Steven F. Durrant

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4555359/publications.pdf

Version: 2024-02-01

122	2,042	257450	289244
papers	citations	24 h-index	40 g-index

123	123	123	2089
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Laser ablation inductively coupled plasma mass spectrometry: achievements, problems, prospects. Journal of Analytical Atomic Spectrometry, 1999, 14, 1385-1403.	3.0	255
2	Recent biological and environmental applications of laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS). Journal of Analytical Atomic Spectrometry, 2005, 20, 821.	3.0	123
3	Molybdenum Oxide Thin Films Obtained by the Hot-Filament Metal Oxide Deposition Technique. Chemistry of Materials, 2004, 16, 513-520.	6.7	92
4	HMDSO plasma polymerization and thin film optical properties. Thin Solid Films, 1995, 270, 109-113.	1.8	60
5	Mechanisms of polymer film deposition from r.f. discharges of acetylene, nitrogen and helium mixtures. Thin Solid Films, 1995, 259, 139-145.	1.8	60
6	Relationships between the plasma environment and the composition and optical properties of plasmaâ€polymerized thin films produced in rf discharges of C2H2â€SF6mixtures. Journal of Applied Physics, 1992, 71, 448-455.	2.5	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. Fresenius' Journal of Analytical Chemistry, 1994, 349, 768-771.	1.5	54
8	Nitrogen-doped diamond films. Journal of Applied Physics, 1999, 85, 7455-7458.	2.5	50
9	Alternatives to all-argon plasmas in inductively coupled plasma mass spectrometry (ICP-MS): an overview. Fresenius' Journal of Analytical Chemistry, 1993, 347-347, 389-392.	1.5	46
10	Multi-elemental analysis of environmental matrices by laser ablation inductively coupled plasma mass spectrometry. Analyst, The, 1992, 117, 1585.	3.5	42
11	Measurements of gunshot residues by sector field inductively coupled plasma mass spectrometryâ€"Further studies with pistols. Forensic Science International, 2007, 172, 63-66.	2.2	42
12	Use of Saccharomyces cerevisiae immobilized in agarose gel as a binding agent for diffusive gradients in thin films. Analytica Chimica Acta, 2010, 683, 107-112.	5.4	39
13	Soil loss risk and habitat quality in streams of a meso-scale river basin. Scientia Agricola, 2007, 64, 336-343.	1.2	38
14	Laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS) for the multielemental analysis of biological materials: a feasibility study. Food Chemistry, 1994, 49, 317-323.	8.2	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. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 1074-1079.	2.9	37
16	Amorphous oxygenâ€containing hydrogenated carbon films formed by plasma enhanced chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 118-124.	2.1	36
17	Use of waste collected from wind turbine blade production as an eco-friendly ingredient in mortars for civil construction. Journal of Cleaner Production, 2020, 274, 122948.	9.3	36
18	Analysis of biological standard reference materials by laser ablation inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 1992, 7, 1139.	3.0	34

#	Article	IF	Citations
19	Fluorinated polymer films from r.f. plasmas containing benzene and sulfur hexafluorine. Thin Solid Films, 1992, 220, 295-302.	1.8	33
20	Morphological and electrical evolution of ZnO: Al thin filmsdeposited by RF magnetron sputtering onto glass substrates. Materials Research, 2014, 17, 1384-1390.	1.3	30
21	Semiquantitative Analysis of Biological Materials by Inductively Coupled Plasmaâ€“Mass Spectrometry. Microchemical Journal, 1997, 56, 352-372.	4.5	29
22	Treatment of PVC using an alternative low energy ion bombardment procedure. Applied Surface Science, 2011, 258, 1854-1861.	6.1	28
23	Trace elemental content of biological materials. Biological Trace Element Research, 1990, 26-27, 177-187.	3.5	27
24	Effect of the plasma excitation power on the properties of SiOxCyHz films deposited on AISI 304 steel. Surface and Coatings Technology, 2017, 311, 127-137.	4.8	26
25	Rapid multielemental analysis of Chinese reference soils by laser ablation inductively coupled plasma-source mass spectrometry. Fresenius' Journal of Analytical Chemistry, 1993, 345, 512-517.	1.5	25
26	Optical emission study of reaction mechanisms in the deposition of nitrogenâ€containing amorphous hydrogenated carbon films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 1901-1906.	2.1	24
27	Evaluation of blood compatibility of plasma deposited heparin-like films and SF6 plasma treated surfaces. Materials Research, 2010, 13, 95-98.	1.3	23
28	Amorphous hydrogenated fluorinated carbon films produced by PECVD. Surface and Coatings Technology, 1996, 86-87, 443-448.	4.8	22
29	Enhancement of diamond nucleation using the solid-liquid-gas interface energy. Journal of Applied Physics, 2000, 88, 1650-1654.	2.5	21
30	Structural and optical properties of amorphous hydrogenated fluorinated carbon films produced by PECVD. Thin Solid Films, 1997, 304, 149-156.	1.8	20
31	Inductively coupled plasmaâ€”mass spectrometry for biological analysis. TrAC - Trends in Analytical Chemistry, 1992, 11, 68-73.	11.4	19
32	Effects of argon dilution of an ethanol/hydrogen gas feed on the growth of diamond by hot-filament chemical vapor deposition. Thin Solid Films, 2000, 377-378, 303-308.	1.8	19
33	Growth evolution of self-textured ZnO films deposited by magnetron sputtering at low temperatures. Applied Surface Science, 2015, 334, 210-215.	6.1	19
34	Al-doping and Properties of AZO Thin Films Grown at Room Temperature: Sputtering Pressure Effect. Materials Research, 2019, 22, .	1.3	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. Applied Surface Science, 2013, 280, 474-481.	6.1	18
36	Matrix separation by chelation to prepare biological materials for isotopic zinc analysis by inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 1994, 9, 199.	3.0	17

#	Article	IF	Citations
37	Structure and properties of diamond films deposited on porous silicon. Thin Solid Films, 1999, 355-356, 233-238.	1.8	16
38	Plasma polymerized hexamethyldisiloxane: discharge and film studies. Vacuum, 1996, 47, 187-192.	3.5	15
39	Amorphous carbon nitrogenated films prepared by plasma immersion ion implantation and deposition. Thin Solid Films, 2006, 515, 1561-1567.	1.8	15
40	PECVD of amorphous hydrogenated oxygenated nitrogenated carbon films. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 1881-1888.	2.1	14
41	Thin film deposition from plasmas of tetramethylsilane-helium-argon mixtures with oxygen and with nitrogen. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 1873-1879.	2.1	13
42	Effects of the addition of helium on the synthesis of diamond films. Thin Solid Films, 2000, 377-378, 182-187.	1.8	13
43	XPS Investigation of Plasma-Deposited Polysiloxane Films Irradiated with Helium Ions. Plasma Processes and Polymers, 2007, 4, 482-488.	3.0	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. Thin Solid Films, 1996, 277, 115-120.	1.8	12
45	Three polarization reflectometry methods for determination of optical anisotropy. Applied Optics, 1998, 37, 65.	2.1	12
46	Nitrogenated diamond produced by introducing ammonia into the gas feed in hot-filament CVD. Thin Solid Films, 1999, 355-356, 157-161.	1.8	12
47	Microcrystalline diamond deposition on a porous silicon host matrix. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 69-70, 171-176.	3.5	12
48	Characterization of diamond fluorinated by glow discharge plasma treatment. Diamond and Related Materials, 2001, 10, 490-495.	3.9	12
49	Elemental Factors in Human Fetal Development. Journal of Nutritional Medicine, 1990, 1, 19-26.	0.3	11
50	Structural and optical properties of plasma-deposited amorphous hydrogenated oxygenated carbon films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 1334-1339.	2.1	11
51	Structural transition of ZnO thin films produced by RF magnetron sputtering at low temperatures. Journal of Materials Science: Materials in Electronics, 2013, 24, 3143-3148.	2.2	11
52	Development of tubes of micro-crystalline diamond and diamond-like carbon. Thin Solid Films, 2001, 398-399, 250-254.	1.8	10
53	Method of porous diamond deposition on porous silicon. Applied Surface Science, 2001, 185, 108-113.	6.1	10
54	Micro-crystalline diamond and nano-carbon structures produced using a high argon concentration in hot-filament chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 1057-1062.	2.1	10

#	Article	IF	Citations
55	Optical and Electrical Properties of Polymerizing Plasmas and Their Correlation with DLC Film Properties. Plasmas and Polymers, 2004, 9, 1-22.	1.5	10
56	Developments in hot-filament metal oxide deposition (HFMOD). Thin Solid Films, 2008, 516, 789-793.	1.8	10
57	Conventional and dynamic actinometry of discharges of hydrocarbonâ€“oxygenâ€“argon mixtures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 2513-2518.	2.1	9
58	Tungsten Oxide Films of High Electrochromic Efficiencies Obtained by Deposition. Electrochemical and Solid-State Letters, 2003, 6, H9.	2.2	9
59	Structural and optical properties of chlorinated plasma polymers. Thin Solid Films, 2011, 520, 1442-1445.	1.8	9
60	Characterization of amorphous hydrogenated chlorinated plasma polymers. Surface and Coatings Technology, 2016, 289, 118-123.	4.8	9
61	Deposition mechanisms and properties of oxygenated carbon nitride films from rf discharges of acetylene, nitrogen, oxygen and argon mixtures. Journal of Non-Crystalline Solids, 2000, 262, 216-227.	3.1	8
62	Controlled fluorination of a-C:F:H films by PECVD of ethyleneâ€“hexafluorobenzene mixtures. Surface and Coatings Technology, 2008, 203, 526-529.	4.8	8
63	Effects of cold SF6 plasma treatment on a-C:H, polypropylene and polystyrene. Surface and Coatings Technology, 2020, 385, 125398.	4.8	8
64	Hydrogen-containing carbon nitride films produced by the combined hot filamentâ€“plasma CVD technique. Thin Solid Films, 2000, 377-378, 280-284.	1.8	7
65	Characterization of Si:O:C:H films fabricated using electron emission enhanced chemical vapour deposition. Thin Solid Films, 2008, 516, 803-806.	1.8	7
66	A Novel Plasma Technique for Surface Treatment: The Plasma Expander. IEEE Transactions on Plasma Science, 2012, 40, 492-496.	1.3	7
67	Radionuclide concentrations in raw and purified phosphoric acids from Brazil and their processing wastes: implications for radiation exposures. Environmental Geochemistry and Health, 2012, 34, 103-111.	3.4	7
68	Al-Doping Effect on the Surface Morphology of ZnO Films Grown by Reactive RF Magnetron Sputtering. Materials Sciences and Applications, 2013, 04, 761-767.	0.4	7
69	An actinometric study of C2H2 plasma polymerization and film properties. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 2747-2752.	2.1	6
70	Helium Ion Irradiation of Polymer Films Deposited from TMS-Ar Plasmas. Plasma Processes and Polymers, 2007, 4, 489-496.	3.0	6
71	Plasma enhanced chemical vapor deposition of titanium (IV) ethoxideâ€“oxygenâ€“helium mixtures. Thin Solid Films, 2008, 516, 4940-4945.	1.8	6
72	Hydroxyapatite coating deposited on grade 4 Titanium by Plasma Electrolytic Oxidation. Materials Research, 2014, 17, 1427-1433.	1.3	6

#	Article	IF	Citations
73	Fluorine-containing amorphous hydrogenated carbon films. Thin Solid Films, 1996, 281-282, 294-297.	1.8	5
74	Conventional and dynamic actinometry of glow discharges fed mixtures of tetramethylsilane, sulfur hexafluoride, and helium. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 509-513.	2.1	5
75	Photoluminescent Properties of Porous Carbon Films Pyrolised on Silicon. Physica Status Solidi A, 2000, 182, 395-400.	1.7	5
76	Structural and photoluminescent properties of porous silicon with deep pores obtained by laser-assisted electrochemistry. Surface and Coatings Technology, 2000, 133-134, 325-330.	4.8	5
77	Optical Fiber Device and Biological Tissue Phantoms for Determination of Optical Parameters in the Nearâ€Infrared Region. Instrumentation Science and Technology, 2004, 32, 489-505.	1.8	5
78	Diverse Amorphous Carbonaceous Thin Films Obtained by Plasma Enhanced Chemical Vapor Deposition and Plasma Immersion Ion Implantation and Deposition. Physics Procedia, 2012, 32, 48-57.	1.2	5
79	Hydrosedimentological disequilibrium in a small, urbanized watershed. Acta Limnologica Brasiliensia, 2013, 25, 140-149.	0.4	5
80	SnO2/ZnO Heterostructure as an Electron Transport Layer for Perovskite Solar Cells. Materials Research, 2021, 24, .	1.3	5
81	Structural properties of diamond and diamond-like carbon grown on stainless-steel blades. Thin Solid Films, 2001, 398-399, 255-259.	1.8	4
82	Gas-phase and plasma-surface reactions in radiofrequency discharges of C2H2â€“N2â€“noble gas mixtures. Thin Solid Films, 2001, 398-399, 156-162.	1.8	4
83	Effects of nitrogen ion irradiation on plasma polymerized films produced from titanium tetraisopropoxideâ€“oxygenâ€“helium mixtures. Surface and Coatings Technology, 2008, 203, 534-537.	4.8	4
84	Effects of helium ion irradiation on fluorinated plasma polymers. Surface and Coatings Technology, 2010, 204, 3059-3063.	4.8	4
85	Reduction of Bacterial Adhesion to Biocompatible Polymer Surfaces Via Plasma Processing. Plasma Medicine, 2011, 1, 157-166.	0.6	4
86	Characterization of PECVD a-C:H:Si:O:Cl films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 04D103.	2.1	4
87	Characterization of amorphous carbon films by PECVD and plasma ion implantation: The role of fluorine and sulfur doping. Materials Chemistry and Physics, 2019, 227, 170-175.	4.0	4
88	Growth Evolution of AZO thin Films Deposited by Magnetron Sputtering at Room Temperature. Materials Research, 2021, 24, .	1.3	4
89	Nitrogenation of diamond by glow discharge plasma treatment. Thin Solid Films, 1999, 355-356, 184-188.	1.8	3
90	Electron emission enhanced chemical vapor deposition (EEECVD) for the fabrication of diverse silicon-containing films. Thin Solid Films, 2001, 398-399, 591-596.	1.8	3

#	Article	IF	Citations
91	Growth of glassy carbon on natural fibers. Journal of Non-Crystalline Solids, 2002, 304, 271-277.	3.1	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.	1.4	3
93	Lubricating coating prepared by PIIID on a forming tool. Journal of Physics: Conference Series, 2012, 370, 012022.	0.4	3
94	Cell Adhesion to Plasma-Coated PVC. Scientific World Journal, The, 2014, 2014, 1-9.	2.1	3
95	Mg-Containing Hydroxyapatite Coatings Produced by Plasma Electrolytic Oxidation of Titanium. Materials Research, 2017, 20, 891-898.	1.3	3
96	Structural and photoluminescent properties of carbon structures on thick porous silicon. Thin Solid Films, 2000, 377-378, 315-319.	1.8	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.	2.1	2
98	Fabrication of smooth diamond films on SiO2 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.	2.1	2
99	Potential Use of Polyacrylamide for Soil Erosion Control in Brazil. Journal of Sustainable Development, 2010, 3, .	0.3	2
100	Feasibility of RF Sputtering and PIIID for production of thin films from red mud. Materials Research, 2014, 17, 1316-1323.	1.3	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.	0.4	2
102	Surface properties and corrosion resistance of SF₆ plasmaâ€treated polyesterâ€based thermoplastic elastomer. Surface and Interface Analysis, 2018, 50, 13-26.	1.8	2
103	Plasma Treatment of Crosslinked Polyethylene Tubes for Improved Adhesion of Water-based Paints. Materials Research, 2019, 22, .	1.3	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.	0.5	2
105	Study of wettability and optical transparency of pet polymer modified by plasma immersion techniques. Revista Brasileira De AplicaÃ§Ãµes De VÃ¡cuo, 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, .	1.3	2
107	Comparison of RF and Pulsed Magnetron Sputtering for the Deposition of AZO Thin Films on PET. Materials Research, 2020, 23, .	1.3	2
108	Surface functionalization of polyvinyl chloride by plasma immersion techniques. Polimeros, 2020, 30, .	0.7	2

#	Article	IF	Citations
109	Structural and optical properties o plasma-deposited a-C:H:Si:O:N films. Polimeros, 2021, 31, .	0.7	2
110	Growth of diamond and carbon structures on natural pyrolized fibers. Thin Solid Films, 2001, 398-399, 260-264.	1.8	1
111	Synthesis of diamond from ethanol highly diluted in neon/hydrogen mixtures. Diamond and Related Materials, 2001, 10, 927-930.	3.9	1
112	Effects of Aging on Chlorinated Plasma Polymers. Materials Research, 2017, 20, 862-865.	1.3	1
113	Characterization of Plasma-deposited a-C:H:Si:F:N Films. Materials Research, 2021, 24, .	1.3	1
114	AnÃ¡lise do Desempenho do ProtÃ³tipo Arduino com Sensor de pH para MediÃ§Ãµes da Qualidade de Ãgua contaminada em IgarapÃ©s de Manaus. Brazilian Journal of Development, 2020, 6, 20145-20156.	0.1	1
115	Nitrogenated amorphous carbon films deposited from plasmas of methanol-nitrogen mixtures. AIP Conference Proceedings, 1996, , .	0.4	0
116	Plasma polymerization of methanol-sulfur hexafluoride mixtures: Discharge and film studies. AIP Conference Proceedings, 1996, , .	0.4	0
117	Nucleation enhancement of diamond using natural lamellar hematite in the chemical vapor deposition process. Thin Solid Films, 2000, 377-378, 309-314.	1.8	0
118	Structural and optical properties of brominated plasma polymers. Surface and Coatings Technology, 2013, 237, 182-186.	4.8	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.	4.0	0
120	DEPRECIAÃ‡ÃƒO DE MÃQUINAS E EQUIPAMENTOS USANDO OS MÃ‰TODOS 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.	0.1	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.	0.4	0