

# M F Cerqueira

## List of Publications by Year in descending order

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79  
papers

1,425  
citations

489802

18  
h-index

406436

35  
g-index

80  
all docs

80  
docs citations

80  
times ranked

2931  
citing authors

#	ARTICLE	IF	CITATIONS
1	Confronting Vegard's rule in Ge <sub>1-x</sub> Sn <sub>x</sub> epilayers: from fundamentals to the effect of defects. Journal Physics D: Applied Physics, 2022, 55, 295301.	1.3	2
2	Dielectric spectroscopy of melt-extruded polypropylene and as-grown carbon nanofiber composites. European Physical Journal E, 2021, 44, 73.	0.7	4
3	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, .	0.9	3
4	A novel approach to reduce in-service temperature in WC-Co cutting tools. Ceramics International, 2020, 46, 3002-3008.	2.3	34
5	Electrosprayed whey protein-based nanocapsules for $\beta$ -carotene encapsulation. Food Chemistry, 2020, 314, 126157.	4.2	36
6	Laser printing of silver-based micro-wires in ZrO <sub>2</sub> substrate for smart implant applications. Optics and Laser Technology, 2020, 131, 106416.	2.2	9
7	Vapor grown carbon nanofiber based cotton fabrics with negative thermoelectric power. Cellulose, 2020, 27, 9091-9104.	2.4	18
8	Laser printing of micro-electronic communication systems for smart implants applications. Optics and Laser Technology, 2020, 128, 106211.	2.2	8
9	Negative thermoelectric power of melt mixed vapor grown carbon nanofiber polypropylene composites. Carbon, 2019, 150, 408-416.	5.4	25
10	Laser surface texturing of Ti-6Al-4V by nanosecond laser: Surface characterization, Ti-oxide layer analysis and its electrical insulation performance. Materials Science and Engineering C, 2019, 104, 109901.	3.8	21
11	Wafer scale fabrication of graphene microelectrode arrays for the detection of DNA hybridization. Microelectronic Engineering, 2018, 189, 85-90.	1.1	19
12	Effect of the Soldering Atmosphere on the Wettability Between Sn <sub>4.0</sub> Ag <sub>0.5</sub> Cu (in wt.%) Lead-Free Solder Paste and Various Substrates. Journal of Materials Engineering and Performance, 2018, 27, 5011-5017.	1.2	5
13	Comparison of soybean hull pre-treatments to obtain cellulose and chemical derivatives: Physical chemistry characterization. Carbohydrate Polymers, 2018, 198, 601-610.	5.1	21
14	Structural and vibrational properties of Sn <sub>x</sub> Ge <sub>1-x</sub> : Modeling and experiments. Journal of Applied Physics, 2018, 124, .	1.1	11
15	Atomic-layer-deposited ultrafine MoS <sub>2</sub> nanocrystals on cobalt foam for efficient and stable electrochemical oxygen evolution. Nanoscale, 2017, 9, 2711-2717.	2.8	88
16	Vapor-solid synthesis of monolithic single-crystalline CoP nanowire electrodes for efficient and robust water electrolysis. Chemical Science, 2017, 8, 2952-2958.	3.7	162
17	Characterization of magnetron sputtered sub-stoichiometric CrAlSiN <sub>x</sub> and CrAlSiO <sub>y</sub> N <sub>x</sub> coatings. Surface and Coatings Technology, 2017, 328, 134-141.	2.2	18
18	Epitaxial CuInSe <sub>2</sub> thin films grown by molecular beam epitaxy and migration enhanced epitaxy. Journal of Crystal Growth, 2017, 475, 300-306.	0.7	10

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19	Raman and IR-ATR spectroscopy studies of heteroepitaxial structures with a GaN:C top layer. Journal Physics D: Applied Physics, 2017, 50, 365103.	1.3	9
20	Chemical Vapour Deposition of Hexagonal Boron Nitride for Two Dimensional Electronics. U Porto Journal of Engineering, 2017, 3, 27-34.	0.2	1
21	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.	0.8	5
22	Photoluminescence from ultrathin Ge-rich multiple quantum wells observed up to room temperature: Experiments and modeling. Physical Review B, 2016, 94, .	1.1	8
23	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.	1.7	7
24	Raman study of insulating and conductive ZnO:(Al, Mn) thin films. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2345-2354.	0.8	16
25	Fabrication of GeSn-multiple quantum wells by overgrowth of Sn on Ge by using molecular beam epitaxy. Applied Physics Letters, 2015, 107, .	1.5	12
26	Straightforward phase-transfer route to colloidal iron oxide nanoparticles for protein immobilization. RSC Advances, 2015, 5, 47954-47958.	1.7	6
27	Multi-stacks of epitaxial GeSn self-assembled dots in Si: Structural analysis. Journal of Applied Physics, 2015, 117, 125706.	1.1	8
28	Permeation barrier performance of Hot Wire-CVD grown silicon-nitride films treated by argon plasma. Thin Solid Films, 2015, 575, 72-75.	0.8	12
29	Wetting behaviour of SAC305 solder on different substrates in high vacuum and inert atmosphere. Journal of Materials Science: Materials in Electronics, 2015, 26, 5106-5112.	1.1	13
30	Effect of surface plasmon resonance in TiO <sub>2</sub> /Au thin films on the fluorescence of self-assembled CdTe QDs structure. Journal of Physics: Conference Series, 2015, 605, 012025.	0.3	3
31	Effect of argon ion energy on the performance of silicon nitride multilayer permeation barriers grown by hot-wire CVD on polymers. Thin Solid Films, 2015, 595, 258-265.	0.8	9
32	Piezoresistor Sensor Fabrication by Direct Laser Writing on Hydrogenated Amorphous Silicon. Materials Research Society Symposia Proceedings, 2014, 1594, 1.	0.1	0
33	Influence of hydrogen plasma thermal treatment on the properties of ZnO:Al thin films prepared by dc magnetron sputtering. Vacuum, 2014, 107, 145-154.	1.6	16
34	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. Thin Solid Films, 2014, 550, 404-412.	0.8	20
35	High-Temperature Magnetism as a Probe for Structural and Compositional Uniformity in Ligand-Capped Magnetite Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 28322-28329.	1.5	26
36	Large-Scale Synthesis of Colloidal Fe <sub>3</sub> O <sub>4</sub> Nanoparticles Exhibiting High Heating Efficiency in Magnetic Hyperthermia. Journal of Physical Chemistry C, 2014, 118, 8691-8701.	1.5	226

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37	The effect of argon plasma treatment on the permeation barrier properties of silicon nitride layers. Surface and Coatings Technology, 2013, 235, 361-366.	2.2	28
38	Study on excimer laser irradiation for controlled dehydrogenation and crystallization of boron doped hydrogenated amorphous/nanocrystalline silicon multilayers. Thin Solid Films, 2013, 536, 147-151.	0.8	10
39	Nano-ilmenite FeTiO <sub>3</sub> : Synthesis and characterization. Journal of Magnetism and Magnetic Materials, 2013, 331, 129-132.	1.0	76
40	Optical characterization of TiAlN/TiAlON/SiO <sub>2</sub> absorber for solar selective applications. Surface and Coatings Technology, 2012, 211, 41-44.	2.2	69
41	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. Thin Solid Films, 2012, 520, 2514-2519.	0.8	19
42	Resonant Raman scattering in ZnO:Mn and ZnO:Mn:Al thin films grown by RF sputtering. Journal of Physics Condensed Matter, 2011, 23, 334205.	0.7	26
43	A Microinjected 3-Axis Thermal Accelerometer. Procedia Engineering, 2011, 25, 607-610.	1.2	20
44	ZnO:Cu Thin Films and p-n Homojunctions Grown by Electrochemical Deposition. AIP Conference Proceedings, 2011, , .	0.3	0
45	Faraday effect in ZnO:Mn thin films. AIP Conference Proceedings, 2011, , .	0.3	0
46	Characterisation of chemical bath deposited CdS thin films on different substrates using electrolyte contacts. Thin Solid Films, 2011, 519, 7583-7586.	0.8	13
47	Flexible CuInSe <sub>2</sub> photovoltaic cells fabricated by non-vacuum techniques. Thin Solid Films, 2011, 519, 7272-7275.	0.8	8
48	Segregation of Te at the back contact in electrochemically deposited CdTe thin film solar cells. Journal of Crystal Growth, 2011, 320, 13-17.	0.7	2
49	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
50	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.	0.1	5
51	Room temperature paramagnetism of ZnO:Mn films grown by RF-sputtering. Thin Solid Films, 2010, 518, 4612-4614.	0.8	7
52	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
53	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
54	Raman study of doped ZnO thin films grown by rf sputtering. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2290-2293.	0.8	13

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55	Electrical and Raman Scattering Studies of ZnO:P and ZnO:Sb Thin Films. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 2620-2623.	0.9	8
56	Structural and photoluminescence studies of erbium-implanted nanocrystalline silicon thin films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 2161-2165.	0.8	0
57	Photoluminescence of nc-Si:Er thin films obtained by physical and chemical vapour deposition techniques: The effects of microstructure and chemical composition. <i>Thin Solid Films</i> , 2009, 517, 5808-5812.	0.8	2
58	ZnO Thin Films Implanted with Al, Sb and P: Optical, Structural and Electrical Characterization. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 3574-3577.	0.9	2
59	The influence of electric field on the microstructure of nc-Si:H films produced by RF magnetron sputtering. <i>Vacuum</i> , 2008, 82, 1433-1436.	1.6	4
60	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.	1.4	15
61	Visible and infrared photoluminescence from erbium-doped silicon nanocrystals produced by rf sputtering. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007, 204, 1769-1774.	0.8	0
62	Electron confinement in nanocrystals embedded in random media: Andersen localization effects. <i>AIP Conference Proceedings</i> , 2007, . .	0.3	1
63	Study of the oxygen role in the photoluminescence of erbium doped nanocrystalline silicon embedded in a silicon amorphous matrix. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 1148-1151.	1.5	2
64	Erbium-doped silicon nanocrystals grown by r.f. sputtering method: Competition between oxygen and silicon to get erbium. <i>Optical Materials</i> , 2006, 28, 836-841.	1.7	5
65	Size Dependence Of The Optical Gap In Silicon Nanocrystals Embedded Into a-Si:H Matrix. <i>AIP Conference Proceedings</i> , 2005, . .	0.3	0
66	The visible and near IR photoluminescent response of nc-Si:Er thin films produced by rf sputtering. <i>Nanotechnology</i> , 2004, 15, 802-806.	1.3	4
67	The role of microstructure in luminescent properties of Er-doped nanocrystalline Si thin films. <i>Physics of the Solid State</i> , 2004, 46, 113-117.	0.2	2
68	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.	2.3	42
69	Influence of crystals distribution on the photoluminescence properties of nanocrystalline silicon thin films. <i>Microelectronics Journal</i> , 2003, 34, 375-378.	1.1	1
70	Interrelation between microstructure and optical properties of erbium-doped nanocrystalline thin films. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 16, 414-419.	1.3	7
71	Dielectric function of nanocrystalline silicon with few nanometers (<3 nm) grain size. <i>Applied Physics Letters</i> , 2003, 82, 2993-2995.	1.5	58
72	Spectroscopic ellipsometry study of the layer structure and impurity content in Er-doped nanocrystalline silicon thin films. <i>Physica B: Condensed Matter</i> , 2001, 308-310, 374-377.	1.3	4

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73	Photoluminescence of erbium doped microcrystalline silicon thin films produced by reactive magnetron sputtering. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2001, 81, 32-35.	1.7	3
74	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.	0.8	19
75	Temperature dependence of the first order Raman scattering in thin films of $\hat{1}/4c\text{-Si:H}$ . <i>Journal of Materials Processing Technology</i> , 1999, 92-93, 235-238.	3.1	9
76	Structural characterization of $\hat{1}/4c\text{-Si:H}$ films produced by R.F. magnetron sputtering. <i>Microelectronic Engineering</i> , 1998, 43-44, 627-634.	1.1	3
77	Optical modulation spectroscopy of hydrogenated microcrystalline silicon. <i>Thin Solid Films</i> , 1997, 296, 118-121.	0.8	3
78	Photoluminescence and structure properties from $\hat{1}/4c\text{-Si:H}$ and $\hat{1}/4c\text{-Si:H-PS}$ samples. <i>Thin Solid Films</i> , 1997, 296, 126-128.	0.8	2
79	Macrocrystalline silicon thin films prepared by RF reactive magnetron sputter deposition. <i>Vacuum</i> , 1995, 46, 1385-1390.	1.6	29