

# M F Cerqueira

## List of Publications by Year in descending order

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79  
papers

1,425  
citations

430874

18  
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80  
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80  
docs citations

80  
times ranked

2629  
citing authors

#	ARTICLE	IF	CITATIONS
1	Large-Scale Synthesis of Colloidal Fe <sub>3</sub> O <sub>4</sub> Nanoparticles Exhibiting High Heating Efficiency in Magnetic Hyperthermia. <i>Journal of Physical Chemistry C</i> , 2014, 118, 8691-8701.	3.1	226
2	Vapor-phase solid synthesis of monolithic single-crystalline CoP nanowire electrodes for efficient and robust water electrolysis. <i>Chemical Science</i> , 2017, 8, 2952-2958.	7.4	162
3	Atomic-layer-deposited ultrafine MoS <sub>2</sub> nanocrystals on cobalt foam for efficient and stable electrochemical oxygen evolution. <i>Nanoscale</i> , 2017, 9, 2711-2717.	5.6	88
4	Nano-ilmenite FeTiO <sub>3</sub> : Synthesis and characterization. <i>Journal of Magnetism and Magnetic Materials</i> , 2013, 331, 129-132.	2.3	76
5	Optical characterization of TiAlN/TiAlON/SiO <sub>2</sub> absorber for solar selective applications. <i>Surface and Coatings Technology</i> , 2012, 211, 41-44.	4.8	69
6	Dielectric function of nanocrystalline silicon with few nanometers (< 3 nm) grain size. <i>Applied Physics Letters</i> , 2003, 82, 2993-2995.	3.3	58
7	On-line monitoring of the residence time distribution along a kneading block of a twin-screw extruder. <i>Polymer Testing</i> , 2004, 23, 925-937.	4.8	42
8	Electrosprayed whey protein-based nanocapsules for $\beta$ -carotene encapsulation. <i>Food Chemistry</i> , 2020, 314, 126157.	8.2	36
9	A novel approach to reduce in-service temperature in WC-Co cutting tools. <i>Ceramics International</i> , 2020, 46, 3002-3008.	4.8	34
10	Macrocrystalline silicon thin films prepared by RF reactive magnetron sputter deposition. <i>Vacuum</i> , 1995, 46, 1385-1390.	3.5	29
11	The effect of argon plasma treatment on the permeation barrier properties of silicon nitride layers. <i>Surface and Coatings Technology</i> , 2013, 235, 361-366.	4.8	28
12	Resonant Raman scattering in ZnO:Mn and ZnO:Mn:Al thin films grown by RF sputtering. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 334205.	1.8	26
13	High-Temperature Magnetism as a Probe for Structural and Compositional Uniformity in Ligand-Capped Magnetite Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2014, 118, 28322-28329.	3.1	26
14	Negative thermoelectric power of melt mixed vapor grown carbon nanofiber polypropylene composites. <i>Carbon</i> , 2019, 150, 408-416.	10.3	25
15	Comparison of soybean hull pre-treatments to obtain cellulose and chemical derivatives: Physical chemistry characterization. <i>Carbohydrate Polymers</i> , 2018, 198, 601-610.	10.2	21
16	Laser surface texturing of Ti-6Al-4V by nanosecond laser: Surface characterization, Ti-oxide layer analysis and its electrical insulation performance. <i>Materials Science and Engineering C</i> , 2019, 104, 109901.	7.3	21
17	A Microinjected 3-Axis Thermal Accelerometer. <i>Procedia Engineering</i> , 2011, 25, 607-610.	1.2	20
18	Optimisation of surface treatments of TiO <sub>2</sub> :Nb transparent conductive coatings by a post-hot-wire annealing in a reducing H <sub>2</sub> atmosphere. <i>Thin Solid Films</i> , 2014, 550, 404-412.	1.8	20

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19	Structural studies and influence of the structure on the electrical and optical properties of microcrystalline silicon thin films produced by RF sputtering. <i>Thin Solid Films</i> , 2000, 370, 128-136.	1.8	19
20	Effect of hot-filament annealing in a hydrogen atmosphere on the electrical and structural properties of Nb-doped TiO <sub>2</sub> sputtered thin films. <i>Thin Solid Films</i> , 2012, 520, 2514-2519.	1.8	19
21	Wafer scale fabrication of graphene microelectrode arrays for the detection of DNA hybridization. <i>Microelectronic Engineering</i> , 2018, 189, 85-90.	2.4	19
22	Characterization of magnetron sputtered sub-stoichiometric CrAlSiN <sub>x</sub> and CrAlSiO <sub>y</sub> N <sub>x</sub> coatings. <i>Surface and Coatings Technology</i> , 2017, 328, 134-141.	4.8	18
23	Vapor grown carbon nanofiber based cotton fabrics with negative thermoelectric power. <i>Cellulose</i> , 2020, 27, 9091-9104.	4.9	18
24	Influence of hydrogen plasma thermal treatment on the properties of ZnO:Al thin films prepared by dc magnetron sputtering. <i>Vacuum</i> , 2014, 107, 145-154.	3.5	16
25	Raman study of insulating and conductive ZnO:(Al, Mn) thin films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 2345-2354.	1.8	16
26	The annealing effect on structural and optical properties of ZnO thin films produced by r.f. sputtering. <i>Superlattices and Microstructures</i> , 2007, 42, 265-269.	3.1	15
27	Raman study of doped ZnO thin films grown by rf sputtering. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010, 7, 2290-2293.	0.8	13
28	Characterisation of chemical bath deposited CdS thin films on different substrates using electrolyte contacts. <i>Thin Solid Films</i> , 2011, 519, 7583-7586.	1.8	13
29	Wetting behaviour of SAC305 solder on different substrates in high vacuum and inert atmosphere. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 5106-5112.	2.2	13
30	Fabrication of GeSn-multiple quantum wells by overgrowth of Sn on Ge by using molecular beam epitaxy. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	12
31	Permeation barrier performance of Hot Wire-CVD grown silicon-nitride films treated by argon plasma. <i>Thin Solid Films</i> , 2015, 575, 72-75.	1.8	12
32	Structural and vibrational properties of Sn <sub>x</sub> Ge <sub>1-x</sub> : Modeling and experiments. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	11
33	Study on excimer laser irradiation for controlled dehydrogenation and crystallization of boron doped hydrogenated amorphous/nanocrystalline silicon multilayers. <i>Thin Solid Films</i> , 2013, 536, 147-151.	1.8	10
34	Epitaxial CuInSe <sub>2</sub> thin films grown by molecular beam epitaxy and migration enhanced epitaxy. <i>Journal of Crystal Growth</i> , 2017, 475, 300-306.	1.5	10
35	Temperature dependence of the first order Raman scattering in thin films of <sup>114</sup> c-Si:H. <i>Journal of Materials Processing Technology</i> , 1999, 92-93, 235-238.	6.3	9
36	Effect of argon ion energy on the performance of silicon nitride multilayer permeation barriers grown by hot-wire CVD on polymers. <i>Thin Solid Films</i> , 2015, 595, 258-265.	1.8	9

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37	Raman and IR-ATR spectroscopy studies of heteroepitaxial structures with a GaN:C top layer. Journal Physics D: Applied Physics, 2017, 50, 365103.	2.8	9
38	Laser printing of silver-based micro-wires in ZrO2 substrate for smart implant applications. Optics and Laser Technology, 2020, 131, 106416.	4.6	9
39	Electrical and Raman Scattering Studies of ZnO:P and ZnO:Sb Thin Films. Journal of Nanoscience and Nanotechnology, 2010, 10, 2620-2623.	0.9	8
40	Flexible CuInSe2 photovoltaic cells fabricated by non-vacuum techniques. Thin Solid Films, 2011, 519, 7272-7275.	1.8	8
41	Multi-stacks of epitaxial GeSn self-assembled dots in Si: Structural analysis. Journal of Applied Physics, 2015, 117, 125706.	2.5	8
42	Photoluminescence from ultrathin Ge-rich multiple quantum wells observed up to room temperature: Experiments and modeling. Physical Review B, 2016, 94, .	3.2	8
43	Laser printing of micro-electronic communication systems for smart implants applications. Optics and Laser Technology, 2020, 128, 106211.	4.6	8
44	Interrelation between microstructure and optical properties of erbium-doped nanocrystalline thin films. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 16, 414-419.	2.7	7
45	Room temperature paramagnetism of ZnO:Mn films grown by RF-sputtering. Thin Solid Films, 2010, 518, 4612-4614.	1.8	7
46	Role of counter-ion and helper lipid content in the design and properties of nanocarrier systems: a biophysical study in 2D and 3D lipid assemblies. RSC Advances, 2016, 6, 47730-47740.	3.6	7
47	Amorphous silicon thin film solar cells deposited on flexible substrates using different zinc oxide layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1061-1064.	0.8	6
48	Straightforward phase-transfer route to colloidal iron oxide nanoparticles for protein immobilization. RSC Advances, 2015, 5, 47954-47958.	3.6	6
49	Erbium-doped silicon nanocrystals grown by r.f. sputtering method: Competition between oxygen and silicon to get erbium. Optical Materials, 2006, 28, 836-841.	3.6	5
50	Crystal Size and Crystalline Volume Fraction Effects on the Erbium Emission of nc-Si:Er Grown by r.f. Sputtering. Journal of Nanoscience and Nanotechnology, 2010, 10, 2663-2668.	0.9	5
51	Effect of grain size and hydrogen passivation on the electrical properties of nanocrystalline silicon films. International Journal of Materials and Product Technology, 2010, 39, 195.	0.2	5
52	Laser patterning of amorphous silicon thin films deposited on flexible and rigid substrates. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1717-1727.	1.8	5
53	Effect of the Soldering Atmosphere on the Wettability Between Sn4.0Ag0.5Cu (in wt.%) Lead-Free Solder Paste and Various Substrates. Journal of Materials Engineering and Performance, 2018, 27, 5011-5017.	2.5	5
54	Spectroscopic ellipsometry study of the layer structure and impurity content in Er-doped nanocrystalline silicon thin films. Physica B: Condensed Matter, 2001, 308-310, 374-377.	2.7	4

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55	The visible and near IR photoluminescent response of nc-Si:Er thin films produced by rf sputtering. Nanotechnology, 2004, 15, 802-806.	2.6	4
56	The influence of electric field on the microstructure of nc-Si:H films produced by RF magnetron sputtering. Vacuum, 2008, 82, 1433-1436.	3.5	4
57	Dielectric spectroscopy of melt-extruded polypropylene and as-grown carbon nanofiber composites. European Physical Journal E, 2021, 44, 73.	1.6	4
58	Optical modulation spectroscopy of hydrogenated microcrystalline silicon. Thin Solid Films, 1997, 296, 118-121.	1.8	3
59	Structural characterization of $\hat{1}/4$ c-Si:H films produced by R.F. magnetron sputtering. Microelectronic Engineering, 1998, 43-44, 627-634.	2.4	3
60	Photoluminescence of erbium doped microcrystalline silicon thin films produced by reactive magnetron sputtering. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 81, 32-35.	3.5	3
61	Effect of surface plasmon resonance in $\text{TiO}_2/\text{Au}$ thin films on the fluorescence of self-assembled CdTe QDs structure. Journal of Physics: Conference Series, 2015, 605, 012025.	0.4	3
62	Role of sublimation kinetics of ammonia borane in chemical vapor deposition of uniform, large-area hexagonal boron nitride. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	3
63	Photoluminescence and structure properties from $\hat{1}/4$ c-Si:H and $\hat{1}/4$ c-Si:H-PS samples. Thin Solid Films, 1997, 296, 126-128.	1.8	2
64	The role of microstructure in luminescent properties of Er-doped nanocrystalline Si thin films. Physics of the Solid State, 2004, 46, 113-117.	0.6	2
65	Study of the oxygen role in the photoluminescence of erbium doped nanocrystalline silicon embedded in a silicon amorphous matrix. Journal of Non-Crystalline Solids, 2006, 352, 1148-1151.	3.1	2
66	Photoluminescence of nc-Si:Er thin films obtained by physical and chemical vapour deposition techniques: The effects of microstructure and chemical composition. Thin Solid Films, 2009, 517, 5808-5812.	1.8	2
67	ZnO Thin Films Implanted with Al, Sb and P: Optical, Structural and Electrical Characterization. Journal of Nanoscience and Nanotechnology, 2009, 9, 3574-3577.	0.9	2
68	Erbium-doped nanocrystalline silicon thin films produced by RF sputtering - annealing effect on the Er emission. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, NA-NA.	0.8	2
69	Segregation of Te at the back contact in electrochemically deposited CdTe thin film solar cells. Journal of Crystal Growth, 2011, 320, 13-17.	1.5	2
70	Confronting Vegard's rule in $\text{Ge}_{1-x}\text{Sn}_x$ epilayers: from fundamentals to the effect of defects. Journal Physics D: Applied Physics, 2022, 55, 295301.	2.8	2
71	Influence of crystals distribution on the photoluminescence properties of nanocrystalline silicon thin films. Microelectronics Journal, 2003, 34, 375-378.	2.0	1
72	Electron confinement in nanocrystals embedded in random media: Andersen localization effects. AIP Conference Proceedings, 2007, . .	0.4	1

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73	Chemical Vapour Deposition of Hexagonal Boron Nitride for Two Dimensional Electronics. U Porto Journal of Engineering, 2017, 3, 27-34.	0.4	1
74	Size Dependence Of The Optical Gap In Silicon Nanocrystals Embedded Into a-Si:H Matrix. AIP Conference Proceedings, 2005, , .	0.4	0
75	Visible and infrared photoluminescence from erbium-doped silicon nanocrystals produced by rf sputtering. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1769-1774.	1.8	0
76	Structural and photoluminescence studies of erbium-implanted nanocrystalline silicon thin films. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2161-2165.	1.8	0
77	ZnO:Cu Thin Films and p-n Homojunctions Grown by Electrochemical Deposition. AIP Conference Proceedings, 2011, , .	0.4	0
78	Faraday effect in ZnO:Mn thin films. AIP Conference Proceedings, 2011, , .	0.4	0
79	Piezoresistor Sensor Fabrication by Direct Laser Writing on Hydrogenated Amorphous Silicon. Materials Research Society Symposia Proceedings, 2014, 1594, 1.	0.1	0