# Debajyoti Das

List of Publications by Year
in descending order



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|---|---|---|---|
| 169 papers | 3,475 citations | 109321 35 h-index | 189892 50 g-index |
| 169 all docs | 169 docs citations | 169 times ranked | 2091 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | ZnO/CdS/CuS heterostructure: A suitable candidate for applications in visible-light photocatalysis. Journal of Physics and Chemistry of Solids, 2022, 160, 110344. | 4.0 | 41 |
| 2 | Effect of HF wet-etching and H2-plasma polishing on the low-temperature growth of carbon nanotubes on stainless-steel substrates. Journal of Physics and Chemistry of Solids, 2022, 160, 110307. | 4.0 | 4 |
| 3 | Synthesis of nanocrystalline diamond embedded diamond-like carbon films on untreated glass substrates at low temperature using (C2H2Â+ÂH2) gas composition in microwave plasma CVD. Applied Surface Science, 2022, 579, 152132. | 6.1 | 17 |
| 4 | Room temperature synthesized highly conducting B-doped nanocrystalline silicon thin films on flexible polymer substrates by ICP-CVD. Applied Surface Science, 2022, 583, 152499. | 6.1 | 1 |
| 5 | Spectroscopic studies of low-temperature synthesized nanocrystalline silicon oxy-carbide thin films. Materials Today: Proceedings, 2022, , . | 1.8 | 0 |
| 6 | The effect of CO2 addition to the (C2H2Â+ÂH2) gas system on the low-temperature growth of diamond-like carbon (DLC) with prominent nano-diamond phase. Materials Today: Proceedings, 2022, 62, 5057-5060. | 1.8 | 1 |
| 7 | Growth of Nanostructured Diamond Films on Glass Substrates by Low-Temperature Microwave Plasma-Enhanced Chemical Vapor Deposition for Applications in Nanotribology. ACS Applied Nano Materials, 2022, 5, 3558-3571. | 5.0 | 5 |
| 8 | Ag<sub>2</sub>O Decorated ZnO Nanorods Demonstrating Two-Step Visible-Light Photocatalytic Dye-Degradation Phenomena. IOP Conference Series: Materials Science and Engineering, 2022, 1221, 012047. | 0.6 | 0 |
| 9 | Preparation of boron doped diamond-like carbon films in a low-pressure high-density plasma in RF ICP-CVD. Materials Today: Proceedings, 2022, 62, 5105-5109. | 1.8 | 1 |
| 10 | Correlation of microstructure factor with the electronic properties of nanocrystalline siliconâ€“germanium thin films. Materials Today: Proceedings, 2022, , . | 1.8 | 0 |
| 11 | Intrinsic, P-doped and B-doped nanocrystalline silicon thin films grown at room temperature on flexible substrates for photovoltaic applications. Materials Today: Proceedings, 2022, , . | 1.8 | 0 |
| 12 | Synthesis and characterization of organic ligand capped luminescent silicon nanoparticles. Materials Today: Proceedings, 2022, , . | 1.8 | 1 |
| 13 | Diamond-Like Carbon Thin Films from Low-Pressure and High-Density CH<sub>4</sub> Plasma. IOP Conference Series: Materials Science and Engineering, 2022, 1221, 012037. | 0.6 | 0 |
| 14 | Two-Step Visible Light Photocatalytic Dye Degradation Phenomena in Ag<sub>2</sub>O-Impregnated ZnO Nanorods via Growth of Metallic Ag and Formation of ZnO/Ag<sup>0</sup>/Ag<sub>2</sub>O Heterojunction Structures. Langmuir, 2022, 38, 4503-4520. | 3.5 | 17 |
| 15 | Growth of diamond-like carbon films with significant nanocrystalline phases in a low-pressure high-density CH4 plasma in ICP-CVD: Effect of negative dc substrate bias. Applied Surface Science, 2022, 596, 153638. | 6.1 | 2 |
| 16 | Optimal H2-dilution playing key role in accomplishing significant nanocrystallinity with both Si and Ge moieties in SiGe nanocomposite thin film network. Applied Surface Science, 2022, 597, 153657. | 6.1 | 3 |
| 17 | Morphological variations of ZnO nanostructures and its influence on the photovoltaic performance when used as photoanodes in dye sensitized solar cells. Solar Energy Materials and Solar Cells, 2022, 243, 111811. | 6.2 | 19 |
| 18 | Structural characteristics, impedance spectroscopy, ac-conductivity and dielectric loss studies on RF-magnetron sputtered F doped ZnO (FZO) thin films. Ceramics International, 2022, 48, 31370-31380. | 4.8 | 1 |

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| 19 | Prominent c-axis oriented Si-doped ZnO thin film prepared at low substrate temperature in RF magnetron sputtering and its UV sensing in p-Si/n-SZO heterojunction structures. Journal of Physics and Chemistry of Solids, 2021, 151, 109907. | 4.0 | 6 |
| 20 | Wide optical gap B-doped nc-Si thin films with advanced crystallinity and conductivity on transparent flexible substrates for potential low-cost flexible electronics including nc-Si superstrate pâ€“iâ€“n solar cells. Materials Advances, 2021, 2, 2055-2067. | 5.4 | 16 |
| 21 | Reduced Graphene Oxide-Laminated One-Dimensional TiO<sub>2</sub>â€“Bronze Nanowire Composite: An Efficient Photoanode Material for Dye-Sensitized Solar Cells. ACS Omega, 2021, 6, 4362-4373. | 3.5 | 34 |
| 22 | Low-temperature synthesis of conducting boron-doped nanocrystalline silicon oxide thin films as the window layer of solar cells. Current Applied Physics, 2021, 23, 42-51. | 2.4 | 2 |
| 23 | Reverse Meyer-Neldel rule prevailing in the hole transport of B-doped nc-SiOx:H thin films sustaining degeneracy and performing as suitable window of nc-Si solar cells. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 128, 114615. | 2.7 | 10 |
| 24 | Complex Dielectric Characteristics, ac-Conductivity, and Impedance Spectroscopy of B-Doped nc-SiO<sub>X</sub>:H Thin Films. ACS Applied Electronic Materials, 2021, 3, 1634-1647. | 4.3 | 10 |
| 25 | CdS Q-Dot-Impregnated TiO<sub>2</sub>-B Nanowire-Based Photoanodes for Efficient Photovoltaic Conversion in â€˜Q-Dot Co-sensitized DSSCâ€™. Energy & Fuels, 2021, 35, 8246-8262. | 5.1 | 17 |
| 26 | Synthesis of single-walled, bamboo-shaped and Y-junction carbon nanotubes using microwave plasma CVD on low-temperature and chemically processed catalysts. Journal of Physics and Chemistry of Solids, 2021, 152, 109971. | 4.0 | 7 |
| 27 | Optoelectronic and structural properties of Ge-rich narrow band gap nc-SixGe1-x absorber layer for tandem structure nc-Si solar cells. Journal of Physics and Chemistry of Solids, 2021, 154, 110055. | 4.0 | 6 |
| 28 | Graphitic carbon nitride (g-C3N4) incorporated TiO2â€“B nanowires as efficient photoanode material in dye sensitized solar cells. Materials Chemistry and Physics, 2021, 266, 124520. | 4.0 | 19 |
| 29 | Phosphorus-doped nanocrystalline silicon-oxycarbide thin films. Journal of Alloys and Compounds, 2021, 876, 160094. | 5.5 | 8 |
| 30 | Frequency and temperature dependent electrical characteristics of P-doped nc-SiOX:H thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 272, 115361. | 3.5 | 2 |
| 31 | Maintaining superior crystallinity and conductivity in boron-doped nc-Si ultra-thin films by hydrogen plasma treatment. Journal of Physics and Chemistry of Solids, 2021, 157, 110199. | 4.0 | 1 |
| 32 | Synthesis of CdS/GO modified ZnO heterostructure for visible light dye degradation applications. Applied Surface Science, 2021, 570, 151260. | 6.1 | 18 |
| 33 | Improved TCO characteristics of ZnO:Si films via utilization of Si4+ ionized donor states and its application in n-SZO/p-Si heterojunction solar cells. Solar Energy Materials and Solar Cells, 2020, 206, 110278. | 6.2 | 20 |
| 34 | Advanced nanocrystallinity with widened optical gap realized via microstructural control in P-doped silicon oxide thin films used as window layer in nc-Si solar cells. Materials Chemistry and Physics, 2020, 243, 122628. | 4.0 | 14 |
| 35 | Narrow band gap reduced TiO2-B:Cu nanowire heterostructures for efficient visible light absorption, charge separation and photocatalytic degradation. Applied Surface Science, 2020, 506, 144880. | 6.1 | 29 |
| 36 | Controlling superior crystallinity and conductivity in ultra-thin doped nc-Si layers via H2-plasma treatment for applications in nc-Si/c-Si heterojunction solar cells. AIP Conference Proceedings, 2020, , . | 0.4 | 0 |

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| 37 | Low temperature growth of highly conducting boron doped nc-Si thin films on flexible substrates. AIP Conference Proceedings, 2020, , . | 0.4 | 0 |
| 38 | Vertically aligned silicon nanowire arrays prepared by silver assisted single step chemical etching. AIP Conference Proceedings, 2020, , . | 0.4 | 1 |
| 39 | Single-step fabrication of single-junction c-Si nano-structured solar cells by optimization of plasma etching parameters. Journal of Alloys and Compounds, 2020, 847, 155352. | 5.5 | 3 |
| 40 | Ternary ZnCdSO composite photocatalyst for efficient dye degradation under visible light retaining Z-scheme of migration pathways for the photogenerated charge carriers. Solar Energy Materials and Solar Cells, 2020, 217, 110674. | 6.2 | 24 |
| 41 | Low temperature growth of a-Si/nc-Si superlattice thin films demonstrating enhanced optical absorption. AIP Conference Proceedings, 2020, , . | 0.4 | 1 |
| 42 | Biocompatible implant mimicking cartilage: A new horizon for reconstructive facial field. Artificial Organs, 2020, 44, E494-E508. | 1.9 | 0 |
| 43 | Autogenic single p/n-junction solar cells from black-Si nano-grass structures of p-to-n type self-converted electronic configuration. Nanoscale, 2020, 12, 15371-15382. | 5.6 | 20 |
| 44 | Effect of Si incorporation to produce Ge-rich nc-SixGe1-x absorber layer for nc-Si solar cells. AIP Conference Proceedings, 2020, , . | 0.4 | 0 |
| 45 | Synthesis of cost-effective g-C3N4/ZnO heterostructure photocatalyst for methyl orange (MO) dye degradation. AIP Conference Proceedings, 2020, , . | 0.4 | 1 |
| 46 | ZnO-Cu O heterostructure photocatalyst for efficient dye degradation. Journal of Physics and Chemistry of Solids, 2020, 143, 109463. | 4.0 | 46 |
| 47 | Synthesis of diameter controlled multiwall carbon nanotubes by microwave plasma-CVD on low-temperature and chemically processed Fe nanoparticle catalysts. Applied Surface Science, 2020, 515, 146043. | 6.1 | 31 |
| 48 | Optimization of Si doping in ZnO thin films and fabrication of n-ZnO:Si/p-Si heterojunction solar cells. Journal of Alloys and Compounds, 2020, 824, 153902. | 5.5 | 45 |
| 49 | Evolution of nanocrystalline diamond thin films by high-density low-pressure CH4 plasma in planar inductively coupled plasma CVD. AIP Conference Proceedings, 2020, , . | 0.4 | 1 |
| 50 | Synthesis and characterization of silica encapsulated magnetite nanoparticles. AIP Conference Proceedings, 2020, , . | 0.4 | 1 |
| 51 | Narrow band gap high conducting nc-Si1-xGex:H absorber layers for tandem structure nc-Si solar cells. Journal of Alloys and Compounds, 2019, 806, 1529-1535. | 5.5 | 14 |
| 52 | Minimization of Reflection-Loss from Etched Nano-structures of Silicon Crystal Wafers. Materials Today: Proceedings, 2019, 18, 1324-1328. | 1.8 | 0 |
| 53 | Superior photocatalytic dye degradation under visible light by reduced graphene oxide laminated TiO2-B nanowire composite. Journal of Environmental Chemical Engineering, 2019, 7, 103358. | 6.7 | 37 |
| 54 | Growth of Multiwall Carbon Nanotubes at 300Â°C Using CO2 as a Weak Oxidant to (CH4+H2) Microwave Plasma. Materials Today: Proceedings, 2019, 18, 1411-1415. | 1.8 | 3 |

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| 55 | Electrically active boron doping in the core of Si nanocrystals by planar inductively coupled plasma CVD. Journal of Applied Physics, 2019, 126, 155305. | 2.5 | 14 |
| 56 | Optimization of Nano-structured Tin Doped Indium Oxide Films Grown at Substrate Temperature close to the Melting Point of Tin. Materials Today: Proceedings, 2019, 18, 1304-1309. | 1.8 | 3 |
| 57 | Significant band gap narrowing of reduced monoclinic TiO2-B porous nanowire decorated by ternary hybrid of Cu/Cu2O-nanoparticle for efficient visible light absorption. Materials Today: Proceedings, 2019, 18, 1430-1434. | 1.8 | 2 |
| 58 | Enhanced multiferroic, magnetodielectric and electrical properties of Sm doped Lanthanum ferrite nanoparticles. Journal of Materials Science: Materials in Electronics, 2019, 30, 10694-10710. | 2.2 | 11 |
| 59 | Influence of manganese on multiferroic and electrical properties of lanthanum ferrite nanoparticles. Materials Research Express, 2019, 6, 085032. | 1.6 | 6 |
| 60 | Further optimization of ITO films at the melting point of Sn and configuration of Ohmic contact at the c-Si/ITO interface. Applied Surface Science, 2019, 481, 16-24. | 6.1 | 20 |
| 61 | Optimization in the nanostructural evolution of hydrogenated silicon germanium thin film in RF-PECVD. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 111, 20-28. | 2.7 | 10 |
| 62 | Nanocrystalline Diamond. , 2019, , 123-181. | | 6 |
| 63 | Photocatalytic degradation of Rhodamine-B dye by stable ZnO nanostructures with different calcination temperature induced defects. Applied Surface Science, 2019, 465, 546-556. | 6.1 | 127 |
| 64 | Highly conducting p-type nanocrystalline silicon thin films preparation without additional hydrogen dilution. AIP Conference Proceedings, 2018, , . | 0.4 | 3 |
| 65 | Silicon nanostructure arrays prepared by single step metal assisted chemical etching from single crystal wafer. AIP Conference Proceedings, 2018, , . | 0.4 | 4 |
| 66 | Maintaining significant ultra-nanocrystallinity in electrically conducting boron doped silicon thin layers for solar cells. AIP Conference Proceedings, 2018, , . | 0.4 | 1 |
| 67 | Optimization of growth of nanocrystalline silicon germanium thin films synthesized by RF-PECVD. AIP Conference Proceedings, 2018, , . | 0.4 | 0 |
| 68 | Controlling the opto-electronic properties of nc-SiOx:H films by promotion of ã€˂220ã€‰ orientation in the growth of ultra-nanocrystallites at the grain boundary. Applied Surface Science, 2018, 428, 757-766. | 6.1 | 14 |
| 69 | Nano-diamond and Diamond-like Carbon Thin Films for Anti-Reflecting Coating Application on Silicon Solar Cells. Materials Today: Proceedings, 2018, 5, 23316-23320. | 1.8 | 4 |
| 70 | Microstructural association of diverse chemical constituents in nc-SiOx:H network synthesized by spontaneous low temperature plasma processing. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 103, 99-109. | 2.7 | 16 |
| 71 | Low temperature growth of carbon nanotubes by microwave plasma stimulated by CO2 as weak oxidant and guided by shadow masking. Diamond and Related Materials, 2018, 88, 204-214. | 3.9 | 20 |
| 72 | Melting point of Sn as the optimal growth temperature in realizing the favored transparent conducting properties of In2O3:Sn films. Journal of Alloys and Compounds, 2018, 767, 642-650. | 5.5 | 17 |

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| 73 | Self-doped TiO2 nanowires in TiO2-B single phase, TiO2-B/anatase and TiO2-anatase/rutile heterojunctions demonstrating individual superiority in photocatalytic activity under visible and UV light. Applied Surface Science, 2018, 455, 1106-1115. | 6.1 | 67 |
| 74 | Structural, Magnetic and Optical Properties of Lanthanum Ferrite Nanoparticles with Application Perspective. Advanced Science Letters, 2018, 24, 913-917. | 0.2 | 1 |
| 75 | Fabrication of double barrier structures in single layer c-Siâ€“QDs/a-SiOx films for realization of energy selective contacts for hot carrier solar cells. Journal of Applied Physics, 2017, 121, 044305. | 2.5 | 4 |
| 76 | Nanocrystalline silicon thin films from SiH 4 plasma diluted by H 2 and He in RF-PECVD. Journal of Physics and Chemistry of Solids, 2017, 105, 90-98. | 4.0 | 26 |
| 77 | Further improvements in conducting and transparent properties of ZnO:Ga films with perpetual c -axis orientation: Materials optimization and application in silicon solar cells. Applied Surface Science, 2017, 411, 315-320. | 6.1 | 35 |
| 78 | The growth of ZnO:Ga:Cu as new TCO film of advanced electrical, optical and structural quality. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 91, 1-7. | 2.7 | 13 |
| 79 | Correlation between the physical parameters of the i â€“nc-Si absorber layer grown by 27.12 MHz plasma with the nc-Si solar cell parameters. Applied Surface Science, 2017, 416, 980-987. | 6.1 | 36 |
| 80 | Structural characterization of silicon thin film superlattice grown at low temperature. Superlattices and Microstructures, 2017, 111, 385-395. | 3.1 | 1 |
| 81 | Black silicon prepared by H2 plasma etching of single crystal wafers in PECVD. AIP Conference Proceedings, 2017, , . | 0.4 | 2 |
| 82 | Low temperature growth of carbon nanotubes with aligned multiwalls by microwave plasma-CVD. AIP Conference Proceedings, 2017, , . | 0.4 | 5 |
| 83 | Enhancement of multiferroic properties and unusual magnetic phase transition in Eu doped bismuth ferrite nanoparticles. New Journal of Chemistry, 2017, 41, 10985-10991. | 2.8 | 33 |
| 84 | Development of optimum p-nc-Si window layers for nc-Si solar cells. Physical Chemistry Chemical Physics, 2017, 19, 21357-21363. | 2.8 | 12 |
| 85 | Structural studies of n-type nc-Siâ€“QD thin films for nc-Si solar cells. Journal of Physics and Chemistry of Solids, 2017, 111, 115-122. | 4.0 | 10 |
| 86 | Metastable titanium dioxide B-phase nanowire prepared by hydrothermal method. AIP Conference Proceedings, 2017, , . | 0.4 | 4 |
| 87 | Effect of oxygen on the optical, electrical and structural properties of mixed-phase boron doped nanocrystalline silicon oxide thin films. Applied Surface Science, 2017, 423, 1161-1168. | 6.1 | 15 |
| 88 | Growth of highly aligned vertical Si-Nanorods and random Si-Nanowires by ICP-Plasma chemical etching of c-Si wafers. AIP Conference Proceedings, 2017, , . | 0.4 | 3 |
| 89 | Highly conducting and wide band gap phosphorous doped nc-Siâ€“QD/a-SiC films as n-type window layers for solar cells. AIP Conference Proceedings, 2016, , . | 0.4 | 0 |
| 90 | Opto-electronic properties of P-doped nc-Siâ€“QD/a-SiC:H thin films as foundation layer for all-Si solar cells in superstrate configuration. Journal of Applied Physics, 2016, 120, 025102. | 2.5 | 9 |

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| 91 | Effect of hydrogen in controlling the structural orientation of ZnO:Ga:H as transparent conducting oxide films suitable for applications in stacked layer devices. Physical Chemistry Chemical Physics, 2016, 18, 20450-20458. | 2.8 | 22 |
| 92 | Low temperature grown ZnO:Ga films with predominant c-axis orientation in wurtzite structure demonstrating high conductance, transmittance and photoluminescence. RSC Advances, 2016, 6, 6144-6153. | 3.6 | 53 |
| 93 | Self-assembled nc-Si-QD/a-SiC thin films from planar ICP-CVD plasma without H<sub>2</sub>-dilution: a combination of wide optical gap, high conductivity and preferred ã€˜220ã€‰ crystallographic orientation, uniquely appropriate for nc-Si solar cells. RSC Advances, 2016, 6, 3860-3869. | 3.6 | 13 |
| 94 | Further improvements of nano-diamond structures on unheated substrates by optimization of parameters with secondary plasma in MW-PECVD. Surface and Coatings Technology, 2015, 272, 357-365. | 4.8 | 21 |
| 95 | Self-assembled ultra-nanocrystalline silicon films with preferred ã€˜2 2 0ã€‰ crystallographic orientation for solar cell applications. Applied Surface Science, 2015, 330, 134-141. | 6.1 | 9 |
| 96 | Rapid synthesis of nc-Si/a-SiN<sub>x</sub>:H QD thin films by plasma processing for their cost effective applications in photonic and photovoltaic devices. RSC Advances, 2015, 5, 63572-63579. | 3.6 | 10 |
| 97 | Superior optical response of size-controlled silicon nano-crystals in a-Si:H/nc-Si:H superlattice films for multi-junction solar cells. RSC Advances, 2015, 5, 61118-61126. | 3.6 | 12 |
| 98 | Anti-reflection coatings for silicon solar cells from hydrogenated diamond like carbon. Applied Surface Science, 2015, 345, 204-215. | 6.1 | 38 |
| 99 | Quantum size effects on the optical properties of nc-Si QDs embedded in an a-SiO<sub>x</sub> matrix synthesized by spontaneous plasma processing. Physical Chemistry Chemical Physics, 2015, 17, 5063-5071. | 2.8 | 18 |
| 100 | Preferential ã€˜220ã€‰ crystalline growth in nanocrystalline silicon films from 27.12 MHz SiH<sub>4</sub> plasma for applications in solar cells. RSC Advances, 2015, 5, 54011-54018. | 3.6 | 14 |
| 101 | Investigation of the vertical electrical transport in a-Si:H/nc-Si:H superlattice thin films. Physical Chemistry Chemical Physics, 2015, 17, 17063-17068. | 2.8 | 3 |
| 102 | Self-assembled nc-Si/a-SiNx: H quantum dots thin films: An alternative solid-state light emitting material. Journal of Luminescence, 2015, 158, 11-18. | 3.1 | 8 |
| 103 | Low temperature synthesis of spherical nano-diamond. Journal of Experimental Nanoscience, 2014, 9, 818-824. | 2.4 | 15 |
| 104 | Spectroscopic and microscopic studies of self-assembled nc-Si/a-SiC thin films grown by low pressure high density spontaneous plasma processing. Physical Chemistry Chemical Physics, 2014, 16, 25421-25431. | 2.8 | 15 |
| 105 | Conducting intrinsic nanocrystalline silicon films with high growth rate prepared at 27.12 MHz frequency. , 2014, , . | | 0 |
| 106 | One-step synthesis of silicon nanocrystals in aâ"SiOx matrix at low-temperature by RF magnetron sputtering. , 2014, , . | | 0 |
| 107 | Fabrication of highly transparent diamond-like carbon anti-reflecting coating for Si solar cell application. , 2014, , . | | 3 |
| 108 | Low temperature plasma processing of nc-Si/a-SiN<sub>x</sub>:H QD thin films with high carrier mobility and preferred (220) crystal orientation: a promising material for third generation solar cells. RSC Advances, 2014, 4, 36929-36939. | 3.6 | 14 |

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| 109 | Photoluminescence phenomena prevailing in c-axis oriented intrinsic ZnO thin films prepared by RF magnetron sputtering. RSC Advances, 2014, 4, 35735-35743. | 3.6 | 176 |
| 110 | Spectroscopic studies on nanocrystalline silicon thin films prepared from H2-diluted SiH4-plasma in inductively coupled low pressure RF PECVD. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 61, 95-100. | 2.7 | 12 |
| 111 | Conducting wide band gap nc-Si/a-SiC:H films for window layers in nc-Si solar cells. Journal of Materials Chemistry A, 2013, 1, 14744. | 10.3 | 50 |
| 112 | SiOx nanowires with intrinsic nC-Si quantum dots: the enhancement of the optical absorption and photoluminescence. Journal of Materials Chemistry C, 2013, 1, 6623. | 5.5 | 20 |
| 113 | Realizing a variety of carbon nanostructures at low temperature using MW-PECVD of (CH4+H2) plasma. Applied Surface Science, 2013, 273, 806-815. | 6.1 | 26 |
| 114 | Electrical transport phenomena prevailing in undoped nc-Si/a-SiNx:H thin films prepared by inductively coupled plasma chemical vapor deposition. Journal of Applied Physics, 2013, 114, . | 2.5 | 50 |
| 115 | Transparent and conducting intrinsic ZnO thin films prepared at high growth-rate with c-axis orientation and pyramidal surface texture. Applied Surface Science, 2013, 286, 397-404. | 6.1 | 46 |
| 116 | Tunable photoluminescence from nc-Si/a-SiNx:H quantum dot thin films prepared by ICP-CVD. Physical Chemistry Chemical Physics, 2013, 15, 3881. | 2.8 | 45 |
| 117 | Nanocrystalline silicon thin films prepared by low pressure planar inductively coupled plasma. Applied Surface Science, 2013, 276, 249-257. | 6.1 | 42 |
| 118 | Preferred C-axis oriented photoluminescent ZnO thin films prepared by RF magnetron sputtering. , 2013, , . | | 1 |
| 119 | Wide band gap nanocrystalline silicon carbide thin films prepared by ICP-CVD. , 2013, , . | | 0 |
| 120 | Development of nc-Si/<I>a</I>-SiN<I><SUB>x</SUB></I>:H Thin Films for Photovoltaic and Light-Emitting Applications. Science of Advanced Materials, 2013, 5, 188-198. | 0.7 | 28 |
| 121 | Low temperature plasma synthesis of photoluminescent nanocrystalline silicon-nitride. , 2012, , . | | 0 |
| 122 | Effect of substrate bias on the promotion of nanocrystalline silicon growth from He-diluted SiH<sub>4</sub> plasma at low temperature. Journal of Materials Research, 2012, 27, 1303-1313. | 2.6 | 12 |
| 123 | Structural investigation of nC-Si/SiOx:H thin films from He diluted (SiH4+CO2) plasma at low temperature. Applied Surface Science, 2012, 259, 477-485. | 6.1 | 11 |
| 124 | Size effect on electronic transport in nCâ€“Si/SiO core/shell quantum dots. Materials Research Bulletin, 2012, 47, 3625-3629. | 5.2 | 17 |
| 125 | Effect of RF power on the formation and size evolution of nC-Si quantum dots in an amorphous SiOx matrix. Journal of Materials Chemistry, 2011, 21, 7452. | 6.7 | 14 |
| 126 | Controlling the growth of nanocrystalline silicon by tuning negative substrate bias. Solar Energy Materials and Solar Cells, 2011, 95, 3181-3188. | 6.2 | 45 |

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| 127 | Changes in Optical and Electrical Phenomena Correlated to Structural Configuration in Nanocrystalline Silicon Network. Journal of the Electrochemical Society, 2011, 158, H1138. | 2.9 | 8 |
| 128 | Photoluminescent silicon quantum dots in core/shell configuration: synthesis by low temperature and spontaneous plasma processing. Nanotechnology, 2011, 22, 055601. | 2.6 | 35 |
| 129 | Optical, electrical and structural properties of SiOâ€‰:â€‰H films prepared from He dilution to the SiH<sub>4</sub>plasma. Journal Physics D: Applied Physics, 2009, 42, 215404. | 2.8 | 15 |
| 130 | Studies on the structural properties of SiO:H films prepared from (SiH4+CO2+He) plasma in RF-PECVD. Solar Energy Materials and Solar Cells, 2009, 93, 588-596. | 6.2 | 42 |
| 131 | Evolution of nc-Si Network and the Control of Its Growth by He/H<sub>2</sub> Plasma Assistance in SiH<sub>4</sub> at PECVD. Journal of Nanoscience and Nanotechnology, 2009, 9, 5614-5621. | 0.9 | 5 |
| 132 | Nanocrystalline silicon prepared at high growth rate using helium dilution. Bulletin of Materials Science, 2008, 31, 467-471. | 1.7 | 9 |
| 133 | Hydrogen induced promotion of nanocrystallization from He-diluted SiH<sub>4</sub>plasma. Journal Physics D: Applied Physics, 2008, 41, 085303. | 2.8 | 35 |
| 134 | Effect of deposition temperature on the growth of nanocrystalline silicon network from helium diluted silane plasma. Journal Physics D: Applied Physics, 2008, 41, 155420. | 2.8 | 36 |
| 135 | Nanocrystalline silicon films prepared from silane plasma in RF-PECVD, using helium dilution without hydrogen: structural and optical characterization. Nanotechnology, 2007, 18, 415704. | 2.6 | 65 |
| 136 | Characterization of the Si:H network during transformation from amorphous to micro- and nanocrystalline structures. Journal of Applied Physics, 2006, 100, 103701. | 2.5 | 54 |
| 137 | Structural studies on Si:H network by Raman, micro-photoluminescence, electron microscopy and ultraviolet ellipsometry: effect of Ar dilution to the SiH4-plasma. Thin Solid Films, 2005, 476, 237-245. | 1.8 | 41 |
| 138 | Better control over the onset of microcrystallinity in fast-growing silicon network. Journal of Materials Research, 2004, 19, 2597-2603. | 2.6 | 10 |
| 139 | Rigid amorphous silicon network from hydrogenated and fluorinated precursors in ECR-CVD. Solar Energy Materials and Solar Cells, 2004, 81, 155-168. | 6.2 | 14 |
| 140 | Generally Applicable Self-Masked Dry Etching Technique for Nanotip Array Fabrication. Nano Letters, 2004, 4, 471-475. | 9.1 | 147 |
| 141 | Development of highly conducting p-type Î¼c-Si:H films from minor diborane doping in highly hydrogenated SiH4 plasma. Materials Letters, 2004, 58, 980-985. | 2.6 | 9 |
| 142 | Helium versus hydrogen dilution in the optimization of polymorphous silicon solar cells. Journal of Non-Crystalline Solids, 2004, 338-340, 668-672. | 3.1 | 26 |
| 143 | Evolution of microcrystalline growth pattern by ultraviolet spectroscopic ellipsometry on Si:H films prepared by Hot-Wire CVD. Solid State Communications, 2003, 128, 397-402. | 1.9 | 9 |
| 144 | Micro-photoluminescence and micro-Raman studies near the amorphous-to-microcrystalline transition in Si:H. Solid State Communications, 2003, 127, 453-456. | 1.9 | 9 |

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| 145 | P-doped Î¼c-Si:H films at a very low thickness and high deposition rate: Suitable for application in solar cells. Journal of Materials Research, 2003, 18, 2371-2378. | 2.6 | 4 |
| 146 | Micro-Raman and ultraviolet ellipsometry studies on Î¼c-Si:H films prepared by H2 dilution to the Ar-assisted SiH4 plasma in radio frequency glow discharge. Journal of Applied Physics, 2003, 93, 2528-2535. | 2.5 | 39 |
| 147 | A novel approach towards silicon nanotechnology. Journal Physics D: Applied Physics, 2003, 36, 2335-2346. | 2.8 | 39 |
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