

# Justin Bogan

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

518  
citations

686830

13  
h-index

676716

22  
g-index

40  
all docs

40  
docs citations

40  
times ranked

558  
citing authors

#	ARTICLE	IF	CITATIONS
1	Exploring the Role of Adsorption and Surface State on the Hydrophobicity of Rare Earth Oxides. ACS Applied Materials & Interfaces, 2017, 9, 13751-13760.	4.0	77
2	A new method for assessing the recyclability of powders within Powder Bed Fusion process. Materials Characterization, 2020, 161, 110167.	1.9	46
3	Interdiffusion and barrier layer formation in thermally evaporated Mn/Cu heterostructures on SiO <sub>2</sub> substrates. Applied Physics Letters, 2011, 98, 123112.	1.5	38
4	Chemical and structural investigation of the role of both Mn and Mn oxide in the formation of manganese silicate barrier layers on SiO <sub>2</sub> . Journal of Applied Physics, 2011, 110, .	1.1	33
5	Synchrotron radiation photoemission study of in situ manganese silicate formation on SiO <sub>2</sub> for barrier layer applications. Applied Physics Letters, 2011, 98, 113508.	1.5	33
6	In Situ XPS Chemical Analysis of MnSiO <sub>3</sub> Copper Diffusion Barrier Layer Formation and Simultaneous Fabrication of Metal Oxide Semiconductor Electrical Test MOS Structures. ACS Applied Materials & Interfaces, 2016, 8, 2470-2477.	4.0	32
7	On the use of (3-trimethoxysilylpropyl)diethylenetriamine self-assembled monolayers as seed layers for the growth of Mn based copper diffusion barrier layers. Applied Surface Science, 2018, 427, 260-266.	3.1	26
8	Area-Selective ALD of Ru on Nanometer-Scale Cu Lines through Dimerization of Amino-Functionalized Alkoxy Silane Passivation Films. ACS Applied Materials & Interfaces, 2020, 12, 4678-4688.	4.0	25
9	Photoemission study of the identification of Mn silicate barrier formation on carbon containing low- $\epsilon$ dielectrics. Microelectronic Engineering, 2014, 130, 46-51.	1.1	18
10	Nucleation and adhesion of ultra-thin copper films on amino-terminated self-assembled monolayers. Applied Surface Science, 2018, 462, 38-47.	3.1	18
11	Photoemission study of carbon depletion from ultralow- $\epsilon$ carbon doped oxide surfaces during the growth of Mn silicate barrier layers. Journal of Applied Physics, 2011, 110, 124512.	1.1	16
12	Scanning transmission electron microscopy investigations of self-forming diffusion barrier formation in Cu(Mn) alloys on SiO <sub>2</sub> . APL Materials, 2013, 1, .	2.2	16
13	Chemical and structural investigations of the interactions of Cu with MnSiO <sub>3</sub> diffusion barrier layers. Journal of Applied Physics, 2012, 112, 064507.	1.1	13
14	Precise Definition of a "Monolayer Point" in Polymer Brush Films for Fabricating Highly Coherent TiO <sub>2</sub> Thin Films by Vapor-Phase Infiltration. Langmuir, 2020, 36, 12394-12402.	1.6	13
15	Physical, chemical and electrical characterisation of the diffusion of copper in silicon dioxide and prevention via a CuAl alloy barrier layer system. Materials Science in Semiconductor Processing, 2017, 63, 227-236.	1.9	11
16	In-situ surface and interface study of atomic oxygen modified carbon containing porous low- $\epsilon$ dielectric films for barrier layer applications. Journal of Applied Physics, 2016, 120, 105305.	1.1	10
17	Hard x-ray photoelectron spectroscopy study of copper formation by metal salt inclusion in a polymer film. Journal Physics D: Applied Physics, 2019, 52, 435301.	1.3	10
18	Chemical and structural investigations of the incorporation of metal manganese into ruthenium thin films for use as copper diffusion barrier layers. Applied Physics Letters, 2012, 101, 231603.	1.5	9

#	ARTICLE	IF	CITATIONS
19	Defect-mediated ferromagnetism in ZnO:Mn nanorods. Applied Physics A: Materials Science and Processing, 2014, 115, 313-321.	1.1	8
20	Oxidation of ruthenium thin films using atomic oxygen. Thin Solid Films, 2015, 597, 112-116.	0.8	8
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.	1.5	7
22	The addition of aluminium to ruthenium liner layers for use as copper diffusion barriers. Applied Surface Science, 2014, 307, 677-681.	3.1	7
23	Surface characterization of poly-2-vinylpyridine A polymer for area selective deposition techniques. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, 050601.	0.9	7
24	Analysis of Al and Cu salt infiltration into a poly 2-vinylpyridine (P2vP) polymer layer for area selective deposition applications. Journal Physics D: Applied Physics, 2020, 53, 115105.	1.3	7
25	Investigation of nitrogen incorporation into manganese based copper diffusion barrier layers for future interconnect applications. Surfaces and Interfaces, 2018, 13, 133-138.	1.5	6
26	The impact of porosity on the formation of manganese based copper diffusion barrier layers on low- $\kappa$ dielectric materials. Journal Physics D: Applied Physics, 2015, 48, 325102.	1.3	5
27	Nitrogen reactive ion etch processes for the selective removal of poly-(4-vinylpyridine) in block copolymer films. Nanotechnology, 2018, 29, 355302.	1.3	4
28	The role of atomic oxygen in the decomposition of self-assembled monolayers during area-selective atomic layer deposition. Applied Surface Science, 2022, 586, 152679.	3.1	4
29	Investigation of the release of Si from SiO <sub>2</sub> during the formation of manganese/ruthenium barrier layers. Applied Physics Letters, 2013, 102, 201603.	1.5	3
30	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.	0.8	3
31	Controlling wettability of PECVD-deposited dual organosilicon/carboxylic acid films to influence DNA hybridisation assay efficiency. Journal of Materials Chemistry B, 2017, 5, 8378-8388.	2.9	3
32	The addition of aluminium and manganese to ruthenium liner layers for use as a copper diffusion barrier. , 2014, , .		1
33	A photoemission study of the effectiveness of nickel, manganese, and cobalt based corrosion barriers for silicon photo-anodes during water oxidation. Journal of Applied Physics, 2016, 119, 195301.	1.1	1
34	STEM Analysis Of Cu(Mn) Self-Forming Diffusion Barriers on SiO <sub>2</sub> For Applications In The Semiconductor Industry. Microscopy and Microanalysis, 2012, 18, 1842-1843.	0.2	0
35	Growth characteristics of Mn silicate barrier layers on SiO <sub>2</sub> . , 2012, , .		0
36	Photoemission study of the impact of carbon content on Mn silicate barrier formation on low- $\kappa$ dielectric materials. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
37	Atomic oxygen treatment of carbon containing low-k dielectric materials to facilitate manganese silicate barrier formation. , 2015, , .		0
38	Characterisation of CuAl alloy for future interconnect technologies. , 2015, , .		0
39	Characterisation of Electroless Deposited Cobalt by Hard and Soft X-ray Photoemission Spectroscopy. , 2018, , .		0
40	Synchrotron radiation study of metallic titanium deposited on dielectric substrates. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, .	0.6	0