Lee A Walsh

List of Publications by Year
in descending order

30 papers	663 citations	759233 12 h-index	580821 25 g-index
30 all docs	30 docs citations	30 times ranked	1501 citing authors

#	Article	IF	Citations
1	van der Waals epitaxy: 2D materials and topological insulators. Applied Materials Today, 2017, 9, 504-515.	4.3	137
2	Nucleation and growth of WSe ₂ : enabling large grain transition metal dichalcogenides. 2D Materials, 2017, 4, 045019.	4.4	96
3	Interface Chemistry of Contact Metals and Ferromagnets on the Topological Insulator Bi₂Se₃. Journal of Physical Chemistry C, 2017, 121, 23551-23563.	3.1	71
4	Wâ€‰Te ₂ thin films grown by beam-interrupted molecular beam epitaxy. 2D Materials, 2017, 4, 025044.	4.4	48
5	Spin coating of hydrophilic polymeric films for enhanced centrifugal flow control by serial siphoning. Microfluidics and Nanofluidics, 2014, 16, 691-699.	2.2	39
6	Fermi Level Manipulation through Native Doping in the Topological Insulator Bi₂Se₃. ACS Nano, 2018, 12, 6310-6318.	14.6	37
7	Dislocation driven spiral and non-spiral growth in layered chalcogenides. Nanoscale, 2018, 10, 15023-15034.	5.6	24
8	Engineering the Palladiumâ€“WSe2 Interface Chemistry for Field Effect Transistors with High-Performance Hole Contacts. ACS Applied Nano Materials, 2019, 2, 75-88.	5.0	24
9	WSe _(2â^’ <i>x</i>) Te _{<i>x</i>} alloys grown by molecular beam epitaxy. 2D Materials, 2019, 6, 045027.	4.4	20
10	Molecular Beam Epitaxy of Transition Metal Dichalcogenides. , 2018, , 515-531.		19
11	A combined hard x-ray photoelectron spectroscopy and electrical characterisation study of metal/SiO2/Si(100) metal-oxide-semiconductor structures. Applied Physics Letters, 2012, 101, .	3.3	16
12	Large-area growth of MoS₂ at temperatures compatible with integrating back-end-of-line functionality. 2D Materials, 2021, 8, 025008.	4.4	14
13	Engineering the interface chemistry for scandium electron contacts in WSe₂ transistors and diodes. 2D Materials, 2019, 6, 045020.	4.4	13
14	Hard x-ray photoelectron spectroscopy and electrical characterization study of the surface potential in metal/Al<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>/GaAs(100) metal-oxide-semiconductor structures. Ph	3.2	10
15	In-situ surface and interface study of atomic oxygen modified carbon containing porous low-Îº dielectric films for barrier layer applications. Journal of Applied Physics, 2016, 120, 105305.	2.5	10
16	Oxide-related defects in quantum dot containing Si-rich silicon nitride films. Thin Solid Films, 2017, 636, 267-272.	1.8	10
17	Effects of Annealing Temperature and Ambient on Metal/PtSe₂ Contact Alloy Formation. ACS Omega, 2019, 4, 17487-17493.	3.5	10
18	Ni-(In,Ga)As Alloy Formation Investigated by Hard-X-Ray Photoelectron Spectroscopy and X-Ray Absorption Spectroscopy. Physical Review Applied, 2014, 2, .	3.8	9

#	Article	IF	Citations
19	Impact of Etch Processes on the Chemistry and Surface States of the Topological Insulator Bi₂Se₃. ACS Applied Materials & Interfaces, 2019, 11, 32144-32150.	8.0	9
20	Monolayer doping of silicon-germanium alloys: A balancing act between phosphorus incorporation and strain relaxation. Journal of Applied Physics, 2019, 126, .	2.5	9
21	In Situ Investigations into the Mechanism of Oxygen Catalysis on Ruthenium/Manganese Surfaces and the Thermodynamic Stability of Ru/Mn-Based Copper Diffusion Barrier Layers. Journal of Physical Chemistry C, 2013, 117, 16136-16143.	3.1	7
22	The addition of aluminium to ruthenium liner layers for use as copper diffusion barriers. Applied Surface Science, 2014, 307, 677-681.	6.1	7
23	The impact of porosity on the formation of manganese based copper diffusion barrier layers on low-<i>Îº</i> dielectric materials. Journal Physics D: Applied Physics, 2015, 48, 325102.	2.8	5
24	Two-Dimensional Materials and Their Role in Emerging Electronic and Photonic Devices. Electrochemical Society Interface, 2018, 27, 53-58.	0.4	5
25	Growth and characterization of thin manganese oxide corrosion barrier layers for silicon photoanode protection during water oxidation. Solar Energy Materials and Solar Cells, 2015, 136, 64-69.	6.2	4
26	Investigation of the thermal stability of Mo-In0.45Ga0.47As for applications as source/drain contacts. Journal of Applied Physics, 2016, 120, .	2.5	4
27	Chemical and electrical characterisation of the segregation of Al from a CuAl alloy (90%:10% wt) with thermal anneal. Thin Solid Films, 2016, 599, 59-63.	1.8	3
28	A combined capacitance-voltage and hard x-ray photoelectron spectroscopy characterisation of metal/Al2O3/In0.53Ga0.47As capacitor structures. Journal of Applied Physics, 2014, 116, 024104.	2.5	2
29	A spectroscopic method for the evaluation of surface passivation treatments on metalâ€“oxideâ€“semiconductor structures. Applied Surface Science, 2014, 301, 40-45.	6.1	1
30	Chemical Vapor Deposition of MoS2 for Back-End-of-Line Applications. ECS Meeting Abstracts, 2021, MA2021-02, 1952-1952.	0.0	0