

POSTER SESSION 1

EMERGING TOPICS

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| 4990 | The ExB Thermoelectric Effect |
| 5018 | Doping by design: Enhanced thermoelectric performance of GeSe-based alloys through metavalent bonding |
| 5117 | A solid electrolyte able to significantly enhance the power factor of a thermoelectric oxide film |
| 5119 | How thermo-electrochemical cells work. Explained by an impedance spectroscopy study |
| 5196 | Correlating thermal conductivity, structure and doping in thermoelectric polymers |

THERMOELECTRIC DEVICES AND APPLICATIONS

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| 4840 | Development of a Thermoelectric Generator for Industrial Waste Heat Recovery at a Zinc Melting Furnace: Operation Conditions and Simulation |
| 5022 | An experimental approach to flexible thermoelectrics for energy harvesting applications |
| 5036 | PERFORMANCE OPTIMIZATION OF VAPOR COMPRESSION SYSTEMS PROVIDED WITH NATURAL REFRIGERANTS BY INCLUDING THERMOELECTRIC SUBCOOLING |
| 5039 | Development and test results of overheating protection of thermoelectric systems for utilization of radiative waste heat in industrial environments |
| 5069 | Fabrication of planar micro-thermoelectric generators integrating a 2.5D thermopile topology |
| 5076 | Comparison of design concepts for ceramic oxide thermoelectric multilayer generators |
| 5089 | Batteryless IoT for smart monitoring in ATEX and energy demanding industries |
| 5104 | Evaluation of cooling effect of simulated PA MMIC device using peltier cooler |
| 5115 | Experimental investigation of heat losses and energy balance of a commercial condensing boiler with thermoelectric generators (TEG) |
| 5116 | Long-term autonomous volcanic surveillance powered by thermoelectric generators |
| 5120 | Heat Fluxmeter in Silicon technology with low thermal resistance |

5121	EXPERIMENTAL PERFORMANCE STUDY OF MULTISTAGE THERMOELECTIC HEAT PUMPS USED FOR THERMAL ENERGY STORAGE
5123	New thermoelectric generator with no moving parts nor environmental impact for high temperature geothermal energy
5129	Critical thermal stress between high / intermediate temperature thermoelectric elements and passive layers: a finite element evaluation
5137	Novel thick film thermoelectric devices for heat sink-free energy harvesting applications
5140	Experimental transcritical carbon dioxide refrigeration cycle working with a thermoelectric subcooler and an internal heat exchanger
5141	Flexible multilayer graphene-based devices for large-area thermoelectric sensing applications
5150	Thermoelectric Generators for Waste Heat Recovery in Heavy-Duty Vehicles
5156	Geothermal thermoelectric generators: a promising alternative for hot dry rock fields
5159	Estimation of the thermal breakdown voltage of Al ₂ O ₃ anodic layer for thermoelectric module substrate
5192	Efficiency and thermal stability of silicide-based thermoelectric modules
5253	Model-based Design of Thermoelectric Generators for Waste Heat Recovery from Marine Engine Exhaust Gases
5258	Printed thermoelectric generators wirelessly powered by high-power laser beam
5263	Boosting Thermoelectric Power Generation Coupling NIR absorbers for Wireless Power Transfer
5269	Powering Wearable Electronics with Modular Thermoelectric Generators – Material Optimization to Device and System Demonstration
5348	Maximizing Vehicle Thermoelectric Generator Output through Thermal control: simulations and concept validation
5349	Enabling Large-Scale Waste Heat Recovery Applications using Thermoelectrics: Affordable materials, geometries and methods suitable for upscaling
THERMOELECTRIC MATERIALS AND MATERIALS PROCESSING	
4917	Epitaxial growth and thermoelectric properties of Mg ₃ Bi ₂ thin films deposited by magnetron sputtering
5001	Reducing the thermal conductivity of nanocrystalline CuNi alloys

5004	Going further and towards sustainability: magnesium-based materials for space applications
5015	Enhancement in Thermoelectric Efficiency of n-type Yb-Filled Co ₄ Sb ₁₂ via Incorporation of InSb and Carbon-Coated Nano-Boron
5027	Significant influence of microstructure on the thermoelectric performance of Mg _{3+x} Sb _{1.49} Bi _{0.49} Te _{0.02} (x=0.2, 0.3, 0.4)
5048	Lattice dynamics and thermoelectric properties of Ca-Si alloys
5050	High Performance Tin Sulfide Thin Films Prepared by Aerosol Assisted Chemical Vapor Deposition
5051	Evolution of the microstructure and thermoelectric performance of strontium titanate-graphene materials
5064	Optimizing the thermoelectric performance of nanocrystalline Si thin films by à la carte B doping using sputtering co-deposition
5072	The influence of nanocrystalline grains in the amorphous Silicon matrix on the Power Factor of hot wire chemical vapor deposited silicon films
5081	OXIDE COMPOSITES FOR HIGH TEMPERATURE THERMOELECTRIC POWER GENERATION
5088	Point Defects and Thermoelectric Properties of Melt-grown Mg ₂ Ge Single Crystals
5098	Using graphite as mobility booster in La and Nb co-doped SrTiO ₃ for enhanced thermoelectric performance
5100	Polycrystalline samples showing axis-dependent conduction polarity and investigation of new materials
5106	Adjustment of carrier concentration and texturation processing on thermoelectric silicide – Higher Manganese Silicide (HMS) and CrSi ₂
5111	CMOS compatible silicon based thin films on 300 mm wafer level for thermoelectric applications
5138	Powder-Aerosol deposited (PAD) calcium manganate as n-type thermoelectric material
5144	Application of MXene reinforced nanocomposites for thermoelectric power generation
5147	Room Temperature Thermoelectric Performance of n-type Multiphase Pseudo-Binary Bi ₂ Te ₃ – Bi ₂ S ₃ Compounds
5152	Establishing synthesis-structure-property relationships for enhanced and reproducible MgAgSb thermoelectric properties
5180	Discovery of new thermoelectric copper-based sulfides
5217	On the enhancement of thermoelectric properties of Bi _{2-x} Y _x O ₂ Se ceramics

5218	Influence of implantation induced defects on the thermoelectric properties of ScN
5231	Impact of oxygen deficiency on thermoelectric properties of Bi ₂ O ₂ Se
5239	Thermoelectric properties of Mg(Si, Sn) prepared by different grades of Si-kerf from PV manufacturing
5241	Laser Processing of Zn ₄ Sb ₃ Thermoelectric Powders
5274	Silicon-alloy thermoelectric nanostructured fibers
5282	Thermoelectric performance of Y-doped CaMnO ₃ -based oxides processed by ball milling
5343	Refractory Metal Inclusions and Their Impact on the Thermoelectric Performance of La _{3-x} Te ₄ Composites
5053	Mobility-enhanced thermoelectric performance in textured nanograin Bi ₂ Se ₃ , effect on scattering and surface-like transport

TRANSPORT PHENOMENA

5057	Dynamic instability of higher manganese silicides
5063	On the phonon and magnon drag thermopower
5065	Thermoelectric and magnetic properties of Co ₂ ZrSn and Co ₂ HfSn Heusler alloys
5068	Determination of transport properties of a electrochemically deposited polycrystalline SnSe thin film on Au-substrate by spectroscopic ellipsometry
5090	Transverse thermoelectric properties of CuCr ₂ X ₄ (X=S, Se and Te), experiment and ab-initio calculation
5157	Bipolar transport in Bi-Sb alloys
5165	Disorder-induced localization for bidimensional thermoelectrics optimization
5175	Highly efficient Monte Carlo simulation method for transport in complex nanostructured thermoelectric materials
5184	Measurement of ionic Seebeck coefficient of Cu _{2-δ} Se at the phase transition
5225	Thermoelectrical properties and EPR in Sb _{2-x} Cu _x Te ₃ single crystals
5238	Electrochemical and thermoelectric characterization of mixed-conducting high-entropy oxides
5262	Thermal conductivity in BiSb alloys
5341	Bonding pattern and atomic disorder vs. thermoelectric properties in Ga ₃ Fe-type intermetallic semiconductors