

<b>mESC-IS 2019 Program</b>	
<b>September 10th Tuesday 2019</b>	
14:00 - 20:00	Registration

<b>September 11th Wednesday 2019</b>	
08:30 - 17:30	Registration
08:15 - 08:50	Opening Session
08:50 - 09:30	Hall A Chair: <b>Dag Nerous</b> Organic-based aqueous flow batteries for massive electrical energy storage <b>Michael J Aziz</b> (121)
09:30 - 10:00	Aqueous Electrolyte Rechargeable Metal-ion Batteries, <b>Rezan Demir Çakan</b> (132)
10:00 - 10:30	A Novel Air-Stable O <sub>3</sub> -Type Layered Oxide Cathode for Sodium-Ion Batteries, <b>Şaban Patat</b> (135)
10:30 : 11:00	Coffee Break

<b>September 11th Wednesday 2019</b>			
	Hall A Chair: <b>TBA</b>	Hall B Chair: <b>TBA</b>	Hall C Chair: <b>TBA</b>
11:00 - 11:20	Electrochemical polymerization of polypyrrole pyridine carboxylic acid composites and its electrochemical performances as cathode of lithium ion batteries Derya Kızılelma, <b>Zeliha Ertekin</b> and Kadir Pekmez (86) withdrawn	Self-standing Ni nanowire-based electrodes produced by template-assisted electrodeposition for super-capacitors applications <b>Nourhan Mohamed</b> and Mustafa Urgan (21)	Proton conductivity in BCY10 in nominally dry reducing conditions <b>Francisco Loureiro</b> , Domingo Pérez-Coll, Vanessa Graça, Sergey Mikhalev, Alejandro Ribeiro, Adélio Mendes and Duncan Fagg (120)
11:20 - 11:40	Novel Zirconium based Active Material Synthesis and Performance as a Li-ion Battery Electrode <b>Cansu Savaş Uygur</b> and Mehmet Kadri Aydınol (19)	Carbon Nanoflake - Manganese Dioxide Nanocomposite Supercapacitor Electrodes <b>Alptekin Aydinli</b> , Gülhan Çakmak, Tayfur Öztürk and Hüsnü Emrah Ünalın (41)	Influence of Processing Conditions on the Electrochemical Performance of Ni-YSZ Thin Film Anodes Prepared by Polymeric Precursor Deposition <b>Buse Bilbey</b> , Meltem Sezen, Cleve Ow-Yang and Aligül Büyükaksoy (68)
11:40 - 12:00	Graphene and MWCNT based freestanding thin film NCA cathode electrodes <b>Hatice Gungor</b> , Deniz Kuruahmet, Esmâ Mert, Ecem Berberî, Mustafa Mahmut Singil, Engin Alkan, Lutfullah Ozdogan, Mehmet Oğuz Güler, Hatem Akbulut and Aslihan Guler (40)	Liquid Phase Exfoliated Graphene as a Sacrificial Template for the Synthesis of MnO <sub>2</sub> Nanoparticles with Superior Capacitance <b>Neriman Sinan</b> and Ece Unur (58)	Fabrication of dense yttria stabilized zirconia coatings and their evaluation as a solid oxide fuel cell electrolyte <b>Batuhan Bal</b> and Aligül Büyükaksoy (65)
12:00 - 12:20	Doping of layered Li(NixMnyCo1-x-y-zMz)O <sub>2</sub> (z=W,Mo) cathode materials for lithium ion batteries <b>Berke Piskin</b> , Cansu Savas Uygur and M. Kadri Aydınol (2)	Development and Characterization of Activated Carbon / Transition Metal Phosphide Composites for Electrochemical Capacitors <b>Kadir Özgün Köse</b> and Kadri Aydınol (72)	Effect of crystal orientation on the segregation of aliovalent dopants at the surface of La <sub>0.6</sub> Sr <sub>0.4</sub> CoO <sub>3</sub> <b>Fatih Pişkin</b> , Roland Bliem and Bilge Yildiz (1)
12:20 - 14:00	Lunch Break		

**September 11th Wednesday 2019**

Hall A Chair: <b>Michael Aziz</b>			
14:00 - 14:30	Hydrides as conversion-type anodes for Li-ion batteries, <b>Fermin Cuevas</b> (122)		
14:30 - 15:00	Electrochemical evaluation of Li <sub>1.3</sub> Al <sub>0.3</sub> Ti <sub>1.7</sub> (PO <sub>4</sub> ) <sub>3</sub> (LTP) electrolytes for solid state battery applications <b>Mehmet Oguz Guler</b> , Ozgur Cevher, Aslihan Guler, Deniz Nalci, Hatice Gungor, Mustafa Mahmut Singil, Engin Alkan, Lütfullah Özdoğan and Hatem Akbulut (43)		
15:00 - 15:30	Operando XPS for a direct monitoring of the chemical and electronic properties of the electrolyte-electrode interfaces in all-solid-state batteries <b>Mario El Kazzi</b> (124)		
15:30 - 16:00	Impedance and Noise Analyses of Non-rechargeable and Rechargeable Batteries <b>Burak Ülgüt</b> (128)		
16:00 - 16:30	Developing Strategies for Solid Electrolytes Towards All Solid State Batteries, <b>Servet Turan</b> (139)		
16:30 - 17:00	Coffee Break		
	Hall -A Chair: <b>TBA</b>	Hall-B Chair: <b>TBA</b>	Hall C Chair: <b>TBA</b>
17:00 - 17:20	Porous Si, Si/C and SiC thin films as the anodes for lithium ion microbatteries <b>Aliya Mukanova</b> , Assel Serikazyeva, Arailym Nurpeissova, Sung-Soo Kim, Maksym Myronov and Zhumabay Bakenov (15)	Hierarchical Hybrid Electrodes Based on Polyaniline Coated Manganese oxide/Graphene Embedded Carbon Fibers for High Performance Supercapacitors, <b>Leila Haghighi Poudesh</b> , Fevzi Çakmak Cebeci, Yusuf Menceloğlu, Mehmet Yildiz and Burcu Saner Okan(17)	The Development of LaSrCoO <sub>3</sub> Thin Film Cathodes For Solid Oxid Fuel Cells <b>Sevim Erdol</b> , Meltem Sezen, Cleve Ow-Yang and Aligül Buyukaksoy (70)
17:20 - 17:40	Mechanochemical Synthesis of SnS Anodes for Sodium Ion Batteries <b>Mehbare Dogrusoz</b> and Rezan Demir-Cakan (114)	Yolk-shell Fe <sub>3</sub> O <sub>4</sub> @Carbon Nanostructures as Supercapacitor Electrode Materials <b>Neriman Sinan</b> and Ece Unur (57)	Synthesis of Dual Phase Cathodes for IT-Solid Oxide Cells via Thermal Plasma, <b>Havva Eda Aysal</b> , Dogancan Sari, Fatih Piskin and Tayfur Ozturk(18)
17:40 - 18:00	Nano-magnetite decorated graphene oxide aerogels for high-capacity and stability Li-ion battery anodes <b>Buse Bulut Köpüklü</b> , Adnan Taşdemir, Alp Duman, Selmiye Alkan Gürsel and Alp Yürüm (60)	Contribution of polyaniline coating to the stability and performance of nickel hydroxide based supercapacitor electrodes <b>Berke Karaman</b> , Nourhan Mohamad, Burçak Avcı and Mustafa Ürgen (51)	Characterization of porous membranes modified by plasma-induced grafting as interelectrode separators in alkaline water electrolysis cell <b>Lubomír Staňo</b> , Michal Stano and Pavol Ďurina (75)
18:00 - 18:20	Green synthesis of silicon nanoparticles for high energy Li-ion battery applications <b>Engin Alkan</b> , Mustafa Mahmut Singil, Aslihan Guler, Mehmet Oguz Guler and Hatem Akbulut (36)	Optimization of Graphene Synthesis by Electrochemical Exfoliation of Graphite <b>Vahit Kurt</b> and M.Kadri Aydinol (30)	Ni@Pt/C Two Layer PEM Fuel Cell Electrocatalyst Preparation via Magnetron Sputtering Method <b>Sonnur Kurtuluş</b> and Ayşe BayrakÇeken Yurtcan (78)

**September 12th Thursday 2019**

	Hall A <b>Chair: Andras Tompos</b>		
08:15- 08:45	Magnetically separable metal(0) Nanocatalysts for hydrogen generation from the hydrolysis of ammonia borane <b>Saim Özkar</b> (126)		
08:45 - 09:15	Graphene-based technologies for energy applications, challenges and perspectives <b>Selmiye Alkan Gürsel</b> (53)		
09:15 - 9:45	Synthesis and characterization of ferrocene-functionalized reduced graphene oxide nanostructure via click reaction as a supercapacitor electrode material, <b>Bahadır Keskin</b> , Burak Erdemir(102)		
9:45 - 10:15	Flexible Supercapacitor Electrodes with Silver Nanowire Networks <b>Emrah Ünalın</b> (129)		
10:15-10:45	Recent Developments in Supercapacitor Material Research <b>Mustafa Ürgen</b> (141)		
10:45 - 11:15	Coffee Break		
	Hall A <b>Chair: TBA</b>	Hall B <b>Chair: TBA</b>	Hall C <b>Chair:TBA</b>
11:15 - 11:35	Synthesis of Electroactive Materials for Suspension based Flow Assisted Batteries <b>Bayram Yıldız</b> , Yasemin Aşkar and Simge Çınar (89)	Green approach for highly efficient synthesis of N/S-doped porous bio-carbon and its supercapacitor electrode performance, <b>Muslum Demir</b> and Osman Cem Altıncı(115))	The effect of flow field design on large scale PEM fuel cells , <b>Elena Carcadea</b> , Mihai Varlam, Laurentiu Patularu, Dorin Schitea, Derek Ingham and Mohammed S. Ismail(95)
11:35 - 11:55	High Cyclability rGO/Pd/a-MnO <sub>2</sub> Nanocomposite For Lithium-Air Battery Utilized As Air Breathing Cathode <b>Ahmed Waleed Majeed Al-Ogaili</b> , Hatem Akbulut and Tuğrul Çetinkaya (37)	Linear and Nonlinear Electrochemical Impedance Spectroscopy Studies of Li\SOCl <sub>2</sub> Primary Batteries <b>Mohammed Ahmed Zabara</b> , Can Bark Uzundal and Burak Ulgut (42)	Development of Novel Hybrid Electrospun Membranes for PEM Fuel Cells Naeimeh Rajabalzadeh, Adnan Taşdemir, Alp Yürüm, Selmiye Alkan Gürsel and <b>Begüm Yarar Kaplan</b> (44)
11:55 - 12:15	Biosynthesized MnO <sub>2</sub> Nanowires for Carbon-Free Air Breathing Cathode to Enhance Cyclability of Li-O <sub>2</sub> Battery <b>Sara Pakseresht</b> , Mihrac Halebi, Hatem Akbulut and Tuğrul Çetinkaya (34)	Continuous synthesis of graphite with tunable interlayer distance <b>Gülhan Çakmak</b> and Tayfur Ozturk(3)	Nitrogen-doped Carbon Derived from ZIF-8 as Platinum Catalyst Support for PEM Fuel Cells <b>Mohamed Ali Mohamud</b> and Ayşe BayrakÇeken Yurtcan (22)
12:15 - 12:35	Enhance oxygen electrocatalysis activity and stability by optimizing electronic metal-support interaction between binary metal carbide and nitrogen doped carbon <b>Chao Lin</b> and Jung-Ho Lee (11)	Synthesis of graphene aerogel by reducing graphene oxide suspension for energy storage systems <b>Sidika Yıldırım</b> , Deniz Kuruahmet, Hatice Güngör, Aslıhan Güler, Mehmet Oğuz Güler and Hatem Akbulut (45)	Synthesis of Platinum Nanocrystals in Cubic Shapes Supported on N-Doped Carbon as PEM Fuel Cell Catalyst <b>Ayşenur Öztürk</b> and Ayşe BayrakÇeken Yurtcan (63)

12:35 - 14:45	<b>Poster Session and Lunch</b>
	<b>Poster Session: Batteries &amp; Supercapacitors</b>
	Cost of Ownership for Electric Vehicles of Different Types – the Comparative Analysis <b>Evgeny Buzoverov</b> and Andrey Zhuk (23)
	Express diagnostics of chemical power sources using impedance spectroscopy on the example of lithium tionile – chloride elements Evgeny Shkolnikov, <b>Elena Petrenko</b> , Valentina Semenova and Daria Vervikishko (26)
	Electrochemical Noise Measurements and Their Chemical Origins in Primary Li Batteries <b>Gözde Karaoğlu</b> , Can Berk Uzundal and Burak Ulgut (52)
	Structural and Electrochemical Performance of Mo-Doped Li(Ni <sub>0.8-x</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> )O <sub>2</sub> Cathodes for Li-Ion Batteries <b>Cansu Savaş Uygur</b> , Berke Piskin and Kadri Aydinol (10)
	Perspective Cathode Material for Li-ion Batteries Based on Spinel Type Compounds: LiMeNi <sub>0.5-x</sub> Mn <sub>1.5</sub> O <sub>4</sub> , where Me = Fe and x = 0.1 ÷ 0.4 <b>Eteri Kachibaia</b> , Rupi Imnadze and Tamar Paikidze (14)
	Synthesis of cathode composite powders from methylcellulose matrix: Li <sub>2</sub> FeSiO <sub>4</sub> /C, Li <sub>2</sub> FeP <sub>2</sub> O <sub>7</sub> /C and LiFePO <sub>4</sub> /C <b>Miloš Milović</b> , Dragana Jugović, Miodrag Mitrić, Maja Kuzmanović, Milica Vujković and Dragan Uskoković (27)
	Thermal behaviors of lithium and hydrogen in LiCoO <sub>2</sub> positive electrode and LATP electrolyte at charging process <b>Bun Tsuchiya</b> , Ryo Kato, Shunya Yamamoto and Katsumi Takahiro (84)
	Ni-Rich LiNi <sub>x</sub> Mn <sub>y</sub> Co <sub>z</sub> O <sub>2</sub> (x>0.6) Cathode Material Development for Li-Ion Battery via Sol-Gel Method <b>Mustafa Alp Yildirim</b> and Mehmet Kadri Aydinol (85)
	Synthesis and characterization of nanostructured LiMnO <sub>2</sub> and Li <sub>2</sub> MnO <sub>3</sub> prepared by different methods <b>Krum Banov</b> and Branimir Banov (87)
	Synthesis methods influencing electrochemical characteristics of NMC 811 <b>Krum Banov</b> and Branimir Banov (88)
	Synthesis and characterization of NMF cathode active materials for Li-ion batteries Berke Piskin, Gulhan Cakmak, <b>Nilay Harmanci</b> and Silan Demir (118)
	Effect of structural and chemical properties of carbonaceous anode materials on electrochemical performance for lithium-ion batteries <b>Yağmur Güner</b> , Kamil Burak Dermenci and Servet Turan (28)
	CeO <sub>2</sub> based catalyst nanostructures for high capacity Li-air battery electrodes <b>Adnan Tasdemir</b> , Sezer Seçkin, Emre Biçer, Alp Yürüm and Selmiye Alkan Gürsel (67)
	Electrochemical Characterization and Modeling of the Effect of Electrolyte-to-Sulfur Ratio on the Cell Resistance in Li-S Batteries <b>Aysegul Karakus</b> and Damla Eroglu (104)
	A new concept in flow assisted energy storage: suspension electrode approach Bayram Yıldız, Yasemin Aşkar and <b>Simge Cınar</b> (92)
	Research and development of high-performance carbon materials for electrochemical power sources Evgeny Shkolnikov, <b>Egor Novaev</b> , Evgeny Vasiliev, Svetlana Kochanova, Irina Lipatova, Daria Vervikishko, Andrey Gavriluk and Renat Khakimov (29)
	Development of Carbon-Free Bio-Titanium Oxide Cathode Materials For Li-O <sub>2</sub> Batteries <b>Mihrac Halebi</b> , Sara Pakseresht, Tugrul Cetinkaya and Hatem Akbulut (55)
	MoS <sub>2</sub> Based Free Standing Electrodes With Graphene Support for Li-Air Batteries <b>Busra Korkusuz</b> , Hatem Akbulut and Tugrul Cetinkaya (59)
	NASICON-type Fe <sup>3+</sup> substituted LiZr <sub>2</sub> (PO <sub>4</sub> ) with improved ionic conductivity as solid electrolyte <b>Semih Engun</b> , K. Burak Dermenci and Servet Turan (94)
	Asymmetric high-capacitive pseudosupercapacitors: Synergetic effect of ZnO nanocrystals and graphene foam, <b>Maryam Toufani</b> and Emre Erdem (117)
	Supercapacitive properties of Cobalt Metal Organic Framework Decorated Nickel Sulfate Nanowires Directly Grown on Nickel Foam <b>Farzaneh Hekmat</b> and Husnu Emrah Unalan (73)
	Wearable Supercapacitors Based on Hierarchical Nickel Tungsten Trioxide@Nickel Oxide <b>Farzaneh Hekmat</b> , Husnu Emrah Unalan and Yusuf Tutel (74)

Investigation of Defect Structures by Electron Paramagnetic Resonance (EPR) Spectroscopy in Electrode Materials for Hybrid Supercapacitors <b>Sumaiyah Najib</b> and Emre Erdem (116)
Fabrication of Conductive Electroactive Materials for Next-Generation Suspension Flow Batteries , <b>Yasemin Aşkar</b> , Bayram Yıldız and Simge Çınar(91)
Synthesis and Characterization of Composite Active Cathode Materials for Lithium-Ion Batteries , <b>Erdem Erkin Erdoğan</b> and Mehmet Kadri Aydınol(46)
A Green Battery for Large Scale Energy Storage Applications ,Berfu Karlı and <b>Mehmet Kadri Aydınol</b> (9)
Electrochemical properties of novel O3-NaMn5/12Fe2/12Ni5/12 as a cathode material for sodium-ion batteries, <b>Ayşe Şahin</b> , Nur Şaşmaz, Yusuf Taş, Şaban Patat and Tayfur Öztürk (136)
Improving the performance of Sn based anodes for Na-ion batteries , <b>Aylin Elçi</b> and Tayfur Öztürk(8)
Topological analysis and large-scale computational screening for solid Li-ion superconductor candidates , <b>Mert Övün</b> (12)
Development and Characterization of Anode Materials for Aqueous Lithium Ion Batteries , <b>Batuhan Kara</b> and Kadri Aydınol(48)
Raman studies of lithiated Si thin films with various doping types. <b>Assel Serikkazyeva</b> , Aliya Mukanova, Arailym Nurpeissova and Zhumabay Bakenov (137)
Fe doped MnO2 positive electrode for rechargeable Zn-MnO2 Batteries, <b>Yiğit Akbaş</b> , Necdet Özgür Daricioğlu and Tayfur Öztürk (138)

#### Poster Session: : Fuel Cells and Electrolyzers

Development of LSF Based Cathode Material for IT-SOFC , <b>Fahrettin Kılıç</b> , Havva Eda Aysal and Tayfur Öztürk(7)
Cu-doped La2NiO4+δ as Co- and Ca,Sr,Ba-free electrode materials for protonic ceramic fuel cells Artem Tarutin, Julia Lyagaeva, Andrey Farlenkov, Alexey Vylkov and <b>Dmitry Medvedev</b> (20)

#### Poster Session: Hydrides for Energy storage and Conversion

Hydrogen Storage Properties of Oxygen modified AB2 type Metal Hydride Alloy <b>Moegamat Wafeeq Davids</b> , Tayla Chire Martin, Mykhaylo Lototskyy, Roman Denys and Volodymyr Yartys (33)
Influence of electrostatic field on the interaction of AB5-type alloy LaNi4.4Al0.3Fe0.3 with hydrogen <b>Ivan Romanov</b> , Vasily Borzenko, Alexey Eronin and Alexey Kazakov (49)
Effect of Pyrophyllite and VO2(B) on hydrogen sorption properties of Mg17Al12 <b>Sandra Kurko</b> , Jelena Rmuš, Tijana Pantić, Ana Mraković, Andjela Mitrović, Jasmina Grbovic Novakovic and Sanja Milošević Govedarović (77)
Hydrogen in Mg-V thin films: TOF-ERDA characterization Tijana Pantic, Bojana Paskas Mamula, Sanja Milosevic Govedarovic, Sandra Kurko, Jasmina Grbovic Novakovic and <b>Nikola Novakovic</b> (100)
Microstructural features and hydrogen sorption behaviour of Mg-Ni eutectic alloy composites with graphene <b>Pavel Fursikov</b> , Adilya Fattakhova, Artem Arbuzov, Alexey Volodin, Valentin Fokin and Boris Tarasov (101)
Metal hydride hydrogen storage systems for power-to-hydrogen technologies <b>Boris Tarasov</b> , Pavel Fursikov, Alexey Volodin, Artem Arbuzov, Volodymyr Yartys and Mykhaylo Lototskyy (113)
Density dependence in hydrogen-storage characteristic of lithium-rich zirconium oxides <b>Bun Tsuchiya</b> , Shimpei Iwane, Tomoko Sugiyama, Hiroki Miyaoka, Takayuki Ichikawa and Yoshitsugu Kojima (61)
Influence of carbon ion irradiation on structural properties of MoS2 <b>Jelena Rmuš</b> , Željko Mravik, Ana Mraković, Tijana Pantić, Sanja Milošević Govedarović, Jasmina Grbović Novaković and Sandra Kurko (71)
Investigation of catalytic properties of MoS2-GO nanostructures for hydrogenation reactions of various functional organic groups <b>Alper Yildirim</b> , Oğuz Bayindir and Bahadır Keskin (97)
MoS2-GO nanostructures as efficient cocatalyst of Zinc Phthalocyanine for water splitting <b>Hiba Messaoudi</b> , Bahadır Keskin and Atif Koca (98)
Development of Perovskite-Oxide based Composites for Hydrogen Production <b>Ömer Özcan</b> and Fatih Pişkin (111)
Nature of bonding in amidoborane molecular chains and solids <b>Nikola Novakovic</b> , Bojana Paskas Mamula and Igor Milanovic (119)
Development of Hydrogen Purification Membrane Based on Pd-Mn-Ag Ternary System , <b>Mehmet Mert Köse</b> and Tayfur Ozturk(13)

**September 12th Thursday 2019**

		Hall A Chair: <b><u>Selmiye Alkan Gürsel</u></b>
14:45 - 15:15		CO tolerant Pt electrocatalysts for PEM fuel cells with enhanced stability against electrocorrosion, <b>Andras Tompos</b> (142)
15:15 - 15:45		Fabrication of Protonic Ceramic Fuel Cells, <b>Duncan Fagg</b> (83)
15:45-16:15		GDC Interlayer on the Performance of Anode Supported Solid Oxide Fuel Cell, <b>Bora Timurkutluk</b> (105)
16:15-16:45		Coffee Break

		Hall A Chair: <b><u>Saim Özkar</u></b>
16:45 - 17:15		"Poly(vinylidene fluoride-co-hexafluoropropylene) based polymer gel electrolytes for all solid state lithium air batteries <b>Tuğrul Çetinkaya</b> (140)
17:15 - 17:45		Modeling discharge Behaviour of Li-S Batteries , <b>Damla Eroglu</b> (103)
17:45 - 18:15		Correlation between formation duration and electrochemically active PbO <sub>2</sub> particle size <b>Hatice Gökdemir</b> , Mehmet Ali Gülgün and Cem Hakan Yılmaz (96)

**September 13<sup>th</sup> Friday 2019**

	Hall A <b>Chair: Semen Klyamkin</b>		
08:15 - 08:45	Adding oxygen and hydrogen gas to NiMH batteries extend cycle life and can be used for basic studies of reaction kinetics and hydrogen diffusion <b>Dag Noréus</b> , Yang Shen and Stina Starborg (82)		
08:45 - 09:15	Effect of surface plasma activation on the Mg2Ni powder hydrogenation mechanism Matas Damonskis, Marius Urbonavicius, Sarunas Varnagiris and <b>Darius Milcius</b> (112)		
09:15 - 9:45	Fuel cell power module for electric forklift with integrated metal hydride hydrogen storage system Mykhaylo Lototskyy, <b>Ivan Tolj</b> , Adrian Parsons, Yevgeniy Klochko, Irshad Khan, Edson Naylor, Maurice Shenker, Ali Brey, Sivakumar Pasupathi and Vladimir Linkov (31)		
9:45 - 10:15	Metal hydride - polymer composites: a novel approach to membrane hydrogen separation <b>Semen Klyamkin</b> , Ivan Savvotin, Peter Konik, Elena Berdonosova, Vladislav Zadorozhnyy and Mikhail Zadorozhnyy (80)		
10:15-10:45	TBA		
10:45 - 11:15	Coffee Break		
	Hall A <b>Chair: TBA</b>	Hall B <b>Chair: TBA</b>	Hall C <b>Chair: TBA</b>
11:15 - 11:35	Dynamic analysis of lithium and hydrogen migrations at Au/LiCoO <sub>2</sub> , LiCoO <sub>2</sub> /LATP, LATP/Pt interfaces in all-solid-state batteries with charging by elastic recoil detection technique <b>Bun Tsuchiya</b> , Taiki Usami, Shunya Yamamoto and Katsumi Takahiro (54)	Cobalt Macrocycles as Pt-free PEM Catalyst <b>Mehmet Suha Yazici</b> and Sumeyye Dursun (16)	Low-Co AB5 intermetallic compounds for electrochemical applications <b>Alexey Kazakov</b> , Dmitry Blinov and Alexey Volodin (50)
11:35 - 11:55	The effect of binders different on LiFePO <sub>4</sub> /Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> full cell lithium ion batteries <b>Lütfullah Özdoğan</b> , Deniz Kuruahmet, Cansu Kose, Aslihan Guler, Hatice Gungor Gungor, Mustafa Mahmut Singil, Engin Alkan, Mehmet Oguz Guler and Hatem Akbulut (38)	Synthesis of Platinum Nanocrystals in Different Shapes Assisted by Various Reductant Concentration and Utilization as PEM Fuel Cell Catalyst <b>Aysenur Öztürk</b> and Ayşe Bayrakçeken Yurtcan (62)	Carbon/Metal Hydride and Carbon/Hydroxide composites for Ni-MH power sources <b>Aleksei Volodin</b> , Artem Sleptsov, Artem Arbuzov, Pavel Fursikov, Alexey Kazakov, Dmitry Blinov and Boris Tarasov (110)
11:55 - 12:15	A Multielement Doping Effect on Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Solid Electrolytes by Using Waste Material <b>Kamil Burak Dermenci</b> , Ahmet Furkan Buluç and Servet Turan (90)	Functionalized graphene as efficient electrocatalyst support material for oxygen reduction reaction in PEM fuel cells <b>Esaam Jamil</b> , Veera Sadhu and Selmiye Alkan Gürsel (66)	Development of cost-effective electrodes for NiMH Batteries <b>Necdet Özgür Darıcioğlu</b> , Yiğit Akbaş and Tayfur Öztürk (5)
12:15 - 12:35	Assembling all-solid-state Lithium-Sulfur batteries: Li <sub>3</sub> PS <sub>4</sub> @Li   Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub>   P <sub>4</sub> S <sub>16</sub> system, <b>Abdulkadir Kızılaslan</b> and Hatem Akbulut(76)	CO Tolerant Pt/Ti <sub>0.8</sub> Mo <sub>0.2</sub> O <sub>2</sub> -C Electrocatalyst for Reformate-fed PEM Fuel Cell <b>Mehmet Suha Yazici</b> , Sumeyye Dursun, Irina Borbath and Andras Tompos (79)	Improving Electrochemical Performance of Aqueous Electrolyte Zn-Cryptomelane MnO <sub>2</sub> with Alginate Film Coated Paper Separator, <b>Selin Sarriyer</b> and Rezan Demir-Çakan(108)
12:35 - 14:00	Lunch Break		

**September 13<sup>th</sup> Friday 2019**

	Hall A Chair: TBA	Hall B Chair: TBA	Hall C Chair: TBA
14:00 - 14:30	Hydrothermally Synthesized Metal Oxide Containing Carbonaceous Material and Its Utilization as Interlayer in Lithium-Sulfur Batteries, <b>Tutku Mutlu</b> , Elif Ceylan Cengiz and Rezan Demir-Cakan (106)	Enhancing Electrochemical Performance of PVDF-HFP Gel Polymer Electrolytes with Different Type of Ceramic Fillers <b>Mustafa Celik</b> , Mustafa Can, Tugrul Cetinkaya and Hatem Akbulut (56)	Characteristics of hydrothermal oxidation of solid aluminum for hydrogen producing <b>Renat Hakimov</b> , Eugene Shkolnikov, Mihail Vlaskin, Andrei Zhuk, Alexander Dolzhenko, Andrei Gavrilyuk and Ilya Gaganov (25)
14:30 - 14:50	SnO <sub>2</sub> /N-doped Carbon Anode Material for SIBs, <b>Meral Aydın</b> , Emrah Demir, Burcu Ünal and Rezan Demir Çakan (107)	Facile Synthesis of Nanorod CuO/ Graphene/ MWCNT Nanocomposites for Li-Ion Batteries <b>Deniz Kuruahmet</b> , Cansu Köse, Aslıhan Güler, Hatice Güngör, Mustafa Mahmut Singil, Engin Alkan, Lütfullah Özdoğan, Mehmet Oğuz Güler and Hatem Akbulut (35)	Performance simulation of combined two-tank latent and thermochemical heat storage systems for high temperature waste heat recovery <b>Serge Nyallang Nyamsi</b> and Mykhaylo Lototskyy (93)
14:50 - 15:10	Biomass derived hard carbons and their tin oxide composites as anode materials for sodium ion batteries, <b>Emrah Demir</b> , Meral Aydın and Rezan Demir-Cakan(109)	The design of a Lithium Ion Full Cell Employing Silicon Based Anode and NMC Based Cathode <b>Mahmud Tokur</b> and Hatem Akbulut (24)	On-board metal hydride thermal energy storage for ICE start preheating <b>Vasilii Borzenko</b> and Alexey Kazakov (81)
15:10 - 15:30	Fabrication, Phase Evolution, Microstructure and Electrochemical Performance of La <sub>0.8</sub> Sr <sub>0.2</sub> FeO <sub>3</sub> – Ce <sub>0.8</sub> Sm <sub>0.2</sub> O <sub>2</sub> Thin Film Air Electrodes for Solid Oxide Fuel Cells <b>Levent Goral</b> , Meltem Sezen, Cleva Ow-Yang and Aligül Büyükaksoy (64)	MOF Derived NiO Nanoparticles as High Performance Anode Materials for Lithium Ion Batteries Sezer Seçkin, <b>Adnan Taşdemir</b> , Emre Biçer, Selmiye Alkan Gürsel and Alp Yurum (69)	Three Dimensional Stress Analysis of Anode Supported SOFC Synthetic Micro Structure Selahattin Çelik, <b>Tolga Altan</b> and Serkan Toros (32 )
15:30 - 15:40	Coffee Break		
	Hall Chair: <b>Inci Eroğlu</b>		
15:40 : 16:10	Latest Trends and Challenges in the Development of Commercial PEM Fuel Cells <b>Hüseyin Devrim</b> (134)		
16:10-16:30	<b>Closing Session</b>		
20:00-23:00	<b>Gala Dinner</b>		