Nam-Hoon Kim

List of Publications by Year in descending order

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96 papers

858 citations

16 h-index 24 g-index

96 all docs 96
docs citations

96 times ranked 932 citing authors

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Temperature effects of pad conditioning process on oxide CMP: Polishing pad, slurry characteristics, and surface reactions. Microelectronic Engineering, 2006, 83, 362-370. | 2.4 | 52 |
| 2 | High-performance near-infrared photodetector based on nano-layered MoSe ₂ . Semiconductor Science and Technology, 2017, 32, 065015. | 2.0 | 46 |
| 3 | Isothermal aging characteristics of Sn–Pb micro solder bumps. Microelectronics Reliability, 2003, 43, 757-763. | 1.7 | 37 |
| 4 | Structural and surface properties of NiCr thin films prepared by DC magnetron sputtering under variation of annealing conditions. Microelectronic Engineering, 2005, 82, 314-320. | 2.4 | 36 |
| 5 | Influences of thickness-uniformity and surface morphology on the electrical and optical properties of sputtered CdTe thin films for large-area Il–VI semiconductor heterostructured solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 171, 73-78. | 3.5 | 36 |
| 6 | Design of experiment (DOE) method considering interaction effect of process parameters for optimization of copper chemical mechanical polishing (CMP) process. Microelectronic Engineering, 2006, 83, 506-512. | 2.4 | 34 |
| 7 | Thickness dependence on the optoelectronic properties of multilayered GaSe based photodetector. Nanotechnology, 2016, 27, 325202. | 2.6 | 34 |
| 8 | Electrical and optical properties of sputter-deposited cadmium sulfide thin films optimized by annealing temperature. Materials Science in Semiconductor Processing, 2012, 15, 125-130. | 4.0 | 33 |
| 9 | Chemical mechanical polishing and electrochemical characteristics of tungsten using mixed oxidizers with hydrogen peroxide and ferric nitrate. Materials Letters, 2006, 60, 1192-1197. | 2.6 | 30 |
| 10 | Effects of phosphoric acid stabilizer on copper and tantalum nitride CMP. Materials Letters, 2003, 57, 4601-4604. | 2.6 | 23 |
| 11 | Chemical mechanical polishing (CMP) mechanisms of thermal SiO2 film after high-temperature pad conditioning. Thin Solid Films, 2006, 504, 166-169. | 1.8 | 21 |
| 12 | CMP characteristics and optical property of ITO thin film by using silica slurry with a variety of process parameters. Microelectronic Engineering, 2006, 83, 2213-2217. | 2.4 | 19 |
| 13 | Gate-tunable optoelectronic properties of a nano-layered GaSe photodetector. Optical Materials Express, 2017, 7, 587. | 3.0 | 18 |
| 14 | Electrical and Thermal Properties of Platinum Thin Films Prepared by DC Magnetron Sputtering for Micro-Heater of Microsensor Applications after CMP Process. Solid State Phenomena, 2007, 124-126, 267-270. | 0.3 | 17 |
| 15 | Microstructure, stress and optical properties of CdTe thin films laser-annealed by using an 808-nm diode laser: Effect of the laser scanning velocity. Journal of the Korean Physical Society, 2013, 63, 229-235. | 0.7 | 17 |
| 16 | Improvement of TEOS-chemical mechanical polishing performance by control of slurry temperature. Microelectronic Engineering, 2006, 83, 286-292. | 2.4 | 16 |
| 17 | Effect of nonionic surfactants on the stability of alumina slurry for Cu CMP. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 118, 293-300. | 3.5 | 15 |
| 18 | Removal characteristics of hillock on SnO2 thin film by chemical mechanical polishing process. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 1133-1136. | 2.1 | 15 |

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| 19 | A pilot investigation on laser annealing for thin-film solar cells: Crystallinity and optical properties of laser-annealed CdTe thin films by using an 808-nm diode laser. Journal of the Korean Physical Society, 2013, 62, 502-507. | 0.7 | 15 |
| 20 | Non-selenization method using sputtering deposition with a CuSe2 target for CIGS thin film. Journal of the Korean Physical Society, 2012, 61, 1177-1180. | 0.7 | 13 |
| 21 | Impurity Phases and Optoelectronic Properties of CuSbSe2 Thin Films Prepared by Cosputtering Process for Absorber Layer in Solar Cells. Coatings, 2020, 10, 1209. | 2.6 | 13 |
| 22 | Chemical mechanical polishing performances by filtering and retreatment of used silica abrasives slurry. Microelectronic Engineering, 2005, 77, 358-364. | 2.4 | 12 |
| 23 | Effects of various oxidizers on chemical mechanical polishing performance of nickel for microelectromechanical system applications. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1297-1301. | 2.1 | 12 |
| 24 | Fabrication of Si-based two-dimensional photonic quasicrystals by using multiple-exposure holographic lithography. Journal of Vacuum Science & Technology B, 2009, 27, 1886. | 1.3 | 12 |
| 25 | Behaviour of electrical and optical properties of indium tin oxide transparent electrode after CMP process. Electronics Letters, 2006, 42, 487. | 1.0 | 11 |
| 26 | Fabrication of SiO2 nano-dots by block copolymer lithography and liquid phase deposition. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 147, 209-212. | 3.5 | 11 |
| 27 | Surface and sensing properties of PE-ALD SnO2 thin film. Electronics Letters, 2005, 41, 475. | 1.0 | 9 |
| 28 | Chemical mechanical planarization characteristics of WO3 thin film for gas sensing. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 737-740. | 2.1 | 9 |
| 29 | Reduction of loading effects with the sufficient vertical profile for deep trench silicon etching by using decoupled plasma sources. Journal of Materials Processing Technology, 2009, 209, 5818-5829. | 6.3 | 9 |
| 30 | Fabrication of Highly Uniform Conductive Polypyrrole Nanowires with DNA Template. Journal of Nanoscience and Nanotechnology, 2010, 10, 3180-3184. | 0.9 | 9 |
| 31 | Characteristics of SnO ₂ :Sb Films as Transparent Conductive Electrodes of Flexible Inverted Organic Solar Cells. Journal of Nanoscience and Nanotechnology, 2016, 16, 4973-4977. | 0.9 | 9 |
| 32 | Hydrophobic Anti-Reflective Coating of Plasma-Enhanced Chemical Vapor Deposited Diamond-Like Carbon Thin Films with Various Thicknesses for Dye-Sensitized Solar Cells. Applied Sciences (Switzerland), 2021, 11, 358. | 2.5 | 9 |
| 33 | Effects of Silica Slurry Temperature on Chemical Mechanical Polishing for Tetraethyl Orthosilicate Film. Japanese Journal of Applied Physics, 2005, 44, L1256-L1258. | 1.5 | 8 |
| 34 | Electrochemical corrosion effects and chemical mechanical polishing characteristics of tungsten film using mixed oxidizers. Microelectronic Engineering, 2006, 83, 428-433. | 2.4 | 8 |
| 35 | Chemical mechanical polishing of BTO thin film for vertical sidewall patterning of high-density memory capacitor. Thin Solid Films, 2006, 504, 261-264. | 1.8 | 8 |
| 36 | Electromigration characteristics in dual-damascene copper interconnects by difference of via structures. Microelectronic Engineering, 2007, 84, 2663-2668. | 2.4 | 8 |

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| 37 | Laser-induced doping of aluminum into a cadmium telluride thin film: Electrical and optical properties. Journal of the Korean Physical Society, 2012, 60, 425-429. | 0.7 | 8 |
| 38 | Effective Ag Doping by He-Ne Laser Exposure to Improve the Electrical and the Optical Properties of CdTe Thin Films for Heterostructured Thin Film Solar Cells. Journal of the Korean Physical Society, 2011, 59, 2286-2290. | 0.7 | 8 |
| 39 | Agglomeration characteristic of particles in alumina slurry by addition of chemicals and milling process for Cu CMP. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 118, 306-309. | 3.5 | 7 |
| 40 | Semi-abrasive free slurry with acid colloidal silica for copper chemical mechanical planarization. Journal of Materials Science: Materials in Electronics, 2005, 16, 629-632. | 2.2 | 7 |
| 41 | Chemical mechanical polishing characteristics in (Bi,La)Ti3O12 damascene process for high-density ferroelectric memories. Thin Solid Films, 2007, 515, 6456-6459. | 1.8 | 7 |
| 42 | Improvement of the surface roughness and sensing properties of cerium dioxide thin film by chemical mechanical polishing. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 794-797. | 2.1 | 7 |
| 43 | Effects of Rapid Thermal Treatment on Characteristics of Magnetron-Sputtered NiO Thin Films for Supercapacitor Applications. Journal of Nanoscience and Nanotechnology, 2018, 18, 6213-6219. | 0.9 | 7 |
| 44 | Universal Surface Hydrophilicity Obtained by Using Low-temperature Plasma H2O gas for Nanosphere Lithography. Journal of the Korean Physical Society, 2011, 58, 1-4. | 0.7 | 7 |
| 45 | Magnetron Sputter-Deposited \hat{l}^2 -Ga2O3 Films on c-Sapphire Substrate: Effect of Rapid Thermal Annealing Temperature on Crystalline Quality. Coatings, 2022, 12, 140. | 2.6 | 7 |
| 46 | H3PO4 addition to slurry for Cu and TaN CMP. Electronics Letters, 2003, 39, 718. | 1.0 | 6 |
| 47 | Effects of conditioning temperature on polishing pad for oxide chemical mechanical polishing process. Microelectronic Engineering, 2005, 82, 680-685. | 2.4 | 6 |
| 48 | Platinum chemical mechanical polishing (CMP) characteristics for high density ferroelectric memory applications. Microelectronic Engineering, 2007, 84, 2702-2706. | 2.4 | 6 |
| 49 | Optoelectronic Characterizations of Two-Dimensional h-BN/MoSe2 Heterostructures Based Photodetector. Science of Advanced Materials, 2018, 10, 627-631. | 0.7 | 6 |
| 50 | Thickness Dependence of Optoelectronic Properties of Molybdenum Diselenide-Based Nanodevices. Journal of Electronic Materials, 2019, 48, 7025-7030. | 2.2 | 5 |
| 51 | Roles of N2 gas in etching of platinum by inductively coupled Ar/Cl2/N2 plasmas. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1377-1380. | 2.1 | 4 |
| 52 | Aging Treatment Characteristics of Shear Strength in Micro Solder Bump. Materials Transactions, 2002, 43, 3234-3238. | 1.2 | 4 |
| 53 | Electrochemical Patterning of Copper Using Microcontact Printing. Journal of the Electrochemical Society, 2004, 151, C455. | 2.9 | 4 |
| 54 | Nanometer-scaled triangular platinum islands fabricated using the bridge phenomenon of polystyrene beads. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 819-823. | 2.1 | 4 |

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| 55 | Heavily-doped ZnO:Al thin films prepared by using magnetron Co-sputtering: Optical and electrical properties. Journal of the Korean Physical Society, 2016, 69, 220-225. | 0.7 | 4 |
| 56 | Yield improvement of 0.13â€,μm Cu/low-k dual-damascene interconnection by organic cleaning process. Journal of Vacuum Science & Technology B, 2007, 25, 1819. | 1.3 | 3 |
| 57 | Performance and characteristics of imprint mould fabricated by liquid-phase deposition. Superlattices and Microstructures, 2008, 44, 520-527. | 3.1 | 3 |
| 58 | Stabilization of sheet resistance for metal lines by formation of etch stop layer (ESL) trench structure. Microelectronic Engineering, 2010, 87, 343-347. | 2.4 | 3 |
| 59 | Low-temperature, rapid thermal annealing of CIS thin films deposited by using a co-sputtering process with in and CuSe2 targets. Journal of the Korean Physical Society, 2015, 66, 1001-1008. | 0.7 | 3 |
| 60 | Rapid laser annealing of Cu(In,Ga)Se2 thin films by using a continuous wave Nd:YAG laser (\hat{l} »0= 532 nm). Journal of the Korean Physical Society, 2017, 70, 809-815. | 0.7 | 3 |
| 61 | Micro-Hall Sensors Based on Two-Dimensional Molybdenum Diselenide. Journal of Nanoscience and Nanotechnology, 2019, 19, 4330-4332. | 0.9 | 3 |
| 62 | Optoelectronic properties of two-dimensional molybdenum diselenide dual-gated MISFET-based photodetector. Optik, 2020, 224, 165427. | 2.9 | 3 |
| 63 | Hydrogenation in 808-nm Diode Laser Annealing of CdTe Thin Films: Structural, Optical, and Electrical Properties. Science of Advanced Materials, 2016, 8, 1813-1818. | 0.7 | 3 |
| 64 | Optimized Digital Proportional Integral Derivative Controller for Heating and Cooling Injection Molding System. Journal of Electrical Engineering and Technology, 2015, 10, 1383-1388. | 2.0 | 3 |
| 65 | Recycling method for used slurry by annealed filtering. Electronics Letters, 2004, 40, 1553. | 1.0 | 2 |
| 66 | Characteristics of gold nanowires and UV spectral changes by interaction between gold nanoparticles and DNA. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2545-2550. | 2.7 | 2 |
| 67 | Laser-Induced Indium-Diffusion into Cadmium Sulfide Thin Film for Solar Cell Applications. Chinese Physics Letters, 2012, 29, 127302. | 3.3 | 2 |
| 68 | AMORPHOUS COPPER DISELENIDE THIN FILMS DOPED WITH GALLIUM AND INDIUM BY LASER-INDUCED DOPING. International Journal of Modern Physics B, 2013, 27, 1350030. | 2.0 | 2 |
| 69 | Co-Sputtered and Rapid-Thermal-Annealed CIAS Thin Films Using CuSe2/In/Al Triple Targets of Varying In/Al Compositions. Journal of Nanoscience and Nanotechnology, 2016, 16, 1583-1586. | 0.9 | 2 |
| 70 | Cu(ln,Ga)Se2 thin films annealed using a continuous wave Nd:YAG laser (\hat{l} »0 = 532 nm): Effects of laser-annealing time. Journal of the Korean Physical Society, 2017, 71, 1038-1047. | 0.7 | 2 |
| 71 | TiC/a-C Nano-Composite Films Fabricated by Using Closed-Field Unbalanced Magnetron Sputtering for Biomedical Applications. Journal of the Korean Physical Society, 2019, 75, 380-384. | 0.7 | 2 |
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| 73 | Se-loss-induced CIS Thin Films in RTA Process after Co-sputtering Using CuSe2and InSe2Targets. Journal of Electrical Engineering and Technology, 2014, 9, 1009-1015. | 2.0 | 2 |
| 74 | Variation of Surface Nanostructures on (100) PbS Single Crystals during Argon Plasma Treatment. Crystals, 2022, 12, 111. | 2.2 | 2 |
| 75 | Defects controlled stress engineering in Al-doped ZnO transparent multilayered thin films. Journal of the Korean Ceramic Society, 0 , , . | 2.3 | 2 |
| 76 | Optimization of nitride films for linear pre-metal dielectric process. Microelectronic Engineering, 2005, 81, 29-34. | 2.4 | 1 |
| 77 | Creation mechanism of metal depression in sputtering process for aluminum interconnects. Microelectronic Engineering, 2007, 84, 2471-2475. | 2.4 | 1 |
| 78 | Polishing damages to electrical properties of BLT thin-film capacitors fabricated by damascene process. Electronics Letters, 2008, 44, 1429. | 1.0 | 1 |
| 79 | Influence of a post–chemical mechanical polishing cleaning process on the ferroelectric properties of a Pb(Zr,Ti)O3 thin film capacitor fabricated by the damascene process. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 720-723. | 2.1 | 1 |
| 80 | Electrical Characteristics and Doping Mechanism of DNA Molecules Doped with Iodine Solutions. Journal of Nanoscience and Nanotechnology, 2010, 10, 3484-3488. | 0.9 | 1 |
| 81 | Enhancement of optical properties for CdTe absorber through improving thickness uniformity by CMP process. Electronics Letters, 2010, 46, 1019. | 1.0 | 1 |
| 82 | Deviations from stoichiometry and molecularity in non-stoichiometric Ag-In-Se thin films: Effects on the optical and the electrical properties. Journal of the Korean Physical Society, 2016, 69, 1817-1823. | 0.7 | 1 |
| 83 | Amorphous Indium Selenide Thin Films Prepared by RF Sputtering: Thickness-Induced Characteristics. Journal of Nanoscience and Nanotechnology, 2016, 16, 5128-5132. | 0.9 | 1 |
| 84 | Dependence of Structural, Compositional, Electrical, and Optical Properties of Sputtering-Deposited CdS Thin Films on Laser-Annealing Power. Science of Advanced Materials, 2018, 10, 232-237. | 0.7 | 1 |
| 85 | Modification of Nanocrystalline Porous Cu2-xSe Films during Argon Plasma Treatment. Applied Sciences (Switzerland), 2021, 11, 612. | 2.5 | 1 |
| 86 | Periodic Nanometer-Scale Holes Fabricated by Using Plasma Ashing Technique and Selective Liquid Phase Deposition. Journal of the Korean Physical Society, 2007, 51, 234. | 0.7 | 1 |
| 87 | Acid colloidal silica slurry for Cu CMP. Electronics Letters, 2004, 40, 26. | 1.0 | 0 |
| 88 | Indium Tin Oxide Film Characteristics after Chemical Mechanical Polishing Process with Control of Pad Conditioning Temperature. Solid State Phenomena, 2007, 124-126, 263-266. | 0.3 | 0 |
| 89 | Polishing damages to electrical properties of BLT thin film capacitors fabricated by damascene process of chemical mechanical polishing. , 2008, , . | | 0 |
| 90 | Non-Stoichiometric Amorphous Indium Selenide Thin Films as a Buffer Layer for CIGS Solar Cells with Various Temperatures in Rapid Thermal Annealing. Journal of Nanoscience and Nanotechnology, 2016, 16, 5070-5073. | 0.9 | 0 |

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| 91 | Characteristics of W Doped Nanocrystalline Carbon Films Prepared by Unbalanced Magnetron Sputtering. Journal of Nanoscience and Nanotechnology, 2016, 16, 4989-4992. | 0.9 | O |
| 92 | Characteristics of InZnSnO Thin Films Deposited by Dual Magnetron Sputtering for Thin Films Transistors. Journal of Nanoscience and Nanotechnology, 2017, 17, 7164-7168. | 0.9 | 0 |
| 93 | Improvement of the Sensitivity for Silica Humidity Sensors with a Multiple-layered Silica Bead Coating. Journal of the Korean Physical Society, 2011, 59, 3325-3328. | 0.7 | O |
| 94 | Tribological and Electrical Properties of Chromium Doped Diamond-Like Carbon Films Deposited by Unbalanced Magnetron Sputtering. Science of Advanced Materials, 2018, 10, 429-432. | 0.7 | 0 |
| 95 | Electrical Characteristics of Metal-Insulator-Semiconductor Structure Using a-C:H Films Fabricated by Dual Magnetron Sputtering. Science of Advanced Materials, 2018, 10, 433-437. | 0.7 | O |
| 96 | Electronic Structure and Thermoelectric Properties of Mg ₂ Sn Films Fabricated by Using Co-Sputtering Process With Stoichiometric Modification. IEEE Access, 2022, 10, 380-390. | 4.2 | 0 |