

Bruce A Davidson

List of Publications by Year in descending order

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67
papers

1,867
citations

257450

24
h-index

254184

43
g-index

68
all docs

68
docs citations

68
times ranked

1996
citing authors

#	ARTICLE	IF	CITATIONS
1	Single-crystalline epitaxial TiO film: A metal and superconductor, similar to Ti metal. Science Advances, 2021, 7, .	10.3	14
2	High-temperature superconductivity and its robustness against magnetic polarization in monolayer FeSe on EuTiO ₃ . Npj Quantum Materials, 2021, 6, .	5.2	14
3	An integrated ultra-high vacuum apparatus for growth and <i>in situ</i> characterization of complex materials. Review of Scientific Instruments, 2020, 91, 085109.	1.3	17
4	Controlling the electrical and magnetic ground states by doping in the complete phase diagram of titanate $\text{Eu}_{1-x}\text{Ca}_x\text{TiO}_3$ thin films. Physical Review B, 2020, 101, .	3.2	7
5	Reduced Critical Current Spread in Planar MgB ₂ Josephson Junction Array Made by Focused Helium Ion Beam. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-6.	1.7	11
6	Normal-state and superconducting properties of Co-doped BaFe ₂ As ₂ and MgB ₂ thin films after focused helium ion beam irradiation. Superconductor Science and Technology, 2019, 32, 095009.	3.5	6
7	Epitaxial growth of perovskite SrBiO_3 film on SrTiO_3 by oxide molecular beam epitaxy. Physical Review Materials, 2019, 3, .	2.4	9
8	Strain-induced magnetization control in an oxide multiferroic heterostructure. Physical Review B, 2018, 97, .	3.2	26
9	MgB ₂ Josephson junctions produced by focused helium ion beam irradiation. AIP Advances, 2018, 8, .	1.3	21
10	Nature of the metal-insulator transition in few-unit-cell-thick LaNiO ₃ films. Nature Communications, 2018, 9, 2206.	12.8	66
11	Strain-Engineered Oxygen Vacancies in CaMnO ₃ Thin Films. Nano Letters, 2017, 17, 794-799.	9.1	83
12	Constructing oxide interfaces and heterostructures by atomic layer-by-layer laser molecular beam epitaxy. Npj Quantum Materials, 2017, 2, .	5.2	34
13	Deterministic and robust room-temperature exchange coupling in monodomain multiferroic BiFeO ₃ heterostructures. Nature Communications, 2017, 8, 1583.	12.8	45
14	Real-time and <i>in situ</i> monitoring of sputter deposition with RHEED for atomic layer controlled growth. APL Materials, 2016, 4, 086111.	5.1	17
15	Electron sampling depth and saturation effects in perovskite films investigated by soft x-ray absorption spectroscopy. Physical Review B, 2014, 90, .	3.2	40
16	Surface Octahedral Distortions and Atomic Design of Perovskite Interfaces. Advanced Materials, 2013, 25, 4043-4048.	21.0	19
17	Evidence of direct correlation between out-of-plane lattice parameter and metal-insulator transition temperature in oxygen-depleted manganite thin films. Applied Physics Letters, 2012, 100, .	3.3	45
18	Evidence of electronic band redistribution in La _{0.65} Sr _{0.35} MnO ₃ by hard x-ray photoelectron spectroscopy. Physical Review B, 2012, 86, .	3.2	25

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19	The influence of surface roughness in X-ray resonant magnetic reflectivity experiments. European Physical Journal: Special Topics, 2012, 208, 165-175.	2.6	2
20	Local tunneling magnetoresistance probed by low-temperature scanning laser microscopy. Applied Physics Letters, 2011, 99, 182513.	3.3	3
21	Improved tunneling magnetoresistance at low temperature in manganite junctions grown by molecular beam epitaxy. Applied Physics Letters, 2011, 98, .	3.3	28
22	Measuring magnetic profiles at manganite surfaces with monolayer resolution. Journal of Magnetism and Magnetic Materials, 2010, 322, 1212-1216.	2.3	21
23	Two-stage dissipation in a superconducting microbridge: experiment and modeling. Superconductor Science and Technology, 2010, 23, 085005.	3.5	3
24	$YBa_2Cu_3O_{7-x}$ Physical Review B, 2010, 82, .	3.2	17
25	Surface electronic and magnetic properties of $La_{1-x}Sr_xMnO_3$ Physical Review B, 2008, 78, .	3.2	17
26	High Resolution Thermal Imaging of Hotspots in Superconducting Films. IEEE Transactions on Applied Superconductivity, 2007, 17, 3215-3218.	1.7	12
27	Preparation and characterization of LaMnO3 thin films grown by pulsed laser deposition. Journal of Applied Physics, 2006, 100, 023910.	2.5	66
28	Effect of strain in La0.7Sr0.3MnO3 epitaxial films with different crystallographic orientation. Journal of Alloys and Compounds, 2006, 423, 228-231.	5.5	9
29	High-quality in situ manganite thin films by pulsed laser deposition at low background pressures. European Physical Journal B, 2006, 51, 337-340.	1.5	21
30	Broken Particle-Hole Symmetry at Atomically Flat $YBa_2Cu_3O_{7-x}$ Interfaces. Physical Review Letters, 2004, 93, 107004.	7.8	3
31	Defect scattering in high T_c and colossal magnetoresistive tunnel junctions. Physica C: Superconductivity and Its Applications, 2000, 335, 184-189.	1.2	3
32	Supercurrent peaks in planar high-temperature superconducting Josephson junctions. Physical Review B, 2000, 62, 12455-12461.	3.2	2
33	Dynamic properties of asymmetric discrete vortex-flow transistors. Superconductor Science and Technology, 1999, 12, 970-973.	3.5	2
34	Three Terminal H_Tc Vortex Flow Transistors: Optimisation of the Device Geometry Employing Bicrystal Grain-Boundary Josephson Junctions. International Journal of Modern Physics B, 1999, 13, 1253-1258.	2.0	0
35	Observation of strong to Josephson-coupled crossover in 10° $YBa_2Cu_3O_x$ bicrystal junctions. Applied Physics Letters, 1999, 75, 3171-3173.	3.3	24
36	Growth of colossal magnetoresistance heterostructures by molecular beam epitaxy. Materials Research Society Symposia Proceedings, 1999, 602, 9.	0.1	2

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37	Dynamic properties and nonequilibrium processes in electron-beam scribed YBa ₂ Cu ₃ O ₇ Josephson junctions. Applied Physics Letters, 1998, 73, 1290-1292.	3.3	3
38	High-resistivity SNS Josephson junctions scribed in YBa ₂ /Cu ₃ O ₇ by electron irradiation. IEEE Transactions on Applied Superconductivity, 1997, 7, 2518-2521.	1.7	3
39	Design and implementation of a dual-control active device using YBCO grain-boundary junctions. IEEE Transactions on Applied Superconductivity, 1997, 7, 2407-2410.	1.7	0
40	Nature of the Josephson barrier in electron-beam-written YBa ₂ Cu ₃ O ₇ junctions. Physical Review B, 1997, 56, 10828-10831.	3.2	8
41	Microscopic barrier properties in electron-beam scribed YBCO Josephson junctions. Applied Superconductivity, 1997, 5, 277-284.	0.5	1
42	Superconductor-normal-superconductor behavior of Josephson junctions scribed in YBa ₂ Cu ₃ O ₇ by a high-brightness electron source. Applied Physics Letters, 1996, 68, 3811-3813.	3.3	37
43	Mechanisms for conduction via low-frequency noise measurements of high-T _c /thin-film microbridges. IEEE Transactions on Applied Superconductivity, 1995, 5, 3369-3372.	1.7	1
44	Magnetic field sensitivity of variable thickness microbridges in TBCCO, BSCCO, and YBCO. IEEE Transactions on Applied Superconductivity, 1994, 4, 228-235.	1.7	16
45	Strain and critical thickness in GaSb(001)/AlSb. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1989, 7, 764.	1.6	9
46	Critical layer thickness and strain relaxation measurements in GaSb(001)/AlSb structures. Journal of Applied Physics, 1989, 66, 1687-1694.	2.5	16
47	Growth mechanism and clustering phenomena: The Ge-on-Si system. Physical Review B, 1989, 39, 7848-7851.	3.2	74
48	Superconducting TlBaCaCuO films by sputtering. Applied Physics Letters, 1988, 53, 2102-2104.	3.3	48
49	Preparation of high T _c and J _c films of Ba ₂ YCu ₃ O ₇ using laser evaporation of a composite target containing BaF ₂ . Applied Physics Letters, 1988, 52, 1995-1997.	3.3	42
50	Observation of a halide (F/Cl) stabilized, new perovskite phase in superconducting Y ₂ Ba ₅ Cu ₇ O _x films. Applied Physics Letters, 1988, 52, 1625-1627.	3.3	46
51	YBaCuO films by rf magnetron sputtering using single composite targets: Superconducting and structural properties. Applied Physics Letters, 1988, 52, 1735-1737.	3.3	16
52	The Formation and Structure of CVD W Films Produced by the Si Reduction of WF ₆ . Journal of the Electrochemical Society, 1987, 134, 2285-2292.	2.9	47
53	Summary Abstract: Structural analysis of ultrathin epitaxial Ge/Si films on Si(100). Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1987, 5, 1147.	1.6	5
54	Statistical equilibrium in particle channeling. Applied Physics Letters, 1987, 50, 135-137.	3.3	12

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55	Structural and superconducting properties of orientation-ordered $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ films prepared by molecular-beam epitaxy. <i>Physical Review B</i> , 1987, 36, 4039-4042.	3.2	196
56	Superconducting YBaCuO oxide films by sputtering. <i>Applied Physics Letters</i> , 1987, 51, 694-696.	3.3	157
57	Structure and optical properties of GeSi ordered superlattices. <i>Applied Physics Letters</i> , 1987, 50, 760-762.	3.3	66
58	Improvements in the heteroepitaxy of GaAs on Si. <i>Applied Physics Letters</i> , 1987, 51, 36-38.	3.3	59
59	Strained Layer Semiconductor Films: Structure and Stability. <i>Materials Research Society Symposia Proceedings</i> , 1987, 102, 405.	0.1	3
60	Epitaxial Films of High T_c Oxide Superconductors $\text{Y}_{1-x}\text{Ba}_x\text{Cu}_3\text{O}_{7-x}$ Grown on SrTiO_3 by Molecular Beam Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 1987, 99, 339.	0.1	4
61	Electrical and magnetic properties of amorphous W-Mn-O films. <i>Journal of Non-Crystalline Solids</i> , 1987, 92, 261-270.	3.1	2
62	Spin-glass transition in Mg Mn alloys. <i>Solid State Communications</i> , 1987, 62, 835-836.	1.9	1
63	Strain in ultrathin epitaxial films of $\text{Ge/Si}(100)$ measured by ion scattering and channeling. <i>Physical Review Letters</i> , 1987, 59, 664-667.	7.8	62
64	Summary Abstract: The Ge/Sn system: Complex growth of a IV/IV heterostructure. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1986, 4, 888.	1.6	0
65	GeSi layered structures: Artificial crystals and complex cell ordered superlattices. <i>Applied Physics Letters</i> , 1986, 49, 286-288.	3.3	152
66	Observation of $(5\sqrt{5})$ Surface Reconstruction on Pure Silicon and its Stability Against Native-Oxide Formation. <i>Physical Review Letters</i> , 1986, 57, 1332-1335.	7.8	25
67	Hydrogen Atom Doping: A Versatile Method for Modulated Interface Resistive Switching. <i>Advanced Electronic Materials</i> , 0, , 2200353.	5.1	2