

Judith L Macmanus-Driscoll

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464
papers

18,954
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67
h-index

119
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490
ext. papers

20,797
ext. citations

7
avg, IF

6.84
L-index

#	Paper	IF	Citations
464	ZnO nanostructures, defects, and devices. <i>Materials Today</i> , 2007 , 10, 40-48	21.8	1369
463	Strongly enhanced current densities in superconducting coated conductors of YBa ₂ Cu ₃ O _{7-x} + BaZrO ₃ . <i>Nature Materials</i> , 2004 , 3, 439-43	27	1034
462	Greatly reduced leakage current and conduction mechanism in aliovalent-ion-doped BiFeO ₃ . <i>Applied Physics Letters</i> , 2005 , 86, 062903	3.4	875
461	Materials science challenges for high-temperature superconducting wire. <i>Nature Materials</i> , 2007 , 6, 631-42	47	596
460	Large low-field magnetoresistance in La _{0.7} Ca _{0.3} MnO ₃ induced by artificial grain boundaries. <i>Nature</i> , 1997 , 387, 266-268	50.4	410
459	Large Electric Polarization and Exchange Bias in Multiferroic BiFeO ₃ . <i>Advanced Materials</i> , 2006 , 18, 1445-1448	315	
458	Strain control and spontaneous phase ordering in vertical nanocomposite heteroepitaxial thin films. <i>Nature Materials</i> , 2008 , 7, 314-20	27	297
457	Enhanced performance in fluorene-free organometal halide perovskite light-emitting diodes using tunable, low electron affinity oxide electron injectors. <i>Advanced Materials</i> , 2015 , 27, 1414-9	24	255
456	Angular-dependent vortex pinning mechanisms in YBa ₂ Cu ₃ O ₇ coated conductors and thin films. <i>Applied Physics Letters</i> , 2004 , 84, 2121-2123	3.4	246
455	Self-Assembled Heteroepitaxial Oxide Nanocomposite Thin Film Structures: Designing Interface-Induced Functionality in Electronic Materials. <i>Advanced Functional Materials</i> , 2010 , 20, 2035-2045	15.6	213
454	Defect-Induced Ferromagnetism in Co-doped ZnO. <i>Advanced Materials</i> , 2006 , 18, 1449-1452	24	203
453	Searching for Defect-Tolerant Photovoltaic Materials: Combined Theoretical and Experimental Screening. <i>Chemistry of Materials</i> , 2017 , 29, 4667-4674	9.6	191
452	Thick lead-free ferroelectric films with high Curie temperatures through nanocomposite-induced strain. <i>Nature Nanotechnology</i> , 2011 , 6, 491-5	28.7	191
451	High critical current density and improved irreversibility field in bulk MgB ₂ made by a scaleable, nanoparticle addition route. <i>Applied Physics Letters</i> , 2002 , 81, 2026-2028	3.4	188
450	Strong efficiency improvements in ultra-low-cost inorganic nanowire solar cells. <i>Advanced Materials</i> , 2010 , 22, E254-8	24	167
449	Overcoming the barrier to 1000Åm width superconducting coatings. <i>Applied Physics Letters</i> , 2005 , 87, 162505	3.4	167
448	Towards Oxide Electronics: a Roadmap. <i>Applied Surface Science</i> , 2019 , 482, 1-93	6.7	160

447	Tunable Low-Field Magnetoresistance in (La _{0.7} Sr _{0.3} MnO ₃) _{0.5} :(ZnO) _{0.5} Self-Assembled Vertically Aligned Nanocomposite Thin Films. <i>Advanced Functional Materials</i> , 2011 , 21, 2423-2429	15.6	158
446	Defect-induced spin disorder and magnetoresistance in single-crystal and polycrystal rare-earth manganite thin films. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1998 , 356, 1593-1615	3	150
445	Size-Dependent Photon Emission from Organometal Halide Perovskite Nanocrystals Embedded in an Organic Matrix. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 446-50	6.4	137
444	Microstructure, vertical strain control and tunable functionalities in self-assembled, vertically aligned nanocomposite thin films. <i>Acta Materialia</i> , 2013 , 61, 2783-2792	8.4	132
443	Incompatible Length Scales in Nanostructured Cu ₂ O Solar Cells. <i>Advanced Functional Materials</i> , 2012 , 22, 2202-2208	15.6	132
442	Preventing interfacial recombination in colloidal quantum dot solar cells by doping the metal oxide. <i>ACS Nano</i> , 2013 , 7, 4210-20	16.7	122
441	Electrochemical growth of ZnO nanoplates. <i>Nanotechnology</i> , 2005 , 16, 320-4	3.4	119
440	Epitaxial Growth of Vertically Aligned and Branched Single-Crystalline Tin-Doped Indium Oxide Nanowire Arrays. <i>Advanced Materials</i> , 2006 , 18, 234-238	24	117
439	Systematic enhancement of in-field critical current density with rare-earth ion size variance in superconducting rare-earth barium cuprate films. <i>Applied Physics Letters</i> , 2004 , 84, 5329-5331	3.4	117
438	Strongly enhanced oxygen ion transport through samarium-doped CeO ₂ nanopillars in nanocomposite films. <i>Nature Communications</i> , 2015 , 6, 8588	17.4	116
437	A Novel Buffering Technique for Aqueous Processing of Zinc Oxide Nanostructures and Interfaces, and Corresponding Improvement of Electrodeposited ZnO-Cu ₂ O Photovoltaics. <i>Advanced Functional Materials</i> , 2011 , 21, 573-582	15.6	116
436	Fundamental Carrier Lifetime Exceeding 1 μs in Cs ₂ AgBiBr ₆ Double Perovskite. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800464	4.6	114
435	Strongly coupled critical current density values achieved in Y ₁ Ba ₂ Cu ₃ O _{7-x} coated conductors with near-single-crystal texture. <i>Applied Physics Letters</i> , 2003 , 82, 4519-4521	3.4	109
434	Room temperature ferromagnetism in bulk Mn-Doped Cu ₂ O. <i>Applied Physics Letters</i> , 2005 , 86, 072514	3.4	108
433	Efficient Triplet Exciton Fusion in Molecularly Doped Polymer Light-Emitting Diodes. <i>Advanced Materials</i> , 2017 , 29, 1605987	24	106
432	Microscopic role of carbon on MgB ₂ wire for critical current density comparable to NbTi. <i>NPG Asia Materials</i> , 2012 , 4, e3-e3	10.3	105
431	Self-assembled, rare earth tantalate pyrochlore nanoparticles for superior flux pinning in YBa ₂ Cu ₃ O _{7-x} films. <i>Superconductor Science and Technology</i> , 2009 , 22, 022001	3.1	105
430	Strongly Enhanced Photovoltaic Performance and Defect Physics of Air-Stable Bismuth Oxide (BiO). <i>Advanced Materials</i> , 2017 , 29, 1702176	24	100

429	High-resolution x-ray diffraction and transmission electron microscopy of multiferroic BiFeO ₃ films. <i>Applied Physics Letters</i> , 2005 , 86, 071913	3.4	97
428	Identification of intrinsic ab-plane pinning in YBa/sub 2/Cu/sub 3/O/sub 7/ thin films and coated conductors. <i>IEEE Transactions on Applied Superconductivity</i> , 2005 , 15, 2808-2811	1.8	95
427	Interfacial coupling in heteroepitaxial vertically aligned nanocomposite thin films: From lateral to vertical control. <i>Current Opinion in Solid State and Materials Science</i> , 2014 , 18, 6-18	12	87
426	Size dependent ferromagnetism in cerium oxide (CeO ₂) nanostructures independent of oxygen vacancies. <i>Journal of Physics Condensed Matter</i> , 2008 , 20, 165201	1.8	87
425	Electronic and transport properties of Li-doped NiO epitaxial thin films. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 2275-2282	7.1	85
424	Strong influence of boron precursor powder on the critical current density of MgB ₂ . <i>Superconductor Science and Technology</i> , 2005 , 18, 1473-1477	3.1	84
423	Fabrication of ZnO/Cu ₂ O heterojunctions in atmospheric conditions: Improved interface quality and solar cell performance. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 135, 43-48	6.4	83
422	Strong pinning enhancement in MgB ₂ using very small Dy ₂ O ₃ additions. <i>Applied Physics Letters</i> , 2006 , 88, 192512	3.4	83
421	Improved Open- Circuit Voltage in ZnO-PbSe Quantum Dot Solar Cells by Understanding and Reducing Losses Arising from the ZnO Conduction Band Tail. <i>Advanced Energy Materials</i> , 2014 , 4, 1301544	21.8	82
420	Vertical Interface Effect on the Physical Properties of Self-Assembled Nanocomposite Epitaxial Films. <i>Advanced Materials</i> , 2009 , 21, 3794-3798	24	82
419	Effects of Silver and Lead on the Phase Stability of Bi ₂ Sr ₂ Ca ₁ Cu ₂ O _{8+x} and Bi ₂ Sr ₂ Ca ₂ Cu ₃ O _{10+x} above and below the Solidus Temperature. <i>Journal of the American Ceramic Society</i> , 1994 , 77, 2305-2313	33.8	82
418	Non-stoichiometry, structural defects and properties of LaMnO _{3+δ} with high δ values (0.110.29). <i>Journal of Materials Chemistry</i> , 1997 , 7, 2139-2144		81
417	Structural Evidence for Zn Intersitials in Ferromagnetic Zn _{1-x} CoxO Films. <i>Advanced Materials</i> , 2007 , 19, 2925-2929	24	81
416	Understanding High Critical Currents in YBa ₂ Cu ₃ O ₇ Thin Films and Coated Conductors. <i>Journal of Low Temperature Physics</i> , 2004 , 135, 87-98	1.3	81
415	Identifying and Reducing Interfacial Losses to Enhance Color-Pure Electroluminescence in Blue-Emitting Perovskite Nanoplatelet Light-Emitting Diodes. <i>ACS Energy Letters</i> , 2019 , 4, 1181-1188	20.1	80
414	Research Update: Doping ZnO and TiO ₂ for solar cells. <i>APL Materials</i> , 2013 , 1, 060701	5.7	80
413	Spatial atmospheric atomic layer deposition: a new laboratory and industrial tool for low-cost photovoltaics. <i>Materials Horizons</i> , 2014 , 1, 314-320	14.4	79
412	Grain boundaries and pinning in bulk MgB ₂ . <i>Superconductor Science and Technology</i> , 2007 , 20, S264-S270	3.1	79

411	Epitaxial and oriented YMnO ₃ film growth by pulsed laser deposition. <i>Journal of Crystal Growth</i> , 2004 , 267, 548-553	1.6	78
410	Influence of crystalline texture on vortex pinning near the ab-plane in YBa ₂ Cu ₃ O ₇ thin films and coated conductors. <i>Physica C: Superconductivity and Its Applications</i> , 2004 , 412-414, 976-982	1.3	75
409	Ionic Conductivity Increased by Two Orders of Magnitude in Micrometer-Thick Vertical Yttria-Stabilized ZrO ₂ Nanocomposite Films. <i>Nano Letters</i> , 2015 , 15, 7362-9	11.5	73
408	Low-Temperature Synthesis of Large-Area, Free-Standing Nanorod Arrays on ITO/Glass and other Conducting Substrates. <i>Advanced Materials</i> , 2008 , 20, 4470-4475	24	72
407	Oxygen tracer diffusion in undoped lanthanum manganites. <i>Solid State Ionics</i> , 1999 , 122, 41-49	3.3	72
406	Specific heat of La _{1-x} CaxMnO ₃ . <i>Journal of Magnetism and Magnetic Materials</i> , 1998 , 189, 274-282	2.8	71
405	Influence of strain and microstructure on magnetotransport in La _{0.7} Ca _{0.3} MnO ₃ thin films. <i>Journal of Applied Physics</i> , 1998 , 84, 3939-3948	2.5	71
404	Role of scaffold network in controlling strain and functionalities of nanocomposite films. <i>Science Advances</i> , 2016 , 2, e1600245	14.3	70
403	Novel Atmospheric Growth Technique to Improve Both Light Absorption and Charge Collection in ZnO/Cu ₂ O Thin Film Solar Cells. <i>Advanced Functional Materials</i> , 2013 , 23, 3413-3419	15.6	70
402	RECENT DEVELOPMENTS IN CONDUCTOR PROCESSING OF HIGH IRREVERSIBILITY FIELD SUPERCONDUCTORS. <i>Annual Review of Materials Research</i> , 1998 , 28, 421-462		69
401	Studies of structural disorder in ReBa ₂ Cu ₃ O _{7-x} thin films (Re=rare earth) as a function of rare-earth ionic radius and film deposition conditions. <i>Physica C: Superconductivity and Its Applications</i> , 1994 , 232, 288-308	1.3	69
400	New epitaxy paradigm in epitaxial self-assembled oxide vertically aligned nanocomposite thin films. <i>Journal of Materials Research</i> , 2017 , 32, 4054-4066	2.5	68
399	Oxygen Stoichiometry in Sr ₂ FeMoO ₆ , the Determination of Fe and Mo Valence States, and the Chemical Phase Diagram of SrO-Fe ₃ O ₄ -MoO ₃ . <i>Journal of the American Ceramic Society</i> , 2004 , 87, 1330-1335	3.8	68
398	Self-assembled oxide films with tailored nanoscale ionic and electronic channels for controlled resistive switching. <i>Nature Communications</i> , 2016 , 7, 12373	17.4	67
397	Efficient light-emitting diodes from mixed-dimensional perovskites on a fluoride interface. <i>Nature Electronics</i> , 2020 , 3, 704-710	28.4	67
396	A new class of room-temperature multiferroic thin films with bismuth-based supercell structure. <i>Advanced Materials</i> , 2013 , 25, 1028-32	24	66
395	Electrochemical growth of ZnO nano-rods on polycrystalline Zn foil. <i>Nanotechnology</i> , 2003 , 14, 968-973	3.4	66
394	Influence of anodisation voltage on the dimension of titania nanotubes. <i>Journal of Alloys and Compounds</i> , 2010 , 503, 359-364	5.7	65

393	Materials chemistry and thermodynamics of REBa ₂ Cu ₃ O _{7-x} . <i>Advanced Materials</i> , 1997 , 9, 457-473	24	65
392	Strongly enhanced dielectric and energy storage properties in lead-free perovskite titanate thin films by alloying. <i>Nano Energy</i> , 2018 , 45, 398-406	17.1	64
391	Nanostructured interfaces in polymer solar cells. <i>Applied Physics Letters</i> , 2010 , 96, 263109	3.4	63
390	Novel electroforming-free nanoscaffold memristor with very high uniformity, tunability, and density. <i>Advanced Materials</i> , 2014 , 26, 6284-9	24	62
389	Multifunctional, self-assembled oxide nanocomposite thin films and devices. <i>MRS Bulletin</i> , 2015 , 40, 736-745	3.4	62
388	State-of-the-art flux pinning in YBa ₂ Cu ₃ O _{7-x} by the creation of highly linear, segmented nanorods of Ba ₂ (Y/Gd)(Nb/Ta)O ₆ together with nanoparticles of (Y/Gd) ₂ O ₃ and (Y/Gd)Ba ₂ Cu ₄ O ₈ . <i>Superconductor Science and Technology</i> , 2011 , 24, 095012	3.1	60
387	Reproducible growth of p-type ZnO:N using a modified atomic layer deposition process combined with dark annealing. <i>Applied Physics Letters</i> , 2008 , 93, 172111	3.4	60
386	Low field magnetotransport properties of (La _{0.7} Sr _{0.3} MnO ₃) _{0.5} :(ZnO) _{0.5} nanocomposite films. <i>Applied Physics Letters</i> , 2006 , 88, 192514	3.4	60
385	Large pinning forces and matching effects in YBa ₂ Cu ₃ O _{7-x} thin films with Ba ₂ Y(Nb/Ta)O ₆ nano-precipitates. <i>Scientific Reports</i> , 2016 , 6, 21188	4.9	59
384	Microstructure, magnetic, and low-field magnetotransport properties of self-assembled (La _{0.7} Sr _{0.3} MnO ₃) _{0.5} :(CeO ₂) _{0.5} vertically aligned nanocomposite thin films. <i>Nanotechnology</i> , 2011 , 22, 315712	3.4	59
383	Research Update: Bismuth-based perovskite-inspired photovoltaic materials. <i>APL Materials</i> , 2018 , 6, 084502	3.4	59
382	Extremely high tunability and low loss in nanoscaffold ferroelectric films. <i>Nano Letters</i> , 2012 , 12, 4311-711.5	11.5	58
381	Leakage mechanisms of self-assembled (BiFeO ₃) _{0.5} :(Sm ₂ O ₃) _{0.5} nanocomposite films. <i>Applied Physics Letters</i> , 2008 , 93, 142904	3.4	58
380	Alignment of Carbon Nanotube Additives for Improved Performance of Magnesium Diboride Superconductors. <i>Advanced Materials</i> , 2006 , 18, 785-788	24	58
379	Rare earth ion size effects and enhanced critical current densities in Y ₂ B ₁ Sm ₁ Ba ₂ Cu ₃ O _{7-x} coated conductors. <i>Applied Physics Letters</i> , 2005 , 86, 032505	3.4	58
378	Growth of ~5 cm ² Vs ⁻¹ mobility, p-type Copper(I) oxide (Cu ₂ O) films by fast atmospheric atomic layer deposition (AALD) at 225°C and below. <i>AIP Advances</i> , 2012 , 2, 042179	1.5	57
377	The Materials Science of Functional Oxide Thin Films. <i>Advanced Materials</i> , 2009 , 21, 3827-3839	24	56
376	Improved Exciton Dissociation at Semiconducting Polymer:ZnO Donor:Acceptor Interfaces via Nitrogen Doping of ZnO. <i>Advanced Functional Materials</i> , 2014 , 24, 3562-3570	15.6	55

- 375 Charge confinement and doping at LaAlO₃/SrTiO₃ interfaces. *Physical Review Letters*, **2009**, 103, 166802-4 53
- 374 ECsPbI₃ Colloidal Quantum Dots: Synthesis, Photodynamics, and Photovoltaic Applications. *ACS Energy Letters*, **2019**, 4, 1308-1320 20.1 52
- 373 Induced magnetization in La_{0.7}Sr_{0.3}MnO₃/BiFeO₃ superlattices. *Physical Review Letters*, **2014**, 113, 047204 7.4 52
- 372 Materials design for artificial pinning centres in superconductor PLD coated conductors. *Superconductor Science and Technology*, **2017**, 30, 123001 3.1 52
- 371 Electronic Structure and Band Alignment at the NiO and SrTiO p-n Heterojunctions. *ACS Applied Materials & Interfaces*, **2017**, 9, 26549-26555 9.5 52
- 370 Thin-film ZnO/Cu₂O solar cells incorporating an organic buffer layer. *Solar Energy Materials and Solar Cells*, **2012**, 96, 148-154 6.4 51
- 369 Research Update: Atmospheric pressure spatial atomic layer deposition of ZnO thin films: Reactors, doping, and devices. *APL Materials*, **2015**, 3, 040701 5.7 51
- 368 Enhancement of critical current density in low level Al-doped MgB₂. *Superconductor Science and Technology*, **2004**, 17, 1093-1096 3.1 51
- 367 Phase equilibria in the Y₂B₂Cu₂O system and melt processing of Ag clad Y₁Ba₂Cu₃O_{7-x} tapes at reduced oxygen partial pressures. *Physica C: Superconductivity and Its Applications*, **1995**, 241, 401-413 1.3 51
- 366 Composite epitaxial thin films: A new platform for tuning, probing, and exploiting mesoscale oxides. *MRS Bulletin*, **2015**, 40, 933-942 3.2 50
- 365 Influence of oxygen vacancies on magnetoresistance properties of bulk La_{0.67}Ca_{0.33}MnO₃. *Journal of Magnetism and Magnetic Materials*, **1999**, 195, 31-36 2.8 50
- 364 Self-catalysed growth of zinc oxide nanowires. *Nanotechnology*, **2005**, 16, 1364-1368 3.4 49
- 363 Ultrahigh energy storage in superparaelectric relaxor ferroelectrics. *Science*, **2021**, 374, 100-104 33.3 49
- 362 Photoelectrochemical water splitting strongly enhanced in fast-grown ZnO nanotree and nanocluster structures. *Journal of Materials Chemistry A*, **2016**, 4, 10203-10211 13 47
- 361 Increased T_c in electrolyte-gated cuprates. *Advanced Materials*, **2010**, 22, 2529-33 24 47
- 360 High-speed atmospheric atomic layer deposition of ultra thin amorphous TiO₂ blocking layers at 100 °C for inverted bulk heterojunction solar cells. *Progress in Photovoltaics: Research and Applications*, **2013**, 21, 393-400 6.8 45
- 359 Three-dimensional strain engineering in epitaxial vertically aligned nanocomposite thin films with tunable magnetotransport properties. *Materials Horizons*, **2018**, 5, 536-544 14.4 44
- 358 Hysteretic vortex pinning in superconductor-ferromagnet nanocomposites. *Physical Review Letters*, **2007**, 98, 117003 7.4 44

357	Critical current enhancement by Lorentz force reduction in superconductor/ferromagnet nanocomposites. <i>Superconductor Science and Technology</i> , 2009 , 22, 025017	3.1	43
356	Strain-induced time-dependent magnetic disorder in ultra-thin La _{0.7} Ca _{0.3} MnO ₃ films. <i>Journal of Magnetism and Magnetic Materials</i> , 1999 , 191, 359-367	2.8	43
355	Strong room temperature exchange bias in self-assembled BiFeO ₃ /Fe ₃ O ₄ nanocomposite heteroepitaxial films. <i>Applied Physics Letters</i> , 2013 , 102, 012905	3.4	42
354	Strain relaxation and enhanced perpendicular magnetic anisotropy in BiFeO ₃ /CoFe ₂ O ₄ vertically aligned nanocomposite thin films. <i>Applied Physics Letters</i> , 2014 , 104, 062402	3.4	42
353	Tuning of defects in ZnO nanorod arrays used in bulk heterojunction solar cells. <i>Nanoscale Research Letters</i> , 2012 , 7, 655	5	42
352	Strain Tuning and Strong Enhancement of Ionic Conductivity in SrZrO ₃ /RE ₂ O ₃ (RE = Sm, Eu, Gd, Dy, and Er) Nanocomposite Films. <i>Advanced Functional Materials</i> , 2015 , 25, 4328-4333	15.6	41
351	Interfacial Strain-Induced Oxygen Disorder as the Cause of Enhanced Critical Current Density in Superconducting Thin Films. <i>Advanced Functional Materials</i> , 2009 , 19, 835-841	15.6	41
350	Growth and process conditions of aligned and patternable films of iron(III) oxide nanowires by thermal oxidation of iron. <i>Nanotechnology</i> , 2008 , 19, 455608	3.4	41
349	Crossover between channeling and pinning at twin boundaries in YBa ₂ Cu ₃ O ₇ thin films. <i>Physical Review Letters</i> , 2006 , 97, 257002	7.4	41
348	Epitaxial growth of BiFeO ₃ thin films by LPE and sol-gel methods. <i>Journal of Magnetism and Magnetic Materials</i> , 2004 , 283, 415-421	2.8	41
347	Single-Crystalline Thin Films for Studying Intrinsic Properties of BiFeO ₃ /SrTiO ₃ Solid Solution Photoelectrodes in Solar Energy Conversion. <i>Chemistry of Materials</i> , 2015 , 27, 6635-6641	9.6	40
346	Precise Tuning of (YBa ₂ Cu ₃ O ₇) _{1-x} (BaZrO ₃) _x Thin Film Nanocomposite Structures. <i>Advanced Functional Materials</i> , 2014 , 24, 5240-5245	15.6	40
345	Chemical quantification of atomic-scale EDS maps under thin specimen conditions. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1782-90	0.5	40
344	Microstructural and magnetic properties of (La _{0.7} Sr _{0.3} MnO ₃) _{0.7} :(Mn ₃ O ₄) _{0.3} nanocomposite thin films. <i>Journal of Applied Physics</i> , 2011 , 109, 054302	2.5	40
343	The backing layer dependence of open circuit voltage in ZnO/polymer composite solar cells. <i>Thin Solid Films</i> , 2008 , 516, 7218-7222	2.2	40
342	Structural and Superconducting Property Variations with Nominal Mg Non-Stoichiometry in Mg _x B ₂ and Its Enhancement of Upper Critical Field. <i>Advanced Functional Materials</i> , 2008 , 18, 113-120	15.6	38
341	Growth of strongly biaxially aligned MgB ₂ thin films on sapphire by postannealing of amorphous precursors. <i>Applied Physics Letters</i> , 2001 , 79, 4001-4003	3.4	38
340	Effects of high vacancy concentrations on the magnetic properties of La _{1-x} Mn _{1-y} O ₃ (0.02?x, y?0.13). <i>Journal of Applied Physics</i> , 1998 , 83, 394-399	2.5	38

339	Lead-Free Perovskite-Inspired Absorbers for Indoor Photovoltaics. <i>Advanced Energy Materials</i> , 2021 , 11, 2002761	21.8	38
338	Strong perpendicular exchange bias in epitaxial La(0.7)Sr(0.3)MnO ₃ :BiFeO ₃ nanocomposite films through vertical interfacial coupling. <i>Nanoscale</i> , 2015 , 7, 13808-15	7.7	37
337	Perpendicular Exchange-Biased Magnetotransport at the Vertical Heterointerfaces in La(0.7)Sr(0.3)MnO ₃ :NiO Nanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 21646-51	9.5	37
336	New approaches for achieving more perfect transition metal oxide thin films. <i>APL Materials</i> , 2020 , 8, 040904	5.7	37
335	Very High Surface Area Mesoporous Thin Films of SrTiO Grown by Pulsed Laser Deposition and Application to Efficient Photoelectrochemical Water Splitting. <i>Nano Letters</i> , 2016 , 16, 7338-7345	11.5	37
334	Microstructure of SrTiO ₃ buffer layers and its effects on superconducting properties of YBa ₂ Cu ₃ O _{7-x} -coated conductors. <i>Journal of Materials Research</i> , 2004 , 19, 1869-1875	2.5	37
333	High performance inverted bulk heterojunction solar cells by incorporation of dense, thin ZnO layers made using atmospheric atomic layer deposition. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 116, 197-202	6.4	36
332	Strong room temperature magnetism in highly resistive strained thin films of BiFe _{0.5} Mn _{0.5} O ₃ . <i>Applied Physics Letters</i> , 2011 , 98, 012509	3.4	36
331	Controlled, perfect ordering in ultrathin anodic aluminum oxide templates on silicon. <i>Applied Physics Letters</i> , 2007 , 91, 143123	3.4	36
330	Structure of the superconducting gap in MgB ₂ from point-contact spectroscopy. <i>Superconductor Science and Technology</i> , 2002 , 15, 526-532	3.1	36
329	The role of a superconducting seed layer in the structural and transport properties of EuBa ₂ Cu ₃ O _{7-x} films. <i>Applied Physics Letters</i> , 2003 , 83, 1388-1390	3.4	35
328	New strain states and radical property tuning of metal oxides using a nanocomposite thin film approach. <i>APL Materials</i> , 2015 , 3, 062507	5.7	34
327	Delta-doped LaAlO ₃ /SrTiO ₃ interfaces. <i>Applied Physics Letters</i> , 2009 , 94, 172101	3.4	34
326	Tunable lattice strain in vertically aligned nanocomposite (BiFeO ₃) _x :(Sm ₂ O ₃) _{1-x} thin films. <i>Journal of Applied Physics</i> , 2009 , 106, 094309	2.5	34
325	Critical fields and critical currents in MgB ₂ . <i>Superconductor Science and Technology</i> , 2003 , 16, 176-182	3.1	34
324	Influence of grain size on magnetoresistance properties of bulk La _{0.67} Ca _{0.33} MnO ₃ . <i>Journal of Magnetism and Magnetic Materials</i> , 1999 , 192, 263-270	2.8	34
323	Room Temperature Ferrimagnetism and Ferroelectricity in Strained, Thin Films of BiFeMnO. <i>Advanced Functional Materials</i> , 2014 , 24, 7478-7487	15.6	33
322	Influence of oxygen stoichiometry on Raman phonon spectroscopy, lattice parameters and physical properties of La _{0.7} Ca _{0.3} MnO ₃ thin films. <i>Solid State Communications</i> , 1998 , 105, 643-648	1.6	33

3 ²¹	Liquid-phase epitaxial growth of REBa ₂ Cu ₃ O ₇ (RE=Y, Yb, Er) thick films at reduced temperatures. <i>Journal of Crystal Growth</i> , 2000 , 213, 312-318	1.6	33
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