List of Publications by Year in descending order

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| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Formation and evolution of luminescent Si nanoclusters produced by thermal annealing of SiOx<br>films. Journal of Applied Physics, 2004, 95, 3723-3732.                               | 2.5  | 303       |
| 2  | Efficient Luminescence and Energy Transfer in Erbium Silicate Thin Films. Advanced Materials, 2007, 19,<br>1582-1588.   | 21.0 | 124       |
| 3  | Pb clustering and Pbi2 nanofragmentation during methylammonium lead iodide perovskite degradation. Nature Communications, 2019, 10, 2196.   | 12.8 | 116       |
| 4  | Si-based materials and devices for light emission in silicon. Physica E: Low-Dimensional Systems and<br>Nanostructures, 2003, 16, 547-553.  | 2.7  | 101       |
| 5  | From thin film to bulk 3C-SiC growth: Understanding the mechanism of defects reduction. Materials<br>Science in Semiconductor Processing, 2018, 78, 57-68.                            | 4.0  | 99        |
| 6  | Ambipolar MoS <sub>2</sub> Transistors by Nanoscale Tailoring of Schottky Barrier Using Oxygen<br>Plasma Functionalization. ACS Applied Materials & Interfaces, 2017, 9, 23164-23174. | 8.0  | 81        |
| 7  | Similar Structural Dynamics for the Degradation of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub><br>in Air and in Vacuum. ChemPhysChem, 2015, 16, 3064-3071.                       | 2.1  | 80        |
| 8  | Microscopy study of the conductive filament in HfO2 resistive switching memory devices.<br>Microelectronic Engineering, 2013, 109, 75-78.   | 2.4  | 78        |
| 9  | Inhibition of Aβ Amyloid Growth and Toxicity by Silybins: The Crucial Role of Stereochemistry. ACS<br>Chemical Neuroscience, 2017, 8, 1767-1778.                                      | 3.5  | 72        |
| 10 | Electroluminescence and transport properties in amorphous silicon nanostructures.<br>Nanotechnology, 2006, 17, 1428-1436.   | 2.6  | 68        |
| 11 | Free-Standing Copper(II) Oxide Nanotube Arrays through an MOCVD Template Process. Chemistry of<br>Materials, 2004, 16, 5559-5561.   | 6.7  | 67        |
| 12 | Photochemical synthesis of copper nanoparticles incorporated in poly(vinyl pyrrolidone). Journal of<br>Nanoparticle Research, 2008, 10, 1183-1192.                                    | 1.9  | 61        |
| 13 | High-quality 6inch (111) 3C-SiC films grown on off-axis (111) Si substrates. Thin Solid Films, 2010, 518,<br>S165-S169.   | 1.8  | 61        |
| 14 | Effects of Annealing Treatments on the Properties of Al/Ti/p-GaN Interfaces for Normally OFF p-GaN<br>HEMTs. IEEE Transactions on Electron Devices, 2016, 63, 2735-2741.              | 3.0  | 55        |
| 15 | Dielectric properties of Pr2O3 high-k films grown by metalorganic chemical vapor deposition on silicon. Applied Physics Letters, 2003, 83, 129-131.                                   | 3.3  | 51        |
| 16 | Nanoscale structural characterization of epitaxial graphene grown on off-axis 4H-SiC (0001).<br>Nanoscale Research Letters, 2011, 6, 269.   | 5.7  | 50        |
| 17 | Formation of nanoparticles from laser irradiated Au thin film on SiO2/Si: Elucidating the Rayleigh-instability role. Materials Letters, 2012, 84, 27-30.                              | 2.6  | 49        |
| 18 | Localized electrical characterization of the giant permittivity effect in CaCu3Ti4O12 ceramics. Applied Physics Letters, 2008, 92, .  | 3.3  | 48        |

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|----|---|------|-----------|
| 19 | Structural defects in (100) 3C-SiC heteroepitaxy: Influence of the buffer layer morphology on generation and propagation of stacking faults and microtwins. Diamond and Related Materials, 2009, 18, 1440-1449. | 3.9  | 46        |
| 20 | Conductive filament structure in HfO2 resistive switching memory devices. Solid-State Electronics, 2015, 111, 161-165.  | 1.4  | 46        |
| 21 | Laser ablation synthesis of mono- and bimetallic Pt and Pd nanoparticles and fabrication of Pt-Pd/Graphene nanocomposites. Applied Surface Science, 2019, 475, 494-503.   | 6.1  | 43        |
| 22 | Chemical Vapor Deposition Growth of Silicon Nanowires with Diameter Smaller Than 5 nm. ACS Omega, 2019, 4, 17967-17971.   | 3.5  | 42        |
| 23 | Ni(OH)2@Ni core-shell nanochains as low-cost high-rate performance electrode for energy storage applications. Scientific Reports, 2019, 9, 7736.  | 3.3  | 41        |
| 24 | Oxygen Functionalities Evolution in Thermally Treated Graphene Oxide Featured by EELS and DFT Calculations. Journal of Physical Chemistry C, 2017, 121, 5408-5414.  | 3.1  | 40        |
| 25 | Chemical and structural arrangement of the trigonal phase in GeSbTe thin films. Nanotechnology, 2017, 28, 065706.   | 2.6  | 39        |
| 26 | Role of the Support and the Ru Precursor on the Performance of Ru/Carbon Catalysts Towards H2<br>Production Through NaBH4 Hydrolysis. Catalysis Letters, 2012, 142, 882-888.                                    | 2.6  | 38        |
| 27 | Towards a laser fluence dependent nanostructuring of thin Au films on Si by nanosecond laser<br>irradiation. Applied Surface Science, 2012, 258, 9128-9137.   | 6.1  | 37        |
| 28 | Molecular doping applied to Si nanowires array based solar cells. Solar Energy Materials and Solar<br>Cells, 2015, 132, 118-122.  | 6.2  | 37        |
| 29 | Electron energy-loss spectra of graphene oxide for the determination of oxygen functionalities.<br>Carbon, 2015, 93, 1034-1041.   | 10.3 | 36        |
| 30 | Comparative study of gate oxide in 4H-SiC lateral MOSFETs subjected to post-deposition-annealing in N2O and POCl3. Applied Physics A: Materials Science and Processing, 2014, 115, 333-339.                     | 2.3  | 35        |
| 31 | Nanoscale surface modification of Mt. Etna volcanic ashes. Geochimica Et Cosmochimica Acta, 2016, 174, 70-84.   | 3.9  | 35        |
| 32 | Genesis and evolution of extended defects: The role of evolving interface instabilities in cubic SiC.<br>Applied Physics Reviews, 2020, 7, 021402.  | 11.3 | 35        |
| 33 | Multi-Scale-Porosity TiO2 scaffolds grown by innovative sputtering methods for high throughput hybrid photovoltaics. Scientific Reports, 2016, 6, 39509.  | 3.3  | 34        |
| 34 | New Approaches and Understandings in the Growth of Cubic Silicon Carbide. Materials, 2021, 14, 5348.  | 2.9  | 34        |
| 35 | Microstructure of Au nanoclusters formed in and on SiO2. Superlattices and Microstructures, 2008, 44, 588-598.  | 3.1  | 33        |
| 36 | Amorphous-Crystal Phase Transitions in Ge <sub>x</sub> Te <sub>1-x</sub> Alloys. Journal of the Electrochemical Society, 2011, 159, H130-H139.  | 2.9  | 32        |

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|----|--|-----|-----------|
| 37 | Role of Linear Carbon Chains in the Aggregation of Copper, Silver, and Gold Nanoparticles. Journal of<br>Physical Chemistry C, 2010, 114, 907-915.   | 3.1 | 31        |
| 38 | Supported silver catalysts prepared by deposition in aqueous solution of Ag nanoparticles obtained through a photochemical approach. Applied Catalysis A: General, 2009, 367, 138-145.                 | 4.3 | 30        |
| 39 | Electrical and structural properties of surfaces and interfaces in Ti/Al/Ni Ohmic contacts to p-type implanted 4H-SiC. Applied Surface Science, 2017, 420, 331-335.                                    | 6.1 | 30        |
| 40 | Formation, evolution and photoluminescence properties of Si nanoclusters. Journal of Physics<br>Condensed Matter, 2007, 19, 225003.  | 1.8 | 29        |
| 41 | Efficiency Enhancement in ZnO:Al-Based Dye-Sensitized Solar Cells Structured with Sputtered<br>TiO <sub>2</sub> Blocking Layers. Journal of Physical Chemistry C, 2014, 118, 6576-6585.                | 3.1 | 29        |
| 42 | Crystallization of sputtered-deposited and ion implanted amorphous Ge2Sb2Te5 thin films. Journal of Applied Physics, 2009, 105, .  | 2.5 | 27        |
| 43 | Ti/Al ohmic contacts on AlGaN/GaN heterostructures with different defect density. Applied Surface<br>Science, 2014, 314, 546-551.  | 6.1 | 27        |
| 44 | Temperature-dependent Fowler-Nordheim electron barrier height in SiO2/4H-SiC MOS capacitors.<br>Materials Science in Semiconductor Processing, 2018, 78, 38-42.  | 4.0 | 27        |
| 45 | Nanostructured TiO <sub>2</sub> Grown by Low-Temperature Reactive Sputtering for Planar<br>Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 6218-6229.                                   | 5.1 | 27        |
| 46 | Quantitative determination of the clustered silicon concentration in substoichiometric silicon oxide layer. Applied Physics Letters, 2005, 87, 044102.   | 3.3 | 26        |
| 47 | Functionalization of Bulk SiO2 Surface with Biomolecules for Sensing Applications: Structural and Functional Characterizations. Chemosensors, 2018, 6, 59.   | 3.6 | 26        |
| 48 | Extended defects in 3C-SiC: Stacking faults, threading partial dislocations, and inverted domain boundaries. Acta Materialia, 2021, 213, 116915.   | 7.9 | 26        |
| 49 | Pseudoepitaxial transrotational structures in 14â€nm-thick NiSi layers on [001] silicon. Acta<br>Crystallographica Section B: Structural Science, 2005, 61, 486-491.                                   | 1.8 | 25        |
| 50 | Morphological and electrical properties of Nickel based Ohmic contacts formed by laser annealing process on n-type 4H-SiC. Materials Science in Semiconductor Processing, 2019, 97, 62-66.             | 4.0 | 25        |
| 51 | Impact of Stacking Faults and Domain Boundaries on the Electronic Transport in Cubic Silicon Carbide<br>Probed by Conductive Atomic Force Microscopy. Advanced Electronic Materials, 2020, 6, 1901171. | 5.1 | 25        |
| 52 | Preferential oxidation of stacking faults in epitaxial off-axis (111) 3C-SiC films. Applied Physics Letters, 2009, 95, 111905.   | 3.3 | 24        |
| 53 | Protrusions reduction in 3C-SiC thin film on Si. Journal of Crystal Growth, 2018, 498, 248-257.  | 1.5 | 24        |
| 54 | Tailoring the Tiâ^•4H–SiC Schottky barrier by ion irradiation. Applied Physics Letters, 2004, 85, 6152-6154.   | 3.3 | 23        |

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|----|--|--------------------|---------------------------|
| 55 | Crystallization of ion amorphized Ge2Sb2Te5 thin films in presence of cubic or hexagonal phase.<br>Journal of Applied Physics, 2010, 107, .  | 2.5                | 23                        |
| 56 | Photo-physical characterization of fluorophore Ru(bpy) 3 2+ for optical biosensing applications.<br>Sensing and Bio-Sensing Research, 2015, 6, 67-71.  | 4.2                | 23                        |
| 57 | Innovative spongy TiO2 layers for gas detection at low working temperature. Sensors and Actuators<br>B: Chemical, 2018, 259, 658-667.  | 7.8                | 23                        |
| 58 | Role of the internal strain on the incomplete Siâ^SiO2 phase separation in substoichiometric silicon oxide films. Applied Physics Letters, 2007, 90, 183101.   | 3.3                | 22                        |
| 59 | Electron trapping at SiO <sub>2</sub> /4H-SiC interface probed by transient capacitance measurements and atomic resolution chemical analysis. Nanotechnology, 2018, 29, 395702.  | 2.6                | 22                        |
| 60 | Development of Chitosan/Cyclodextrin Nanospheres for Levofloxacin Ocular Delivery.<br>Pharmaceutics, 2021, 13, 1293.   | 4.5                | 22                        |
| 61 | Critical nickel thickness to form silicide transrotational structures on [001] silicon. Applied Physics<br>Letters, 2006, 89, 102105.  | 3.3                | 20                        |
| 62 | Pulsed laser deposition of multiwalled carbon nanotubes thin films. Applied Surface Science, 2007, 254, 1260-1263.   | 6.1                | 20                        |
| 63 | Heteroepitaxial growth of (111) 3C-SiC on (110) Si substrate by second order twins. Applied Physics<br>Letters, 2008, 92, 224102.  | 3.3                | 20                        |
| 64 | Trehalose Conjugates of Silybin as Prodrugs for Targeting Toxic AÎ <sup>2</sup> Aggregates. ACS Chemical Neuroscience, 2020, 11, 2566-2576.  | 3.5                | 20                        |
| 65 | Anatase/Rutile nucleation and growth on (0002) and (11-20) oriented ZnO:Al/glass substrates at 150°C.<br>Thin Solid Films, 2014, 555, 3-8.   | 1.8                | 19                        |
| 66 | Crystallization properties of melt-quenched Ge-rich GeSbTe thin films for phase change memory applications. Journal of Applied Physics, 2020, 128, .   | 2.5                | 19                        |
| 67 | Two-dimensional defect mapping of the <mml:math<br>xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt;<mml:msub><mml:mi>SiO</mml:mi><mml:mn>2interface. Physical Review Materials, 2019, 3, .</mml:mn></mml:msub></mml:math<br> | n <b>n2.4/</b> mml | :msoub> <mm< td=""></mm<> |
| 68 | Heteroepitaxial Growth and Faceting of Ge Nanowires on Si(111) by Electron-Beam Evaporation.<br>Electrochemical and Solid-State Letters, 2010, 13, K53.  | 2.2                | 18                        |
| 69 | Silicon nitride surfaces as active substrate for electrical DNA biosensors. Sensors and Actuators B:<br>Chemical, 2017, 252, 492-502.  | 7.8                | 18                        |
| 70 | Effect of the liquid environment on the formation of carbon nanotubes and graphene layers by arcing processes. Carbon, 2012, 50, 2365-2369.  | 10.3               | 17                        |
| 71 | Nickel nanostructured materials from liquid phase photodeposition. Journal of Nanoparticle Research, 2007, 9, 611-619.   | 1.9                | 16                        |
| 72 | Direct Growth on Si(100) of Isolated Octahedral Mil-101(Fe) Crystals for the Separation of Aromatic Vapors. Journal of Physical Chemistry C, 2019, 123, 28836-28845.   | 3.1                | 16                        |

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|----|--|------------|-----------|
| 73 | Structural Characterization and Adsorption Properties of Dunino Raw Halloysite Mineral for Dye<br>Removal from Water. Materials, 2021, 14, 3676.   | 2.9        | 16        |
| 74 | Interfacial electrical and chemical properties of deposited SiO2 layers in lateral implanted 4H-SiC MOSFETs subjected to different nitridations. Applied Surface Science, 2021, 557, 149752.                                 | 6.1        | 16        |
| 75 | Structural characterization of Ni2Si pseudoepitaxial transrotational structures on [001] Si. Acta Crystallographica Section B: Structural Science, 2006, 62, 729-736.  | 1.8        | 14        |
| 76 | Surface effects on the growth of solution processed pentacene thin films. Surface Science, 2008, 602, 993-1005.  | 1.9        | 14        |
| 77 | Two-dimensional electron gas insulation by local surface thin thermal oxidation in AlGaNâ^GaN heterostructures. Applied Physics Letters, 2008, 92, 252101.   | 3.3        | 14        |
| 78 | Fiber texturing in nano-crystalline TiO <sub>2</sub> thin films deposited at 150°C by dc-reactive<br>sputtering on fiber-textured [0 0 0 1] ZnO : Al substrates. Journal Physics D: Applied Phys<br>355301.                  | sics22012, | 4514      |
| 79 | Low temperature sputtered TiO <sub>2</sub> nano sheaths on electrospun PES fibers as high porosity photoactive material. RSC Advances, 2015, 5, 73444-73450.   | 3.6        | 14        |
| 80 | TiO <sub>2</sub> Colloids Laser-Treated in Ethanol for Photocatalytic H <sub>2</sub> Production.<br>ACS Applied Nano Materials, 2020, 3, 9127-9140.  | 5.0        | 14        |
| 81 | Generation and Termination of Stacking Faults by Inverted Domain Boundaries in 3C-SiC. Crystal<br>Growth and Design, 2020, 20, 3104-3111.  | 3.0        | 14        |
| 82 | Nano-patterning with Block Copolymers. Superlattices and Microstructures, 2008, 44, 693-698.   | 3.1        | 13        |
| 83 | High Quality Single Crystal 3C-SiC(111) Films Grown on Si(111). Materials Science Forum, 0, 615-617, 145-148.  | 0.3        | 13        |
| 84 | Selective diffusion of gold nanodots on nanopatterned substrates realized by self-assembly of diblock copolymers. Journal of Materials Research, 2011, 26, 240-246.  | 2.6        | 13        |
| 85 | Nanoporous Ge electrode as a template for nano-sized ( < 5 nm) Au aggregates. Nanotechnology,<br>2012, 23, 395604.   | 2.6        | 13        |
| 86 | Thermally induced structural modifications of nano-sized anatase films and the effects on the dye-TiO2 surface interactions. Applied Surface Science, 2014, 296, 69-78.  | 6.1        | 13        |
| 87 | Photo-electrochemical water splitting in silicon based photocathodes enhanced by plasmonic/catalytic nanostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 225, 128-133. | 3.5        | 13        |
| 88 | Atomic diffusion in laser irradiated Ge rich GeSbTe thin films for phase change memory applications.<br>Journal Physics D: Applied Physics, 2018, 51, 145103.  | 2.8        | 13        |
| 89 | β-Bi <sub>2</sub> O <sub>3</sub> reduction by laser irradiation in a liquid environment. Physical Chemistry Chemical Physics, 2018, 20, 10292-10301.   | 2.8        | 13        |
| 90 | Modification of the sheet resistance under Ti/Al/Ni/Au Ohmic contacts on AlGaN/GaN heterostructures. Materials Science in Semiconductor Processing, 2018, 78, 111-117.   | 4.0        | 13        |

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| 91  | Ohmic contacts on n-type and p-type cubic silicon carbide (3C-SiC) grown on silicon. Materials Science<br>in Semiconductor Processing, 2019, 93, 295-298.  | 4.0  | 13        |
| 92  | Barrier height tuning in Ti/4H-SiC Schottky diodes. Solid-State Electronics, 2021, 186, 108042.  | 1.4  | 13        |
| 93  | Low temperature formation and evolution of a 10 nm amorphous Ni–Si layer on [001] silicon studied by <i>in situ</i> transmission electron microscopy. Journal of Applied Physics, 2009, 105, .                                       | 2.5  | 12        |
| 94  | On the "Step Bunching―Phenomena Observed on Etched and Homoepitaxially Grown 4H Silicon<br>Carbide. Materials Science Forum, 0, 679-680, 358-361.  | 0.3  | 12        |
| 95  | Pervasive infiltration and multi-branch chemisorption of N-719 molecules into newly designed spongy<br>TiO <sub>2</sub> layers deposited by gig-lox sputtering processes. Journal of Materials Chemistry A,<br>2017, 5, 25529-25538. | 10.3 | 12        |
| 96  | Metal/Semiconductor Barrier Properties of Non-Recessed Ti/Al/Ti and Ta/Al/Ta Ohmic Contacts on AlGaN/GaN Heterostructures. Energies, 2019, 12, 2655.   | 3.1  | 12        |
| 97  | 3C-SiC Growth on Inverted Silicon Pyramids Patterned Substrate. Materials, 2019, 12, 3407.   | 2.9  | 12        |
| 98  | Ni/4H-SiC interaction and silicide formation under excimer laser annealing for ohmic contact.<br>Materialia, 2020, 9, 100528.  | 2.7  | 12        |
| 99  | Exploring the Structural Competition between the Black and the Yellow Phase of CsPbI3.<br>Nanomaterials, 2021, 11, 1282.   | 4.1  | 12        |
| 100 | Synthesis of MIL-Modified Fe3O4 Magnetic Nanoparticles for Enhancing Uptake and Efficiency of<br>Temozolomide in Glioblastoma Treatment. International Journal of Molecular Sciences, 2022, 23, 2874.                                | 4.1  | 12        |
| 101 | Local Order and Crystallization of Laser Quenched and Ion Implanted Amorphous Ge[sub 1â^'x]Te[sub x]<br>Thin Films. Electrochemical and Solid-State Letters, 2010, 13, H317.   | 2.2  | 11        |
| 102 | Structural and electrical properties of AlN thin films on GaN substrates grown by plasma<br>enhanced-Atomic Layer Deposition. Materials Science in Semiconductor Processing, 2019, 97, 35-39.  | 4.0  | 11        |
| 103 | Ultralow loading electroless deposition of IrOx on nickel foam for efficient and stable water oxidation catalysis. International Journal of Hydrogen Energy, 2020, 45, 26583-26594.  | 7.1  | 11        |
| 104 | Correlating electron trapping and structural defects in Al2O3 thin films deposited by plasma enhanced atomic layer deposition. AlP Advances, 2020, 10, .   | 1.3  | 11        |
| 105 | Thermal evolution and photoluminescence properties of nanometric Si layers. Nanotechnology, 2005, 16, 3012-3016.   | 2.6  | 10        |
| 106 | Effect of surrounding environment on atomic structure and equilibrium shape of growing nanocrystals: gold in/on SiO2. Nanoscale Research Letters, 2007, 2, 240-247.  | 5.7  | 10        |
| 107 | 3C-SiC Heteroepitaxial Growth on Inverted Silicon Pyramids (ISP). Materials Science Forum, 0, 645-648, 135-138.  | 0.3  | 10        |
| 108 | Nanoscale electro-structural characterisation of ohmic contacts formed on p-type implanted 4H-SiC.<br>Nanoscale Research Letters, 2011, 6, 158.  | 5.7  | 10        |

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|-----|---|-----|-----------|
| 109 | TiO2 Nanofibrous Chemoresistors Coated with PEDOT and PANi Blends for High Performance Gas<br>Sensors. Procedia Engineering, 2012, 47, 937-940.   | 1.2 | 10        |
| 110 | Nanofabrication processes for innovative nanohole-based solar cells. Physica Status Solidi (A)<br>Applications and Materials Science, 2013, 210, 1564-1570.                               | 1.8 | 10        |
| 111 | Characterization of SiO <sub>2</sub> /SiC Interfaces Annealed in N <sub>2</sub> O<br>or POCl <sub>3</sub> . Materials Science Forum, 0, 778-780, 623-626.                                 | 0.3 | 10        |
| 112 | Direct observation of single organic molecules grafted on the surface of a silicon nanowire.<br>Scientific Reports, 2019, 9, 5647.  | 3.3 | 10        |
| 113 | On the origin of the premature breakdown of thermal oxide on 3C-SiC probed by electrical scanning probe microscopy. Applied Surface Science, 2020, 526, 146656.                           | 6.1 | 10        |
| 114 | Structural defects and device electrical behaviour in AlGaN/GaN heterostructures grown on 8°<br>off-axis 4H-SiC. Applied Physics A: Materials Science and Processing, 2010, 100, 197-202. | 2.3 | 9         |
| 115 | Preparation of ceria and titania supported Pt catalysts through liquid phase photo-deposition.<br>Journal of Molecular Catalysis A, 2010, 333, 100-108.                                   | 4.8 | 9         |
| 116 | Synthesis of crystalline Si quantum dots by millisecond laser irradiation of SiOxNy layers. Journal of<br>Applied Physics, 2010, 107, 023703.   | 2.5 | 9         |
| 117 | Morphological and Electrical Characterization of Electrically Trimmable Thin-Film Resistors. IEEE<br>Transactions on Electron Devices, 2012, 59, 3549-3554.                               | 3.0 | 9         |
| 118 | Light scattering calculations from Au and Au/SiO2 core/shell nanoparticles. Physica E:<br>Low-Dimensional Systems and Nanostructures, 2013, 47, 25-33.                                    | 2.7 | 9         |
| 119 | New Synthetic Route for the Growth of α-FeOOH/NH <sub>2</sub> -Mil-101 Films on Copper Foil for High<br>Surface Area Electrodes. ACS Omega, 2019, 4, 18495-18501.                         | 3.5 | 8         |
| 120 | Formation of CsPbl <sub>3</sub> γâ€Phase at 80 °C by Europiumâ€Assisted Snowplow Effect. Advanced<br>Energy and Sustainability Research, 2021, 2, 2100091.                                | 5.8 | 8         |
| 121 | Black‥ellow Bandgap Tradeâ€Off During Thermal Stability Tests in Lowâ€Temperature Euâ€Doped<br>CsPbl <sub>3</sub> . Solar Rrl, 2022, 6, .   | 5.8 | 8         |
| 122 | Synthesis and luminescence properties of erbium silicate thin films. Materials Science and Engineering<br>B: Solid-State Materials for Advanced Technology, 2008, 146, 29-34.             | 3.5 | 7         |
| 123 | Morphological and electrical characterization of SixCryCzBv thin films. Microelectronic Engineering, 2010, 87, 430-433.   | 2.4 | 7         |
| 124 | Effect of Dopant Concentrations and Annealing Conditions on the Electrically Active Profiles and Lattice Damage in Al Implanted 4H-SiC. Materials Science Forum, 2010, 645-648, 713-716.  | 0.3 | 7         |
| 125 | Schottky Barrier Inhomogeneities in Nickel Silicide Transrotational Contacts. Applied Physics Express, 2011, 4, 115701.   | 2.4 | 7         |
| 126 | Bimodal Porosity and Stability of a TiO2 Gig-Lox Sponge Infiltrated with Methyl-Ammonium Lead Iodide<br>Perovskite. Nanomaterials, 2019, 9, 1300.   | 4.1 | 7         |

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|-----|---|-----|-----------|
| 127 | Study on the Physico-Chemical Properties of the Si Nanowires Surface. Nanomaterials, 2019, 9, 818.  | 4.1 | 7         |
| 128 | Inter-diffusion, melting and reaction interplay in Ni/4H-SiC under excimer laser annealing. Applied Surface Science, 2021, 539, 148218.   | 6.1 | 7         |
| 129 | Nanoporous Ge coated by Au nanoparticles for electrochemical application. Electrochemistry Communications, 2013, 30, 83-86.   | 4.7 | 6         |
| 130 | Simulation of the Growth Kinetics in Group IV Compound Semiconductors. Physica Status Solidi (A)<br>Applications and Materials Science, 2019, 216, 1800597.   | 1.8 | 6         |
| 131 | Thermal annealing effect on electrical and structural properties of Tungsten Carbide Schottky contacts on AlGaN/GaN heterostructures. Semiconductor Science and Technology, 2020, 35, 105004.                   | 2.0 | 6         |
| 132 | Simulations of the Ultra-Fast Kinetics in Ni-Si-C Ternary Systems under Laser Irradiation. Materials, 2021, 14, 4769.   | 2.9 | 6         |
| 133 | Impact of Nitrogen on the Selective Closure of Stacking Faults in 3C-SiC. Crystal Growth and Design, 2022, 22, 4996-5003.   | 3.0 | 6         |
| 134 | Interface roughening and defect nucleation during solid phase epitaxy regrowth of doped and intrinsic Si0.83Ge0.17 alloys. Journal of Applied Physics, 2007, 101, 103508.                                       | 2.5 | 5         |
| 135 | Crystallization of Nanometer Ge2Sb2Te5 Amorphous Regions Embedded in the Hexagonal Close Packed<br>Structure. Electrochemical and Solid-State Letters, 2012, 15, H105.  | 2.2 | 5         |
| 136 | A strategy to stabilise the local structure of Ti4+ and Zn2+ species against aging in<br>TiO2/aluminium-doped ZnO bi-layers for applications in hybrid solar cells. Journal of Applied Physics,<br>2014, 116, . | 2.5 | 5         |
| 137 | Electrical and structural properties of Ti/Alâ€based contacts on AlGaN/GaN heterostructures with<br>different quality. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1091-1098.      | 1.8 | 5         |
| 138 | Stacking Faults Defects on 3C-SiC Homo-Epitaxial Films. Materials Science Forum, 0, 924, 124-127.   | 0.3 | 5         |
| 139 | High Resolution Investigation of Stacking Fault Density by HRXRD and STEM. Materials Science Forum, 0, 963, 346-349.  | 0.3 | 5         |
| 140 | Systematic Characterization of Plasma-Etched Trenches on 4H-SiC Wafers. ACS Omega, 2021, 6, 20667-20675.  | 3.5 | 5         |
| 141 | Photo-Fenton Degradation of Methyl Orange with Dunino Halloysite as a Source of Iron. Catalysts, 2022, 12, 257.   | 3.5 | 5         |
| 142 | Realization of Hybrid Silicon core/silicon Nitride Shell Nanodots by LPCVD for NVM Application.<br>Materials Research Society Symposia Proceedings, 2008, 1071, 1.  | 0.1 | 4         |
| 143 | The zero field self-organization of cobalt/surfactant nanocomposite thin films. Nanotechnology, 2009, 20, 225605.   | 2.6 | 4         |
| 144 | Influence of Thermal Annealing on Ohmic Contacts and Device Isolation in AlGaN/GaN<br>Heterostructures. Materials Science Forum, 2009, 615-617, 967-970.  | 0.3 | 4         |

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| 145 | Towards Large Area (111)3C-SiC Films Grown on Off-Oriented (111)Si. Materials Science Forum, 0, 615-617,<br>149-152.  | 0.3 | 4         |
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