Andreas Klein

List of Publications by Year in Descending Order

271 papers	9,173 citations	49 h-index	81 g-index
282 ext. papers	9,989 ext. citations	4 avg, IF	6.3 L-index

#	Paper	IF	Citations
271	Origin of Surface Reduction upon Water Adsorption on Oriented NiO Thin Films and Its Relation to Electrochemical Activity. *Journal of Physical Chemistry C*, **2022**, 126, 1303-1315	3.8	0
270	Electroceramics XVII - The 2020 virtual conference experience at TU Darmstadt. *Open Ceramics*, **2021**, 6, 100114	3.3	0
269	Influence of Defects on the Schottky Barrier Height at BaTiO3/RuO2 Interfaces. *Physica Status Solidi (A) Applications and Materials Science*, **2021**, 218, 2100143	1.6	0
268	Design of Lead-Free Antiferroelectric (1 −x)NaNbO3–xSrSnO3 Compositions Guided by First-Principles Calculations. *Chemistry of Materials*, **2021**, 33, 266-274	9.6	16
267	High field electroformation of sodium bismuth titanate and its solid solutions with barium titanate. *Journal of Materials Chemistry C*, **2021**, 9, 3334-3342	7.1	2
266	Fermi Level Engineering for Large Permittivity in BaTiO3-Based Multilayers. *Surfaces*, **2020**, 3, 567-578	2.9	
265	Pinning of the Fermi Level in CuFeO2 by Polaron Formation Limiting the Photovoltage for Photochemical Water Splitting. *Advanced Functional Materials*, **2020**, 30, 1910432	15.6	23
264	Polarization dependence of ZnO Schottky barriers revealed by photoelectron spectroscopy. *Physical Review Materials*, **2020**, 4,	3.2	6
263	Review–Electronic Properties of 2D Layered Chalcogenide Surfaces and Interfaces grown by (quasi) van der Waals Epitaxy. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 093012	2	3
262	Electroless Nanoplating of Pd–Pt Alloy Nanotube Networks: Catalysts with Full Compositional Control for the Methanol Oxidation Reaction. *ChemElectroChem*, **2020**, 7, 855-864	4.3	8
261	Oxygen Surface Exchange and Tracer Diffusion in Differently Oriented Thin Films of Gd-Doped CeO. *ACS Applied Materials & Interfaces*, **2020**, 12, 36768-36777	9.5	3
260	Sunlight Selective Photodeposition of CoO(OH) and NiO(OH) on Truncated Bipyramidal BiVO for Highly Efficient Photocatalysis. *ACS Applied Materials & Interfaces*, **2020**,	9.5	10
259	Fermi Energy Limitation at p-CuGaO2 Interfaces Induced by Electrochemical Oxidation/Reduction of Cu. *ACS Applied Energy Materials*, **2020**, 3, 9117-9125	6.1	1
258	BiVO4 Surface Reduction upon Water Exposure. *ACS Energy Letters*, **2019**, 4, 2522-2528	20.1	14
257	Analysis of the interfacial characteristics of BiVO/metal oxide heterostructures and its implication on their junction properties. *Physical Chemistry Chemical Physics*, **2019**, 21, 5086-5096	3.6	43
256	Off-Stoichiometry of Magnetron Sputtered Ba1−xSrxTiO3 Thin Films. *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1900148	1.3	7
255	Influence of ZnO Surface Modification on the Photocatalytic Performance of ZnO/NiO Thin Films. *Catalysis Letters*, **2019**, 149, 1813-1824	2.8	8

254	Defect Modulation Doping. *Advanced Functional Materials*, **2019**, 29, 1807906	15.6	14
253	Concentration and Diffusivity of Oxygen Interstitials in Niobia-Doped Ceria. *Journal of Physical Chemistry C*, **2019**, 123, 6340-6350	3.8	5
252	The energy level of the Fe-transition in BaTiO and SrTiO single crystals. *Physical Chemistry Chemical Physics*, **2019**, 21, 6238-6246	3.6	5
251	Multi-Level Cell Properties of a Bilayer Cu□/Al□□Resistive Switching Device. *Nanomaterials*, **2019**, 9,	5.4	17
250	Interface Behaviour and Work Function Modification of Self-Assembled Monolayers on Sn-Doped In2O3. *Surfaces*, **2019**, 2, 241-256	2.9	1
249	SnO Films Deposited by Ultrasonic Spray Pyrolysis: Influence of Al Incorporation on the Properties. *Molecules*, **2019**, 24,	4.8	15
248	Nickel Oxide Selectively Deposited on the {101} Facet of Anatase TiO2 Nanocrystal Bipyramids for Enhanced Photocatalysis. *ACS Applied Nano Materials*, **2019**, 2, 4793-4803	5.6	16
247	Electrical Properties of Low-Temperature Processed Sn-Doped InO Thin Films: The Role of Microstructure and Oxygen Content and the Potential of Defect Modulation Doping. *Materials*, **2019**, 12,	3.5	5
246	Sputter Deposition of Transition Metal Oxides on Silicon: Evidencing the Role of Oxygen Bombardment for Fermi-Level Pinning. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1900730	1.6	1
245	Electrochemical Reduction of Undoped and Cobalt-Doped BiFeO Induced by Water Exposure: Quantitative Determination of Reduction Potentials and Defect Energy Levels Using Photoelectron Spectroscopy. *Journal of Physical Chemistry Letters*, **2019**, 10, 7071-7076	6.4	7
244	Off-Stoichiometry of Magnetron Sputtered Ba1□SrxTiO3 Thin Films (Phys. Status Solidi B 10/2019). *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1970039	1.3	
243	Barrier formation at BaTiO3 interfaces with Ni and NiO. *Applied Surface Science*, **2019**, 466, 472-476	6.7	6
242	Enhancing electrical conductivity of room temperature deposited Sn-doped In2O3 thin films by hematite seed layers. *Applied Physics Letters*, **2018**, 112, 152105	3.4	7
241	Energy-Band Alignment of BiVO4 from Photoelectron Spectroscopy of Solid-State Interfaces. *Journal of Physical Chemistry C*, **2018**, 122, 20861-20870	3.8	22
240	Residual stress effect on coupling electromechanical factor of epitaxial Barium Strontium Titanate (BST) thin films. *Mechanics Research Communications*, **2018**, 87, 13-20	2.2	4
239	Supercritical CO2-assisted deposition of NiO on (101)-anatase-TiO2 for efficient facet engineered photocatalysts. *New Journal of Chemistry*, **2018**, 42, 18649-18658	3.6	7
238	The Work Function of TiO2. *Surfaces*, **2018**, 1, 73-89	2.9	84
237	Electrocatalytic Properties of (100)-, (110)-, and (111)-Oriented NiO Thin Films toward the Oxygen Evolution Reaction. *Journal of Physical Chemistry C*, **2018**, 122, 22252-22263	3.8	20

236	Limitation of Fermi level shifts by polaron defect states in hematite photoelectrodes. *Nature Communications*, **2018**, 9, 4309	17.4	65
235	Fermi Level Positions and Induced Band Bending at Single Crystalline Anatase (101) and (001) Surfaces: Origin of the Enhanced Photocatalytic Activity of Facet Engineered Crystals. *Advanced Energy Materials*, **2018**, 8, 1802195	21.8	23
234	Discovering the Determining Parameters for the Photocatalytic Activity of TiO2 Colloids Based on an Anomalous Dependence on the Specific Surface Area. *Particle and Particle Systems Characterization*, **2018**, 35, 1800216	3.1	5
233	Energy band alignment of antiferroelectric (Pb,La)(Zr,Sn,Ti)O 3. *Applied Surface Science*, **2017**, 407, 99-104	3.7	2
232	Influence of dopant segregation on the work function and electrical properties of Ge-doped in comparison to Sn-doped In2O3 thin films (Phys. Status Solidi A 2017). *Physica Status Solidi (A) Applications and Materials Science*, **2017**, 214, 1770109	1.6	
231	Energy band alignment at the nanoscale. *Applied Physics Letters*, **2017**, 110, 051603	3.4	2
230	Piezotronic effect at Schottky barrier of a metal-ZnO single crystal interface. *Journal of Applied Physics*, **2017**, 121, 155701	2.5	18
229	Modification of the Schottky barrier height at the RuO2 cathode during resistance degradation of Fe-doped SrTiO3. *Journal of the American Ceramic Society*, **2017**, 100, 4590-4601	3.8	13
228	A Space-Charge Treatment of the Increased Concentration of Reactive Species at the Surface of a Ceria Solid Solution. *Angewandte Chemie*, **2017**, 129, 14708-14712	3.6	4
227	Systematic Investigation of the Electronic Structure of Hematite Thin Films. *Advanced Materials Interfaces*, **2017**, 4, 1700542	4.6	14
226	A Space-Charge Treatment of the Increased Concentration of Reactive Species at the Surface of a Ceria Solid Solution. *Angewandte Chemie - International Edition*, **2017**, 56, 14516-14520	16.4	22
225	Polymorphism of the Blocking TiO2 Layer Deposited on F:SnO2 and Its Influence on the Interfacial Energetic Alignment. *Journal of Physical Chemistry C*, **2017**, 121, 17305-17313	3.8	4
224	Elasticity study of textured barium strontium titanate thin films by X-ray diffraction and laser acoustic waves. *Japanese Journal of Applied Physics*, **2017**, 56, 055501	1.4	2
223	Influence of dopant segregation on the work function and electrical properties of Ge-doped in comparison to Sn-doped In2O3 thin films. *Physica Status Solidi (A) Applications and Materials Science* , **2017**, 214, 1600486	1.6	4
222	Determination of electrical properties of degraded mixed ionic conductors: Impedance studies with applied dc voltage. *Journal of Applied Physics*, **2017**, 122, 244101	2.5	10
221	High quality epitaxial fluorine-doped SnO 2 films by ultrasonic spray pyrolysis: Structural and physical property investigation. *Materials and Design*, **2017**, 132, 518-525	8.1	13
220	Investigations on RF-magnetron sputtered Co3O4thin films regarding the solar energy conversion properties. *Journal Physics D: Applied Physics*, **2016**, 49, 155306	3	23
219	Band Alignment Engineering at Cu2O/ZnO Heterointerfaces. *ACS Applied Materials & Interfaces*, **2016**, 8, 21824-31	9.5	86

218	Polarisation dependence of Schottky barrier heights at ferroelectric BaTiO3 / RuO2interfaces: influence of substrate orientation and quality. *Journal Physics D: Applied Physics*, **2016**, 49, 295304	3	17
217	Influence of dopant species and concentration on grain boundary scattering in degenerately doped In2O3 thin films. *Thin Solid Films*, **2016**, 614, 62-68	2.2	33
216	Influence of grain boundaries and interfaces on the electronic structure of polycrystalline CuO thin films. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 1615-1624	1.6	22
215	Comparative study of sputter-deposited SnO2 films doped with antimony or tantalum. *Physica Status Solidi (B): Basic Research*, **2016**, 253, 923-928	1.3	13
214	Interface Properties of Dielectric Oxides. *Journal of the American Ceramic Society*, **2016**, 99, 369-387	3.8	55
213	Surface potentials of (111), (110) and (100) oriented CeO 2 thin films. *Applied Surface Science*, **2016**, 377, 1-8	6.7	21
212	Defect chemistry and resistance degradation in Fe-doped SrTiO3 single crystal. *Acta Materialia*, **2016**, 108, 229-240	8.4	64
211	Defect Structure of Doped Lead-Free 0.9(Bi0.5Na0.5)TiO3 0.1(Bi0.5K0.5)TiO3 Piezoceramics. *Journal of the American Ceramic Society*, **2016**, 99, 543-550	3.8	9
210	Copper (I) Oxide (Cu2O) based back contact for p-i-n CdTe solar cells. *Progress in Photovoltaics: Research and Applications*, **2016**, 24, 1229-1236	6.8	20
209	Highly conductive grain boundaries in copper oxide thin films. *Journal of Applied Physics*, **2016**, 119, 235303	2.5	15
208	Functional Interfaces for Transparent Organic Electronic Devices: Consistent Description of Charge Injection by Combining In Situ XPS and Current Voltage Measurements with Self-Consistent Modeling. *Journal of Physical Chemistry C*, **2016**, 120, 10466-10475	3.8	2
207	Substrate reactivity as the origin of Fermi level pinning at the Cu2O/ALD-Al2O3interface. *Materials Research Express*, **2016**, 3, 046404	1.7	7
206	Application of atomic layer deposited Al2O3as charge injection layer for high-permittivity dielectrics. *Semiconductor Science and Technology*, **2015**, 30, 024012	1.8	5
205	Energy band alignment in chalcogenide thin film solar cells from photoelectron spectroscopy. *Journal of Physics Condensed Matter*, **2015**, 27, 134201	1.8	73
204	In Situ Hall Effect Monitoring of Vacuum Annealing of InOH Thin Films. *Materials*, **2015**, 8, 561-574	3.5	37
203	Study of electrical fatigue by defect engineering in organic light-emitting diodes. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2015**, 192, 26-51	3.1	23
202	Cu 2 S as ohmic back contact for CdTe solar cells. *Thin Solid Films*, **2015**, 582, 336-339	2.2	13
201	Reversible metal-insulator transition of Ar-irradiated LaAlO3/SrTiO3 interfaces. *Physical Review B*, **2015**, 92,	3.3	15

200	Schottky Solar Cells with CuInS2 Nanocrystals as Absorber Material. *Zeitschrift Fur Physikalische Chemie*, **2015**, 229, 191-203	3.1	9
199	Quantitative Nanometer-Scale Mapping of Dielectric Tunability. *Advanced Materials Interfaces*, **2015**, 2, 1500088	4.6	6
198	Improved photocatalytic activity in RuO2-ZnO nanoparticulate heterostructures due to inhomogeneous space charge effects. *Physical Chemistry Chemical Physics*, **2015**, 17, 5090-102	3.6	59
197	Sputter-deposited polycrystalline tantalum-doped SnO2 layers. *Thin Solid Films*, **2014**, 555, 173-178	2.2	25
196	Reactively magnetron sputtered Bi2O3 thin films: Analysis of structure, optoelectronic, interface, and photovoltaic properties. *Physica Status Solidi (A) Applications and Materials Science*, **2014**, 211, 93-100	1.6	39
195	In situ Hall effect and conductivity measurements of ITO thin films. *Solid State Ionics*, **2014**, 262, 636-639	3.3	13
194	Domain wall stability in ferroelectrics with space charges. *Journal of Applied Physics*, **2014**, 115, 084110	2.5	22
193	Growth and surface properties of epitaxial SnO2. *Physica Status Solidi (A) Applications and Materials Science*, **2014**, 211, 1997-2004	1.6	17
192	Intrinsic energy band alignment of functional oxides. *Physica Status Solidi - Rapid Research Letters*, **2014**, 8, 571-576	2.5	50
191	Vapor-Phase Deposition of Oxides **2014**, 267-290		
190	Energy band alignment at ferroelectric/electrode interface determined by photoelectron spectroscopy. *Chinese Physics B*, **2014**, 23, 017702	1.2	4
189	Valence band offsets at Cu(In,Ga)Se2/Zn(O,S) interfaces. *Physica Status Solidi (A) Applications and Materials Science*, **2014**, 211, 1972-1980	1.6	14
188	Modification of energy band alignment and electric properties of Pt/Ba0.6Sr0.4TiO3/Pt thin-film ferroelectric varactors by Ag impurities at interfaces. *Journal of Applied Physics*, **2014**, 115, 243704	2.5	3
187	Efficacy of the DFT + U formalism for modeling hole polarons in perovskite oxides. *Physical Review B*, **2014**, 90,	3.3	71
186	Efficiency limitations of thermally evaporated thin-film SnS solar cells. *Journal Physics D: Applied Physics*, **2013**, 46, 305109	3	97
185	Energy Band Alignment between Anatase and Rutile TiO2. *Journal of Physical Chemistry Letters*, **2013**, 4, 4182-4187	6.4	184
184	PVD of copper sulfide (Cu2S) for PIN-structured solar cells. *Journal Physics D: Applied Physics*, **2013**, 46, 495112	3	26
183	SXPS studies of single crystalline CdTe/CdS interfaces. *Journal of Electron Spectroscopy and Related Phenomena*, **2013**, 190, 54-63	1.7	6

182	Transparent Conducting Oxides: Electronic Structure–Property Relationship from Photoelectron Spectroscopy with in situ Sample Preparation. *Journal of the American Ceramic Society*, **2013**, 96, 331-345	3.8	100
181	Influence of orbital contributions to the valence band alignment of Bi2O3, Fe2O3, BiFeO3, and Bi0.5Na0.5TiO3. *Physical Review B*, **2013**, 88,	3.3	44
180	Thermal stability, morphology and electronic band gap of Zn(NCN). *Solid State Sciences*, **2013**, 23, 50-57	3.4	16
179	Studies on CdTe solar cell front contact properties using X-ray photoelectron spectroscopy. *Thin Solid Films*, **2013**, 545, 548-557	2.2	7
178	A possible way to reduce absorber layer thickness in thin film CdTe solar cells. *Thin Solid Films*, **2013**, 535, 233-236	2.2	21
177	Surface electronic properties of polycrystalline bulk and thin film In2O3(ZnO)k compounds. *Applied Surface Science*, **2013**, 264, 811-815	6.7	3
176	Preparation of RuO2/TiO2Mesoporous Heterostructures and Rationalization of Their Enhanced Photocatalytic Properties by Band Alignment Investigations. *Journal of Physical Chemistry C*, **2013**, 117, 22098-22110	3.8	128
175	Detailed photoluminescence studies of thin film Cu2S for determination of quasi-Fermi level splitting and defect levels. *Journal of Applied Physics*, **2013**, 114, 233506	2.5	7
174	Spectral Calibrated and Confocal Photoluminescence of Cu2S Thin-Film Absorber. *Materials Research Society Symposia Proceedings*, **2013**, 1538, 191-196		1
173	An in situ x-ray photoelectron spectroscopy study of the initial stages of rf magnetron sputter deposition of indium tin oxide on p-type Si substrate. *Applied Physics Letters*, **2013**, 102, 021606	3.4	11
172	Evidence of diffusion at BaTiO3/silicon interfaces. *Thin Solid Films*, **2012**, 520, 1997-2000	2.2	7
171	Energy band alignment at interfaces of semiconducting oxides: A review of experimental determination using photoelectron spectroscopy and comparison with theoretical predictions by the electron affinity rule, charge neutrality levels, and the common anion rule. *Thin Solid Films*, **2012**, 520, 3721-3728	2.2	103
170	Surface studies of crystalline and amorphous Zn–In–Sn–O transparent conducting oxides. *Thin Solid Films*, **2012**, 520, 5633-5639	2.2	13
169	Silicon carbonitride nanolayers – Synthesis and chemical characterization. *Thin Solid Films*, **2012**, 520, 5906-5913	2.2	16
168	Photoelectron Spectroscopy in Materials Science and Physical Chemistry: Analysis of Composition, Chemical Bonding, and Electronic Structure of Surfaces and Interfaces **2012**, 477-512		8
167	Vapor-Phase Deposition of Oxides **2012**, 267-290		3
166	Atomic Layer Deposition of Al2O3 onto Sn-Doped In2O3: Absence of Self-Limited Adsorption during Initial Growth by Oxygen Diffusion from the Substrate and Band Offset Modification by Fermi Level Pinning in Al2O3. *Chemistry of Materials*, **2012**, 24, 4503-4510	9.6	28
165	Organic Grafting on Si for Interfacial SiO2 Growth Inhibition During Chemical Vapor Deposition of HfO2. *Chemistry of Materials*, **2012**, 24, 3135-3142	9.6	5

164	Sputter deposition of indium tin oxide onto zinc pthalocyanine: Chemical and electronic properties of the interface studied by photoelectron spectroscopy. *Applied Surface Science*, **2012**, 258, 3913-3919	6.7	6
163	Nanoscaled tin dioxide films processed from organotin-based hybrid materials: an organometallic route toward metal oxide gas sensors. *Nanoscale*, **2012**, 4, 6806-13	7.7	38
162	Polarization dependence of Schottky barrier heights at interfaces of ferroelectrics determined by photoelectron spectroscopy. *Physical Review B*, **2012**, 86,	3.3	66
161	Chemical bonds and elemental compositions of BCxNy layers produced by chemical vapor deposition with trimethylamine borane, triethylamine borane, or trimethylborazine. *X-Ray Spectrometry*, **2012**, 41, 240-246	0.9	6
160	Electrically Programmable Bistable Capacitor for High-Frequency Applications Based on Charge Storage at the (Ba,Sr)TiO3/Al2O3 Interface. *Advanced Functional Materials*, **2012**, 22, 4827-4832	15.6	12
159	Chemical interactions in the layered system BCxNy/Ni(Cu)/Si, produced by CVD at high temperature. *Analytical and Bioanalytical Chemistry*, **2012**, 404, 479-87	4.4	4
158	Reactive magnetron sputtering of Cu2O: Dependence on oxygen pressure and interface formation with indium tin oxide. *Journal of Applied Physics*, **2011**, 109, 113704	2.5	78
157	PbTiO3/SrTiO3 interface: Energy band alignment and its relation to the limits of Fermi level variation. *Physical Review B*, **2011**, 84,	3.3	50
156	Photoemission studies on undoped SnO2 buffer layers for CdTe thin film solar cells. *Energy Procedia*, **2011**, 10, 149-154	2.3	12
155	An optimized multilayer structure of CdS layer for CdTe solar cells application. *Journal of Alloys and Compounds*, **2011**, 509, 5285-5289	5.7	30
154	Comparison between the structural, morphological and optical properties of CdS layers prepared by Close Space Sublimation and RF magnetron sputtering for CdTe solar cells. *Thin Solid Films*, **2011** , 519, 7596-7599	2.2	26
153	Influence of the PVD sputtering method on structural characteristics of SiCN-coatings Comparison of RF, DC and HiPIMS sputtering and target configurations. *Surface and Coatings Technology*, **2011**, 205, S119-S123	4.4	38
152	CdTe thin film solar cells with reduced CdS film thickness. *Thin Solid Films*, **2011**, 519, 7138-7141	2.2	31
151	Interdiffusion at the BaCuSeF/ZnTe interface. *Thin Solid Films*, **2011**, 519, 7369-7373	2.2	1
150	Influence of substrate temperature, growth rate and TCO substrate on the properties of CSS deposited CdS thin films. *Thin Solid Films*, **2011**, 519, 7556-7559	2.2	28
149	Annealing effects on the chemical deposited CdS films and the electrical properties of CdS/CdTe solar cells. *Materials Research Bulletin*, **2011**, 46, 194-198	5.1	21
148	Resonant photoemission shake-up satellites from semiconductors with shallow 3d and 4d core levels. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 309-313	1.3	2
147	Self-limited oxygen exchange kinetics at SnO2 surfaces. *Physical Chemistry Chemical Physics*, **2011**, 13, 3223-6	3.6	15

146	Electrical properties of (Ba, Sr)TiO3 thin films with Pt and ITO electrodes: dielectric and rectifying behaviour. *Journal of Physics Condensed Matter*, **2011**, 23, 334202	1.8	20
145	Optimized chemical bath deposited CdS layers for the improvement of CdTe solar cells. *Solar Energy Materials and Solar Cells*, **2011**, 95, 816-820	6.4	75
144	Orientation dependent ionization potential of In2O3: a natural source for inhomogeneous barrier formation at electrode interfaces in organic electronics. *Journal of Physics Condensed Matter*, **2011**, 23, 334203	1.8	27
143	Role of copper interstitials in CuInSe2: First-principles calculations. *Physical Review B*, **2011**, 84,	3.3	24
142	12% efficient CdTe/CdS thin film solar cells deposited by low-temperature close space sublimation. *Journal of Applied Physics*, **2011**, 110, 064508	2.5	40
141	Reduction-induced Fermi level pinning at the interfaces between Pb(Zr,Ti)O3and Pt, Cu and Ag metal electrodes. *Journal Physics D: Applied Physics*, **2011**, 44, 255301	3	37
140	Interface Investigation in Nanostructured BaTiO3/Silica Composite Ceramics. *Journal of the American Ceramic Society*, **2010**, 93, 865-874	3.8	42
139	Energy level alignment and electrical properties of (Ba,Sr)TiO3/Al2O3 interfaces for tunable capacitors. *Journal of Applied Physics*, **2010**, 108, 014113	2.5	13
138	Band alignment at the BaCuSeF/ZnTe interface. *Applied Physics Letters*, **2010**, 96, 162110	3.4	9
137	Transparent Conducting Oxides for Photovoltaics: Manipulation of Fermi Level, Work Function and Energy Band Alignment. *Materials*, **2010**, 3, 4892-4914	3.5	300
136	Surface energy controlled preferential orientation of thin films. *Journal Physics D: Applied Physics*, **2010**, 43, 055301	3	37
135	Barrier heights, polarization switching, and electrical fatigue in Pb(Zr,Ti)O3 ceramics with different electrodes. *Journal of Applied Physics*, **2010**, 108, 104106	2.5	36
134	Energy band alignment between Pb(Zr,Ti)O3and high and low work function conducting oxides from hole to electron injection. *Journal Physics D: Applied Physics*, **2010**, 43, 295301	3	42
133	Electronic structure of In2O3 and Sn-doped In2O3 by hard x-ray photoemission spectroscopy. *Physical Review B*, **2010**, 81,	3.3	94
132	Limits for n-type doping in In2O3 and SnO2: A theoretical approach by first-principles calculations using hybrid-functional methodology. *Journal of Applied Physics*, **2010**, 108, 053511	2.5	52
131	Electronic properties of BaCuChF (Ch=S,Se,Te) surfaces and BaCuSeF/ZnPc interfaces. *Journal of Applied Physics*, **2010**, 107, 103713	2.5	11
130	Analytical characterization of BC(x)N(y) films generated by LPCVD with triethylamine borane. *Analytical and Bioanalytical Chemistry*, **2010**, 398, 1077-84	4.4	15
129	Properties of SiCN coatings for high temperature applications Comparison of RF-, DC- and HPPMS-sputtering. *Surface and Coatings Technology*, **2010**, 205, S21-S27	4.4	26

128	Surface segregation in Nb-doped BaTiO3 films. *Applied Surface Science*, **2010**, 256, 6228-6232	6.7	11
127	In situ photoelectron study of the (Ba,Sr)TiO3/RuO2 contact formation. *Journal of the European Ceramic Society*, **2010**, 30, 187-192	6	34
126	Electrical properties of the CdTe back contact: A new chemically etching process based on nitric acid/acetic acid mixtures. *Applied Surface Science*, **2010**, 256, 5803-5806	6.7	11
125	Electronic structure of In2O3 from resonant x-ray emission spectroscopy. *Applied Physics Letters*, **2009**, 94, 022105	3.4	38
124	Formation and modification of Schottky barriers at the PZT/Pt interface. *Journal Physics D: Applied Physics*, **2009**, 42, 215302	3	35
123	Interface Engineering of Inorganic Thin-Film Solar Cells Materials-Science Challenges for Advanced Physical Concepts. *Advanced Materials*, **2009**, 21, 4196-4206	24	105
122	CdTe thin film solar cells: Interrelation of nucleation, structure, and performance. *Thin Solid Films*, **2009**, 517, 2125-2131	2.2	53
121	Speciation of BC(x)N(y) films grown by PECVD with trimethylborazine precursor. *Analytical and Bioanalytical Chemistry*, **2009**, 395, 1901-9	4.4	11
120	Chemical character of BCxNy layers grown by CVD with trimethylamine borane. *X-Ray Spectrometry*, **2009**, 38, 68-73	0.9	23
119	Depositon of Dielectric Films with Inductively Coupled Plasma-CVD in Dependence on Pressure and Two RF-Power-Sources. *Plasma Processes and Polymers*, **2009**, 6, S582-S587	3.4	5
118	Deposition and characterization of highly p-type antimony doped ZnTe thin films. *Thin Solid Films*, **2009**, 517, 2149-2152	2.2	24
117	Band alignment of differently treated TCO/CdS interface. *Thin Solid Films*, **2009**, 517, 2558-2561	2.2	25
116	Surface potentials of magnetron sputtered transparent conducting oxides. *Thin Solid Films*, **2009**, 518, 1197-1203	2.2	125
115	Surface and bulk properties of sputter deposited undoped and Sb-doped SnO2 thin films. *Sensors and Actuators B: Chemical*, **2009**, 139, 665-672	8.5	49
114	Influence of sputter deposition parameters on the properties of tunable barium strontium titanate thin films for microwave applications. *Journal of the European Ceramic Society*, **2009**, 29, 1433-1442	6	28
113	Chemical characterization of SiCxNy nanolayers by FTIR-and Raman spectroscopy, XPS and TXRF-NEXAFS. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2009**, 603, 174-177	1.2	16
112	Geometry, electronic structure and thermodynamic stability of intrinsic point defects in indium oxide. *Journal of Physics Condensed Matter*, **2009**, 21, 455801	1.8	65
111	Chemical and electronic properties of the ITO/Al(2)O(3) interface. *Physical Chemistry Chemical Physics*, **2009**, 11, 3049-54	3.6	37

110	Bulk defect chemistry and surface electronic behavior of Zn,Sn codoped In(2)O(3) transparent conducting oxides. *Physical Chemistry Chemical Physics*, **2009**, 11, 3099-104	3.6	14
109	ZnO and Its Applications. *Springer Series in Materials Science*, **2008**, 1-33	0.9	28
108	Barrier height at (Ba,Sr)TiO3/Pt interfaces studied by photoemission. *Physical Review B*, **2008**, 77,	3.3	115
107	Nature of the band gap of In2O3 revealed by first-principles calculations and x-ray spectroscopy. *Physical Review Letters*, **2008**, 100, 167402	7.4	498
106	Surfaces and Interfaces of Sputter-Deposited ZnO Films. *Springer Series in Materials Science*, **2008**, 125-185	0.9	14
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