

Steven F. Durrant

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Laser ablation inductively coupled plasma mass spectrometry: achievements, problems, prospects. <i>Journal of Analytical Atomic Spectrometry</i> , 1999, 14, 1385-1403.	1.6	255
2	Recent biological and environmental applications of laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS). <i>Journal of Analytical Atomic Spectrometry</i> , 2005, 20, 821.	1.6	123
3	Molybdenum Oxide Thin Films Obtained by the Hot-Filament Metal Oxide Deposition Technique. <i>Chemistry of Materials</i> , 2004, 16, 513-520.	3.2	92
4	HMDSO plasma polymerization and thin film optical properties. <i>Thin Solid Films</i> , 1995, 270, 109-113.	0.8	60
5	Mechanisms of polymer film deposition from r.f. discharges of acetylene, nitrogen and helium mixtures. <i>Thin Solid Films</i> , 1995, 259, 139-145.	0.8	60
6	Relationships between the plasma environment and the composition and optical properties of plasma-polymerized thin films produced in rf discharges of C ₂ H ₂ -SF ₆ mixtures. <i>Journal of Applied Physics</i> , 1992, 71, 448-455.	1.1	55
7	Feasibility of improvement in analytical performance in laser ablation inductively coupled plasma-mass spectrometry (LA-ICP-MS) by addition of nitrogen to the argon plasma. <i>Fresenius' Journal of Analytical Chemistry</i> , 1994, 349, 768-771.	1.5	54
8	Nitrogen-doped diamond films. <i>Journal of Applied Physics</i> , 1999, 85, 7455-7458.	1.1	50
9	Alternatives to all-argon plasmas in inductively coupled plasma mass spectrometry (ICP-MS): an overview. <i>Fresenius' Journal of Analytical Chemistry</i> , 1993, 347-347, 389-392.	1.5	46
10	Multi-elemental analysis of environmental matrices by laser ablation inductively coupled plasma mass spectrometry. <i>Analyst, The</i> , 1992, 117, 1585.	1.7	42
11	Measurements of gunshot residues by sector field inductively coupled plasma mass spectrometry—Further studies with pistols. <i>Forensic Science International</i> , 2007, 172, 63-66.	1.3	42
12	Use of <i>Saccharomyces cerevisiae</i> immobilized in agarose gel as a binding agent for diffusive gradients in thin films. <i>Analytica Chimica Acta</i> , 2010, 683, 107-112.	2.6	39
13	Soil loss risk and habitat quality in streams of a meso-scale river basin. <i>Scientia Agricola</i> , 2007, 64, 336-343.	0.6	38
14	Laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS) for the multielemental analysis of biological materials: a feasibility study. <i>Food Chemistry</i> , 1994, 49, 317-323.	4.2	37
15	On-line determination of Sb(III) and total Sb using baker's yeast immobilized on polyurethane foam and hydride generation inductively coupled plasma optical emission spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2006, 61, 1074-1079.	1.5	37
16	Amorphous oxygen-containing hydrogenated carbon films formed by plasma enhanced chemical vapor deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996, 14, 118-124.	0.9	36
17	Use of waste collected from wind turbine blade production as an eco-friendly ingredient in mortars for civil construction. <i>Journal of Cleaner Production</i> , 2020, 274, 122948.	4.6	36
18	Analysis of biological standard reference materials by laser ablation inductively coupled plasma mass spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 1992, 7, 1139.	1.6	34

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19	Fluorinated polymer films from r.f. plasmas containing benzene and sulfur hexafluorine. <i>Thin Solid Films</i> , 1992, 220, 295-302.	0.8	33
20	Morphological and electrical evolution of ZnO: Al thin films deposited by RF magnetron sputtering onto glass substrates. <i>Materials Research</i> , 2014, 17, 1384-1390.	0.6	30
21	Semiquantitative Analysis of Biological Materials by Inductively Coupled Plasma-Mass Spectrometry. <i>Microchemical Journal</i> , 1997, 56, 352-372.	2.3	29
22	Treatment of PVC using an alternative low energy ion bombardment procedure. <i>Applied Surface Science</i> , 2011, 258, 1854-1861.	3.1	28
23	Trace elemental content of biological materials. <i>Biological Trace Element Research</i> , 1990, 26-27, 177-187.	1.9	27
24	Effect of the plasma excitation power on the properties of SiO _x C _y H _z films deposited on AISI 304 steel. <i>Surface and Coatings Technology</i> , 2017, 311, 127-137.	2.2	26
25	Rapid multielemental analysis of Chinese reference soils by laser ablation inductively coupled plasma-source mass spectrometry. <i>Fresenius' Journal of Analytical Chemistry</i> , 1993, 345, 512-517.	1.5	25
26	Optical emission study of reaction mechanisms in the deposition of nitrogen-containing amorphous hydrogenated carbon films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1995, 13, 1901-1906.	0.9	24
27	Evaluation of blood compatibility of plasma deposited heparin-like films and SF ₆ plasma treated surfaces. <i>Materials Research</i> , 2010, 13, 95-98.	0.6	23
28	Amorphous hydrogenated fluorinated carbon films produced by PECVD. <i>Surface and Coatings Technology</i> , 1996, 86-87, 443-448.	2.2	22
29	Enhancement of diamond nucleation using the solid-liquid-gas interface energy. <i>Journal of Applied Physics</i> , 2000, 88, 1650-1654.	1.1	21
30	Structural and optical properties of amorphous hydrogenated fluorinated carbon films produced by PECVD. <i>Thin Solid Films</i> , 1997, 304, 149-156.	0.8	20
31	Inductively coupled plasma-mass spectrometry for biological analysis. <i>TrAC - Trends in Analytical Chemistry</i> , 1992, 11, 68-73.	5.8	19
32	Effects of argon dilution of an ethanol/hydrogen gas feed on the growth of diamond by hot-filament chemical vapor deposition. <i>Thin Solid Films</i> , 2000, 377-378, 303-308.	0.8	19
33	Growth evolution of self-textured ZnO films deposited by magnetron sputtering at low temperatures. <i>Applied Surface Science</i> , 2015, 334, 210-215.	3.1	19
34	Al-doping and Properties of AZO Thin Films Grown at Room Temperature: Sputtering Pressure Effect. <i>Materials Research</i> , 2019, 22, .	0.6	19
35	Optical, mechanical and surface properties of amorphous carbonaceous thin films obtained by plasma enhanced chemical vapor deposition and plasma immersion ion implantation and deposition. <i>Applied Surface Science</i> , 2013, 280, 474-481.	3.1	18
36	Matrix separation by chelation to prepare biological materials for isotopic zinc analysis by inductively coupled plasma mass spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 1994, 9, 199.	1.6	17

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37	Structure and properties of diamond films deposited on porous silicon. <i>Thin Solid Films</i> , 1999, 355-356, 233-238.	0.8	16
38	Plasma polymerized hexamethyldisiloxane: discharge and film studies. <i>Vacuum</i> , 1996, 47, 187-192.	1.6	15
39	Amorphous carbon nitrogenated films prepared by plasma immersion ion implantation and deposition. <i>Thin Solid Films</i> , 2006, 515, 1561-1567.	0.8	15
40	PECVD of amorphous hydrogenated oxygenated nitrogenated carbon films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1998, 36, 1881-1888.	2.4	14
41	Thin film deposition from plasmas of tetramethylsilane-helium-argon mixtures with oxygen and with nitrogen. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1998, 36, 1873-1879.	2.4	13
42	Effects of the addition of helium on the synthesis of diamond films. <i>Thin Solid Films</i> , 2000, 377-378, 182-187.	0.8	13
43	XPS Investigation of Plasma-Deposited Polysiloxane Films Irradiated with Helium Ions. <i>Plasma Processes and Polymers</i> , 2007, 4, 482-488.	1.6	13
44	Dynamic actinometric optical emission spectroscopy for the elucidation of plasma processes in the production of fluorinated amorphous hydrogenated carbon films from glow discharges. <i>Thin Solid Films</i> , 1996, 277, 115-120.	0.8	12
45	Three polarization reflectometry methods for determination of optical anisotropy. <i>Applied Optics</i> , 1998, 37, 65.	2.1	12
46	Nitrogenated diamond produced by introducing ammonia into the gas feed in hot-filament CVD. <i>Thin Solid Films</i> , 1999, 355-356, 157-161.	0.8	12
47	Microcrystalline diamond deposition on a porous silicon host matrix. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2000, 69-70, 171-176.	1.7	12
48	Characterization of diamond fluorinated by glow discharge plasma treatment. <i>Diamond and Related Materials</i> , 2001, 10, 490-495.	1.8	12
49	Elemental Factors in Human Fetal Development. <i>Journal of Nutritional Medicine</i> , 1990, 1, 19-26.	0.3	11
50	Structural and optical properties of plasma-deposited amorphous hydrogenated oxygenated carbon films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1997, 15, 1334-1339.	0.9	11
51	Structural transition of ZnO thin films produced by RF magnetron sputtering at low temperatures. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 3143-3148.	1.1	11
52	Development of tubes of micro-crystalline diamond and diamond-like carbon. <i>Thin Solid Films</i> , 2001, 398-399, 250-254.	0.8	10
53	Method of porous diamond deposition on porous silicon. <i>Applied Surface Science</i> , 2001, 185, 108-113.	3.1	10
54	Micro-crystalline diamond and nano-carbon structures produced using a high argon concentration in hot-filament chemical vapor deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001, 19, 1057-1062.	0.9	10

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55	Optical and Electrical Properties of Polymerizing Plasmas and Their Correlation with DLC Film Properties. <i>Plasmas and Polymers</i> , 2004, 9, 1-22.	1.5	10
56	Developments in hot-filament metal oxide deposition (HFMOD). <i>Thin Solid Films</i> , 2008, 516, 789-793.	0.8	10
57	Conventional and dynamic actinometry of discharges of hydrocarbon-oxygen-argon mixtures. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1995, 13, 2513-2518.	0.9	9
58	Tungsten Oxide Films of High Electrochromic Efficiencies Obtained by Deposition. <i>Electrochemical and Solid-State Letters</i> , 2003, 6, H9.	2.2	9
59	Structural and optical properties of chlorinated plasma polymers. <i>Thin Solid Films</i> , 2011, 520, 1442-1445.	0.8	9
60	Characterization of amorphous hydrogenated chlorinated plasma polymers. <i>Surface and Coatings Technology</i> , 2016, 289, 118-123.	2.2	9
61	Deposition mechanisms and properties of oxygenated carbon nitride films from rf discharges of acetylene, nitrogen, oxygen and argon mixtures. <i>Journal of Non-Crystalline Solids</i> , 2000, 262, 216-227.	1.5	8
62	Controlled fluorination of a-C:F:H films by PECVD of ethylene-hexafluorobenzene mixtures. <i>Surface and Coatings Technology</i> , 2008, 203, 526-529.	2.2	8
63	Effects of cold SF6 plasma treatment on a-C:H, polypropylene and polystyrene. <i>Surface and Coatings Technology</i> , 2020, 385, 125398.	2.2	8
64	Hydrogen-containing carbon nitride films produced by the combined hot filament-plasma CVD technique. <i>Thin Solid Films</i> , 2000, 377-378, 280-284.	0.8	7
65	Characterization of Si:O:C:H films fabricated using electron emission enhanced chemical vapour deposition. <i>Thin Solid Films</i> , 2008, 516, 803-806.	0.8	7
66	A Novel Plasma Technique for Surface Treatment: The Plasma Expander. <i>IEEE Transactions on Plasma Science</i> , 2012, 40, 492-496.	0.6	7
67	Radionuclide concentrations in raw and purified phosphoric acids from Brazil and their processing wastes: implications for radiation exposures. <i>Environmental Geochemistry and Health</i> , 2012, 34, 103-111.	1.8	7
68	Al-Doping Effect on the Surface Morphology of ZnO Films Grown by Reactive RF Magnetron Sputtering. <i>Materials Sciences and Applications</i> , 2013, 04, 761-767.	0.3	7
69	An actinometric study of C2H2 plasma polymerization and film properties. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1995, 13, 2747-2752.	0.9	6
70	Helium Ion Irradiation of Polymer Films Deposited from TMS-Ar Plasmas. <i>Plasma Processes and Polymers</i> , 2007, 4, 489-496.	1.6	6
71	Plasma enhanced chemical vapor deposition of titanium (IV) ethoxide-oxygen-helium mixtures. <i>Thin Solid Films</i> , 2008, 516, 4940-4945.	0.8	6
72	Hydroxyapatite coating deposited on grade 4 Titanium by Plasma Electrolytic Oxidation. <i>Materials Research</i> , 2014, 17, 1427-1433.	0.6	6

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73	Fluorine-containing amorphous hydrogenated carbon films. <i>Thin Solid Films</i> , 1996, 281-282, 294-297.	0.8	5
74	Conventional and dynamic actinometry of glow discharges fed mixtures of tetramethylsilane, sulfur hexafluoride, and helium. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1998, 16, 509-513.	0.9	5
75	Photoluminescent Properties of Porous Carbon Films Pyrolysed on Silicon. <i>Physica Status Solidi A</i> , 2000, 182, 395-400.	1.7	5
76	Structural and photoluminescent properties of porous silicon with deep pores obtained by laser-assisted electrochemistry. <i>Surface and Coatings Technology</i> , 2000, 133-134, 325-330.	2.2	5
77	Optical Fiber Device and Biological Tissue Phantoms for Determination of Optical Parameters in the Near-Infrared Region. <i>Instrumentation Science and Technology</i> , 2004, 32, 489-505.	0.9	5
78	Diverse Amorphous Carbonaceous Thin Films Obtained by Plasma Enhanced Chemical Vapor Deposition and Plasma Immersion Ion Implantation and Deposition. <i>Physics Procedia</i> , 2012, 32, 48-57.	1.2	5
79	Hydrosedimentological disequilibrium in a small, urbanized watershed. <i>Acta Limnologica Brasiliensia</i> , 2013, 25, 140-149.	0.4	5
80	SnO ₂ /ZnO Heterostructure as an Electron Transport Layer for Perovskite Solar Cells. <i>Materials Research</i> , 2021, 24, .	0.6	5
81	Structural properties of diamond and diamond-like carbon grown on stainless-steel blades. <i>Thin Solid Films</i> , 2001, 398-399, 255-259.	0.8	4
82	Gas-phase and plasma-surface reactions in radiofrequency discharges of C ₂ H ₂ -N ₂ -noble gas mixtures. <i>Thin Solid Films</i> , 2001, 398-399, 156-162.	0.8	4
83	Effects of nitrogen ion irradiation on plasma polymerized films produced from titanium tetraisopropoxide-oxygen-helium mixtures. <i>Surface and Coatings Technology</i> , 2008, 203, 534-537.	2.2	4
84	Effects of helium ion irradiation on fluorinated plasma polymers. <i>Surface and Coatings Technology</i> , 2010, 204, 3059-3063.	2.2	4
85	Reduction of Bacterial Adhesion to Biocompatible Polymer Surfaces Via Plasma Processing. <i>Plasma Medicine</i> , 2011, 1, 157-166.	0.2	4
86	Characterization of PECVD a-C:H:Si:O:Cl films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017, 35, 04D103.	0.9	4
87	Characterization of amorphous carbon films by PECVD and plasma ion implantation: The role of fluorine and sulfur doping. <i>Materials Chemistry and Physics</i> , 2019, 227, 170-175.	2.0	4
88	Growth Evolution of AZO thin Films Deposited by Magnetron Sputtering at Room Temperature. <i>Materials Research</i> , 2021, 24, .	0.6	4
89	Nitrogenation of diamond by glow discharge plasma treatment. <i>Thin Solid Films</i> , 1999, 355-356, 184-188.	0.8	3
90	Electron emission enhanced chemical vapor deposition (EEECVD) for the fabrication of diverse silicon-containing films. <i>Thin Solid Films</i> , 2001, 398-399, 591-596.	0.8	3

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91	Growth of glassy carbon on natural fibers. Journal of Non-Crystalline Solids, 2002, 304, 271-277.	1.5	3
92	Infrared spectroscopy investigation of various plasma-deposited polymer films irradiated with 170keV He+ ions. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 162-166.	0.6	3
93	Lubricating coating prepared by PIID on a forming tool. Journal of Physics: Conference Series, 2012, 370, 012022.	0.3	3
94	Cell Adhesion to Plasma-Coated PVC. Scientific World Journal, The, 2014, 2014, 1-9.	0.8	3
95	Mg-Containing Hydroxyapatite Coatings Produced by Plasma Electrolytic Oxidation of Titanium. Materials Research, 2017, 20, 891-898.	0.6	3
96	Structural and photoluminescent properties of carbon structures on thick porous silicon. Thin Solid Films, 2000, 377-378, 315-319.	0.8	2
97	Semi-empirical modeling of the optical gap of amorphous hydrogenated nitrogenated carbon films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 2466.	0.9	2
98	Fabrication of smooth diamond films on SiO ₂ by the addition of nitrogen to the gas feed in hot-filament chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 1052-1056.	0.9	2
99	Potential Use of Polyacrylamide for Soil Erosion Control in Brazil. Journal of Sustainable Development, 2010, 3, .	0.1	2
100	Feasibility of RF Sputtering and PIID for production of thin films from red mud. Materials Research, 2014, 17, 1316-1323.	0.6	2
101	Effect of Ion Irradiation on the Structural Properties and Hardness of a-C:H:Si:O:F Films. Journal of Physics: Conference Series, 2015, 591, 012044.	0.3	2
102	Surface properties and corrosion resistance of SF ₆ plasma-treated polyester-based thermoplastic elastomer. Surface and Interface Analysis, 2018, 50, 13-26.	0.8	2
103	Plasma Treatment of Crosslinked Polyethylene Tubes for Improved Adhesion of Water-based Paints. Materials Research, 2019, 22, .	0.6	2
104	Use of red mud activated at different temperatures as a low cost adsorbent of reactive dye. Engenharia Sanitaria E Ambiental, 2021, 26, 805-811.	0.1	2
105	Study of wettability and optical transparency of pet polymer modified by plasma immersion techniques. Revista Brasileira De Aplicações De Vácuo, 2017, 36, 68.	0.1	2
106	Co-doped p-type ZnO:Al-N Thin Films Grown by RF-Magnetron Sputtering at Room Temperature. Materials Research, 2020, 23, .	0.6	2
107	Comparison of RF and Pulsed Magnetron Sputtering for the Deposition of AZO Thin Films on PET. Materials Research, 2020, 23, .	0.6	2
108	Surface functionalization of polyvinyl chloride by plasma immersion techniques. Polimeros, 2020, 30, .	0.2	2

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109	Structural and optical properties o plasma-deposited a-C:H:Si:O:N films. Polimeros, 2021, 31, .	0.2	2
110	Growth of diamond and carbon structures on natural pyrolyzed fibers. Thin Solid Films, 2001, 398-399, 260-264.	0.8	1
111	Synthesis of diamond from ethanol highly diluted in neon/hydrogen mixtures. Diamond and Related Materials, 2001, 10, 927-930.	1.8	1
112	Effects of Aging on Chlorinated Plasma Polymers. Materials Research, 2017, 20, 862-865.	0.6	1
113	Characterization of Plasma-deposited a-C:H:Si:F:N Films. Materials Research, 2021, 24, .	0.6	1
114	Análise do Desempenho do Protótipo Arduino com Sensor de pH para Medições da Qualidade de Água contaminada em Igarapês de Manaus. Brazilian Journal of Development, 2020, 6, 20145-20156.	0.0	1
115	Nitrogenated amorphous carbon films deposited from plasmas of methanol-nitrogen mixtures. AIP Conference Proceedings, 1996, , .	0.3	0
116	Plasma polymerization of methanol-sulfur hexafluoride mixtures: Discharge and film studies. AIP Conference Proceedings, 1996, , .	0.3	0
117	Nucleation enhancement of diamond using natural lamellar hematite in the chemical vapor deposition process. Thin Solid Films, 2000, 377-378, 309-314.	0.8	0
118	Structural and optical properties of brominated plasma polymers. Surface and Coatings Technology, 2013, 237, 182-186.	2.2	0
119	Structural and optical properties of a-C:H:O:Cl and a-C:H:Si:O:Cl films obtained by Plasma Enhanced Chemical Vapor Deposition. Materials Chemistry and Physics, 2018, 214, 277-284.	2.0	0
120	DEPRECIAMENTO DE MÁQUINAS E EQUIPAMENTOS USANDO OS MÉTODOS LINHA, COLE, PERCENTAGEM CONSTANTE E CAIRES / DEPRECIATION OF MACHINERY AND EQUIPMENT USING, LINE, COLE, CONSTANT PERCENTAGE AND CAIRES METHODS. Brazilian Journal of Development, 2021, 7, 13736-13753.	0.0	0
121	X-RAY PHOTOELECTRON SPECTROSCOPY (XPS) STUDY OF CONDUCTIVE TUBE AFTER NITROGEN PIII. , 0, , 109-124.		0
122	Effect of Zn Sputtering Rate on the Morphological and Optical Properties of ZnO Films. Materials Sciences and Applications, 2013, 04, 802-807.	0.3	0