# Yaniv Gelbstein

List of Publications by Year
in descending order

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|---|---|---|---|
| 118 papers | 4,765 citations | 41344 49 h-index | 98798 67 g-index |
| 120 all docs | 120 docs citations | 120 times ranked | 2853 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | n-type (Zr,Ti)NiSn half Heusler materials via mechanical alloying: Structure, Sb-doping and thermoelectric properties. Journal of Physics and Chemistry of Solids, 2022, 167, 110735. | 4.0 | 9 |
| 2 | Reduction of Hf via Hf/Zr Substitution in Mechanically Alloyed (Hf,Ti)CoSb Half-Heusler Solid Solutions. Inorganics, 2022, 10, 51. | 2.7 | 4 |
| 3 | Microstructural effects on the thermoelectric performance of Ge0.962Bi0.038Te1.057. Journal of Alloys and Compounds, 2022, 918, 165663. | 5.5 | 2 |
| 4 | High thermoelectric performance of p-type half-Heusler (Hf,Ti)Co(Sb,Sn) solid solutions fabricated by mechanical alloying. Journal of Alloys and Compounds, 2021, 858, 158330. | 5.5 | 14 |
| 5 | Hybrid structural electronics printing by novel dry film stereolithography and laser induced forward transfer. Nano Select, 2021, 2, 979-991. | 3.7 | 6 |
| 6 | Electronic properties of co-doped nonstoichiometric germanium telluride. Intermetallics, 2021, 131, 107118. | 3.9 | 2 |
| 7 | The Initial Oxidation of HfNiSn Half-Heusler Alloy by Oxygen and Water Vapor. Materials, 2021, 14, 3942. | 2.9 | 2 |
| 8 | High entropy alloy on single sub-lattice in MNiSn compound: Stability and thermoelectric properties. Journal of Alloys and Compounds, 2021, 874, 159940. | 5.5 | 5 |
| 9 | Lattice variation of cubic Y2O3 in three dimensions: Temperature, pressure and crystal size. Journal of Alloys and Compounds, 2021, 885, 161199. | 5.5 | 5 |
| 10 | Thermoelectric transport properties of (Ti1â˜'cAlc)NiSn half-Heusler alloy. Physical Chemistry Chemical Physics, 2020, 22, 1566-1574. | 2.8 | 11 |
| 11 | Thermal shock resistant solid oxide fuel cell ceramic composite electrolytes. Journal of Alloys and Compounds, 2020, 821, 153490. | 5.5 | 10 |
| 12 | Enhanced Thermoelectric Properties of n-Type Bi<sub>2</sub>Te<sub>3â€“x</sub>Se<sub>x</sub> Alloys following Melt-Spinning. ACS Applied Energy Materials, 2020, 3, 2090-2095. | 5.1 | 26 |
| 13 | Phase Stability of Nanocrystalline Grains of Rare-Earth Oxides (Sm2O3 and Eu2O3) Confined in Magnesia (MgO) Matrix. Materials, 2020, 13, 2201. | 2.9 | 14 |
| 14 | Composition conserving defects and their influence on the electronic properties of thermoelectric TiNiSn. Physical Chemistry Chemical Physics, 2020, 22, 8035-8047. | 2.8 | 7 |
| 15 | Bismuth doping of induction furnace synthesized Mg2Si, Mg2Sn and Mg2Ge thermoelectric compounds. Intermetallics, 2020, 120, 106767. | 3.9 | 9 |
| 16 | Mechanical properties of proton bombarded SS316L thin foils using the small punch technique. Journal of Nuclear Materials, 2020, 540, 152340. | 2.7 | 0 |
| 17 | PbO-SiO2 Based Glass Coating of PbI2 Doped PbTe. Metals, 2020, 10, 284. | 2.3 | 1 |
| 18 | Investigation of the thermoelectric potential for heating, cooling and ventilation in buildings: Characterization options and applications. Renewable Energy, 2019, 131, 229-239. | 8.9 | 57 |

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|---|---|---|---|
| 19 | Aging condition and trapped hydrogen effects on the mechanical behavior of a precipitation hardened martensitic stainless steel. Journal of Alloys and Compounds, 2019, 805, 509-516. | 5.5 | 16 |
| 20 | Thermoelectric properties of Ti0.3Zr0.35Hf0.35Ni1.005Sn half-Heusler alloy. Journal of Applied Physics, 2019, 126, . | 2.5 | 8 |
| 21 | PbOâ€“SiO<sub>2</sub>-based glass doped with B<sub>2</sub>O<sub>3</sub> and Na<sub>2</sub>O for coating of thermoelectric materials. Journal of Materials Research, 2019, 34, 3563-3572. | 2.6 | 7 |
| 22 | Lattice variations in nanocrystalline Y2O3 confined in magnesia (MgO) matrix. Journal of Alloys and Compounds, 2019, 801, 375-380. | 5.5 | 7 |
| 23 | Enhanced thermoelectric properties of n-type Ti-doped PbTe. MRS Advances, 2019, 4, 1683-1689. | 0.9 | 1 |
| 24 | The Initial Stage in Oxidation of ZrNiSn (Half Heusler) Alloy by Oxygen. Materials, 2019, 12, 1509. | 2.9 | 11 |
| 25 | Al solubility in (Ti<sub>1â^'c</sub>Al<sub>c</sub>)NiSn half-Heusler alloy. Physical Chemistry Chemical Physics, 2019, 21, 7524-7533. | 2.8 | 6 |
| 26 | Ion-induced n-p inversion of conductivity in TiNiSn compound for thermoelectric applications. Journal of Applied Physics, 2019, 126, 155106. | 2.5 | 3 |
| 27 | Co-doping effect on the electronic properties of nonstoichiometric tin telluride. MRS Advances, 2019, 4, 1699-1707. | 0.9 | 1 |
| 28 | Influence of galia (Ga2O3) addition on the phase evolution and grain growth behavior of voided yttria stabilized zirconia (YSZ) powder. Journal of Alloys and Compounds, 2019, 783, 286-291. | 5.5 | 4 |
| 29 | TiNiSn half-Heusler crystals grown from metallic flux for thermoelectric applications. Journal of Alloys and Compounds, 2019, 781, 1132-1138. | 5.5 | 61 |
| 30 | Thermoelectric Bi<sub>2</sub>Te<sub>3â^'x</sub>Se<sub>x</sub> alloys for efficient thermal to electrical energy conversion. Physical Chemistry Chemical Physics, 2018, 20, 4092-4099. | 2.8 | 63 |
| 31 | Estimation of yield and ultimate stress using the small punch test method applied to non-standard specimens: A computational study validated by experiments. International Journal of Mechanical Sciences, 2018, 135, 484-498. | 6.7 | 17 |
| 32 | Metallurgical and Hydrogen Effects on the Small Punch Tested Mechanical Properties of PH-13-8Mo Stainless Steel. Materials, 2018, 11, 1966. | 2.9 | 8 |
| 33 | Surface Oxidation of TiNiSn (Half-Heusler) Alloy by Oxygen and Water Vapor. Materials, 2018, 11, 2296. | 2.9 | 16 |
| 34 | Compatibility between Co-Metallized PbTe Thermoelectric Legs and an Agâ€“Cuâ€“In Brazing Alloy. Materials, 2018, 11, 99. | 2.9 | 14 |
| 35 | Peculiarities of doping of nanograined thermoelectric TiNiSn by 3d noble and transition metals. Intermetallics, 2018, 98, 154-160. | 3.9 | 4 |
| 36 | Physical Metallurgy Inspired Nanoâ€Features for Enhancement of Thermoelectric Conversion Efficiency. Advanced Theory and Simulations, 2018, 1, 1800072. | 2.8 | 6 |

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|---|---|---|---|
| 37 | Thermoelectric and mechanical properties of Ag and Cu doped (GeTe)0.96(Bi2Te3)0.04. MRS Communications, 2018, 8, 1292-1299. | 1.8 | 7 |
| 38 | Applying the general effective media (GEM) approach for analyzing the thermal conductivity of ZrO2â€“8YSZ composites. Physical Chemistry Chemical Physics, 2018, 20, 16666-16672. | 2.8 | 4 |
| 39 | Influence of galia (Ga2O3) addition on the phase transformations and crystal growth behavior of zirconia (ZrO2). Journal of Materials Science, 2018, 53, 12741-12749. | 3.7 | 7 |
| 40 | Solubility of Ti in thermoelectric PbTe compound. Intermetallics, 2017, 89, 16-21. | 3.9 | 49 |
| 41 | High temperature thermoelectric properties evolution of Pb1-Sn Te based alloys. Journal of Alloys and Compounds, 2017, 722, 33-38. | 5.5 | 72 |
| 42 | Sc solubility in p-type half-Heusler (Ti1-Sc )NiSn thermoelectric alloys. Journal of Alloys and Compounds, 2017, 729, 446-452. | 5.5 | 31 |
| 43 | Evaporationâ€“condensation effects on the thermoelectric performance of PbTe-based couples. Physical Chemistry Chemical Physics, 2017, 19, 19326-19333. | 2.8 | 4 |
| 44 | The Mechanical Behavior of HAVAR Foils Using the Small Punch Technique. Materials, 2017, 10, 491. | 2.9 | 8 |
| 45 | Internal Nano Voids in Yttria-Stabilised Zirconia (YSZ) Powder. Materials, 2017, 10, 1440. | 2.9 | 9 |
| 46 | Microstructure Evolution of Ag-Alloyed PbTe-Based Compounds and Implications for Thermoelectric Performance. Crystals, 2017, 7, 281. | 2.2 | 13 |
| 47 | High thermoelectric potential of Bi2Te3 alloyed GeTe-rich phases. Journal of Applied Physics, 2016, 120, . | 2.5 | 75 |
| 48 | Vertical power MOS transistor as a thermoelectric quasi-nanowire device. Journal of Applied Physics, 2016, 120, 244903. | 2.5 | 1 |
| 49 | High thermoelectric potential of n-type Pb1â^'xTixTe alloys. Journal of Applied Physics, 2016, 120, . | 2.5 | 70 |
| 50 | Doping in controlling the type of conductivity in bulk and nanostructured thermoelectric materials. Journal of Solid State Chemistry, 2016, 240, 91-100. | 2.9 | 8 |
| 51 | Texture anisotropy of higher manganese silicide following arc-melting and hot-pressing. Intermetallics, 2016, 68, 71-77. | 3.9 | 80 |
| 52 | Development of Bi2Te2.4Se0.6 alloy for thermoelectric power generation applications. Journal of Alloys and Compounds, 2016, 679, 196-201. | 5.5 | 67 |
| 53 | Combined electronic and thermodynamic approaches for enhancing the thermoelectric properties of Ti-doped PbTe. Physical Chemistry Chemical Physics, 2016, 18, 32429-32437. | 2.8 | 7 |
| 54 | Criteria for extending the operation periods of thermoelectric converters based on IV-VI compounds. Journal of Solid State Chemistry, 2016, 241, 79-85. | 2.9 | 65 |

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|---|---|---|---|
| 55 | Bonding of Bi2Te3-Based Thermoelectric Legs to Metallic Contacts Using Bi0.82Sb0.18 Alloy. Journal of Electronic Materials, 2016, 45, 1296-1300. | 2.2 | 56 |
| 56 | Hybrid photovoltaic-thermoelectric system for concentrated solar energy conversion: Experimental realization and modeling. Journal of Applied Physics, 2015, 118, . | 2.5 | 121 |
| 57 | Effective Electronic Mechanisms for Optimizing the Thermoelectric Properties of GeTeâ€Rich Alloys. Advanced Electronic Materials, 2015, 1, 1500228. | 5.1 | 79 |
| 58 | Investigation of the Effect of MoSe2 on the Thermoelectric Properties of n-Type Bi2Te2.4Se0.6. Journal of Electronic Materials, 2015, 44, 1402-1407. | 2.2 | 12 |
| 59 | Evaluation of the mechanical properties of SS-316L thin foils by small punch testing and finite element analysis. Materials and Design, 2015, 83, 75-84. | 7.0 | 43 |
| 60 | Thermoelectric Properties of the Quasi-Binary MnSi1.73â€“FeSi2 System. Journal of Electronic Materials, 2015, 44, 1637-1643. | 2.2 | 70 |
| 61 | Functional Graded Germaniumâ€“Lead Chalcogenideâ€Based Thermoelectric Module for Renewable Energy Applications. Advanced Energy Materials, 2015, 5, 1500272. | 19.5 | 95 |
| 62 | Morphological effects on the thermoelectric properties of Ti<sub>0.3</sub>Zr<sub>0.35</sub>Hf<sub>0.35</sub>Ni<sub>1+Î´</sub>Sn alloys following phase separation. Journal of Materials Chemistry C, 2015, 3, 11653-11659. | 5.5 | 71 |
| 63 | The origin of the effect of aging on the thermoelectric power of maraging C250 steel. Journal of Materials Science, 2015, 50, 7698-7704. | 3.7 | 2 |
| 64 | Enhancement of the thermoelectric properties of n-type PbTe by Na and Cl co-doping. Journal of Materials Chemistry C, 2015, 3, 9559-9564. | 5.5 | 79 |
| 65 | Electronic tuning of the transport properties of off-stoichiometric PbxSn1â^'xTe thermoelectric alloys by Bi2Te3 doping. Journal of Applied Physics, 2015, 118, . | 2.5 | 75 |
| 66 | Investigation of the Microstructural and Thermoelectric Properties of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:mrow><mml:msub><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mtext>GeTe</mml:mtext><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 297.72 Td (stretchy="false"><mml:mo xmlns:mml="http://www.w3.org/1998/Math/MathML" Significant lattice thermal conductivity reduction following phase separation of the highly efficient Ge<sub> x </sub> Pb<sub>1-x </sub> Te thermoelectric alloys. Physica Status Solidi (B): Basic Research, 2014, 251, 1431-1437. | | |
| 67 | | 1.5 | 76 |
| 68 | A Comparison Between the Effects of Sb and Bi Doping on the Thermoelectric Properties of the Ti0.3Zr0.35Hf0.35NiSn Half-Heusler Alloy. Journal of Electronic Materials, 2014, 43, 1976-1982. | 2.2 | 80 |
| 69 | An ab initio study of the thermoelectric enhancement potential in nano-grained TiNiSn. Physical Chemistry Chemical Physics, 2014, 16, 20023-20029. | 2.8 | 84 |
| 70 | Origin of the High Performance in GeTe-Based Thermoelectric Materials upon Bi<sub>2</sub>Te<sub>3</sub> Doping. Journal of the American Chemical Society, 2014, 136, 11412-11419. | 13.7 | 319 |
| 71 | Highly efficient functional Ge<sub>x</sub>Pb<sub>1â^'x</sub>Te based thermoelectric alloys. Physical Chemistry Chemical Physics, 2014, 16, 20120-20126. | 2.8 | 111 |
| 72 | Orienting MoS2 flakes into ordered films. Journal of Materials Science, 2014, 49, 7353-7359. | 3.7 | 2 |

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|---|---|---|---|
| 73 | Physical, Mechanical, and Structural Properties of Highly Efficient Nanostructured n- and p-Silicides for Practical Thermoelectric Applications. Journal of Electronic Materials, 2014, 43, 1703-1711. | 2.2 | 119 |
| 74 | Effects of Microstructural Evolution on the Thermoelectric Properties of Spark-Plasma-Sintered Ti0.3Zr0.35Hf0.35NiSn Half-Heusler Compound. Journal of Electronic Materials, 2013, 42, 1340-1345. | 2.2 | 62 |
| 75 | A Comparison Between the Mechanical and Thermoelectric Properties of Three Highly Efficient p-Type GeTe-Rich Compositions: TAGS-80, TAGS-85, and 3% Bi2Te3-Doped Ge0.87Pb0.13Te. Journal of Electronic Materials, 2013, 42, 1542-1549. | 2.2 | 104 |
| 76 | Mechanical Alloying and Spark Plasma Sintering of Higher Manganese Silicides for Thermoelectric Applications. Journal of Electronic Materials, 2013, 42, 1926-1931. | 2.2 | 60 |
| 77 | Phase morphology effects on the thermoelectric properties of Pb0.25Sn0.25Ge0.5Te. Acta Materialia, 2013, 61, 1499-1507. | 7.9 | 74 |
| 78 | Phase separation and antisite defects in the thermoelectric TiNiSn half-Heusler alloys. Journal of Solid State Chemistry, 2013, 203, 247-254. | 2.9 | 113 |
| 79 | Controlling Metallurgical Phase Separation Reactions of the Ge<sub>0.87</sub>Pb<sub>0.13</sub>Te Alloy for High Thermoelectric Performance. Advanced Energy Materials, 2013, 3, 815-820. | 19.5 | 202 |
| 80 | Characterization of AISI 4340 corrosion products using Raman spectroscopy. Corrosion Science, 2013, 74, 414-418. | 6.6 | 32 |
| 81 | Submicron Features in Higher Manganese Silicide. Journal of Nanomaterials, 2013, 2013, 1-5. | 2.7 | 53 |
| 82 | Morphological effects on the electronic transport properties of three-phase thermoelectric materials. Journal of Applied Physics, 2012, 112, . | 2.5 | 9 |
| 83 | Phase separation and thermoelectric properties of the Pb0.25Sn0.25Ge0.5Te compound. Journal of Alloys and Compounds, 2012, 526, 31-38. | 5.5 | 53 |
| 84 | Thermoelectric properties of p-type didymium (DD) based skutterudites DDy(Fe1âˆ’xNix)4Sb12 (0.13â©½xâ©½0.25,) Tj ETQq0 0 0 rg | 5.5 | 52 |
| 85 | Silicon-Rich Higher Manganese Silicides for Thermoelectric Applications. Journal of Electronic Materials, 2012, 41, 1504-1508. | 2.2 | 57 |
| 86 | Pb1âˆ’x Sn x Te Alloys: Application Considerations. Journal of Electronic Materials, 2011, 40, 533-536. | 2.2 | 76 |
| 87 | Thermoelectric properties of spark plasma sintered composites based on TiNiSn half-Heusler alloys. Journal of Materials Research, 2011, 26, 1919-1924. | 2.6 | 71 |
| 88 | Structural Evolution Following Spinodal Decomposition of the Pseudoternary Compound (Pb0.3Sn0.1Ge0.6)Te. Journal of Electronic Materials, 2010, 39, 2165-2171. | 2.2 | 61 |
| 89 | Highly Efficient Ge-Rich Ge x Pb1âˆ’x Te Thermoelectric Alloys. Journal of Electronic Materials, 2010, 39, 2049-2052. | 2.2 | 64 |
| 90 | Nucleation of nanosize particles following the spinodal decomposition in the pseudo-ternary Ge0.6Sn0.1Pb0.3Te compound. Scripta Materialia, 2010, 62, 89-92. | 5.2 | 67 |

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|---|---|---|---|
| 91 | High Thermoelectric Figure of Merit and Nanostructuring in Bulk p-type Ge<sub>x</sub>(Sn<sub>y</sub>Pb<sub>1â^'y</sub>)<sub>1â^'x</sub>Te Alloys Following a Spinodal Decomposition Reaction. Chemistry of Materials, 2010, 22, 1054-1058. | 6.7 | 75 |
| 92 | Thermoelectric Properties Evolution of Spark Plasma Sintered (Ge<sub>0.6</sub>Pb<sub>0.3</sub>Sn<sub>0.1</sub>)Te Following a Spinodal Decomposition. Journal of Physical Chemistry C, 2010, 114, 13126-13131. | 3.1 | 59 |
| 93 | APPLYING TEP MEASUREMENTS TO ASSESS THE RESPONSE OF HASTELLOY TO LONG TIME AGING. , 2009, , . | | 0 |
| 94 | Thermoelectric power and structural properties in two-phase Sn/SnTe alloys. Journal of Applied Physics, 2009, 105, . | 2.5 | 90 |
| 95 | Thermoelectric Properties of (Pb,Sn,Ge)Te-Based Alloys. Journal of Electronic Materials, 2009, 38, 1478-1482. | 2.2 | 54 |
| 96 | Phase transitions of p-type (Pb,Sn,Ge)Te-based alloys for thermoelectric applications. Journal of Crystal Growth, 2009, 311, 4289-4292. | 1.5 | 14 |
| 97 | Mechanical properties of PbTe-based thermoelectric semiconductors. Scripta Materialia, 2008, 58, 251-254. | 5.2 | 137 |
| 98 | The search for mechanically stable PbTe based thermoelectric materials. Journal of Applied Physics, 2008, 104, . | 2.5 | 65 |
| 99 | KINETIC STUDY OF AGING IN A URANIUM-TITANIUM EUTECTOID ALLOY USING THERMOELECTRIC POWER MEASUREMENT. AIP Conference Proceedings, 2008, , . | 0.4 | 0 |
| 100 | APPLYING TEP MEASUREMENTS TO ASSESS THE AGING STAGE OF MARAGING 250 STEEL. AIP Conference Proceedings, 2008, , . | 0.4 | 3 |
| 101 | Rhombohedral-cubic phase transition characterization of (Pb,Ge)Te using high-temperature XRD. Powder Diffraction, 2008, 23, 137-140. | 0.2 | 6 |
| 102 | Functionally Graded Bi<inf>2</inf>Te<inf>3</inf> based material for above ambient temperature application. , 2007, , . | | 0 |
| 103 | Powder metallurgical processing of functionally graded p-Pb1â^'xSnxTe materials for thermoelectric applications. Physica B: Condensed Matter, 2007, 391, 256-265. | 2.7 | 71 |
| 104 | In-doped Pb0.5Sn0.5Te p-type samples prepared by powder metallurgical processing for thermoelectric applications. Physica B: Condensed Matter, 2007, 396, 16-21. | 2.7 | 51 |
| 105 | Highly efficient bismuth telluride doped pâ€type Pb<sub>0.13</sub>Ge<sub>0.87</sub>Te for thermoelectric applications. Physica Status Solidi - Rapid Research Letters, 2007, 1, 232-234. | 2.4 | 57 |
| 106 | Highly textured Bi2Te3-based materials for thermoelectric energy conversion. Journal of Applied Physics, 2007, 101, 113707. | 2.5 | 89 |
| 107 | Preparation and Thermoelectric Properties of N-type PbTe Doped with In and PbI2. , 2006, , . | | 3 |
| 108 | Thermoelectric Properties of p-type In-doped Pb1-xSnxTe. , 2006, , . | | 0 |

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|---|---|---|---|
| 109 | Development of p-Pb1-xSnxTe Functionally Graded Materials. , 2006, , . | | 1 |
| 110 | Improved power factor of Bi0.4Sb1.6Te3 - based samples prepared by cold pressing and sintering. , 2006, , . | | 2 |
| 111 | High performance n-type PbTe-based materials for thermoelectric applications. Physica B: Condensed Matter, 2005, 363, 196-205. | 2.7 | 231 |
| 112 | Synthesis of n-type PbTe by powder metallurgy. , 0, , . | | 6 |
| 113 | Design, synthesis and characterization of graded n-type PbTe. , 0, , . | | 4 |
| 114 | Transport properties of PbI/sub 2/-doped PbTe. , 0, , . | | 0 |
| 115 | Optimization of thermoelectric efficiency in graded materials. , 0, , . | | 2 |
| 116 | Simulation of Morphological Effects on Thermoelectric Power, Thermal and Electrical Conductivity in Multiâ€Phase Thermoelectric Materials. , 0, , . | | 2 |
| 117 | Mechanical Properties of Thermoelectric Materials for Practical Applications. , 0, , . | | 15 |
| 118 | Bismuth Telluride Solubility Limit and Dopant Effects on the Electronic Properties of Lead Telluride. , 0, , . | | 0 |