple conducting properties with cobalt-free air electrode material for reversible ceramic cells
Bae, Yeongeun; Kim, Seo-hyun; Park, Jun-young*

154 – Performance and degradation of positrodes for proton ceramic electrolysers
Wu, Mengxin*

185 – Proton Concentrations in Ba(Fe,Acc)O3-d Perovskites
Merkle, Rotraut*; Raimondi, Giulia; Maier, Joachim

316 – Electronic structure, phase formation, and defect distribution in the Ba(Ce,Fe,Acc)O3-d system investigated by density functional theory calculations
Sitte, W.*; Merkle, R.; Hoedl, M. F.; Chesnokov, A.; Gryaznov, D.; Nader, C.; Egger, A.; Bucher, E.; Kotomin, E. A.; Maier, J.

335 – High-performance tubular protonic ceramic fuel cells by compensating Ba evaporation via a Ba-excess electrolyte
Kim, Youdong; Meisel, Charlie; Hernandezb, Carolina; Rend, Peter; Yang, Jayoon; Sullivan, Neal; O'Hayre, Ryan

358 – A Novel Sample Cell for Innovative Materials Analytics: Detection of Protons in Ceramic Materials through In-Situ Integration of Laser-Induced Breakdown Spectroscopy
Anstiss, Melanie*; Weiss, Maximilian; Limbeck, Andreas; Opitz, Alexander K.; Weil, Matthias

496 – Proton Intercalation into Bronze-type Vanadium Dioxide: Combined Experimental and Computational Analyses
Park, Sunghyun; Nishimura, Shin-ichi; Kitada, Atsushi; Yamada, Atsuo*

510 – Ion Conductivity of Cubic Perovskite BaSn1-xInxO3-δHε Oxyhydrides
Takahashi, Takuya; Kobayashi, Genki; Aoki, Yoshitaka*

523 – Ion Conductivity of BaZr0.5In0.5O2.25H0.5 Oxyhydride
Maeda, Ryosuke; Toriumi, Hajime; Aoki, Yoshitaka*

527 – Surface B-site effect of La0.9Sr0.1MO3-δ (M = Al, Ga, In and Yb) on the surface with X-ray and Infrared studies
Lee, Yi-Hsuan*; Liu, Yi-xin; He, Cai-yen; Wu, Jia-ying

531 – Recycling inert cations in double perovskite enables the low-temperature operation of protonic ceramic cells
Xie, Yun; Shi, Nai*; Chen, Ming*

534 – B-Site Elements and Correlation with the Electron and Ionic Conductive Properties of Ba-Based Perovskite Structure Materials
Wu, Jia-Ying; Lee, Yi-Hsuan

540 – Anisotropic Proton Migration in Hexagonal Perovskite Related Oxide
Kim, Hye-Sung*; Youn, Yong; Hussain, Basharat; Ullah, Abid; Hong, Jong-Eun; Joh, Dong Woo; Lee, Seung-Bok; Song, Rak-Hyun; Park, Seok-Joo; Kim, Tae Woo; Choi, Yoonseok; Lim, Tak-Hyoung

545 – Structure and electrical properties of high-entropy cobaltites with double perovskites structure
Kavaliuk, Hanna*; Wachowski, Sebastian; Miruszewski, Tadeusz; Mielewczyk-Gryń,

557 – Relationship between hydration and percolation in the proton conduction of the amino acid peptide Gly-X (X = Pro, Ser) and the creation of recombinant proton conductors based on Gly-Ser.
Semizo, Hitoki*; Ohgishi, Yamato; Nishimura, Hitoshi; Matsuo, Yasumitsu*

576 – Investigation of Ni Doping Effect on Layered Perovskite Air Electrode for Highly Efficient Reversible Protonic Ceramic Cells
Yun, Jiwon; Choi, Sihyuk*

579 – A study on the characteristics of BaZrO3-based electrolyte supported solid oxide electrochemical cells
Nam, Gyeong Duk; Lee, Gahyeon; Lee, Hyeon Jin; Kim, Tae Woo; Yun, Kyong Sik; Kim, Hye-Sung; Yu, Ji Haeng; Joo, Jong Hoon*

582 – Water adsorption and surface protonic conduction on NiO
Wang, Luyang*; Norby, Truls*

588 – Proton H+ Self-Diffusion in Li-H Exchanged Li6La3ZrTaO12 as Seen by Solid-State 1H NMR Relaxation
Stainer, Florian*; Gombotz, Maria; Akimoto, Junji; Wilkening, H. Martin R

594 – Modelling and Characterization of Negatrodes in Proton Ceramic Electrochemical Cells
Ewerhardt, Patrick*; Norby, Truls; Bjørheim, Tor; Polfus, Jonathan

595 – Optimization of Hydride-Ion Conductivity of Perovskite-type structure in SrLiH3–CaLiH3–NaLiH2 Quasi-Ternary System
Hirose, Takashi; Matsui, Naoki*; Watanabe, Kenta; Saito, Takashi; Mori, Kazuhiro; Suzuki, Kota; Kanno, Ryoji*; Hirayama, Masaaki*

618 – Optimization of Ccomposite Electrodes with Carbon Mesoporus Material and Functional Materials for Enhanced Supercapacitor Performance
Lo, An-Ya

148 – Innovative architectures for nanostructured SOC oxygen electrodes: La2NiO4+δ and La2NiO4+δ – Ce0.9G0.1O2- δ composites in focus
Spann, Michael; Steil, Marlu César; Laurencin, Jérôme; Djurado, Elisabeth*

171 – UHV surface science on Solid oxide cell electrodes at controllable oxygen activity
Nenning, Andreas*; Breitwieser, Stanislaus; Melcher, Christian; Kogler, Matthias; Valtiner, Markus; Fleig, Jürgen

202 – Investigating the atomic-scale effects of surface modifications on model surfaces of mixed ionic and electronic conducting oxides
Siebenhofer, Matthaeus*; Nenning, Andreas; Blaha, Peter; Fleig, Juergen; Kubicek, Markus

247 – Ultrathin Interfacial Layers Affect Space Charges between Mixed Ionic and Electronic Conducting Oxides and SrTiO3
Steinbach, Claudia*; Schmid, Alexander; Boehme, Christin; Fleig, Juergen

364 – Synthesis and characterization of SrCoO3-δ-based materials doped with 4d/5d elements (Ta, Nb, W, Mo) for use as air electrode materials for SOFC applications
Zielińska, Klaudia*; Dąbrowa, Juliusz; Zajusz, Marek; Świerczek, Konrad

388 – Mechanistic Insights into Photo-current Enhancement in Strontium Titanate Heterojunctions under UV Illumination
Schmid, Alexander*; Enzlberger, Ludwig; Fleig, Juergen

425 – On Porous MgO Stabilized Zirconia from Laser Melting of a Preheated Ceramic
Merino, Rosa I.*; Sanjuán, M. Luisa; Oliete, Patricia B.; Peña, José I.

484 – Superior transport and charge transfer in Ba7Nb4MoO20 hexagonal perovskite electrochemical cells
Dhanalakshmi R, Ba

490 – Exploring the Potential of LSCrMn in Oxygen Ion Batteries via Chemical Capacitance Measurements
Wagner, Barbara*; Schmid, Alexander; Fleig, Jürgen

495 – Evaluating the Potential of High Entropy Ruddlesden-Popper Oxides as Solid Oxide Cell Electrodes
Alsaiari, Nawal*; Skinner, Stephen

499 – Thermoelectric Properties of Composite Materials Based on Multicomponent Pyrochlore.
Lewoc, Damian*; Miruszewski, Tadeus

512 – Isotopic Exchange Raman Spectroscopy (IERS) multidimensional analysis on Pr and Gd-doped ceria
Shen, Zonghao*; Morales-Zapata, Miguel; Orera, Alodia; Laguna-Bercero, Miguel; Jiménez, Carmen; Burriel, Mónica

513 – Large-area planar Solid Oxide Cells for hydrogen production: evaluation of the electrochemical performance of LSM and LSCF electrodes
de la Torre-Gamarra, Carmen*; Zueco-Vincelle, Juan*; Campos-Galera, Andrés*; Alconchel-Allué, Aida*; Orera, Alodia*; Laguna, Miguel Ángel

521 – Processing-structure-property relationships in BiFeO3-BaTiO3 lead-free ferroelectrics
Bishop, Sean*; Neuman, Eric; Lowry, Daniel; Bachman, William; Dong, Wen; O'Brien, Christopher; McCoy, Chad

528 – In Situ NAP-HT-XPS Studies of La0.31Sr0.58Ti0.97Ni0.03O3-d Thin Film SOFC Anode
Nurk, Gunnar*; Kooser, Kuno; Ainsar, Mait; Möller, Priit; Kodu, Margus; Kelp, Glen; Romann, Tavo; Gallet, Jean-Jacques; Kukk, Edwin; Käämbre, Tanel; Hävecker, Michael

529 – EIS Characterization of La0.31Sr0.58Ti0.97Ni0.03O3-d SOFC Thin Film Microelectrodes
Ainsar, Mait*; Kooser, Kuno; Kodu, Margus; Kelp, Glen; Nurk, Gunnar*

536 – Effect of B2O3 additive on the Sintering Behavior of Hexagonal Perovskite-related Ba7Nb4MoO20
Choi, Yoonseok*; Chun, Phil Joo; Youn, Yong; Kim, Hye-Sung; Kim, Tae Woo

538 – Heterostructured Double Perovskite Nanoparticle-decorated Perovskite Air Electrode for Solid Oxide Cells
Hong, Jong-Eun*; Kim, Hye-Sung; Joh, Dong Woo; Lee, Seung-Bok; Lim, Tak-Hyoung; Park, Seok-Joo; Song, Rak-Hyun

539 – Novel La0.21Sr0.26Ca0.48Ti0.95Fe0.05O3-δ PERVOSKITES as a Hydrogen Electrode for Solid Oxide Electrolysis Cells
Paydar, Sara*; Volobujeva, Olga; Lust, Enn; Nurk, Gunnar*

544 – Characterization of La2Ce2O7 and Y2Zr2O7 using polarization effects via Kelvin Probe Force Microscopy
Mowe, Patrick*; Pfeiffer, Felix; Winter, Martin; Neuhaus, Kerstin

550 – Mapping of Reduction Profiles for Improved Electrochemical Performance in SOCs
McCabe, Kevin*; Padinjarethil, Aiswarya; Hauch, Anne; Chen, Ming

551 – Dopant Clustering and Vacancy Ordering in Neodymium Doped Ceria
Ming, Jing*; Leszczyńska-Redek, MarzenaMarzena*; Malys, Marcin; Wrobel, Wojciech; Jamroz, Jan; Struzik, Michal; Hull, Stephen; Krok, Franciszek; Abrahams, Isaac*

554 – Defect and disorder engineering on tailored rare-earth oxides nanocatalysts
Nanclares, Dimy*; Trindade, Fabiane; Moraes, Tamara; Fonseca, Fabio; Ferlauto, Andre*

559 – In situ transmission electron microscopy of phase transformations in solid state ionic materials for carbon capture sorbents and solid oxide cells
Wardini, Jenna; Martinez, Jenny; Bowman, William*

570 – Oxygen Permeability and Structural Stability of BaCo0.7Fe0.25Zr0.05O3-δ Oxygen Transport Membrane for Hydrogen Production
Koo, Bonjae*

571 – Effects of the microstructure of the metal support on the performance of metal-supported solid oxide fuel cell
Jin, ZhengDao; Park, HeeJung*; Woo, SungHun

572 – Oxide-Ion Conductivity and Ion Migration Mechanism of Ba7Nb4MoO20-based Materials
Sakuda, Yuichi; Murakami, Taito; Avdeev, Maxim; Fujii, Kotaro; Yasui, Yuta; Hester, James R.; Hagihala, Masato; Ikeda, Yoichi; Nambu, Yusuke; Yatoo, Mudasir A.; Skinner, Stephen; Yashima, Masatomo*

573 – Optimization and application of a novel two-volume measurement setup for high-temperature electrolyzer cells
Weiss, Maximilian*; Huber, Tobias M.; Wimmer, Christian; Rath, Kirsten; Opitz, Alexander K.

583 – High-temperature reaction setup for in-situ catalytic experiments
Sun, Xiao*; Inangha, Princess Gerald; Kohns, Richard; Huber, Patrick; Haas, Sylvio; Mascotto, Simone

590 – The Effect of Basic Binary Oxide Infiltration on Oxygen Electrodes
Jensen, Veronica Humlebæk*; Aw-Ali, Sade; Khoshkalam, Mohamad; Hendriksen, Peter Va

593 – Unlocking Enhanced Reversible Oxygen Storage Capacity via Noble Metal Exsolution in Titanium-Doped Lanthanum Strontium Ferrites for Catalytic Applications
Majumder, Deblina*; Martin, Alex Martinez; Saini, Shailza; Kousi, Kalliopi; Papaioannou, Evang

600 – Exploring novel insights into high-temperature synthesis of perovskite oxide particles: beyond traditional methods
Arumuga Kani, Nagaarjhuna

603 – Lone-pair driven order-disorder phase transition in Bi0.8Pr0.2O1.5 oxide ion conductor
Wrobel, Wojciech*; Jamroz, Jan; Krynski, Marcin; Malys, Marcin; Krok, Franciszek; Abrahams, Isaac

608 – Defect chemical study of Y2+xRu2-xO7-δ pyrochlores and correlation with OER performance
Cho, En Ju; Ghosh, Bidipta; Yang, Hong; Perry, Nicola*

576 – CGO-Cu cermet characterization by in situ scattering measurements with a dilatometer
Balaguer, María*; Kriele, Armin; Fabuel, María; Stark, Andreas; Serra, José Manuel; Solís, Cecilia*

502 – Revolutionizing Clean Energy Labs: Robotic Imitation Learning for Efficient Cathode Deposition
Xu, Xi*; Gu, Esther; Skinner, Stephen

525 – Degradation tests of affordable fuel electrode supported solid oxide cells
Campos-Galera, Andrés*; Zueco-Vincelle, Juan; Alconchel-Allué, Aida; de la Torre-Gamarra, Carmen; Orera, Alodia*; Laguna-Bercero, Mig

546 – First-Principles Study Exploring the Influence of Structural Vibrational Entropy on Thermally Regenerative Electrochemical Systems
Song, You-Yeob; Choi, Ahreum; Lee, Seok Woo*; Lee, Hyun-Wook*; Seo, Dong-Hwa*

566 – Finetuning of Bismuth-based Photoelectrodes Through Chemical Solution Deposition Routes Towards Green Hydrogen and CO2RR
Joos, Bjorn*; Elen, Ken; Moon, Choongman; Shin, Byungha; Van Bael, Marlies; Hardy, An

614 – Ammonia as a Direct Fuel for Solid Oxide Fuel Cells: Long-Term Testing and Durability Analysis
Joh, Dong Woo*; Muneeb Ur Rehman, Mian; Hussain, Amjad; Kim, Tae-Hun; Shin, Ji-Weon; Hong, Jon-Eun; Lim, Ak-Hyoung; Song, Rak-Hyun

580 – Charge Carrier Dynamics of the Mixed Conducting Interphase in All-Solid-State Batteries: Lithiated LATP as a Case Study
Scheiber, Thomas; Marko, Annika; Gadermaier, Bernhard; Finsgar, Matjaz; Wilkening, H. Martin

610 – Reaction Mechanism of Li2FeSO Cathode Material at All-Solid-State Battery
Hikima, Kazuhiro*; Nishimoto, Maro; Matsuda, Atsunori

532 – Effect of Pb 6s2 lone pair on potential flattening of fluoride-ion conduction in CsPbF3
Matsui, Naoki*; Murakami, Miwa; Mori, Kazuhiro; Saito, Takashi; Shimizu, Keisuke; Suzuki, Kota; Kanno, Ryoji*

560 – Development of Intercalation Anode Materials for Fluoride-ion Batteries : Magnéli Phase TixO
Shimo, Yusuke*; Matsui, Naoki; Kanno, Ryoji

562 – Intercalation Reaction of Y2C as an Anode Material for Fluoride-Ion Batteries
Tojigamori, Takeshi*; Matsui, Naoki; Kanno, Ryoji

581 – Fluoride ion conductors based on MSnF4 (M=Pb , Ba) solid electrolyte prepared by mechanical milling
Mineshige, Atsushi*; Sugiura, Maiko