# Hugo guas

#### List of Publications by Citations

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| #   | Paper   | IF   | Citations |
|-----|---|------|-----------|
| 176 | Influence of the deposition pressure on the properties of transparent and conductive ZnO:Ga thin-film produced by r.f. sputtering at room temperature. <i>Thin Solid Films</i> , <b>2003</b> , 427, 401-405 | 2.2  | 263       |
| 175 | Highly stable transparent and conducting gallium-doped zinc oxide thin films for photovoltaic applications. <i>Solar Energy Materials and Solar Cells</i> , <b>2008</b> , 92, 1605-1610                     | 6.4  | 139       |
| 174 | High field-effect mobility zinc oxide thin film transistors produced at room temperature. <i>Journal of Non-Crystalline Solids</i> , <b>2004</b> , 338-340, 806-809   | 3.9  | 112       |
| 173 | Multifunctional cellulose-paper for light harvesting and smart sensing applications. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 3143-3181   | 7.1  | 107       |
| 172 | Growth of ZnO:Ga thin films at room temperature on polymeric substrates: thickness dependence. <i>Thin Solid Films</i> , <b>2003</b> , 442, 121-126   | 2.2  | 93        |
| 171 | High quality conductive gallium-doped zinc oxide films deposited at room temperature. <i>Thin Solid Films</i> , <b>2004</b> , 451-452, 443-447  | 2.2  | 92        |
| 170 | Thin Film Silicon Photovoltaic Cells on Paper for Flexible Indoor Applications. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 3592-3598  | 15.6 | 86        |
| 169 | New challenges on gallium-doped zinc oxide films prepared by r.f. magnetron sputtering. <i>Thin Solid Films</i> , <b>2003</b> , 442, 102-106  | 2.2  | 86        |
| 168 | Influence of the layer thickness in plasmonic gold nanoparticles produced by thermal evaporation. <i>Scientific Reports</i> , <b>2013</b> , 3, 1469   | 4.9  | 80        |
| 167 | Photonic-structured TiO2 for high-efficiency, flexible and stable Perovskite solar cells. <i>Nano Energy</i> , <b>2019</b> , 59, 91-101   | 17.1 | 68        |
| 166 | Office paper decorated with silver nanostars - an alternative cost effective platform for trace analyte detection by SERS. <i>Scientific Reports</i> , <b>2017</b> , 7, 2480                                | 4.9  | 61        |
| 165 | Transparent, conductive ZnO:Al thin film deposited on polymer substrates by RF magnetron sputtering. <i>Surface and Coatings Technology</i> , <b>2002</b> , 151-152, 247-251                                | 4.4  | 59        |
| 164 | Silicon thin film solar cells on commercial tiles. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 4620  | 35.4 | 57        |
| 163 | Broadband photocurrent enhancement in a-Si:H solar cells with plasmonic back reflectors. <i>Optics Express</i> , <b>2014</b> , 22 Suppl 4, A1059-70   | 3.3  | 55        |
| 162 | Inkjet printed and "doctor blade" TiO2 photodetectors for DNA biosensors. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 25, 1229-34  | 11.8 | 52        |
| 161 | New developments in gallium doped zinc oxide deposited on polymeric substrates by RF magnetron sputtering. <i>Surface and Coatings Technology</i> , <b>2004</b> , 180-181, 20-25                            | 4.4  | 51        |
| 160 | Design of optimized wave-optical spheroidal nanostructures for photonic-enhanced solar cells. <i>Nano Energy</i> , <b>2016</b> , 26, 286-296  | 17.1 | 50        |

#### (2009-2009)

| 159 | Nanostructured silicon and its application to solar cells, position sensors and thin film transistors. <i>Philosophical Magazine</i> , <b>2009</b> , 89, 2699-2721  | 1.6             | 49 |  |
|-----|---|-----------------|----|--|
| 158 | Broadband light trapping in thin film solar cells with self-organized plasmonic nano-colloids. <i>Nanotechnology</i> , <b>2015</b> , 26, 135202   | 3.4             | 47 |  |
| 157 | Highly efficient nanoplasmonic SERS on cardboard packaging substrates. <i>Nanotechnology</i> , <b>2014</b> , 25, 41   | 5 <b>3</b> .042 | 47 |  |
| 156 | Mapping the Electrical Properties of ZnO-Based Transparent Conductive Oxides Grown at Room Temperature and Improved by Controlled Postdeposition Annealing. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1500287 | 6.4             | 45 |  |
| 155 | Polycrystalline intrinsic zinc oxide to be used in transparent electronic devices. <i>Thin Solid Films</i> , <b>2005</b> , 487, 212-215   | 2.2             | 43 |  |
| 154 | Direct growth of plasmonic nanorod forests on paper substrates for low-cost flexible 3D SERS platforms. <i>Flexible and Printed Electronics</i> , <b>2017</b> , 2, 014001   | 3.1             | 37 |  |
| 153 | Bio-microfluidic platform for gold nanoprobe based DNA detectionapplication to Mycobacterium tuberculosis. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 48, 87-93   | 11.8            | 37 |  |
| 152 | Colloidal-lithographed TiO2 photonic nanostructures for solar cell light trapping. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 6852-6861   | 7.1             | 36 |  |
| 151 | Passivation of Interfaces in Thin Film Solar Cells: Understanding the Effects of a Nanostructured Rear Point Contact Layer. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1701101                                 | 4.6             | 36 |  |
| 150 | Influence of the Substrate on the Morphology of Self-Assembled Silver Nanoparticles by Rapid Thermal Annealing. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 18235-18242                                     | 3.8             | 35 |  |
| 149 | Performances of hafnium oxide produced by radio frequency sputtering for gate dielectric application. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2004</b> , 109, 89-93  | 3.1             | 34 |  |
| 148 | Piezoresistive E-Skin Sensors Produced with Laser Engraved Molds. <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1800182   | 6.4             | 33 |  |
| 147 | Polycrystalline silicon obtained by metal induced crystallization using different metals. <i>Thin Solid Films</i> , <b>2004</b> , 451-452, 334-339  | 2.2             | 32 |  |
| 146 | 3D ZnO/Ag Surface-Enhanced Raman Scattering on Disposable and Flexible Cardboard Platforms. <i>Materials</i> , <b>2017</b> , 10, 1351   | 3.5             | 31 |  |
| 145 | Piezoelectricity Enhancement of Nanogenerators Based on PDMS and ZnSnO Nanowires through Microstructuration. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2020</b> , 12, 18421-18430                             | 9.5             | 30 |  |
| 144 | Label-Free Nanosensing Platform for Breast Cancer Exosome Profiling. <i>ACS Sensors</i> , <b>2019</b> , 4, 2073-2083  | 3 9.2           | 30 |  |
| 143 | Digital Microfluidics for Nucleic Acid Amplification. Sensors, 2017, 17,  | 3.8             | 30 |  |
| 142 | Highly conductive p-type nanocrystalline silicon films deposited by RF-PECVD using silane and trimethylboron mixtures at high pressure. <i>Vacuum</i> , <b>2009</b> , 83, 1253-1256   | 3.7             | 29 |  |

| 141 | Large Area Deposition of Polymorphous Silicon by Plasma Enhanced Chemical Vapor Deposition at 27.12 MHz and 13.56 MHz. <i>Japanese Journal of Applied Physics</i> , <b>2003</b> , 42, 4935-4942                                    | 1.4    | 29 |
|-----|--|--------|----|
| 140 | Inkjet printed highly porous TiO2 films for improved electrical properties of photoanode. <i>Journal of Colloid and Interface Science</i> , <b>2016</b> , 465, 208-14  | 9.3    | 27 |
| 139 | Flexible a-Si:H Position-Sensitive Detectors. <i>Proceedings of the IEEE</i> , <b>2005</b> , 93, 1281-1286   | 14.3   | 27 |
| 138 | Optimal-Enhanced Solar Cell Ultra-thinning with Broadband Nanophotonic Light Capture. <i>IScience</i> , <b>2018</b> , 3, 238-254   | 6.1    | 26 |
| 137 | Optical and structural analysis of porous silicon coated with GZO films using rf magnetron sputtering. <i>Thin Solid Films</i> , <b>2007</b> , 515, 8664-8669  | 2.2    | 26 |
| 136 | Paper-Based SERS Platform for One-Step Screening of Tetracycline in Milk. <i>Scientific Reports</i> , <b>2019</b> , 9, 17922   | 4.9    | 26 |
| 135 | New insights on large area flexible position sensitive detectors. <i>Journal of Non-Crystalline Solids</i> , <b>2002</b> , 299-302, 1272-1276  | 3.9    | 25 |
| 134 | Optimum Luminescent Down-Shifting Properties for High Efficiency and Stable Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 2930-2938   | 6.1    | 24 |
| 133 | Solar cells for self-sustainable intelligent packaging. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 13226-1   | 32/3/6 | 23 |
| 132 | Influence of post-deposition annealing on electrical and optical properties of ZnO-based TCOs deposited at room temperature. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2016</b> , 213, 2317-2328    | 1.6    | 23 |
| 131 | Low-temperature spray-coating of high-performing ZnO:Al films for transparent electronics. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2017</b> , 127, 299-308   | 6      | 22 |
| 130 | Design of wave-optical structured substrates for ultra-thin perovskite solar cells. <i>Applied Materials Today</i> , <b>2020</b> , 20, 100720  | 6.6    | 21 |
| 129 | Role of buffer layer on the performances of amorphous silicon solar cells with incorporated nanoparticles produced by plasma enhanced chemical vapor deposition at 27.12 MHz. <i>Thin Solid Films</i> , <b>2005</b> , 487, 170-173 | 2.2    | 21 |
| 128 | A Digital Microfluidics Platform for Loop-Mediated Isothermal Amplification Detection. <i>Sensors</i> , <b>2017</b> , 17,  | 3.8    | 20 |
| 127 | Influence of the Strain on the Electrical Resistance of Zinc Oxide Doped Thin Film Deposited on Polymer Substrates. <i>Advanced Engineering Materials</i> , <b>2002</b> , 4, 610-612   | 3.5    | 20 |
| 126 | Ultra-fast plasmonic back reflectors production for light trapping in thin Si solar cells. <i>Solar Energy</i> , <b>2018</b> , 174, 786-792  | 6.8    | 20 |
| 125 | Lightwave trapping in thin film solar cells with improved photonic-structured front contacts.<br>Journal of Materials Chemistry C, <b>2019</b> , 7, 6456-6464  | 7.1    | 18 |
| 124 | Polycrystalline silicon obtained by gold metal induced crystallization. <i>Journal of Non-Crystalline Solids</i> , <b>2004</b> , 338-340, 178-182  | 3.9    | 18 |

## (2001-2004)

| 123 | Characterization of silicon carbide thin films prepared by VHF-PECVD technology. <i>Journal of Non-Crystalline Solids</i> , <b>2004</b> , 338-340, 530-533   | 3.9     | 18 |
|-----|--|---------|----|
| 122 | Study of the stabilizer influence on the structural and optical properties of sol-gel spin coated zinc oxide films. <i>Materials Science in Semiconductor Processing</i> , <b>2018</b> , 74, 80-87 | 4.3     | 17 |
| 121 | E-Skin Bimodal Sensors for Robotics and Prosthesis Using PDMS Molds Engraved by Laser. <i>Sensors</i> , <b>2019</b> , 19,  | 3.8     | 16 |
| 120 | Flexible thin film solar cells on cellulose substrates with improved light management. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2017</b> , 214, 1700070            | 1.6     | 16 |
| 119 | Silicon thin films prepared in the transition region and their use in solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2006</b> , 90, 3001-3008                                     | 6.4     | 16 |
| 118 | Ag and Sn Nanoparticles to Enhance the Near-Infrared Absorbance of a-Si:H Thin Films. <i>Plasmonics</i> , <b>2014</b> , 9, 1015-1023   | 2.4     | 15 |
| 117 | All-Thin-Film Perovskite/CBi Four-Terminal Tandems: Interlayer and Intermediate Contacts Optimization. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 3979-3985                            | 6.1     | 14 |
| 116 | a-Si:H interface optimisation for thin film position sensitive detectors produced on polymeric substrates. <i>Journal of Non-Crystalline Solids</i> , <b>2002</b> , 299-302, 1289-1294             | 3.9     | 14 |
| 115 | Optoelectronic Devices from Bacterial NanoCellulose <b>2016</b> , 179-197  |         | 14 |
| 114 | A statistics modeling approach for the optimization of thin film photovoltaic devices. <i>Solar Energy</i> , <b>2017</b> , 144, 232-243  | 6.8     | 13 |
| 113 | Multifunctional microfluidic chip for optical nanoprobe based RNA detection - application to Chronic Myeloid Leukemia. <i>Scientific Reports</i> , <b>2018</b> , 8, 381                            | 4.9     | 13 |
| 112 | Nanostructure characterization of high k materials by spectroscopic ellipsometry. <i>Applied Surface Science</i> , <b>2006</b> , 253, 339-343  | 6.7     | 13 |
| 111 | Linearity and sensitivity of MIS position sensitive detectors. <i>Journal of Materials Science</i> , <b>2005</b> , 40, 1377  | -143381 | 13 |
| 110 | Paper-Based In-Situ Gold Nanoparticle Synthesis for Colorimetric, Non-Enzymatic Glucose Level Determination. <i>Nanomaterials</i> , <b>2020</b> , 10,  | 5.4     | 13 |
| 109 | Vacuum solid-state ion-conducting silver source for application in field emission electric propulsion systems. <i>Vacuum</i> , <b>2016</b> , 131, 252-258  | 3.7     | 13 |
| 108 | Hydrogen plasma treatment of very thin p-type nanocrystalline Si films grown by RF-PECVD in the presence of B(CH). <i>Science and Technology of Advanced Materials</i> , <b>2012</b> , 13, 045004  | 7.1     | 12 |
| 107 | Amorphous silicon position sensitive detectors applied to micropositioning. <i>Journal of Non-Crystalline Solids</i> , <b>2006</b> , 352, 1792-1796  | 3.9     | 12 |
| 106 | Production and characterization of large area flexible thin film position sensitive detectors. <i>Thin Solid Films</i> , <b>2001</b> , 383, 310-313  | 2.2     | 12 |

| 105 | Transduction Mechanisms, Micro-Structuring Techniques, and Applications of Electronic Skin Pressure Sensors: A Review of Recent Advances. <i>Sensors</i> , <b>2020</b> , 20,                      | 3.8 | 12 |
|-----|---|-----|----|
| 104 | Colloidal-structured metallic micro-grids: High performance transparent electrodes in the red and infrared range. <i>Solar Energy Materials and Solar Cells</i> , <b>2019</b> , 197, 7-12         | 6.4 | 11 |
| 103 | Design and Simple Assembly of Gold Nanostar Bioconjugates for Surface-Enhanced Raman Spectroscopy Immunoassays. <i>Nanomaterials</i> , <b>2019</b> , 9,   | 5.4 | 11 |
| 102 | Experimental optimization of a passive planar rhombic micromixer with obstacles for effective mixing in a short channel length. <i>RSC Advances</i> , <b>2014</b> , 4, 56013-56025                | 3.7 | 11 |
| 101 | Time-resolved luminescence studies of Eu3+ in soda-lime silicate glasses. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2014</b> , 134, 29-38                           | 2.1 | 11 |
| 100 | Study of nanostructured silicon by hydrogen evolution and its application in pf solar cells.<br>Journal of Non-Crystalline Solids, <b>2006</b> , 352, 1945-1948                                   | 3.9 | 11 |
| 99  | Polymorphous Silicon Films Deposited at 27.12 MHz. Chemical Vapor Deposition, 2003, 9, 333-337  |     | 11 |
| 98  | Thin film position sensitive detectors based on pin amorphous silicon carbide structures. <i>Applied Surface Science</i> , <b>2001</b> , 184, 443-447   | 6.7 | 11 |
| 97  | High UV and Sunlight Photocatalytic Performance of Porous ZnO Nanostructures Synthesized by a Facile and Fast Microwave Hydrothermal Method. <i>Materials</i> , <b>2021</b> , 14,                 | 3.5 | 11 |
| 96  | The effects of argon and helium dilution in the growth of nc-Si:H thin films by plasma-enhanced chemical vapor deposition. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 3672-3681      | 4.3 | 11 |
| 95  | Raman spectrum of nanocrystals: Phonon dispersion splitting and anisotropy. <i>Physical Review B</i> , <b>2018</b> , 98,  | 3.3 | 11 |
| 94  | Nanocrystalline thin film silicon solar cells: A deeper look into p/i interface formation. <i>Thin Solid Films</i> , <b>2015</b> , 591, 25-31   | 2.2 | 10 |
| 93  | Study of environmental degradation of silver surface. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 1215-1218  |     | 10 |
| 92  | Spectroscopic ellipsometry study of Co-doped TiO2 films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2008</b> , 205, 880-883   | 1.6 | 10 |
| 91  | Influence of the deposition conditions on the properties of titanium oxide produced by r.f. magnetron sputtering. <i>Materials Science in Semiconductor Processing</i> , <b>2004</b> , 7, 243-247 | 4.3 | 10 |
| 90  | Spectroscopic ellipsometry study of amorphous silicon anodically oxidised. <i>Thin Solid Films</i> , <b>2003</b> , 427, 345-349   | 2.2 | 10 |
| 89  | Surface modification of a new flexible substrate based on hydroxypropylcellulose for optoelectronic applications. <i>Thin Solid Films</i> , <b>2003</b> , 442, 127-131                            | 2.2 | 10 |
| 88  | Super linear position sensitive detectors using MIS structures. <i>Optical Materials</i> , <b>2005</b> , 27, 1088-1092  | 3.3 | 10 |

## (2001-2002)

| 87 | 32 linear array position sensitive detector based on NIP and hetero a-Si:H microdevices. <i>Journal of Non-Crystalline Solids</i> , <b>2002</b> , 299-302, 1283-1288   | 3.9  | 10 |
|----|--|------|----|
| 86 | Photonic-structured TCO front contacts yielding optical and electrically enhanced thin-film solar cells. <i>Solar Energy</i> , <b>2020</b> , 196, 92-98  | 6.8  | 10 |
| 85 | Characterization of the density of states of polymorphous silicon films produced at 13.56 and 27.12 MHz using CPM and SCLC techniques. <i>Journal of Non-Crystalline Solids</i> , <b>2004</b> , 338-340, 206-210   | 3.9  | 9  |
| 84 | Metal induced crystallization: Gold versus aluminium. <i>Journal of Materials Science</i> , <b>2005</b> , 40, 1387-1391  | 4.3  | 9  |
| 83 | Role of ion bombardment on the properties of a-Si:H films. <i>Vacuum</i> , <b>2001</b> , 60, 247-254   | 3.7  | 9  |
| 82 | Oxidation and Strain in Free-standing Silicon Nanocrystals. Physical Review Applied, 2019, 11,   | 4.3  | 9  |
| 81 | Fast Prototyping Microfluidics: Integrating Droplet Digital Lamp for Absolute Quantification of Cancer Biomarkers. <i>Sensors</i> , <b>2020</b> , 20,  | 3.8  | 8  |
| 80 | An integrated approach for assessing the bioreceptivity of glazed tiles to phototrophic microorganisms. <i>Biofouling</i> , <b>2016</b> , 32, 243-59   | 3.3  | 8  |
| 79 | High quality a-Si:H films for MIS device applications. <i>Thin Solid Films</i> , <b>2002</b> , 403-404, 26-29  | 2.2  | 8  |
| 78 | Polymorphous silicon deposited in large area reactor at 13 and 27 MHz. Thin Solid Films, 2003, 427, 6-10   | 2.2  | 8  |
| 77 | Study of the effect of different plasma-enhanced chemical vapour deposition reactor configurations on the properties of hydrogenated amorphous silicon thin films. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties,</i> <b>2000</b> , 80, 475-486 |      | 8  |
| 76 | Plasma diagnostics of a PECVD system using different R.F. electrode configurations. <i>Vacuum</i> , <b>2000</b> , 56, 31-37  | 3.7  | 8  |
| 75 | Single nucleotide polymorphism detection using gold nanoprobes and bio-microfluidic platform with embedded microlenses. <i>Biotechnology and Bioengineering</i> , <b>2015</b> , 112, 1210-9  | 4.9  | 7  |
| 74 | Self-Cleaned Photonic-Enhanced Solar Cells with Nanostructured Parylene-C. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 2000264   | 4.6  | 7  |
| 73 | n-PS/a-Si:H heterojunction for device application. <i>Journal of Non-Crystalline Solids</i> , <b>2008</b> , 354, 2632-2636   | 53.9 | 7  |
| 72 | Spectroscopic ellipsometry study of nickel induced crystallization of a-Si. <i>Journal of Non-Crystalline Solids</i> , <b>2006</b> , 352, 1204-1208  | 3.9  | 7  |
| 71 | Role of ion bombardment and plasma impedance on the performances presented by undoped a-Si:H films. <i>Thin Solid Films</i> , <b>2001</b> , 383, 165-168   | 2.2  | 7  |
| 70 | Correlation between a-Si:H surface oxidation process and the performance of MIS structures. <i>Thin Solid Films</i> , <b>2001</b> , 383, 185-188   | 2.2  | 7  |

| 69 | Characteristics of a linear array of a-Si:H thin film position sensitive detector. <i>Thin Solid Films</i> , <b>1999</b> , 337, 222-225  | 2.2 | 7 |
|----|--|-----|---|
| 68 | Role of the hot wire filament temperature on the structure and morphology of the nanocrystalline silicon p-doped films. <i>Applied Surface Science</i> , <b>1999</b> , 144-145, 690-696  | 6.7 | 7 |
| 67 | Role of a disperse carbon interlayer on the performances of tandem a-Si solar cells. <i>Science and Technology of Advanced Materials</i> , <b>2013</b> , 14, 045009  | 7.1 | 6 |
| 66 | Multifunctional Thin Film Zinc Oxide Semiconductors: Application to Electronic Devices. <i>Materials Science Forum</i> , <b>2006</b> , 514-516, 3-7  | 0.4 | 6 |
| 65 | ZnO:Ga Thin Films Produced by RF Sputtering at Room Temperature: Effect of the Power Density. <i>Materials Science Forum</i> , <b>2004</b> , 455-456, 12-15  | 0.4 | 6 |
| 64 | Effect of the discharge frequency and impedance on the structural properties of polymorphous silicon. <i>Thin Solid Films</i> , <b>2004</b> , 451-452, 264-268   | 2.2 | 6 |
| 63 | Dependence of the Strains and Residual Mechanical Stresses on the Performances Presented by a-Si:H Thin Film Position Sensors. <i>Advanced Engineering Materials</i> , <b>2002</b> , 4, 612-616  | 3.5 | 6 |
| 62 | Colloidal Lithography for Photovoltaics: An Attractive Route for Light Management. <i>Nanomaterials</i> , <b>2021</b> , 11,  | 5.4 | 6 |
| 61 | E-Skin Pressure Sensors Made by Laser Engraved PDMS Molds. <i>Proceedings (mdpi)</i> , <b>2018</b> , 2, 1039   | 0.3 | 6 |
| 60 | Role of trimethylboron to silane ratio on the properties of p-type nanocrystalline silicon thin film deposited by radio frequency plasma enhanced chemical vapour deposition. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2010</b> , 10, 2547-51 | 1.3 | 5 |
| 59 | Amorphous silicon-based PINIP structure for color sensor. <i>Thin Solid Films</i> , <b>2005</b> , 487, 268-270   | 2.2 | 5 |
| 58 | Mass spectroscopy analysis during the deposition of a-SiC:H and a-C:H films produced by hot wire and hot wire plasma-assisted techniques. <i>Applied Surface Science</i> , <b>2001</b> , 184, 60-65  | 6.7 | 5 |
| 57 | Towards the improvement of the stability of a-Si:H pin devices. Solar Energy, 2001, 69, 257-262  | 6.8 | 5 |
| 56 | Wave-optical front structures on silicon and perovskite thin-film solar cells <b>2020</b> , 315-354  |     | 5 |
| 55 | Reusable and highly sensitive SERS immunoassay utilizing gold nanostars and a cellulose hydrogel-based platform. <i>Journal of Materials Chemistry B</i> , <b>2021</b> , 9, 7516-7529  | 7.3 | 5 |
| 54 | Investigation of a-Si:H 1D MIS position sensitive detectors for application in 3D sensors. <i>Journal of Non-Crystalline Solids</i> , <b>2006</b> , 352, 1787-1791   | 3.9 | 4 |
| 53 | Engineering of a-Si:H device stability by suitable design of interfaces. <i>Solar Energy Materials and Solar Cells</i> , <b>2002</b> , 73, 39-49   | 6.4 | 4 |
| 52 | New nanostructured silicon films grown by PECVD technique under controlled powder formation conditions. <i>Solar Energy</i> , <b>2001</b> , 69, 263-269  | 6.8 | 4 |

## (2008-2001)

| 51 | Influence of the Plasma Regime on the Structural, Optical, Electrical and Morphological Properties of a-Si:H Thin Films. <i>Materials Science Forum</i> , <b>2001</b> , 382, 11-20   | 0.4  | 4 |  |
|----|--|------|---|--|
| 50 | Optimization of ZnO Nanorods Concentration in a Micro-Structured Polymeric Composite for Nanogenerators. <i>Chemosensors</i> , <b>2021</b> , 9, 27   | 4    | 4 |  |
| 49 | Color sensing ability of an amorphous silicon position sensitive detector array system. <i>Sensors and Actuators A: Physical</i> , <b>2014</b> , 205, 26-37  | 3.9  | 3 |  |
| 48 | 3 dimensional polymorphous silicon based metal-insulator-semiconductor position sensitive detectors. <i>Thin Solid Films</i> , <b>2007</b> , 515, 7530-7533  | 2.2  | 3 |  |
| 47 | Flexible position sensitive photodetectors based on a-Si:H heterostructures. <i>Sensors and Actuators A: Physical</i> , <b>2004</b> , 116, 119-124   | 3.9  | 3 |  |
| 46 | Influence of a DC grid on silane r.f. plasma properties. <i>Vacuum</i> , <b>2002</b> , 64, 387-392   | 3.7  | 3 |  |
| 45 | Metal-ferroelectric thin film devices. <i>Journal of Non-Crystalline Solids</i> , <b>2002</b> , 299-302, 1311-1315   | 3.9  | 3 |  |
| 44 | Hybrid Microfluidic Platform for Multifactorial Analysis Based on Electrical Impedance, Refractometry, Optical Absorption and Fluorescence. <i>Micromachines</i> , <b>2016</b> , 7,  | 3.3  | 3 |  |
| 43 | Insights on Amorphous Silicon Nip and MIS 3D Position Sensitive Detectors. <i>Materials Science Forum</i> , <b>2006</b> , 514-516, 13-17   | 0.4  | 2 |  |
| 42 | Effect of Annealing on Gold Rectifying Contacts in Amorphous Silicon. <i>Materials Science Forum</i> , <b>2004</b> , 455-456, 96-99  | 0.4  | 2 |  |
| 41 | Effect of an interfacial oxide layer in the annealing behaviour of Au/a-Si:H MIS photodiodes. <i>Journal of Non-Crystalline Solids</i> , <b>2004</b> , 338-340, 810-813  | 3.9  | 2 |  |
| 40 | Characterization of silicon carbide thin films and their use in colour sensor. <i>Solar Energy Materials and Solar Cells</i> , <b>2005</b> , 87, 343-348   | 6.4  | 2 |  |
| 39 | Fast and cheap method to qualitatively measure the thickness and uniformity of ZrO2 thin films. <i>Materials Science in Semiconductor Processing</i> , <b>2001</b> , 4, 319-321  | 4.3  | 2 |  |
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| 37 | Recombination of photo-generated charge carriers in H-terminated and (photo-)oxidized silicon nanoparticles. <i>Applied Materials Today</i> , <b>2021</b> , 23, 101071   | 6.6  | 2 |  |
| 36 | Size-dependent critical transition in the origin of light emission from coreBhell SiBiO2 nanoparticles. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 9012-9023   | 7.1  | 1 |  |
| 35 | Photovoltaics: Passivation of Interfaces in Thin Film Solar Cells: Understanding the Effects of a Nanostructured Rear Point Contact Layer (Adv. Mater. Interfaces 2/2018). <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1870007 | 4.6  | 1 |  |
| 34 | Metal contamination detection in nickel induced crystallized silicon by spectroscopic ellipsometry.<br>Journal of Non-Crystalline Solids, 2008, 354, 2319-2323   | 3.9  | 1 |  |
|    |  |      |   |  |

| 33 | Composition, Structure and Optical Characteristics of Polymorphous Silicon Films Deposited by PECVD at 27.12 MHz. <i>Materials Science Forum</i> , <b>2004</b> , 455-456, 100-103                                    | 0.4             | 1 |
|----|--|-----------------|---|
| 32 | Growth of Polymorphous/Nanocrystalline Silicon Films Deposited by PECVD at 13.56 MHz. <i>Materials Science Forum</i> , <b>2004</b> , 455-456, 532-535  | 0.4             | 1 |
| 31 | Batch Processing Method to Deposit a-Si:H Films by PECVD. <i>Materials Science Forum</i> , <b>2004</b> , 455-456, 10   | 4o1. <b>0</b> 7 | 1 |
| 30 | Role of the i layer surface properties on the performance of a-Si:H Schottky barrier photodiodes. <i>Sensors and Actuators A: Physical</i> , <b>2002</b> , 99, 220-223   | 3.9             | 1 |
| 29 | Silicon nanostructure thin film materials. <i>Vacuum</i> , <b>2002</b> , 64, 219-226   | 3.7             | 1 |
| 28 | Role of the rf frequency on the structure and composition of polymorphous silicon films. <i>Journal of Non-Crystalline Solids</i> , <b>2004</b> , 338-340, 183-187   | 3.9             | 1 |
| 27 |  |                 | 1 |
| 26 | Correlation between the carbon and hydrogen contents with the gas species and the plasma impedance of silicon carbide films produced by PECVD technique. <i>Applied Surface Science</i> , <b>2001</b> , 184, 101-106 | 6.7             | 1 |
| 25 | Highly Conductive/Transparent ZnO:Al Thin Films Deposited at Room Temperature by rf Magnetron Sputtering. <i>Key Engineering Materials</i> , <b>2002</b> , 230-232, 571-574  | 0.4             | 1 |
| 24 | Light management with quantum nanostructured dots-in-host semiconductors. <i>Light: Science and Applications</i> , <b>2021</b> , 10, 231   | 16.7            | 1 |
| 23 | Soft-Microstructured Transparent Electrodes for Photonic-Enhanced Flexible Solar Cells. <i>Micro</i> , <b>2021</b> , 1, 215-227  |                 | 1 |
| 22 | Surface-enhanced Raman scattering paper-based analytical devices <b>2022</b> , 117-167   |                 | 1 |
| 21 | Solar Cells: Self-Cleaned Photonic-Enhanced Solar Cells with Nanostructured Parylene-C (Adv. Mater. Interfaces 15/2020). <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 2070084                             | 4.6             | 1 |
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| 19 | E-Skin Piezoresistive Pressure Sensor Combining Laser Engraving and Shrinking Polymeric Films for Health Monitoring Applications. <i>Advanced Materials Interfaces</i> , <b>2021</b> , 8, 2100877                    | 4.6             | О |
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| 17 | Mortars from the Palace of Knossos in Crete, Greece: A Multi-Analytical Approach. <i>Minerals (Basel, Switzerland)</i> , <b>2022</b> , 12, 30  | 2.4             | О |
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| 13 | Role of Substrate on the Growth Process of Polycrystalline Silicon Thin Films by Low-Pressure Chemical Vapour Deposition. <i>Materials Science Forum</i> , <b>2004</b> , 455-456, 112-115                                    | 0.4 |
| 12 | Sputtering Preparation of Silicon Nitride Thin Films for Gate Dielectric Applications. <i>Materials Science Forum</i> , <b>2004</b> , 455-456, 69-72   | 0.4 |
| 11 | MIS Photodiodes of Polymorphous Silicon Deposited at Higher Growth Rates by 27.12 MHz PECVD Discharge. <i>Materials Science Forum</i> , <b>2004</b> , 455-456, 73-76   | 0.4 |
| 10 | Silicon Etching in CF4/O2 and SF6 Atmospheres. <i>Materials Science Forum</i> , <b>2004</b> , 455-456, 120-123   | 0.4 |
| 9  | Effect of the tunnelling oxide growth by H2O2 oxidation on the performance of a-Si:H MIS photodiodes. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2004</b> , 109, 256-259 | 3.1 |
| 8  | Silicon Films Produced by PECVD under Powder Formation Conditions. <i>Materials Science Forum</i> , <b>2001</b> , 382, 21-30   | 0.4 |
| 7  | Influence of the Plasma Regime on the Structural, Optical and Transport Properties of a-Si:H Thin Films. <i>Key Engineering Materials</i> , <b>2002</b> , 230-232, 583-586   | 0.4 |
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| 5  | Two Step Process for the Growth of a Thin Layer of Silicon Dioxide for Tunneling Effect Applications. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 619, 179  |     |
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| 3  | Characterization of Zinc Oxide Thin Films Deposited by rf Magnetron Sputtering on Mylar Substrates. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 666, 3211   |     |
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| 1  | Thin Film Metal Oxide Semiconductors Deposited on Polymeric Substrates. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 685, 1  |     |