

Manuel Varela

List of Publications by Year in descending order

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125
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147801

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197818

49
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125
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125
docs citations

125
times ranked

3307
citing authors

#	ARTICLE	IF	CITATIONS
1	Electric-Field Control of Exchange Bias in Multiferroic Epitaxial Heterostructures. <i>Physical Review Letters</i> , 2006, 97, 227201.	7.8	295
2	Spin filtering through ferromagnetic BiMnO ₃ tunnel barriers. <i>Physical Review B</i> , 2005, 72, .	3.2	187
3	Nonferroelectric contributions to the hysteresis cycles in manganite thin films: A comparative study of measurement techniques. <i>Journal of Applied Physics</i> , 2011, 109, .	2.5	100
4	Selectable Spontaneous Polarization Direction and Magnetic Anisotropy in BiFeO ₃ ∕CoFe ₂ O ₄ Epitaxial Nanostructures. <i>ACS Nano</i> , 2010, 4, 4955-4961.	14.6	86
5	Enhanced electron-electron correlations in nanometric SrRuO ₃ epitaxial films. <i>Physical Review B</i> , 2003, 67, .	3.2	85
6	Magnetoimpedance spectroscopy of epitaxial multiferroic thin films. <i>Physical Review B</i> , 2012, 86, .	3.2	80
7	Epitaxial stabilization of μ -Fe ₂ O ₃ (001) thin films on SrTiO ₃ (111). <i>Applied Physics Letters</i> , 2010, 96, .	3.3	79
8	Tunneling magnetoresistance in Co ²⁺ /ZrO ₂ granular thin films. <i>Physical Review B</i> , 2006, 73, .	3.2	57
9	Emergence of ferromagnetism in antiferromagnetic TbMnO ₃ by epitaxial strain. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	53
10	Pulsed laser deposition of diamond from graphite targets. <i>Applied Physics Letters</i> , 1995, 67, 485-487.	3.3	52
11	A phase transition close to room temperature in BiFeO ₃ thin films. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 342202.	1.8	49
12	On the strain coupling across vertical interfaces of switchable BiFeO ₃ ∕CoFe ₂ O ₄ multiferroic nanostructures. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	48
13	Weak localization effects in some metallic perovskites. <i>European Physical Journal B</i> , 2004, 40, 439-444.	1.5	47
14	Controlling exchange bias in Co ²⁺ /CoO nanoparticles by oxygen content. <i>Nanotechnology</i> , 2009, 20, 175702.	2.6	46
15	Magnetic field effect on quantum corrections to the low-temperature conductivity in metallic perovskite oxides. <i>Physical Review B</i> , 2005, 72, .	3.2	44
16	Exchange bias between magnetoelectric YMnO ₃ and ferromagnetic SrRuO ₃ epitaxial films. <i>Journal of Applied Physics</i> , 2006, 99, 08P302.	2.5	43
17	Dynamics of the hydrodynamical growth of columns on silicon exposed to ArF excimer-laser irradiation. <i>Applied Physics A: Materials Science and Processing</i> , 1998, 66, 83-86.	2.3	42
18	Synthesis, structure, and magnetic studies on self-assembled BiFeO ₃ ∕CoFe ₂ O ₄ nanocomposite thin films. <i>Journal of Applied Physics</i> , 2008, 103, 07E301.	2.5	41

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19	ArF and KrF excimer laser deposition of yttria-stabilized zirconia on Si(100). Applied Physics Letters, 1996, 68, 1048-1050.	3.3	39
20	Pulsed laser deposition of epitaxial LaNiO ₃ thin films on buffered Si(100). Thin Solid Films, 2001, 384, 200-205.	1.8	39
21	Growth and characterization of epitaxial ferroelectric PbZrTi _{1-x} O ₃ thin film capacitors with SrRuO ₃ electrodes for non-volatile memory applications. Solid-State Electronics, 2001, 45, 1433-1440.	1.4	39
22	Domain structure of epitaxial SrRuO ₃ thin films. Physical Review B, 2005, 71, .	3.2	39
23	Ferromagnetism in epitaxial orthorhombic YMnO ₃ thin films. Journal of Magnetism and Magnetic Materials, 2009, 321, 1719-1722.	2.3	38
24	Optical properties of co-evaporated CuInSe ₂ thin films. Journal Physics D: Applied Physics, 1986, 19, 127-136.	2.8	37
25	Critical effects of substrate terraces and steps morphology on the growth mode of epitaxial SrRuO ₃ films. Applied Physics Letters, 2004, 85, 1981-1983.	3.3	37
26	Exchange biasing and electric polarization with YMnO ₃ . Applied Physics Letters, 2006, 89, 032510.	3.3	37
27	Transition from three- to two-dimensional growth in strained SrRuO ₃ films on SrTiO ₃ (001). Applied Physics Letters, 2003, 83, 902-904.	3.3	36
28	Impact of microstructure on transport properties of nanometric epitaxial SrRuO ₃ films. Applied Physics Letters, 2003, 82, 85-87.	3.3	35
29	La ₂ Sr ₁₋₃ MnO ₃ La _{0.1} Bi _{0.9} MnO ₃ heterostructures for spin filtering. Journal of Applied Physics, 2006, 99, 08E504.	2.5	35
30	Optical properties of indium doped CdS thin films. Solar Energy Materials and Solar Cells, 1988, 17, 55-64.	0.4	32
31	Growth and magnetic properties of multiferroic La _x Bi _{1-x} MnO ₃ thin films. Physical Review B, 2007, 75, .	3.2	31
32	Crystal texture selection in epitaxies of orthorhombic antiferromagnetic YMnO ₃ films. Thin Solid Films, 2008, 516, 4899-4907.	1.8	31
33	Self-organization in complex oxide thin films: from 2D to 0D nanostructures of SrRuO ₃ and CoCr ₂ O ₄ . Nanotechnology, 2005, 16, S190-S196.	2.6	29
34	Critical Limitations in the Fabrication of Biferroic BiFeO ₃ /CoFe ₂ O ₄ Columnar Nanocomposites Due to Bismuth Loss. Chemistry of Materials, 2009, 21, 1375-1380.	6.7	29
35	Effects of wavelength, deposition rate and thickness on laser ablation deposited YSZ films on Si(100). Thin Solid Films, 1997, 304, 225-228.	1.8	28
36	Study of the epitaxial growth of CeO ₂ (001) on yttria-stabilized zirconia/Si(001). Journal of Crystal Growth, 1998, 192, 175-184.	1.5	26

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37	Anisotropic magnetoresistance of (00h), (0hh) and (hhh) La ₂ /3Sr ₁ /3MnO ₃ thin films on (001) Si substrates. Journal of Magnetism and Magnetic Materials, 2000, 211, 206-211.	2.3	26
38	Strain tuned magnetoelectric coupling in orthorhombic YMnO ₃ thin films. Applied Physics Letters, 2009, 95, .	3.3	26
39	Dielectric anomaly and magnetic response of epitaxial orthorhombic YMnO ₃ thin films. Journal of Materials Research, 2007, 22, 2096-2101.	2.6	25
40	Strain-driven noncollinear magnetic ordering in orthorhombic epitaxial YMnO ₃ thin films. Journal of Applied Physics, 2010, 108, .	2.5	25
41	Effect of disorder on the temperature dependence of the resistivity of SrRuO ₃ . Physical Review B, 2008, 77, Dielectric properties of (Bi _{1-x} Tl _x) ₂ TlQqO ₀ 0 rgBT /Overlock 10 Tf 50 567	3.2	24
42		3.2	24
43	Deposition of Zn ₃ P ₂ thin films by coevaporation. Solar Energy Materials and Solar Cells, 1985, 12, 51-56.	0.4	23
44	Tunable epitaxial growth of magnetoresistive La ₂ /3Sr ₁ /3MnO ₃ thin films. Journal of Applied Physics, 1999, 85, 4800-4802.	2.5	23
45	Competing tunneling and capacitive paths in Co [~] ZrO ₂ granular thin films. Physical Review B, 2003, 67, .	3.2	23
46	Crystalline properties of co-evaporated CuInSe ₂ thin films. Thin Solid Films, 1985, 130, 155-164.	1.8	22
47	Epitaxial growth of magnetoresistive (00h), (0hh), and (hhh) La ₂ /3Sr ₁ /3MnO ₃ thin films on (001)Si substrates. Applied Physics Letters, 1999, 74, 1743-1745.	3.3	22
48	Pulsed laser deposition of epitaxial PbZrxTi _{1-x} O ₃ ferroelectric capacitors with LaNiO ₃ and SrRuO ₃ electrodes. Applied Surface Science, 2000, 168, 219-222.	6.1	21
49	SrRuO ₃ /SrTiO ₃ /SrRuO ₃ heterostructures for magnetic tunnel junctions. Journal of Applied Physics, 2003, 93, 8035-8037.	2.5	21
50	Particle growth mechanisms in Ag [~] ZrO ₂ and Au [~] ZrO ₂ granular films obtained by pulsed laser deposition. Nanotechnology, 2006, 17, 4106-4111.	2.6	20
51	Epitaxial SrRuO ₃ thin films on LaAlO ₃ (100) and Si(100). Applied Surface Science, 2000, 154-155, 159-164.	6.1	19
52	Structural and compositional characterization of laser ablated CeO ₂ thin films. Applied Surface Science, 1993, 70-71, 94-98.	6.1	18
53	Epitaxial thin films of (Bi _{0.9} La _{0.1}) ₂ NiMnO ₆ obtained by pulsed laser deposition. Journal of Magnetism and Magnetic Materials, 2009, 321, 1748-1753.	2.3	18
54	Electrical conductivity of polycrystalline CuInSe ₂ thin films. Journal Physics D: Applied Physics, 1984, 17, 2423-2427.	2.8	17

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55	Growth of diamond by laser ablation of graphite. <i>Diamond and Related Materials</i> , 1995, 4, 780-783.	3.9	17
56	Anisotropic magnetoresistance in SrRuO ₃ ferromagnetic oxide. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, 517-518.	2.3	16
57	Epitaxial growth of biferroic YMnO ₃ (0001) on platinum electrodes. <i>Journal of Crystal Growth</i> , 2007, 299, 288-294.	1.5	16
58	Characterization of hydroxyapatite laser ablation plumes by fast intensified CCD-imaging. <i>Journal of Materials Research</i> , 1995, 10, 473-478.	2.6	15
59	Carbon nitride thin films obtained by laser ablation of graphite in a nitrogen plasma. <i>Applied Surface Science</i> , 1996, 96-98, 870-873.	6.1	15
60	Magnetoresistance at artificial interfaces in epitaxial ferromagnetic thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2000, 211, 217-225.	2.3	15
61	Long-range order of Ni ²⁺ and Mn ⁴⁺ and ferromagnetism in multiferroic (Bi _{0.9} La _{0.1}) ₂ NiMnO ₆ thin films. <i>Journal of Applied Physics</i> , 2010, 108, 123907.	2.5	15
62	Influence of substrate temperature in BiFeO ₃ –CoFe ₂ O ₄ nanocomposites deposited on SrTiO ₃ (001). <i>Journal of Magnetism and Magnetic Materials</i> , 2009, 321, 1790-1794.	2.3	14
63	Superconducting YBa ₂ Cu ₃ O ₇ films deposited on Si (100) substrates with CeO ₂ buffer layers by laser ablation. <i>Physica C: Superconductivity and Its Applications</i> , 1992, 195, 47-50.	1.2	13
64	Giant step bunching from self-organized coalescence of SrRuO ₃ islands. <i>Physical Review B</i> , 2006, 73, .	3.2	13
65	Mapping of the epitaxial stabilization of quasi-tetragonal BiFeO ₃ with deposition temperature. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	13
66	Perovskite-based heterostructures integrating ferromagnetic-insulating La _{0.1} Bi _{0.9} MnO ₃ . <i>Journal of Applied Physics</i> , 2005, 97, 103909.	2.5	12
67	Thin films in ternary Bi–Mn–O system obtained by pulsed laser deposition. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2007, 144, 138-142.	3.5	12
68	Material properties of Au–Pd thin alloy films. <i>Thin Solid Films</i> , 2010, 518, 5715-5719.	1.8	12
69	Ferroelectric phase transition in strained multiferroic (Bi _{0.9} La _{0.1}) ₂ NiMnO ₆ thin films. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	12
70	Erbium oxide thin films on Si(100) obtained by laser ablation and electron beam evaporation. <i>Applied Surface Science</i> , 1995, 86, 95-98.	6.1	11
71	Optical and structural characterization of boron nitride thin films. <i>Diamond and Related Materials</i> , 1995, 4, 657-660.	3.9	11
72	Controlled magnetic anisotropy of SrRuO ₃ thin films grown on nominally exact SrTiO ₃ (001) substrates. <i>Applied Physics Letters</i> , 2006, 89, 152501.	3.3	11

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73	Protective oxide coatings for superconducting YBa ₂ Cu ₃ O _{7-x} thin films. Thin Solid Films, 1997, 306, 74-77.	1.8	10
74	Room-temperature epitaxial growth of CeO ₂ (001) films on YSZ buffered Si(001) substrates. Applied Physics A: Materials Science and Processing, 1998, 67, 455-457.	2.3	10
75	Magnetoresistance at artificial interfaces in the itinerant SrRuO ₃ ferromagnet. Physical Review B, 1999, 60, 9579-9582.	3.2	10
76	Structural and dielectric properties of (001) and (111)-oriented BaZr _{0.2} Ti _{0.8} O ₃ epitaxial thin films. Thin Solid Films, 2010, 518, 4692-4695.	1.8	10
77	Novel Fabrication of Ca-Doped LaNbO ₄ Thin Film Proton-Conducting Fuel Cells by Pulsed Laser Deposition. Journal of the American Ceramic Society, 2010, 93, 1874-1878.	3.8	10
78	Simulation of epitaxial growth of CeO ₂ on YSZ(100) and SrTiO ₃ on MgO(100) for YBa ₂ Cu ₃ O _{7-x} deposition. Thin Solid Films, 1998, 317, 81-84.	1.8	9
79	Magnetic properties of Co nanoparticles in zirconia matrix. Journal of Magnetism and Magnetic Materials, 2007, 316, 103-105.	2.3	9
80	Indium thin films on metal-coated substrates. Thin Solid Films, 1985, 129, 103-109.	1.8	8
81	YBa ₂ Cu ₃ O _{7-x} thin films on double buffer layers on Si(100). Physica C: Superconductivity and Its Applications, 1994, 235-240, 647-648.	1.2	8
82	Evolution of the plumes produced by laser ablation of a carbon target. Diamond and Related Materials, 1995, 4, 337-341.	3.9	8
83	Epitaxial ferroelectric PbZr _x Ti _{1-x} O ₃ thin films for non-volatile memory applications. Microelectronics Reliability, 2000, 40, 671-674.	1.7	8
84	Metallic Nanoparticles Embedded in a Dielectric Matrix: Growth Mechanisms and Percolation. Journal of Nanomaterials, 2008, 2008, 1-5.	2.7	8
85	Study of material emission in ArF and KrF excimer laser ablation of yttria stabilized zirconia single crystals. Thin Solid Films, 1998, 317, 108-111.	1.8	7
86	Laser irradiation of SrTiO ₃ single crystals. Applied Physics A: Materials Science and Processing, 1999, 69, S501-S504.	2.3	7
87	Room-temperature magnetoresistive sensor based on thick films manganese perovskite. Sensors and Actuators A: Physical, 2000, 81, 64-66.	4.1	7
88	Superconductivity and magnetoresistance in YBa ₂ Cu ₃ O ₇ /SrTiO ₃ /La ₂ /3Sr ₁ /3MnO ₃ heterostructures. Journal of Magnetism and Magnetic Materials, 2000, 211, 180-185.	2.3	7
89	High-quality YBa ₂ Cu ₃ O ₇ /insulator/LaNiO ₃ trilayers obtained by pulsed laser deposition. Vacuum, 2002, 64, 337-341.	3.5	7
90	Kerr measurements on single-domain SrRuO ₃ thin films. Journal of Applied Physics, 2005, 97, 10M321.	2.5	7

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91	Electric field effects on magnetotransport properties of multiferroic Py/YMnO ₃ /Pt heterostructures. Philosophical Magazine Letters, 2007, 87, 183-191.	1.2	7
92	Electrical conductivity dependence of thin metallic films of Au and Pd as a top electrode in capacitor applications. Applied Surface Science, 2009, 255, 3618-3622.	6.1	7
93	Growth of epitaxial Pt thin films on (001) SrTiO ₃ by rf magnetron sputtering. Applied Surface Science, 2014, 306, 23-26.	6.1	7
94	Single crystal laser patterning for selective YBa ₂ Cu ₃ O _{7-x} growth. Applied Surface Science, 1996, 96-98, 405-409.	6.1	6
95	Pulsed laser deposition of epitaxial ferroelectric PbZr _x Ti _{1-x} O ₃ /SrTiO ₃ and PbZr _x Ti _{1-x} O ₃ /SrRuO ₃ bilayers. Applied Surface Science, 2000, 154-155, 500-507.	6.1	6
96	Synthesis and characterization of platinum thin film as top electrodes for multifunctional layer devices by PLD. Thin Solid Films, 2010, 518, 4705-4709.	1.8	6
97	Deposition of YBa ₂ Cu ₃ O _x by laser ablation on Si(100) using different buffer layers. Applied Surface Science, 1993, 69, 221-224.	6.1	5
98	X-ray diffraction study of lattice engineered manganite magnetoresistive films. Journal of Crystal Growth, 2000, 209, 842-849.	1.5	5
99	Growth modes and self-organization in the epitaxy of ferromagnetic SrRuO ₃ on SrTiO ₃ (001). Progress in Solid State Chemistry, 2006, 34, 213-221.	7.2	5
100	An Investigation on Solid State Reactions in Heat Treated Au/Pd Thin Films for Electrodes Applications. Journal of Nanoscience and Nanotechnology, 2010, 10, 2635-2640.	0.9	5
101	Laser wavelength dependence of YBa ₂ Cu ₃ O _y laser ablation plumes. Applied Surface Science, 1995, 86, 59-63.	6.1	4
102	Excimer laser patterning of epitaxial YSZ films grown on silicon. Vacuum, 2002, 65, 115-118.	3.5	4
103	Relevance of the 3D to 2D growth mode transition for the transport properties of nanometric SrRuO ₃ films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 221-225.	3.5	4
104	Rheotaxial growth on indium thin films. Thin Solid Films, 1984, 113, L21-L23.	1.8	3
105	Rheotaxial growth of CuInSe ₂ thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 169-173.	2.1	3
106	Electrical transport properties of polycrystalline CuInSe ₂ films. Solar Energy Materials and Solar Cells, 1988, 17, 347-355.	0.4	3
107	YBa ₂ Cu ₃ O _{7-x} superconducting thin films by sequential evaporation on alumina substrates. Journal of the Less Common Metals, 1990, 164-165, 430-437.	0.8	3
108	Deposition of Er ₂ O ₃ thin films on Si(100) by laser ablation. Vacuum, 1994, 45, 1129-1130.	3.5	3

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109	Influence of laser-ablation plume dynamics on the room-temperature epitaxial growth of CeO ₂ on silicon. Applied Physics A: Materials Science and Processing, 1999, 69, S815-S818.	2.3	3
110	Magnetic and transport properties of La _{2/3} Sr _{1/3} MnO ₃ thin films prepared by pulsed laser deposition. Journal of Magnetism and Magnetic Materials, 1999, 203, 256-258.	2.3	3
111	Epitaxial growth of yttria-stabilised zirconia buffer layers on X-cut LiNbO ₃ for superconducting electrodes. Applied Physics A: Materials Science and Processing, 2002, 75, 381-385.	2.3	3
112	Pulsed laser deposition of epitaxial buffer layers on LiNbO ₃ . Applied Surface Science, 2002, 186, 397-402.	6.1	3
113	Giant step bunching in epitaxial SrRuO ₃ films on vicinal SrTiO ₃ (001). Thin Solid Films, 2006, 495, 159-164.	1.8	3
114	Crystalline properties of In-Doped CdS thin films. Journal of Crystal Growth, 1987, 84, 483-488.	1.5	2
115	Study of the interdiffusion of ceramic thin films deposited on Si(100) by laser ablation. Vacuum, 1994, 45, 1131-1133.	3.5	2
116	Effects of excimer-laser irradiation of LaAlO ₃ (100) single crystals: Influence on superconducting YBa ₂ Cu ₃ O _{7-x} film growth. Applied Physics A: Materials Science and Processing, 1997, 65, 429-436.	2.3	2
117	Magneto-optical Kerr effect in laser-patterned La _{2/3} Sr _{1/3} MnO ₃ epitaxial thin films. Journal of Applied Physics, 2001, 89, 6958-6960.	2.5	2
118	Reduced microwave losses of YBa ₂ Cu ₃ O _{7-δ} thin films on electro-optic LiNbO ₃ crystals. Journal of Applied Physics, 2002, 92, 6346-6348.	2.5	2
119	Self-interference of charge carriers in ferromagnetic SrRuO ₃ . Journal of Applied Physics, 2004, 95, 7213-7215.	2.5	2
120	Nanoporous films obtained by sacrificial layer pulsed laser deposition. Thin Solid Films, 2009, 518, 383-386.	1.8	2
121	Response to "Comment on "On the strain coupling across vertical interfaces of switchable BiFeO ₃ /CoFe ₂ O ₄ multiferroic nanostructures" [Appl. Phys. Lett. 96, 076101 (2010)]. Applied Physics Letters, 2010, 96, 076102.	3.3	2
122	Oxygen content and inhomogeneity effects on the electrical properties of YBa ₂ Cu ₃ O _y thin films. Journal of Materials Research, 1997, 12, 47-53.	2.6	1
123	Excimer laser irradiation of SrRuO ₃ epitaxial thin films. Applied Surface Science, 2000, 154-155, 622-626.	6.1	1
124	Superconducting Y-Ba-Cu-O thin films on silicon and Al ₂ O ₃ substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1992, 14, 53-56.	3.5	0
125	Magneto-resistance of SrRuO ₃ ultra-thin films. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1123-1126.	2.3	0