

# J K S Baldwin

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

2,981  
citations

218677

26  
h-index

161849

54  
g-index

61  
all docs

61  
docs citations

61  
times ranked

5002  
citing authors

#	ARTICLE	IF	CITATIONS
1	Implications of Microstructure in Helium-Implanted Nanocrystalline Metals. <i>Materials</i> , 2022, 15, 4092.	2.9	6
2	Comparison of void swelling of ferritic-martensitic and ferritic HT9 alloys after high-dose self-ion irradiation. <i>Materials Characterization</i> , 2021, 173, 110908.	4.4	11
3	Enhanced van der Waals epitaxy of germanium by out-of-plane dipole moment induced from transferred graphene on TiN/AlN multilayers. <i>Journal of Applied Physics</i> , 2021, 130, .	2.5	3
4	Methylammonium Lead Tribromide Single Crystal Detectors towards Robust Gamma-Ray Photon Sensing. <i>Advanced Optical Materials</i> , 2020, 8, 2000233.	7.3	18
5	Toward high-throughput defect density quantification: A comparison of techniques for irradiated samples. <i>Ultramicroscopy</i> , 2019, 206, 112820.	1.9	8
6	Structure and properties of pseudomorphically transformed bcc Mg in Mg/Nb multilayered nanolaminates studied using synchrotron X-ray diffraction. <i>Journal of Applied Physics</i> , 2019, 126, 025302.	2.5	10
7	Outstanding radiation resistance of tungsten-based high-entropy alloys. <i>Science Advances</i> , 2019, 5, eaav2002.	10.3	360
8	Microstructure and mechanical properties of co-sputtered Al-SiC composites. <i>Materials and Design</i> , 2019, 168, 107670.	7.0	13
9	The alleviation of radiation-damage on Nb/MgO film driven by strain gradient in He ion irradiation. <i>Applied Surface Science</i> , 2019, 465, 1014-1018.	6.1	7
10	Mechanical properties of metal-ceramic nanolaminates: Effect of constraint and temperature. <i>Acta Materialia</i> , 2018, 142, 37-48.	7.9	39
11	Initial results and designs of dual-filter and plenoptic imaging for high-temperature plasmas. <i>Review of Scientific Instruments</i> , 2018, 89, 10E112.	1.3	4
12	Reflectance determination of optical spectral emissivity of metal surfaces at ambient conditions. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	10
13	Room temperature deformation mechanisms of Mg/Nb nanolayered composites. <i>Journal of Materials Research</i> , 2018, 33, 1311-1332.	2.6	43
14	Heterogeneous to homogeneous melting transition visualized with ultrafast electron diffraction. <i>Science</i> , 2018, 360, 1451-1455.	12.6	133
15	Stress-induced surface instabilities and defects in thin films sputter deposited on compliant substrates. <i>Soft Matter</i> , 2017, 13, 4035-4046.	2.7	12
16	Cr incorporated phase transformation in Y2O3 under ion irradiation. <i>Scientific Reports</i> , 2017, 7, 40148.	3.3	6
17	Solitary Oxygen Dopant Emission from Carbon Nanotubes Modified by Dielectric Metasurfaces. <i>ACS Nano</i> , 2017, 11, 6431-6439.	14.6	15
18	Rapid solidification growth mode transitions in Al-Si alloys by dynamic transmission electron microscopy. <i>Acta Materialia</i> , 2017, 131, 22-30.	7.9	58

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19	The role of grain size in He bubble formation: Implications for swelling resistance. <i>Journal of Nuclear Materials</i> , 2017, 484, 236-244.	2.7	70
20	Evidence of a temperature transition for denuded zone formation in nanocrystalline Fe under He irradiation. <i>Materials Research Letters</i> , 2017, 5, 195-200.	8.7	27
21	Strong, Ductile, and Thermally Stable bcc-Mg Nanolaminates. <i>Scientific Reports</i> , 2017, 7, 8264.	3.3	53
22	Achieving Radiation Tolerance through Non-Equilibrium Grain Boundary Structures. <i>Scientific Reports</i> , 2017, 7, 12275.	3.3	38
23	Multi-exciton emission from solitary dopant states of carbon nanotubes. <i>Nanoscale</i> , 2017, 9, 16143-16148.	5.6	5
24	In situ frustum indentation of nanoporous copper thin films. <i>International Journal of Plasticity</i> , 2017, 98, 139-155.	8.8	15
25	Determination of the Solid Electrolyte Interphase Structure Grown on a Silicon Electrode Using a Fluoroethylene Carbonate Additive. <i>Scientific Reports</i> , 2017, 7, 6326.	3.3	157
26	Self-organization of helium precipitates into elongated channels within metal nanolayers. <i>Science Advances</i> , 2017, 3, eaao2710.	10.3	41
27	Coupling Quantitative Dislocation Analysis with In Situ Loading Techniques: New Insight into Deformation Mechanisms. <i>Microscopy and Microanalysis</i> , 2017, 23, 764-765.	0.4	0
28	Evaluating the solid electrolyte interphase formed on silicon electrodes: a comparison of ex situ X-ray photoelectron spectroscopy and in situ neutron reflectometry. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13927-13940.	2.8	80
29	Quantification of void pinning effects during grain growth of nanocrystalline iron. <i>Journal of Nuclear Materials</i> , 2016, 481, 62-65.	2.7	7
30	What determines the interfacial configuration of Nb/Al <sub>2</sub> O <sub>3</sub> and Nb/MgO interface. <i>Scientific Reports</i> , 2016, 6, 33931.	3.3	25
31	Time-Resolved In Situ Measurements During Rapid Alloy Solidification: Experimental Insight for Additive Manufacturing. <i>Jom</i> , 2016, 68, 985-999.	1.9	53
32	Solid-State Approach for Fabrication of Photostable, Oxygen-Doped Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2015, 25, 6157-6164.	14.9	30
33	Nanoscale morphologies at alloyed and irradiated metal-oxide bilayers. <i>Journal of Materials Science</i> , 2015, 50, 2726-2734.	3.7	4
34	Room-temperature single-photon generation from solitary dopants of carbon nanotubes. <i>Nature Nanotechnology</i> , 2015, 10, 671-675.	31.5	234
35	Fluid and Resistive Tethered Lipid Membranes on Nanoporous Substrates. <i>Journal of Physical Chemistry B</i> , 2015, 119, 12868-12876.	2.6	6
36	Thermal flux limited electron Kapitza conductance in copper-niobium multilayers. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	21

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37	Direct Determination of Solid-Electrolyte Interphase Thickness and Composition as a Function of State of Charge on a Silicon Anode. <i>Journal of Physical Chemistry C</i> , 2015, 119, 20339-20349.	3.1	127
38	Texture evolution in nanocrystalline iron films deposited using biased magnetron sputtering. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	19
39	Radiation induced effects on mechanical properties of nanoporous gold foams. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	39
40	Characterization of a Fe/Y <sub>2</sub> O <sub>3</sub> metal/oxide interface using neutron and x-ray scattering. <i>Applied Physics Letters</i> , 2014, 105, 041601.	3.3	10
41	Design of radiation resistant metallic multilayers for advanced nuclear systems. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	33
42	Ozonated Graphene Oxide Film as a Proton Exchange Membrane. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3588-3593.	13.8	214
43	Investigating phosphonate monolayer stability on ALD oxide surfaces. <i>Applied Surface Science</i> , 2014, 288, 98-108.	6.1	22
44	Flow-based solution liquid solid nanowire synthesis. <i>Nature Nanotechnology</i> , 2013, 8, 660-666.	31.5	67
45	Detection of helium bubble formation at fcc-bcc interfaces using neutron reflectometry. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	24
46	Smallest Metallic Nanorods Using Physical Vapor Deposition. <i>Physical Review Letters</i> , 2013, 110, 136102.	7.8	40
47	The Effect of Ballistic Electron Transport on Copper-Niobium Thermal Interface Conductance. , 2013, , .		0
48	Indentation Fracture Response of Al/TiN Nanolaminates. <i>Materials Research Letters</i> , 2013, 1, 102-108.	8.7	33
49	Anomaly of film porosity dependence on deposition rate. <i>Applied Physics Letters</i> , 2012, 100, 061601.	3.3	16
50	Microcompression study of Al-Nb nanoscale multilayers. <i>Journal of Materials Research</i> , 2012, 27, 592-598.	2.6	58
51	Nitrogen-Doped Graphene-Rich Catalysts Derived from Heteroatom Polymers for Oxygen Reduction in Nonaqueous Lithium-O <sub>2</sub> Battery Cathodes. <i>ACS Nano</i> , 2012, 6, 9764-9776.	14.6	486
52	High-pressure and high-temperature neutron reflectometry cell for solid-fluid interface studies. <i>European Physical Journal Plus</i> , 2012, 127, 1.	2.6	3
53	A study of the effect of iron island morphology and interface oxidation on the magnetic hysteresis of Fe-MgO (001) thin film composites. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	16
54	Irradiation induced changes in small angle grain boundaries in mosaic Cu thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 108, 121-126.	2.3	6

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55	Growth and structural characterization of epitaxial Cu/Nb multilayers. Thin Solid Films, 2011, 519, 4137-4143.	1.8	45
56	Trapping of implanted He at Cu/Nb interfaces measured by neutron reflectometry. Applied Physics Letters, 2011, 98, .	3.3	40
57	Synthesis and characterization of nanoporous Pt-Ni alloys. Applied Physics Letters, 2009, 95, 201902.	3.3	20
58	Controlled nanoporous Pt morphologies by varying deposition parameters. Applied Physics Letters, 2009, 95, .	3.3	27