

# Christof Schneider

## List of Publications by Year in descending order

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132  
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136  
docs citations

136  
times ranked

7396  
citing authors

#	ARTICLE	IF	CITATIONS
1	New Insight into the Gas Phase Reaction Dynamics in Pulsed Laser Deposition of Multi-Elemental Oxides. <i>Materials</i> , 2022, 15, 4862.	2.9	1
2	Role of Dy on the magnetic properties of orthorhombic $\text{DyFeO}_3$ . <i>Physical Review Materials</i> , 2022, 6, .	2.1	2
3	Growth of $\text{Li}_{x\text{La}_{y\text{Sr}_{z\text{Mn}}}\text{O}_3}$ thin films by pulsed laser deposition: complex relation between thin film composition and deposition parameters. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 473.	2.3	4
4	$\text{LaTiO}_2\text{N}$ crystallographic orientation control significantly increases visible-light induced charge extraction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22867-22873.	10.3	5
5	Strain engineering of the charge and spin-orbital interactions in $\text{Sr}_2\text{IrO}_4$ . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 24764-24770.	7.1	19
6	Multiple magnetic ordering phenomena in multiferroic $\text{HoMn}_5\text{O}_{10}$ . <i>Physical Review B</i> , 2020, 102, .	3.2	5
7	Robust In-plane Ferroelectricity in Ultrathin Epitaxial Aurivillius Films. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000202.	3.7	25
8	Proximity-Induced Odd-Frequency Superconductivity in a Topological Insulator. <i>Physical Review Letters</i> , 2020, 125, 026802.	7.8	34
9	Manipulation of ion energies in pulsed laser deposition to improve film growth. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	2.3	6
10	Electronic localization in $\text{CaVO}_3$ films via bandwidth control. <i>Npj Quantum Materials</i> , 2019, 4, .	5.2	16
11	Unique coexistence of incommensurate and commensurate magnetic order in $\text{TbMnO}_3$ strained films. <i>Physical Review Materials</i> , 2019, 3, .	2.4	2
12	Oxygen diffusion in oxide thin films grown on $\text{SrTiO}_3$ . <i>Physical Review Materials</i> , 2019, 3, .	2.4	16
13	Electrochemical and spectroscopic characterization of oxide films formed on Alloy 182 in simulated boiling water reactor environment: Effect of dissolved hydrogen. <i>Corrosion Science</i> , 2018, 133, 204-216.	6.6	7
14	In situ stress measurements of metal oxide thin films. , 2018, , 109-132.		2
15	Multiferroic phase diagram of $\text{R}_{1-x}\text{Mn}_x\text{O}_3$ films studied by neutron and x-ray diffraction. <i>Physical Review B</i> , 2018, 98, .	3.2	10
16	Relationship between crystal structure and multiferroic orders in orthorhombic perovskite manganites. <i>Physical Review Materials</i> , 2018, 2, .	2.4	16
17	Electronic band structure of the buried $\text{SiO}_2/\text{SiC}$ interface investigated by soft x-ray ARPES. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	7
18	Plasma plume dynamics, rebound, and recoating of the ablation target in pulsed laser deposition. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	32

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19	Tuning the multiferroic mechanisms of TbMnO <sub>3</sub> by epitaxial strain. <i>Scientific Reports</i> , 2017, 7, 44753.		3.3	26
20	Single-axis-dependent structural and multiferroic properties of orthorhombic $\text{R}_{0.6}\text{Mn}_{3-\delta}$ . <i>Physical Review B</i> , 2017, 95, .			
21	Addendum: The hard X-ray Photon Single-Shot Spectrometer of SwissFEL's initial characterization. <i>Journal of Instrumentation</i> , 2017, 12, A07001-A07001.		1.2	1
22	The hard X-ray Photon Single-Shot Spectrometer of SwissFEL's initial characterization. <i>Journal of Instrumentation</i> , 2017, 12, P05024-P05024.		1.2	17
23	Cation ratio and ferroelectric properties of TbMnO <sub>3</sub> epitaxial films grown by pulsed laser deposition. <i>Journal of Applied Physics</i> , 2016, 119, 184102.		2.5	8
24	Pressure and temperature dependence of the laser-induced plasma plume dynamics. <i>Journal of Applied Physics</i> , 2016, 120, .		2.5	23
25	Multiferroic properties of uniaxially compressed orthorhombic HoMnO <sub>3</sub> thin films. <i>Applied Physics Letters</i> , 2016, 108, .		3.3	14
26	Coexisting multiple order parameters in single-layer $\text{LuMn}_{3-\delta}$ films. <i>Physical Review B</i> , 2016, 94, .		3.2	6
27	Correspondence: Reply to "Quantitative evaluation of X-ray dark-field images for microcalcification analysis in mammography". <i>Nature Communications</i> , 2016, 7, 10868.		12.8	8
28	The importance of pressure and mass ratios when depositing multi-element oxide thin films by pulsed laser deposition. <i>Applied Surface Science</i> , 2016, 389, 126-134.		6.1	21
29	Direct laser deposition of nanostructured tungsten oxide for sensing applications. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 205101.		2.8	11
30	Tracing the origin of oxygen for La <sub>0.6</sub> Sr <sub>0.4</sub> MnO <sub>3</sub> thin film growth by pulsed laser deposition. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 045201.		2.8	14
31	Interplay between magnetic order at Mn and Tm sites alongside the structural distortion in multiferroic films of $\text{TmMnO}_3$ . <i>Physical Review B</i> , 2015, 91, .		3.2	15
32	Electron-phonon Coupling and the Superconducting Phase Diagram of the LaAlO <sub>3</sub> -SrTiO <sub>3</sub> Interface. <i>Scientific Reports</i> , 2015, 5, 12309.		3.3	37
33	Tracing the plasma interactions for pulsed reactive crossed-beam laser ablation. <i>Journal of Applied Physics</i> , 2015, 118, .		2.5	6
34	The flip-over effect in pulsed laser deposition: Is it relevant at high background gas pressures?. <i>Applied Surface Science</i> , 2015, 357, 2055-2062.		6.1	9
35	Low-temperature Micro-Solid Oxide Fuel Cells with Partially Amorphous La <sub>0.6</sub> Sr <sub>0.4</sub> CoO <sub>3-δ</sub> Cathodes. <i>Advanced Energy Materials</i> , 2015, 5, 1400747.		19.5	65
36	Probing the bulk ionic conductivity by thin film hetero-epitaxial engineering. <i>Science and Technology of Advanced Materials</i> , 2015, 16, 015001.		6.1	16

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37	Crystallization of zirconia based thin films. Physical Chemistry Chemical Physics, 2015, 17, 18613-18620.		2.8	6
38	Angular distribution of species in pulsed laser deposition of $\text{La}_{x}\text{Ca}_{1-x}\text{MnO}_3$ . Applied Surface Science, 2015, 336, 150-156.		6.1	18
39	Dense zig-zag microstructures in YSZ thin films by pulsed laser deposition. APL Materials, 2015, 3, .		5.1	4
40	Structural, magnetic, and superconducting properties of pulsed-laser-deposition-grown $\text{La}_{1.85}\text{Sr}_{0.15}\text{Mn}_2$ . Physical Review B, 2014, 89, .			
41	Langmuir probe measurements and mass spectrometry of plasma plumes generated by laser ablation of $\text{La}_{0.4}\text{Ca}_{0.6}\text{MnO}_3$ . Journal of Applied Physics, 2014, 116, .		2.5	17
42	Plasma interactions determine the composition in pulsed laser deposited thin films. Applied Physics Letters, 2014, 105, 114104.		3.3	46
43	Multiferroic Properties of $\text{LuMnO}_3$ -Axis Strain. Physical Review Letters, 2014, 113, 167202.		7.8	31
44	Non-invasive classification of microcalcifications with phase-contrast X-ray mammography. Nature Communications, 2014, 5, 3797.		12.8	110
45	Laser deposition and direct-writing of thermoelectric misfit cobaltite thin films. Applied Physics Letters, 2014, 104, 231907.		3.3	16
46	Nearly amorphous Mo-N gratings for ultimate resolution in extreme ultraviolet interference lithography. Nanotechnology, 2014, 25, 235305.		2.6	9
47	Strain-Induced Ferromagnetism in Antiferromagnetic $\text{LuMnO}_3$ Thin Films. Physical Review Letters, 2013, 111, 037201.		7.8	66
48	Shadowgraphic investigations into the laser-induced forward transfer of different $\text{SnO}_2$ precursor films. Applied Surface Science, 2013, 278, 77-81.		6.1	8
49	Interface superconductor with gap behaviour like a high-temperature superconductor. Nature, 2013, 502, 528-531.		27.8	209
50	Influence of an O <sub>2</sub> background gas on the composition and kinetic energies of species in laser induced $\text{La}_{0.4}\text{Ca}_{0.6}\text{MnO}_3$ plasmas. Applied Surface Science, 2013, 278, 317-320.		6.1	3
51	Electric-Field-Induced Polar Order and Localization of the Confined Electrons in $\text{LaAlO}_3$ . Physical Review Letters, 2013, 110, 136805.		7.8	18
52	Lattice distortion and strain relaxation in epitaxial thin films of multiferroic $\text{TbMnO}_3$ probed by X-ray diffractometry and micro-Raman spectroscopy. Applied Surface Science, 2013, 278, 92-95.		6.1	3
53	Oxidation of laser-induced plasma species in different background conditions. Applied Surface Science, 2013, 278, 47-51.		6.1	6
54	Magnetismus im Stress: Gleichzeitiger Anti- und Ferromagnetismus. Physik in Unserer Zeit, 2013, 44, 267-268.		0.0	0

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55	Optical probe of ferroelectric order in bulk and thin-film perovskite titanates. Physical Review B, 2013, 88, .	3.2	32
56	Experimental and ab initio investigations of the x-ray absorption near edge structure of orthorhombic LuMnO <sub>3</sub> . Applied Physics Letters, 2012, 100, 252901. <small>Pulsed laser deposition of LuMnO<sub>3</sub> thin films</small>	3.3	5
57	$\text{Cu}_{\frac{1}{2}} \text{O}_{\frac{3}{2}}$	3.2	34
58	Depth-dependent Spin Dynamics in TbMnO <sub>3</sub> Thin Films Measured by Low Energy Muon Spin Relaxation. Physics Procedia, 2012, 30, 137-141.	1.2	5
59	Laser induced forward transfer aluminum layers: Process investigation by time resolved imaging. Applied Surface Science, 2012, 258, 9352-9354.	6.1	17
60	Strain and lattice distortion in (110)-epitaxial orthorhombic TbMnO <sub>3</sub> multiferroic thin films grown by pulsed laser deposition. Applied Surface Science, 2012, 258, 9323-9325.	6.1	7
61	Composition and species evolution in a laser-induced LuMnO <sub>3</sub> plasma. Applied Surface Science, 2012, 258, 9355-9358.	6.1	6
62	Spatially resolved strain-imprinted magnetic states in an artificial multiferroic. Physical Review B, 2012, 86, .	3.2	68
63	Tunable conductivity threshold at polar oxide interfaces. Nature Communications, 2012, 3, 932.	12.8	121
64	Laser ablation and thin film deposition. , 2011, , .		2
65	Surface layer formation on Li <sub>1+x</sub> Mn <sub>2</sub> O <sub>4</sub> thin film electrodes during electrochemical cycling. Electrochimica Acta, 2011, 56, 8539-8544.	5.2	13
66	Pulsed laser deposition and characterisation of perovskite-type LaTiO <sub>3</sub> -xNx thin films. Acta Materialia, 2011, 59, 7145-7154.	7.9	26
67	Glassy carbon – A promising substrate material for pulsed laser deposition of thin Li <sub>1+x</sub> Mn <sub>2</sub> O <sub>4</sub> electrodes. Applied Surface Science, 2011, 257, 5347-5353.	6.1	6
68	Negative ions: The overlooked species in thin film growth by pulsed laser deposition. Applied Physics Letters, 2011, 99, . <small>Evolution of the Interfacial Structure of</small>	3.3	20
69	$\text{LaAlO}_{\frac{3}{2}}$	7.8	132
70	Aspects of the Surface Layer Formation on Li <sub>[1+x]</sub> Mn <sub>[2]</sub> O <sub>[4]</sub> during Electrochemical Cycling. Journal of the Electrochemical Society, 2010, 157, A1026.	2.9	23
71	Microfabrication of polystyrene microbead arrays by laser induced forward transfer. Journal of Applied Physics, 2010, 108, .	2.5	39
72	The origin of oxygen in oxide thin films: Role of the substrate. Applied Physics Letters, 2010, 97, .	3.3	102

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73	Dynamical Response and Confinement of the Electrons at the $\text{LaAlO}_3$ grain boundary. <i>Physical Review Letters</i> , 2010, 104, 156807.	7.8	93
74	Laser Ablation and Thin Film Deposition. Springer Series in Materials Science, 2010, , 89-112.	0.6	41
75	Low-angle grain boundaries in $\text{YBa}_2\text{Cu}_3\text{O}_{7+\delta}$ with high critical current densities. <i>Physical Review B</i> , 2009, 79, .		
76	Electron Scattering at Dislocations in $\text{LaAlO}_3$ . <i>Physical Review Letters</i> , 2009, 102, 046809.		
77	Mechanisms of the laser plume expansion during the ablation of $\text{LiMn}_2\text{O}_4$ . <i>Journal of Applied Physics</i> , 2009, 105, .	2.5	75
78	Pulsed laser deposition and characterization of nitrogen-substituted $\text{SrTiO}_3$ thin films. <i>Applied Surface Science</i> , 2009, 255, 5252-5255.	6.1	24
79	Profiling the Interface Electron Gas of $\text{LaAlO}_3$ with Hard X-Ray Photoelectron Spectroscopy. <i>Physical Review Letters</i> , 2009, 102, 176805.		
80	Optical Properties of Nitrogen-Substituted Strontium Titanate Thin Films Prepared by Pulsed Laser Deposition. <i>Materials</i> , 2009, 2, 1388-1401.	2.9	20
81	Magnetic flux periodicity of $h/e$ in superconducting loops. <i>Nature Physics</i> , 2008, 4, 112-115.	16.7	53
82	Physical properties of $(\text{La},\text{Sr})\text{Ti}(\text{O},\text{N})_3$ thin films grown by pulsed laser deposition. <i>Materials Research Bulletin</i> , 2008, 43, 1376-1383.	5.2	15
83	Nanoscale control of an interfacial metalâ€“insulator transition at room temperature. <i>Nature Materials</i> , 2008, 7, 298-302.	27.5	525
84	Chemical and structural changes of quartz surfaces due to structuring by laser-induced backside wet etching. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 3195.	2.8	13
85	Maximum supercurrent in Josephson junctions with alternating critical current density. <i>Physical Review B</i> , 2007, 76, .	3.2	2
86	Synthesis and properties of oxynitrides $(\text{La},\text{Sr})\text{Ti}(\text{O},\text{N})_3$ thin films. <i>Progress in Solid State Chemistry</i> , 2007, 35, 291-298.	7.2	20
87	Superconducting Interfaces Between Insulating Oxides. <i>Science</i> , 2007, 317, 1196-1199.	12.6	2,874
88	Tunable Quasi-Two-Dimensional Electron Gases in Oxide Heterostructures. <i>Science</i> , 2006, 313, 1942-1945.	12.6	1,423
89	NanoSIMS analysis of Ca doping at a grain boundary in a superconducting YBCO Ca-123/123 bicrystal. <i>Journal of Physics: Conference Series</i> , 2006, 43, 272-276.	0.4	5
90	Superconducting memory based on ferromagnetism. <i>Applied Physics Letters</i> , 2006, 89, 163509.	3.3	35

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91	Microlithography of electron gases formed at interfaces in oxide heterostructures. <i>Applied Physics Letters</i> , 2006, 89, 122101.	3.3	99
92	Transport properties of low angle grain boundaries in $\text{Y}_{1-x}\text{Ca}_x\text{Ba}_2\text{Cu}_3\text{O}_7$ films at high magnetic fields. <i>Applied Physics Letters</i> , 2006, 88, 132510.	3.3	3
93	Studies of superconducting field effect transistors with sheet resistances close to the quantum resistance. <i>Applied Physics Letters</i> , 2005, 86, 202505.	3.3	8
94	Capacitance measurements on grain boundaries in $\text{Y}_{1-x}\text{Ca}_x\text{Ba}_2\text{Cu}_3\text{O}_7$ . <i>Physical Review B</i> , 2004, 70, .	3.2	12
95	Electron Transport through $\text{YBa}_2\text{Cu}_3\text{O}_7$ Grain Boundary Interfaces between 4.2 and 300 K. <i>Physical Review Letters</i> , 2004, 92, 257003.	7.8	12
96	Half- $h/2e$ critical current oscillations of SQUIDs. <i>Europhysics Letters</i> , 2004, 68, 86-92.	2.0	39
97	Influence of the doping concentration of $\text{YBa}_2\text{Cu}_3\text{O}_7$ drain-source channels on the properties of superconducting field-effect devices. <i>Annalen Der Physik</i> , 2004, 13, 66-67.	2.4	1
98	Unusual current-voltage characteristics of single crystalline and bicrystalline $\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ films. <i>Annalen Der Physik</i> , 2004, 13, 595-599.	2.4	1
99	Determination of Ca diffusion in YBCO films by Secondary Ion Mass Spectroscopy. <i>Solid State Ionics</i> , 2003, 164, 149-158.	2.7	13
100	Conduction and magnetoresistance in doped manganite grain boundaries. <i>Applied Physics Letters</i> , 2003, 82, 2670-2672.	3.3	14
101	Ca-doping-induced enhancement of the critical currents of coated conductors grown by ion-beam-assisted deposition. <i>Applied Physics Letters</i> , 2003, 82, 772-774.	3.3	21
102	Influence of the doping concentration of $\text{Y}_{1-y}\text{Ca}_y\text{Ba}_2\text{Cu}_3\text{O}_7$ drain-source channels on the properties of superconducting field-effect devices. <i>Applied Physics Letters</i> , 2003, 83, 3528-3530.	3.3	15
103	Improving coated conductors. <i>IEEE Transactions on Applied Superconductivity</i> , 2003, 13, 2625-2627.	1.7	1
104	Pairing symmetry in $\text{Bi}_2\text{Sr}_2\text{Ca}_1\text{Cu}_2\text{O}_{8+x}$ . <i>Europhysics Letters</i> , 2003, 64, 489-495.	2.0	7
105	Experiments with $d$ -wave Superconductors. , 2003, , .		0
106	$d$ -Wave Induced Zero-Field Resonances in dc-Superconducting Quantum Interference Devices. <i>Physical Review Letters</i> , 2002, 88, 177003.	7.8	23
107	Possible solution of the grain-boundary problem for applications of high-Tc superconductors. <i>Applied Physics Letters</i> , 2002, 81, 3209-3211.	3.3	34
108	Experiments with d-wave Superconductors. <i>Physica Scripta</i> , 2002, T102, 107.	2.5	12

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109	Coated conductors containing grains with big aspect ratios. <i>Annalen Der Physik</i> , 2002, 11, 497-502.	2.4	4
110	Probing unconventional superconducting symmetries using Josephson interferometry. <i>Physica C: Superconductivity and Its Applications</i> , 2002, 368, 261-266.	1.2	5
111	Large grain boundary area superconductors. <i>European Physical Journal B</i> , 2002, 27, 299-301.	1.5	7
112	Spatial homogeneity and doping dependence of quasiparticle tunneling spectra in cuprate superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2001, 364-365, 450-457.	1.2	8
113	Interfaces in high-T <sub>c</sub> superconductors: fundamental insights and possible applications. <i>Current Applied Physics</i> , 2001, 1, 349-353.	2.4	3
114	Doping-induced enhancement of grain boundary critical currents. <i>IEEE Transactions on Applied Superconductivity</i> , 2001, 11, 2830-2837.	1.7	12
115	Evidence of Doping-Dependent Pairing Symmetry in Cuprate Superconductors. <i>Physical Review Letters</i> , 2001, 87, 087003.	7.8	124
116	Doping induced enhancement of the critical currents of grain boundaries in high-T <sub>c</sub> superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 1393-1396.	1.2	11
117	Realization of High-T <sub>c</sub> dc SQUIDs. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 1651-1654.	1.2	4
118	Enhanced supercurrent density in polycrystalline YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> at 77 K from calcium doping of grain boundaries. <i>Nature</i> , 2000, 407, 162-164.	27.8	255
119	Design and realization of an all d-wave dc superconducting quantum interference device. <i>Applied Physics Letters</i> , 2000, 76, 912-914.	3.3	118
120	Grain boundaries in high-T <sub>c</sub> superconductors: insights and improvements. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2000, 80, 827-834.	0.6	13
121	Grain boundaries in high-T <sub>c</sub> superconductors: insights and improvements. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2000, 80, 827-834.	0.6	2
122	Tailoring of high-T <sub>c</sub> Josephson junctions by doping their electrodes. <i>Applied Physics Letters</i> , 1999, 75, 850-852.	3.3	32
123	HTS quasiparticle injection devices with large current gain at 77 K. <i>IEEE Transactions on Applied Superconductivity</i> , 1999, 9, 3648-3651.	1.7	7
124	Modifying electronic properties of interfaces in high-T <sub>c</sub> superconductors by doping. <i>Physica C: Superconductivity and Its Applications</i> , 1999, 326-327, 7-11.	1.2	23
125	Doping-induced enhancement of the critical currents of grain boundaries in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> . <i>Europhysics Letters</i> , 1999, 47, 110-115.	2.0	160
126	High dielectric constant and tunability of epitaxial SrTiO <sub>3</sub> thin film capacitors. <i>Journal of Applied Physics</i> , 1999, 85, 7362-7369.	2.5	155

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127	Grain boundary critical currents - a new perspective. <i>Superconductor Science and Technology</i> , 1999, 12, 1043-1045.	3.5	10
128	Factors Controlling Transport Properties of Interfaces in High-Tc Superconductors. <i>Materials Research Society Symposia Proceedings</i> , 1999, 574, 261.	0.1	0
129	Material aspects for preparing HTS quasiparticle injection devices. <i>IEEE Transactions on Applied Superconductivity</i> , 1997, 7, 2730-2733.	1.7	12
130	Inductive measurements of $\Delta(T)$ of bare YBCO films and the proximity effect in YBCO/normal metal bilayers. <i>IEEE Transactions on Applied Superconductivity</i> , 1995, 5, 1432-1435.	1.7	3
131	Penetration depth measurements for Nd <sub>1.85</sub> Ce <sub>0.15</sub> CuO <sub>4</sub> and NbCN thin films using a kinetic inductance technique. <i>Physica C: Superconductivity and Its Applications</i> , 1994, 233, 77-84.	1.2	26
132	Analysis of Thin Thermal Oxides on (0001) SiC Epitaxial Layers. <i>Materials Science Forum</i> , 0, 897, 119-122.	0.3	2