

Joe Trodahl

List of Publications by Year in descending order

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59
papers

1,338
citations

304743

22
h-index

361022

35
g-index

62
all docs

62
docs citations

62
times ranked

1249
citing authors

#	ARTICLE	IF	CITATIONS
1	TO(Γ) mode resonances in the rare-earth nitrides. AIP Advances, 2022, 12, 075120.	1.3	2
2	GdN/SmN superlattices; influence of a Zeeman/exchange conflict. AIP Advances, 2021, 11, .	1.3	3
3	SmN and DyN: Effect of the nitrogen to rare earth flux ratio on the structural, transport, and magnetic properties. AIP Advances, 2021, 11, .	1.3	8
4	Contrasting para- and ferro-magnetic responses of (Gd,Dy)N alloys. Applied Physics Letters, 2021, 119, 172406.	3.3	3
5	Magneto-resistance of epitaxial GdN films. Journal of Applied Physics, 2020, 128, .	2.5	3
6	Nitrogen vacancies and carrier-concentration control in rare-earth nitrides. Applied Physics Letters, 2020, 117, .	3.3	16
7	Facile dissociation of molecular nitrogen using lanthanide surfaces: Towards ambient temperature ammonia synthesis. Physical Review Materials, 2020, 4, .	2.4	8
8	Tunable magnetic exchange springs in semiconductor GdN/NdN superlattices. Physical Review B, 2019, 100, .	3.2	5
9	Optical spectroscopy of SmN: Locating the conduction band. Physical Review B, 2019, 99, .	3.4	14
10	Breaking Molecular Nitrogen under Mild Conditions with an Atomically Clean Lanthanide Surface. ACS Omega, 2019, 4, 5950-5954.	3.5	17
11	Carrier concentration and band structure of GdN: γ -band conduction in the magnetic semiconductor NdN. Physical Review B, 2019, 100, .	3.4	14
12	Experimental and <i>ab initio</i> study of Mg doping in the intrinsic ferromagnetic semiconductor GdN. Journal of Applied Physics, 2018, 123, .	2.5	5
13	Anomalous Hall effect in SmN: Influence of orbital magnetism and γ -band conduction. Physical Review B, 2018, 98, .	3.2	14
14	Electron transport in heavily doped GdN. Physical Review Materials, 2018, 2, .	2.4	6
15	Effect of the growth temperature and nitrogen precursor on the structural and electrical transport properties of SmN thin films. MRS Advances, 2017, 2, 165-171.	0.9	1
16	Sea ice growth rates from tide-driven visible banding. Journal of Geophysical Research: Oceans, 2017, 122, 4675-4684.	2.6	2
17	Carrier-controlled anomalous Hall effect in an intrinsic ferromagnetic semiconductor. Physical Review B, 2017, 96, .	3.2	14
18	Epitaxial GdN/SmN-based superlattices grown by molecular beam epitaxy. MRS Advances, 2017, 2, 189-194.	0.9	1

#	ARTICLE	IF	CITATIONS
19	Superconductivity in the ferromagnetic semiconductor samarium nitride. Physical Review B, 2016, 94, .	3.2	25
20	On the ferromagnetic ground state of SmN. Physical Review B, 2016, 93, .	3.2	24
21	NdN: An intrinsic ferromagnetic semiconductor. Physical Review B, 2016, 93, .	3.2	21
22	Temperature-Induced Four-Fold-on-Six-Fold Symmetric Heteroepitaxy, Rocksalt SmN on Hexagonal AlN. Crystal Growth and Design, 2016, 16, 6454-6460.	3.0	7
23	Twisted phase of the orbital-dominant ferromagnet SmN in a GdN/SmN heterostructure. Physical Review B, 2015, 91, .	3.2	13
24	Highly resistive epitaxial Mg-doped GdN thin films. Applied Physics Letters, 2015, 106, .	3.3	18
25	YbN: An intrinsic semiconductor with antiferromagnetic exchange. Physical Review B, 2014, 90, .	3.2	8
26	Europium Nitride: A Novel Diluted Magnetic Semiconductor. Physical Review Letters, 2013, 111, 167206.	7.8	31
27	Optical response of DyN. Journal of Applied Physics, 2013, 113, 203509.	2.5	24
28	Electric field and photo-excited control of the carrier concentration in GdN. Applied Physics Letters, 2013, 102, 132409.	3.3	20
29	Role of magnetic polarons in ferromagnetic GdN. Physical Review B, 2013, 87, .	3.2	40
30	Spin/orbit moment imbalance in the near-zero moment ferromagnetic semiconductor SmN. Physical Review B, 2013, 87, .	3.2	34
31	Epitaxial growth and properties of GdN, EuN and SmN thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 605-608.	0.8	21
32	Magnetic state of EuN: X-ray magnetic circular dichroism at the EuM _{4,5} and L _{2,3} absorption edges. Physical Review B, 2011, 83, .	3.2	47
33	Enhanced Curie temperature in N-deficient GdN. Applied Physics Letters, 2011, 98, .	3.3	38
34	Electronic structure of EuN: Growth, spectroscopy, and theory. Physical Review B, 2011, 84, .	3.2	38
35	Electronic band structure information of GdN extracted from x-ray absorption and emission spectroscopy. Applied Physics Letters, 2010, 96, 032101.	3.3	22
36	Nearest-neighbor Mn antiferromagnetic exchange in $Ga_{1-x}Mn_x$. Physical Review B, 2010, 81, .	3.2	30

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37	Vibrational properties of rare-earth nitrides: Raman spectra and theory. <i>Physical Review B</i> , 2009, 79, .	3.2	32
38	Growth and properties of epitaxial GdN. <i>Journal of Applied Physics</i> , 2009, 106, .	2.5	49
39	Near-zero-moment ferromagnetism in the semiconductor SmN. <i>Physical Review B</i> , 2008, 78, .	3.2	39
40	Electronic properties of (Ga,Mn)N thin films with high Mn content. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	10
41	Comparison between experiment and calculated band structures for DyN and SmN. <i>Physical Review B</i> , 2007, 76, .	3.2	47
42	Ferromagnetic redshift of the optical gap in GdN. <i>Physical Review B</i> , 2007, 76, .	3.2	79
43	Thermal conductivity of landfast Antarctic and Arctic sea ice. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	122
44	Direct measurement of sea ice thermal conductivity: No surface reduction. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	19
45	Effect of ammonia on the temperature-dependent conductivity and thermopower of polypyrrole. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2006, 44, 1331-1338.	2.1	47
46	Semiconducting ground state of GdN thin films. <i>Physical Review B</i> , 2006, 73, .	3.2	110
47	Ferromagnetic resonance study of GdN thin films with bulk and extended lattice constants. <i>Physical Review B</i> , 2006, 74, .	3.2	34
48	Evolution of the local structure in GaN:O thin films grown by ion-assisted deposition with film thickness. <i>Surface and Interface Analysis</i> , 2005, 37, 273-280.	1.8	3
49	Raman spectroscopy of highly aligned thin films of Sr ₂ FeMoO ₆ . <i>Journal of Raman Spectroscopy</i> , 2004, 35, 1081-1085.	2.5	7
50	X-ray absorption spectroscopy in the analysis of GaN thin films. <i>Surface and Interface Analysis</i> , 2003, 35, 719-722.	1.8	24
51	Depth and seasonal variations in the thermal properties of Antarctic Dry Valley permafrost from temperature time series analysis. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	16
52	Gap anisotropy, spin fluctuations, and normal-state properties of the electron-doped superconductor Sr _{0.9} La _{0.1} CuO ₂ . <i>Physical Review B</i> , 2002, 65, .	3.2	26
53	Compositional and structural studies of amorphous GaN grown by ion-assisted deposition. <i>Materials Research Society Symposia Proceedings</i> , 2001, 693, 579.	0.1	3
54	Conductivity, photoconductivity and optical properties of amorphous GaN films. <i>Materials Research Society Symposia Proceedings</i> , 2001, 693, 81.	0.1	3

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55	Solar radiative heating in first-year sea ice. <i>Annals of Glaciology</i> , 2001, 33, 261-266.	1.4	3
56	Amorphous Thin Films: Insulators, Metals, and Semiconductors. <i>Advanced Materials</i> , 2001, 13, 1031-1033.	21.0	10
57	O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering. <i>Physical Review B</i> , 2001, 63, .	3.2	21
58	Heat transport in McMurdo Sound first-year fast ice. <i>Journal of Geophysical Research</i> , 2000, 105, 11347-11358.	3.3	30
59	Determination of the depth dependent scattering coefficient in sea ice. <i>Journal of Geophysical Research</i> , 1997, 102, 1141-1151.	3.3	13