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(Program-Penultimate)

	September 14th Tuesday 2021
08:30 - 17:30	Registration
08:30 - 09:00	Opening Addresses Tayfur Öztürk
	Chair: Dag Noréus
09:00 - 09:30	Prospects for lithium-ion batteries and beyond Mihri Ozkan
09:30 - 10:00	Material aspects of alternative energy stores: sodium-ion and solid-state batteries Philipp Adelhelm
10:00 - 10:30	Ultra fast charging high energy lithium-ion batteries utilizing borophene/h-BN aerogel layers Onur Ergen
10:30 - 11:00	Coffee Break

	Chair: Marie Guignard	**Chair: Duncan Paul Fagg**
	Li-ion Battery (Cathode)	**Advances in Fuel Cells**
11:00 - 11:20	Study of the structural and lithium storage properties of the rock-salt structured (MgCoNiMnLiX)O (X=Cr, Fe, Al) high entropy oxides Ersu Lökçü, Meltem Çayırlı and Mustafa Anık	29 Synthesis of Thermally Reduced Graphene Oxide Welded Graphene Aerogel Support Material for PEM fuel cells Meryem Samancı and Ayşe Bayrakçeken Yurtcan
11:20 - 11:40	Supercritical CO2-Approach to Prepare Lithium-rich Layered Metal Oxide Material for Li-ion Batteries Ali Yalçin, Müslüm Demir, Solmaz Khankeshizadeh, Mehmet N. Ates, Mehmet Gönen and Mesut Akgün	Enhancing the electrochemical performance of misfit calcium cobaltite electrodes for reversible solid oxide cells Francisco Loureiro, Allan Araújo, Laura Holz, Vanessa Graça, João Grilo, Daniel Macedo, Carlos Paskocimas and Duncan Fagg
11:40 - 12:00	Sodium and Niobium Co-doped Lithium Titanate as a High Rate Anode for Lithium Ion Batteries Şaban Patat, Sunardi Rahman and Ahmet Ülgen	Optimization of the flow-field for solid oxide fuel cell thin sheet interconnectors Bora Timurkutluk and Emre Ucar
12:00 - 12:20	Electrochemical properties of Ni-rich NMC cathodes for Li-ion batteries Ahmed M. Faris, Tuğrul Çetinkaya, Mahmud Tokur and Hatem Akbulut	Combinatorial Development of LSC Based Cathode Material for IT-SOFC Ramin Babazadeh Dizaj and Tayfur Öztürk
12:20 - 13:30	Lunch Break	

September 14th Tuesday 2021 (Afternoon)			
		Chair: Branimir Banov	**Chair: Ümit B Demirci**
		Li-ion Batteries (Anode)	**Electrolysers and Renewable Hydrogen**
13:30 - 13:50		Spinel-structured type high entropy oxides as anodes for lithium-ion batteries Deniz Okan Bayraktar, Ersu Lökçü and Cigdem Toparli	Enhanced CO_2 stability of nickel doped $BaCe_{0.9}Y_{0.1}O_{3-d}$ (BCY10) Vanessa Graça, Francisco Loureiro, Laura Holz, Sergey Mikhalev and Duncan Fagg
13:50 - 14:10		Investigation of Electrochemical Processes of Metallic Li Batteries using Temperature Dependent Electrochemical Impedance Spectroscopy Mohammed Ahmed Zabara and Burak Ulgut	Effect of Dual Perovskites on Hydrogen Production by Thermochemical Water Splitting Seyfettin Berk Şanlı, İhsan Emre Yiğiter, Gülhan Çakmak, Fatih Pişkin and Berke Piskin
14:10 - 14:30		Anodes for Li-ion batteries based on silicon monoxide carbonized with fluorocarbon Darina Lozhkina, Ekaterina Astrova, Alexander Rumyantsev and Alesya Parfeneva	Combinatorial Development of LSF Based Cathode Material for IT-SOFC Fahrettin Kılıç, Havva Eda Aysal and Tayfur öztürk
14:30 - 14:50		Nano Silicon Powder Reinforced Carbon Anodes for High Capacity Lithium Ion Battery Salman Ahmad, Tugrul Cetinkaya, Mahmud Tokur and Hatem Akbulut	Sr doped $LaMn_{0.6}Al_{0.4}O_{3-\delta}$ for H_2 production based two-step thermochemical water splitting İhsan Emre Yiğiter, Seyfettin Berk Şanlı, Gülhan Çakmak, Berke Piskin and Fatih Pişkin
14:50 - 15:30		Coffee Break	
		Chair: Hatem Akbulut	
15:30 - 16:00		Nano Designs for Lithium Battery Anodes Mahmud Tokur and Hatem Akbulut	
16:00 - 16:20		New lithium-rich layered oxides as positive electrode materials for lithium-ion batteries Marie Guignard	
16:20 - 16:40		High Performance Electrospun Anatase/Poly(3,4-Ethylenedioxythiophene) Polystyrene Sulfonate-based Anodes for Li-ion Battery Begüm Yarar Kaplan, Vahid Charkhesht, Alp Yürüm and Selmiye Alkan Gürsel	
16:40 - 17:00		Inspection on Capacity Fade Challenge for $LiNi_{0.5}Mn_{1.5}O_4$ Cathode Tayfun Kocak, Zhang Xiaogang, Muharrem Kunduraci and Servet Turan	
17:00 - 17:20		Electrochemical performance of highly concentrated LiFSI-EC electrolytes in Silicon/Graphite - NMC111 Li-ion batteries Burak Aktekin, Guiomar Hernández, Reza Younesi, Daniel Brandell and Kristina Edström	

		September 15th Wednesday 2021 (Morning)
		Chair: Philipp Adelhelm
09:00 - 09:30		Advanced aqueous alkaline batteries based on hydrogen Dag Noréus
09:30 - 10:00		Multivalent-ions Rechargeable Batteries in Aqueous Medium Rezan Demir Çakan
10:00 - 10:30		A Novel Air-Stable O_3-Type Layered Oxide Cathode Material with Low Ni Content for Sodium-Ion Batteries Şaban Patat, Ayşe Şahin, Yusuf Taş, Ferhat Şanlı, Yakup Yılmaz and Tayfur Öztürk
10:30 - 11:00		Coffee Break

		Chair: Servet Turan	**Chair: Akif Aliyev**
		Li-ion Batteries (Solid Electrolyte)	**Electrolysers and Renewable Hydrogen**
11:00 - 11:20		Study of the Solid Electrolyte Thin Films with Li Loss Compensation Aiym Mashekova, Mukagali Yegamkulov, Aliya Mukanova and Ivan Trussov	A two-step thermochemical water splitting by doped perovskite structures Seyfettin Berk Sanli, İhsan Emre Yigiter, Berke Piskin, Fatih Piskin and Gülhan Cakmak
11:20 - 11:40		A Long Cycle Life and High Ionic Conductivity, Hybrid LATP/PEO Solid Electrolyte for Lithium-Ion Batteries Samet Usta, Mustafa Çelik, Tuğrul Çetinkaya and Hatem Akbulut	Electrochemical promotion of N_2O reduction on LSCF catalyst Laura Holz, Francisco Loureiro, Allan Araújo, Vanessa Graça, Diogo Mendes, Adélio Mendes and Duncan Fagg
11:40 - 12:00		Crystallization of $Li_7P_3S_{11}$ Solid Electrolytes for Solid Lithium Sulfur Batteries Seda Eğri and Mahmud Tokur	Improved hydrogen production by the substitution of $LaMnO_3$ based perovskite oxides for thermochemical water splitting Cagla Unal and Berke Piskin
12:00 - 12:20		The Effect of Sulfur Load on Graphene-Sulfur Cathodes Synthesized by Sulfur-Amine Chemistry for All-Solid-State Batteries Çağrı Gökhan Türk and Mahmud Tokur	Electrochemical performance of calcium cobaltite as oxygen electrode for solid oxide cells with Pr-doped ceria active layer Allan Araújo, Francisco Loureiro, Laura Holz, Vanessa Graça, João Grilo, Daniel Macedo, Carlos Paskocimas and Duncan Fagg
12:20 - 13:30		Lunch Break	

	September 15th Wednesday 2021 (Afternoon)	
	Chair: Saban Patat	**Chair: Mustafa Urgen**
	Na-ion Batteries	**Supercapacitors-I**
13:30 - 13:50	Salt-templated N-doped porous carbon anode materials for sodium ion batteries Emrah Demir	Organic Electrochromic-Energy Storage Application Based on Dithienothiophene, Triphenyamine and 3,4-ethylenedioxythiophene Sebahat Topal, Esma Sezer, Belkis Ustamehmetoglu and Turan Ozturk
13:50 - 14:10	Tin Selenide Anode Material in SIB Synthesized via High Energy Ball Milling Meral Aydin and Rezan Demir Çakan	Capacitive performance of chemically modified Fe/O co-doped graphene Neriman Sinan Tatli and Ece Unur Yilmaz
14:10 - 14:30	Investigation the effect of the binder and the electrolyte salt anion for optimizing the sodium-selenium battery system Zeynep Erdöl, Ali Ata and Rezan Demir-Cakan	Induced bifunctionality in dual-doped lanthanum cobalt-based perovskite for zinc-air batteries Mohamed Elhousseini Hilal, Seyfettin Berk Şanlı, Francis Verpoort and Berke Piskin
14:30 - 14:50	Analysis of the effect of sulfur loading on the performance of lithium-sulfur batteries H. Merve Bilal and Damla Eroğlu	Advances in Harvesting Triboelectric Nano Energy within ZnO/Ag/Si(100) Gizem Durak Yüzüak, Seray Özkan and Ercüment Yüzüak
14:50 - 15:30	Coffee Break	
	Chair: Sanjoy Banerjee	
15:30 - 15:50	First Principles Investigation of Anion Intercalation into Graphitic Carbon Cathode Taner Akbay and Tatsumi Ishihara	
15:50 - 16:10	Assessment of Ionic Liquid Electrolytes for High Performance Li-S Batteries Using Machine Learning Aysegul Kilic, Ramazan Yildirim and Damla Eroglu	
16:10 - 16:30	Preparation of an MXene/CNT composite electrode for high-performance supercapacitor Muslum Demir, Murat Yılmaz and Omer Sadak	
16:30 - 16:50	Elucidation of Efficient Charge/Discharge Mechanisms in Electrical Double Layer Capacitors Betul Uralcan and Ayse Korkut	
16:50-17:10	Advancing the Promise of Low-Temperature Molten Sodium Batteries Erik D. Spoerke,	
17:10 - 17:30	Materials technology gaps for low cost grid energy Babu Chalamala	

		September 16th Thursday 2021 (Morning)
		Chair: Selmiye Alkan Gürsel
09:00 - 09:30		Enabling the success of the hydrogen-energy chain through international cooperation Fermin Cuevas, François Aguey-Zinsou, Junxian Zhang and Michel Latroche
09:30 - 10:00		Materials development for proton ceramic cells Olivier Joubert
10:00 - 10:30		Nitride materials as possible electrodes for NH_3 reversible fuel cells Duncan Paul Fagg
10:30 - 11:00		Coffee Break

		Chair: Rezan Demir-Çakan	**Chair: Semen Klyamkin**
		Aqueous Batteries	**Hydrogen Storage and Separation-I**
11:00 - 11:20		Development of Energy Storage Systems Based on Aluminum-Ion in Aqueous Medium Burcu Ünal, Sevde Nazlı Dambasan, Selin Sarıyer and Rezan Demir Cakan	Hydrogen absorption kinetics comparison of the $LaNi_{4.4}Al_{0.3}Fe_{0.3}$-alloy based compact and the free powder bed Ivan Romanov, Vasily Borzenko and Alexey Kazakov
11:20 - 11:40		Search for New Compositions for Cathode Materials In MnO2 Secondary Alkaline Batteries Necdet Özgür Darıcıoğlu, Yiğit Akbaş and Tayfur Ozturk	Uncovering the influence of the surface oxidation on hydrogen absorption/desorption process of magnesium ultra-thin films Miguel Blanco, Carlos Morales, Fabrice Leardini, Jan I. Flege, Jose-Francisco Fernández, Isabel J. Ferrer and Jose-Ramón Ares
11:40 - 12:00		The effect of crosslinked binders on electrochemical performance of MnO2 cathode in zinc-ion aqueous electrolyte Selin Sariyer and Rezan Demir-Cakan	Developing Hydrogen Separation Dense Metallic Membrane Based on Pd-Mn-Ag Ternary alloy Mehmet Mert Köse, Hilal Aybike Can, Fatih Piskin and Tayfur Öztürk
12:00 - 12:20		New Cathode Compositions for Mildly Acidic Zn/MnO_2 Batteries Yiğit Akbaş, Necdet Özgür Darıcıoğlu and Tayfur Öztürk	High pressure hydrogen storage performance of Basolite® MOFs Sergey Chuvikov and Semen Klyamkin
12:20 - 13:30		Lunch Break	

	September 16th Thursday 2021 (Afternoon)	
	Chair: Önder Metin	**Chair: Mykhaylo Lototskyy**
	Metal Air Batteries	**Hydrogen Storage and Separation-II**
13:30 - 13:50	Bifunctional gas-diffusion electrodes based on carbon free materials Emiliya Mladenova, Miglena Slavova, Borislav Abrashev, Valentin Terziev, Blagoy Burdin and Gergana Raikova	Experimental Research of Metal Hydride-Based Heat Storage System Processes Alexander Bezdudny, Dmitri Blinov and Vasiliy Borzenko
13:50 - 14:10	Lithium and Oxygen Adsorption at the α-MnO2 surface Doaa A. Ahmed, Tuğrul Çetİnkaya, Abdulkadir Kizilaslan and Hatem Akbulut	Effect of Heterointerfaces on the Electrical Conductivity of $BaZr_{0.80}Y_{0.20}O_{3-\delta}$ - $SrCe_{0.95}Yb_{0.05}O_{3-\delta}$ Composite Thin Films Taner Özdal, Gülhan Çakmak, Berke Pişkin and Fatih Pişkin
14:10 - 14:30	Analysis of key materials and cell design parameters for high capacity lithium-oxygen batteries using machine learning Aysegul Kilic, Damla Eroglu and Ramazan Yildirim	Electrochemical performance of AB_5 type metal hydride electrodes with carbon nanotubes Alexey Kazakov, Dmitry Blinov, Natalia Zaytseva and Alexey Volodin
14:30 - 14:50	Enhancement of the Stability and Ionic Conductivity of Quasi Solid Li-O2 Batteries Using Double Layer Gel Polymer Electrolytes Mustafa Çelik, Samet Usta, Tuğrul Çetinkaya and Hatem Akbulut	Structure investigation of multi-base-component alloys and their hydrides Artem Korol, Vladislav Zadorozhnyy, Elena Berdonosova, Mikhail Zadoroznhyy, Semen Klyamkin and Polina Borisova
14:50 - 15:00	Short Break	
	Chair: Fermin Cuevas	
15:00 - 15:30	How to increase the catalytic efficacy of platinum-based nanocatalysts for hydrogen generation from the hydrolysis of ammonia borane Saim Özkar	
15:30 - 16:00	Photoelectrochemical Water Oxidation using BiVO4 Photoanodes Sarp Kaya	
16:00 - 16:30	How A-site doping strategy influences the OER activity on La-based parent perovskite oxides through oxidation state and lattice distortion Cigdem Toparli	
16:30 - 17:00	From model-type thin film electrodes to 3D porous cermets and beyond Alexander Opitz	
17:00 - 17:30	Energy-Efficient Hardware and Intelligent Materials for Brain-inspired Computing: Artificial Synapses Based on Proton and Oxygen Motion Bilge Yıldız	
17:30 - 18:30	Break	
18:30-20:00		

	September 16th Thursday 2021 (Evening)
	Poster Session
September 16th Thursday 2021 (Evening) Poster Session	**Chairs: Akif Aliyev, Begum Yarar Kaplan, Şaban Patat and all Session Chairs**
	Development of Borides/Borates for Energy Storage Devıces Doruk Bahtiyar and Mehmet Kadri Aydınol
	Synthesis and Performance of Mixed Metal Sulfides as Electrode Materials for Lithium-based Battery Systems Cansu Savaş Uygur and Mehmet Kadri Aydınol
	Effect of storage on the elctrochemical performanse of LiMnO2 Krum Banov, Iliyan Popov, Dimka Ivanova and Branimir Banov
	Effect of micro-fluidization on the crystal structure and electrochemical performance of layered-oxide cathodes Semih Engün, K. Burak Dermenci, Umut Savacı and Servet Turan
	LFP battery aging study: selecting batteries for reuse in a second life William Wheeler, Ali Sari, Pascal Venet, Yann Bultel, Elie Rivière and Frédéric Meniere
	Ni-Rich $LiNi_xMn_yCo_zO_2$ (x>0.6) Cathode Material Development for Li-Ion Battery via Sol-Gel Method Mustafa Alp Yildirim and Mehmet Kadri Aydınol
	Production of high C-rate LiFePO4 cathode boosting with Graphene for Li-ion Batteries Ali Jamal Abdulkareem, Tuğrul Çetinkaya, Mahmud Tokur and Hatem Akbulut
	Peach stone supported Fe3O4 particles for environmental friendly anode for Lithium – ion batteries Krum Banov, Iliyan Popov, Simeon Stankov, Ofeliya Kostadinova and Branimir Banov
	The Effect of Synthesis Method on Electrochemical Performance of O_3- $Na_{0.9}Mn_{0.48}Fe_{0.30}Cu_{0.22}O_2$ Cathode Material for Sodium-Ion Batteries Yakup Yılmaz , Şaban Patat and Tayfur Öztürk
	Cobalt-free, high-nickel $LiNi_{0.8}Mn_{0.15}Al_{0.05}O_2$/graphene aerogel composites as cathode materials for lithium-ion batteries Deniz Kuruahmet, Sıdıka Yıldırım, Hatice Güngör, Aslıhan Güler, Mehmet Oğuz Güler and Hatem Akbulut
	Composite anode based on red phosphorus for lithium-ion batteries Zarina Yelemessova, Assemay Nauryzbayeva, Aiym Mashekova, Aliya Mukanova and Zhumabay Bakenov
	Silicon/Lithium Alloy Anode Material for Lithium Sulfur Batteries Muhammed Osman Numan Oğuz, Hatem Akbulut and Mahmud Tokur
	Photovoltaic Industry Waste as a Sustainable Source of High Capacity Li-ion Battery Anodes Mehmet Nevzat Duman and Mehmet Kadri Aydınol
	N and B Co-Doping Hierarchical Porous Carbon Anode for Li-ion Battery Hatice Gungor, Deniz Kuruahmet, Sıdıka Yildirim, Aslıhan Guler, Mehmet Oğuz Guler and Hatem Akbulut
	Ni-rich $LiNi_{0.8}Co_{0.15}Al_{0.05}O_2$ nanoparticles / graphene aerogel cathode material for lithium ion batteries Deniz Kuruahmet, Sıdıka Yıldırım, Hatice Güngör, Aslıhan Güler, Mehmet Oğuz Güler and Hatem Akbulut
	Investigation of the Calendering Parameters for High Energy Density Lithium Ion Battery Electrodes Muhammet Barış Ekici, Mahmud Tokur and Mustafa Akçil
	Modeling the distribution of ions in a electrolytic capacitor Jami Torki, Ali Sari and Charles Joubert
	Effective Cathode Slurry Preparation for Ni-MH Batteries Necdet Özgür Darıcıoğlu, Yiğit AkbaŞ and Tayfur Ozturk
	P[Th_3CNTT-TPA] based electrode material for supercapacitors Sema Topal, Sebahat Topal, Garen Suna, Belkıs Ustamehmetoğlu, Turan Öztürk and Esma Sezer

Synthesis of carbon encapsulated tin nanoparticles by induction thermal plasma as anode for Na-ion batteries Aylin Elçi and Tayfur Öztürk
Ultrasonic Spray Deposition of Cobalt Based Metal Organic Frameworks for Textile-Based Supercapacitor Electrodes Mete Batuhan Durukan, Asude Cetin, Tufan Bolukbasi and Husnu Emrah Unalan
Supercapacitor Based on Functionalized Carbon Materials and Room Temperature Ionic Liquid Ayse Korkut and Betul Uralcan
Optimization of energy density in supercapacitors by utilizing a Hybrid Artificial Neural Network-Genetic Algorithm Betül Uralcan and Duygu Kaya
Enhancing the OER activity of benchmark BaSrCoFeO6 electrocatalyts through A-site doping strategy Tuncay Erdil, Ersu Lökçü and Çiğdem Toparlı
Effect of Fe Alloying On The Electrochemical Performance and Long-Term Stability of Ni Thin Film Electrodes Mustafa Ünsal Ünver and Aligül Büyükaksoy
Artificial Neural Network (ANN) for Pressure- Concentration- Temperature (P-C-T) curves of metal hydrides. Ziphezinhle Khethiwe Simelane
Sulfonated Silica-Based Proton Conductive Hybrid Electrospun Membranes for Low Humidity Operation of PEM Fuel Cells Naeimeh Rajabalizadeh Mojarrad, Ahmet Can Kırlıoğlu, Selmiye Alkan Gürsel and Begüm Yarar Kaplan
Characterization of CdS thin films electrodeposited on conductive glass for application in solar cells Shikhamir Eminov, Akif Aliyev, Jafar Guliyev, Khuraman Jalilova and Vusala Majidzade
Effect of B-site dopant on the structural properties of $La_{0.2}Na_{0.8}Al_{0.3}M_{0.7}O_3$ (M=Mn and Mg) perovskite oxides Müzeyyen Özdemir and Berke Piskin
High Performance LSF based fuel electrodes for Solid Oxide Fuel Cells Buse Bilbey and Aligül Büyükaksoy

Design Exhibition
Design Requirements and Materials Selections for Battery Packs in Electric Vehicles Salih Alçın, Sebnem Temel, Hande Ozturk, Cahit Günes and Gurkan Pekoz
Design Requirements and Roadmaps for Cathodes Used in Electric Vehicles, Yiğit Hamza Yıldız, Selahattin Cat, Fatih Kaan Gullu and Sertac Celik
A Comparative Study on Recycling Methods for Lithium-Ion Batteries Orhun Oguz, Oytun Berkman, Yunus Emre Gul, Ahmet Suat Gursoy, Emre Bayboga, Ozgul Keles and Sebahattin Gurmen
Anode Design Requirements and Materials Selection for Electric Vehicles, Arda Durer, Elif Sarikas, Yagiz Arslan, Melike Korkman, Anil Savran, Ozgul Keles and Sebahattin Gurmen
Design of 1 MW Energy Storage System for Renewable Energy- Li-ion Batteries Berkhan Karadede, Özge Karataş, İbrahim Dereli, Cansu Şimşek, Aykut Şahbazoğlu, Eren Sefer
Design of Solar Battery Storage System for a Residential Home Salim Karsanbaş, Berke Pişkin, Gülhan Çakmak and Fatih Pişkin
Design of 1 MW Energy Storage System for Renewable Energy- Li-ion Batteries Berkhan Karadede, Özge Karataş, İbrahim Dereli, Cansu Şimşek, Aykut Şahbazoğlu, Eren Sefer
Design of 1MW Energy Storage System for Renewable Energy- Flow Batteries Ali Ataberk Ergün, Mustafa Itri Gercek, Beril Özlen, Gözde Öztürk

September 17th Friday 2021 (Morning)

	Chair: İbrahim Pamuk		
09:00 - 09:25	Thermally-driven hydrogen compression utilizing metal hydrides Mykhaylo Lototskyy		
09:25 - 9:50	Composition design, preparation techniques and hydrogen storage properties of high entropy alloys Semen Klyamkin, Vladislav Zadorozhnyy, Elena Berdonosova, Mikhail Zadorozhnyy, Artem Korol and Ivan Savvotin		
09:50 - 10:15	Feasibility study of fuel cell powered forklift truck Gojmir Radica, Ivan Tolj, Michael Lototskyy and Sivakumar Pasupathi		
10:15 - 10:40	Transient CFD Analysis of 1 kW Air-Cooled PEM Fuel Cell Stack During Startup Ivan Tolj, Gojmir Radica and Željko Penga		
10:40 - 11:00	Coffee Break		
	Chair: Damla Eroglu Pala	**Chair: Saim Özkar**	**Chair: H. Emrah Unalan**
	Flow Batteries	**Catalyst and Active Material Synthesis**	**Supercapacitors-II**
11:00 - 11:20	The effects of heat treatment on the felt electrodes in Vanadium Redox Flow Battery Mert Taş and Gülşah Elden	Structure evolution of Ti_xO_y photocatalysts from the molecular form to the amorphous state: post-ultraviolet illumination effects Ezgi Onur Şahin, Yitao Dai, Candace K. Chan, Harun Tüysüz, Wolfgang Schmidt, Joohyun Lim, Siyuan Zhang, Christina Scheu and Claudia Weidenthaler	Synthesis of Biomass-derived hierarchical porous carbon for supercapacitor electrode material Murat Yılmaz and Müslüm Demir
11:20 - 11:40	A Numerical Analysis on Vanadium Redox Flow Battery Based on Different Nafion Membranes Phil Jacques Alphonse and Gülşah Elden	Effect of lateritic Ni ores on the crystal structure and electrochemical properties of NMC cathodes Semih Engün, Burak Dermenci and Servet Turan	Development of Activated Carbon / Bimetallic Transition Metal Phosphide Composite Materials for Electrochemical Capacitors and OER Catalysis Kadir Özgün Köse and Kadri Aydınol
11:40 - 12:00	Investigation of electrocatalysts containing single, binary, ternary, and quaternary metal ions deposited on graphite electrode for vanadium redox battery Niyazi Özçelik, Zeliha Ertekin, Nuran Özçiçek Pekmez and Kadir Pekmez	Recovery of Li,Ni,Co and Mn From Spent Lithium-ion Batteries Fırat Tekmanlı, Şerif Kaya and Kadri Aydınol	Ti_3C_2 MXene Supercapacitor with Thin Film h-BN Separator Alptekin Aydinli, Xuehang Wang, Husnu Emrah Unalan and Yury Gogotsi
12:00 - 12:20	Nanoporous Ni Surface Modification by Electrochemical Dealloying Taner Özdal and Fatih Pişkin	Effect of carbon support type on anode electrocatalyst for EOR performance Emine Sena Kazan, Mahmut Bayramoğlu and Canan Arslan	Double layered hydroxide (Ni-Co)OOH for energy storage application Nourhan Mohamed, Ozden Gunes Yildiz and Mustafa Urgen
12:20 - 13:30	Lunch Break		

		September 17th Friday 2021 (Afternoon)
		Chair: Olivier Joubert
13:30 - 13:50		Hydrogen generation by PEM electrolysis - a numerical investigation Elena Carcadea, Mihai Varlam, Daniela Ion-Ebrasu, Konstantin Petrov, Catalin Jianu, Laurentiu Patularu and Dorin Schitea
13:50 - 14:10		Effect of Boron Doping on the Layered Iron Nickel Sulphide Nanosheets for Electrochemical Hydrogen Evolution Reaction Esaam Jamil, Begüm Yarar Kaplan, Selmiye Alkan Gürsel and Alp Yürüm
14:10 - 14:30		Impact of Anode Loading on the CO Tolerance of $Ti_{0,8}Mo_{0,5}O_2$-C supported Pt Electrocatalyst Ceyhun Yildirim, Emine Sena Kazan, Osman Ozturk, Irina Borbath, Andras Tompos and Mehmet Suha Yazici
14:30 - 14:50		High Performance electrospun Pt/C/Sulfonated Silica/P(VDF-TrFE) fibrous cathodes for PEM fuel cells Bilal Iskandarani, Selmiye Alkan Gürsel and Begüm Yarar Kaplan
14:50- 15:10		Heterogeneous A-site Deficient / Stoichiometric (La, Ca)CoO3 Electrodes for Solid Oxide Cells Mehmet Sezer, Ali Şems Ahsen and Aligül Büyükaksoy
15:10 - 15:30		Coffee Break

		September 17th Friday 2021 (Late Afternoon)
		Chair: Kadri Aydınol
15:30 - 16:00		Replacement of Cobalt with Copper in NCA Cathode Materials Ozgul Keles and Dila Sivlin
16:00 - 16:30		Refinement of Metal Sulphates and Synthesis of NMC Cathode for Li-ion Batteries from Gördes Ni-Co Deposits. Serif Kaya
16:30 - 17:00		Development of rechargeable zinc manganese dioxide batteries from concept through product to market Sanjoy Banerjee
17:00 - 17:30		Current Status and Future Prospect of Li-Ion Battery Technology in Turkey Ahmet Altınay
17:30 - 17:40		Short Break
17:40 - 18:00		**Closing session (Awards)**