John Robertson

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

594 papers	65,756 citations	113 h-index	247 g-index
617 ext. papers	70,530 ext. citations	4.3 avg, IF	8.47 L-index

#	Paper	IF	Citations
594	p-Type Semiconduction in Oxides with Cation Lone Pairs. *Chemistry of Materials*, **2022**, 34, 643-651	9.6	3
593	Negative Differential Resistance Effect in Gold Metal Heterostructure Diodes. *IEEE Electron Device Letters*, **2022**, 1-1	4.4	5
592	Reduced Fermi Level Pinning at Physisorptive Sites of Moire-MoS/Metal Schottky Barriers.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	4
591	Self-Poisoning by C2 Products in CO2 Photoreduction Using a Phosphorus-Doped Carbon Nitride with Nitrogen Vacancies. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 5758-5769	8.3	2
590	Electronic Structure of Transparent Amorphous Oxide Semiconductors **2022**, 73-92		
589	Electronic properties of CaF2 bulk and interfaces. *Journal of Applied Physics*, **2022**, 131, 215302	2.5	1
588	Doping limits in p-type oxide semiconductors. *MRS Bulletin*, **2021**, 46, 1037	3.2	4
587	Microstructure scaling of metal insulator transition properties of VO2 films. *Applied Physics Letters*, **2021**, 118, 121901	3.4	2
586	Electronic properties and tunability of the hexagonal SiGe alloys. *Applied Physics Letters*, **2021**, 118, 172101	3.4	3
585	Schottky barrier heights of defect-free metal/ZnO, CdO, MgO, and SrO interfaces. *Journal of Applied Physics*, **2021**, 129, 175304	2.5	4
584	Microstructure scaling in metal-insulator-transitions of atomic layer deposited VO2 films. *Solid-State Electronics*, **2021**, 183, 108046	1.7	0
583	The metal insulator phase change in vanadium dioxide and its applications. *Journal of Applied Physics*, **2021**, 129, 240902	2.5	5
582	. *IEEE Transactions on Electron Devices*, **2021**, 68, 288-293	2.9	3
581	Carbon cluster formation and mobility degradation in 4H-SiC MOSFETs. *Applied Physics Letters*, **2021**, 118, 031601	3.4	5
580	Coupled VO Oscillators Circuit as Analog First Layer Filter in Convolutional Neural Networks. *Frontiers in Neuroscience*, **2021**, 15, 628254	5.1	10
579	Single-Atom Rhodium on Defective g-C3N4: A Promising Bifunctional Oxygen Electrocatalyst. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 3590-3599	8.3	37
578	High-Throughput Electronic Structures and Ferroelectric Interfaces of HfO2 by GGA+U(d,p) Calculations. *Physica Status Solidi - Rapid Research Letters*, **2021**, 15, 2100295	2.5	2

577	Comparison of hexagonal boron nitride and MgO tunnel barriers in Fe,Co magnetic tunnel junctions. *Applied Physics Reviews*, **2021**, 8, 031307	17.3	3
576	Study of Hexagonal Boron Nitride as the Tunnel Barrier in Magnetic Tunnel Junctions. *ACS Applied Materials & Interfaces*, **2021**, 13, 47226-47235	9.5	2
575	Machine-learning-based interatomic potentials for advanced manufacturing. *International Journal of Mechanical System Dynamics*, **2021**, 1, 159-172		0
574	Role of the third metal oxide in In□Ga□Zn□O4 amorphous oxide semiconductors: Alternatives to gallium. *Journal of Applied Physics*, **2020**, 128, 215704	2.5	3
573	Spin filtering by proximity effects at hybridized interfaces in spin-valves with 2D graphene barriers. *Nature Communications*, **2020**, 11, 5670	17.4	17
572	Theoretical investigation on graphene-supported single-atom catalysts for electrochemical CO2 reduction. *Catalysis Science and Technology*, **2020**, 10, 8465-8472	5.5	11
571	Influence of precursor dose and residence time on the growth rate and uniformity of vanadium dioxide thin films by atomic layer deposition. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 042401	2.9	7
570	Modelling the enthalpy change and transition temperature dependence of the metal-insulator transition in pure and doped vanadium dioxide. *Physical Chemistry Chemical Physics*, **2020**, 22, 13474-13478	3.6	3
569	Tuning the high-□oxide (HfO2, ZrO2)/4H-SiC interface properties with a SiO2 interlayer for power device applications. *Applied Surface Science*, **2020**, 527, 146843	6.7	4
568	. *IEEE Electron Device Letters*, **2020**, 41, 1009-1012	4.4	17
567	Band Structure, Band Offsets, and Intrinsic Defect Properties of Few-Layer Arsenic and Antimony. *Journal of Physical Chemistry C*, **2020**, 124, 7441-7448	3.8	3
566	Semiconducting few-layer PdSe and PdSe: native point defects and contacts with native metallic PdSe. *Physical Chemistry Chemical Physics*, **2020**, 22, 7365-7373	3.6	4
565	Termination-dependence of Fermi level pinning at rare-earth arsenide/GaAs interfaces. *Applied Physics Letters*, **2020**, 116, 251602	3.4	5
564	Time-Delay Encoded Image Recognition in a Network of Resistively Coupled VO□bn Si Oscillators. *IEEE Electron Device Letters*, **2020**, 41, 629-632	4.4	19
563	A unified mid-gap defect model for amorphous GeTe phase change material. *Applied Physics Letters* , **2020**, 116, 052103	3.4	3
562	Hybrid band offset calculation for heterojunction interfaces between disparate semiconductors. *Applied Physics Letters*, **2020**, 116, 131602	3.4	7
561	Anisotropic Transport Property of Antimonene MOSFETs. *ACS Applied Materials & Interfaces*, **2020**, 12, 22378-22386	9.5	20
560	Electronic structure of amorphous copper iodide: A p-type transparent semiconductor. *Physical Review Materials*, **2020**, 4,	3.2	7

559	Scaled resistively-coupled VO2 oscillators for neuromorphic computing. *Solid-State Electronics*, **2020**, 168, 107729	1.7	17
558	Extending the metal-induced gap state model of Schottky barriers. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2020**, 38, 042208	1.3	9
557	Origin of Weaker Fermi Level Pinning and Localized Interface States at Metal Silicide Schottky Barriers. *Journal of Physical Chemistry C*, **2020**, 124, 19698-19703	3.8	4
556	Preparation of atomic layer deposited vanadium dioxide thin films using tetrakis(ethylmethylamino) vanadium as precursor. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 052402	2.9	4
555	Indium Silicon Oxide TFT Fully Photolithographically Processed for Circuit Integration. *IEEE Journal of the Electron Devices Society*, **2020**, 8, 1162-1167	2.3	4
554	Ultrahigh drive current and large selectivity in GeS selector. *Nature Communications*, **2020**, 11, 4636	17.4	36
553	Phase dependence of Schottky barrier heights for GeSbTe and related phase-change materials. *Journal of Applied Physics*, **2020**, 127, 155301	2.5	4
552	Atomic structure and band alignment at Al2O3/GaN, Sc2O3/GaN and La2O3/GaN interfaces: A first-principles study. *Microelectronic Engineering*, **2019**, 216, 111039	2.5	9
551	Modeling of surface gap state passivation and Fermi level de-pinning in solar cells. *Applied Physics Letters*, **2019**, 114, 222106	3.4	12
550	Chalcogenide selector devices and their non-linear conduction process. *Microelectronic Engineering*, **2019**, 216, 111037	2.5	1
549	Interfacial Properties of Monolayer Antimonene Devices. *Physical Review Applied*, **2019**, 11,	4.3	14
548	Chemical bonding and band alignment at X2O3/GaN (X = Al, Sc) interfaces. *Applied Physics Letters*, **2019**, 114, 161601	3.4	20
547	Atomic structure and electronic structure of disordered graphitic carbon nitride. *Carbon*, **2019**, 147, 483-489	10.4	7
546	Chalcogenide van der Waals superlattices: a case example of interfacial phase-change memory. *Pure and Applied Chemistry*, **2019**, 91, 1777-1786	2.1	4
545	Origin of resistivity contrast in interfacial phase-change memory: The crucial role of Ge/Sb intermixing. *Applied Physics Letters*, **2019**, 114, 132102	3.4	27
544	Schottky barrier height at metal/ZnO interface: A first-principles study. *Microelectronic Engineering*, **2019**, 216, 111056	2.5	10
543	Density Functional Theory Studies of the Metal–Insulator Transition in Vanadium Dioxide Alloys. *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1900210	1.3	5
542	Optical band gap of cross-linked, curved, and radical polyaromatic hydrocarbons. *Physical Chemistry Chemical Physics*, **2019**, 21, 16240-16251	3.6	20

541	Band alignment calculation of dielectric films on VO2. *Microelectronic Engineering*, **2019**, 216, 111057	2.5	1
540	Structural changes during the switching transition of chalcogenide selector devices. *Applied Physics Letters*, **2019**, 115, 163503	3.4	6
539	Electronic structure of metallic and insulating phases of vanadium dioxide and its oxide alloys. *Physical Review Materials*, **2019**, 3,	3.2	7
538	Insertion of an ultrathin AlO interfacial layer for Schottky barrier height reduction in WS field-effect transistors. *Nanoscale*, **2019**, 11, 4811-4821	7.7	15
537	Band Offset Models of Three-Dimensionally Bonded Semiconductors and Insulators. *Journal of Physical Chemistry C*, **2019**, 123, 5562-5570	3.8	12
536	Materials Selection and Mechanism of Non-linear Conduction in Chalcogenide Selector Devices. *Scientific Reports*, **2019**, 9, 1867	4.9	23
535	Dye-Assisted Transformation of CuO Nanocrystals to Amorphous Cu O Nanoflakes for Enhanced Photocatalytic Performance. *ACS Omega*, **2018**, 3, 1939-1945	3.9	11
534	Insulator-to-Metallic Spin-Filtering in 2D-Magnetic Tunnel Junctions Based on Hexagonal Boron Nitride. *ACS Nano*, **2018**, 12, 4712-4718	16.7	59
533	Direct transition of a HfGeTe4 ternary transition-metal chalcogenide monolayer with a zigzag van der Waals gap. *APL Materials*, **2018**, 6, 046104	5.7	13
532	Band edge states, intrinsic defects, and dopants in monolayer HfS2 and SnS2. *Applied Physics Letters*, **2018**, 112, 062105	3.4	17
531	Carbon nanotube isolation layer enhancing in-liquid quality-factors of thin film bulk acoustic wave resonators for gravimetric sensing. *Sensors and Actuators B: Chemical*, **2018**, 261, 398-407	8.5	10
530	The Over-Reset Phenomenon in Ta2O5 RRAM Device Investigated by the RTN-Based Defect Probing Technique. *IEEE Electron Device Letters*, **2018**, 39, 955-958	4.4	15
529	Dirac-Point Shift by Carrier Injection Barrier in Graphene Field-Effect Transistor Operation at Room Temperature. *ACS Applied Materials & Interfaces*, **2018**, 10, 10618-10621	9.5	3
528	Native point defects of semiconducting layered BiOSe. *Scientific Reports*, **2018**, 8, 10920	4.9	17
527	Germanium substitution endowing Cr3+-doped zinc aluminate phosphors with bright and super-long near-infrared persistent luminescence. *Acta Materialia*, **2018**, 155, 214-221	8.4	45
526	Oxygen vacancies and hydrogen in amorphous In-Ga-Zn-O and ZnO. *Physical Review Materials*, **2018**, 2,	3.2	16
525	Passivating the sulfur vacancy in monolayer MoS2. *APL Materials*, **2018**, 6, 066104	5.7	34
524	Controlling Surface Termination and Facet Orientation in CuO Nanoparticles for High Photocatalytic Activity: A Combined Experimental and Density Functional Theory Study. *ACS Applied Materials & Interfaces*, **2017**, 9, 8100-8106	9.5	70

523	Yttrium passivation of defects in GeO2 and GeO2/Ge interfaces. *Applied Physics Letters*, **2017**, 110, 032903	3.4	12
522	Band offsets and metal contacts in monolayer black phosphorus. *Microelectronic Engineering*, **2017**, 178, 108-111	2.5	4
521	Ultrathin Multifunctional Graphene-PVDF Layers for Multidimensional Touch Interactivity for Flexible Displays. *ACS Applied Materials & Interfaces*, **2017**, 9, 18410-18416	9.5	51
520	Adsorptive graphene doping: Effect of a polymer contaminant. *Applied Physics Letters*, **2017**, 110, 223104	3.4	3
519	The role of nitrogen doping in ALD Ta2O5 and its influence on multilevel cell switching in RRAM. *Applied Physics Letters*, **2017**, 110, 102902	3.4	36
518	Defect passivation of transition metal dichalcogenides via a charge transfer van der Waals interface. *Science Advances*, **2017**, 3, e1701661	14.3	67
517	Low temperature growth of fully covered single-layer graphene using a CoCu catalyst. *Nanoscale*, **2017**, 9, 14467-14475	7.7	11
516	Enhanced switching stability in Ta2O5 resistive RAM by fluorine doping. *Applied Physics Letters*, **2017**, 111, 092904	3.4	17
515	Germanium oxidation occurs by diffusion of oxygen network interstitials. *Applied Physics Letters*, **2017**, 110, 222902	3.4	8
514	From Growth Surface to Device Interface: Preserving Metallic Fe under Monolayer Hexagonal Boron Nitride. *ACS Applied Materials & Interfaces*, **2017**, 9, 29973-29981	9.5	13
513	Hydrogen and the Light-Induced Bias Instability Mechanism in Amorphous Oxide Semiconductors. *Scientific Reports*, **2017**, 7, 16858	4.9	14
512	Charge transfer doping of graphene without degrading carrier mobility. *Journal of Applied Physics*, **2017**, 121, 224304	2.5	9
511	Investigating the Role of Tunable Nitrogen Vacancies in Graphitic Carbon Nitride Nanosheets for Efficient Visible-Light-Driven H2 Evolution and CO2 Reduction. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 7260-7268	8.3	224
510	Defect Emission and Optical Gain in SiCO:H Films. *ACS Applied Materials & Interfaces*, **2017**, 9, 22725-22731	9.5	18
509	Metal-catalyst-free growth of graphene on insulating substrates by ammonia-assisted microwave plasma-enhanced chemical vapor deposition. *RSC Advances*, **2017**, 7, 33185-33193	3.7	23
508	Face Dependence of Schottky Barriers Heights of Silicides and Germanides on Si and Ge. *Scientific Reports*, **2017**, 7, 16669	4.9	11
507	Band structure, band offsets, substitutional doping, and Schottky barriers of bulk and monolayer InSe. *Physical Review Materials*, **2017**, 1,	3.2	28
506	A fast transfer-free synthesis of high-quality monolayer graphene on insulating substrates by a simple rapid thermal treatment. *Nanoscale*, **2016**, 8, 2594-600	7.7	17

505	Nondestructive optical visualisation of graphene domains and boundaries. *Nanoscale*, **2016**, 8, 16427-16434	7.7	5
504	Impact of oxygen exchange reaction at the ohmic interface in TaO-based ReRAM devices. *Nanoscale*, **2016**, 8, 17774-17781	7.7	92
503	Interface Engineering for Atomic Layer Deposited Alumina Gate Dielectric on SiGe Substrates. *ACS Applied Materials & Interfaces*, **2016**, 8, 19110-8	9.5	29
502	Stable, efficient p-type doping of graphene by nitric acid. *RSC Advances*, **2016**, 6, 113185-113192	3.7	49
501	Growth of Continuous Monolayer Graphene with Millimeter-sized Domains Using Industrially Safe Conditions. *Scientific Reports*, **2016**, 6, 21152	4.9	40
500	Revisiting the Local Structure in Ge-Sb-Te based Chalcogenide Superlattices. *Scientific Reports*, **2016**, 6, 22353	4.9	57
499	Nature of Cu Interstitials in Al2O3and the Implications for Filament Formation in Conductive Bridge Random Access Memory Devices. *Journal of Physical Chemistry C*, **2016**, 120, 14474-14483	3.8	11
498	Mott lecture: How bonding concepts can help understand amorphous semiconductor behavior. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 1641-1652	1.6	11
497	Magnetic tunnel junctions with monolayer hexagonal boron nitride tunnel barriers. *Applied Physics Letters*, **2016**, 108, 102404	3.4	95
496	The screening effects of the screened exchange hybrid functional in surface systems: A case study on the CO/Pt(111) problem. *AIP Advances*, **2016**, 6, 065309	1.5	2
495	Growth of continuous graphene by open roll-to-roll chemical vapor deposition. *Applied Physics Letters*, **2016**, 109, 193103	3.4	31
494	Band engineering in transition metal dichalcogenides: Stacked versus lateral heterostructures. *Applied Physics Letters*, **2016**, 108, 233104	3.4	114
493	AlN and Al oxy-nitride gate dielectrics for reliable gate stacks on Ge and InGaAs channels. *Journal of Applied Physics*, **2016**, 119, 204101	2.5	6
492	Chemical trends of Schottky barrier behavior on monolayer hexagonal B, Al, and Ga nitrides. *Journal of Applied Physics*, **2016**, 120, 065302	2.5	10
491	Stabilizing a graphene platform toward discrete components. *Applied Physics Letters*, **2016**, 109, 253110	3.4	10
490	Atomic Layering, Intermixing and Switching Mechanism in Ge-Sb-Te based Chalcogenide Superlattices. *Scientific Reports*, **2016**, 6, 37325	4.9	31
489	Thirty Gigahertz Optoelectronic Mixing in Chemical Vapor Deposited Graphene. *Nano Letters*, **2016**, 16, 2988-93	11.5	15
488	Improved Calculation of Li and Na Intercalation Properties in Anatase, Rutile, and TiO2(B). *Journal of Physical Chemistry C*, **2016**, 120, 22910-22917	3.8	56

487	Ultrafast Ge-Te bond dynamics in a phase-change superlattice. *Physical Review B*, **2016**, 94,	3.3	5
486	Calculation of TiO2 Surface and Subsurface Oxygen Vacancy by the Screened Exchange Functional. *Journal of Physical Chemistry C*, **2015**, 119, 18160-18166	3.8	105
485	Low-Temperature Growth of Carbon Nanotube Forests Consisting of Tubes with Narrow Inner Spacing Using Co/Al/Mo Catalyst on Conductive Supports. *ACS Applied Materials & Interfaces*, **2015**, 7, 16819-27	9.5	23
484	AlN-GeO2 based gate stack for improved reliability of Ge MOSFETs. *Microelectronic Engineering*, **2015**, 147, 168-170	2.5	6
483	Ab initio calculations of materials selection of oxides for resistive random access memories. *Microelectronic Engineering*, **2015**, 147, 339-343	2.5	9
482	Long-Term Passivation of Strongly Interacting Metals with Single-Layer Graphene. *Journal of the American Chemical Society*, **2015**, 137, 14358-66	16.4	114
481	Selective Passivation of GeO2/Ge Interface Defects in Atomic Layer Deposited High-k MOS Structures. *ACS Applied Materials & Interfaces*, **2015**, 7, 20499-506	9.5	53
480	Efficient Transfer Doping of Carbon Nanotube Forests by MoO3. *ACS Nano*, **2015**, 9, 10422-30	16.7	33
479	High-K materials and metal gates for CMOS applications. *Materials Science and Engineering Reports*, **2015**, 88, 1-41	30.9	382
478	Oxygen Defect-Induced Metastability in Oxide Semiconductors Probed by Gate Pulse Spectroscopy. *Scientific Reports*, **2015**, 5, 14902	4.9	42
477	Localized Tail States and Electron Mobility in Amorphous ZnON Thin Film Transistors. *Scientific Reports*, **2015**, 5, 13467	4.9	54
476	Modeling of switching mechanism in GeSbTe chalcogenide superlattices. *Scientific Reports*, **2015**, 5, 12612	4.9	76
475	Energetics of intrinsic defects in NiO and the consequences for its resistive random access memory performance. *Applied Physics Letters*, **2015**, 107, 122110	3.4	36
474	Defect state passivation at III-V oxide interfaces for complementary metal□oxide□emiconductor devices. *Journal of Applied Physics*, **2015**, 117, 112806	2.5	61
473	Spatial variability in large area single and few-layer CVD graphene **2015**,		1
472	Chalcogen vacancies in monolayer transition metal dichalcogenides and Fermi level pinning at contacts. *Applied Physics Letters*, **2015**, 106, 173106	3.4	121
471	3D Behavior of Schottky Barriers of 2D Transition-Metal Dichalcogenides. *ACS Applied Materials & Interfaces*, **2015**, 7, 25709-15	9.5	107
470	The effects of screening length in the non-local screened-exchange functional. *Journal of Physics Condensed Matter*, **2015**, 27, 025501	1.8	10

469	Soluble polysulphide sorption using carbon nanotube forest for enhancing cycle performance in a lithium–sulphur battery. *Nano Energy*, **2015**, 12, 538-546	17.1	85
468	Vacancy and Doping States in Monolayer and bulk Black Phosphorus. *Scientific Reports*, **2015**, 5, 14165	4.9	46
467	Metal oxide induced charge transfer doping and band alignment of graphene electrodes for efficient organic light emitting diodes. *Scientific Reports*, **2014**, 4, 5380	4.9	168
466	Amorphous Oxide Semiconductor TFTs for Displays and Imaging. *Journal of Display Technology*, **2014**, 10, 917-927		102
465	The role of the sp2:sp3 substrate content in carbon supported nanotube growth. *Carbon*, **2014**, 75, 327-334	10.4	16
464	Calculation of metallic and insulating phases of V2O3 by hybrid density functionals. *Journal of Chemical Physics*, **2014**, 140, 054702	3.9	21
463	Carbon nanotube forests growth using catalysts from atomic layer deposition. *Journal of Applied Physics*, **2014**, 115, 144303	2.5	7
462	Study of CeO2 and Its Native Defects by Density Functional Theory with Repulsive Potential. *Journal of Physical Chemistry C*, **2014**, 118, 24248-24256	3.8	67
461	Effect of Catalyst Pretreatment on Chirality-Selective Growth of Single-Walled Carbon Nanotubes. *Journal of Physical Chemistry C*, **2014**, 118, 5773-5781	3.8	35
460	Organic light emitting diodes with environmentally and thermally stable doped graphene electrodes. *Journal of Materials Chemistry C*, **2014**, 2, 6940	7.1	51
459	Indirect doping effects from impurities in MoS2/h-BN heterostructures. *Physical Review B*, **2014**, 90,	3.3	36
458	Sub-nanometer atomic layer deposition for spintronics in magnetic tunnel junctions based on graphene spin-filtering membranes. *ACS Nano*, **2014**, 8, 7890-5	16.7	96
457	Behaviour of hydrogen in wide band gap oxides. *Journal of Applied Physics*, **2014**, 115, 203708	2.5	55
456	Single-step CVD growth of high-density carbon nanotube forests on metallic Ti coatings through catalyst engineering. *Carbon*, **2014**, 67, 680-687	10.4	21
455	Comparison of carbon nanotube forest growth using AlSi, TiSiN, and TiN as conductive catalyst supports. *Physica Status Solidi (B): Basic Research*, **2014**, 251, 2389-2393	1.3	6
454	Silicon versus the rest. *Canadian Journal of Physics*, **2014**, 92, 553-560	1.1	1
453	Materials selection for oxide-based resistive random access memories. *Applied Physics Letters*, **2014** , 105, 223516	3.4	69
452	Nature of gap states in GeSbTe phase change memory materials. *Canadian Journal of Physics*, **2014**, 92, 671-674	1.1	8

451	Origin of the high work function and high conductivity of MoO3. *Applied Physics Letters*, **2014**, 105, 222110	3.4	123
450	Diamond-Like Carbon Films, Properties and Applications **2014**, 101-139		8
449	Increased carbon nanotube area density after catalyst generation from cobalt disilicide using a cyclic reactive ion etching approach. *Journal of Applied Physics*, **2014**, 115, 144302	2.5	3
448	Light induced instability mechanism in amorphous InGaZn oxide semiconductors. *Applied Physics Letters*, **2014**, 104, 162102	3.4	54
447	Oxygen vacancy defects in Ta2O5 showing long-range atomic re-arrangements. *Applied Physics Letters*, **2014**, 104, 112906	3.4	28
446	Dopant compensation in HfO2 and other high K oxides. *Applied Physics Letters*, **2014**, 104, 192904	3.4	12
445	Electronic properties of MoS2/h-BN heterostructures: Impact of dopants and impurities. *Physica Status Solidi (B): Basic Research*, **2014**, 251, 2620-2625	1.3	8
444	Low temperature growth of ultra-high mass density carbon nanotube forests on conductive supports. *Applied Physics Letters*, **2013**, 103, 073116	3.4	44
443	Defect densities inside the conductive filament of RRAMs. *Microelectronic Engineering*, **2013**, 109, 208-210	2.5	21
442	Analysis of metal insulator transitions in VO2 and V2O3 for RRAMs. *Microelectronic Engineering*, **2013**, 109, 278-281	2.5	7
441	High density carbon nanotube growth using a plasma pretreated catalyst. *Carbon*, **2013**, 53, 339-345	10.4	22
440	High contrast holograms using nanotube forest. *Applied Physics Letters*, **2013**, 103, 111104	3.4	4
439	Electronic structure of lanthanide oxide high K gate oxides. *Microelectronic Engineering*, **2013**, 109, 72-74	2.5	10
438	Chemical trends of defects at HfO2:GaAs and Al2O3:GaAs/InAs/InP/GaSb interfaces. *Journal of Applied Physics*, **2013**, 113, 134103	2.5	17
437	Band offsets, Schottky barrier heights, and their effects on electronic devices. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2013**, 31, 050821	2.9	130
436	First-principles calculations of the electronic structure and defects of Al2O3. *Journal of Applied Physics*, **2013**, 114, 083704	2.5	24
435	Tantalum-oxide catalysed chemical vapour deposition of single- and multi-walled carbon nanotubes. *RSC Advances*, **2013**, 3, 4086	3.7	12
434	Chemical trends and passivation of defects at Al2O3:GaAs/InAs/InP/GaSb interfaces. *Microelectronic Engineering*, **2013**, 109, 274-277	2.5	6

433	Nitrogen passivation at GaAs:Al2O3 interfaces. *Applied Physics Letters*, **2013**, 102, 091606	3.4	30
432	Nature of the electronic band gap in lanthanide oxides. *Physical Review B*, **2013**, 87,	3.3	157
431	Measurement of area density of vertically aligned carbon nanotube forests by the weight-gain method. *Journal of Applied Physics*, **2013**, 113, 144309	2.5	47
430	Band alignment between Ta2O5 and metals for resistive random access memory electrodes engineering. *Applied Physics Letters*, **2013**, 102, 062106	3.4	49
429	Carbon nanotube growth for through silicon via application. *Nanotechnology*, **2013**, 24, 125603	3.4	35
428	Doping and compensation in Nb-doped anatase and rutile TiO2. *Journal of Applied Physics*, **2013**, 113, 213706	2.5	57
427	Defects at Ge:GeO2 and Ge:MeOx interfaces. *Microelectronic Engineering*, **2013**, 109, 244-249	2.5	7
426	Improved Switching Uniformity and Low-Voltage Operation in ${rm TaO}_{x}$-Based RRAM Using Ge Reactive Layer. *IEEE Electron Device Letters*, **2013**, 34, 1130-1132	4.4	26
425	A hybrid density functional view of native vacancies in gallium nitride. *Journal of Physics Condensed Matter*, **2013**, 25, 405501	1.8	19
424	Defect energy levels in La and Hf germanates on Ge. *Journal of Applied Physics*, **2013**, 113, 124101	2.5	
423	Electrical conduction of carbon nanotube forests through sub-nanometric films of alumina. *Applied Physics Letters*, **2013**, 102, 113109	3.4	21
422	Sulfur vacancies in monolayer MoS2 and its electrical contacts. *Applied Physics Letters*, **2013**, 103, 183113	3.4	271
421	Superhydrophobic Carbon Nanotube Electrode Produces a Near-Symmetrical Alternating Current from Photosynthetic Protein-Based Photoelectrochemical Cells. *Advanced Functional Materials*, **2013**, 23, 5556-5563	15.6	28
420	Evaluation of bimetallic catalysts for the growth of carbon nanotube forests. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 2605-2610	1.3	5
419	Diameter and wall number control of carbon nanotubes by chemical vapor deposition. *Journal of Applied Physics*, **2013**, 114, 244302	2.5	6
418	Advances in understanding of transparent conducting oxides. *Thin Solid Films*, **2012**, 520, 3714-3720	2.2	46
417	Graphene-passivated nickel as an oxidation-resistant electrode for spintronics. *ACS Nano*, **2012**, 6, 10930-10	14.7	120
416	The Phase of Iron Catalyst Nanoparticles during Carbon Nanotube Growth. *Chemistry of Materials*, **2012**, 24, 4633-4640	9.6	158

415	Chemical vapor deposition of carbon nanotube forests. *Physica Status Solidi (B): Basic Research*, **2012**, 249, 2315-2322	1.3	19
414	A framework for assessing amorphous oxide semiconductor thin-film transistor passivation. *Journal of the Society for Information Display*, **2012**, 20, 589-595	2.1	4
413	Catalyst design by cyclic deposition: Nanoparticle formation and growth of high-density nanotube forests. *Physica Status Solidi (B): Basic Research*, **2012**, 249, 2428-2431	1.3	2
412	Investigation of resistive switching in bipolar TaOx-based resistive random access memory **2012**,		1
411	Stretched Contact Printing of One-Dimensional Nanostructures for Hybrid Inorganic□Organic Field Effect Transistors. *Journal of Physical Chemistry C*, **2012**, 116, 7118-7125	3.8	23
410	Optimized Vertical Carbon Nanotube Forests for Multiplex Surface-Enhanced Raman Scattering Detection. *Journal of Physical Chemistry Letters*, **2012**, 3, 3486-92	6.4	21
409	Co-Catalytic Solid-State Reduction Applied to Carbon Nanotube Growth. *Journal of Physical Chemistry C*, **2012**, 116, 1107-1113	3.8	21
408	Calculation of point defects in rutile TiO2 by the screened-exchange hybrid functional. *Physical Review B*, **2012**, 86,	3.3	81
407	Bonding and optical contrast in phase change memory materials. *Physica Status Solidi (B): Basic Research*, **2012**, 249, 1867-1873	1.3	5
406	Applications of Carbon Nanotubes Grown by Chemical Vapor Deposition. *Japanese Journal of Applied Physics*, **2012**, 51, 01AH01	1.4	24
405	Heterogeneous catalysis model of growth mechanisms of carbon nanotubes, graphene and silicon nanowires. *Journal of Materials Chemistry*, **2012**, 22, 19858		47
404	Hybrid functional calculations of the Al impurity in □quartz: Hole localization and electron paramagnetic resonance parameters. *Physical Review B*, **2012**, 85,	3.3	15
403	Growth of ultrahigh density single-walled carbon nanotube forests by improved catalyst design. *ACS Nano*, **2012**, 6, 2893-903	16.7	168
402	Defect models and electrical storage mechanism in GeSbTe phase change materials. *Journal of Non-Crystalline Solids*, **2012**, 358, 2393-2397	3.9	16
401	Properties and doping limits of amorphous oxide semiconductors. *Journal of Non-Crystalline Solids*, **2012**, 358, 2437-2442	3.9	33
400	Adhesive Properties of Gecko-Inspired Mimetic via Micropatterned Carbon Nanotube Forests. *Journal of Physical Chemistry C*, **2012**, 116, 20047-20053	3.8	43
399	Electronic and magnetic properties of Ti(2)O(3), Cr(2)O(3), and Fe(2)O(3) calculated by the screened exchange hybrid density functional. *Journal of Physics Condensed Matter*, **2012**, 24, 325504, 1-8	1.8	65
398	Control of Schottky barrier heights by inserting thin dielectric layers. *Applied Physics Letters*, **2012**, 101, 172907	3.4	13

397	Complementary metal-oxide-semiconductor-compatible and self-aligned catalyst formation for carbon nanotube synthesis and interconnect fabrication. *Journal of Applied Physics*, **2012**, 111, 064310	2.5	13
396	Electronic structure of epitaxial germanium Metal germanate interfaces. *Journal of Applied Physics*, **2012**, 112, 114114	2.5	1
395	Nature of defects and gap states in GeTe model phase change materials. *Physical Review B*, **2012**, 85,	3.3	34
394	Highly chiral-selective growth of single-walled carbon nanotubes with a simple monometallic Co catalyst. *Physical Review B*, **2012**, 85,	3.3	64
393	Metal-Free Growth of Nanographene on Silicon Oxides for Transparent Conducting Applications. *Advanced Functional Materials*, **2012**, 22, 2123-2128	15.6	142
392	Passivation of interfacial defects at III-V oxide interfaces. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 04E101	1.3	47
391	Substrate-assisted nucleation of ultra-thin dielectric layers on graphene by atomic layer deposition. *Applied Physics Letters*, **2012**, 100, 173113	3.4	71
390	Identifying a suitable passivation route for Ge interfaces. *Applied Physics Letters*, **2012**, 101, 052903	3.4	20
389	Defect compensation in LaAlO3 perovskite-based high dielectric constant oxides. *Journal of Applied Physics*, **2012**, 112, 034108	2.5	6
388	Electron spin resonance signature of the oxygen vacancy in HfO2. *Applied Physics Letters*, **2012**, 101, 102904	3.4	18
387	How to achieve ultra high photoconductive gain for transparent oxide semiconductor image sensors **2012**,		8
386	Plasma stabilisation of metallic nanoparticles on silicon for the growth of carbon nanotubes. *Journal of Applied Physics*, **2012**, 112, 034303	2.5	13
385	Metal silicide Schottky barriers on Si and Ge show weaker Fermi level pinning. *Applied Physics Letters*, **2012**, 101, 052110	3.4	18
384	Gated three-terminal device architecture to eliminate persistent photoconductivity in oxide semiconductor photosensor arrays. *Nature Materials*, **2012**, 11, 301-5	27	332
383	Electronic structure of oxygen vacancies in SrTiO3 and LaAlO3. *Physical Review B*, **2012**, 86,	3.3	121
382	Applications of Carbon Nanotubes Grown by Chemical Vapor Deposition. *Japanese Journal of Applied Physics*, **2012**, 51, 01AH01	1.4	23
381	Fabrication and bio-functionalization of tetrahedral amorphous carbon thin films for bio sensor applications. *Diamond and Related Materials*, **2011**, 20, 1020-1025	3.5	21
380	Limits to doping in oxides. *Physical Review B*, **2011**, 83,	3.3	207

379	Trap-limited and percolation conduction mechanisms in amorphous oxide semiconductor thin film transistors. *Applied Physics Letters*, **2011**, 98, 203508	3.4	199
378	Defect states at III-V semiconductor oxide interfaces. *Applied Physics Letters*, **2011**, 98, 082903	3.4	111
377	Electronic Structure of Transparent Conducting Oxides **2011**, 27-50		19
376	Use of plasma treatment to grow carbon nanotube forests on TiN substrate. *Journal of Applied Physics*, **2011**, 109, 114312	2.5	33
375	P-16: Light-Bias Induced Instability and Persistent Photoconductivity in In-Zn-O/Ga-In-Zn-O Thin Film Transistors. *Digest of Technical Papers SID International Symposium*, **2011**, 42, 1154-1157	0.5	14
374	Calculation of semiconductor band structures and defects by the screened exchange density functional. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 537-546	1.3	25
373	Catalyst design for the growth of highly packed nanotube forests. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 2528-2531	1.3	7
372	Plasma Deposition of Diamond-Like Carbon. *Japanese Journal of Applied Physics*, **2011**, 50, 01AF01	1.4	33
371	Temperature dependent electron transport in amorphous oxide semiconductor thin film transistors **2011**,		31
370	New High-K Materials for CMOS Applications **2011**, 132-176		10
369	Integration for All Configurations. *IEEE Microwave Magazine*, **2011**, 12, 42-50	1.2	4
368	Support□Catalyst□Gas Interactions during Carbon Nanotube Growth on Metallic Ta Films. *Journal of Physical Chemistry C*, **2011**, 115, 4359-4369	3.8	55
367	Dual gate photo-thin film transistor with high photoconductive gain for high reliability, and low noise flat panel transparent imager **2011**,		2
366	Bonding and gap states at GaAs-oxide interfaces. *Microelectronic Engineering*, **2011**, 88, 373-376	2.5	6
365	Shifting Schottky barrier heights with ultra-thin dielectric layers. *Microelectronic Engineering*, **2011**, 88, 1461-1463	2.5	27
364	On the identification of the oxygen vacancy in HfO2. *Microelectronic Engineering*, **2011**, 88, 1464-1466	2.5	21
363	Defect gap states on III□V semiconductor□oxide interfaces (invited). *Microelectronic Engineering*, **2011**, 88, 1440-1443	2.5	16
362	Band structure calculations of CuAlO2, CuGaO2, CuInO2, and CuCrO2 by screened exchange. *Physical Review B*, **2011**, 84,	3.3	82

361	Energetics of hydrogen in GeO2, Ge, and their interfaces. *Applied Physics Letters*, **2011**, 99, 032902	3.4	9
360	Atomic mechanism of electric dipole formed at high-K: SiO2 interface. *Journal of Applied Physics*, **2011**, 109, 094502	2.5	66
359	Metal-induced gap states modeling of metal-Ge contacts with and without a silicon nitride ultrathin interfacial layer. *Journal of Applied Physics*, **2011**, 109, 094501	2.5	38
358	First-principles study of Oxygen deficiency in rutile Titanium Dioxide. *Materials Research Society Symposia Proceedings*, **2011**, 1352, 3		2
357	Calculation of Semiconductor Band Structures and Defects by the Screened Exchange Density Functional **2011**, 79-96		
356	In-situ study of growth of carbon nanotube forests on conductive CoSi2 support. *Journal of Applied Physics*, **2011**, 109, 114314	2.5	31
355	Plasma Deposition of Diamond-Like Carbon. *Japanese Journal of Applied Physics*, **2011**, 50, 01AF01	1.4	33
354	Capacitive nanoelectromechanical switch based on suspended carbon nanotube array. *Applied Physics Letters*, **2010**, 97, 233508	3.4	30
353	Oxygen vacancy levels and electron transport in Al2O3. *Applied Physics Letters*, **2010**, 96, 032905	3.4	104
352	GaAs: Gap state passivation at interfaces and surfaces **2010**,		3
351	Instability in threshold voltage and subthreshold behavior in Hf□h□nO thin film transistors induced by bias-and light-stress. *Applied Physics Letters*, **2010**, 97, 113504	3.4	96
350	Persistent photoconductivity in Hf□h□nO thin film transistors. *Applied Physics Letters*, **2010**, 97, 143510	3.4	120
349	Electronic and atomic structure of metal-HfO2 interfaces. *Physical Review B*, **2010**, 81,	3.3	21
348	Bonding origin of optical contrast in phase-change memory materials. *Physical Review B*, **2010**, 81,	3.3	175
347	Observation of excitonic effects in metallic single-walled carbon nanotubes. *Physical Review B*, **2010**, 82,	3.3	18
346	Growth of vertically-aligned carbon nanotube forests on conductive cobalt disilicide support. *Journal of Applied Physics*, **2010**, 108, 024311	2.5	51
345	Growth of ultrahigh density vertically aligned carbon nanotube forests for interconnects. *ACS Nano* , **2010**, 4, 7431-6	16.7	125
344	Screened exchange density functional applied to solids. *Physical Review B*, **2010**, 82,	3.3	174

343	Intrinsic defects in ZnO calculated by screened exchange and hybrid density functionals. *Physical Review B*, **2010**, 81,	3.3	232
342	Photo-Induced Instability of Nanocrystalline Silicon TFTs. *Journal of Display Technology*, **2010**, 6, 589-591		7
341	Ultra-high density carbon nanotubes on Al-Cu for advanced vias **2010**,		32
340	Atomic structure, electronic structure, and band offsets at Ge:GeO:GeO2 interfaces. *Applied Physics Letters*, **2010**, 97, 242902	3.4	43
339	Second-Stage Actuation for Hard Disc Drives Through MEMS Technology. *IEEE Transactions on Magnetics*, **2010**, 46, 782-789	2	3
338	Band alignment at metal–semiconductor and metal–oxide interfaces. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 261-269	1.6	19
337	Carbon nanotubes growth: From entanglement to vertical alignment. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2656-2659	1.3	4
336	Analysis of carbon nanotube chiralities obtained from a bimetallic Co-Mo catalyst. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2660-2663	1.3	1
335	High-density growth of horizontally aligned carbon nanotubes for interconnects. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2669-2672	1.3	18
334	The screened-exchange approximation as alternative method for DFT calculations on graphene structures. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2945-2948	1.3	8
333	Extended Frenkel pairs and band alignment at metal-oxide interfaces. *Physical Review B*, **2009**, 79,	3.3	29
332	Passivation of oxygen vacancy states and suppression of Fermi pinning in HfO2 by La addition. *Applied Physics Letters*, **2009**, 94, 042904	3.4	43
331	Atomic mechanism of flat-band voltage shifts by La2O3 and Al2O3 in gate stacks. *Applied Physics Letters*, **2009**, 95, 012906	3.4	34
330	Plasma restructuring of catalysts for chemical vapor deposition of carbon nanotubes. *Journal of Applied Physics*, **2009**, 105, 064304	2.5	22
329	Confined palladium colloids in mesoporous frameworks for carbon nanotube growth. *Journal of Materials Science*, **2009**, 44, 6563-6570	4.3	9
328	Stable colloidal Co–Pd nanocatalysts for carbon nanotube growth. *Physica Status Solidi (B): Basic Research*, **2009**, 246, 2436-2439	1.3	6
327	Electronic structure of oxygen vacancies in La2O3, Lu2O3 and LaLuO3. *Microelectronic Engineering*, **2009**, 86, 1672-1675	2.5	23
326	Oxygen vacancy levels and interfaces of Al2O3. *Microelectronic Engineering*, **2009**, 86, 1668-1671	2.5	32

325	Atomic mechanism of flat-band voltage shifts at La2O3, Al2O3 and Nb2O5 capping layers. *Microelectronic Engineering*, **2009**, 86, 1743-1746	2.5	21
324	Carbon nanotube based cathodes for microwave amplifiers **2009**,		6
323	Acetylene: A Key Growth Precursor for Single-Walled Carbon Nanotube Forests. *Journal of Physical Chemistry C*, **2009**, 113, 17321-17325	3.8	108
322	Model of interface states at III-V oxide interfaces. *Applied Physics Letters*, **2009**, 94, 152104	3.4	125
321	Diffusion- and reaction-limited growth of carbon nanotube forests. *ACS Nano*, **2009**, 3, 3560-6	16.7	114
320	Oxygen vacancies in high dielectric constant oxides La2O3, Lu2O3, and LaLuO3. *Applied Physics Letters*, **2009**, 95, 022903	3.4	31
319	Energy levels of oxygen vacancies in BiFeO3 by screened exchange. *Applied Physics Letters*, **2009**, 94, 022902	3.4	99
318	State of the catalyst during carbon nanotube growth. *Diamond and Related Materials*, **2009**, 18, 940-945	3.5	65
317	Growth of high-density vertically aligned arrays of carbon nanotubes by plasma-assisted catalyst pretreatment. *Applied Physics Letters*, **2009**, 95, 173115	3.4	41
316	Fermi level pinning in Si, Ge and GaAs systems - MIGS or defects? **2009**,		8
315	State of Transition Metal Catalysts During Carbon Nanotube Growth. *Journal of Physical Chemistry C*, **2009**, 113, 1648-1656	3.8	155
314	Use of carbon nanotubes for VLSI interconnects. *Diamond and Related Materials*, **2009**, 18, 957-962	3.5	51
313	Resonant bonding in crystalline phase-change materials. *Nature Materials*, **2008**, 7, 653-8	27	775
312	Growth of aligned millimeter-long carbon nanotube by chemical vapor deposition. *Diamond and Related Materials*, **2008**, 17, 1447-1451	3.5	44
311	Impact of incorporated Al on the TiN/HfO2 interface effective work function. *Journal of Applied Physics*, **2008**, 104, 074501	2.5	24
310	Te-induced modulation of the Mo/HfO2 interface effective work function. *Applied Physics Letters*, **2008**, 92, 113504	3.4	13
309	In-situ X-ray Photoelectron Spectroscopy Study of Catalyst-Support Interactions and Growth of Carbon Nanotube Forests. *Journal of Physical Chemistry C*, **2008**, 112, 12207-12213	3.8	224
308	Physics of amorphous conducting oxides. *Journal of Non-Crystalline Solids*, **2008**, 354, 2791-2795	3.9	30

307	Enhanced Subthreshold Slopes in Large Diameter Single Wall Carbon Nanotube Field Effect Transistors. *IEEE Nanotechnology Magazine*, **2008**, 7, 458-462	2.6	14
306	Electron field emission from nanostructured cubic boron nitride islands. *Applied Physics Letters*, **2008**, 92, 013115	3.4	33
305	Maximizing performance for higher K gate dielectrics. *Journal of Applied Physics*, **2008**, 104, 124111	2.5	109
304	A Slider With an Integrated Microactuator (SLIM) for Second Stage Actuation in Hard Disc Drives. *IEEE Transactions on Magnetics*, **2008**, 44, 3726-3729	2	8
303	p-type Fermi level pinning at a Si:Al2O3 model interface. *Applied Physics Letters*, **2008**, 93, 122905	3.4	25
302	Growth and characterization of high-density mats of single-walled carbon nanotubes for interconnects. *Applied Physics Letters*, **2008**, 93, 163111	3.4	53
301	Controlling the catalyst during carbon nanotube growth. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 6105-11	1.3	12
300	Electronic defects in LaAlO3. *Microelectronic Engineering*, **2008**, 85, 65-69	2.5	17
299	Comparison of diamond-like carbon to diamond for applications. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 2233-2244	1.6	81
298	Disorder and instability processes in amorphous conducting oxides. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 1026-1032	1.3	76
297	Carbon nanotubes for interconnects in VLSI integrated circuits. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 2303-2307	1.3	10
296	Growth of carbon nanotubes as horizontal interconnects. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 2308-2310	1.3	13
295	Work function control at metal high-dielectric-constant gate oxide interfaces. *Microelectronic Engineering*, **2008**, 85, 9-14	2.5	5
294	Disorder, band offsets and dopability of transparent conducting oxides. *Thin Solid Films*, **2008**, 516, 1419-1425	2.1	23
293	□phase and □metal-insulator transition in multiferroic BiFeO3. *Physical Review B*, **2008**, 77,	3.3	517
292	Time resolved in-situ TEM observations of Carbon Nanotube growth **2008**, 165-166		1
291	Carbon Nanotube Field Emission Devices. *Advanced Micro & Nanosystems*, **2008**, 291-309		1
290	Carbon nanotube cathodes as electron sources for microwave amplifiers **2007**,		7

289	Electronic structures and doping of SnO2, CuAlO2, and CuInO2. *Journal of Applied Physics*, **2007**, 102, 123703	2.5	45
288	In situ observations of catalyst dynamics during surface-bound carbon nanotube nucleation. *Nano Letters*, **2007**, 7, 602-8	11.5	605
287	Band gap and Schottky barrier heights of multiferroic BiFeO3. *Applied Physics Letters*, **2007**, 90, 132903	3.4	332
286	Dispersion relations and optical properties of amorphous carbons. *Diamond and Related Materials*, **2007**, 16, 1813-1822	3.5	32
285	Ink-jet printing of carbon nanotube thin film transistors. *Journal of Applied Physics*, **2007**, 102, 043710	2.5	165
284	Electronic and atomic structure of Ge2Sb2Te5 phase change memory material. *Thin Solid Films*, **2007**, 515, 7538-7541	2.2	50
283	Defects and their passivation in high K gate oxides. *Microelectronic Engineering*, **2007**, 84, 663-668	2.5	27
282	Oxygen vacancies in high-k oxides. *Microelectronic Engineering*, **2007**, 84, 2028-2031	2.5	70
281	The role of precursor gases on the surface restructuring of catalyst films during carbon nanotube growth. *Physica E: Low-Dimensional Systems and Nanostructures*, **2007**, 37, 1-5	3	71
280	Growth of nanotubes for electronics. *Materials Today*, **2007**, 10, 36-43	21.8	121
279	Diamond-like carbon for data and beer storage. *Materials Today*, **2007**, 10, 44-53	21.8	186
278	Electronic transport in ambipolar silicon nanowires. *Physica Status Solidi (B): Basic Research*, **2007**, 244, 4161-4164	1.3	26
277	Behavior of hydrogen in wide band gap oxides. *Journal of Applied Physics*, **2007**, 102, 083710	2.5	86
276	Thermal and chemical vapor deposition of Si nanowires: Shape control, dispersion, and electrical properties. *Journal of Applied Physics*, **2007**, 102, 034302	2.5	72
275	Fermi level pinning by defects in HfO2-metal gate stacks. *Applied Physics Letters*, **2007**, 91, 132912	3.4	125
274	Defect states in the high-dielectric-constant gate oxide HfSiO4. *Journal of Applied Physics*, **2007**, 101, 024101	2.5	58
273	Control of Schottky barrier heights on high-K gate dielectrics for future complementary metal-oxide semiconductor devices. *Physical Review Letters*, **2007**, 99, 086805	7.4	50
272	Electronic structure and defects of high dielectric constant gate oxide La2Hf2O7. *Applied Physics Letters*, **2007**, 90, 062901	3.4	23

271	Growth kinetics of 0.5 cm vertically aligned single-walled carbon nanotubes. *Journal of Physical Chemistry B*, **2007**, 111, 1907-10	3.4	158
270	Importance of Oxygen Vacancies in High K Gate Dielectrics **2007**,		2
269	Three-dimensional carbon nanowall structures. *Applied Physics Letters*, **2007**, 90, 123107	3.4	78
268	Band gaps and defect levels in functional oxides. *Thin Solid Films*, **2006**, 496, 1-7	2.2	191
267	Backplane Requirements for Active Matrix Organic Light Emitting Diode Displays. *Materials Research Society Symposia Proceedings*, **2006**, 910, 1		5
266	Defect states in the high-dielectric-constant gate oxide LaAlO3. *Applied Physics Letters*, **2006**, 89, 022907	3.4	88
265	Defect passivation in HfO2 gate oxide by fluorine. *Applied Physics Letters*, **2006**, 89, 142914	3.4	62
264	Passivation of oxygen vacancy states in HfO2 by nitrogen. *Journal of Applied Physics*, **2006**, 99, 044105	2.5	119
263	Bonding and interface states of Si:HfO2 and Si:ZrO2 interfaces. *Physical Review B*, **2006**, 73,	3.3	64
262	DEFECT ENERGY LEVELS IN HIGH-K GATE OXIDES **2006**, 175-187		6
261	Roughness evolution during growth of hydrogenated tetrahedral amorphous carbon. *Diamond and Related Materials*, **2006**, 15, 898-903	3.5	20
260	Band offsets of high K gate oxides on III-V semiconductors. *Journal of Applied Physics*, **2006**, 100, 014111	2.5	548
259	Ion transport and electrochemical tuning of Fermi level in single-wall carbon nanotube probed by in situ Raman scattering. *Journal of Applied Physics*, **2006**, 100, 083711	2.5	12
258	Hydrogenated amorphous carbon film coating of PET bottles for gas diffusion barriers. *Diamond and Related Materials*, **2006**, 15, 921-927	3.5	84
257	Surface atomic properties of tetrahedral amorphous carbon. *Diamond and Related Materials*, **2006**, 15, 936-938	3.5	18
256	Phonon linewidths and electron-phonon coupling in graphite and nanotubes. *Physical Review B*, **2006**, 73,	3.3	290
255	High dielectric constant gate oxides for metal oxide Si transistors. *Reports on Progress in Physics*, **2006**, 69, 327-396	14.4	1318
254	Catalytic chemical vapor deposition of single-wall carbon nanotubes at low temperatures. *Nano Letters*, **2006**, 6, 1107-12	11.5	267

253	Interfacial atomic structures, energetics and band offsets of Ge:ZrO2 interfaces. *Journal of Applied Physics*, **2006**, 100, 093713	2.5	13
252	Band structure of functional oxides by screened exchange and the weighted density approximation. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 2054-2070	1.3	83
251	Defect energy states in high-K gate oxides. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 2071-2080	1.3	43
250	Shape-selective synthesis of II-VI semiconductor nanowires. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3301-3305	1.3	9
249	Epitaxial growth of carbon caps on Ni for chiral selectivity. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3494-3499	1.3	25
248	Control the chirality of carbon nanotubes by epitaxial growth. *Chemical Physics Letters*, **2006**, 421, 469-472	2.5	158
247	Band offsets of high K gate oxides on high mobility semiconductors. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2006**, 135, 267-271	3.1	72
246	Work function control at metal-oxide interfaces in CMOS. *Materials Science in Semiconductor Processing*, **2006**, 9, 964-968	4.3	5
245	Synthesis and optical properties of silicon nanowires grown by different methods. *Applied Physics A: Materials Science and Processing*, **2006**, 85, 247-253	2.6	44
244	Raman spectroscopy of hydrogenated amorphous carbons. *Physical Review B*, **2005**, 72,	3.3	879
243	Protective diamond-like carbon coatings for future optical storage disks. *Diamond and Related Materials*, **2005**, 14, 994-999	3.5	85
242	Wet catalyst assisted growth of carbon nanofibers on complex three-dimensional substrates. *Diamond and Related Materials*, **2005**, 14, 733-738	3.5	21
241	Defect energy levels in HfO2 high-dielectric-constant gate oxide. *Applied Physics Letters*, **2005**, 87, 183505	3.4	408
240	Effects of catalyst film thickness on plasma-enhanced carbon nanotube growth. *Journal of Applied Physics*, **2005**, 98, 034308	2.5	115
239	The smoothness of tetrahedral amorphous carbon. *Diamond and Related Materials*, **2005**, 14, 913-920	3.5	34
238	Bonding in hydrogenated diamond-like carbon by Raman spectroscopy. *Diamond and Related Materials*, **2005**, 14, 1098-1102	3.5	291
237	Ab initio resonant Raman spectra of diamond-like carbons. *Diamond and Related Materials*, **2005**, 14, 1078-1083	3.5	45
236	Mechanism of sp3 bond formation in the growth of diamond-like carbon. *Diamond and Related Materials*, **2005**, 14, 942-948	3.5	54

235	Point defects in HfO2 high K gate oxide. *Microelectronic Engineering*, **2005**, 80, 408-411	2.5	71
234	Interfaces and defects of high-K oxides on silicon. *Solid-State Electronics*, **2005**, 49, 283-293	1.7	175
233	Surface diffusion: the low activation energy path for nanotube growth. *Physical Review Letters*, **2005**, 95, 036101	7.4	329
232	Atomic Structure, Interfaces and Defects of High Dielectric Constant Gate Oxides **2005**, 179-214		1
231	Catalyst patterning methods for surface-bound chemical vapor deposition of carbon nanotubes. *Applied Physics A: Materials Science and Processing*, **2005**, 81, 1559-1567	2.6	22
230	Kohn Anomalies and Electron-Phonon Coupling in Carbon Nanotubes. *AIP Conference Proceedings*, **2005**,	0	2
229	Submicron patterning of Co colloid catalyst for growth of vertically aligned carbon nanotubes. *Nanotechnology*, **2005**, 16, 1636-1640	3.4	25
228	Structure and formation energy of carbon nanotube caps. *Physical Review B*, **2005**, 72,	3.3	105
227	Fermi level pinning and Hf□i bonds at HfO2: Polycrystalline silicon gate electrode interfaces. *Applied Physics Letters*, **2005**, 86, 012904	3.4	37
226	Low-temperature synthesis of ZnSe nanowires and nanosaws by catalyst-assisted molecular-beam epitaxy. *Applied Physics Letters*, **2005**, 86, 153103	3.4	82
225	Instability measurements in amorphous hydrogenated silicon using capacitance-voltage techniques. *Applied Physics Letters*, **2005**, 86, 202110	3.4	4
224	The ultrasmoothness of diamond-like carbon surfaces. *Science*, **2005**, 309, 1545-8	33.3	262
223	Point defects in ZrO/sub 2/ high-/spl kappa/ gate oxide. *IEEE Transactions on Device and Materials Reliability*, **2005**, 5, 84-89	1.6	43
222	Bonding, energies, and band offsets of Si-ZrO2 and HfO2 gate oxide interfaces. *Physical Review Letters*, **2004**, 92, 057601	7.4	146
221	Growth of aligned carbon nanofibres over large areas using colloidal catalysts at low temperatures. *Chemical Communications*, **2004**, 1416-7	5.8	27
220	Electrochemical Tuning of Single-Wall Carbon Nanotube Mat and Investigations on Actuator Mechanism. *Materials Research Society Symposia Proceedings*, **2004**, 855, 72		
219	Defect Energy Levels in HfO2, ZrO2, La2O3 and SrTiO3. *Materials Research Society Symposia Proceedings*, **2004**, 811, 307		5
218	Matchstick Nanotubes: Structure Control and Properties. *Materials Research Society Symposia Proceedings*, **2004**, 858, 164		

217	Kohn Anomalies in Graphite and Nanotubes. *Materials Research Society Symposia Proceedings*, **2004**, 858, 283		4
216	Low Temperature Growth of Carbon Nanotubes and Nanofibres. *Materials Research Society Symposia Proceedings*, **2004**, 858, 138		
215	Detection of carbon nitride by resonant Raman spectroscopy. *Diamond and Related Materials*, **2004**, 13, 1558-1560	3.5	8
214	Self-assembly of novel nanowires by thermolysis of fullerene and transition metal thin films. *Nanotechnology*, **2004**, 15, 601-608	3.4	7
213	High dielectric constant oxides. *EPJ Applied Physics*, **2004**, 28, 265-291	1.1	1107
212	Raman spectroscopy of amorphous, nanostructured, diamond-like carbon, and nanodiamond. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2004**, 362, 2477-512	3	1767
211	The role of the catalytic particle in the growth of carbon nanotubes by plasma enhanced chemical vapor deposition. *Journal of Applied Physics*, **2004**, 95, 6387-6391	2.5	97
210	Atomic structure, band offsets, growth and defects at high-K oxide:Si interfaces. *Microelectronic Engineering*, **2004**, 72, 112-120	2.5	26
209	Realistic applications of CNTs. *Materials Today*, **2004**, 7, 46-52	21.8	236
208	Bonding and structure of some high-k oxide:Si interfaces. *Physica Status Solidi (B): Basic Research*, **2004**, 241, 2236-2245	1.3	27
207	Charge transfer in carbon nanotube actuators investigated using in situ Raman spectroscopy. *Journal of Applied Physics*, **2004**, 95, 2038-2048	2.5	71
206	Large area deposition of hydrogenated amorphous carbon films for optical storage disks. *Diamond and Related Materials*, **2004**, 13, 1505-1510	3.5	15
205	Stability and band offsets of nitrogenated high-dielectric-constant gate oxides. *Applied Physics Letters*, **2004**, 84, 106-108	3.4	110
204	Surface properties of ultra-thin tetrahedral amorphous carbon films for magnetic storage technology. *Diamond and Related Materials*, **2004**, 13, 1416-1421	3.5	64
203	Hydrogen content estimation of hydrogenated amorphous carbon by visible Raman spectroscopy. *Journal of Applied Physics*, **2004**, 96, 6348-6352	2.5	71
202	Behavior of hydrogen in high dielectric constant oxide gate insulators. *Applied Physics Letters*, **2003**, 83, 2025-2027	3.4	154
201	Electrical conduction in nanostructured carbon and carbon-metal films grown by supersonic cluster beam deposition. *European Physical Journal B*, **2003**, 36, 3-13	1.2	20
200	Interpretation of infrared and Raman spectra of amorphous carbon nitrides. *Physical Review B*, **2003**, 67,	3.3	582

199	Gold catalyzed growth of silicon nanowires by plasma enhanced chemical vapor deposition. *Journal of Applied Physics*, **2003**, 94, 6005-6012	2.5	225
198	Flyable media for slider based ultra-high density optical recording. *IET Science, Measurement and Technology*, **2003**, 150, 203-206		6
197	Doping and hydrogen in wide gap oxides. *Thin Solid Films*, **2003**, 445, 155-160	2.2	59
196	Requirements of ultrathin carbon coatings for magnetic storage technology. *Tribology International* , **2003**, 36, 405-415	4.9	94
195	Surface diffusion of SiH3 radicals and growth mechanism of a-Si:H and microcrystalline Si. *Thin Solid Films*, **2003**, 427, 11-15	2.2	17
194	Paramagnetic defects in hydrogenated amorphous carbon powders. *Journal of Physics Condensed Matter*, **2003**, 15, 7463-7468	1.8	8
193	Dynamic roughening of tetrahedral amorphous carbon. *Physical Review Letters*, **2003**, 91, 226104	7.4	90
192	Low-temperature growth of carbon nanotubes by plasma-enhanced chemical vapor deposition. *Applied Physics Letters*, **2003**, 83, 135-137	3.4	324
191	Raman spectroscopy of silicon nanowires. *Physical Review B*, **2003**, 68,	3.3	286
190	Direct growth of aligned carbon nanotube field emitter arrays onto plastic substrates. *Applied Physics Letters*, **2003**, 83, 4661-4663	3.4	145
189	Improving the properties of diamond-like carbon. *Diamond and Related Materials*, **2003**, 12, 79-84	3.5	61
188	Structure, bonding, and band offsets of (100)SrTiO3/silicon interfaces. *Applied Physics Letters*, **2003** , 83, 5497-5499	3.4	43
187	Charge Transfer Dynamics in Single-Wall Carbon Nanotubes Mat: In Situ Raman Spectroscopy. *Materials Research Society Symposia Proceedings*, **2003**, 785, 931		
186	Bonding and Epitaxial Relationships at High-K Oxide:Si interfaces. *Materials Research Society Symposia Proceedings*, **2003**, 786, 551		
185	Physical and electrical properties of low temperature (. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, 728-739	2.9	12
184	Binding and surface diffusion of SiH3 radicals and the roughness of hydrogenated amorphous silicon. *Applied Physics Letters*, **2003**, 82, 883-885	3.4	16
183	Thermodynamic model of nucleation and growth of plasma deposited microcrystalline silicon. *Journal of Applied Physics*, **2003**, 93, 731-735	2.5	21
182	Energy levels of point defects in SrTiO3 and related oxides. *Journal of Applied Physics*, **2003**, 93, 1054-1059	2.5	25

181	Calculations of SiH3 Diffusion and Growth Processes on a-Si:H Surfaces. *Materials Research Society Symposia Proceedings*, **2003**, 762, 921		2
180	Surface Diffusion of SiH3 Radicals and Growth Mechanism of a-Si:H and □-Si. *Materials Research Society Symposia Proceedings*, **2002**, 715, 1531		
179	Acoustic phonon propagation and elastic properties of nano-sized carbon films investigated by Brillouin light scattering. *Thin Solid Films*, **2002**, 420-421, 300-305	2.2	2
178	Low-Temperature Self-Assembly of Novel Encapsulated Compound Nanowires. *Advanced Materials*, **2002**, 14, 1821-1824	24	14
177	Diamond-like amorphous carbon. *Materials Science and Engineering Reports*, **2002**, 37, 129-281	30.9	4594
176	Band structures and band offsets of high K dielectrics on Si. *Applied Surface Science*, **2002**, 190, 2-10	6.7	91
175	Electronic structure of p-type conducting transparent oxides. *Thin Solid Films*, **2002**, 411, 96-100	2.2	101
174	Influence of cluster-assembly parameters on the field emission properties of nanostructured carbon films. *Journal of Applied Physics*, **2002**, 92, 5482-5489	2.5	31
173	Bonding and mechanical properties of ultrathin diamond-like carbon films. *Applied Physics Letters*, **2002**, 81, 3804-3806	3.4	75
172	EFFECT OF FOCUSSED VACUUM ARC PLASMA DEPOSITION ON THE PROPERTIES OF TETRAHEDRAL AMORPHOUS CARBON FILMS. *International Journal of Modern Physics B*, **2002**, 16, 830-835	1.1	1
171	Electronic Structure and Band Offsets of High-Dielectric-Constant Gate Oxides. *MRS Bulletin*, **2002**, 27, 217-221	3.2	97
170	Field emission from chemical vapor deposition diamond surface with graphitic patches. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2002**, 20, 238		13
169	Control of field emission current of individual sites by a local resistor. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2002**, 20, 19		5
168	Atomic Structure, Band Offsets and Hydrogen in High K oxide:Silicon interfaces. *Materials Research Society Symposia Proceedings*, **2002**, 745, 751/T5.5.1		2
167	Atomic Structure, Band Offsets and Hydrogen in High K oxide:Silicon interfaces. *Materials Research Society Symposia Proceedings*, **2002**, 747, 1		4
166	The Use of C-V Techniques To Investigate Instability Mechanisms in M-I-S Structures. *Materials Research Society Symposia Proceedings*, **2002**, 716, 1141		
165	Temperature selective growth of carbon nanotubes by chemical vapor deposition. *Journal of Applied Physics*, **2002**, 92, 3299-3303	2.5	159
164	Band offsets and Schottky barrier heights of high dielectric constant oxides. *Journal of Applied Physics*, **2002**, 92, 4712-4721	2.5	333

163	Negatively curved spongy carbon. *Applied Physics Letters*, **2002**, 81, 3359-3361	3.4	71
162	Highest optical gap tetrahedral amorphous carbon. *Diamond and Related Materials*, **2002**, 11, 1086-1090	3.5	37
161	Properties and prospects for non-crystalline carbons. *Journal of Non-Crystalline Solids*, **2002**, 299-302, 798-804	3.9	31
160	Binding and surface diffusion of SiH3 radicals on a growing a-Si:H surface. *Journal of Non-Crystalline Solids*, **2002**, 299-302, 48-52	3.9	5
159	Band offsets of high dielectric constant gate oxides on silicon. *Journal of Non-Crystalline Solids*, **2002**, 303, 94-100	3.9	127
158	Elastic constants and structural properties of nanometre-thick diamond-like carbon films. *Diamond and Related Materials*, **2002**, 11, 1062-1067	3.5	17
157	Is stress necessary to stabilise sp3 bonding in diamond-like carbon?. *Diamond and Related Materials*, **2002**, 11, 994-999	3.5	107
156	Ultrathin carbon coatings for magnetic storage technology. *Thin Solid Films*, **2001**, 383, 81-88	2.2	188
155	Defects in Diamond-Like Carbon. *Physica Status Solidi A*, **2001**, 186, 177-185		19
154	Schottky barrier heights and band offsets of high-K dielectrics. *Integrated Ferroelectrics*, **2001**, 32, 251-258	0.8	6
153	X-Ray Reflectivity of Ultra-Thin Diamond-Like Carbon Films. *Materials Research Society Symposia Proceedings*, **2001**, 675, 1		3
152	Properties of amorphous carbon–silicon alloys deposited by a high plasma density source. *Journal of Applied Physics*, **2001**, 90, 5002-5012	2.5	89
151	Field emission site densities of nanostructured carbon films deposited by a cathodic arc. *Journal of Applied Physics*, **2001**, 89, 5707-5711	2.5	29
150	Raman and infrared modes of hydrogenated amorphous carbon nitride. *Journal of Applied Physics*, **2001**, 89, 5425-5430	2.5	176
149	Improved electron emission from carbon film using a resistive layer. *Journal of Applied Physics*, **2001**, 89, 3490-3493	2.5	14
148	Growth process conditions of vertically aligned carbon nanotubes using plasma enhanced chemical vapor deposition. *Journal of Applied Physics*, **2001**, 90, 5308-5317	2.5	902
147	Effect of graphitic inclusions on the optical gap of tetrahedral amorphous carbon films. *Journal of Applied Physics*, **2001**, 89, 3706-3710	2.5	46
146	Resonant Raman spectroscopy of disordered, amorphous, and diamondlike carbon. *Physical Review B*, **2001**, 64,	3.3	2119

145	Chemical sputtering of ta-C: Implications for the deposition of carbon nitride. *Journal of Applied Physics*, **2001**, 89, 5754-5759	2.5	28
144	Electronic structure studies of undoped and nitrogen-doped tetrahedral amorphous carbon using high-resolution electron energy-loss spectroscopy. *Journal of Applied Physics*, **2001**, 89, 3783-3792	2.5	71
143	Carbon, Amorphous **2001**, 900-902		1
142	High Quality Growth of SiO2 at 80°C by Electron Cyclotron Resonance (ECR) for Thin Film Transistors. *Materials Research Society Symposia Proceedings*, **2001**, 685, 1		1
141	Thermodynamic Model of the Role of Hydrogen Dilution in Plasma Deposition of Microcrystalline Silicon. *Materials Research Society Symposia Proceedings*, **2001**, 664, 151		
140	Elastic Constants of Nanometer Thick Diamond-like Carbon Films. *Materials Research Society Symposia Proceedings*, **2001**, 675, 1		
139	Field Emission Site Densities of Nanostructured Carbon. *Materials Research Society Symposia Proceedings*, **2001**, 675, 1		
138	FIELD EMISSION FROM CARBON FILMS GROWN BY THE CATHODIC ARC PROCESS. *International Journal of Modern Physics B*, **2000**, 14, 301-307	1.1	7
137	Growth Processes of Hydrogenated Amorphous Silicon. *Materials Research Society Symposia Proceedings*, **2000**, 609, 141		12
136	Hydrogenated Amorphous Silicon and Silicon Nitride Deposited at less than 100°C by ECR-PECVD for Thin Film Transistors. *Materials Research Society Symposia Proceedings*, **2000**, 609, 2821		
135	Very low field electron emission from Hot Filament CVD grown microcrystalline diamond. *Materials Research Society Symposia Proceedings*, **2000**, 621, 531		7
134	Electron emission from amorphous and nanocluster carbon films grown by the cathodic arc process. *Applied Surface Science*, **2000**, 159-160, 561-566	6.7	3
133	Density, sp3 fraction, and cross-sectional structure of amorphous carbon films determined by x-ray reflectivity and electron energy-loss spectroscopy. *Physical Review B*, **2000**, 62, 11089-11103	3.3	461
132	Interpretation of Raman spectra of disordered and amorphous carbon. *Physical Review B*, **2000**, 61, 14095-14107	3.3	10583
131	The role of dc current limitations in Fowler–Nordheim electron emission from carbon films. *Applied Physics Letters*, **2000**, 77, 1831	3.4	32
130	Effect of sp2-phase nanostructure on field emission from amorphous carbons. *Applied Physics Letters*, **2000**, 76, 2627-2629	3.4	163
129	Influence of nitrogen and temperature on the deposition of tetrahedrally bonded amorphous carbon. *Journal of Applied Physics*, **2000**, 88, 1149-1157	2.5	115
128	Field Emission from Carbon Systems. *Materials Research Society Symposia Proceedings*, **2000**, 621, 111		8

127	Growth mechanism of hydrogenated amorphous silicon. *Journal of Non-Crystalline Solids*, **2000**, 266-269, 79-83	3.9	19
126	Relative importance of the Si–Si bond and Si–H bond for the stability of amorphous silicon thin film transistors. *Journal of Applied Physics*, **2000**, 87, 144-154	2.5	121
125	Band offsets of wide-band-gap oxides and implications for future electronic devices. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2000**, 18, 1785		1654
124	Low threshold field emission from nanoclustered carbon grown by cathodic arc. *Journal of Applied Physics*, **2000**, 87, 3126-3131	2.5	62
123	Density, sp 3 content and internal layering of DLC films by X-ray reflectivity and electron energy loss spectroscopy. *Diamond and Related Materials*, **2000**, 9, 771-776	3.5	87
122	Preparation of tetrahedral amorphous carbon films by filtered cathodic vacuum arc deposition. *Diamond and Related Materials*, **2000**, 9, 663-667	3.5	140
121	Photoconductivity of nitrogen-modified hydrogenated tetrahedral amorphous carbon. *Journal of Applied Physics*, **2000**, 87, 789-794	2.5	31
120	Deposition mechanism of hydrogenated amorphous silicon. *Journal of Applied Physics*, **2000**, 87, 2608-2617	2.5	102
119	Low field electron emission from nanoclustered carbon grown by cathodic arc. *Diamond and Related Materials*, **2000**, 9, 1213-1217	3.5	2
118	Elastic constants of ultrathin diamond-like carbon films. *Diamond and Related Materials*, **2000**, 9, 825-830	3.5	40
117	Evolution of sp2 bonding with deposition temperature in tetrahedral amorphous carbon studied by Raman spectroscopy. *Applied Physics Letters*, **2000**, 76, 1419-1421	3.4	225
116	Direct quantitative detection of the sp3 bonding in diamond-like carbon films using ultraviolet and visible Raman spectroscopy. *Journal of Applied Physics*, **2000**, 87, 7283-7289	2.5	160
115	Effect of work function and surface microstructure on field emission of tetrahedral amorphous carbon. *Journal of Applied Physics*, **2000**, 88, 6002-6010	2.5	104
114	Growth mechanism of hydrogenated amorphous silicon studied by in situ scanning tunneling microscopy. *Journal of Applied Physics*, **1999**, 85, 8032-8039	2.5	56
113	Elastic constants of tetrahedral amorphous carbon films by surface Brillouin scattering. *Applied Physics Letters*, **1999**, 75, 1893-1895	3.4	156
112	Field emission from tetrahedral amorphous carbon as a function of surface treatment and substrate material. *Applied Physics Letters*, **1999**, 74, 1594-1596	3.4	94
111	Surface characterisation of strontium-bismuth tantalate (SBT) thin films. *Integrated Ferroelectrics*, **1999**, 23, 113-126	0.8	3
110	Deposition, defect and weak bond formation processes in a-Si:H. *Thin Solid Films*, **1999**, 337, 32-36	2.2	20

109	High rate deposition of ta-C:H using an electron cyclotron wave resonance plasma source. *Thin Solid Films*, **1999**, 337, 71-73	2.2	45
108	Stress reduction and bond stability during thermal annealing of tetrahedral amorphous carbon. *Journal of Applied Physics*, **1999**, 85, 7191-7197	2.5	363
107	The Preparation, Characterization and Tribological Properties of TA-C:H Deposited Using an Electron Cyclotron Wave Resonance Plasma Beam Source. *Physica Status Solidi A*, **1999**, 172, 79-90		48
106	Nitrogen Incorporation into Tetrahedral Hydrogenated Amorphous Carbon. *Physica Status Solidi A*, **1999**, 174, 25-37		63
105	Electron field emission from cluster-assembled carbon thin films. *Europhysics Letters*, **1999**, 46, 245-250	1.6	44
104	Mechanisms of electron field emission from diamond, diamond-like carbon, and nanostructured carbon. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1999**, 17, 659		185
103	Ultraviolet Raman characterisation of diamond-like carbon films. *Diamond and Related Materials*, **1999**, 8, 541-544	3.5	40
102	Electronic properties of tetrahedral amorphous carbon investigated by scanning tunneling microscopy. *Journal of Applied Physics*, **1999**, 85, 1609-1615	2.5	73
101	Effect of surface treatment and back contact material on field emission from tetrahedral amorphous carbon. *Diamond and Related Materials*, **1999**, 8, 809-813	3.5	20
100	Schottky barrier heights of tantalum oxide, barium strontium titanate, lead titanate, and strontium bismuth tantalate. *Applied Physics Letters*, **1999**, 74, 1168-1170	3.4	332
99	Band Alignments of High-K Dielectrics on Si and Pt. *Materials Research Society Symposia Proceedings* , **1999**, 592, 107		4
98	Low Threshold Field Emission from Nanocluster Carbon Films. *Materials Research Society Symposia Proceedings*, **1999**, 593, 207		
97	Density and sp3 Content in Diamond-Like Carbon Films by X-ray Reflectivity and Electron Energy Loss Spectroscopy. *Materials Research Society Symposia Proceedings*, **1999**, 593, 293		8
96	Raman Signature of Bonding and Disorder in Carbons. *Materials Research Society Symposia Proceedings*, **1999**, 593, 299		16
95	Elastic Constants of Diamond-Like Carbon Films by Surface Brillouin Scattering. *Materials Research Society Symposia Proceedings*, **1999**, 593, 311		6
94	Amorphous Carbon-Silicon Alloys Prepared by a High Plasma Density Source. *Materials Research Society Symposia Proceedings*, **1999**, 593, 523		1
93	Elastic Constants of Diamond Like Carbon Films by Surface Brillouin Scattering. *Materials Research Society Symposia Proceedings*, **1999**, 594, 289		2
92	Analysis of amorphous carbon thin films by spectroscopic ellipsometry. *Journal of Non-Crystalline Solids*, **1998**, 227-230, 617-621	3.9	16

91	Local hydrogen reactions of H2* in a-Si:H. *Journal of Non-Crystalline Solids*, **1998**, 227-230, 138-142	3.9	7
90	Nature of disorder and localization in amorphous carbon. *Journal of Non-Crystalline Solids*, **1998**, 227-230, 602-606	3.9	118
89	Band diagram of diamond and diamond-like carbon surfaces. *Diamond and Related Materials*, **1998**, 7, 620-625	3.5	83
88	Field emission from tetrahedral amorphous carbon. *Diamond and Related Materials*, **1998**, 7, 656-659	3.5	50
87	Photoconductivity and electronic transport in tetrahedral amorphous carbon and hydrogenated tetrahedral amorphous carbon. *Journal of Applied Physics*, **1998**, 84, 5575-5582	2.5	33
86	Deposition of tetrahedral hydrogenated amorphous carbon using a novel electron cyclotron wave resonance reactor. *Applied Physics Letters*, **1998**, 72, 1314-1316	3.4	71
85	Ab initio calculation of electron affinities of diamond surfaces. *Physical Review B*, **1998**, 57, 9241-9245	3.3	134
84	Scanning Tunnelling Microscopy Study of the Growth Mechanism for Hydrogenated Amorphous Silicon Produced by Plasma Enhanced Chemical Vapour Deposition. *Materials Research Society Symposia Proceedings*, **1998**, 507, 571		
83	Deposition, Defect and Weak Bond Formation Processes in a-Si:H. *Materials Research Society Symposia Proceedings*, **1998**, 507, 897		3
82	Mechanism of Field Emission in Diamond and Diamond-Like Carbon. *Materials Research Society Symposia Proceedings*, **1998**, 508, 185		3
81	Mechanism of Field Emission in Diamond and Diamondlike Carbon. *Materials Research Society Symposia Proceedings*, **1998**, 509, 83		14
80	Schottky Barrier Heights of Tantalum Oxide, Barium Strontium Titanate, Lead Zirconate Titanate and Strontium Bismuth Tantalate. *Materials Research Society Symposia Proceedings*, **1998**, 541, 443		4
79	Deposition and Properties of Diamond-Like Carbons. *Materials Research Society Symposia Proceedings*, **1998**, 555, 291		6
78	Electronic Structure and Surface Properties of SrBi2Ta2O9 and Related Oxides. *Materials Research Society Symposia Proceedings*, **1997**, 493, 249		3
77	High Rate Deposition of Ta-C:H Using an Electron Cyclotron Wave Resonance Plasma Source. *Materials Research Society Symposia Proceedings*, **1997**, 498, 147		1
76	Photoconductivity of Diamond-Like Carbon. *Materials Research Society Symposia Proceedings*, **1997**, 498, 103		1
75	Theory of Electron Field Emission from Diamond and Diamond-Like Carbon. *Materials Research Society Symposia Proceedings*, **1997**, 498, 197		20
74	Field Emission from Tetrahedrally Bonded Amorphous Carbon as a Function of Surface Treatment and Contact Material. *Materials Research Society Symposia Proceedings*, **1997**, 498, 209		4

73	Doping Mechanism in Tetrahedral Amorphous Carbon. *Materials Research Society Symposia Proceedings*, **1997**, 498, 31		4
72	Band Model for Electron Emission from Diamond and Diamond-Like Carbon. *Materials Research Society Symposia Proceedings*, **1997**, 471, 217		13
71	Deposition mechanism of diamond-like carbon and cubic boron nitride. *Radiation Effects and Defects in Solids*, **1997**, 142, 63-90	0.9	10
70	Direct observation of sp3 bonding in tetrahedral amorphous carbon using ultraviolet Raman spectroscopy. *Applied Physics Letters*, **1997**, 70, 1980-1982	3.4	221
69	Nitrogen modification of hydrogenated amorphous carbon films. *Journal of Applied Physics*, **1997**, 81, 2626-2634	2.5	319
68	Electronic structure of diamond-like carbon. *Diamond and Related Materials*, **1997**, 6, 212-218	3.5	91
67	Field emission from tetrahedral amorphous carbon. *Applied Physics Letters*, **1997**, 71, 1430-1432	3.4	279
66	Photoluminescence and Raman spectroscopy in hydrogenated carbon films. *IEEE Transactions on Magnetics*, **1997**, 33, 3148-3150	2	156
65	Influence of ion energy and substrate temperature on the optical and electronic properties of tetrahedral amorphous carbon (ta-C) films. *Journal of Applied Physics*, **1997**, 81, 139-145	2.5	317
64	Effects of deposition temperature on the properties of hydrogenated tetrahedral amorphous carbon. *Journal of Applied Physics*, **1997**, 82, 4566-4576	2.5	136
63	Gap states in diamond-like amorphous carbon. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1997**, 76, 335-350		120
62	Electron affinity of carbon systems. *Diamond and Related Materials*, **1996**, 5, 797-801	3.5	77
61	Hardness, elastic modulus, and structure of very hard carbon films produced by cathodic-arc deposition with substrate pulse biasing. *Applied Physics Letters*, **1996**, 68, 779-781	3.4	231
60	Defect-dipole alignment and tetragonal strain in ferroelectrics. *Journal of Applied Physics*, **1996**, 79, 9250-9257	2.5	162
59	Recombination and photoluminescence mechanism in hydrogenated amorphous carbon. *Physical Review B*, **1996**, 53, 16302-16305	3.3	277
58	Amorphous carbon. *Current Opinion in Solid State and Materials Science*, **1996**, 1, 557-561	12	42
57	Deposition mechanism of cubic boron nitride. *Diamond and Related Materials*, **1996**, 5, 519-524	3.5	84
56	Pb displacements in Pb(Zr,Ti)O3 perovskites. *Physical Review B*, **1996**, 53, 3080-3087	3.3	46

55	Preparation and properties of highly tetrahedral hydrogenated amorphous carbon. *Physical Review B*, **1996**, 53, 1594-1608	3.3	322
54	Electronic structure of the ferroelectric layered perovskite SrBi2Ta2O9. *Applied Physics Letters*, **1996**, 69, 1704-1706	3.4	130
53	Hydrogen Density of States and Defects Densities in a-Si:H. *Materials Research Society Symposia Proceedings*, **1996**, 420, 515		2
52	Properties of Tetrahedral Amorphous Carbon Deposited by a Filtered Cathodic Vacuum Arc. *Materials Research Society Symposia Proceedings*, **1996**, 423, 299		5
51	Electron Field Emission from Diamond-Like Carbon. *Materials Research Society Symposia Proceedings*, **1996**, 423, 777		5
50	Properties of Diamond-Like Carbon for Thin Film Microcathodes for Field Emission Displays. *Materials Research Society Symposia Proceedings*, **1996**, 424, 381		5
49	Electronic Structure of the Layered Ferroelectric Perovskite SrBi2Ta2O9. *Materials Research Society Symposia Proceedings*, **1996**, 433, 279		
48	Tetrahedral amorphous carbon films prepared by magnetron sputtering and dc ion plating. *Journal of Applied Physics*, **1996**, 79, 1416-1422	2.5	173
47	Structure and luminescence properties of an amorphous hydrogenated carbon. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1996**, 74, 369-386		87
46	Tetrahedrally bonded amorphous carbon (ta-C) thin film transistors. *Electronics Letters*, **1996**, 32, 498	1.1	64
45	Mechanism of bias-enhanced nucleation of diamond on Si. *Applied Physics Letters*, **1995**, 66, 3287-3289	3.4	117
44	Band states and shallow hole traps in Pb(Zr,Ti)O3 ferroelectrics. *Journal of Applied Physics*, **1995**, 77, 3975-3980	2.5	84
43	Nitrogen doping of tetrahedral amorphous carbon. *Diamond and Related Materials*, **1995**, 4, 441-444	3.5	212
42	Comparison of neutron-scattering data for tetrahedral amorphous carbon with structural models. *Physical Review B*, **1995**, 51, 12303-12312	3.3	96
41	Structural models of a-C and a-C:H. *Diamond and Related Materials*, **1995**, 4, 297-301	3.5	192
40	Nucleation during deposition of hydrocarbon ions as a function of substrate temperature. *Diamond and Related Materials*, **1995**, 4, 333-336	3.5	31
39	Diamond-like carbon. *Pure and Applied Chemistry*, **1994**, 66, 1789-1796	2.1	189
38	Highly tetrahedral, diamond-like amorphous hydrogenated carbon prepared from a plasma beam source. *Applied Physics Letters*, **1994**, 64, 2797-2799	3.4	151

37	The deposition mechanism of diamond-like a-C and a-C: H. *Diamond and Related Materials*, **1994**, 3, 361-368	359	359
36	Energy Levels of Point Defects in Perovskite Oxides. *Materials Research Society Symposia Proceedings*, **1994**, 361, 123		10
35	Deposition mechanisms for promoting sp3 bonding in diamond-like carbon. *Diamond and Related Materials*, **1993**, 2, 984-989	3.5	446
34	Properties of filtered-ion-beam-deposited diamondlike carbon as a function of ion energy. *Physical Review B*, **1993**, 48, 4777-4782	3.3	785
33	Shallow Pb3+ hole traps in lead zirconate titanate ferroelectrics. *Applied Physics Letters*, **1993**, 63, 1519-1521	3.4	84
32	bonded clusters in amorphous carbon materials. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1992**, 66, 199-209		76
31	Mechanical properties and coordinations of amorphous carbons. *Physical Review Letters*, **1992**, 68, 220-223	7.4	227
30	Properties of diamond-like carbon. *Surface and Coatings Technology*, **1992**, 50, 185-203	4.4	645
29	Hard amorphous (diamond-like) carbons. *Progress in Solid State Chemistry*, **1991**, 21, 199-333	8	703
28	Limits to adherence of oxide scales. *Materials Science and Technology*, **1990**, 6, 81-92	1.5	162
27	Creep and oxygen diffusion in magnetite. *Acta Metallurgica Et Materialia*, **1990**, 38, 2567-2572		32
26	Clustering and gap states in amorphous carbon. *Philosophical Magazine Letters*, **1988**, 57, 143-148	1	62
25	Criteria for formation of single layer, duplex, and breakaway scales on steels. *Materials Science and Technology*, **1988**, 4, 1064-1071	1.5	60
24	The growth mechanism of thin oxide films on Si. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1987**, 55, 673-684		17
23	Electronic and atomic structure of amorphous carbon. *Physical Review B*, **1987**, 35, 2946-2957	3.3	1199
22	Amorphous carbon. *Advances in Physics*, **1986**, 35, 317-374	18.4	1296
21	Electronic structure of amorphous III-V and II-VI compound semiconductors and their defects. *Physical Review B*, **1986**, 34, 8684-8695	3.3	101
20	Defect mechanisms in a-SiO2. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1985**, 52, 371-377		27

19	The electronic structure of defects in amorphous GaAs. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1984**, 50, L9-L12		10
18	Defect levels ofSnO2. *Physical Review B*, **1984**, 30, 3520-3522	3.3	66
17	Electronic structure and core exciton of hexagonal boron nitride. *Physical Review B*, **1984**, 29, 2131-2137	3.3	97
16	. *Journal of Physics C: Solid State Physics*, **1984**, 17, L349-L354		23
15	Theory of defects in vitreous silicon dioxide. *Physical Review B*, **1983**, 27, 3780-3795	3.3	379
14	Electronic structure of amorphous semiconductors. *Advances in Physics*, **1983**, 32, 361-452	18.4	143
13	The detection of chemical order in non-crystalline alloys from their valence s bands. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1983**, 47, 621-626		20
12	Bonding in liquid and amorphous binary semiconductor alloys. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1981**, 44, 239-263		17
11	The electronic structure of model lead glasses. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1981**, 43, 497-516		17
10	The electronic properties of silicon nitride. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1981**, 44, 215-237		85
9	Ionicity dependence of defect reactions and negative-U states in glasses, I. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1980**, 41, 643-660		5
8	Ionicity dependence of defect reactions and negative-U states in glasses, II. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1980**, 41, 661-676		15
7	Ionicity and coordination in glasses. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1980**, 41, 177-190		7
6	Electronic structure of SnS2, SnSe2, CdI2and PbI2. *Journal of Physics C: Solid State Physics*, **1979**, 12, 4753-4766		110
5	Electronic structure of SnO2, GeO2, PbO2, TeO2and MgF2. *Journal of Physics C: Solid State Physics*, **1979**, 12, 4767-4776		225
4	A new model for the structure of amorphous selenium. *Philosophical Magazine and Journal*, **1976**, 34, 13-31		49
3	Electronic Structure and Band Offsetsof Lanthanide Oxides313-329		10
2	Halide Perovskites: Advanced Photovoltaic Materials Empowered by a Unique Bonding Mechanism. *Advanced Functional Materials*,2110166	15.6	11

1	Diamond-Like Carbon for Applications277-299	3