

Nathan Stein

List of Publications by Year in descending order

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63
papers

1,381
citations

331670

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361022

35
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63
all docs

63
docs citations

63
times ranked

1283
citing authors

#	ARTICLE	IF	CITATIONS
1	Texture modification, grain refinement and improved hardness/corrosion balance of a FeAl alloy by pulsed electron beam surface treatment in the "heating mode". Scripta Materialia, 2008, 58, 1058-1061.	5.2	108
2	Comparative study of the electrochemical preparation of Bi ₂ Te ₃ , Sb ₂ Te ₃ , and (Bi _x Sb _{1-x}) ₂ Te ₃ films. Thin Solid Films, 2005, 483, 44-49.	1.8	78
3	Room-temperature ionic liquid for lanthanum electrodeposition. Electrochemistry Communications, 2008, 10, 1661-1664.	4.7	78
4	Galvanostatic and potentiostatic deposition of bismuth telluride films from nitric acid solution: effect of chemical and electrochemical parameters. Journal of Crystal Growth, 2005, 277, 274-283.	1.5	69
5	Hydrothermally treated aminated tannin as precursor of N-doped carbon gels for supercapacitors. Carbon, 2015, 90, 63-74.	10.3	67
6	Microstructure modifications and associated hardness and corrosion improvements in the AISI 420 martensitic stainless steel treated by high current pulsed electron beam (HCPEB). Surface and Coatings Technology, 2014, 259, 737-745.	4.8	61
7	Pulsed electrodeposition of (Bi _{1-x} Sb _x) ₂ Te ₃ thermoelectric thin films. Journal of Applied Electrochemistry, 2006, 36, 449-454.	2.9	58
8	Pore structure and electrochemical performances of tannin-based carbon cryogels. Biomass and Bioenergy, 2012, 39, 274-282.	5.7	58
9	Enhanced dielectric and electrocaloric properties in lead-free rod-like BCZT ceramics. Journal of Advanced Ceramics, 2020, 9, 210-219.	17.4	45
10	Electrochemical performances of hydrothermal tannin-based carbons doped with nitrogen. Industrial Crops and Products, 2015, 70, 332-340.	5.2	38
11	Title is missing!. Journal of Applied Electrochemistry, 2003, 33, 23-27.	2.9	37
12	Electrodeposition of bismuth telluride nanowires with controlled composition in polycarbonate membranes. Electrochimica Acta, 2012, 69, 30-37.	5.2	37
13	Template-free electrodeposition of tellurium nanostructures in a room-temperature ionic liquid. Electrochemistry Communications, 2012, 24, 57-60.	4.7	36
14	A review of electroplating for "VI thermoelectric films: from synthesis to device integration. Journal of Materials Research, 2015, 30, 2518-2543.	2.6	35
15	In situ spectroscopic ellipsometric study of porous alumina film dissolution. Electrochimica Acta, 2002, 47, 1811-1817.	5.2	33
16	Characterisation of electroplated Bi ₂ (Te _{1-x} Se _x) ₃ alloys. Journal of Solid State Electrochemistry, 2007, 12, 95-101.	2.5	28
17	In-situ ellipsometric study of lead sulfate film electroformation on lead in a sulfuric acid solution. Electrochimica Acta, 1998, 44, 445-454.	5.2	23
18	Optical and thermoelectric characterizations of electroplated n-Bi ₂ (Te _{0.9} Se _{0.1}) ₃ . Journal of Physics and Chemistry of Solids, 2007, 68, 1902-1907.	4.0	23

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19	Influence of pulsed electrodeposition on stoichiometry and thermoelectric properties of bismuth telluride films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 2340-2344.	1.8	23
20	Influence of tartaric acid on diffusion coefficients of BiIII, SbIII, TeIV in aqueous medium: Application of electrodeposition of thermoelectric films. <i>Journal of Electroanalytical Chemistry</i> , 2014, 724, 111-117.	3.8	22
21	Growth Mechanism during the Early Stages of electrodeposition of Bismuth telluride films. <i>Electrochimica Acta</i> , 2015, 174, 376-383.	5.2	22
22	Towards enhanced durability of electrochromic WO ₃ interfaced with liquid or ceramic sodium-based electrolytes. <i>Electrochimica Acta</i> , 2020, 360, 136931.	5.2	20
23	Systematic errors in fixed polarizer, rotating polarizer, sample, fixed analyzer spectroscopic ellipsometry. <i>Thin Solid Films</i> , 1998, 313-314, 73-78.	1.8	18
24	In situ analysis of bismuth telluride electrodeposition using combined spectroscopic ellipsometry and electrochemical quartz crystal microbalance. <i>Electrochimica Acta</i> , 2007, 52, 4760-4766.	5.2	18
25	Electrodeposition and Characterization of Bismuth Telluride Nanowires. <i>Journal of Electronic Materials</i> , 2010, 39, 2043-2048.	2.2	18
26	Electrodeposition of stoichiometric bismuth telluride Bi ₂ Te ₃ using a piperidinium ionic liquid binary mixture. <i>Electrochimica Acta</i> , 2014, 137, 586-594.	5.2	18
27	Characterizations of bismuth telluride films from Mott-Schottky plot and spectroscopic ellipsometry. <i>Surface and Interface Analysis</i> , 2008, 40, 593-596.	1.8	17
28	Structural and spectroscopic ellipsometry characterization for electrodeposited ZnO growth at different hydrogen peroxide concentration. <i>Thin Solid Films</i> , 2010, 518, 4150-4155.	1.8	16
29	Real time in situ ellipsometric and gravimetric monitoring for electrochemistry experiments. <i>Review of Scientific Instruments</i> , 2007, 78, 064101.	1.3	15
30	Tuning the morphology of Te one-dimensional nanostructures by template-free electrochemical deposition in an ionic liquid. <i>Electrochimica Acta</i> , 2016, 197, 300-306.	5.2	15
31	Electrodeposition of high aspect ratio single crystalline tellurium nanowires from piperidinium-based ionic liquid. <i>Electrochimica Acta</i> , 2016, 222, 528-534.	5.2	15
32	Electrodeposition, microstructural characterization and anticorrosive properties of Zn-Mn alloy coatings from acidic chloride electrolyte containing 4-hydroxybenzaldehyde and ammonium thiocyanate. <i>Surface and Coatings Technology</i> , 2016, 298, 73-82.	4.8	15
33	Individual thermoelectric properties of electrodeposited bismuth telluride nanowires in polycarbonate membranes. <i>Electrochimica Acta</i> , 2015, 161, 403-407.	5.2	14
34	Infrared and Visible Dielectric Function of Electroplated Bi _{2-x} Te _{3+x} Films Determined by Spectroscopic Ellipsometry. <i>Journal of the Electrochemical Society</i> , 2005, 152, G772.	2.9	13
35	Study of the potential driven changes in a collagen film self-assembled on a polycrystalline gold electrode surface. <i>Journal of Electroanalytical Chemistry</i> , 2013, 706, 140-148.	3.8	13
36	Coloration mechanism of electrochromic Na _x WO ₃ thin films. <i>Optics Letters</i> , 2019, 44, 1104.	3.3	13

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37	In-situ ellipsometric study of copper passivation by copper heptanoate through electrochemical oxidation. <i>Electrochimica Acta</i> , 1998, 43, 3227-3234.	5.2	12
38	In situ ellipsometric and electrochemical monitoring of the oxidation of a Pb-Ca-Sn alloy used in the lead acid batteries. <i>Thin Solid Films</i> , 2004, 455-456, 735-741.	1.8	12
39	Influence of the aluminum incorporation on the properties of electrodeposited ZnO thin films. <i>Surface and Coatings Technology</i> , 2015, 270, 236-242.	4.8	12
40	Microstructure and thermoelectric properties of p-type bismuth antimony telluride nanowires synthesized by template electrodeposition in polycarbonate membranes. <i>Electrochimica Acta</i> , 2018, 279, 258-268.	5.2	12
41	Pulse electrodeposition and characterization of Zn-Mn coatings deposited from additive-free chloride electrolytes. <i>Journal of Applied Electrochemistry</i> , 2019, 49, 399-411.	2.9	12
42	Electroless method for Bi ₂ Te ₃ film deposition. <i>Materials Letters</i> , 2005, 59, 746-748.	2.6	11
43	Lattice thermal conductivity of Bi ₂ Te ₃ and SnSe using Debye-Callaway and Monte Carlo phonon transport modeling: Application to nanofilms and nanowires. <i>Physical Review B</i> , 2019, 100, .	3.2	11
44	Electrochemical determination of the diffusion coefficient of cations into Chevrel phase-based electrochemical transfer junction by potential step chronoamperometry and impedance spectroscopy. <i>Electrochimica Acta</i> , 2011, 56, 2740-2747.	5.2	10
45	Thermal conductivity of Bi ₂ Te ₃ tilted nanowires, a molecular dynamics study. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	9
46	Oxide Growth Mechanism on Mg AZ91 Alloy by Anodizing: Combination of Electrochemical and Ellipsometric In-Situ Measurements. <i>Journal of the Electrochemical Society</i> , 2017, 164, C1059-C1066.	2.9	8
47	Synthesis of bismuth telluride nanotubes and their simulated thermal properties. <i>Superlattices and Microstructures</i> , 2018, 122, 587-595.	3.1	8
48	Design of a real-time spectroscopic rotating compensator ellipsometer without systematic errors. <i>Thin Solid Films</i> , 2014, 571, 509-512.	1.8	7
49	Influence of the electrolyte composition on the electrochemical dissolution behavior of forged Inconel 718. <i>Journal of Applied Electrochemistry</i> , 2020, 50, 197-206.	2.9	7
50	Morphological and chemical dynamics upon electrochemical cyclic sodiation of electrochromic tungsten oxide coatings extracted by in situ ellipsometry. <i>Applied Optics</i> , 2020, 59, 3766.	1.8	6
51	Oxidation of chromia forming molybdenum-tungsten based alloys. <i>Journal of Materials Science</i> , 2003, 38, 2063-2072.	3.7	5
52	Synthesis of Te-Bi core-shell nanowires by two-step electrodeposition in ionic liquids. <i>Electrochemistry Communications</i> , 2018, 86, 30-33.	4.7	5
53	Caractérisation par ellipsométrie spectroscopique de films minces de tellure de bismuth obtenus par voie électrochimique. <i>European Physical Journal Special Topics</i> , 2004, 122, 87-92.	0.2	4
54	Optical constants of electroplated Bi ₂ Te ₃ films by Mueller matrix spectroscopic ellipsometry. <i>Thin Solid Films</i> , 2008, 516, 2922-2927.	1.8	4

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55	Analysis of carrier parameters and bandgap of electroplated Bi ₂ Te ₃ films by infrared spectroscopic ellipsometry. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1190-1193.	0.8	3
56	<i>In situ</i> spectroelectrochemical ellipsometry using super continuum white laser: Study of the anodization of magnesium alloy. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2019, 37, .	1.2	3
57	Electrodeposition of Tin Selenide from Oxalate-Based Aqueous Solution. Journal of the Electrochemical Society, 2020, 167, 162502.	2.9	2
58	Effect of lithium salt precursors on the physical properties of ZnO-Li thin films. Thin Solid Films, 2021, 725, 138644.	1.8	1
59	Thermal conductivity of Bi ₂ Te ₃ nanowires and nanotubes. , 2015, , .		0
60	Development of microdevices for the in-plane thermoelectric characterization of deposited films. Journal of Materials Research and Technology, 2021, 15, 1190-1200.	5.8	0
61	Grain Refinement and Improved Hardness/Corrosion Balance by Pulsed Electron Beam Surface Treatment of a FeAl Alloy. , 2007, , .		0
62	Characterization of Bi ₂ Te ₃ Thin Films Grown by Pulse Electroplating. , 2007, , .		0
63	Insights in the two-step synthesis of single crystalline Ag ₂ Te nanorods. Materials Chemistry and Physics, 2022, 289, 126487.	4.0	0