

Nuggehalli M Ravindra

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7473054/publications.pdf>

Version: 2024-02-01

78
papers

1,727
citations

394421

19
h-index

289244

40
g-index

97
all docs

97
docs citations

97
times ranked

1613
citing authors

#	ARTICLE	IF	CITATIONS
1	On the Penn Gap in Semiconductors. <i>Physica Status Solidi (B): Basic Research</i> , 1979, 93, K155.	1.5	398
2	Comments on the Moss Formula. <i>Physica Status Solidi (B): Basic Research</i> , 1980, 100, 715-719.	1.5	272
3	Emissivity Measurements and Modeling of Silicon-Related Materials: An Overview. <i>International Journal of Thermophysics</i> , 2001, 22, 1593-1611.	2.1	91
4	Optical properties of vanadium oxides-an analysis. <i>Journal of Materials Science</i> , 2013, 48, 6341-6351.	3.7	88
5	Light emission from silicon: Some perspectives and applications. <i>Journal of Electronic Materials</i> , 2003, 32, 1043-1051.	2.2	76
6	Metallurgical and Mechanical Evaluation of 4340 Steel Produced by Direct Metal Laser Sintering. <i>Jom</i> , 2015, 67, 582-589.	1.9	53
7	Silicon device processing in H-ambients: H-diffusion mechanisms and influence on electronic properties. <i>Journal of Electronic Materials</i> , 2001, 30, 1616-1627.	2.2	52
8	Transdermal drug delivery and patches—An overview. <i>Medical Devices & Sensors</i> , 2020, 3, e10069.	2.7	43
9	The magnetic field-assisted assembly of nanoscale semiconductor devices: A new technique. <i>Jom</i> , 2004, 56, 32-34.	1.9	40
10	Properties of PbS, PbSe, and PbTe. <i>Physica Status Solidi A</i> , 1980, 58, 311-316.	1.7	38
11	Energy Gap-Refractive Index Relations in Perovskites. <i>Materials</i> , 2020, 13, 1917.	2.9	36
12	Temperature dependence of the energy Gap in PbS, PbSe, and PbTe. <i>Physica Status Solidi A</i> , 1979, 52, K151-K155.	1.7	34
13	Advances in the manufacturing, types, and applications of biosensors. <i>Jom</i> , 2007, 59, 37-43.	1.9	29
14	Modeling and simulation of emissivity of silicon-related materials and structures. <i>Journal of Electronic Materials</i> , 2003, 32, 1052-1058.	2.2	28
15	Temperature dependence of CIGS and perovskite solar cell performance: an overview. <i>SN Applied Sciences</i> , 2020, 2, 1.	2.9	26
16	Applications of porous silicon thin films in solar cells and biosensors. <i>Jom</i> , 2010, 62, 15-24.	1.9	25
17	Transport Property Measurements in Doped BiTe ₃ Single Crystals Obtained via Zone Melting Method. <i>Journal of Electronic Materials</i> , 2015, 44, 1509-1516.	2.2	25
18	Pressure dependence of energy gap of III-V and II-VI ternary semiconductors. <i>Journal of Materials Science</i> , 2012, 47, 5735-5742.	3.7	21

#	ARTICLE	IF	CITATIONS
19	Process Evaluation of AISI 4340 Steel Manufactured by Laser Powder Bed Fusion. Journal of Materials Engineering and Performance, 2018, 27, 63-71.	2.5	20
20	Optical Properties of Black Silicon: An Analysis. Jom, 2015, 67, 2154-2159.	1.9	18
21	Additive Manufacturing of Sensors for Military Monitoring Applications. Polymers, 2021, 13, 1455.	4.5	18
22	Optical properties of metal phthalocyanines. Journal of Materials Science, 2010, 45, 4013-4020.	3.7	17
23	Silicon-integrated uncooled infrared detectors: Perspectives on thin films and microstructures. Journal of Electronic Materials, 2005, 34, 484-490.	2.2	16
24	Ion beam mixing for processing of nanostructure materials. Journal of Electronic Materials, 2006, 35, 834-839.	2.2	15
25	Rapid thermal processing of silicon wafers with emissivity patterns. Journal of Electronic Materials, 2006, 35, 877-891.	2.2	15
26	Emissivity of Electronic Materials, Coatings, and Structures. Jom, 2014, 66, 616-636.	1.9	14
27	Modeling of Magnetic-Field-Assisted Assembly of Semiconductor Devices. Journal of Electronic Materials, 2008, 37, 374-378.	2.2	13
28	A Review: Advances and Modernization in U.S Army Gun Propellants. Jom, 2021, 73, 1144-1164.	1.9	13
29	Structural, thermodynamic and electronic properties of $\text{GaP}_x\text{Sb}_{1-x}$ and $\text{InP}_x\text{Sb}_{1-x}$ alloys. Emerging Materials Research, 2013, 2, 109-113.	0.7	12
30	Isosymmetric compression of cubic halide perovskites ABX_3 ($A=\text{K, Rb, Cs}$). Applied Sciences, 2021, 3, 1.	2.9	11
31	Simulation of spectral emissivity of vanadium oxides (VOx)-based microbolometer structures. Emerging Materials Research, 2014, 3, 194-202.	0.7	9
32	CIGS and perovskite solar cells – an overview. Emerging Materials Research, 2020, 9, 812-824.	0.7	9
33	First-principles study of cubic alkaline-earth metal zirconate perovskites. Journal of Physics Communications, 2021, 5, 035006.	1.2	9
34	Thermochromic Polymeric Films for Applications in Active Intelligent Packaging – An Overview. Micromachines, 2021, 12, 1193.	2.9	9
35	Thermoelectric Properties of Pristine and Doped Graphene Nanosheets and Graphene Nanoribbons: Part I. Jom, 2016, 68, 1653-1659.	1.9	8
36	Temperature dependence of the energy gap in pyrite (FeS ₂). Physica Status Solidi A, 1981, 65, 737-742.	1.7	7

#	ARTICLE	IF	CITATIONS
37	Plasma Synthesis of Nitrogen Clusters on Carbon Nanotube Sheets. <i>Jom</i> , 2014, 66, 608-615.	1.9	6
38	A Magnetic-Field-Assisted Milli-Scale Robotic Assembly Machine: An Approach to Parallel Robotic Automation Systems. <i>Micromachines</i> , 2018, 9, 144.	2.9	6
39	Assembly of Glass and Copolymer Particles on a Liquid Surface - An Experimental Study. <i>Emerging Materials Research</i> , 2020, 9, 1-5.	0.7	6
40	Developing sensors for multifunctional applications. <i>Jom</i> , 2000, 52, 14-14.	1.9	5
41	Thermoelectric Properties of Pristine and Doped Graphene Nanosheets and Graphene Nanoribbons: Part II. <i>Jom</i> , 2016, 68, 1660-1666.	1.9	5
42	Evidence of Silicon Band-Edge Emission Enhancement When Interfaced with SiO ₂ :Er Films. <i>Jom</i> , 2017, 69, 241-246.	1.9	5
43	Synthesis and Stabilization of Cubic Gauche Polynitrogen under Radio-Frequency Plasma. <i>Chemistry of Materials</i> , 2022, 34, 4712-4720.	6.7	5
44	Temperature and voltage dependence of the barrier height in SnO ₂ /Si solar cells. <i>Physica Status Solidi A</i> , 1982, 70, 623-630.	1.7	4
45	Electrical, Optical and Structural Properties of Thin SiO ₂ Films On Si. <i>Materials Research Society Symposia Proceedings</i> , 1987, 105, 169.	0.1	4
46	Transient-enhanced diffusion in shallow-junction formation. <i>Journal of Electronic Materials</i> , 2002, 31, 999-1003.	2.2	4
47	Modeling of Optical Properties of Black Silicon/Crystalline Silicon. <i>Journal of Scientific and Industrial Metrology</i> , 2016, 01, .	0.1	4
48	Radiative Properties of Thin Films of Common Dielectric Materials in the IR Spectral Range of 1.5-14.2 μ m: Application to Infrared Imaging. <i>Jom</i> , 2018, 70, 1267-1273.	1.9	4
49	The dependence of solar cell active layer resistance on illumination. <i>International Journal of Electronics</i> , 1981, 50, 499-504.	1.4	3
50	Grain Enhancement of Thin Silicon Layers Using Optical Processing. <i>Materials Research Society Symposia Proceedings</i> , 1997, 470, 419.	0.1	3
51	Silicon nanoelectronics and beyond: An overview and recent developments. <i>Jom</i> , 2005, 57, 16-20.	1.9	3
52	Engineered Stresses for a Functional Si Light Emitter at Bandgap: An Overview. <i>Jom</i> , 2019, 71, 4857-4866.	1.9	3
53	Electrical & Structural Properties of TiSi ₂ Films. <i>Materials Research Society Symposia Proceedings</i> , 1988, 116, 459.	0.1	2
54	Grain Enhancement of Polycrystalline Silicon Films Aided by Optical Excitation. <i>Materials Research Society Symposia Proceedings</i> , 1997, 485, 95.	0.1	2

#	ARTICLE	IF	CITATIONS
55	Flat-band Voltage Study Of Atomic-layer-Deposited Aluminum-oxide Subjected To Spike Thermal Annealing. Materials Research Society Symposia Proceedings, 2003, 765, 1.	0.1	2
56	The drive for further miniaturization: Silicon nanoelectronics. Jom, 2005, 57, 14-15.	1.9	2
57	Electronâ€”hole superlattices in GaAs/AlxGa1â”xAs multiple quantum wells. Philosophical Magazine, 2006, 86, 3581-3593.	1.6	2
58	Effects of crystal ordering and composition on properties of CdSxTe1â”xalloys: a first-principle insight. Nanomaterials and Energy, 2013, 2, 288-293.	0.2	2
59	Processing for Highly Emissive CZ-Silicon by Depositing Stressed Solâ€”Gel Films. Jom, 2014, 66, 643-648.	1.9	2
60	Ab Initio Calculations of Electronic Properties of Vanadium Oxides. Jom, 2015, 67, 3022-3029.	1.9	2
61	Ab Initio Calculations of Transport Properties of Vanadium Oxides. Jom, 2018, 70, 561-565.	1.9	2
62	Hydrophobically Modified Isosorbide Dimethacrylates as a Bisphenol-A (BPA)-Free Dental Filling Material. Materials, 2021, 14, 2139.	2.9	2
63	Formulation of UV Curable Resins Utilized in Vat Photo Polymerization for the Additive Manufacturing of Gun Propulsion Charge in 3D Printers (Update). Minerals, Metals and Materials Series, 2020, , 1945-1954.	0.4	2
64	Electrical and Optical Properties of Thermid Polyimide. Materials Research Society Symposia Proceedings, 1992, 247, 241.	0.1	1
65	Reflectance calculations of alkaline textured multicrystalline silicon: a new approach. Emerging Materials Research, 2014, 3, 10-18.	0.7	1
66	Other materials. , 2022, , 111-132.		1
67	Currentâ€”Voltage Measurements of Thermally Grown SiO2 Films on Etched Silicon Surfaces. Physica Status Solidi A, 1992, 129, 291-300.	1.7	0
68	Optical Properties of Thermally Oxidized Silicon. Materials Research Society Symposia Proceedings, 1994, 342, 319.	0.1	0
69	Theoretical Analysis of the Minority Carrier Lifetime in a Multicrystalline Wafer with Spatially Varying Defect Distribution. Materials Research Society Symposia Proceedings, 1998, 510, 373.	0.1	0
70	Advances in microelectronic processing. Jom, 2001, 53, 42-42.	1.9	0
71	Special issue on polymers and composite materials. Polymers for Advanced Technologies, 2015, 26, 1303-1305.	3.2	0
72	A â€œPress and Goâ€”Thin Biofuel Cell Patch for Power Generation. Jom, 2019, 71, 3706-3710.	1.9	0

#	ARTICLE	IF	CITATIONS
73	Properties of Interfaced Materials and Films: Part II. Jom, 2019, 71, 4848-4849.	1.9	0
74	Properties of Interfaced Materials and Films: Part I. Jom, 2019, 71, 3696-3697.	1.9	0
75	Temperature Dependence of Energy Gap in Semiconductorsâ€™Influence on Solar Cell Performance. Minerals, Metals and Materials Series, 2021, , 259-268.	0.4	0
76	Infrared detector materials. , 2022, , 41-109.		0
77	A case study of an uncooled microbolometer. , 2022, , 257-298.		0
78	Present and future trends. , 2022, , 299-308.		0