

David McKenzie

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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.

554
papers

17,306
citations

65
h-index

103
g-index

577
ext. papers

18,623
ext. citations

4.2
avg, IF

6.58
L-index

#	Paper	IF	Citations
554	Compressive-stress-induced formation of thin-film tetrahedral amorphous carbon. <i>Physical Review Letters</i> , 1991 , 67, 773-776	7.4	845
553	EELS analysis of vacuum arc-deposited diamond-like films. <i>Philosophical Magazine Letters</i> , 1988 , 57, 285-290		524
552	Tetrahedral bonding in amorphous carbon. <i>Reports on Progress in Physics</i> , 1996 , 59, 1611-1664	14.4	321
551	Compressive stress induced formation of cubic boron nitride. <i>Diamond and Related Materials</i> , 1993 , 2, 970-976	3.5	249
550	Properties of tetrahedral amorphous carbon prepared by vacuum arc deposition. <i>Diamond and Related Materials</i> , 1991 , 1, 51-59	3.5	228
549	Photonic engineering. Aphrodite's iridescence. <i>Nature</i> , 2001 , 409, 36-7	50.4	216
548	The structure of the C70 molecule. <i>Nature</i> , 1992 , 355, 622-624	50.4	210
547	The Vroman effect: competitive protein exchange with dynamic multilayer protein aggregates. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013 , 103, 395-404	6	189
546	Gas chromatography-mass spectrometry analyses of encapsulated stable perovskite solar cells. <i>Science</i> , 2020 , 368,	33.3	167
545	Residual stress, microstructure, and structure of tungsten thin films deposited by magnetron sputtering. <i>Journal of Applied Physics</i> , 2000 , 87, 177-187	2.5	161
544	Neutron-scattering studies of the structure of highly tetrahedral amorphous diamondlike carbon. <i>Physical Review Letters</i> , 1991 , 67, 1286-1289	7.4	157
543	Electron diffraction analysis of polycrystalline and amorphous thin films. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 1988 , 44, 870-878		157
542	Microscopic structure of tetrahedral amorphous carbon. <i>Physical Review Letters</i> , 1996 , 76, 768-771	7.4	156
541	Ab initio simulations of the structure of amorphous carbon. <i>Physical Review B</i> , 2000 , 61, 2349-2355	3.3	155
540	Multilayer reflectors in animals using green and gold beetles as contrasting examples. <i>Journal of Experimental Biology</i> , 1998 , 201, 1307-1313	3	155
539	Free radical functionalization of surfaces to prevent adverse responses to biomedical devices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 14405-10	11.5	153
538	Structure and hardness of diamond-like carbon films prepared by arc evaporation. <i>Journal of Materials Science Letters</i> , 1988 , 7, 410-412		136

537	Comparison of density-functional, tight-binding, and empirical methods for the simulation of amorphous carbon. <i>Physical Review B</i> , 2002 , 65,	3.3	135
536	Generation and applications of compressive stress induced by low energy ion beam bombardment. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1993 , 11, 1928		131
535	Electrochemical corrosion behavior of biodegradable Mg ₇₅ RE and Mg ₇₅ Zn ₂₅ alloys in Ringer's solution and simulated body fluid. <i>Corrosion Science</i> , 2015 , 91, 160-184	6.8	129
534	Welding methods for joining thermoplastic polymers for the hermetic enclosure of medical devices. <i>Medical Engineering and Physics</i> , 2010 , 32, 690-9	2.4	129
533	Plasma modified surfaces for covalent immobilization of functional biomolecules in the absence of chemical linkers: towards better biosensors and a new generation of medical implants. <i>Biophysical Reviews</i> , 2010 , 2, 55-65	3.7	128
532	Ab initio simulations of tetrahedral amorphous carbon. <i>Physical Review B</i> , 1996 , 54, 9703-9714	3.3	128
531	n-type doping of highly tetrahedral diamond-like amorphous carbon. <i>Journal of Physics Condensed Matter</i> , 1993 , 5, L169-L174	1.8	122
530	Monte Carlo calculation of the thermalization of atoms sputtered from the cathode of a sputtering discharge. <i>Journal of Applied Physics</i> , 1989 , 65, 3671-3679	2.5	118
529	Properties and structure of amorphous hydrogenated carbon films. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1983 , 48, 341-364		111
528	Covalent immobilisation of tropoelastin on a plasma deposited interface for enhancement of endothelialisation on metal surfaces. <i>Biomaterials</i> , 2009 , 30, 1675-81	15.6	110
527	Substitutional nitrogen doping of tetrahedral amorphous carbon. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1994 , 69, 1133-1140		110
526	Fundamentals of siRNA and miRNA therapeutics and a review of targeted nanoparticle delivery systems in breast cancer. <i>Biophysical Reviews</i> , 2018 , 10, 69-86	3.7	107
525	A comprehensive survey of M(2)AX phase elastic properties. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 305403	1.8	107
524	Characteristics of titanium arc evaporation processes. <i>Thin Solid Films</i> , 1987 , 153, 91-102	2.2	106
523	A comprehensive model of stress generation and relief processes in thin films deposited with energetic ions. <i>Surface and Coatings Technology</i> , 2006 , 200, 4345-4354	4.4	104
522	Highly tetrahedral amorphous carbon films with low stress. <i>Applied Physics Letters</i> , 1996 , 69, 2344-2346	3.4	103
521	Ion-assisted deposition of mixed TiO ₂ -SiO ₂ films. <i>Journal of Applied Physics</i> , 1989 , 66, 1805-1809	2.5	101
520	A comparison of covalent immobilization and physical adsorption of a cellulase enzyme mixture. <i>Langmuir</i> , 2010 , 26, 14380-8	4	100

519	Ion implantation in tetrahedral amorphous carbon. <i>Physical Review B</i> , 1995 , 52, 850-857	3.3	98
518	Small field diode correction factors derived using an air core fibre optic scintillation dosimeter and EBT2 film. <i>Physics in Medicine and Biology</i> , 2012 , 57, 2587-602	3.8	97
517	Hydrogen-free amorphous carbon preparation and properties. <i>Diamond and Related Materials</i> , 1994 , 3, 353-360	3.5	96
516	A plastic scintillation dosimeter for high dose rate brachytherapy. <i>Physics in Medicine and Biology</i> , 2006 , 51, 5505-16	3.8	93
515	Hemocompatibility and anti-bacterial properties of silver doped diamond-like carbon prepared by pulsed filtered cathodic vacuum arc deposition. <i>Diamond and Related Materials</i> , 2007 , 16, 1353-1360	3.5	91
514	Cellular response to modulated radiation fields. <i>Physics in Medicine and Biology</i> , 2007 , 52, 5469-82	3.8	89
513	Mobile phones, heat shock proteins and cancer. <i>Differentiation</i> , 2001 , 67, 93-7	3.5	89
512	In vivo dosimeters for HDR brachytherapy: a comparison of a diamond detector, MOSFET, TLD, and scintillation detector. <i>Medical Physics</i> , 2007 , 34, 1759-65	4.4	87
511	Composition, residual stress, and structural properties of thin tungsten nitride films deposited by reactive magnetron sputtering. <i>Journal of Applied Physics</i> , 2000 , 88, 1380-1388	2.5	87
510	Optical and electronic properties of amorphous diamond. <i>Diamond and Related Materials</i> , 1993 , 2, 782-787	2.5	86
509	The immobilization of recombinant human tropoelastin on metals using a plasma-activated coating to improve the biocompatibility of coronary stents. <i>Biomaterials</i> , 2010 , 31, 8332-40	15.6	84
508	Molecular-dynamics study of compressive stress generation. <i>Physical Review B</i> , 1996 , 53, 4117-4124	3.3	83
507	Intrafractional motion during proton beam scanning. <i>Physics in Medicine and Biology</i> , 2005 , 50, 4853-62	3.8	82
506	Amorphous diamond-Si semiconductor heterojunctions. <i>Applied Physics Letters</i> , 1991 , 59, 69-71	3.4	82
505	Infrared absorption and bonding in amorphous hydrogenated silicon-carbon alloys. <i>Journal Physics D: Applied Physics</i> , 1985 , 18, 1935-1948	3	81
504	Effects of zirconium and oxygen plasma ion implantation on the corrosion behavior of ZK60 Mg alloy in simulated body fluids. <i>Corrosion Science</i> , 2014 , 82, 7-26	6.8	80
503	Influence of gas pressure and cathode composition on ion energy distributions in filtered cathodic vacuum arcs. <i>Journal of Applied Physics</i> , 1998 , 83, 2965-2970	2.5	79
502	Electron optical characterization of cubic boron nitride thin films prepared by reactive ion plating. <i>Journal of Applied Physics</i> , 1991 , 70, 3007-3012	2.5	79

501	Electron tomography and computer visualisation of a three-dimensional 'photonic' crystal in a butterfly wing-scale. <i>Micron</i> , 2002 , 33, 483-7	2.3	77
500	Plasma-based ion implantation utilising a cathodic arc plasma. <i>Surface and Coatings Technology</i> , 2002 , 156, 136-142	4.4	76
499	Abrupt stress induced transformation in amorphous carbon films with a highly conductive transition phase. <i>Physical Review Letters</i> , 2008 , 100, 176101	7.4	75
498	Cerenkov-free scintillation dosimetry in external beam radiotherapy with an air core light guide. <i>Physics in Medicine and Biology</i> , 2008 , 53, 3071-80	3.8	72
497	Unambiguous determination of optical constants of absorbing films by reflectance and transmittance measurements. <i>Applied Optics</i> , 1984 , 23, 1197	1.7	72
496	Transport properties of arrays of intersecting cylinders. <i>Applied Physics Berlin</i> , 1981 , 25, 23-30		71
495	Electrostatic and optical resonances of arrays of cylinders. <i>Applied Physics Berlin</i> , 1980 , 23, 223-235		68
494	Transmission laser welding of amorphous and semi-crystalline poly-ether-ether-ketone for applications in the medical device industry. <i>Materials & Design</i> , 2010 , 31, 4823-4830		67
493	Exact modelling of cubic lattice permittivity and conductivity. <i>Nature</i> , 1977 , 265, 128-129	50.4	66
492	Surface plasma modification and tropoelastin coating of a polyurethane co-polymer for enhanced cell attachment and reduced thrombogenicity. <i>Biomaterials</i> , 2014 , 35, 6797-809	15.6	65
491	Over-response of synthetic microDiamond detectors in small radiation fields. <i>Physics in Medicine and Biology</i> , 2014 , 59, 5873-81	3.8	65
490	Analysis of films prepared by plasma polymerization of acetylene in a D.C. magnetron. <i>Thin Solid Films</i> , 1983 , 108, 247-256	2.2	65
489	Binding of the cell adhesive protein tropoelastin to PTFE through plasma immersion ion implantation treatment. <i>Biomaterials</i> , 2011 , 32, 5100-11	15.6	63
488	Autohesion of plasma treated semi-crystalline PEEK: Comparative study of argon, nitrogen and oxygen treatments. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011 , 374, 88-95	5.1	62
487	Synthesis, structure and applications of amorphous diamond. <i>Thin Solid Films</i> , 1991 , 206, 198-203	2.2	62
486	Codoping of aluminum and gallium with nitrogen in ZnO: A comparative first-principles investigation. <i>Physical Review B</i> , 2009 , 79,	3.3	58
485	Phosphine dissociation on the Si(001) surface. <i>Physical Review Letters</i> , 2004 , 93, 226102	7.4	58
484	Electron spin resonance study of amorphous hydrogenated carbon films. <i>Thin Solid Films</i> , 1983 , 108, 257-264	2.2	57

483	Titanium nitride/vanadium nitride alloy coatings: mechanical properties and adhesion characteristics. <i>Surface and Coatings Technology</i> , 2006 , 200, 3605-3611	4.4	56
482	The orientation dependence of elastic strain energy in cubic crystals and its application to the preferred orientation in titanium nitride thin films. <i>Journal of Physics Condensed Matter</i> , 1996 , 8, 5883-5890	1.8	56
481	Structural investigation of two carbon nitride solids produced by cathodic arc deposition and nitrogen implantation. <i>Journal of Applied Physics</i> , 1996 , 79, 6914-6919	2.5	56
480	Mechanisms for surface energy changes observed in plasma immersion ion implanted polyethylene: The roles of free radicals and oxygen-containing groups. <i>Polymer Degradation and Stability</i> , 2009 , 94, 638-646	4.7	55
479	Biological effects of electromagnetic fields--mechanisms for the effects of pulsed microwave radiation on protein conformation. <i>Journal of Theoretical Biology</i> , 2000 , 206, 291-8	2.3	55
478	Structural study of hydrogenated amorphous silicon-carbon alloys. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1986 , 54, 113-131		55
477	Electrodeless plasma thrusters for spacecraft: a review. <i>Plasma Science and Technology</i> , 2017 , 19, 083001	1.5	54
476	The linker-free covalent attachment of collagen to plasma immersion ion implantation treated polytetrafluoroethylene and subsequent cell-binding activity. <i>Biomaterials</i> , 2010 , 31, 2526-34	15.6	54
475	In vivo biocompatibility of a plasma-activated, coronary stent coating. <i>Biomaterials</i> , 2012 , 33, 7984-92	15.6	53
474	Nanocrystalline hexagonal diamond formed from glassy carbon. <i>Scientific Reports</i> , 2016 , 6, 37232	4.9	53
473	The attachment of catalase and poly-L-lysine to plasma immersion ion implantation-treated polyethylene. <i>Acta Biomaterialia</i> , 2007 , 3, 695-704	10.8	51
472	Characterization of a Ti vacuum arc and the structure of deposited Ti and TiN films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1987 , 5, 22-28	2.9	51
471	Elastic properties of a material composed of alternating layers of negative and positive Poisson's ratio. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 505, 111-115	5.3	50
470	A fibre optic dosimeter customised for brachytherapy. <i>Radiation Measurements</i> , 2007 , 42, 929-932	1.5	50
469	Electron-Diffraction Evidence for Threefold Coordination in Amorphous Hydrogenated Carbon Films. <i>Physical Review Letters</i> , 1983 , 51, 280-283	7.4	50
468	The structural phases of non-crystalline carbon prepared by physical vapour deposition. <i>Carbon</i> , 2009 , 47, 3263-3270	10.4	49
467	Plastic scintillation dosimetry: comparison of three solutions for the Cerenkov challenge. <i>Physics in Medicine and Biology</i> , 2011 , 56, 5805-21	3.8	49
466	Biocompatibility of calcium and phosphorus doped diamond-like carbon thin films synthesized by plasma immersion ion implantation and deposition. <i>Diamond and Related Materials</i> , 2006 , 15, 893-897	3.5	49

465	Thermodynamic theory for preferred orientation in materials prepared by energetic condensation. <i>Thin Solid Films</i> , 2001 , 382, 280-287	2.2	49
464	Cylindrical magnetron sputtering system for coating solar selective surfaces onto batches of tubes. <i>Journal of Vacuum Science and Technology</i> , 1979 , 16, 2105-2108		49
463	A prototype scintillation dosimeter customized for small and dynamic megavoltage radiation fields. <i>Physics in Medicine and Biology</i> , 2010 , 55, 1115-26	3.8	48
462	The radiobiological effect of intra-fraction dose-rate modulation in intensity modulated radiation therapy (IMRT). <i>Physics in Medicine and Biology</i> , 2008 , 53, 3567-78	3.8	48
461	Monte Carlo calculations of the properties of sputtered atoms at a substrate surface in a magnetron discharge. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1992 , 10, 455-461	2.9	48
460	Interactions of the directed plasma from a cathodic arc with electrodes and magnetic fields. <i>IEEE Transactions on Plasma Science</i> , 1996 , 24, 1291-1298	1.3	47
459	Photoresponse characteristics of n-type tetrahedral amorphous carbon/p-type Si heterojunction diodes. <i>Applied Physics Letters</i> , 1994 , 64, 2297-2299	3.4	47
458	Free radical kinetics in a plasma immersion ion implanted polystyrene: Theory and experiment. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012 , 280, 26-35	1.2	46
457	Direct current reactive sputtering Cr ₁ Cr ₂ O ₃ cermet solar selective surfaces for solar hot water applications. <i>Thin Solid Films</i> , 2009 , 517, 1601-1606	2.2	46
456	Acetylene plasma polymerized surfaces for covalent immobilization of dense bioactive protein monolayers. <i>Surface and Coatings Technology</i> , 2009 , 203, 1310-1316	4.4	46
455	Non-thermal effects in the microwave induced unfolding of proteins observed by chaperone binding. <i>Bioelectromagnetics</i> , 2008 , 29, 324-30	1.6	46
454	Electron-diffraction study of chemical ordering in glow-discharge a-Si _{1-x} C _x :H. <i>Physical Review B</i> , 1988 , 37, 8875-8881	3.3	46
453	Cell Adhesion to PEEK Treated by Plasma Immersion Ion Implantation and Deposition for Active Medical Implants. <i>Plasma Processes and Polymers</i> , 2012 , 9, 355-362	3.4	45
452	Oxygen incorporation in Ti ₂ AlC thin films. <i>Applied Physics Letters</i> , 2008 , 92, 064102	3.4	45
451	Structural colours through photonic crystals. <i>Physica B: Condensed Matter</i> , 2003 , 338, 182-185	2.8	45
450	The structure of boron-, phosphorus- and nitrogen-doped tetrahedral amorphous carbon deposited by cathodic arc. <i>Journal of Non-Crystalline Solids</i> , 1994 , 170, 46-50	3.9	45
449	The structure of highly tetrahedral amorphous diamond-like carbon. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1992 , 66, 155-169		45
448	Thermal dissociation and desorption of PH ₃ on Si(001): A reinterpretation of spectroscopic data. <i>Physical Review B</i> , 2006 , 74,	3.3	44

447	Effect of intrinsic stress on preferred orientation in AlN thin films. <i>Journal of Applied Physics</i> , 2004 , 95, 2130-2134	2.5	44
446	Mechanisms for the behavior of carbon films during annealing. <i>Physical Review B</i> , 2004 , 70,	3.3	44
445	A study of filter transport mechanisms in filtered cathodic vacuum arcs. <i>IEEE Transactions on Plasma Science</i> , 1996 , 24, 1165-1173	1.3	44
444	¹³ C NMR and FTIR study of thermal annealing of amorphous hydrogenated carbon. <i>Carbon</i> , 1993 , 31, 569-575	10.4	44
443	Substrate bias effects on the structural and electronic properties of tetrahedral amorphous carbon. <i>Physical Review B</i> , 1996 , 54, 14504-14510	3.3	43
442	Thickness-dependent stress in sputtered carbon films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1994 , 12, 727-732	2.9	43
441	Influence of dc bias voltage on the refractive index and stress of carbon-diamond films deposited from a CH ₄ /Ar rf plasma. <i>Journal of Applied Physics</i> , 1991 , 70, 5374-5379	2.5	43
440	Long term performance of evacuated tubular solar water heaters in Sydney, Australia. <i>Solar Energy</i> , 1984 , 32, 785-791	6.8	43
439	Characterization of small-field stereotactic radiosurgery beams with modern detectors. <i>Physics in Medicine and Biology</i> , 2013 , 58, 7595-608	3.8	42
438	Linker-free covalent attachment of the extracellular matrix protein tropoelastin to a polymer surface for directed cell spreading. <i>Acta Biomaterialia</i> , 2009 , 5, 3371-81	10.8	42
437	Raman spectroscopy study of DLC films prepared by RF plasma and filtered cathodic arc. <i>Surface and Coatings Technology</i> , 2007 , 201, 6734-6736	4.4	42
436	Extraction of structural information from measured transport properties of composites. <i>Applied Physics A: Solids and Surfaces</i> , 1982 , 29, 19-27		42
435	Clinical trials of a urethral dose measurement system in brachytherapy using scintillation detectors. <i>International Journal of Radiation Oncology Biology Physics</i> , 2011 , 79, 609-15	4	41
434	Control of stress and microstructure in cathodic arc deposited films. <i>IEEE Transactions on Plasma Science</i> , 2003 , 31, 939-944	1.3	41
433	Properties of TiN films deposited at low temperature in a new plasma-based deposition system. <i>Journal of Applied Physics</i> , 1996 , 80, 6279-6285	2.5	41
432	Effects of zirconium and nitrogen plasma immersion ion implantation on the electrochemical corrosion behavior of MgZRE alloy in simulated body fluid and cell culture medium. <i>Corrosion Science</i> , 2014 , 86, 239-251	6.8	40
431	Plasma-Treated Polyethylene Surfaces for Improved Binding of Active Protein. <i>Plasma Processes and Polymers</i> , 2007 , 4, 583-590	3.4	40
430	Elastic properties of Ti _n +1AlC _n and Ti _n +1AlN _n MAX phases. <i>Advanced Engineering Materials</i> , 2008 , 10, 935-938	3.5	40

429	Mechanical Properties of Plasma Immersion Ion Implanted PEEK for Bioactivation of Medical Devices. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 23029-40	9.5	39
428	Electronic structure models of phosphorus doped silicon. <i>Physical Review B</i> , 2009 , 79,	3.3	39
427	A unique form of light reflector and the evolution of signalling in Ovalipes (Crustacea: Decapoda: Portunidae). <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1998 , 265, 861-867	4.4	39
426	Gold, silver, chromium, and copper cermet selective surfaces for evacuated solar collectors. <i>Applied Physics Letters</i> , 1979 , 34, 25-28	3.4	39
425	Oxygen incorporation in Ti2AlC: Tuning of anisotropic conductivity. <i>Applied Physics Letters</i> , 2010 , 97, 073103	3.4	38
424	Childhood incidence of acute lymphoblastic leukaemia and exposure to broadcast radiation in Sydney--a second look. <i>Australian and New Zealand Journal of Public Health</i> , 1998 , 22, 360-7	2.3	38
423	Phosphine adsorption and dissociation on the Si(001) surface: An ab initio survey of structures. <i>Physical Review B</i> , 2005 , 72,	3.3	38
422	The Sea Mouse and the Photonic Crystal. <i>Australian Journal of Chemistry</i> , 2001 , 54, 241	1.2	38
421	Properties of ZrN x prepared by ion-assisted deposition. <i>Journal of Materials Science Letters</i> , 1990 , 9, 972-974		38
420	Hydrogenated carbon films produced by sputtering in argon-hydrogen mixtures. <i>Applied Optics</i> , 1982 , 21, 3615-7	1.7	38
419	Automated cell colony counting and analysis using the circular Hough image transform algorithm (CHiTA). <i>Physics in Medicine and Biology</i> , 2008 , 53, 5991-6008	3.8	37
418	Structural properties and nitrogen-loss characteristics in sputtered tungsten nitride films. <i>Thin Solid Films</i> , 2000 , 372, 257-264	2.2	37
417	Gap states, doping and bonding in tetrahedral amorphous carbon. <i>Diamond and Related Materials</i> , 1995 , 4, 637-640	3.5	37
416	Growth dynamics of aluminum nitride and aluminum oxide thin films synthesized by ion-assisted deposition. <i>Journal of Applied Physics</i> , 1988 , 63, 760-769	2.5	37
415	An interferometric investigation of the thermalization of copper atoms in a magnetron sputtering discharge. <i>Journal of Applied Physics</i> , 1986 , 59, 720-724	2.5	37
414	Graphitization of Glassy Carbon after Compression at Room Temperature. <i>Physical Review Letters</i> , 2018 , 120, 215701	7.4	37
413	Cell patterning via linker-free protein functionalization of an organic conducting polymer (polypyrrole) electrode. <i>Acta Biomaterialia</i> , 2012 , 8, 2538-48	10.8	36
412	Dose mapping of the rectal wall during brachytherapy with an array of scintillation dosimeters. <i>Medical Physics</i> , 2010 , 37, 2247-55	4.4	36

411	Nonvolatile memory effects in nitrogen doped tetrahedral amorphous carbon thin films. <i>Journal of Applied Physics</i> , 1998 , 84, 5647-5651	2.5	36
410	MD simulations of Ag film growth using the Lennard-Jones potential. <i>Journal of Physics Condensed Matter</i> , 1996 , 8, 8753-8762	1.8	36
409	Influence of ion assistance on the optical properties of MgF(2). <i>Applied Optics</i> , 1987 , 26, 1235-9	1.7	36
408	The structure and properties of ion-beam-synthesized boron nitride films. <i>Journal of Applied Physics</i> , 1988 , 64, 3980-3986	2.5	36
407	Percolation threshold in ultrathin titanium films determined by in situ spectroscopic ellipsometry. <i>Physical Review B</i> , 2004 , 70,	3.3	35
406	Electron diffraction from polycrystalline materials showing stress induced preferred orientation. <i>Journal of Applied Physics</i> , 1999 , 86, 230-236	2.5	35
405	Magnetic and spin properties of tetrahedral amorphous carbon. <i>Diamond and Related Materials</i> , 1995 , 4, 912-916	3.5	35
404	Optical properties and microstructure of thin silver films. <i>Optics Communications</i> , 1991 , 85, 70-82	2	35
403	Optical constants of amorphous hydrogenated carbon and silicon-carbon alloy films and their application in high temperature solar selective surfaces. <i>Solar Energy Materials and Solar Cells</i> , 1983 , 9, 113-126		35
402	Electron diffraction of amorphous thin films using PEELS. <i>Microscopy Microanalysis Microstructures</i> , 1991 , 2, 359-366		35
401	Controlled glow to arc transition in sputtering for high rate deposition of carbon films. <i>Diamond and Related Materials</i> , 2011 , 20, 68-74	3.5	34
400	Enhanced Autohesive Bonding of Polyetheretherketone (PEEK) for Biomedical Applications Using a Methane/Oxygen Plasma Treatment. <i>Plasma Processes and Polymers</i> , 2010 , 7, 1010-1021	3.4	34
399	Combined deposition and implantation in the cathodic arc for thick film preparation. <i>Surface and Coatings Technology</i> , 2001 , 136, 188-191	4.4	34
398	Ab initio simulation of structure in amorphous hydrogenated carbon. <i>Physical Review B</i> , 2000 , 62, 3071-3077	3.3	34
397	A mathematical framework for separating the direct and bystander components of cellular radiation response. <i>Acta Oncologica</i> , 2010 , 49, 1334-43	3.2	33
396	Covalently Bound Biomimetic Layers on Plasma Polymers with Graded Metallic Interfaces for in vivo Implants. <i>Plasma Processes and Polymers</i> , 2009 , 6, 658-666	3.4	33
395	Electromagnetic radiation at 835 MHz changes the morphology and inhibits proliferation of a human astrocytoma cell line. <i>Bioelectrochemistry</i> , 1997 , 43, 13-18		33
394	Water on silicon (001): C defects and initial steps of surface oxidation. <i>Physical Review B</i> , 2008 , 77,	3.3	33

393	Cathode spot phenomena in titanium vacuum arcs. <i>Journal of Applied Physics</i> , 1989 , 66, 505-512	2.5	33
392	Evaluation of corrosion resistance and cytocompatibility of graded metal carbon film on Ti and NiTi prepared by hybrid cathodic arc/glow discharge plasma-assisted chemical vapor deposition. <i>Corrosion Science</i> , 2015 , 97, 126-138	6.8	32
391	Formation of the MAX-phase oxycarbide Ti ₂ AlC _{1-x} O _x studied via electron energy-loss spectroscopy and first-principles calculations. <i>Physical Review B</i> , 2009 , 80,	3.3	31
390	Effects of exposure to electromagnetic radiation at 835 MHz on growth, morphology and secretory characteristics of a mast cell analogue, RBL-2H3. <i>Cell Biology International</i> , 1997 , 21, 427-39	4.5	31
389	Effect of B and the Si/C ratio on high-temperature stability of SiBCN materials. <i>Europhysics Letters</i> , 2006 , 76, 512-518	1.6	31
388	High dose-rate brachytherapy source localization: positional resolution using a diamond detector. <i>Physics in Medicine and Biology</i> , 2003 , 48, 2133-46	3.8	31
387	Modification of polymers by plasma-based ion implantation for biomedical applications. <i>Surface and Coatings Technology</i> , 2004 , 186, 239-244	4.4	31
386	Relation between microstructure and stress in titanium nitride films grown by plasma immersion ion implantation. <i>Journal of Applied Physics</i> , 2003 , 93, 4283-4288	2.5	31
385	Electron microscopy study on the grain-boundary precipitation during aging of Fe-10Ni-5Mn steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2003 , 34, 2421-2428	2.3	31
384	NMR evidence for strained carbon bonding in tetrahedral amorphous carbon. <i>Chemical Physics</i> , 1995 , 193, 167-172	2.3	31
383	Nanoindentation response of PEEK modified by mesh-assisted plasma immersion ion implantation. <i>Surface and Coatings Technology</i> , 2007 , 201, 7961-7969	4.4	30
382	Transmission of Cerenkov radiation in optical fibers. <i>Optics Letters</i> , 2007 , 32, 1205-7	3	30
381	Effect of ion modification of commonly used orthopedic materials on the attachment of human bone-derived cells. <i>Journal of Biomedical Materials Research Part B</i> , 1999 , 45, 345-54		30
380	Optical resonances of three-phase composites and anomalies in transmission. <i>Optics Communications</i> , 1995 , 117, 151-169	2	30
379	Properties of hydrogenated carbon films produced by reactive magnetron sputtering. <i>Solar Energy Materials and Solar Cells</i> , 1981 , 6, 97-106		30
378	The antiferroelectric transition in thiourea studied by thermal neutron scattering. <i>Journal of Physics C: Solid State Physics</i> , 1975 , 8, 1607-1619		30
377	The role of pulse length in target poisoning during reactive HiPIMS: application to amorphous HfO ₂ . <i>Plasma Sources Science and Technology</i> , 2015 , 24, 035015	3.5	29
376	Electron optical techniques for microstructural and compositional analysis of thin films. <i>Thin Solid Films</i> , 1990 , 193-194, 418-430	2.2	29

375	Directed cell attachment by tropoelastin on masked plasma immersion ion implantation treated PTFE. <i>Biomaterials</i> , 2011 , 32, 6710-8	15.6	28
374	Single hydrogen atoms on the Si(001) surface. <i>Physical Review B</i> , 2007 , 76,	3.3	28
373	Use of low energy and high frequency PBII during thin film deposition to achieve relief of intrinsic stress and microstructural changes. <i>Surface and Coatings Technology</i> , 2004 , 186, 21-28	4.4	28
372	Adherent carbon film deposition by cathodic arc with implantation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1995 , 13, 406-411	2.9	28
371	Orientation and conformation of anti-CD34 antibody immobilised on untreated and plasma treated polycarbonate. <i>Acta Biomaterialia</i> , 2015 , 19, 128-37	10.8	27
370	Phosphorus Doped silicon: mixed-atom pseudopotentials and dopant disorder effects. <i>Nanotechnology</i> , 2011 , 22, 065701	3.4	27
369	The time-dependent development of electric double-layers in saline solutions. <i>Journal Physics D: Applied Physics</i> , 2006 , 39, 937-943	3	27
368	A high-current pulsed cathodic vacuum arc plasma source. <i>Review of Scientific Instruments</i> , 2003 , 74, 4750-4754	2.7	27
367	Metal ion implantation using a filtered cathodic vacuum arc. <i>Journal of Applied Physics</i> , 2000 , 87, 4198-4204	2.9	26
366	Silver-magnesium fluoride cermet films. 2: Optical and electrical properties. <i>Applied Optics</i> , 1989 , 28, 2744-53	1.7	26
365	Plasma Polymer Surfaces Compatible with a CMOS Process for Direct Covalent Enzyme Immobilization. <i>Plasma Processes and Polymers</i> , 2009 , 6, 68-75	3.4	25
364	Surface adsorption and wetting properties of amorphous diamond-like carbon thin films for biomedical applications. <i>Thin Solid Films</i> , 2008 , 516, 5157-5161	2.2	25
363	Effect of sputtering-gas pressure on properties of silicon nitride films produced by helicon plasma sputtering. <i>Thin Solid Films</i> , 2001 , 384, 46-52	2.2	25
362	Ab initio study of structure in boron nitride, aluminum nitride and mixed aluminum boron nitride amorphous alloys. <i>Journal of Applied Physics</i> , 2000 , 88, 5028-5032	2.5	25
361	An electron diffraction study of amorphous hydrogenated germanium-carbon thin films. <i>Journal of Applied Physics</i> , 1990 , 68, 3194-3197	2.5	25
360	Bonding in a-Si _{1-x} C _x : H films studied by electron energy loss near edge structure. <i>Solid State Communications</i> , 1986 , 59, 325-329	1.6	25
359	Mixed-mode high-power impulse magnetron sputter deposition of tetrahedral amorphous carbon with pulse-length control of ionization. <i>Journal of Applied Physics</i> , 2016 , 119, 155303	2.5	25
358	The physics of confined flow and its application to water leaks, water permeation and water nanoflows: a review. <i>Reports on Progress in Physics</i> , 2016 , 79, 025901	14.4	24

357	Design of shallow acceptors in ZnO through early transition metals codoped with N acceptors. <i>Physical Review B</i> , 2011 , 83,	3.3	24
356	A comparison of the strength of autohesion of plasma treated amorphous and semi-crystalline PEEK films. <i>Polymers for Advanced Technologies</i> , 2011 , 22, 2496-2502	3.2	24
355	Electric field effects on adsorption/desorption of proteins and colloidal particles on a gold film observed using surface plasmon resonance. <i>Physica B: Condensed Matter</i> , 2007 , 394, 203-207	2.8	24
354	Phosphine dissociation and diffusion on Si(001) observed at the atomic scale. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 3173-9	3.4	24
353	Surface structure and sputtering in amorphous carbon thin films: a tight-binding study of film deposition. <i>Journal of Physics Condensed Matter</i> , 2002 , 14, 723-730	1.8	24
352	Trends in optical parameters and band structure with increasing hydrogenation of amorphous silicon. <i>Solid State Communications</i> , 1983 , 48, 189-193	1.6	24
351	Optical properties of dense regular cermet with relevance to selective solar absorbers. <i>Thin Solid Films</i> , 1979 , 57, 321-326	2.2	24
350	Memristor and selector devices fabricated from HfO ₂ -Nx. <i>Applied Physics Letters</i> , 2016 , 108, 143504	3.4	24
349	Resistive switching and transport characteristics of an all-carbon memristor. <i>Carbon</i> , 2018 , 136, 280-285	10.4	23
348	Combined influences of mechanical properties and surface roughness on the tribological properties of amorphous carbon coatings. <i>Wear</i> , 2006 , 260, 62-74	3.5	23
347	Raman characterisation of PIII multilayer carbon films. <i>Diamond and Related Materials</i> , 2004 , 13, 1422-1426	3.6	23
346	The importance of bias pulse rise time for determining shallow implanted dose in plasma immersion ion implantation. <i>Applied Physics Letters</i> , 2003 , 82, 1827-1829	3.4	23
345	Ohmic contact to nitrogen doped amorphous carbon films. <i>Surface and Coatings Technology</i> , 2005 , 198, 202-205	4.4	23
344	New plasma-assisted deposition technique using helicon activated reactive evaporation. <i>Review of Scientific Instruments</i> , 1995 , 66, 2908-2913	1.7	23
343	Selective nature of gold-black deposits. <i>Journal of the Optical Society of America</i> , 1976 , 66, 249		23
342	Reaction paths of phosphine dissociation on silicon (001). <i>Journal of Chemical Physics</i> , 2016 , 144, 014705	3.9	23
341	External magnetic field increases both plasma generation and deposition rate in HiPIMS. <i>Surface and Coatings Technology</i> , 2018 , 352, 671-679	4.4	22
340	Bio-Activation of Polyether Ether Ketone Using Plasma Immersion Ion Implantation: A Kinetic Model. <i>Plasma Processes and Polymers</i> , 2015 , 12, 180-193	3.4	22

339	van der Pauw method for measuring resistivity of a plane sample with distant boundaries. <i>Review of Scientific Instruments</i> , 2009 , 80, 075109	1.7	22
338	Cathodic arc co-deposition of highly oriented hexagonal Ti and Ti ₂ AlC MAX phase thin films. <i>Thin Solid Films</i> , 2010 , 519, 766-769	2.2	22
337	Plasma Activation and Self Bonding of PEEK for the Use in the Encapsulation of Medical Implants. <i>Plasma Processes and Polymers</i> , 2010 , 7, 866-875	3.4	22
336	Plasma immersion ion implantation treatment of polyethylene for enhanced binding of active horseradish peroxidase. <i>Journal of Biomedical Materials Research - Part A</i> , 2008 , 85, 605-10	5.4	22
335	A model for stress generation and stress relief mechanisms applied to as-deposited filtered cathodic vacuum arc amorphous carbon films. <i>Thin Solid Films</i> , 2005 , 482, 69-73	2.2	22
334	Ab initio simulations of nitrogen evolution in quenched CN _x and SiBCN amorphous materials. <i>Physical Review B</i> , 2005 , 72,	3.3	22
333	Dielectric properties and ferroelectric transitions of thiourea. <i>Journal of Physics C: Solid State Physics</i> , 1973 , 6, 767-773		22
332	Atomic layer deposition of Al ₂ O ₃ and Al ₂ O ₃ /TiO ₂ barrier coatings to reduce the water vapour permeability of polyetheretherketone. <i>Thin Solid Films</i> , 2015 , 591, 131-136	2.2	21
331	HiPIMS carbon coatings show covalent protein binding that imparts enhanced hemocompatibility. <i>Carbon</i> , 2018 , 139, 118-128	10.4	21
330	Real-time scintillation array dosimetry for radiotherapy: the advantages of photomultiplier detectors. <i>Medical Physics</i> , 2012 , 39, 1688-95	4.4	21
329	Cerenkov light spectrum in an optical fiber exposed to a photon or electron radiation therapy beam. <i>Applied Optics</i> , 2009 , 48, 3362-7	0.2	21
328	Electric probe measurements of high-voltage sheath collapse in cathodic arc plasmas due to surface charging of insulators. <i>IEEE Transactions on Plasma Science</i> , 2003 , 31, 438-443	1.3	21
327	Multilayered carbon films for tribological applications. <i>Diamond and Related Materials</i> , 2003 , 12, 178-184	3.5	21
326	Real-time verification of HDR brachytherapy source location: implementation of detector redundancy. <i>Physics in Medicine and Biology</i> , 2005 , 50, 319-27	3.8	21
325	. <i>Journal of Lightwave Technology</i> , 1993 , 11, 1793-1801	4	21
324	Optical properties of thin amorphous silicon and amorphous hydrogenated silicon films produced by ion beam techniques. <i>Thin Solid Films</i> , 1983 , 100, 141-148	2.2	21
323	Optical properties of a-Si and a-Si:H prepared by DC magnetron techniques. <i>Journal of Physics C: Solid State Physics</i> , 1983 , 16, 4933-4944		21
322	Evolution of target condition in reactive HiPIMS as a function of duty cycle: An opportunity for refractive index grading. <i>Journal of Applied Physics</i> , 2017 , 121, 171909	2.5	20

321	Synthesis of highly tetrahedral amorphous carbon by mixed-mode HiPIMS sputtering. <i>Journal Physics D: Applied Physics</i> , 2015 , 48, 442001	3	20
320	Can small field diode correction factors be applied universally?. <i>Radiotherapy and Oncology</i> , 2014 , 112, 442-6	5.3	20
319	Dynamic modeling of lung tumor motion during respiration. <i>Physics in Medicine and Biology</i> , 2011 , 56, 2999-3013	3.8	20
318	Production of amorphous carbon by plasma immersion ion implantation of polymers. <i>Diamond and Related Materials</i> , 2005 , 14, 1577-1582	3.5	20
317	Plasma immersion ion implantation using polymeric substrates with a sacrificial conductive surface layer. <i>Surface and Coatings Technology</i> , 2002 , 156, 332-337	4.4	20
316	Optical properties of chemically ordered a-Si _{1-x} C _x : H alloys. <i>Journal of Applied Physics</i> , 1989 , 65, 1694-1698	20	
315	Nonequilibrium route to nanodiamond with astrophysical implications. <i>Physical Review Letters</i> , 2012 , 108, 075503	7.4	19
314	Acetylene plasma coated surfaces for covalent immobilization of proteins. <i>Thin Solid Films</i> , 2009 , 517, 5343-5346	2.2	19
313	Correlation between film structures and potential limits for hydrogen and oxygen evolutions at a-C:N film electrochemical electrodes. <i>Carbon</i> , 2008 , 46, 663-670	10.4	19
312	Bonding statistics and electronic structure of novel SiBCN materials: Ab initio calculations and experimental verification. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2007 , 25, 1411	2.9	19
311	Correlation between stress and hardness in pulsed cathodic arc deposited titanium/vanadium nitride alloys. <i>Journal of Physics Condensed Matter</i> , 2004 , 16, 7947-7954	1.8	19
310	Influence of gas flow rate and entry point on ion charge, ion counts and ion energy distribution in a filtered cathodic arc. <i>Surface and Coatings Technology</i> , 2002 , 156, 110-114	4.4	19
309	Using ELNES with parallel EELS for differentiating between a-Si:X thin films. <i>Ultramicroscopy</i> , 1989 , 31, 217-221	3.1	19
308	Atomic-Scale Patterning of Arsenic in Silicon by Scanning Tunneling Microscopy. <i>ACS Nano</i> , 2020 , 14, 3316-3327	16.7	18
307	Influence of pH on yeast immobilization on polystyrene surfaces modified by energetic ion bombardment. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013 , 104, 145-52	6	18
306	Electronic structure of two interacting phosphorus doped layers in silicon. <i>Physical Review B</i> , 2013 , 87,	3.3	18
305	A new surface for immobilizing and maintaining the function of enzymes in a freeze-dried state. <i>Biomacromolecules</i> , 2009 , 10, 2577-83	6.9	18
304	Molecular dynamics simulation of the thermal spike in amorphous carbon thin films. <i>Diamond and Related Materials</i> , 2005 , 14, 921-927	3.5	18

303	Optical fiber design and the trapping of Cerenkov radiation. <i>Applied Optics</i> , 2006 , 45, 9151-9	1.7	18
302	Stress relief and texture formation in aluminium nitride by plasma immersion ion implantation. <i>Journal of Physics Condensed Matter</i> , 2004 , 16, 1751-1760	1.8	18
301	Properties of indium tin oxide films prepared by ion-assisted deposition. <i>Thin Solid Films</i> , 1986 , 137, 207-214		18
300	Microstructure of zirconium films deposited with ion assistance. <i>Journal of Materials Science</i> , 1987 , 22, 3725-3731	4.3	18
299	Dose enhancement and cytotoxicity of gold nanoparticles in colon cancer cells when irradiated with kilo- and mega-voltage radiation. <i>Bioengineering and Translational Medicine</i> , 2016 , 1, 94-102	14.8	18
298	In situ analysis of the structural transformation of glassy carbon under compression at room temperature. <i>Physical Review B</i> , 2019 , 99,	3.3	17
297	Depth-Resolved Structural and Compositional Characterization of Ion-Implanted Polystyrene that Enables Direct Covalent Immobilization of Biomolecules. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 16793-16803	3.8	17
296	Ion implantation treatment of beads for covalent binding of molecules: application to bioethanol production using thermophilic beta-glucosidase. <i>Enzyme and Microbial Technology</i> , 2014 , 54, 20-4	3.8	17
295	Autohesion of semi-crystalline PEEK near and under the glass transition temperature. <i>Applied Surface Science</i> , 2013 , 282, 571-577	6.7	17
294	Substrate orientation effects on the nucleation and growth of the Mn ₂ AX _n phase Ti ₂ AlC. <i>Journal of Applied Physics</i> , 2011 , 109, 014903	2.5	17
293	Microstructural investigation supporting an abrupt stress induced transformation in amorphous carbon films. <i>Journal of Applied Physics</i> , 2009 , 105, 084302	2.5	17
292	Mechanisms for covalent immobilization of horseradish peroxidase on ion-beam-treated polyethylene. <i>Scientifica</i> , 2012 , 2012, 126170	2.6	17
291	The effect of argon on the structure of amorphous SiBCN materials: an experimental and ab initio study. <i>Journal of Physics Condensed Matter</i> , 2006 , 18, 2337-2348	1.8	17
290	Wannier function analysis of silicon-carbon alloys. <i>Journal of Physics Condensed Matter</i> , 2003 , 15, 165-173	1.8	17
289	Synthesis and in-situ ellipsometric monitoring of Ti/C nanostructured multilayers using a high-current, dual source pulsed cathodic arc. <i>Thin Solid Films</i> , 2005 , 482, 133-137	2.2	17
288	Oxygen-induced amorphous structure of tungsten thin films. <i>Applied Physics Letters</i> , 1999 , 75, 2211-2213	3.4	17
287	Effect of ion energy on the optical and structural properties of SiO ₂ grown by plasma-enhanced chemical-vapor deposition. <i>Journal of Applied Physics</i> , 1996 , 80, 4707-4714	2.5	17
286	Optical constants and microstructure of stainless steel-carbon films prepared by reactive magnetron sputtering. <i>Solar Energy Materials and Solar Cells</i> , 1982 , 6, 455-466		17

285	Small field detector correction factors: effects of the flattening filter for Elekta and Varian linear accelerators. <i>Journal of Applied Clinical Medical Physics</i> , 2016 , 17, 223-235	2.3	17
284	n-type doping of germanium from phosphine: early stages resolved at the atomic level. <i>Physical Review Letters</i> , 2012 , 109, 076101	7.4	16
283	Optimizing efficiency of Ti ionized deposition in HIPIMS. <i>Plasma Sources Science and Technology</i> , 2011 , 20, 035021	3.5	16
282	Linker-free covalent thermophilic α -glucosidase functionalized polymeric surfaces. <i>Journal of Materials Chemistry</i> , 2011 , 21, 17832		16
281	Semiconductor properties and redox responses at a-C:N thin film electrochemical electrodes. <i>Diamond and Related Materials</i> , 2009 , 18, 1211-1217	3.5	16
280	Protein immobilization capacity and covalent binding coverage of pulsed plasma polymer surfaces. <i>Applied Surface Science</i> , 2010 , 256, 4984-4989	6.7	16
279	Energetic deposition of carbon clusters with preferred orientation using a new mixed mode cathodic arc sputtering process. <i>Carbon</i> , 2010 , 48, 918-921	10.4	16
278	Effect of implanted argon on hardness of novel magnetron sputtered SiBCN materials: experiments and ab initio simulations. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 196228	1.8	16
277	Properties of tetrahedral amorphous carbon films deposited in a filtered cathodic arc in the presence of hydrogen. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1994 , 69, 1121-1131		16
276	Plasma ion implantation enabled bio-functionalization of PEEK improves osteoblastic activity. <i>APL Bioengineering</i> , 2018 , 2, 026109	6.6	16
275	Plasma treatments of dressings for wound healing: a review. <i>Biophysical Reviews</i> , 2017 , 9, 895-917	3.7	15
274	Comparison on protein adsorption properties of diamond-like carbon and nitrogen-containing plasma polymer surfaces. <i>Thin Solid Films</i> , 2012 , 520, 3021-3025	2.2	15
273	A pulsed cathodic arc spacecraft propulsion system. <i>Plasma Sources Science and Technology</i> , 2009 , 18, 045005	3.5	15
272	The time-dependent development of electric double-layers in pure water at metal electrodes: the effect of an applied voltage on the local pH. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012 , 468, 18-34	2.4	15
271	Optimal coupling of light from a cylindrical scintillator into an optical fiber. <i>Applied Optics</i> , 2007 , 46, 397-404		15
270	Nanosecond responses of proteins to ultra-high temperature pulses. <i>Biophysical Journal</i> , 2006 , 91, L66-82.9		15
269	Flat-topped broadband rugate filters. <i>Applied Optics</i> , 2006 , 45, 7841-50	1.7	15
268	Raman spectra of partially oriented sp ² carbon films: Experimental and modelled. <i>Vibrational Spectroscopy</i> , 2006 , 41, 232-239	2.1	15

267	Micro-arcng in radio frequency plasmas. <i>Journal Physics D: Applied Physics</i> , 2004 , 37, 2871-2875	3	15
266	PBII deposition of thick carbon coatings from a cathodic arc plasma. <i>Surface and Coatings Technology</i> , 2002 , 156, 143-148	4.4	15
265	Carbon coating of Ti-6Al-4V for reduced wear in combined impact and sliding applications. <i>Tribology International</i> , 2003 , 36, 873-882	4.9	15
264	Breakdown mechanism of Al ₂ O ₃ based metal-to-metal antifuses. <i>Solid-State Electronics</i> , 2000 , 44, 1557-1562	15	15
263	Thermodynamic theory for preferred orientation in carbon and cubic BN. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1998 , 16, 2733-2734	2.9	15
262	Optical constants of amorphous hydrogenated germanium thin films. <i>Applied Optics</i> , 1988 , 27, 3344-50	1.7	15
261	Production of solar absorbing cermet films by dual cathode d.c. magnetron sputtering. <i>Thin Solid Films</i> , 1979 , 62, 317-325	2.2	15
260	The dc sputter coating of solar-selective surfaces onto tubes. <i>Journal of Vacuum Science and Technology</i> , 1976 , 13, 1073-1075		15
259	Recent progress and future prospects of perovskite tandem solar cells. <i>Applied Physics Reviews</i> , 2021 , 8, 041307	17.3	15
258	Cancer treatment with gas plasma and with gas plasma-activated liquid: positives, potentials and problems of clinical translation. <i>Biophysical Reviews</i> , 2020 , 12, 989-1006	3.7	15
257	Covalent immobilization of enzymes and yeast: Towards a continuous simultaneous saccharification and fermentation process for cellulosic ethanol. <i>Biomass and Bioenergy</i> , 2015 , 81, 234-241	5.3	14
256	Enhanced Water Vapor Flow in Silica Microchannels: The Effect of Adsorbed Water on Tangential Momentum Accommodation. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 22072-22079	3.8	14
255	Cluster of differentiation antibody microarrays on plasma immersion ion implanted polycarbonate. <i>Materials Science and Engineering C</i> , 2014 , 35, 434-40	8.3	14
254	Optimisation of exposure conditions for in vitro radiobiology experiments. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2012 , 35, 151-7	1.9	14
253	Diffusion pathways of phosphorus atoms on silicon (001). <i>Physical Review B</i> , 2009 , 79,	3.3	14
252	Ion-implanted polytetrafluoroethylene enhances <i>Saccharomyces cerevisiae</i> biofilm formation for improved immobilization. <i>Journal of the Royal Society Interface</i> , 2012 , 9, 2923-35	4.1	14
251	Direct Evidence of Covalent Immobilisation of Microperoxidase-11 on Plasma Polymer Surfaces. <i>Plasma Processes and Polymers</i> , 2010 , 7, 708-714	3.4	14
250	Amorphous and crystalline phases in thermal quench simulations of alumina. <i>Journal of Chemical Physics</i> , 2007 , 126, 204709	3.9	14

249	Accurate determination of optical and electronic properties of ultra-thin silver films for biosensor applications. <i>Sensors and Actuators B: Chemical</i> , 2005 , 109, 146-152	8.5	14
248	Defect-induced dimer pinning on the Si(0 0 1) surface. <i>Surface Science</i> , 2005 , 587, 185-192	1.8	14
247	Neutron and Raman study of the lattice dynamics of deuterated thiourea. <i>Journal of Physics C: Solid State Physics</i> , 1975 , 8, 2003-2010		14
246	The shear-driven transformation mechanism from glassy carbon to hexagonal diamond. <i>Carbon</i> , 2019 , 142, 475-481	10.4	14
245	Electric field assisted ion exchange of silver in soda-lime glass: A study of ion depletion layers and interactions with potassium. <i>Journal of Applied Physics</i> , 2019 , 125, 175104	2.5	13
244	Temperature Activated Diffusion of Radicals through Ion Implanted Polymers. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 26340-5	9.5	13
243	Molecular adsorption on silicon (001): A systematic evaluation of size effects in slab and cluster models. <i>AIP Advances</i> , 2013 , 3, 042117	1.5	13
242	A combinatorial comparison of DC and high power impulse magnetron sputtered Cr ₂ AlC. <i>Surface and Coatings Technology</i> , 2014 , 259, 746-750	4.4	13
241	Free Radicals Generated by Ion Bombardment of a Semi-Crystalline PEEK Surface. <i>Plasma Processes and Polymers</i> , 2012 , 9, 174-179	3.4	13
240	Carbon diffusion in alumina from carbon and Ti ₂ AlC thin films. <i>Journal of Applied Physics</i> , 2011 , 109, 083503	5.3	13
239	Free radicals created by plasmas cause autohesive bonding in polymers. <i>Applied Physics Letters</i> , 2011 , 98, 211504	3.4	13
238	The origin of preferred orientation during carbon film growth. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 225003	1.8	13
237	Importance of charging in atomic resolution scanning tunneling microscopy: Study of a single phosphorus atom in a Si(001) surface. <i>Physical Review B</i> , 2006 , 74,	3.3	13
236	An efficient ab initio calculation of powder diffraction intensity using Debye's equation. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2001 , 57, 739-40		13
235	The application of the cathodic arc to plasma assisted chemical vapor deposition of carbon. <i>Journal of Applied Physics</i> , 1996 , 79, 1563-1568	2.5	13
234	Selective absorber design. <i>Solar Energy Materials and Solar Cells</i> , 1980 , 2, 395-401		13
233	Far-infrared transmission spectrum of thiourea. <i>Solid State Communications</i> , 1970 , 8, 2059-2061	1.6	13
232	Grid therapy using high definition multileaf collimators: realizing benefits of the bystander effect. <i>Acta Oncologica</i> , 2017 , 56, 1048-1059	3.2	12

231	Dosimetric consequences of gold nanoparticle clustering during photon irradiation. <i>Medical Physics</i> , 2017 , 44, 6560-6569	4.4	12
230	Carbon films deposited by mixed-mode high power impulse magnetron sputtering for high wear resistance: The role of argon incorporation. <i>Thin Solid Films</i> , 2019 , 688, 137353	2.2	12
229	Single Step Plasma Process for Covalent Binding of Antimicrobial Peptides on Catheters To Suppress Bacterial Adhesion.. <i>ACS Applied Bio Materials</i> , 2019 , 2, 5739-5748	4.1	12
228	Scintillation dosimeter arrays using air core light guides: simulation and experiment. <i>Physics in Medicine and Biology</i> , 2010 , 55, 3401-15	3.8	12
227	Ion implantation induced phase transformation in carbon and boron nitride thin films. <i>Diamond and Related Materials</i> , 2005 , 14, 1395-1401	3.5	12
226	Control of stress and delamination in single and multi-layer carbon thin films prepared by cathodic arc and RF plasma deposition and implantation. <i>Surface and Coatings Technology</i> , 2006 , 200, 6405-6408	4.4	12
225	Intrinsic stress induced by substrate bias in amorphous hydrogenated silicon thin films. <i>Surface and Coatings Technology</i> , 2005 , 198, 156-160	4.4	12
224	The structure and annealing properties of multilayer carbon films. <i>Surface and Coatings Technology</i> , 2005 , 198, 217-222	4.4	12
223	An XPS study of chemical order in hydrogenated amorphous silicon-carbon alloy films. <i>Physica Status Solidi (B): Basic Research</i> , 1989 , 152, 475-480	1.3	12
222	Twin structures, transformation and symmetry of superconducting Y 1Ba2Cu3O7 δ , observed by transmission electron microscopy. <i>Philosophical Magazine Letters</i> , 1988 , 57, 157-163	1	12
221	Small field correction factors for the IBA Razor. <i>Physica Medica</i> , 2016 , 32, 1025-9	2.7	12
220	Science of Water Leaks: Validated Theory for Moisture Flow in Microchannels and Nanochannels. <i>Langmuir</i> , 2015 , 31, 11740-7	4	11
219	CelB and α -glucosidase immobilization for carboxymethyl cellulose hydrolysis. <i>RSC Advances</i> , 2013 , 3, 23604	3.7	11
218	Analytic analysis on asymmetrical micro arcing in high plasma potential RF plasma systems. <i>Plasma Sources Science and Technology</i> , 2006 , 15, 99-104	3.5	11
217	Application of the heat equation to the calculation of temperature rises from pulsed microwave exposure. <i>Journal of Theoretical Biology</i> , 2003 , 222, 403-5	2.3	11
216	A novel pin-on-apparatus. <i>Wear</i> , 2003 , 254, 111-119	3.5	11
215	Optimizing the triggering mode for stable operation of a pulsed cathodic arc deposition system. <i>Plasma Sources Science and Technology</i> , 2003 , 12, 508-512	3.5	11
214	Determination of the equilibrium ion sheath in the drifting plasma by numerical Simulation. <i>IEEE Transactions on Plasma Science</i> , 2003 , 31, 1044-1051	1.3	11

213	Electrical conductivity as a measure of the continuity of titanium and vanadium thin films. <i>Thin Solid Films</i> , 2005 , 474, 341-345	2.2	11
212	Interferometric measurements of the energy of sputtered copper atoms in a magnetron discharge. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993 , 11, 2758-2764	2.9	11
211	Gas-plasma interactions in a filtered cathodic arc. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1992 , 10, 3493-3498	2.9	11
210	Covalent linker-free immobilization of conjugatable oligonucleotides on polypropylene surfaces. <i>RSC Advances</i> , 2016 , 6, 83328-83336	3.7	11
209	A simulation of gas flow: The dependence of the tangential momentum accommodation coefficient on molecular mass. <i>Physics of Fluids</i> , 2016 , 28, 097101	4.4	11
208	The composition, structure and properties of four different glassy carbons. <i>Journal of Non-Crystalline Solids</i> , 2019 , 522, 119561	3.9	10
207	Influence of nitrogen-related defects on optical and electrical behaviour in HfO ₂ /N _x deposited by high-power impulse magnetron sputtering. <i>Applied Physics Letters</i> , 2015 , 107, 112903	3.4	10
206	Correlation of film structure and molecular oxygen reduction at nitrogen doped amorphous carbon thin film electrochemical electrodes. <i>Diamond and Related Materials</i> , 2009 , 18, 1102-1108	3.5	10
205	Cracking of titanium nitride films grown on polycarbonate. <i>Surface and Coatings Technology</i> , 2007 , 201, 5596-5600	4.4	10
204	Doping and STM tip-induced changes to single dangling bonds on Si(0 0 1). <i>Surface Science</i> , 2007 , 601, 4036-4040	1.8	10
203	A novel method for thickness profile control in RF PECVD deposition on large area substrates. <i>Surface and Coatings Technology</i> , 2006 , 200, 4339-4344	4.4	10
202	Practical Plasma Immersion Ion Implantation for Stress Regulation and Treatment of Insulators. <i>Contributions To Plasma Physics</i> , 2004 , 44, 465-471	1.4	10
201	The mechanism of light reflectance in silverfish. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2001 , 457, 511-518	2.4	10
200	Time-dependent phenomena in plasma-assisted chemical vapor deposition of rugate optical films. <i>Applied Optics</i> , 1995 , 34, 5659-64	1.7	10
199	Duty cycle control in reactive high-power impulse magnetron sputtering of hafnium and niobium. <i>Journal Physics D: Applied Physics</i> , 2016 , 49, 245201	3	10
198	A review of in vitro experimental evidence for the effect of spatial and temporal modulation of radiation dose on response. <i>Acta Oncologica</i> , 2010 , 49, 1344-53	3.2	9
197	. <i>IEEE Transactions on Plasma Science</i> , 2009 , 37, 365-368	1.3	9
196	Energetic deposition of carbon in a cathodic vacuum arc with a biased mesh. <i>Journal of Applied Physics</i> , 2011 , 109, 073309	2.5	9

195	Changes in lung tumor shape during respiration. <i>Physics in Medicine and Biology</i> , 2012 , 57, 919-35	3.8	9
194	Real-time monitoring and diagnosis of scintillation dosimeters using an ultraviolet light emitting diode. <i>Physics in Medicine and Biology</i> , 2008 , 53, 2303-12	3.8	9
193	Characteristics of phosphorus-doped diamond-like carbon films synthesized by plasma immersion ion implantation and deposition (PIII and D). <i>Surface and Coatings Technology</i> , 2007 , 201, 6643-6646	4.4	9
192	Reducing Water Permeability while Maintaining Transparency of PET: A Plasma Immersion Ion Implantation Study. <i>Plasma Processes and Polymers</i> , 2008 , 5, 834-839	3.4	9
191	The origins of self-bias on dielectric substrates in RF plasma processing. <i>Surface and Coatings Technology</i> , 2006 , 200, 3670-3674	4.4	9
190	Disturbance of a Langmuir probe at the steady-State sheath boundary in a drifting plasma. <i>IEEE Transactions on Plasma Science</i> , 2004 , 32, 422-428	1.3	9
189	A comparative study of the on-off switching behavior of metal-insulator-metal antifuses. <i>IEEE Electron Device Letters</i> , 2000 , 21, 295-297	4.4	9
188	Applications of tetrahedral amorphous carbon in limited volatility memory and in field programmable gate arrays. <i>Diamond and Related Materials</i> , 2001 , 10, 230-233	3.5	9
187	Use of in situ ellipsometry to observe phase transitions during boron nitride thin film deposition. <i>Surface and Coatings Technology</i> , 1996 , 81, 72-78	4.4	9
186	Atmospheric Pressure Plasma Jet Treatment of Polymers Enables Reagent-Free Covalent Attachment of Biomolecules for Bioprinting. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 38730-38743	9.5	9
185	Sensory gating in bilayer amorphous carbon memristors. <i>Nanoscale</i> , 2018 , 10, 20272-20278	7.7	9
184	Light-gated amorphous carbon memristors with indium-free transparent electrodes. <i>Carbon</i> , 2019 , 152, 59-65	10.4	8
183	Graded metal carbon protein binding films prepared by hybrid cathodic arc glow discharge plasma assisted chemical vapor deposition. <i>Surface and Coatings Technology</i> , 2015 , 265, 222-234	4.4	8
182	Nanoscale Capillary Flows in Alumina: Testing the Limits of Classical Theory. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 2647-52	6.4	8
181	Optimizing HiPIMS pressure for deposition of high-k (k = 18.3) amorphous HfO ₂ . <i>Applied Surface Science</i> , 2016 , 365, 336-341	6.7	8
180	Models for the bystander effect in gradient radiation fields: Range and signalling type. <i>Journal of Theoretical Biology</i> , 2018 , 455, 16-25	2.3	8
179	Cell surface antigen profiling using a novel type of antibody array immobilised to plasma ion-implanted polycarbonate. <i>Cellular and Molecular Life Sciences</i> , 2014 , 71, 3841-57	10.3	8
178	An energy landscape for carbon network solids. <i>Carbon</i> , 2013 , 63, 416-422	10.4	8

177	Structural Analysis and Protein Functionalization of Electroconductive Polypyrrole Films Modified by Plasma Immersion Ion Implantation. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 2247-2258	5.5	8
176	Tropoelastin Switch and Modulated Endothelial Cell Binding to PTFE. <i>BioNanoScience</i> , 2011 , 1, 123-127	3.4	8
175	Study of adhesion of TiN grown on a polymer substrate. <i>Surface and Coatings Technology</i> , 2007 , 201, 6742-6744	4.4	8
174	Dark field microscopy for diffraction analysis of amorphous carbon solids. <i>Journal of Non-Crystalline Solids</i> , 2005 , 351, 413-417	3.9	8
173	Microarcing instability in RF PECVD plasma system. <i>Surface and Coatings Technology</i> , 2005 , 198, 379-383	4.4	8
172	The effect of phase difference between powered electrodes on RF plasmas. <i>Plasma Sources Science and Technology</i> , 2005 , 14, 407-411	3.5	8
171	Cathodic arc ablation as a new method of high-Tc superconductor deposition. <i>Physica C: Superconductivity and Its Applications</i> , 1992 , 197, 147-150	1.3	8
170	Applications of the near-edge and low-loss fine structure in the analysis of diamond. <i>Ultramicroscopy</i> , 1989 , 28, 43-46	3.1	8
169	Electron energy-loss study of bonding in amorphous silicon-carbon alloy films prepared with hydrogen dilution. <i>Applied Physics Letters</i> , 1988 , 53, 2284-2286	3.4	8
168	Electron diffraction study of the structure of boron-and phosphorus-doped hydrogenated amorphous silicon. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1988 , 57, 753-761		8
167	DC magnetron glow discharge amorphous silicon. <i>Solar Energy Materials and Solar Cells</i> , 1984 , 11, 45-56		8
166	In-line production system for sputter deposition of graded index solar absorbing films. <i>Journal of Vacuum Science and Technology</i> , 1981 , 19, 93-95		8
165	Predator-prey dynamics stabilised by nonlinearity explain oscillations in dust-forming plasmas. <i>Scientific Reports</i> , 2016 , 6, 24040	4.9	7
164	Plasma immersion ion implantation of a two-phase blend of polysulfone and polyvinylpyrrolidone. <i>Materials and Design</i> , 2016 , 97, 381-391	8.1	7
163	Revisiting Maxwell's accommodation coefficient: A study of nitrogen flow in a silica microtube across all flow regimes. <i>Annals of Physics</i> , 2014 , 351, 828-836	2.5	7
162	An integrated solution for rapid biosensing with robust linker free covalent binding surfaces. <i>Biosensors and Bioelectronics</i> , 2013 , 42, 447-52	11.8	7
161	Small field in-air output factors: the role of miniphantom design and dosimeter type. <i>Medical Physics</i> , 2014 , 41, 021723	4.4	7
160	Ion energy measurements during plasma immersion ion implantation of an insulator. <i>Plasma Sources Science and Technology</i> , 2010 , 19, 045002	3.5	7

159	Gas permeability reduction in PEEK film: Comparison of tetrahedral amorphous carbon and titanium nanofilm coatings. <i>Journal of Membrane Science</i> , 2011 , 378, 265-271	9.6	7
158	Production of highly ionized species in high-current pulsed cathodic arcs. <i>Applied Physics Letters</i> , 2010 , 96, 221501	3.4	7
157	New developments in processing cathodic arc plasmas. <i>IEEE Transactions on Plasma Science</i> , 1997 , 25, 652-659	1.3	7
156	The effect of plasma immersion ion implantation on the contact pressure and composition of titanium nitride thin films. <i>Surface and Coatings Technology</i> , 2006 , 201, 396-400	4.4	7
155	Simulation of a semitransparent conducting mesh electrode for plasma immersion ion implantation. <i>Physics of Plasmas</i> , 2005 , 12, 093507	2.1	7
154	dc magnetron production of amorphous silicon solar cells. <i>Journal of Applied Physics</i> , 1984 , 56, 2356-2361	5	7
153	A HiPIMS plasma source with a magnetic nozzle that accelerates ions: application in a thruster. <i>EPJ Applied Physics</i> , 2016 , 76, 30801	1.1	7
152	A centre-triggered magnesium fuelled cathodic arc thruster uses sublimation to deliver a record high specific impulse. <i>Applied Physics Letters</i> , 2016 , 109, 094101	3.4	7
151	Antireflection coating of barriers to enhance electron tunnelling: exploring the matter wave analogy of superluminal optical phase velocity. <i>Scientific Reports</i> , 2017 , 7, 12772	4.9	6
150	Tin oxide artificial synapses for low power temporal information processing. <i>Nanotechnology</i> , 2019 , 30, 325201	3.4	6
149	Hidden stressors in the clonogenic assay used in radiobiology experiments. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2011 , 34, 345-50	1.9	6
148	The angular dependence and effective point of measurement of a cylindrical scintillation dosimeter with and without a radio-opaque marker for brachytherapy. <i>Physics in Medicine and Biology</i> , 2009 , 54, 2217-27	3.8	6
147	Fuel Selection for Pulsed Cathodic Arc Thrusters. <i>Journal of Propulsion and Power</i> , 2012 , 28, 218-221	1.8	6
146	Optimizing filter efficiency in pulsed cathodic vacuum arcs operating at high currents. <i>Plasma Sources Science and Technology</i> , 2009 , 18, 045007	3.5	6
145	Detecting and exploring partially unfolded states of proteins using a sensor with chaperone bound to its surface. <i>Biosensors and Bioelectronics</i> , 2008 , 24, 969-75	11.8	6
144	Single P and As dopants in the Si(001) surface. <i>Journal of Chemical Physics</i> , 2007 , 127, 184706	3.9	6
143	Characterization of cathodic arc deposited titanium aluminium nitride films prepared using plasma immersion ion implantation. <i>Journal of Physics Condensed Matter</i> , 2005 , 17, 2791-2800	1.8	6
142	Numerical simulation of metal plasma-immersion ion implantation and deposition on a cone. <i>Journal of Applied Physics</i> , 2004 , 96, 6045-6052	2.5	6

141	New technology for PACVD. <i>Surface and Coatings Technology</i> , 1996 , 82, 326-333	4.4	6
140	Neutron scattering studies of the structure of a highly tetrahedral form of amorphous carbon. <i>Journal of Non-Crystalline Solids</i> , 1992 , 150, 126-131	3.9	6
139	Light emission from a titanium vacuum arc using Fizeau interferometry with parallel detection. <i>Applied Optics</i> , 1990 , 29, 5145-50	1.7	6
138	Accuracy of optical data derived from electron energy loss spectra by kramers-krönig analysis. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1987 , 43, 53-59	1.7	6
137	External magnetic field guiding in HiPIMS to control sp ³ fraction of tetrahedral amorphous carbon films. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 045002	3	6
136	Plasma processing of PDMS based spinal implants for covalent protein immobilization, cell attachment and spreading. <i>Journal of Materials Science: Materials in Medicine</i> , 2018 , 29, 178	4.5	6
135	The behaviour of arcs in carbon mixed-mode high-power impulse magnetron sputtering. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 145205	3	5
134	Temperature sensitivity and short-term memory in electroforming-free low power carbon memristors. <i>Applied Physics Letters</i> , 2019 , 114, 163504	3.4	5
133	The mechanical properties of energetically deposited non-crystalline carbon thin films. <i>Carbon</i> , 2016 , 98, 391-396	10.4	5
132	Quantifying plasma immersion ion implantation of insulating surfaces in a dielectric barrier discharge: how to control the dose. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2018 , 474, 20180263	2.4	5
131	Co-deposition of band-gap tuned Zn _{1-x} Mg _x O using high impulse power- and dc-magnetron sputtering. <i>Journal Physics D: Applied Physics</i> , 2015 , 48, 135301	3	5
130	The influence of deposition rate on the stress and microstructure of AlN films deposited from a filtered cathodic vacuum arc. <i>Thin Solid Films</i> , 2011 , 519, 3573-3577	2.2	5
129	Optimal process parameters for thermoplastic polyetheretherketone joints fabricated using transmission laser welding and Lumogen® IR absorptive pigment. <i>Journal of Laser Applications</i> , 2011 , 23, 012003	2.1	5
128	Optimization of temporal dose modulation: comparison of theory and experiment. <i>Medical Physics</i> , 2012 , 39, 3181-8	4.4	5
127	Single Phosphorus Atoms in Si(001): Doping-Induced Charge Transfer into Isolated Si Dangling Bonds. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 6428-6433	3.8	5
126	The microstructure and stability of Al ₂ O ₃ /AlN multilayered films. <i>Journal of Applied Physics</i> , 2006 , 100, 013504	4.5	5
125	A technique for microsecond heating and cooling of a thin (submicron) biological sample. <i>European Biophysics Journal</i> , 2002 , 31, 378-82	1.9	5
124	Wannier function analysis of tetrahedral amorphous networks. <i>Diamond and Related Materials</i> , 2003 , 12, 2026-2031	3.5	5

123	Ab initio studies of amorphous carbon films. <i>Surface and Coatings Technology</i> , 2005 , 198, 212-216	4.4	5
122	Enhancement of microarcing at a grounded chamber wall by nonvanishing ion sheath in a radio-frequency capacitive discharged plasma. <i>Applied Physics Letters</i> , 2005 , 87, 181501	3.4	5
121	Electric field control of plasma and macroparticles in cathodic arc deposition as a practical alternative to magnetic fields in ducts. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996 , 14, 3059-3064	2.9	5
120	Molecular dynamics study of ion impact phenomena. <i>Journal of Physics Condensed Matter</i> , 1994 , 6, 7833-7846	1.846	5
119	Smooth thin film C/diamond membranes with controllable optical band gaps. <i>Diamond and Related Materials</i> , 1992 , 1, 612-618	3.5	5
118	Prediction of reflectance of metal carbon solar absorbing films for their enhancement by annealing. <i>Solar Energy Materials and Solar Cells</i> , 1982 , 7, 75-84		5
117	Atomic-scale observation and control of the reaction of phosphine with silicon. <i>E-Journal of Surface Science and Nanotechnology</i> , 2006 , 4, 609-613	0.7	5
116	The importance of total hemispherical emittance in evaluating performance of building-integrated silicon and perovskite solar cells in insulated glazings. <i>Applied Energy</i> , 2020 , 276, 115490	10.7	5
115	Investigation of Room Temperature Formation of the Ultra-Hard Nanocarbons Diamond and Lonsdaleite. <i>Small</i> , 2020 , 16, e2004695	11	5
114	Pulsed external magnetic fields increase the deposition rate in reactive HiPIMS while preserving stoichiometry: An application to amorphous HfO ₂ . <i>Journal of Applied Physics</i> , 2016 , 120, 103301	2.5	5
113	Linker-protein G mediated functionalization of polystyrene-encapsulated upconversion nanoparticles for rapid gene assay using convective PCR. <i>Mikrochimica Acta</i> , 2019 , 186, 346	5.8	4
112	A feedback model of magnetron sputtering plasmas in HIPIMS. <i>Plasma Sources Science and Technology</i> , 2015 , 24, 025018	3.5	4
111	The mechanical response of glassy carbon recovered from high pressure. <i>Journal of Applied Physics</i> , 2020 , 127, 145105	2.5	4
110	Profiling of the secretome of human cancer cells: preparation of supernatant for proteomic analysis. <i>Electrophoresis</i> , 2014 , 35, 2626-33	3.6	4
109	Sticky nano-thin films for the adhesion of polymers. <i>Applied Surface Science</i> , 2013 , 285, 893-899	6.7	4
108	Electronic structure of phosphorus and arsenic doped germanium. <i>Physical Review B</i> , 2013 , 88,	3.3	4
107	Ellipsometry analysis of conformational change of immobilized protein monolayer on plasma polymer surfaces. <i>Thin Solid Films</i> , 2011 , 519, 2968-2971	2.2	4
106	Fizeau interferometer system for fast high resolution studies of spectral line shapes. <i>Review of Scientific Instruments</i> , 2011 , 82, 023105	1.7	4

105	Deposition of a-C:N films and evaluation of their robustness in electrochemical applications. <i>Thin Solid Films</i> , 2008 , 516, 5231-5235	2.2	4
104	Time dependent plasma properties during microarcing in radio frequency plasmas. <i>Applied Physics Letters</i> , 2007 , 91, 191501	3.4	4
103	Nanoindentation studies of brittle thin films on a titanium alloy substrate. <i>Journal of Materials Research</i> , 2002 , 17, 861-870	2.5	4
102	Wannier function analysis for understanding disordered structures generated using Car-Parrinello molecular dynamics. <i>Molecular Simulation</i> , 2002 , 28, 971-979	2	4
101	Structural effects in ion-beam-modified polymers. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1999 , 79, 391-402		4
100	Steady-state photoconductivity in a-Si:H prepared by d.c. magnetron methods. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1986 , 54, 255-272		4
99	Enhancement of absorptance of selective coatings with colloidal films. <i>Solar Energy Materials and Solar Cells</i> , 1981 , 6, 107-111		4
98	Properties of solar absorbing films produced by an in-line sputter coating plant. <i>Journal of Vacuum Science and Technology</i> , 1981 , 19, 181-184		4
97	Gold black and gold cermet absorbing surfaces 1978 , 11, 49-53		4
96	Lattice dynamics of urea. <i>Journal of Physics C: Solid State Physics</i> , 1971 , 4, 2304-2312		4
95	Neutron diffraction discriminates between models for the nanoarchitecture of graphene sheets in glassy carbon. <i>Journal of Non-Crystalline Solids</i> , 2021 , 554, 120610	3.9	4
94	A thruster using magnetic reconnection to create a high-speed plasma jet. <i>EPJ Applied Physics</i> , 2018 , 84, 20801	1.1	4
93	Laser fabrication of electrical feedthroughs in polymer encapsulations for active implantable medical devices. <i>Medical Engineering and Physics</i> , 2017 , 42, 105-110	2.4	3
92	Covalent Biofunctionalization of the Inner Surfaces of a Hollow-Fiber Capillary Bundle Using Packed-Bed Plasma Ion Implantation. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 32163-32174	9.5	3
91	Effects of pulse voltage and deposition time on the adhesion strength of graded metal/carbon films deposited on bendable stainless steel foils by hybrid cathodic arc glow discharge plasma assisted chemical vapor deposition. <i>Applied Surface Science</i> , 2016 , 366, 535-544	6.7	3
90	Increasing binding density of yeast cells by control of surface charge with allylamine grafting to ion modified polymer surfaces. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014 , 122, 537-544	6	3
89	Corrections to Graham's Law of Effusion for Predicting Leak Rates Through Hermetic Seals. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2017 , 7, 379-386	1.7	3
88	Reaction pathways for pyridine adsorption on silicon (0 0 1). <i>Journal of Physics Condensed Matter</i> , 2015 , 27, 054001	1.8	3

87	Reply to the comment on: Elastic scintillation dosimetry: comparison of three solutions for the Cerenkov challenge <i>Physics in Medicine and Biology</i> , 2012 , 57, 3667-3673	3.8	3
86	Reply to Comments on Cellular response to modulated radiation fields <i>Physics in Medicine and Biology</i> , 2009 , 54, L15-L21	3.8	3
85	Breathing as a low frequency wave propagation in nonlinear elastic permeable medium. <i>Physica B: Condensed Matter</i> , 2007 , 394, 311-314	2.8	3
84	Tomographic interferometry of a filtered high-current vacuum arc plasma. <i>Journal of Applied Physics</i> , 2007 , 101, 073302	2.5	3
83	All particle simulations of cathodic arc plasmas. <i>Journal of Applied Physics</i> , 2006 , 99, 093304	2.5	3
82	Apparatus for exposing cell membranes to rapid temperature transients. <i>European Biophysics Journal</i> , 2004 , 33, 117-20	1.9	3
81	Cycling effects in nitrogen doped tetrahedral amorphous carbon non-volatile memory cells. <i>Solid-State Electronics</i> , 2000 , 44, 1641-1645	1.7	3
80	Spatial variations in the stoichiometry of sputtered YBaCuO thin films: theory and experiment. <i>Physica C: Superconductivity and Its Applications</i> , 1990 , 170, 473-480	1.3	3
79	Low Emittance Coatings For High Temperature Solar Collectors 1983 , 0428, 166		3
78	Colloidally deposited high-temperature solar selective surfaces. <i>Applied Optics</i> , 1981 , 20, 4051-3	1.7	3
77	Optimization of solar selectivity in colloidally produced solar selective coatings. <i>Thin Solid Films</i> , 1981 , 85, 191-195	2.2	3
76	Analysis of graded metal-carbon films produced by dual-cathode sputtering. <i>Thin Solid Films</i> , 1982 , 91, 123-130	2.2	3
75	Deployment Opportunities for Space Photovoltaics and the Prospects for Perovskite Solar Cells. <i>Advanced Materials Technologies</i> , 2101059	6.8	3
74	Quantifying Moisture Penetration in Encapsulated Devices by Heavy Water Mass Spectrometry: A Standard Moisture Leak Using Poly(ether-ether-ketone). <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 13666-13675	9.5	3
73	A plasma ion bombardment process enabling reagent-free covalent binding of multiple functional molecules onto magnetic particles. <i>Materials Science and Engineering C</i> , 2019 , 98, 118-124	8.3	3
72	Plasma-Activated Substrate with a Tropoelastin Anchor for the Maintenance and Delivery of Multipotent Adult Progenitor Cells. <i>Macromolecular Bioscience</i> , 2019 , 19, e1800233	5.5	3
71	Codeposition of amorphous zinc tin oxide using high power impulse magnetron sputtering: characterisation and doping. <i>Semiconductor Science and Technology</i> , 2017 , 32, 045013	1.8	2
70	Conducting carbon films with covalent binding sites for biomolecule attachment. <i>Journal of Applied Physics</i> , 2019 , 125, 075302	2.5	2

69	On the measurement of dose in-air for small radiation fields: choice of mini-phantom material. <i>Physics in Medicine and Biology</i> , 2015 , 60, 2391-402	3.8	2
68	Direct Determination of Total Hemispherical Emittance of Perovskite and Silicon Solar Cells. <i>Cell Reports Physical Science</i> , 2020 , 1, 100008	6.1	2
67	Alpost Gurney quantum mechanical perspective on the electrolysis of water: ion neutralization in solution. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017 , 473, 20170371	2.4	2
66	Ion implanted, radical-rich surfaces for the rapid covalent immobilization of active biomolecules 2013 ,		2
65	Pathways for thermal phosphorus desorption from the silicon (001) surface. <i>Physical Review B</i> , 2010 , 82,	3.3	2
64	Comment on "Transformation of C-type defects on surface at room temperature STM/STS study [Surf. Sci. 602 (2008) 2835]" <i>Surface Science</i> , 2010 , 604, 235-236	1.8	2
63	Patterns of energy dissipation in three-dimensional face-centred cubic lattices after ion impact. <i>Journal of Physics Condensed Matter</i> , 1997 , 9, 5015-5026	1.8	2
62	Oriented graphite layer formation in Ti/C and TiC/C multilayers deposited by high current pulsed cathodic arc. <i>Journal of Applied Physics</i> , 2008 , 104, 074317	2.5	2
61	Investigation of cytocompatibility of surface-treated cellulose nitrate films by using plasma immersion ion implantation. <i>Surface and Coatings Technology</i> , 2007 , 201, 6897-6900	4.4	2
60	Influence of Gas Entry Point on Plasma Chemistry, Ion Energy and Deposited Alumina Thin Films in Filtered Cathodic Arc. <i>Plasma Chemistry and Plasma Processing</i> , 2007 , 27, 599-608	3.6	2
59	Signal versus noise in fiber-coupled radiation dosimeters for medical applications 2004 , 5317, 105		2
58	Towards the Routine Fabrication of P in Si Nanostructures: Understanding P Precursor Molecules on Si(001). <i>Materials Research Society Symposia Proceedings</i> , 2005 , 864, 541		2
57	Childhood leukaemia and TV towers: the debate continues. <i>Australian and New Zealand Journal of Public Health</i> , 1999 , 23, 553-5	2.3	2
56	Imaging prior to radiotherapy impacts survival. <i>Physics and Imaging in Radiation Oncology</i> , 2020 , 16, 138-143	3.4	2
55	Silicate glass-to-glass hermetic bonding for encapsulation of next-generation optoelectronics: A review. <i>Materials Today</i> , 2021 , 47, 131-155	21.8	2
54	Benzene and Pyridine on Silicon (001): A Trial Ground for Long-Range Corrections in Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 10484-10500	3.8	1
53	Chemical toughening of glass by potassium diffusion: how non-bridging oxygen and a surface calcium barrier limit the process. <i>Journal of the Ceramic Society of Japan</i> , 2019 , 127, 98-104	1	1
52	Electric field assisted copper diffusion in soda-lime glass: a study of ion migration, activation energy and ion interactions. <i>Journal of the Ceramic Society of Japan</i> , 2020 , 128, 186-193	1	1

51	Extending the Debye scattering equation for diffraction from a cylindrically averaged group of atoms: detecting molecular orientation at an interface. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2020 , 76, 468-473	1.7	1
50	Covalent binding of molecules to plasma immersion ion implantation-activated microparticles for delivery into cells. <i>Engineering Reports</i> , 2020 , 2, e12087	1.2	1
49	Observation and characterization of memristive silver filaments in amorphous zinc-tin-oxide. <i>MRS Communications</i> , 2018 , 8, 1104-1110	2.7	1
48	A combinatorial investigation of sputtered TaAlN thin films. <i>Thin Solid Films</i> , 2014 , 558, 99-103	2.2	1
47	Native oxides and their effect on electrochemical characteristics of ta-C:N films. <i>Surface and Coatings Technology</i> , 2013 , 228, S486-S489	4.4	1
46	Imaging dose affects in vitro survival following subsequent therapeutic irradiation. <i>Biomedical Physics and Engineering Express</i> , 2015 , 1, 045016	1.5	1
45	Bio-functionalisation of polyether ether ketone using plasma immersion ion implantation 2015 ,		1
44	Twisted pair of optic fibers for background removal in radiation fields. <i>Applied Optics</i> , 2013 , 52, 5500-7	1.7	1
43	A method to remove residual signals in fibre optic luminescence dosimeters. <i>Physics in Medicine and Biology</i> , 2013 , 58, 1581-90	3.8	1
42	Comment on 'Shear stiffness in nanolaminar Ti3SiC2 challenges ab initio calculations'. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 268001; discussion 268002	1.8	1
41	Enhancing the hardness of Al/W nanostructured coatings. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 055003	1.8	1
40	The distribution and depth of ion doses implanted into wedges by plasma immersion ion implantation in drifting and stationary plasmas. <i>Plasma Sources Science and Technology</i> , 2006 , 15, 384-390 ^{3.5}		1
39	Brenkov radiation in optical fibres 2006 ,		1
38	Effects of layer patterns on magnetic and other properties of single and multilayered FeN films. <i>Journal of Applied Physics</i> , 2007 , 101, 034902	2.5	1
37	Characterization of a large area scanning PECVD deposition system with small size RF electrodes. <i>Thin Solid Films</i> , 2006 , 515, 307-312	2.2	1
36	Molecular Dynamics Study of Ion Impact Phenomena and Compressive Stress in Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 317, 497		1
35	Electron Imaging and Energy Loss Studies of the Crystallization of Hydrogenated Amorphous Silicon. <i>Physica Status Solidi A</i> , 1986 , 96, 67-73		1
34	Magnetron sputtering of solar coatings inside tubes. <i>Journal of Vacuum Science and Technology</i> , 1981 , 19, 700-703		1

33	Structural effects in ion-beam-modified polymers			1
32	Energetic Condensation as a Means of Inducing the Growth of Films Containing High Pressure Phases 1996 , 250-262			1
31	Applying the Hashin-Shtrikman bounds to predict stiffness of multicomponent 3D printed structures: Towards regenerative orthopaedic medicine. <i>Journal of Composite Materials</i> , 2020 , 54, 2173-2183	2.7		1
30	Covalent Immobilization of -Acetylcysteine on a Polyvinyl Chloride Substrate Prevents Bacterial Adhesion and Biofilm Formation. <i>Langmuir</i> , 2020 , 36, 13023-13033	4		1
29	Quantification of dose in plasma immersion ion implantation of polymer bone scaffolds: Probe diagnostics of a pulsed dielectric barrier discharge. <i>Plasma Processes and Polymers</i> , 2020 , 17, 2000113	3.4		1
28	Experimental investigation of plasma-immersion ion implantation treatment for biocompatible polyurethane implants production. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 123, 012003	0.4		1
27	Plasma ion implantation of 3D-printed PEEK creates optimal host conditions for bone ongrowth and mineralisation. <i>Plasma Processes and Polymers</i> , 2021 , 18, 2000219	3.4		1
26	Room-Temperature Negative Differential Resistance in Amorphous Carbon: The Role of Electron Trapping Defects at Device Interfaces. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 720-725	2.9		1
25	Unifying the optical and electrical properties of amorphous carbon: application to hopping photoconductivity and memristance. <i>Journal of Applied Physics</i> , 2020 , 128, 215109	2.5		0
24	Technological advances for polymers in active implantable medical devices 2012 , 239-272			0
23	Properties of powders deposited by silane/hydrogen and silane/methane plasmas. <i>Journal of Non-Crystalline Solids</i> , 1989 , 109, 318-326	3.9		0
22	Current and future perspectives on biomaterials for segmental mandibular defect repair. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 1-13	3		0
21	Back Cover: Plasma Process. Polym. 2015 . <i>Plasma Processes and Polymers</i> , 2015 , 12, 194-194	3.4		
20	On the use of test gases of various radii to investigate molecular sieving in leak channels. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 813-6	0.9		
19	Linker Free Nitrogen Doped Plasma Polymer Biosensors with Label Free Ellipsometric Diagnosis Technique. <i>Procedia Chemistry</i> , 2012 , 6, 149-154			
18	Array of square waveguides for scintillation dosimetry in external radiotherapy. <i>Journal of Physics: Conference Series</i> , 2013 , 444, 012061	0.3		
17	Scintillators for 3D and 4D dosimetry: current status and future potential for clinical translation. <i>Journal of Physics: Conference Series</i> , 2013 , 444, 012075	0.3		
16	Universal Biomolecule Binding Interlayers Created by Energetic Ion Bombardment. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1354, 3			

- 15 Light propagation in multimoded square hollow waveguides. *Journal of Optics (United Kingdom)*, **2012**, 14, 105703 1.7
- 14 Nonvolatile Memory Effects in Doped Tetrahedral Amorphous Carbon Thin Films. *Materials Research Society Symposia Proceedings*, **1997**, 498, 121
- 13 A self-checking fiber optic dosimeter for monitoring common errors in brachytherapy applications. *Medical Physics*, **2009**, 36, 2985-91 4.4
- 12 Soft ferromagnetic materials based on iron/carbon multilayers. *Physica B: Condensed Matter*, **2007**, 394, 273-276 2.8
- 11 1P519 Nanosecond responses of proteins to ultra-high temperature pulses(25. New methods and tools (I),Poster Session,Abstract,Meeting Program of EABS & BSJ 2006). *Seibutsu Butsurei*, **2006**, 46, S276^O
- 10 Dielectric substrate self-bias and plasma confinement in two-dimensional scanning radio frequency plasma-enhanced chemical vapour deposition. *Vacuum*, **2006**, 81, 441-445 3.7
- 9 Physical and psychophysical measures of the distinctiveness of Australian banknotes. *Australian Journal of Psychology*, **2002**, 54, 150-156 2.3
- 8 Mechanisms for the Behaviour of Amorphous Carbon Films During Annealing. *Microscopy and Microanalysis*, **2004**, 10, 614-615 0.5
- 7 Dark Field Microscopy for Diffraction Analysis of Non Crystalline Materials. *Microscopy and Microanalysis*, **2004**, 10, 800-801 0.5
- 6 Carbon Structures Containing Negatively Curved Sheets. *Fullerenes, Nanotubes, and Carbon Nanostructures*, **1999**, 7, 1145-1149
- 5 Film growth **1996**, 467-493
- 4 Anomalous voltage-current characteristics in the sputtering of YBaCuO. *Physica C: Superconductivity and Its Applications*, **1991**, 183, 172-176 1.3
- 3 Radiation responses of cancer and normal cells to split dose fractions with uniform and grid fields: increasing the therapeutic ratio.. *International Journal of Radiation Biology*, **2022**, 1-8 2.9
- 2 The gray body approximation for radiative heat transfer in evacuated tube solar collectors: Effects of envelope infrared transparency. *Journal of Applied Physics*, **2022**, 131, 125001 2.5
- 1 Publisher's Note: The gray body approximation for radiative heat transfer in evacuated tube solar collectors: Effects of envelope infrared transparency[J. Appl. Phys. 131, 125001 (2022)]. *Journal of Applied Physics*, **2022**, 131, 189901 2.5