Joan Esteve

List of Publications by Year
in descending order

120 papers	3,324 citations	117453 34 h-index	182168 51 g-index
120 all docs	120 docs citations	120 times ranked	2892 citing authors

#	Article	IF	Citations
1	Mechanical properties of calcium phosphate coatings deposited by laser ablation. Biomaterials, 2000, 21, 967-971.	5.7	115
2	Mechanical properties of nanocomposite and multilayered Crâ€“Siâ€“N sputtered thin films. Surface and Coatings Technology, 2004, 180-181, 570-574.	2.2	106
3	Improvement of hardness in plasma polymerized hexamethyldisiloxane coatings by silica-like surface modification. Thin Solid Films, 2000, 377-378, 109-114.	0.8	98
4	Micromechanical properties of silica aerogels. Applied Physics Letters, 1999, 75, 653-655.	1.5	95
5	CrAlN coatings deposited by cathodic arc evaporation at different substrate bias. Thin Solid Films, 2006, 515, 113-117.	0.8	95
6	Wear behavior of nanometric CrN/Cr multilayers. Surface and Coatings Technology, 2003, 163-164, 571-577.	2.2	94
7	Tungsten carbide/diamond-like carbon multilayer coatings on steel for tribological applications. Surface and Coatings Technology, 2001, 148, 277-283.	2.2	81
8	Multilayered chromium/chromium nitride coatings for use in pressure die-casting. Surface and Coatings Technology, 2001, 146-147, 268-273.	2.2	79
9	Nanoindentation stressâ€“strain curves as a method for thin-film complete mechanical characterization: application to nanometric CrN/Cr multilayer coatings. Applied Physics A: Materials Science and Processing, 2003, 77, 419-426.	1.1	78
10	Boron carbide thin films deposited by tuned-substrate RF magnetron sputtering. Diamond and Related Materials, 1999, 8, 402-405.	1.8	77
11	Influence of thickness on the properties of hydroxyapatite coatings deposited by KrF laser ablation. Biomaterials, 2001, 22, 2171-2175.	5.7	76
12	Internal stress and strain in heavily boronâ€doped diamond films grown by microwave plasma and hot filament chemical vapor deposition. Journal of Applied Physics, 1996, 80, 1846-1850.	1.1	66
13	Study of magnetic and structural properties of ferrofluids based on cobaltâ€“zinc ferrite nanoparticles. Journal of Magnetism and Magnetic Materials, 2012, 324, 394-402.	1.0	63
14	Optical properties of vacuum-evaporated CdTe thin films. Thin Solid Films, 1984, 120, 23-30.	0.8	61
15	Study of the mechanical properties of tetrahedral amorphous carbon films by nanoindentation and nanowear measurements. Diamond and Related Materials, 2001, 10, 145-152.	1.8	61
16	Cathodic chromium carbide coatings for molding die applications. Surface and Coatings Technology, 2004, 188-189, 506-510.	2.2	60
17	Preparation of Bî—¸Cî—¸N thin films by r.f. plasma assisted CVD. Diamond and Related Materials, 1998, 7, 376-379.	1.8	58
18	High-vacuum versus â€˜â€˜environmentalâ€™â€™ electron beam deposition. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 2609.	1.6	56

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19	Nanometric chromium/chromium carbide multilayers for tribological applications. Surface and Coatings Technology, 2003, 163-164, 392-397.	2.2	55
20	Electron tunneling in heavily Inâ€doped polycrystalline CdS films. Journal of Applied Physics, 1984, 56, 1738-1743.	1.1	54
21	Mechanical and tribological properties of tungsten carbide sputtered coatings. Thin Solid Films, 2000, 373, 282-286.	0.8	54
22	Period dependence of hardness and microstructure on nanometric Cr/CrN multilayers. Surface and Coatings Technology, 2004, 188-189, 338-343.	2.2	54
23	BCN thin films near the B 4 C composition deposited by radio frequency magnetron sputtering. Diamond and Related Materials, 2000, 9, 502-505.	1.8	53
24	Pulsed laser deposition of diamond from graphite targets. Applied Physics Letters, 1995, 67, 485-487.	1.5	52
25	Improvement of mechanical and tribological properties in steel surfaces by using titaniumâ€“aluminum/titaniumâ€“aluminum nitride multilayered system. Applied Surface Science, 2012, 258, 3805-3814.	3.1	48
26	Trimethylboron doping of CVD diamond thin films. Diamond and Related Materials, 1994, 3, 628-631.	1.8	44
27	Mechanical properties of plasma deposited polymer coatings. Surface and Coatings Technology, 2000, 125, 383-387.	2.2	42
28	Micromechanical properties of BN and Bâ€“Câ€“N coatings obtained by r.f. plasma-assisted CVD. Diamond and Related Materials, 1999, 8, 423-427.	1.8	40
29	Nanometric chromium nitride/chromium carbide multilayers by r.f. magnetron sputtering. Surface and Coatings Technology, 2004, 180-181, 335-340.	2.2	39
30	Optical properties of co-evaporated CuInSe2thin films. Journal Physics D: Applied Physics, 1986, 19, 127-136.	1.3	37
31	Synthesis of cubic aluminum nitride by carbothermal nitridation reaction. Diamond and Related Materials, 1999, 8, 1342-1344.	1.8	37
32	Influence of electrical discharge machining on the sliding contact response of cemented carbides. International Journal of Refractory Metals and Hard Materials, 2001, 19, 35-40.	1.7	37
33	Micromechanical and microtribological properties of BCN thin films near the B4C composition deposited by r.f. magnetron sputtering. Diamond and Related Materials, 2001, 10, 1892-1896.	1.8	36
34	Tribological performance of TiN supported molybdenum and tantalum carbide coatings in abrasion and sliding contact. Wear, 2002, 253, 1182-1187.	1.5	35
35	Effects of carbon incorporation in tungsten carbide films deposited by r.f. magnetron sputtering: single layers and multilayers. Surface and Coatings Technology, 2003, 163-164, 386-391.	2.2	35
36	Real time controlled rf reactor for deposition of a-Si:H thin films. Vacuum, 1989, 39, 795-798.	1.6	34

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37	Enhanced reactivity of high-index surface platinum hollow nanocrystals. Journal of Materials Chemistry A, 2016, 4, 200-208.	5.2	32
38	Effect of the bias voltage on the structure of nc-CrC/a-C:H coatings with high carbon content. Surface and Coatings Technology, 2012, 206, 2877-2883.	2.2	29
39	Ellipsometric study of diamond-like thin films. Surface and Coatings Technology, 1991, 47, 263-268.	2.2	28
40	Influence of deposition pressure on the structural mechanical and decorative properties of TiN thin films deposited by cathodic arc evaporation. Vacuum, 2007, 81, 1507-1510.	1.6	28
41	Developing plating baths for the production of reflective Niâ€“Cu films. Electrochimica Acta, 2012, 62, 381-389.	2.6	28
42	Preparation and Nanoscale Mechanical Properties of Self-Assembled Carboxylic Acid Functionalized Pentathiophene on Mica. Langmuir, 2004, 20, 7703-7710.	1.6	25
43	Influence of the microstructure on the thermal shock behavior of cemented carbides. Ceramics International, 2016, 42, 12701-12708.	2.3	25
44	Substrate temperature effects on the microhardness and adhesion of diamond-like thin films. Diamond and Related Materials, 1999, 8, 563-566.	1.8	24
45	Mechanical strength improvement of electrical discharge machined cemented carbides through PVD (TiN, TiAlN) coatings. Thin Solid Films, 2004, 447-448, 258-263.	0.8	24
46	Nucleation and initial growth of bias-assisted HFCVD diamond on boron nitride films. Diamond and Related Materials, 1997, 6, 579-583.	1.8	23
47	Diamond and diamond-like carbon films. Vacuum, 1999, 52, 133-139.	1.6	23
48	Crystalline properties of co-evaporated CuInSe2 thin films. Thin Solid Films, 1985, 130, 155-164.	0.8	22
49	Plasma deposition of hydrogenated amorphous carbon (a-C:H) under a wide bias potential range. Surface and Coatings Technology, 1991, 47, 89-97.	2.2	22
50	Effect of ion bombardment on the properties of B 4 C thin films deposited by RF sputtering. Thin Solid Films, 1999, 355-356, 210-213.	0.8	22
51	Growth vs. nucleation of conducting polymers thin films obtained by plasma-enhanced chemical vapor deposition. Thin Solid Films, 2004, 451-452, 74-80.	0.8	22
52	Tribological performance of chromium/chromium carbide multilayers deposited by r.f. magnetron sputtering. Surface and Coatings Technology, 2005, 200, 1819-1824.	2.2	22
53	Electrical properties of polycrystalline In-doped CdS thin films. Journal Physics D: Applied Physics, 1984, 17, 1679-1685.	1.3	21
54	Hardness and morphological characterization of tungsten carbide thin films. Surface and Coatings Technology, 1998, 108-109, 323-327.	2.2	21

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55	Substrate surface finish effects on scratch resistance and failure mechanisms of TiN-coated hardmetals. Surface and Coatings Technology, 2015, 265, 174-184.	2.2	21
56	Comparative study of high corrosion resistant TiCxN1â^'x and TiN hard coatings. Surface and Coatings Technology, 1994, 68-69, 536-540.	2.2	20
57	Atomic force microscopy observation of the first stages of diamond growth on silicon. Diamond and Related Materials, 1996, 5, 592-597.	1.8	20
58	Surface treatment of titanium by Nd:YAG laser irradiation in the presence of nitrogen. Applied Physics A: Materials Science and Processing, 1999, 69, S699-S702.	1.1	20
59	Mechanism of diamond nucleation enhancement by electron emission via hot filament chemical vapor deposition. Diamond and Related Materials, 1999, 8, 123-126.	1.8	20
60	Amorphous SixC1â^'x films: an example of materials presenting low indentation hardness and high wear resistance. Diamond and Related Materials, 2001, 10, 1053-1057.	1.8	20
61	Micromechanical properties of carbonâ€“silica aerogel composites. Applied Physics A: Materials Science and Processing, 2002, 74, 119-122.	1.1	20
62	Enhancement of surface mechanical properties by using TiN[BCN/BN]n/c-BN multilayer system. Applied Surface Science, 2010, 257, 1098-1104.	3.1	20
63	Piezoresistivity of p-type heteroepitaxial diamond films on Si(100). Diamond and Related Materials, 1998, 7, 528-532.	1.8	19
64	Dependence of transport parameters on thickness in polycrystalline CdS thin films. Thin Solid Films, 1985, 123, 297-306.	0.8	18
65	Surface reflectivity of TiN thin films measured by spectral ellipsometry. Surface Science, 1991, 251-252, 200-203.	0.8	18
66	Nucleation and initial growth of diamond by biased hot filament chemical vapour deposition. Applied Physics A: Materials Science and Processing, 1997, 65, 241-249.	1.1	18
67	Corrosion surface protection by using titanium carbon nitride/titaniumâ€“niobium carbon nitride multilayered system. Thin Solid Films, 2011, 519, 6362-6368.	0.8	18
68	Electrical conductivity of polycrystalline CuInSe2thin films. Journal Physics D: Applied Physics, 1984, 17, 2423-2427.	1.3	17
69	Analysis of contamination in diamond films by secondary ion mass spectroscopy. Diamond and Related Materials, 1992, 1, 500-503.	1.8	17
70	Growth of diamond by laser ablation of graphite. Diamond and Related Materials, 1995, 4, 780-783.	1.8	17
71	Interfacial layer effects in the growth of CVD diamond. Diamond and Related Materials, 1994, 3, 492-494.	1.8	16
72	Microtribological characterization of group V and VI metal-carbide wear-resistant coatings effective in the metal casting industry. Surface and Coatings Technology, 2000, 133-134, 314-318.	2.2	16

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73	Mechanical strengthening in nanometric CrN/Cr multilayers measured by nanoindentation. Journal Physics D: Applied Physics, 2002, 35, 1880-1883.	1.3	16
74	Characterization of hydroxyapatite laser ablation plumes by fast intensified CCD-imaging. Journal of Materials Research, 1995, 10, 473-478.	1.2	15
75	Carbon nitride thin films obtained by laser ablation of graphite in a nitrogen plasma. Applied Surface Science, 1996, 96-98, 870-873.	3.1	15
76	Structural modeling of the possible growth of oriented textured singleâ€crystal diamond film on a silicon (111) surface. Applied Physics Letters, 1996, 69, 1086-1088.	1.5	15
77	MECHANICAL AND TRIBOLOGICAL BEHAVIOR OF VN AND HfN FILMS DEPOSITED VIA REACTIVE MAGNETRON SPUTTERING. Surface Review and Letters, 2013, 20, 1350040.	0.5	15
78	Ultra low nanowear in novel chromium/amorphous chromium carbide nanocomposite films. Applied Surface Science, 2017, 420, 707-713.	3.1	15
79	Nucleation of diamond on silicon by biased HFCVD: A comparative study. Diamond and Related Materials, 1998, 7, 200-204.	1.8	14
80	Surface analysis of nanostructured ceramic coatings containing silicon carbide nanoparticles produced by plasma modulation chemical vapour deposition. Thin Solid Films, 2000, 377-378, 495-500.	0.8	13
81	Analysis of diamond nucleation on molybdenum by biased hot filament chemical vapor deposition. Diamond and Related Materials, 2001, 10, 383-387.	1.8	13
82	Boron incorporation effects in CVD diamond film growth. Vacuum, 1994, 45, 1013-1014.	1.6	12
83	Filament discharge plasma of argon with electrostatic confinement. Journal Physics D: Applied Physics, 1985, 18, 1339-1345.	1.3	11
84	Structure characterization of plasma-deposited TiN coatings. Surface and Coatings Technology, 1991, 45, 67-72.	2.2	11
85	Growth of diamond films on boron nitride thin films by bias-assisted hot filament chemical vapor deposition. Applied Physics Letters, 1997, 70, 1682-1684.	1.5	11
86	Product analysis from D2O electrolysis with Pd and Ti cathodes. Electrochimica Acta, 1992, 37, 215-219.	2.6	10
87	Surface and optical analysis of SiCx films prepared by RF-RMS technique. Diamond and Related Materials, 2006, 15, 71-79.	1.8	10
88	Hydrogen related effects in a-Si:H studied by photothermal deflection spectroscopy. Physica B: Condensed Matter, 1991, 170, 269-272.	1.3	9
89	Nanoindentation hardness measurements using real-shape indenters: application to extremely hard and elastic materials. Applied Physics A: Materials Science and Processing, 2001, 72, 319-324.	1.1	9
90	Control of the bias voltage in d.c. PVD processes on insulator substrates. Vacuum, 2009, 83, 1287-1290.	1.6	9

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91	Exploring New Synthetic Strategies for the Production of Advanced Complex Inorganic Nanocrystals. Zeitschrift Fur Physikalische Chemie, 2015, 229, 65-83.	1.4	9
92	Indium thin films on metal-coated substrates. Thin Solid Films, 1985, 129, 103-109.	0.8	8
93	Comparative study of trimethylboron doping of hot filament chemically vapour deposited and microwave plasma chemically vapour deposited diamond films. Thin Solid Films, 1994, 253, 136-140.	0.8	8
94	Evolution of the plumes produced by laser ablation of a carbon target. Diamond and Related Materials, 1995, 4, 337-341.	1.8	8
95	YSZ protective coatings elaborated by MOCVD on nickel-based alloys. Surface and Coatings Technology, 1998, 100-101, 164-168.	2.2	8
96	Spectroscopic ellipsometry measurements of the diamond-crystalline Si interface in chemically vapour-deposited polycrystalline diamond films. Diamond and Related Materials, 1993, 2, 728-731.	1.8	7
97	Temperature dependence of intergrain barriers in polycrystalline In-doped CdS films. Solid-State Electronics, 1985, 28, 1019-1023.	0.8	6
98	Distribution of electron energy in an electrostatically confined silane plasma. Journal of Applied Physics, 1988, 63, 1230-1232.	1.1	6
99	CVD diamond films on bio-medical ceramics. Diamond and Related Materials, 1995, 4, 798-801.	1.8	6
100	Effect of methane/hydrogen dilution on the properties of hydrogenated amorphous carbon films deposited by RF-plasma. Diamond and Related Materials, 1992, 1, 538-542.	1.8	5
101	Combined Roles of Ion Bombardment and Electron Emission in Bias-Enhanced Diamond Nucleation on Silicon by Hot Filament Chemical Vapour Deposition. Physica Status Solidi A, 1997, 161, R3-R4.	1.7	5
102	Properties of a-C:H films deposited from a methane electron cyclotron wave resonant plasma. Current Applied Physics, 2003, 3, 433-437.	1.1	5
103	Structural characterization of a-SiC:H by thermal desorption spectroscopy. Applied Surface Science, 1993, 70-71, 768-771.	3.1	4
104	Laser wavelength dependence of YBa2Cu3Oy laser ablation plumes. Applied Surface Science, 1995, 86, 59-63.	3.1	4
105	Diamond coatings on electrical-discharge machined hardmetals. Diamond and Related Materials, 2003, 12, 762-767.	1.8	4
106	Improvement of the Electrochemical Behavior of Steel Surfaces Using a [Ti-Al/Ti-Al-N] n Multilayer System. Journal of Materials Engineering and Performance, 2013, 22, 1471-1480.	1.2	4
107	Low Wear and Low Friction DLC Coating With Good Adhesion to CoCrMo Metal Substrates. Physica Status Solidi (B): Basic Research, 2018, 255, 1800225.	0.7	4
108	Rheotaxial growth on indium thin films. Thin Solid Films, 1984, 113, L21-L23.	0.8	3

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109	Electrostatic confinement effects on a hot cathode DC glow discharge in silane. Journal Physics D: Applied Physics, 1987, 20, 1479-1483.	1.3	3
110	Rheotaxial growth of CuInSe2 thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 169-173.	0.9	3
111	Glow discharge deposited a-Si:H,Al thin films. Solar Energy Materials and Solar Cells, 1987, 15, 167-173.	0.4	3
112	Indium liquid films on glass substrates. Thin Solid Films, 1983, 103, L51-L54.	0.8	2
113	Hydrogenated amorphous silicon films obtained by a low pressure dc glow discharge. Applied Physics A: Solids and Surfaces, 1988, 46, 207-213.	1.4	2
114	Plasma polymer thin films obtained by plasma polymerization of pyrrole. European Physical Journal Special Topics, 1999, 09, Pr8-461-Pr8-469.	0.2	1
115	Protective coatings for Al metallizations obtained by plasma polymerization. , 2000, , .		1
116	Step-by-step simulations of diamond nucleation and growth on a silicon (001) surface. Diamond and Related Materials, 2000, 9, 146-155.	1.8	1
117	Deposition of amorphous silicon films from an electrostatically confined silane plasma. Vacuum, 1987, 37, 443-444.	1.6	0
118	Microstructural analysis of CAPD Ti(C,N) hard coatings. Vacuum, 1994, 45, 1001-1002.	1.6	0
119	Using a Grid Platform for Enabling Real Time User Modeling in On-line Campus. , 2007, , .		0
120	Preservation of copper against atmospheric corrosion with a film obtained by plasma polymerization of methane. European Physical Journal Special Topics, 1999, 09, Pr8-479-Pr8-486.	0.2	0