

# Maria J M Gomes

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5168761/publications.pdf>

Version: 2024-02-01

81  
papers

1,223  
citations

430442

18  
h-index

433756

31  
g-index

81  
all docs

81  
docs citations

81  
times ranked

1546  
citing authors

#	ARTICLE	IF	CITATIONS
1	Metal-ferroelectric-metal structures with Schottky contacts. II. Analysis of the experimental current-voltage and capacitance-voltage characteristics of Pb(Zr,Ti)O <sub>3</sub> thin films. Journal of Applied Physics, 2005, 98, 124104.	1.1	141
2	Competition between ferroelectric and semiconductor properties in Pb(Zr <sub>0.65</sub> Ti <sub>0.35</sub> )O <sub>3</sub> thin films deposited by sol-gel. Journal of Applied Physics, 2003, 93, 4776-4783.	1.1	100
3	High-Performance Ferroelectric Dielectric Multilayered Thin Films for Energy Storage Capacitors. Advanced Functional Materials, 2019, 29, 1807196.	7.8	78
4	Absorption and Emission Analysis of RE <sub>3+</sub> (Sm <sup>3+</sup> and Tm <sup>3+</sup> ) in Eu <sup>3+</sup> Doped BaTiO <sub>3</sub> Nanotechnology, 2009, 9, 3672-3677.	0.9	67
5	Impact of disorder on optical phonons confined in CdS nano-crystallites embedded in a SiO <sub>2</sub> matrix. Journal of Physics Condensed Matter, 2001, 13, 3491-3509.	0.7	45
6	Semiconductor layer thickness impact on optical and resistive switching behavior of pulsed laser deposited BaTiO <sub>3</sub> /ZnO heterostructures. Applied Physics Letters, 2013, 102, .	1.5	43
7	Simple model of polarization offset of graded ferroelectric structures. Journal of Applied Physics, 2003, 93, 9961-9967.	1.1	35
8	Ferroelectric phase transitions studies in 0.5Ba(Zr <sub>0.2</sub> Ti <sub>0.8</sub> )O <sub>3</sub> -0.5(Ba <sub>0.7</sub> Ca <sub>0.3</sub> )TiO <sub>3</sub> ceramics. Journal of Electroceramics, 2015, 35, 135-140.	0.8	31
9	Enhanced resistive switching characteristics in Pt/BaTiO <sub>3</sub> /ITO structures through insertion of HfO <sub>2</sub> :Al <sub>2</sub> O <sub>3</sub> (HAO) dielectric thin layer. Scientific Reports, 2017, 7, 46350.	1.6	30
10	Control of efficiency of photon energy up-conversion in CdSe/ZnS quantum dots. Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), 2003, 94, 859-863.	0.2	28
11	Self-assembling of Ge quantum dots in an alumina matrix. Physical Review B, 2010, 82, .	1.1	26
12	Effect of Pt bottom electrode texture selection on the tetragonality and physical properties of Ba <sub>0.8</sub> Sr <sub>0.2</sub> TiO <sub>3</sub> thin films produced by pulsed laser deposition. Journal of Applied Physics, 2012, 112, .	1.1	23
13	Highly transparent sol-gel derived ureasilicate monoliths exhibiting long-term optical stability. Journal of Sol-Gel Science and Technology, 2007, 41, 223-229.	1.1	22
14	Development of new high transparent hybrid organic-inorganic monoliths with surface engraved diffraction pattern. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 492-499.	2.4	22
15	Impedance spectroscopy study of a compositionally graded lead zirconate titanate structure. Journal of Applied Physics, 2007, 102, 114109.	1.1	21
16	Substrate temperature induced effect on microstructure, optical and photocatalytic activity of ultrasonic spray pyrolysis deposited MoO <sub>3</sub> thin films. Materials Research Express, 2019, 6, 066421.	0.8	20
17	Electrical spin injection in forward biased Schottky diodes based on InGaAs/GaAs quantum well heterostructures. Applied Physics Letters, 2006, 89, 181118.	1.5	19
18	Tuning the surface plasmon resonance and surface-enhanced Raman scattering of pulsed laser deposited silver nanoparticle films by ambient and deposition temperature. Journal of Optics (United Kingdom), 2010, 11, 012001.	0.0	10

#	ARTICLE	IF	CITATIONS
19	Resistive switching in ferroelectric lead-free $0.5\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3 \sim 0.5(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ thin films. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 335301.		18
20	Oxygen partial pressure induced effects on the microstructure and the luminescence properties of pulsed laser deposited $\text{TiO}_2$ thin films. <i>AIP Advances</i> , 2017, 7, .	0.6	18
21	Enhancing the dielectric relaxor behavior and energy storage properties of $0.6\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3 \sim 0.4(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ ceramics through the incorporation of paraelectric $\text{SrTiO}_3$ . <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 19374-19382.	1.1	18
22	Highly sensitive thermoelectric touch sensor based on p-type $\text{SnO}_x$ thin film. <i>Nanotechnology</i> , 2019, 30, 435502.	1.3	17
23	Hysteretic Characteristics of Pulsed Laser Deposited $0.5\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3 \sim 0.5(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3/\text{ZnO}$ Bilayers. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 15240-15249.	1.3	17
24	Enhanced resistive switching and multilevel behavior in bilayered $\text{HfAlO}/\text{HfAlO}_x$ structures for non-volatile memory applications. <i>Applied Physics Letters</i> , 2015, 107, 242105.	1.5	15
25	Optical Properties of PZT 65/35 Thin Films Deposited by Sol-Gel. <i>Ferroelectrics</i> , 2002, 268, 187-192.	0.3	14
26	Formation of void lattice after annealing of Ge quantum dot lattice in alumina matrix. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	13
27	Influence of substrate temperature on the properties of pulsed laser deposited silver nanoparticle thin films and their application in SERS detection of bovine serum albumin. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	1.1	13
28	Substrate Temperature Effect on Microstructure, Optical, and Glucose Sensing Characteristics of Pulsed Laser Deposited Silver Nanoparticles. <i>Plasmonics</i> , 2018, 13, 1235-1241.	1.8	13
29	Barium-Doped Zinc Oxide Thin Films as Highly Efficient and Reusable Photocatalysts. <i>ChemistrySelect</i> , 2020, 5, 2824-2834.	0.7	13
30	$1.3 \sim 1.5 \text{ \AA}$ electroluminescence from Schottky diodes made on Au-InAs/GaAs quantum-size heterostructures. <i>Semiconductor Science and Technology</i> , 2004, 19, S469-S471.	1.0	12
31	Influence of laser repetition rate on ferroelectric properties of pulsed laser deposited $\text{BaTiO}_3$ films on platinized silicon substrate. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 113, 379-384.	1.1	12
32	Size and spatial homogeneity of SiGe quantum dots in amorphous silica matrix. <i>Journal of Applied Physics</i> , 2009, 106, 084319.	1.1	11
33	Mn-doped $\text{ZnO}$ nanocrystals embedded in $\text{Al}_2\text{O}_3$ : structural and electrical properties. <i>Nanotechnology</i> , 2010, 21, 505705.	1.3	11
34	Carrier storage in Ge nanoparticles produced by pulsed laser deposition. <i>Physica Status Solidi - Rapid Research Letters</i> , 2012, 6, 223-225.	1.2	11
35	Ferroelectric switching dynamics in $0.5\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3 \sim 0.5(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ thin films. <i>Applied Physics Letters</i> , 2018, 113, 082903.	1.5	11
36	Time Evolution of the Refractive Index of $\text{CuCl}$ under Picosecond Pulsed Excitation. <i>Physica Status Solidi (B): Basic Research</i> , 1989, 151, 747-757.	0.7	10

#	ARTICLE	IF	CITATIONS
37	Probing the Exciton Density of States in Semiconductor Nanocrystals Using Integrated Photoluminescence Spectroscopy. Monatshefte für Chemie, 2002, 133, 909-918.	0.9	10
38	Suppression of the photoluminescence quenching effect in self-assembled InAs/GaAs quantum dots. Applied Physics Letters, 2005, 87, 053109.	1.5	10
39	Structural and electrical studies of ultrathin layers with Si <sub>0.7</sub> Ge <sub>0.3</sub> nanocrystals confined in a SiGe/SiO <sub>2</sub> superlattice. Journal of Applied Physics, 2012, 111, 104323.	1.1	10
40	Light-controlled resistive switching in laser-assisted annealed Ba <sub>0.8</sub> Sr <sub>0.2</sub> TiO <sub>3</sub> thin films. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1082-1087.	0.8	10
41	Effects of oxygen partial pressure on the ferroelectric properties of pulsed laser deposited Ba <sub>0.8</sub> Sr <sub>0.2</sub> TiO <sub>3</sub> thin films. Applied Physics A: Materials Science and Processing, 2013, 113, 817-824.	1.1	9
42	Charge trapping properties and retention time in amorphous SiGe/SiO <sub>2</sub> nanolayers. Journal Physics D: Applied Physics, 2013, 46, 095306.	1.3	9
43	Effect of bi-layer ratio in ZnO/Al <sub>2</sub> O <sub>3</sub> multilayers on microstructure and functional properties of ZnO nanocrystals embedded in Al <sub>2</sub> O <sub>3</sub> matrix. Applied Physics A: Materials Science and Processing, 2014, 115, 283-289.	1.1	9
44	Surface Plasmon Resonance-Coupled Photoluminescence and Resistive Switching Behavior of Pulsed Laser-Deposited Ag:SiC Nanocermet Thin Films. Plasmonics, 2015, 10, 1211-1217.	1.8	9
45	Coherent Signal Generation in CuCl by Light-Induced Grating and Induced Biexciton Decay. Physica Status Solidi (B): Basic Research, 1990, 158, 391-396.	0.7	8
46	Investigation of photoelectrical properties of CdSe nanocrystals embedded in a SiO <sub>2</sub> matrix. Semiconductor Science and Technology, 2008, 23, 095025.	1.0	8
47	Structural and Optical Properties of Ge Nanocrystals Embedded in Al <sub>2</sub> O <sub>3</sub> . Journal of Nanoscience and Nanotechnology, 2008, 8, 572-576.	0.9	8
48	Influence of annealing conditions on the formation of regular lattices of voids and Ge quantum dots in an amorphous alumina matrix. Nanotechnology, 2012, 23, 405605.	1.3	8
49	Ferroelectric properties of pulsed laser deposited PZT (92/8) thin films. Journal of Materials Science: Materials in Electronics, 2013, 24, 5097-5101.	1.1	8
50	A shadowed off-axis production of Ge nanoparticles in Ar gas atmosphere by pulsed laser deposition. Applied Physics A: Materials Science and Processing, 2013, 110, 585-590.	1.1	7
51	Synthesis and characterization of organic-inorganic hybrid materials prepared by sol-gel and containing CdS nanoparticles prepared by a colloidal method using poly(N-vinyl-2-pyrrolidone). Journal of Sol-Gel Science and Technology, 2014, 71, 69-78.	1.1	7
52	Influence of matrix defects on the photoluminescence of InAs self-assembled quantum dots. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1348-1352.	0.8	6
53	Physical and Optical Characterization of Er <sup>3+</sup> /Doped Lead-Zinc-Borate Glass. Journal of Nanoscience and Nanotechnology, 2009, 9, 3555-3561.	0.9	6
54	Enhanced ferromagnetism and glassy state in phase separated La <sub>0.95</sub> Sr <sub>0.05</sub> MnO <sub>3</sub> . Journal of Applied Physics, 2012, 112, 103907.	1.1	6

#	ARTICLE	IF	CITATIONS
55	Charge storage behavior of nanostructures based on SiGe nanocrystals embedded in Al <sub>2</sub> O <sub>3</sub> matrix. European Physical Journal B, 2013, 86, 1.	0.6	5
56	SiGe layer thickness effect on the structural and optical properties of well-organized SiGe/SiO <sub>2</sub> multilayers. Nanotechnology, 2017, 28, 345701.	1.3	5
57	HfO <sub>2</sub> –Al <sub>2</sub> O <sub>3</sub> Dielectric Layer for a Performing Metal–Ferroelectric–Insulator–Semiconductor Structure with a Ferroelectric 0.5Ba(Zr <sub>0.2</sub> Ti <sub>0.8</sub> )O <sub>3</sub> -0.5(Ba <sub>0.7</sub> Ca <sub>0.3</sub> )TiO <sub>3</sub> Thin Film. ACS Applied Electronic Materials, 2020, 2, 2780-2787.	2.0	5
58	Time-Resolved Four-Wave Mixing Experiments in CuCl. Physica Status Solidi (B): Basic Research, 1990, 159, 101-106.	0.7	4
59	Structural and Piezoelectric Properties of Rare Earth Doped PbTiO <sub>3</sub> Ceramics. Ferroelectrics, 2002, 273, 267-272.	0.3	4
60	Confinement effect in CdTe nanocrystals embedded in silica thin films. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1500-1504.	0.8	4
61	Dielectric nonlinearity in a compositionally graded lead zirconate titanate structure. Journal of Applied Physics, 2008, 104, .	1.1	4
62	Tuning the properties of Ge-quantum dots superlattices in amorphous silica matrix through deposition conditions. Journal of Applied Physics, 2012, 111, 074316.	1.1	4
63	Strain induced enhanced ferromagnetic behavior in inhomogeneous low doped La <sub>0.95</sub> Sr <sub>0.05</sub> MnO <sub>3</sub> . Applied Physics Letters, 2013, 102, .	1.5	4
64	Impact of the ferroelectric layer thickness on the resistive switching characteristics of ferroelectric/dielectric structures. Applied Physics Letters, 2018, 113, .	1.5	4
65	The effects of short-range order and natural microinhomogeneities on the FIR optical properties of CdxHg <sub>1-x</sub> Te. Journal of Electronic Materials, 1999, 28, 654-661.	1.0	3
66	Ge nanocrystals in alumina matrix: A structural study. Journal of Physics: Conference Series, 2010, 209, 012060.	0.3	3
67	Ge nanocrystals with highly uniform size distribution deposited on alumina at room temperature by pulsed laser deposition: structural, morphological, and charge trapping properties. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	3
68	Ba <sub>0.8</sub> Sr <sub>0.2</sub> TiO <sub>3</sub> films crystallized on glass and platinized substrates by laser-assisted annealing at room temperature. Applied Physics A: Materials Science and Processing, 2014, 116, 1271-1280.	1.1	3
69	Growth and Properties of Pb(Zr <sub>0.92</sub> Ti <sub>0.08</sub> )O <sub>3</sub> Thin Films. Integrated Ferroelectrics, 2004, 62, 83-87.	0.3	1
70	Band Gap and Band Tailing Behaviour of PLZT Films. Ferroelectrics, 2007, 360, 31-36.	0.3	1
71	Influence of RF-sputtering power on formation of vertically stacked Si <sub>1-x</sub> Ge <sub>x</sub> nanocrystals between ultra-thin amorphous Al <sub>2</sub> O <sub>3</sub> layers: structural and photoluminescence properties. Journal Physics D: Applied Physics, 2013, 46, 385301.	1.3	1
72	Synthesis, Structural and Luminescence Studies of Pyrochlore Phase Free TiO <sub>2</sub> :Dy <sup>3+</sup> Produced by Solid-State Reaction Method. International Journal of Applied Ceramic Technology, 2016, 13, 1139-1148.	1.1	1

#	ARTICLE	IF	CITATIONS
73	Optical and electrical properties of sol-gel spin coated titanium dioxide thin films. IOP Conference Series: Materials Science and Engineering, 2017, 225, 012021.	0.3	1
74	Electric Properties of PZTN (65/35/x) Thin Films Deposited by Sol-Gel. Ferroelectrics, 2003, 293, 135-143.	0.3	0
75	Fundamental absorption edge and near-€absorption edge properties of PLZT thin films. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2576-2580.	0.8	0
76	Electrical Conduction of CdSe Nanocrystals Embedded in Silicon Oxide Films. Journal of Nanoscience and Nanotechnology, 2009, 9, 3418-3423.	0.9	0
77	Growth and characterization of Mn-€doped ZnO/TiO <sub>2</sub> multilayer nanostructures grown by pulsed laser deposition. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2724-2726.	0.8	0
78	THERMAL STABILITY OF ENERGY-EMISSION FROM CdTe NANOCRYSTALS EMBEDDED IN SiO <sub>2</sub> THIN FILMS. Modern Physics Letters B, 2010, 24, 2837-2843.	1.0	0
79	Investigation of Surface Plasmon Resonance in Gold/Alumina Composite Films Prepared by rf-Sputtering. Journal of Nanoscience and Nanotechnology, 2010, 10, 2858-2862.	0.9	0
80	Optical and electrical behavior of organic/inorganic hybrid with embedded gold nanoparticles. Journal of Sol-Gel Science and Technology, 2014, 69, 52-60.	1.1	0
81	Electrical spin injection in light emitting Schottky diodes based on InGaAs /GaAs QW heterostructures. AIP Conference Proceedings, 2007, , .	0.3	0