

**APMAS 2019**  
**9<sup>th</sup> INTERNATIONAL ADVANCES IN APPLIED PHYSICS & MATERIALS**  
**SCIENCE CONGRESS & EXHIBITION**

**ENEFM 2019**  
**5<sup>th</sup> INTERNATIONAL CONGRESS ON ENERGY EFFICIENCY AND ENERGY**  
**RELATED MATERIALS**

**Liberty Hotels Lykia, Oludeniz**  
**MUGLA / TURKEY**

<p><b>PROGRAM</b></p> <p><b>POSTER SESSION – II</b></p> <p><b>THURSDAY, OCTOBER 24, 2019</b></p> <p><b>17:30-18:30</b></p> <p><b>(FOYER)</b></p>		
<p><b>Chairperson: Ahmet Yavuz Oral</b></p> <p><b>(SUBMISSION ID 1264-1400 for APMAS 2019)</b></p> <p><b>(SUBMISSION ID 88-167 for ENEFM 2019)</b></p>		
<p><b>APMAS 2019</b></p>		
Id	Title	Contact Author
1264	Effect of Adding Nano-Scoria and Nano-Lime on Geotechnical Properties of the Expansive Clayey Soils	Aref Al-Swaidani
1265	Corrosion Resistance of Electrodeposited Nickel Coating Containing Cr <sub>2</sub> O <sub>3</sub> Particles	Saida Marmi
1266	Sodium Benzoate as a Corrosion Inhibitor for Mild Steel in Na <sub>2</sub> SO <sub>4</sub> Solution	Hayat Marmi
1267	Contribution to the Study of Double-Panel Confined Masonry Walls under Lateral Loading	Mohamed Guenfoud
1269	Structural Behavior of Reinforced Concrete Beams During and after the Cooling Phase of Fire	Mohamed salah Dimia
1270	Metallurgical and Mechanical Behavior Study of the Lamellar Gray Cast Iron Treated with Cupper Cu	Azzoug Mohammed Oubelkacem
1271	Optical Detection of Catechol Using Tyrosinase-Modified Porous	Kahina Lasmi

	Silicon	
<b>1273</b>	Effect of Recycled Aggregates on the Resistance of Bituminous Concrete with Additives	Mohamed Guenfoud
<b>1274</b>	Removal of Fuchsin Dye in Aqueous Solution via Polystyrene Modified with Oleic Acid	Salima Aitali
<b>1276</b>	Design Method of Flexible Continuous Footings on Swelling Clayey Soils	Ferrah Ferrah
<b>1278</b>	Undoped and Doped Si Nanowires for Surface-Enhanced CO Sensing	Mounir Gaidi
<b>1279</b>	Structural and Spectral Properties of Nanoceramic Materials Based on Non-Stoichiometric Calcium Phosphate	Guerfi Souad
<b>1282</b>	Source Term Evaluation for Research Reactor	Hassane Graine
<b>1284</b>	Thermoelectrics in Lanthanum Rare-Earths; A Case Study of LaCoCrIn	Srishti Singh
<b>1285</b>	Electrical Measurements of CdSe Reinforced Polyaniline Nanocomposites for Diode Applications	Rashmi Singh
<b>1286</b>	Modeling and Simulation of Industrial Reactors with Non-Uniform Bifunctional Catalyst Applied in Catalytic Reforming of Naphtha	Tayeb Fakhreddine Boukezoula
<b>1287</b>	Experimental Analysis of the Accelerated Aging of Concrete Element	Nacera Hassani
<b>1288</b>	First Principle Investigation of Li Intercalated on MoO <sub>3</sub>	Ammaria Mahmoudi
<b>1289</b>	The Technology of Increasing the Energy Density of Batteries by Controlling the Degree of Polarization of Ferroelectrics. Zero-Emission Mobility	Vladimir Zubtsov
<b>1290</b>	Optical Properties of Hybrid Structures Based on Amorphous Hydrogenated Carbon and Silver Nanogranulated Films	Dmitrii Shcherbinin
<b>1291</b>	Synthesis and Crystallographic Study of the New Material MgNa <sub>2</sub> (BO <sub>3</sub> )Cl	Omar Ben Mya
<b>1293</b>	Antimicrobial Effects of ZnO Thin Films - Graphene Structures Synthesized by Magnetron Sputtering	Beatrice Gabriela Sbarcea
<b>1294</b>	Metal Surface Plasmon Resonance as a Mechanism to Improve Solar Energy Harvesting in Thin Film Organic Solar Cells	Genene Tessema Mola
<b>1297</b>	Multilayer Membrane Based on Polystyrene and Polyacrylonitrile Electrospun Nano/Microfibers	Cristina Banciu
<b>1299</b>	Multi-Layer Thin Film Bragg Mirrors as Dispersion and Polarization Elements for Extreme Ultraviolet, Soft X-Ray and X-Ray Wavelength Ranges	Jingtao Zhu
<b>1300</b>	Metamaterials: New Challenges for Mechanics	Jeremiah Rushchitsky
<b>1301</b>	Preparation of Synthetic Copper-Oxidases Mimics by Molecular	Anna Jakubiak-

	Imprinting within Suspension and Precipitation Polymers	Marcinkowska
1302	Experimental Study on Residual Resistance of Normal Concrete after Fire Exposure	Dimia Mohamed Salah
1303	On the Choice of the Geometrical Extrapolation Models for the Mg-Al-Sr System: Experimental Investigation	Mohammad Aljarrah
1304	Optical Characterization of Spray Deposited MgO Thin Film	Chaouch Nadjat
1305	Impact of the Glass Waste on the Behavior of the Opaque Glazes for Sanitary Ceramic-Ware	Kamel Boudeghdegh
1306	Microstructural Study of a Heterogeneous Friction Welds of Stainless Steel to Aluminum Alloy	Djaafar Aboudi
1308	Porous Lime Pastes with Improved Mechanical Properties after Addition of Synthetic Aragonite	Radek Ševčík
1309	Study of Structural and Magnetic Properties of Nd Substituted $Sr_2SnO_4$ Orthostannate	Upendra Kumar
1310	Structural Study of Silicon Thins Films Doped with Cerium	Bekhedda Kheira
1311	Enhancement of Heat Transfer Forced-Convection Cooling of Multiple Heated Using Porous Blocks in a Channel	Ali Bousri
1312	The Morphological and Structural Characterizations of $Fe_x-Co_{1-x}$ Nanoalloy Solutions Synthesis by Ndymium -YAG Laser Ablation	Faisal A. Mustafa Sami Habana Sumaya J. Abbas Al-Bassam
1313	Method for Predicting the Deformation of Swelling Clay Soils under Conditions of Natural Stress and Calculation of the Lifting of Foundations of Structures	Ferrah Ferrah
1314	Zinc Oxide Thin Films for Daytime Radiative Cooling Applications	Benlattar Mustapha
1315	Ultrafast Vibrational Spectroscopy of Water Molecules around Tetramethylammonium Cation	Bhabani Mallik
1316	Optical, and Electronic Study of Ceramic Scintillators within the Framework of Density Functional Theory (DFT)	Abderrahim Hadj Larbi
1317	Surface Spin Disorder, Slow Relaxation and Memory Effect in Magnesium Ferrite Nanoparticles	Kashif Nadeem
1318	The Effect of MgO Concentration on Physical Properties of MgO Thin Films	Chaouch Nadjat
1321	Synthesis, Quantum Chemical Computations and X-Ray Crystallographic Studies of a New Complex Based of Copper	Nabil Benyza
1322	Modal Analysis and Natural Frequencies for Helicopter Rotor Blade	Merouane Salhi
1323	Determination of the Natural Frequencies for a Light Aircraft Engine Suspension	Abdelkader Kirad
1324	Blister Formation in Tungsten by Deuterium Ion Irradiation: Energy	Asha Attri

	and Fluence Dependent Study	
<b>1325</b>	The Non-Isothermal Kinetics of Hydroxyapatite Formation in Kaolin - Natural Phosphate Mixtures	Fateh Chouia
<b>1326</b>	Analysis and Non-Destructive Control of Ferrule Cracking of BK1 Cement Crusher	Sofiane Chorfi
<b>1328</b>	Modeling of Dual-Junction Tandem Based on InGaP/GaAs Heterojunction Stacked on a Ge Solar Cell	Fayçal Bouzid
<b>1329</b>	Towards Novel Materials with Highly Nonlocal Optical Nonlinearity	Gershon Kurizki
<b>1330</b>	Effect of Multilayers on Induction Heating Temperature Control Case Study	Mohamed Rezig
<b>1331</b>	Influence of Thermally Dilated Graphite on the Differential Calorimetric of the Fluoroplastique	Lakel Abdelghani
<b>1333</b>	Synthesis and Characterization of Nickel Nanoparticles Supported on Aluminum Oxide	Djamel Eddine Belfennache
<b>1334</b>	Directional Growth, Physico-Chemical and Quantum Chemical Investigations on 2-Amino-5-Nitropyridinium p-Phenolsulfonate (2A5NPP) Single Crystal for Nonlinear Optical (NLO) Applications	Sivasubramani Vedyappan
<b>1336</b>	Ageing Effect of DBD Activated Ceramic Powders: The Impact of Storage Humidity on the Electrophoretic Deposition Rate	Lubomír Prokeš
<b>1337</b>	Thermal Desorption Spectroscopy Investigation of DBD Plasma Modified Aluminium Oxide Submicron Powders	Pavel Stahel
<b>1339</b>	Influence of Forging on the Structure, Wear and Corrosion Behavior of A105N Carbon Steel	Amel Gharbi
<b>1340</b>	Reliability Analysis of Lifetime of Hydrocarbons Pipeline Transportation	Oualid Ghelloudj
<b>1341</b>	Evaluation of Physical Properties of Hydrothermally Treated Oil Palm Wood in Different Buffered Media: Optimization and Empirical Modelling Using Response Surface Methodology	Seyed Eshagh Ebadi
<b>1342</b>	Theoretical Investigations about Polarizabilities of Niobium Clusters $Nb_n(n=2-15)$	Angyang Yu
<b>1346</b>	Dynamic Analysis of the Effect of a Wall on the Wake Behaviour in the Fluid Flow behind Cylindrical Obstacle	Sidali Bensedira
<b>1349</b>	Effect of Temperature on Synthesis of Hydroxyapatite by Sol-Gel Route	Malika Merzougui
<b>1350</b>	Graphene Based Biosensors for DNA Detection	Mariana Ionita
<b>1351</b>	Effect of Solvents on Synthesis of Hydroxyapatite by Sol-Gel Route	Malika Merzougui
<b>1356</b>	Fault Diagnosis Based on Enhancement of Barkhausen Noise Using Hybrid Method Empirical Mode Decomposition-Savitzky-Golay Filter	Rabah Abdelkader

<b>1357</b>	Dielectric and Thermal Analysis of a Leaf of Vegetation for the Modeling of Forest Fires	Khadija Khelloufi
<b>1359</b>	Effect of Hydrogen on Impact Response of Ductile Cast Iron	Burak Bal
<b>1360</b>	Disclosure of the Hydrogen Generation and Accumulation in Steel and Graphite Irradiated in Inert Environment	Evgenii Krasikov
<b>1361</b>	Self-Assembly of Colloidal Nanoparticles Ag <sub>2</sub> S in Water Solution	Svetlana Rempel
<b>1362</b>	Spin-Hall Detector	Yurii Chiang (Tszyan)
<b>1366</b>	Polymeric Micelles Based on Pluronic as Flavonoids' Nanocarriers	Sylwia Ronka
<b>1368</b>	Mathematical Modelling of Heat and Mass Transfer in a Packed Bed Drying of Shrinking Particles	Amal Kraiem
<b>1369</b>	Boron-Doped Hydrogenated Amorphous Silicon Carbide by Co-Sputtering DC Magnetron	Amer Bright
<b>1370</b>	A Practically Measurements the Friction Coefficients of Compaction Ceramics Powder	Hazim Aljewaree
<b>1372</b>	Molecular Dynamics Simulations of Separation Membrane Based on Super Carbonaceous Materials for Small Gas Molecules	Mariana Ionita
<b>1373</b>	Tunnel Electroresistance in Superconducting/ Ferroelectric Junctions	Víctor Rouco
<b>1374</b>	Micrographic and Chemical Characterization of Timimoun Quartz Deposits (Algeria)	Sidali Medjahed
<b>1375</b>	The Influence of Twinning on the Tensile Properties of Nanocrystalline Light Weight Aluminum Alloys	Khaled Youssef
<b>1377</b>	The Effects of Multiple Conditions on Hydraulic Fracturing and Actual Acid Fracturing Lead to Crack Propagation.	Ximo Qu
<b>1380</b>	Mass Spectrum of Charmonium Meson Using an Energy-Dependent Potential and the Quantum Supersymmetry	Elhadj Hocine
<b>1381</b>	Rotating Plate Viscosity Test - A New Method for Determining Construction Temperature of SBS Modified Asphalt	Haoyuan Luo
<b>1382</b>	TiAlN/a-CN Coatings Produced by PVD Method on Tools for Wood Based Materials Machining	Jerzy Sobiecki
<b>1384</b>	Alginate/Sepiolite Novel Interpenetrating Nanobiocomposite Xerogel Beads with Improved Adsorption Properties	Meriem Baziz
<b>1385</b>	Thermal, Physicochemical and Rheological Properties of Biobased Plasticizers Combinations Used in Poly (Vinyl Chloride)	Boussaha Bouchoul
<b>1386</b>	Analytical and Numerical Analysis of Twin Helical Spring with Circulaire Cross Section	Nacera Benghanem
<b>1387</b>	Contribution of an Optimization Study of the Maintenance Function for a Continuous Improvement of a Rotating Machine Function	Azzedine Bouzaouit

	Safety	
1388	First Principles Calculations on Structural, Electronic, Dielectric and Vibrational Properties of ZnTe	Waqas Mahmood
1390	Structure-Property Correlation in the Multiferroic $(\text{Bi}_{1-x}\text{Ba}_x)(\text{Fe}_{1-x}\text{Ti}_x)\text{O}_3$ System	Arun Kumar
1392	Investigation of Bonding Phase Dimension on Shear Strength of Superalloy Brazed by Active Filler Material	Mudhafar Mohammed
1394	Quasiloca Oscillations of Media near Charged Center in Dielectrics and Semiconductors	Igor V. Chernousov
1395	Atom Concentration in Highly Ionized Inhomogeneous Helium Plasma	Dmitry Kavyrshin
1396	Heat Capacity and Dielectric Properties of Multiferroic $\text{SmFeO}_3$	Nariman Alikhanov
1398	Study of Carbon Admixture in Nitrogen Plasma Jet Impacting Graphite Surface	Dmitry Kavyrshin
1399	Dielectric Properties and AC Conductivities of $\text{Bi}_{1-x}\text{Sm}_x\text{FeO}_3$ Ceramics	Nariman Alikhanov
1400	New Ecological Fire Retardant Polymer Nanocomposites	Ewa Kicko-Walczak
1211	The Boriding Treatment of XC38 Steel: Characterization and Optimization of the Paste Composition for Wear Resistance	Brahimi Abdelhalim
1212	Mechanical Behavior and Microstructure of Gas Pipelines Welded Joints Achieved with Hybrid Welding Process	Abderrahmane Abderrahmane
1504	Structural Acrylate Adhesive Joints for Civil Engineering Use	Klára Vokáč Machalická
1520	Viscoelastic Properties of Selected PVB Interlayers for Laminated Glass	Miroslav Vokáč

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88	Comparative Study of Five Different Methods of Adjustment by the Weibull Model to Determine the Most Accurate Method of Analyzing Annual Variations of Wind Energy in Tetouan - Morocco	Mohamed Hatim Ouahabi
89	Comparative Exergy Investigation of Two Ejector Organic Rankine Cycles Powered by Solar Energy	Larbi Afif
91	Petrology, Mineralogy, Nanoparticulates, Radionuclides, Geochemistry, and Structural Characterization of Inertinite-Rich Bituminous Feed-Coals for potential risk assessment	Md. Ahsan Habib
94	The Impact of Non-Uniform Bifunctional Catalyst for Aromatization of Methyl Cyclopentane	Tayeb Fakhreddine Boukezoula

96	Assessing the Best Renewable Energy Policy in Algeria: A Multicriteria Analysis Approach	Samir Bettahar
97	Structural Study of Silicon Thins Films Doped with Cerium	Bekhedda Kheira
98	Rate-Independent and Ultra-Stable Low-Temperature Sodium Storage in Pseudocapacitive TiO <sub>2</sub> Nanowires	Dongmei Lin
100	Numerical Analysis of the Hybrid Solar Collector Photovoltaic Thermal PV/T with Ribs	Abdelkrim Khelifa
101	Axial Expansion of Ni-Doped TiO <sub>2</sub> Nanorods Grown on Carbon Nanotubes for Favourable Lithium-Ion Intercalation	Syed Mustansar Abbas
102	Design Optimization of Vertical Axis Hydro Turbine for Low Speed Shallow Water Channels	Muneeb Ahsan
103	Using First Principles Density Functional Theory Approach to Model the Thermal Conductivity of Diamond-Like Materials	Salah-Eddine Bensalem
106	Kinetic Hydropower Generation from Slow-Moving Waters	Jameel Ahmad
107	The Development of Luminescent Aggregates from Wasted Glasses for Cement Application	Vorrada Loryuenyong
110	Meteorological Parameters, in Favor of the Emergence of Airborne Allergens, Increase the Severity of Asthma among Children in the City of Annaba (Algeria)	Amel Boumendjel
111	Impact of Office Building Typology and Morphology on Energy Performance	Mohamed Boubekri
117	Daily Change of Solar Radiation on the Horizontal Surface near the Ground	Zhongsheng Guo
122	Comparative Study of an HVAC System Using Geothermal Energy and Other Technologies: Biomass, Diesel and Gas. Case of Study in an Office Building	Alberto Villarino Otero
123	The Reliability of a Power Plant in Jeddah with Assumed Load Model	Wael Alsulami
124	Al-Cu Alloy as A Latent Heat Storage Material for High-Temperature Heat Utilization	Shunsuke Cho
125	Assessment of the Durability of Fiber-Reinforced Lightweight Concrete under the Effect of Temperature	Mohammed Belhadj Ahlem Houaria
128	Electrochemical Properties of LiNi <sub>0.9</sub> Co <sub>0.1</sub> O <sub>2</sub> Cathode Material Prepared by Co-Precipitation Using Citric Acid	Jong Dae Lee
130	Feasibility Study of Small-Scale Gas Engine CHP Systems in Iran	Mousa Meratizaman
131	Tana Beles Hydropower Energy Production and Its Trans Boundary Implications in Upper Blue Nile Basin Using Decision Support System (NB DSS)	Habtam Achenef
136	Thermoelectric Power Studies of Co-Cd Nano- Ferrites for Energy	Ravinder Dacheppalli

	Applications	
137	Micro Hydro Power in Mining Areas of Cameroon for Their Sustainable Development	Elie Bertrand Kengne Signe
138	The Impact of Direct Radiation Ratio on Performance of Tracking Photovoltaic Solar Systems	Levent Colak
139	Energy Generation, Characterization and Management of Concentrated Latex Sewage Sludge	Arif Billah
140	Radial Forces, Dynamic and Steady State Performance of Dual Stator Squirrel Cage Induction Machines with Rotor Eccentricity	Ahmed Shobair
141	Topological Method of Analysis of the Voltage Mode of Complex Electric Networks	Dauren Akhmetbaev
142	Aspects of Thermal Management of Health Care Facilities	Bozena Babiarz
146	Experimental & Theoretical Study for the Renewable Heat Pump Performance	Saadoon Dakhil
147	Comparative Study on Renewable Energy Penetration in Pakistan for Sustainable Development	Sadia Tariq
149	Preference Profile Decomposition when Processing Energy Audit Data by Preference Aggregation Method	Sergey Muravyov
151	Metallic Phase Change Material for Low-Temperature Thermal Management	Kohei Kashiya
152	Possibility of Bioethanol as Reducing Agent for Ironmaking Process: Exergy and CO <sub>2</sub> Emission Analysis	Ade Kurniawan
153	Experimental Research on Performance of a Novel Evaporator for MVR System	Dongsheng Zhu
160	Synthesis and Investigation of the Electrochemical Properties of $\beta$ -Ni(OH) <sub>2</sub> -doped Al, Co and Cu, and $\alpha$ -Ni(OH) <sub>2</sub> Powders for Ni-Based Battery	Ahmet Aytakin
162	Investigation of the Effect of Thermal Performance of Heat Pipes Using Nanofluids on the Thermal Management of Lithium-Ion Battery	Maziar Shafae
165	The Microstructure of U <sub>3</sub> Si <sub>2</sub> -Al Dispersed Fuel after Irradiated in HFETR	Wen Hen
167	Experimental Study on Convective Heat Transfer in Tubes with Temperature Difference	Fahim Ullah
169	Improvement of Coal Utilization Efficiency through Tar Utilization as a Reducing Agent in Ironmaking Process	Keisuke Abe
74	Regulations of Application of Energy Efficiency in Industrial Processes	Georges El-Jamal
23	Wastewater Treatment: Overview, Types, Energy Consumption & Actual State in Lebanon with Proposal of Using Renewable Energy	Firas Fayssal