

John Robertson

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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	Interpretation of Raman spectra of disordered and amorphous carbon. <i>Physical Review B</i> , 2000 , 61, 14095-14107	3.3	14107
593	Diamond-like amorphous carbon. <i>Materials Science and Engineering Reports</i> , 2002 , 37, 129-281	30.9	4594
592	Resonant Raman spectroscopy of disordered, amorphous, and diamondlike carbon. <i>Physical Review B</i> , 2001 , 64,	3.3	2119
591	Raman spectroscopy of amorphous, nanostructured, diamond-like carbon, and nanodiamond. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2004 , 362, 2477-512 ³		1767
590	Band offsets of wide-band-gap oxides and implications for future electronic devices. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000 , 18, 1785		1654
589	High dielectric constant gate oxides for metal oxide Si transistors. <i>Reports on Progress in Physics</i> , 2006 , 69, 327-396	14.4	1318
588	Amorphous carbon. <i>Advances in Physics</i> , 1986 , 35, 317-374	18.4	1296
587	Electronic and atomic structure of amorphous carbon. <i>Physical Review B</i> , 1987 , 35, 2946-2957	3.3	1199
586	High dielectric constant oxides. <i>EPJ Applied Physics</i> , 2004 , 28, 265-291	1.1	1107
585	Growth process conditions of vertically aligned carbon nanotubes using plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2001 , 90, 5308-5317	2.5	902
584	Raman spectroscopy of hydrogenated amorphous carbons. <i>Physical Review B</i> , 2005 , 72,	3.3	879
583	Properties of filtered-ion-beam-deposited diamondlike carbon as a function of ion energy. <i>Physical Review B</i> , 1993 , 48, 4777-4782	3.3	785
582	Resonant bonding in crystalline phase-change materials. <i>Nature Materials</i> , 2008 , 7, 653-8	27	775
581	Hard amorphous (diamond-like) carbons. <i>Progress in Solid State Chemistry</i> , 1991 , 21, 199-333	8	703
580	Properties of diamond-like carbon. <i>Surface and Coatings Technology</i> , 1992 , 50, 185-203	4.4	645
579	In situ observations of catalyst dynamics during surface-bound carbon nanotube nucleation. <i>Nano Letters</i> , 2007 , 7, 602-8	11.5	605
578	Interpretation of infrared and Raman spectra of amorphous carbon nitrides. <i>Physical Review B</i> , 2003 , 67,	3.3	582

577	Band offsets of high K gate oxides on III-V semiconductors. <i>Journal of Applied Physics</i> , 2006 , 100, 014111-25	548
576	Phase and metal-insulator transition in multiferroic BiFeO ₃ . <i>Physical Review B</i> , 2008 , 77,	3-3 517
575	Density, sp ³ fraction, and cross-sectional structure of amorphous carbon films determined by x-ray reflectivity and electron energy-loss spectroscopy. <i>Physical Review B</i> , 2000 , 62, 11089-11103	3-3 461
574	Deposition mechanisms for promoting sp ³ bonding in diamond-like carbon. <i>Diamond and Related Materials</i> , 1993 , 2, 984-989	3-5 446
573	Defect energy levels in HfO ₂ high-dielectric-constant gate oxide. <i>Applied Physics Letters</i> , 2005 , 87, 1835-1838	3-4 408
572	High-K materials and metal gates for CMOS applications. <i>Materials Science and Engineering Reports</i> , 2015 , 88, 1-41	30-9 382
571	Theory of defects in vitreous silicon dioxide. <i>Physical Review B</i> , 1983 , 27, 3780-3795	3-3 379
570	Stress reduction and bond stability during thermal annealing of tetrahedral amorphous carbon. <i>Journal of Applied Physics</i> , 1999 , 85, 7191-7197	2-5 363
569	The deposition mechanism of diamond-like a-C and a-C: H. <i>Diamond and Related Materials</i> , 1994 , 3, 361-368	3-5 359
568	Band offsets and Schottky barrier heights of high dielectric constant oxides. <i>Journal of Applied Physics</i> , 2002 , 92, 4712-4721	2-5 333
567	Gated three-terminal device architecture to eliminate persistent photoconductivity in oxide semiconductor photosensor arrays. <i>Nature Materials</i> , 2012 , 11, 301-5	27 332
566	Band gap and Schottky barrier heights of multiferroic BiFeO ₃ . <i>Applied Physics Letters</i> , 2007 , 90, 132903	3-4 332
565	Schottky barrier heights of tantalum oxide, barium strontium titanate, lead titanate, and strontium bismuth tantalate. <i>Applied Physics Letters</i> , 1999 , 74, 1168-1170	3-4 332
564	Surface diffusion: the low activation energy path for nanotube growth. <i>Physical Review Letters</i> , 2005 , 95, 036101	7-4 329
563	Low-temperature growth of carbon nanotubes by plasma-enhanced chemical vapor deposition. <i>Applied Physics Letters</i> , 2003 , 83, 135-137	3-4 324
562	Preparation and properties of highly tetrahedral hydrogenated amorphous carbon. <i>Physical Review B</i> , 1996 , 53, 1594-1608	3-3 322
561	Nitrogen modification of hydrogenated amorphous carbon films. <i>Journal of Applied Physics</i> , 1997 , 81, 2626-2634	2-5 319
560	Influence of ion energy and substrate temperature on the optical and electronic properties of tetrahedral amorphous carbon (ta-C) films. <i>Journal of Applied Physics</i> , 1997 , 81, 139-145	2-5 317

559	Bonding in hydrogenated diamond-like carbon by Raman spectroscopy. <i>Diamond and Related Materials</i> , 2005 , 14, 1098-1102	3.5	291
558	Phonon linewidths and electron-phonon coupling in graphite and nanotubes. <i>Physical Review B</i> , 2006 , 73,	3.3	290
557	Raman spectroscopy of silicon nanowires. <i>Physical Review B</i> , 2003 , 68,	3.3	286
556	Field emission from tetrahedral amorphous carbon. <i>Applied Physics Letters</i> , 1997 , 71, 1430-1432	3.4	279
555	Recombination and photoluminescence mechanism in hydrogenated amorphous carbon. <i>Physical Review B</i> , 1996 , 53, 16302-16305	3.3	277
554	Sulfur vacancies in monolayer MoS ₂ and its electrical contacts. <i>Applied Physics Letters</i> , 2013 , 103, 183113,	3.4	271
553	Catalytic chemical vapor deposition of single-wall carbon nanotubes at low temperatures. <i>Nano Letters</i> , 2006 , 6, 1107-12	11.5	267
552	The ultrasmoothness of diamond-like carbon surfaces. <i>Science</i> , 2005 , 309, 1545-8	33.3	262
551	Realistic applications of CNTs. <i>Materials Today</i> , 2004 , 7, 46-52	21.8	236
550	Intrinsic defects in ZnO calculated by screened exchange and hybrid density functionals. <i>Physical Review B</i> , 2010 , 81,	3.3	232
549	Hardness, elastic modulus, and structure of very hard carbon films produced by cathodic-arc deposition with substrate pulse biasing. <i>Applied Physics Letters</i> , 1996 , 68, 779-781	3.4	231
548	Mechanical properties and coordinations of amorphous carbons. <i>Physical Review Letters</i> , 1992 , 68, 220-223,	3.4	227
547	Gold catalyzed growth of silicon nanowires by plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2003 , 94, 6005-6012	2.5	225
546	Evolution of sp ² bonding with deposition temperature in tetrahedral amorphous carbon studied by Raman spectroscopy. <i>Applied Physics Letters</i> , 2000 , 76, 1419-1421	3.4	225
545	Electronic structure of SnO ₂ , GeO ₂ , PbO ₂ , TeO ₂ and MgF ₂ . <i>Journal of Physics C: Solid State Physics</i> , 1979 , 12, 4767-4776		225
544	Investigating the Role of Tunable Nitrogen Vacancies in Graphitic Carbon Nitride Nanosheets for Efficient Visible-Light-Driven H ₂ Evolution and CO ₂ Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 7260-7268	8.3	224
543	In-situ X-ray Photoelectron Spectroscopy Study of Catalyst Support Interactions and Growth of Carbon Nanotube Forests. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 12207-12213	3.8	224
542	Direct observation of sp ³ bonding in tetrahedral amorphous carbon using ultraviolet Raman spectroscopy. <i>Applied Physics Letters</i> , 1997 , 70, 1980-1982	3.4	221

541	Nitrogen doping of tetrahedral amorphous carbon. <i>Diamond and Related Materials</i> , 1995 , 4, 441-444	3.5	212
540	Limits to doping in oxides. <i>Physical Review B</i> , 2011 , 83,	3.3	207
539	Trap-limited and percolation conduction mechanisms in amorphous oxide semiconductor thin film transistors. <i>Applied Physics Letters</i> , 2011 , 98, 203508	3.4	199
538	Structural models of a-C and a-C:H. <i>Diamond and Related Materials</i> , 1995 , 4, 297-301	3.5	192
537	Band gaps and defect levels in functional oxides. <i>Thin Solid Films</i> , 2006 , 496, 1-7	2.2	191
536	Diamond-like carbon. <i>Pure and Applied Chemistry</i> , 1994 , 66, 1789-1796	2.1	189
535	Ultrathin carbon coatings for magnetic storage technology. <i>Thin Solid Films</i> , 2001 , 383, 81-88	2.2	188
534	Diamond-like carbon for data and beer storage. <i>Materials Today</i> , 2007 , 10, 44-53	21.8	186
533	Mechanisms of electron field emission from diamond, diamond-like carbon, and nanostructured carbon. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1999 , 17, 659		185
532	Raman and infrared modes of hydrogenated amorphous carbon nitride. <i>Journal of Applied Physics</i> , 2001 , 89, 5425-5430	2.5	176
531	Bonding origin of optical contrast in phase-change memory materials. <i>Physical Review B</i> , 2010 , 81,	3.3	175
530	Interfaces and defects of high-K oxides on silicon. <i>Solid-State Electronics</i> , 2005 , 49, 283-293	1.7	175
529	Screened exchange density functional applied to solids. <i>Physical Review B</i> , 2010 , 82,	3.3	174
528	Tetrahedral amorphous carbon films prepared by magnetron sputtering and dc ion plating. <i>Journal of Applied Physics</i> , 1996 , 79, 1416-1422	2.5	173
527	Metal oxide induced charge transfer doping and band alignment of graphene electrodes for efficient organic light emitting diodes. <i>Scientific Reports</i> , 2014 , 4, 5380	4.9	168
526	Growth of ultrahigh density single-walled carbon nanotube forests by improved catalyst design. <i>ACS Nano</i> , 2012 , 6, 2893-903	16.7	168
525	Ink-jet printing of carbon nanotube thin film transistors. <i>Journal of Applied Physics</i> , 2007 , 102, 043710	2.5	165
524	Effect of sp ² -phase nanostructure on field emission from amorphous carbons. <i>Applied Physics Letters</i> , 2000 , 76, 2627-2629	3.4	163

523	Defect-dipole alignment and tetragonal strain in ferroelectrics. <i>Journal of Applied Physics</i> , 1996 , 79, 9250-9257	2.3	162
522	Limits to adherence of oxide scales. <i>Materials Science and Technology</i> , 1990 , 6, 81-92	1.5	162
521	Direct quantitative detection of the sp ³ bonding in diamond-like carbon films using ultraviolet and visible Raman spectroscopy. <i>Journal of Applied Physics</i> , 2000 , 87, 7283-7289	2.5	160
520	Temperature selective growth of carbon nanotubes by chemical vapor deposition. <i>Journal of Applied Physics</i> , 2002 , 92, 3299-3303	2.5	159
519	The Phase of Iron Catalyst Nanoparticles during Carbon Nanotube Growth. <i>Chemistry of Materials</i> , 2012 , 24, 4633-4640	9.6	158
518	Growth kinetics of 0.5 cm vertically aligned single-walled carbon nanotubes. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 1907-10	3.4	158
517	Control the chirality of carbon nanotubes by epitaxial growth. <i>Chemical Physics Letters</i> , 2006 , 421, 469-472	2.5	158
516	Nature of the electronic band gap in lanthanide oxides. <i>Physical Review B</i> , 2013 , 87,	3.3	157
515	Photoluminescence and Raman spectroscopy in hydrogenated carbon films. <i>IEEE Transactions on Magnetism</i> , 1997 , 33, 3148-3150	2	156
514	Elastic constants of tetrahedral amorphous carbon films by surface Brillouin scattering. <i>Applied Physics Letters</i> , 1999 , 75, 1893-1895	3.4	156
513	State of Transition Metal Catalysts During Carbon Nanotube Growth. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 1648-1656	3.8	155
512	Behavior of hydrogen in high dielectric constant oxide gate insulators. <i>Applied Physics Letters</i> , 2003 , 83, 2025-2027	3.4	154
511	Highly tetrahedral, diamond-like amorphous hydrogenated carbon prepared from a plasma beam source. <i>Applied Physics Letters</i> , 1994 , 64, 2797-2799	3.4	151
510	Bonding, energies, and band offsets of Si-ZrO ₂ and HfO ₂ gate oxide interfaces. <i>Physical Review Letters</i> , 2004 , 92, 057601	7.4	146
509	Direct growth of aligned carbon nanotube field emitter arrays onto plastic substrates. <i>Applied Physics Letters</i> , 2003 , 83, 4661-4663	3.4	145
508	Electronic structure of amorphous semiconductors. <i>Advances in Physics</i> , 1983 , 32, 361-452	18.4	143
507	Metal-Free Growth of Nanographene on Silicon Oxides for Transparent Conducting Applications. <i>Advanced Functional Materials</i> , 2012 , 22, 2123-2128	15.6	142
506	Preparation of tetrahedral amorphous carbon films by filtered cathodic vacuum arc deposition. <i>Diamond and Related Materials</i> , 2000 , 9, 663-667	3.5	140

505	Effects of deposition temperature on the properties of hydrogenated tetrahedral amorphous carbon. <i>Journal of Applied Physics</i> , 1997 , 82, 4566-4576	2.5	136
504	Ab initio calculation of electron affinities of diamond surfaces. <i>Physical Review B</i> , 1998 , 57, 9241-9245	3.3	134
503	Band offsets, Schottky barrier heights, and their effects on electronic devices. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013 , 31, 050821	2.9	130
502	Electronic structure of the ferroelectric layered perovskite SrBi ₂ Ta ₂ O ₉ . <i>Applied Physics Letters</i> , 1996 , 69, 1704-1706	3.4	130
501	Band offsets of high dielectric constant gate oxides on silicon. <i>Journal of Non-Crystalline Solids</i> , 2002 , 303, 94-100	3.9	127
500	Growth of ultrahigh density vertically aligned carbon nanotube forests for interconnects. <i>ACS Nano</i> , 2010 , 4, 7431-6	16.7	125
499	Model of interface states at III-V oxide interfaces. <i>Applied Physics Letters</i> , 2009 , 94, 152104	3.4	125
498	Fermi level pinning by defects in HfO ₂ -metal gate stacks. <i>Applied Physics Letters</i> , 2007 , 91, 132912	3.4	125
497	Origin of the high work function and high conductivity of MoO ₃ . <i>Applied Physics Letters</i> , 2014 , 105, 222110	3.4	123
496	Chalcogen vacancies in monolayer transition metal dichalcogenides and Fermi level pinning at contacts. <i>Applied Physics Letters</i> , 2015 , 106, 173106	3.4	121
495	Electronic structure of oxygen vacancies in SrTiO ₃ and LaAlO ₃ . <i>Physical Review B</i> , 2012 , 86,	3.3	121
494	Growth of nanotubes for electronics. <i>Materials Today</i> , 2007 , 10, 36-43	21.8	121
493	Relative importance of the Si ₃ Si bond and Si ₂ H bond for the stability of amorphous silicon thin film transistors. <i>Journal of Applied Physics</i> , 2000 , 87, 144-154	2.5	121
492	Graphene-passivated nickel as an oxidation-resistant electrode for spintronics. <i>ACS Nano</i> , 2012 , 6, 10930-6	16.7	120
491	Persistent photoconductivity in HfO ₂ /ZnO thin film transistors. <i>Applied Physics Letters</i> , 2010 , 97, 143510	3.4	120
490	Gap states in diamond-like amorphous carbon. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1997 , 76, 335-350		120
489	Passivation of oxygen vacancy states in HfO ₂ by nitrogen. <i>Journal of Applied Physics</i> , 2006 , 99, 044105	2.5	119
488	Nature of disorder and localization in amorphous carbon. <i>Journal of Non-Crystalline Solids</i> , 1998 , 227-230, 602-606	3.9	118

487	Mechanism of bias-enhanced nucleation of diamond on Si. <i>Applied Physics Letters</i> , 1995 , 66, 3287-3289	3.4	117
486	Effects of catalyst film thickness on plasma-enhanced carbon nanotube growth. <i>Journal of Applied Physics</i> , 2005 , 98, 034308	2.5	115
485	Influence of nitrogen and temperature on the deposition of tetrahedrally bonded amorphous carbon. <i>Journal of Applied Physics</i> , 2000 , 88, 1149-1157	2.5	115
484	Long-Term Passivation of Strongly Interacting Metals with Single-Layer Graphene. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14358-66	16.4	114
483	Diffusion- and reaction-limited growth of carbon nanotube forests. <i>ACS Nano</i> , 2009 , 3, 3560-6	16.7	114
482	Band engineering in transition metal dichalcogenides: Stacked versus lateral heterostructures. <i>Applied Physics Letters</i> , 2016 , 108, 233104	3.4	114
481	Defect states at III-V semiconductor oxide interfaces. <i>Applied Physics Letters</i> , 2011 , 98, 082903	3.4	111
480	Stability and band offsets of nitrogenated high-dielectric-constant gate oxides. <i>Applied Physics Letters</i> , 2004 , 84, 106-108	3.4	110
479	Electronic structure of SnS ₂ , SnSe ₂ , CdI ₂ and PbI ₂ . <i>Journal of Physics C: Solid State Physics</i> , 1979 , 12, 4753-4766	110	
478	Maximizing performance for higher K gate dielectrics. <i>Journal of Applied Physics</i> , 2008 , 104, 124111	2.5	109
477	Acetylene: A Key Growth Precursor for Single-Walled Carbon Nanotube Forests. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 17321-17325	3.8	108
476	3D Behavior of Schottky Barriers of 2D Transition-Metal Dichalcogenides. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 25709-15	9.5	107
475	Is stress necessary to stabilise sp ³ bonding in diamond-like carbon?. <i>Diamond and Related Materials</i> , 2002 , 11, 994-999	3.5	107
474	Calculation of TiO ₂ Surface and Subsurface Oxygen Vacancy by the Screened Exchange Functional. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 18160-18166	3.8	105
473	Structure and formation energy of carbon nanotube caps. <i>Physical Review B</i> , 2005 , 72,	3.3	105
472	Oxygen vacancy levels and electron transport in Al ₂ O ₃ . <i>Applied Physics Letters</i> , 2010 , 96, 032905	3.4	104
471	Effect of work function and surface microstructure on field emission of tetrahedral amorphous carbon. <i>Journal of Applied Physics</i> , 2000 , 88, 6002-6010	2.5	104
470	Amorphous Oxide Semiconductor TFTs for Displays and Imaging. <i>Journal of Display Technology</i> , 2014 , 10, 917-927		102

469	Deposition mechanism of hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 2000 , 87, 2608-2613	1.7	102
468	Electronic structure of p-type conducting transparent oxides. <i>Thin Solid Films</i> , 2002 , 411, 96-100	2.2	101
467	Electronic structure of amorphous III-V and II-VI compound semiconductors and their defects. <i>Physical Review B</i> , 1986 , 34, 8684-8695	3.3	101
466	Energy levels of oxygen vacancies in BiFeO ₃ by screened exchange. <i>Applied Physics Letters</i> , 2009 , 94, 022902	3.4	99
465	The role of the catalytic particle in the growth of carbon nanotubes by plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2004 , 95, 6387-6391	2.5	97
464	Electronic Structure and Band Offsets of High-Dielectric-Constant Gate Oxides. <i>MRS Bulletin</i> , 2002 , 27, 217-221	3.2	97
463	Electronic structure and core exciton of hexagonal boron nitride. <i>Physical Review B</i> , 1984 , 29, 2131-2137	3.3	97
462	Sub-nanometer atomic layer deposition for spintronics in magnetic tunnel junctions based on graphene spin-filtering membranes. <i>ACS Nano</i> , 2014 , 8, 7890-5	16.7	96
461	Instability in threshold voltage and subthreshold behavior in Hf _{0.2} Zn _{0.8} O thin film transistors induced by bias-and light-stress. <i>Applied Physics Letters</i> , 2010 , 97, 113504	3.4	96
460	Comparison of neutron-scattering data for tetrahedral amorphous carbon with structural models. <i>Physical Review B</i> , 1995 , 51, 12303-12312	3.3	96
459	Magnetic tunnel junctions with monolayer hexagonal boron nitride tunnel barriers. <i>Applied Physics Letters</i> , 2016 , 108, 102404	3.4	95
458	Requirements of ultrathin carbon coatings for magnetic storage technology. <i>Tribology International</i> , 2003 , 36, 405-415	4.9	94
457	Field emission from tetrahedral amorphous carbon as a function of surface treatment and substrate material. <i>Applied Physics Letters</i> , 1999 , 74, 1594-1596	3.4	94
456	Impact of oxygen exchange reaction at the ohmic interface in TaO-based ReRAM devices. <i>Nanoscale</i> , 2016 , 8, 17774-17781	7.7	92
455	Electronic structure of diamond-like carbon. <i>Diamond and Related Materials</i> , 1997 , 6, 212-218	3.5	91
454	Band structures and band offsets of high K dielectrics on Si. <i>Applied Surface Science</i> , 2002 , 190, 2-10	6.7	91
453	Dynamic roughening of tetrahedral amorphous carbon. <i>Physical Review Letters</i> , 2003 , 91, 226104	7.4	90
452	Properties of amorphous carbon-silicon alloys deposited by a high plasma density source. <i>Journal of Applied Physics</i> , 2001 , 90, 5002-5012	2.5	89

451	Defect states in the high-dielectric-constant gate oxide LaAlO ₃ . <i>Applied Physics Letters</i> , 2006 , 89, 022907, 4	3.4	88
450	Density, sp ³ content and internal layering of DLC films by X-ray reflectivity and electron energy loss spectroscopy. <i>Diamond and Related Materials</i> , 2000 , 9, 771-776	3.5	87
449	Structure and luminescence properties of an amorphous hydrogenated carbon. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1996 , 74, 369-386		87
448	Behavior of hydrogen in wide band gap oxides. <i>Journal of Applied Physics</i> , 2007 , 102, 083710	2.5	86
447	Soluble polysulphide sorption using carbon nanotube forest for enhancing cycle performance in a lithium-sulphur battery. <i>Nano Energy</i> , 2015 , 12, 538-546	17.1	85
446	Protective diamond-like carbon coatings for future optical storage disks. <i>Diamond and Related Materials</i> , 2005 , 14, 994-999	3.5	85
445	The electronic properties of silicon nitride. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1981 , 44, 215-237		85
444	Hydrogenated amorphous carbon film coating of PET bottles for gas diffusion barriers. <i>Diamond and Related Materials</i> , 2006 , 15, 921-927	3.5	84
443	Band states and shallow hole traps in Pb(Zr,Ti)O ₃ ferroelectrics. <i>Journal of Applied Physics</i> , 1995 , 77, 3975-3980	2.5	84
442	Deposition mechanism of cubic boron nitride. <i>Diamond and Related Materials</i> , 1996 , 5, 519-524	3.5	84
441	Shallow Pb ³⁺ hole traps in lead zirconate titanate ferroelectrics. <i>Applied Physics Letters</i> , 1993 , 63, 1519-1521	3.4	84
440	Band diagram of diamond and diamond-like carbon surfaces. <i>Diamond and Related Materials</i> , 1998 , 7, 620-625	3.5	83
439	Band structure of functional oxides by screened exchange and the weighted density approximation. <i>Physica Status Solidi (B): Basic Research</i> , 2006 , 243, 2054-2070	1.3	83
438	Band structure calculations of CuAlO ₂ , CuGaO ₂ , CuInO ₂ , and CuCrO ₂ by screened exchange. <i>Physical Review B</i> , 2011 , 84,	3.3	82
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436	Calculation of point defects in rutile TiO ₂ by the screened-exchange hybrid functional. <i>Physical Review B</i> , 2012 , 86,	3.3	81
435	Comparison of diamond-like carbon to diamond for applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008 , 205, 2233-2244	1.6	81
434	Three-dimensional carbon nanowall structures. <i>Applied Physics Letters</i> , 2007 , 90, 123107	3.4	78

433	Electron affinity of carbon systems. <i>Diamond and Related Materials</i> , 1996 , 5, 797-801	3.5	77
432	Modeling of switching mechanism in GeSbTe chalcogenide superlattices. <i>Scientific Reports</i> , 2015 , 5, 126129		76
431	Disorder and instability processes in amorphous conducting oxides. <i>Physica Status Solidi (B): Basic Research</i> , 2008 , 245, 1026-1032	1.3	76
430	Hydrogen-bonded clusters in amorphous carbon materials. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1992 , 66, 199-209		76
429	Bonding and mechanical properties of ultrathin diamond-like carbon films. <i>Applied Physics Letters</i> , 2002 , 81, 3804-3806	3.4	75
428	Electronic properties of tetrahedral amorphous carbon investigated by scanning tunneling microscopy. <i>Journal of Applied Physics</i> , 1999 , 85, 1609-1615	2.5	73
427	Thermal and chemical vapor deposition of Si nanowires: Shape control, dispersion, and electrical properties. <i>Journal of Applied Physics</i> , 2007 , 102, 034302	2.5	72
426	Band offsets of high K gate oxides on high mobility semiconductors. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2006 , 135, 267-271	3.1	72
425	Substrate-assisted nucleation of ultra-thin dielectric layers on graphene by atomic layer deposition. <i>Applied Physics Letters</i> , 2012 , 100, 173113	3.4	71
424	The role of precursor gases on the surface restructuring of catalyst films during carbon nanotube growth. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2007 , 37, 1-5	3	71
423	Charge transfer in carbon nanotube actuators investigated using in situ Raman spectroscopy. <i>Journal of Applied Physics</i> , 2004 , 95, 2038-2048	2.5	71
422	Hydrogen content estimation of hydrogenated amorphous carbon by visible Raman spectroscopy. <i>Journal of Applied Physics</i> , 2004 , 96, 6348-6352	2.5	71
421	Point defects in HfO ₂ high K gate oxide. <i>Microelectronic Engineering</i> , 2005 , 80, 408-411	2.5	71
420	Negatively curved spongy carbon. <i>Applied Physics Letters</i> , 2002 , 81, 3359-3361	3.4	71
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