Adam T Neal

List of Publications by Citations

36	7,068	22	37
papers	citations	h-index	g-index
37	7,996	5.1	5.96
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
36	Phosphorene: an unexplored 2D semiconductor with a high hole mobility. *ACS Nano*, **2014**, 8, 4033-41	16.7	4487
35	Channel length scaling of MoS2 MOSFETs. *ACS Nano*, **2012**, 6, 8563-9	16.7	594
34	Switching mechanism in single-layer molybdenum disulfide transistors: an insight into current flow across Schottky barriers. *ACS Nano*, **2014**, 8, 1031-8	16.7	202
33	Molecular Doping of Multilayer ${rm MoS}_{2}$ Field-Effect Transistors: Reduction in Sheet and Contact Resistances. *IEEE Electron Device Letters*, **2013**, 34, 1328-1330	4.4	196
32	Demonstration of high mobility and quantum transport in modulation-doped (AlxGa1-x)2O3/Ga2O3 heterostructures. *Applied Physics Letters*, **2018**, 112, 173502	3.4	192
31	Statistical study of deep submicron dual-gated field-effect transistors on monolayer chemical vapor deposition molybdenum disulfide films. *Nano Letters*, **2013**, 13, 2640-6	11.5	168
30	Donors and deep acceptors in Ga2O3. *Applied Physics Letters*, **2018**, 113, 062101	3.4	148
29	The Effect of Dielectric Capping on Few-Layer Phosphorene Transistors: Tuning the Schottky Barrier Heights. *IEEE Electron Device Letters*, **2014**, 35, 795-797	4.4	142
28	Ge-Doped ${beta }$ -Ga2O3 MOSFETs. *IEEE Electron Device Letters*, **2017**, 38, 775-778	4.4	124
27	Heteroepitaxy of N-type Ga2O3 thin films on sapphire substrate by low pressure chemical vapor deposition. *Applied Physics Letters*, **2016**, 109, 132103	3.4	96
26	Intrinsic doping and gate hysteresis in graphene field effect devices fabricated on SiO2 substrates. *Journal of Physics Condensed Matter*, **2010**, 22, 334214	1.8	91
25	Magneto-transport in MoS2: phase coherence, spin-orbit scattering, and the hall factor. *ACS Nano*, **2013**, 7, 7077-82	16.7	78
24	Effects of (NH4)2S passivation on the off-state performance of 3-dimensional InGaAs metal-oxide-semiconductor field-effect transistors. *Applied Physics Letters*, **2011**, 99, 152113	3.4	63
23	Incomplete Ionization of a 110 meV Unintentional Donor in GaO and its Effect on Power Devices. *Scientific Reports*, **2017**, 7, 13218	4.9	60
22	Towards High-Mobility Heteroepitaxial Ga2O3 on Sapphire Dependence on The Substrate Off-Axis Angle. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1700467	1.6	51
21	P-type conduction in two-dimensional MoS2 via oxygen incorporation. *Applied Physics Letters*, **2017**, 110, 193103	3.4	46
20	Size-Dependent-Transport Study of $hbox{In}_{0.53} hbox{Ga}_{0.47}hbox{As}$ Gate-All-Around Nanowire MOSFETs: Impact of Quantum Confinement and Volume Inversion. *IEEE Electron Device Letters*, **2012**, 33, 967-969	4.4	44

19	Two-dimensional TaSe2 metallic crystals: spin-orbit scattering length and breakdown current density. *ACS Nano*, **2014**, 8, 9137-42	16.7	40
18	Lateral Ga2O3 field effect transistors. *Semiconductor Science and Technology*, **2020**, 35, 013002	1.8	38
17	MOCVD growth of high purity Ga2O3 epitaxial films using trimethylgallium precursor. *Applied Physics Letters*, **2020**, 117, 262101	3.4	34
16	Metal contacts to MoS2: A two-dimensional semiconductor **2012**,		33
15	Gallium oxide power electronics. *APL Materials*, **2022**, 10, 029201	5.7	33
14	Pulsed Power Performance of GaO MOSFETs at L-Band. *IEEE Electron Device Letters*, **2020**, 41, 989-992	4.4	19
13	(Invited) Fundamentals in MoS2 Transistors: Dielectric, Scaling and Metal Contacts. *ECS Transactions*, **2013**, 58, 203-208	1	17
12	Reduction of unintentional Si doping in Ga2O3 grown via plasma-assisted molecular beam epitaxy. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 043403	2.9	15
11	Weak localization in few-layer black phosphorus. *2D Materials*, **2016**, 3, 024003	5.9	15
10	Ga2O3 defect study by steady-state capacitance spectroscopy. *Japanese Journal of Applied Physics*, **2018**, 57, 091101	1.4	12
9	Transport studies in 2D transition metal dichalcogenides and black phosphorus. *Journal of Physics Condensed Matter*, **2016**, 28, 263002	1.8	10
8	Si doping in MOCVD grown (010) (AlxGa1)2O3 thin films. *Journal of Applied Physics*, **2022**, 131, 145301	2.5	5
7	Ambipolar phosphorene field-effect transistors with dielectric capping **2014**,		4
6	(Invited) Atomic-Layer-Deposited High-k Dielectric Integration on Epitaxial Graphene. *ECS Transactions*, **2010**, 33, 459-466	1	4
5	Study of defects in Ga2O3 by isothermal capacitance transient spectroscopy. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2019**, 37, 041204	1.3	3
4	(Invited) ALD High-k as a Common Gate Stack Solution for Nanoelectronics. *ECS Transactions*, **2010**, 28, 51-68	1	3
3	Electronic Transport Properties in Top-Gated Epitaxial Graphene on Silicon Carbide with ALD Al2O3 High-K Dielectric **2010**,		1
2	Zeeman spin-splitting in the (010) Ga2O3 two-dimensional electron gas. *Applied Physics Letters*, **2019**, 115, 262103	3.4	0

1 Electrical Properties 1. *Springer Series in Materials Science*, **2020**, 389-405 0.9