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Reversible conductivity changes in
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| # | Paper | IF | Citations |
|------|---|-----|-----------|
| 2363 | Transport and recombination in hydrogenated amorphous silicon. 1984 , 133-161 | | 3 |
| 2362 | A Gas Counter with Rare Gas Only. 1970 , 9, 1010-1011 | | |
| 2361 | Optical and photoconductive properties of discharge-produced amorphous silicon. <i>Journal of Applied Physics</i> , 1977 , 48, 5227-5236 | 2.5 | 252 |
| 2360 | Magnetic Field Dependence of the Photoconductivity in Amorphous Silicon. 1978 , 88, 531-535 | | 25 |
| 2359 | Drift Mobility and Photoconductivity in Amorphous Silicon. 1978 , 89, 495-502 | | 78 |
| 2358 | A new amorphous silicon-based alloy for electronic applications. 1978 , 276, 482-484 | | 185 |
| 2357 | Recombination enhanced defect reactions. 1978 , 21, 1391-1401 | | 337 |
| 2356 | Silane purification via laser-induced chemistry. <i>Applied Physics Letters</i> , 1978 , 32, 46-49 | 3.4 | 68 |
| 2355 | Effect of adsorbed gases on the conductance of amorphous films of semiconducting silicon-hydrogen alloys. <i>Applied Physics Letters</i> , 1978 , 33, 353-356 | 3.4 | 109 |
| 2354 | Recent progress in thin-film solar cells. 1978 , 27, 365-385 | | 11 |
| 2353 | Diodes Schottky et MIS tunnel sur silicium amorphe hydrogéné de qualité photovoltaïque préparé par pulvérisation cathodique Caractérisation électrique par mesures capacitives. 1979 , 14, 201-208 | | 24 |
| 2352 | Amorphous silicon solar cells. 1979 , 287-329 | | 37 |
| 2351 | Photo-induced changes in glow-discharge-deposited amorphous silicon: The Staebler-Wronski effect. 1979 , 39, 349-356 | | 35 |
| 2350 | Electrical and optical properties of amorphous Si:F:H alloys. 1979 , 40, 259-277 | | 206 |
| 2349 | Hydrogen content, electrical properties and stability of glow discharge amorphous silicon. 1979 , 2, 93-106 | | 49 |
| 2348 | Role of gap states in discharge produced a-SiH _x in determining carrier transport and recombination. 1979 , 1, 287-297 | | 13 |
| 2347 | The shape of disorder. 1979 , 32, 17-28 | | 53 |

| | | | |
|------|--|-----|-----|
| 2346 | Thermally Stimulated Currents in Amorphous Silicon. 1980 , 98, K29-K32 | | 18 |
| 2345 | Determination of the density of gap states: field effect and surface adsorption. 1980 , 2, 289-300 | | 34 |
| 2344 | Observation of electron and hole traps in hydrogenated amorphous silicon by voltage- and laser-excited deep level transient spectroscopy. 1980 , 2, 331-347 | | 16 |
| 2343 | Exponential absorption edge in hydrogenated α -Si films. 1980 , 36, 537-540 | | 63 |
| 2342 | Photogeneration, optical absorption and transport in hydrogenated sputtered amorphous silicon. 1980 , 35, 745-751 | | 17 |
| 2341 | The effect of continuous illumination on photoconductivity in undoped amorphous silicon. 1980 , 33, 179-182 | | 1 |
| 2340 | Characterized of glow-discharge deposited a-Si:H. 1980 , 3, 447-501 | | 309 |
| 2339 | Amorphous semiconducting Si:H. 1980 , 2, 295-315 | | 1 |
| 2338 | Amorphous hydrogenated silicon films prepared from a glowdischarge. 1980 , 2, 317-324 | | 5 |
| 2337 | Hydrogen in amorphous semiconductors. 1980 , 9, 211-283 | | 64 |
| 2336 | Light-induced effects in Schottky diodes on hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1980 , 37, 208-211 | 3-4 | 41 |
| 2335 | Field-dependent quantum efficiency in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1980 , 36, 607-608 | 3-4 | 25 |
| 2334 | Light-induced radiative recombination centers in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1980 , 37, 705-706 | 3-4 | 172 |
| 2333 | Electronic structure of amorphous semiconductors. 1980 , 42, 315-333 | | 16 |
| 2332 | Conductivity and temperature dependence of the optical gap in hydrogenated amorphous silicon. 1980 , 37, 407-410 | | 11 |
| 2331 | Properties of a-Si : H : F deposited in SiF ₄ /SiH ₄ /Ar Gas mixtures by a glow-discharge technique. 1980 , 41, 151-159 | | 13 |
| 2330 | Electroabsorption studies on amorphous silicon. 1980 , 41, 1-12 | | 19 |
| 2329 | Spin physics of recombination centers in amorphous silicon. 1980 , 35-36, 625-631 | | 12 |

| | | | |
|------|---|-----|-----|
| 2328 | Influence of magnetic field on the charge transport in amorphous silicon photovoltaic diodes. 1980 , 35-36, 761-766 | | 2 |
| 2327 | Light-induced aging effects in Schottky diodes on sputtered hydrogenated amorphous silicon (a-SiH) : interpretation of the photovoltaic stability. 1980 , 35-36, 767-772 | | 19 |
| 2326 | Reversible photostructural change: Mechanisms, properties and applications. 1980 , 35-36, 1023-1034 | | 208 |
| 2325 | On the role of hydrogen in a-Si. 1980 , 37, 15-22 | | 14 |
| 2324 | Electronic states of fluorinated amorphous silicon. 1980 , 35-36, 61-66 | | 17 |
| 2323 | Determination of the density of states of a-Si:H using the field effect. 1980 , 35-36, 599-604 | | 51 |
| 2322 | Optically induced conductivity changes in discharge-produced hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1980 , 51, 3262-3268 | 2.5 | 602 |
| 2321 | Conductivity changes in dehydrogenated and rehydrogenated discharge-produced a-Si:H. <i>Applied Physics Letters</i> , 1980 , 37, 609-612 | 3.4 | 16 |
| 2320 | Derivation of the low-energy optical-absorption spectra of a-Si: H from photoconductivity. 1980 , 22, 1918-1925 | | 111 |
| 2319 | Light-induced dangling bonds in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1981 , 38, 456-458 | 3.4 | 433 |
| 2318 | On light-induced effect in amorphous hydrogenated silicon. <i>Journal of Applied Physics</i> , 1981 , 52, 859-860 | 2.5 | 125 |
| 2317 | Stability of n-i-p amorphous silicon solar cells. <i>Applied Physics Letters</i> , 1981 , 39, 733-735 | 3.4 | 174 |
| 2316 | Laser-induced phase transition in amorphous GeSe ₂ films. 1981 , 44, 435-452 | | 9 |
| 2315 | Transport properties of a-Si: H alloys prepared by r.f. sputtering I. 1981 , 44, 187-213 | | 54 |
| 2314 | Oxidation and interface states in a-Si: H. 1981 , 43, 1091-1098 | | 35 |
| 2313 | Investigation of photo-induced effects in r.f.- sputtered a-Si. 1981 , 76, 195-200 | | 3 |
| 2312 | Properties of amorphous hydrogenated silicon, with special emphasis on preparation by sputtering. 1981 , 5, 229-316 | | 171 |
| 2311 | Dehybridisation of dangling bond sites and light-induced metastable states in glow-discharge amorphous silicon. 1981 , 39, 979-981 | | 10 |

| | | | |
|------|--|-----|-----|
| 2310 | Characterization of a-Si:H thin films prepared by dc glow discharge of silane. 1981 , 3, 347-357 | | 5 |
| 2309 | Effect of electron irradiation on dark and photoconductivity of amorphous hydrogenated silicon. 1981 , 24, 7443-7446 | | 7 |
| 2308 | Possible configurational model for hydrogen in amorphous Si:H. An exodiffusion study. 1981 , 23, 6648-6667 | 105 | |
| 2307 | Photoconductivity and negatively correlated defects. 1981 , 24, 5485-5496 | | 11 |
| 2306 | Diffusion length of holes in a-Si:H by the surface photovoltage method. <i>Applied Physics Letters</i> , 1981 , 38, 998-999 | 3-4 | 68 |
| 2305 | Deep electron traps in hydrogenated amorphous silicon. 1981 , 24, 7457-7459 | | 83 |
| 2304 | Photoconductivity, trapping, and recombination in discharge-produced, hydrogenated amorphous silicon. 1981 , 23, 794-804 | | 136 |
| 2303 | Photoluminescence studies of band-bending in hydrogenated amorphous silicon thin films. 1981 , 14, 1363-1371 | | 6 |
| 2302 | Radiation-induced paramagnetism in a-Si:H. 1982 , 25, 4362-4376 | | 49 |
| 2301 | Doping and the Fermi Energy in Amorphous Silicon. 1982 , 49, 1187-1190 | | 455 |
| 2300 | Electronic and optical properties of amorphous Si:H films deposited by chemical vapor deposition. <i>Applied Physics Letters</i> , 1982 , 41, 1146-1148 | 3-4 | 25 |
| 2299 | Reversible photoinduced changes in the low-temperature photoconductivity of hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1982 , 41, 986-988 | 3-4 | 24 |
| 2298 | Photoelectronic effects in amorphous silicon based alloys. <i>Applied Physics Letters</i> , 1982 , 41, 272-274 | 3-4 | 17 |
| 2297 | Observation of a Reversible Field-Induced Doping Effect in Hydrogenated Amorphous Silicon. 1982 , 48, 421-424 | | 79 |
| 2296 | Observation of photoinduced changes in the bulk density of gap states in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1982 , 40, 474-476 | 3-4 | 73 |
| 2295 | Low defect density amorphous hydrogenated silicon prepared by homogeneous chemical vapor deposition. <i>Applied Physics Letters</i> , 1982 , 40, 973-975 | 3-4 | 64 |
| 2294 | Annealing and light induced changes in the field effect conductance of amorphous silicon. <i>Journal of Applied Physics</i> , 1982 , 53, 5068-5078 | 2.5 | 41 |
| 2293 | Effect of Adsorbates on the Trapping Properties in Hydrogenated Amorphous Silicon Films. 1982 , 21, L664-L666 | | 7 |

| | | |
|------|---|---------|
| 2292 | Photo-Annealing of Fatigue in Photoluminescence of Hydrogenated Amorphous Silicon. 1982 , 21, L497-L499 | 11 |
| 2291 | Spin-dependent photoconductivity in undoped a-Si: H. 1982 , 46, 273-278 | 44 |
| 2290 | Thickness dependence of electrical and optical properties and E.S.R. in undoped a-Si: H. 1982 , 46, 239-251 | 50 |
| 2289 | Theory of photo-capacitance in amorphous silicon MIS structures. 1982 , 46, 151-161 | 5 |
| 2288 | Determination of the hydrogen diffusion coefficient in hydrogenated amorphous silicon from hydrogen effusion experiments. <i>Journal of Applied Physics</i> , 1982 , 53, 8745-8750 | 2.5 191 |
| 2287 | Stability of Amorphous Silicon Solar Cells. 1982 , R-31, 281-284 | 3 |
| 2286 | Adsorbate effects on the electrical conductance of a-Si: H. 1982 , 45, 435-462 | 135 |
| 2285 | Effect of annealing and light exposure on the field-effect density of states in glow-discharge a-Si: H. 1982 , 45, 407-434 | 46 |
| 2284 | IR spectra of a-Si:H implanted by Cl and As ions. 1982 , 32, 827-830 | 3 |
| 2283 | Effects of prolonged illumination on the properties of hydrogenated amorphous silicon. 1982 , 8, 129-140 | 45 |
| 2282 | Photo-induced effects in hydrogenated amorphous silicon P-I-N diodes. 1982 , 25, 1059-1062 | 9 |
| 2281 | Heterogeneities and surface effects in glow discharge deposited hydrogenated amorphous silicon films. 1982 , 90, 119-129 | 29 |
| 2280 | Bulk and interface Gap states in a-Si:H: A comparative study of field effect and capacitance measurements on codeposited samples. 1982 , 7, 263-279 | 5 |
| 2279 | Recent advances in amorphous silicon solar cells. 1982 , 8, 101-121 | 34 |
| 2278 | Light-induced metastable effects in hydrogenated amorphous silicon. 1982 , 8, 141-151 | 29 |
| 2277 | Effect of preparation condition on conductivity activation energy and downward conductivity kink of undoped hydrogenated amorphous silicon. 1982 , 44, 1123-1126 | 2 |
| 2276 | Optically Induced Potential Fluctuations in a-Si:H Films. 1982 , 111, 171-176 | 38 |
| 2275 | Is amorphous silicon played out?. 1982 , 295, 458-458 | |

| | | |
|------|--|--------|
| 2274 | Laser-enhanced crystallization of Ge and Si. 1983 , 65, 231-234 | 4 |
| 2273 | On the role of surface phenomena in the Staebler-Wronski effect. 1983 , 76, 337-343 | 1 |
| 2272 | Carrier dynamics in optically illuminated a-Si:H. 1983 , 117-118, 894-896 | 1 |
| 2271 | The contribution of the staebler-wronski effect to gap-state absorption in hydrogenated amorphous silicon. 1983 , 117-118, 897-898 | 10 |
| 2270 | Absence of Staebler-Wronski instability in amorphous silicon films hydrogenated in a theta-pinch plasma. 1983 , 105, L79-L81 | 2 |
| 2269 | Amorphous silicon/Langmuir-Blodgett film field effect transistor. 1983 , 99, 297-304 | 26 |
| 2268 | Photoconductivity and dark conductivity of hydrogenated amorphous silicon. 1983 , 47, 573-576 | 49 |
| 2267 | On the intensity dependence of the photoconductivity in a-Si:H. 1983 , 47, 107-110 | 12 |
| 2266 | Hydrogenated amorphous silicon schottky solar cells: The effects of contamination by dopants in the undoped layer. 1983 , 10, 189-198 | 3 |
| 2265 | Stability of p-i-n hydrogenated amorphous silicon solar cells to light exposure. 1983 , 9, 3-12 | 32 |
| 2264 | Light-induced effects in indium tin oxide/n-i-p hydrogenated amorphous silicon solar cells. 1983 , 9, 13-17 | 3 |
| 2263 | Light-induced effects in amorphous silicon material and devices. 1983 , 9, 19-23 | 26 |
| 2262 | Analysis of photo-induced changes in the performance of amorphous silicon solar cells. 1983 , 9, 53-61 | 14 |
| 2261 | Properties of the defect causing solar cell degradation. 1983 , 9, 63-74 | 13 |
| 2260 | The effect of light soaking on the low temperature photoconductivity of hydrogenated amorphous silicon. 1983 , 9, 85-93 | 33 |
| 2259 | The interpretation of photoconductivity measurements in hydrogenated amorphous silicon. 1983 , 9, 95-111 | 5 |
| 2258 | Optical instabilities and localized electronic states in hydrogenated amorphous silicon. 1983 , 9, 113-118 | 7 |
| 2257 | Mobility-lifetime product and interface property in amorphous silicon solar cells. <i>Journal of Applied Physics</i> , 1983 , 54, 3236-3243 | 2.5 56 |

| | | | |
|------|--|-----|-----|
| 2256 | On the mechanism of light-induced effects in hydrogenated amorphous silicon alloys. <i>Applied Physics Letters</i> , 1983 , 42, 588-589 | 3-4 | 51 |
| 2255 | Electronic structure of amorphous semiconductors. 1983 , 32, 361-452 | | 143 |
| 2254 | Properties of a-Si:H prepared by the photochemical decomposition of Si ₂ H ₆ . 1983 , 59-60, 707-710 | | 21 |
| 2253 | Influence of excess carriers on the Staebler and Wronski effect of a-Si solar cells. 1983 , 59-60, 1139-1142 | | 28 |
| 2252 | Stability and new structure in a-Si:H photoconductive sensors. 1983 , 59-60, 1199-1202 | | 5 |
| 2251 | Summary and closing remarks. 1983 , 59-60, 1289-1300 | | 5 |
| 2250 | Study of light-induced creation of defects in a-Si:H by means of single and dual-beam photoconductivity. 1983 , 59-60, 397-400 | | 134 |
| 2249 | The effects of compensation of light-induced metastable defects in a-Si:H. 1983 , 59-60, 409-412 | | 12 |
| 2248 | Light-induced optical absorption changes in sputtered hydrogenated amorphous silicon. 1983 , 59-60, 417-420 | | 1 |
| 2247 | Effects of light irradiation and adsorption on thermally stimulated currents in hydrogenated amorphous silicon. 1983 , 59-60, 425-428 | | 14 |
| 2246 | Temperature dependent light induced changes and annealing of the changes in hydrogen amorphous silicon. 1983 , 59-60, 429-432 | | 24 |
| 2245 | Lifetime and Diffusion Coefficient of Carriers in X-Ray Irradiated a-Si:H. 1983 , 22, 886-886 | | 4 |
| 2244 | Defect States and Electronic Properties of Post-Hydrogenated CVD Amorphous Silicon. 1983 , 22, 1766-1770 | | 8 |
| 2243 | Properties of Passivating Silicon Oxide Films due to HF/H ₂ O ₂ Gas Reaction. 1983 , 22, 1256-1262 | | |
| 2242 | On the application of the Meyer-Neldel rule to a-Si:H. 1983 , 16, 6605-6613 | | 45 |
| 2241 | Transient photoconductivity studies of the light soaked state of hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1983 , 42, 507-509 | 3-4 | 52 |
| 2240 | Study of optically induced degradation of conductivity in hydrogenated amorphous silicon by transient grating method. <i>Applied Physics Letters</i> , 1983 , 42, 807-809 | 3-4 | 19 |
| 2239 | Temperature dependent light induced conductivity changes in hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1983 , 54, 3943-3950 | 2-5 | 20 |

| | | | |
|------|--|-----|----|
| 2238 | Picosecond carrier dynamics in optically illuminated glow discharge hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1983 , 42, 79-81 | 3-4 | 34 |
| 2237 | Photoconductivity of evaporated amorphous silicon films post-hydrogenated in a theta-pinch plasma. 1983 , 27, 3562-3570 | | 7 |
| 2236 | Reversible photoinduced modification of electron-capture cross section at localized states in a-Si:H. <i>Applied Physics Letters</i> , 1983 , 42, 895-897 | 3-4 | 22 |
| 2235 | Dopant states in a-Si: H. II. Effects of H and F. 1983 , 28, 4658-4665 | | 19 |
| 2234 | Carrier dynamics at surface and interface in hydrogenated amorphous silicon observed by the transient grating method. <i>Applied Physics Letters</i> , 1983 , 43, 968-970 | 3-4 | 36 |
| 2233 | Capacitance temperature analysis of midgap states in hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1983 , 54, 4001-4007 | 2.5 | 22 |
| 2232 | OTHER PHOTOVOLTAIC CELLS. 1983 , 464-504 | | 1 |
| 2231 | Chapter 2 Solar Cells. 1984 , 21, 7-37 | | 6 |
| 2230 | High Rate Preparation of a-Si:H by Reactive Evaporation Method. 1984 , 23, 273-276 | | 10 |
| 2229 | Role of carbon in hydrogenated amorphous silicon solar cell degradation. <i>Applied Physics Letters</i> , 1984 , 44, 200-201 | 3-4 | 40 |
| 2228 | The dynamics of photoexcited carriers in microcrystalline silicon. <i>Journal of Applied Physics</i> , 1984 , 56, 1658-1662 | 2.5 | 31 |
| 2227 | Preparation and properties of hydrogenated amorphous silicon films by glow discharge decomposition of silane in cascade reactors. <i>Applied Physics Letters</i> , 1984 , 44, 991-993 | 3-4 | 6 |
| 2226 | Effects of annealing on plasma-deposited a-Si:H films grown under optimal conditions. 1984 , 30, 3320-3332 | | 22 |
| 2225 | Steady-state photoconductivity and recombination process in sputtered hydrogenated amorphous silicon. 1984 , 30, 2016-2025 | | 39 |
| 2224 | Photovoltage profiling of hydrogenated amorphous Si solar cells. <i>Journal of Applied Physics</i> , 1984 , 56, 522-530 | 2.5 | 14 |
| 2223 | dc magnetron production of amorphous silicon solar cells. <i>Journal of Applied Physics</i> , 1984 , 56, 2356-2361 | 1.5 | 7 |
| 2222 | Failure of reciprocity in light-induced changes in hydrogenated amorphous silicon alloys. <i>Applied Physics Letters</i> , 1984 , 45, 569-570 | 3-4 | 18 |
| 2221 | Energy distribution of light-induced gap states in hydrogenated amorphous-silicon alloys. 1984 , 29, 5995-5998 | 20 | |

| | | |
|------|---|---------|
| 2220 | Degradation and regeneration of amorphous silicon solar cells. <i>Journal of Applied Physics</i> , 1984 , 55, 1168-1173 | 4 |
| 2219 | Kinetics of the Staebler-Wronski effect in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1984 , 45, 1075-1077 | 3.4 102 |
| 2218 | Annealing behavior of light-induced defects in hydrogenated amorphous silicon alloys. <i>Applied Physics Letters</i> , 1984 , 45, 50-51 | 3.4 20 |
| 2217 | Substitutional doping of photochemically-deposited amorphous hydrogenated silicon. <i>Journal of Applied Physics</i> , 1984 , 56, 2803-2805 | 2.5 10 |
| 2216 | Properties of amorphous semiconducting a-Si:H multilayer films and of a-SiNx:H alloys. 1984 , 30, 5791-5799 | 100 |
| 2215 | Photoconductivity measurements in a-Si:H by frequency-resolved spectroscopy. 1984 , 17, 6793-6799 | 21 |
| 2214 | Chapter 3 Optical Properties of Defect States in a-Si: H. 1984 , 83-112 | 57 |
| 2213 | Chapter 8 Doping Effects in a-Si: H. 1984 , 257-307 | 25 |
| 2212 | Chapter 7 Homogeneous Chemical Vapor Deposition. 1984 , 21, 123-149 | 8 |
| 2211 | DC magnetron glow discharge amorphous silicon. 1984 , 11, 45-56 | 8 |
| 2210 | Adsorbate and light-induced effects on the conductivity in GD a-Si _{1-x} C _x : H. 1984 , 11, 281-288 | 7 |
| 2209 | The meyer-neldel rule in semiconductors. 1984 , 55, 320-326 | 52 |
| 2208 | On the annealing behaviour of the Staebler-Wronski effect in a-Si:H. 1984 , 35, 9-12 | 14 |
| 2207 | Properties of hydrogenated amorphous silicon prepared by chemical vapor deposition. <i>Journal of Applied Physics</i> , 1984 , 55, 4309-4317 | 2.5 32 |
| 2206 | Clean a-Si:H prepared in a UHV system. 1984 , 66, 45-50 | 20 |
| 2205 | Effects of light soaking at different temperatures on the properties of hydrogenated amorphous silicon alloys. 1984 , 66, 65-70 | 8 |
| 2204 | Chapter 2 Density of States from Junction Measurements in Hydrogenated Amorphous Silicon. 1984 , 21, 9-98 | 22 |
| 2203 | Electronic and optical properties of glow-discharge amorphous silicon-carbon alloys. 1984 , 49, 489-501 | 69 |

| | | |
|------|---|----|
| 2202 | . 1984 , 17, L349-L354 | 23 |
| 2201 | Chapter 4 The Vibrational Spectra of a-Si: H. 1984 , 113-140 | 10 |
| 2200 | Chapter 11 Irradiation-Induced Metastable Effects. 1984 , 359-384 | 1 |
| 2199 | Chapter 10 Optical Recording. 1984 , 21, 173-207 | 1 |
| 2198 | Thermally stimulated currents in a-Si: H. 1984 , 49, L69-L74 | 10 |
| 2197 | Light-induced changes, adsorbate effects and surface photovoltage in a-Si : H. 1984 , 49, L53-L56 | 6 |
| 2196 | Chapter 9 Electronic Properties of Surfaces in a-Si: H. 1984 , 309-345 | 6 |
| 2195 | Chapter 10 The Staebler-Wronski Effect. 1984 , 21, 347-374 | 11 |
| 2194 | Study of light-induced metastable defects by means of temperature-modulated space-charge-limited currents. 1985 , 52, L25-L30 | 25 |
| 2193 | Microscopic model of the Staebler-Wronski effect in intrinsic amorphous hydrogenated silicon. 1985 , 51, L27-L31 | 23 |
| 2192 | Thin Film Silicon Power Modules: Challenges and Opportunities for Materials Science. 1985 , 49, 265 | |
| 2191 | Reversible, Light Induced Changes in a-Si:H Films and Solar Cells. 1985 , 49, 295 | |
| 2190 | Light-Induced Metastable Defects in a-Si:H: Towards an Understanding. 1985 , 49, 301 | 5 |
| 2189 | A Carrier Lifetime Model for the Optical Degradation of Amorphous Silicon Solar Cells. 1985 , 49, 331 | 5 |
| 2188 | Defects in Tetrahedrally Coordinated Amorphous Semiconductors. 1985 , 49, 61 | |
| 2187 | Photoluminescence and Photoconductivity Studies on a-Si:H. 1985 , 53, 465 | |
| 2186 | Transient photocurrent wave form deformation in amorphous silicon by successive light pulse irradiations. 1985 , 90, K101-K102 | 1 |
| 2185 | a.c. Conduction originated from the atomic two-levels systems in hydrogenated amorphous silicon. 1985 , 55, 245-248 | 11 |

| | | | |
|------|--|-----|-----|
| 2184 | Influence of argon partial pressure on the electrical and optical properties of sputtered hydrogenated amorphous silicon. 1985 , 128, 191-203 | | 7 |
| 2183 | Properties and application of hydrogenated amorphous silicon films. 1985 , 126, 1-10 | | 5 |
| 2182 | Photo-Induced Metastable Effects in Hydrogenated Amorphous Silicon (a-Si:H). 1985 , 497, 187-197 | | 11 |
| 2181 | Thermostimulated conductivity in amorphous semiconductors. 1985 , 52, 299-311 | | 37 |
| 2180 | The Role of Hydrogen in the Staebler-Wronski Effect of a-Si:H. 1985 , 24, L838-L840 | | 55 |
| 2179 | Two Components of Light-Induced Photoconductivity Decays in a-Si:H. 1985 , 24, 979-983 | | 1 |
| 2178 | Preparation of High Purity a-Si:H Films and Their Light Soaking Effects. 1985 , 24, L744-L746 | | 5 |
| 2177 | The exponential absorption edge and the low absorption range shoulder of a-Si:H. 1985 , 2, 137-140 | | |
| 2176 | Study of surface photovoltage in hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1985 , 58, 3798-3808 | 2.5 | 6 |
| 2175 | Analysis of thermally stimulated currents in amorphous silicon. 1985 , 32, 4052-4059 | | 5 |
| 2174 | Carrier lifetime model for the optical degradation of amorphous silicon solar cells. <i>Applied Physics Letters</i> , 1985 , 46, 1078-1080 | 3-4 | 51 |
| 2173 | A study of hydrogenated amorphous silicon deposited by hot-wall glow discharge. <i>Journal of Applied Physics</i> , 1985 , 58, 3494-3498 | 2.5 | 16 |
| 2172 | Intrinsic dangling-bond density in hydrogenated amorphous silicon. 1985 , 32, 5510-5513 | | 116 |
| 2171 | Effects of dopants and defects on light-induced metastable states in a-Si:H. 1985 , 31, 2263-2269 | | 79 |
| 2170 | Recent results on hydrogen passivation of silicon sheet solar cells. <i>Journal of Applied Physics</i> , 1985 , 57, 5523-5524 | 2.5 | 8 |
| 2169 | Surface quenching of optically generated carriers in thin-film hydrogenated amorphous silicon: Picosecond transient-grating experiments. 1985 , 32, 8035-8040 | | 19 |
| 2168 | Annealing behavior of light-induced defects in boron-doped hydrogenated amorphous silicon alloys. <i>Journal of Applied Physics</i> , 1985 , 57, 5539-5541 | 2.5 | 15 |
| 2167 | Hydrogenated amorphous silicon position sensitive detector. <i>Journal of Applied Physics</i> , 1985 , 57, 4778-4782 | | 42 |

| | | | |
|------|--|-----|------|
| 2166 | Role of mechanical stress in the light-induced degradation of hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1985 , 47, 21-23 | 3.4 | 92 |
| 2165 | Annealing effects on electron drift mobility in hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1985 , 57, 4808-4810 | 2.5 | 1 |
| 2164 | Influence of stress on light-induced effects in amorphous silicon alloys. <i>Applied Physics Letters</i> , 1985 , 47, 947-949 | 3.4 | 22 |
| 2163 | Light-induced defects in hydrogenated amorphous silicon observed by picosecond photoinduced absorption. <i>Applied Physics Letters</i> , 1985 , 47, 589-591 | 3.4 | 23 |
| 2162 | Analysis of light-induced degradation in amorphous silicon alloy p-i-n solar cells. <i>Journal of Applied Physics</i> , 1985 , 58, 1656-1661 | 2.5 | 21 |
| 2161 | Persistent photoconductivity in doping-modulated multilayers and compensated thin films of hydrogenated amorphous silicon. 1985 , 32, 8469-8472 | | 57 |
| 2160 | Kinetics of the metastable optically induced ESR in a-Si:H. 1985 , 31, 100-105 | | 50 |
| 2159 | Analysis of light and current induced effects in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1985 , 47, 860-862 | 3.4 | 18 |
| 2158 | Structural, electrical, and optical properties of a-Si _{1-x} Ge _x :H and an inferred electronic band structure. 1985 , 31, 2198-2212 | | 241 |
| 2157 | Recent Results on Hydrogenated Amorphous Silicon. 1985 , 15, 79-102 | | 4 |
| 2156 | Light-induced metastable defects in hydrogenated amorphous silicon: A systematic study. 1985 , 32, 23-47 | | 1068 |
| 2155 | On the preparation dependence of the Staebler-Wronski effect in a-Si:H. 1985 , 69, 207-211 | | 6 |
| 2154 | Structural constraints in non-crystalline semiconductors. 1985 , 76, 157-171 | | 2 |
| 2153 | Theoretical studies of aromatic silicon-based structures and their application to photostructural changes in hydrogenated amorphous silicon. 1985 , 75, 297-303 | | 1 |
| 2152 | Theory of defects in amorphous semiconductors. 1985 , 77-78, 37-46 | | 13 |
| 2151 | Planar ring structures in hydrogenated amorphous silicon: A new model for the Staebler-Wronski effect. 1985 , 77-78, 107-110 | | 1 |
| 2150 | Light-induced metastable defects in hydrogenated amorphous silicon. 1985 , 77-78, 363-372 | | 20 |
| 2149 | Correlation between staebler wronski effect and medium range order in a-Si:H by sans. 1985 , 77-78, 373-376 | | 11 |

| | | |
|------|---|--------|
| 2148 | Temperature modulated-SCLC, used for the study of the light induced, metastable density of states of a-Si:H. 1985 , 77-78, 385-388 | 4 |
| 2147 | Light-induced effects in hydrogenated amorphous silicon at low temperatures. 1985 , 77-78, 393-396 | 3 |
| 2146 | Temperature dependent creation of light-induced defects in a-Si:H Schottky barrier diodes. 1985 , 77-78, 397-400 | 8 |
| 2145 | Effects of deposition temperature and hydrogen evolution on light-induced defects in a-Si:H. 1985 , 77-78, 401-404 | 14 |
| 2144 | Kinetic behaviors of the time-dependence of photoconductivity in a-Si:H. 1985 , 77-78, 405-408 | |
| 2143 | Degradation of photoresponse time of a-Si:H and correlation with NI measured by low frequency C-V method. 1985 , 77-78, 417-420 | 2 |
| 2142 | Optically induced frequency dependent loss in A?GE and A?SI. 1985 , 77-78, 471-474 | 2 |
| 2141 | The effect of electron radiation damage on transport properties of a-Si:H. 1985 , 77-78, 487-490 | |
| 2140 | Very long-lived traps in bulk hydrogenated amorphous silicon. 1985 , 77-78, 679-682 | 1 |
| 2139 | Activated reactive evaporation of hydrogenated amorphous silicon. 1985 , 77-78, 817-820 | 12 |
| 2138 | Amorphous silicon doping superlattices. 1985 , 77-78, 1097-1100 | 28 |
| 2137 | Photocurrent spectroscopy in a-Si:H diodes. 1985 , 77-78, 1425-1428 | |
| 2136 | Light-induced effects in amorphous silicon alloys - Design of solar cells with improved stability. 1985 , 77-78, 1451-1460 | 33 |
| 2135 | Dangling bond density and solar cell performance in amorphous silicon. 1985 , 77-78, 1461-1464 | 2 |
| 2134 | Analysis of light-induced degradation in amorphous silicon alloy p-i-n solar cells. 1985 , 77-78, 1481-1484 | |
| 2133 | Activated transport in amorphous semiconductors. II. Interpretation of experimental data. 1985 , 18, 3191-3199 | 30 |
| 2132 | Stability of an amorphous SiC/Si tandem solar cell with blocking barriers. <i>Applied Physics Letters</i> , 1986 , 48, 584-586 | 3-4 17 |
| 2131 | Excitation and temperature dependence of the photo-induced excess conductivity in doping-modulated amorphous silicon. 1986 , 54, 199-218 | 34 |

| | | | |
|------|--|-----|-----|
| 2130 | The Physical Properties of Hydrogenated Amorphous Silicon. 1986 , T13, 45-52 | | 3 |
| 2129 | Defects in amorphous silicon: A new perspective. 1986 , 57, 2979-2982 | | 295 |
| 2128 | Light-induced degradation and thermal recovery of the photoconductivity in hydrogenated amorphous silicon films. <i>Journal of Applied Physics</i> , 1986 , 59, 3508-3515 | 2.5 | 46 |
| 2127 | Status of research on the light-induced effect in a-Si materials and a-Si solar cells. 1986 , 87, 43-63 | | 18 |
| 2126 | Frequency-dependent transport in glow-discharge amorphous silicon. 1986 , 54, 391-414 | | 15 |
| 2125 | Photo-induced reversible change of topological disorder in hydrogenated amorphous silicon. 1986 , 54, L9-L13 | | 4 |
| 2124 | The thermal quenching and supralinearity of photoconductivity in hydrogenated amorphous silicon. 1986 , 53, 321-337 | | 21 |
| 2123 | The kinetics of formation of the Staebler-Wronski effect. 1986 , 53, 407-412 | | 11 |
| 2122 | Charge-transfer-doping-modulated amorphous semiconductor multilayer films. 1986 , 54, 523-532 | | 1 |
| 2121 | Photo-induced changes in the properties of undoped and boron-doped a-Si:H films. 1986 , 54, 301-309 | | 19 |
| 2120 | Photoadmittance in amorphous-silicon Schottky diodes. 1986 , 54, 19-36 | | |
| 2119 | Time Dependence of the Metastable, Optically-Induced ESR in a-Si:H. 1986 , 70, 225 | | 2 |
| 2118 | Measurements of Light-Induced Degradation in A-Si,Ge:H,F Alloys. 1986 , 70, 237 | | 5 |
| 2117 | Hydrogenated Amorphous Silicon Thin-Film Deposition by Direct Photo-Enhanced Decomposition of Silane Using an Internal Hydrogen Discharge Lamp. 1986 , 70, 31 | | 6 |
| 2116 | Back-to-Back Amorphous Silicon Diodes for Driving LC Displays. 1986 , 70, 663 | | 1 |
| 2115 | Light-induced conductivity changes in hydrogenated amorphous silicon films prepared in cascaded glow discharge reactors. 1986 , 135, 165-172 | | 1 |
| 2114 | The Staebler-Wronski effect in microcrystalline silicon films. 1986 , 58, 601-603 | | 19 |
| 2113 | Irradiation Effect on Electronic Properties in Hydrogenated Amorphous Silicon. 1986 , 98, 311-318 | | 4 |

| | | | |
|------|--|-----|-----|
| 2112 | Hydrogenated microvoids and light-induced degradation of amorphous-silicon solar cells. 1986 , 41, 305-309 | | 121 |
| 2111 | A chemical-bond approach to doping, compensation and photo-induced degradation in amorphous silicon. 1986 , 39, 243-250 | | 89 |
| 2110 | Persistent photoconductivity in hydrogenated amorphous silicon. 1986 , 59, 177-181 | | 10 |
| 2109 | Generation rate of the light-induced defects and the temperature dependence of photoconductivity in a-Si:H. 1986 , 3, 81-84 | | |
| 2108 | Origin of the non-exponential photocurrent decay in amorphous semiconductors. 1986 , 54, 285-299 | | 19 |
| 2107 | Dangling Bond Creation in Hydrogenated Amorphous Silicon by Light-Soaking. 1986 , 25, L634-L636 | | 5 |
| 2106 | Amorphous silicon p-i-n-i-p and n-i-p-i-n diodes. <i>Applied Physics Letters</i> , 1986 , 48, 1006-1008 | 3.4 | 8 |
| 2105 | Hydrogenated amorphous silicon films prepared in cascaded glow discharge reactors. <i>Journal of Applied Physics</i> , 1986 , 59, 1578-1586 | 2.5 | 7 |
| 2104 | Catalytic Chemical Vapor Deposition (CTC-CVD) Method Producing High Quality Hydrogenated Amorphous Silicon. 1986 , 25, L949-L951 | | 160 |
| 2103 | Evidence of light-induced bond breaking in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1986 , 49, 645-647 | 3.4 | 23 |
| 2102 | Dangling bond in a-Si:H. 1986 , 56, 2203-2206 | | 85 |
| 2101 | Electronic transport in doped amorphous silicon. 1986 , 34, 6014-6017 | | 98 |
| 2100 | Electrical conductivity of electron-irradiated hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1986 , 59, 2590-2591 | 2.5 | 7 |
| 2099 | Photovoltaic decay and its temperature dependence on amorphous silicon solar cells. <i>Journal of Applied Physics</i> , 1986 , 59, 658-659 | 2.5 | |
| 2098 | Dynamics of the creation of light-induced defects in amorphous silicon alloys. 1986 , 33, 2512-2519 | | 21 |
| 2097 | Hydrogenated amorphous silicon films deposited in a helium atmosphere. <i>Journal of Applied Physics</i> , 1986 , 60, 4268-4272 | 2.5 | 13 |
| 2096 | Thermal-equilibrium defect processes in hydrogenated amorphous silicon. 1986 , 57, 2450-2453 | | 143 |
| 2095 | Implications of light-induced defects on the performance of amorphous silicon alloy p-i-n solar cells. <i>Journal of Applied Physics</i> , 1986 , 59, 2222-2228 | 2.5 | 9 |

| | | | |
|------|--|-----|-----|
| 2094 | Annealing of metastable defects in hydrogenated amorphous silicon. 1986 , 34, 63-72 | | 63 |
| 2093 | Doped hydrogenated amorphous silicon films by laser-induced chemical vapor deposition. <i>Applied Physics Letters</i> , 1986 , 48, 171-173 | 3-4 | 24 |
| 2092 | A self-consistent analysis of temperature-dependent field-effect measurements in hydrogenated amorphous silicon thin-film transistors. <i>Journal of Applied Physics</i> , 1986 , 60, 643-649 | 2.5 | 38 |
| 2091 | Photoconductivity and light-induced change in a-Si:H. 1986 , 34, 2475-2481 | | 43 |
| 2090 | Influence of mechanical stress on light-induced creation of defects in hydrogenated amorphous silicon. 1987 , 55, 197-200 | | 7 |
| 2089 | Stability as Regards Film Thickness, Homogeneity and Optical Properties of Thin a-Si:H Films. 1987 , 26, 341-346 | | 10 |
| 2088 | Light-induced changes in the field-effect conductance of hydrogenated amorphous silicon. 1987 , 2, 649-653 | | |
| 2087 | Thermal Degradation of a-Si:H Solar Cells by Dopant Diffusion. 1987 , 26, 889-892 | | 8 |
| 2086 | Light-Induced Effect of a-Si Films Fabricated Using the Super Chamber. 1987 , 26, 1408-1412 | | 8 |
| 2085 | Hole Transport in Silicon Thin Films with Variable Hydrogen Content. 1987 , 26, L276-L279 | | 14 |
| 2084 | Effects of discharge parameters on deposition rate of hydrogenated amorphous silicon for solar cells from pure SiH ₄ plasma. <i>Journal of Applied Physics</i> , 1987 , 62, 485-491 | 2.5 | 45 |
| 2083 | Kinetics of the Staebler-Wronski effect. 1987 , 35, 1442-1445 | | 3 |
| 2082 | Drift mobility of steady-state photocarriers in a-Si:H. 1987 , 36, 1703-1705 | | 3 |
| 2081 | Effect of argon dilution of silane on persistent photoconductivity in single-layered hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1987 , 61, 446-448 | 2.5 | 1 |
| 2080 | Photocapacitance characteristics of amorphous-silicon Schottky diode sensor arrays and their changes due to the Staebler-Wronski effect. <i>Journal of Applied Physics</i> , 1987 , 61, 585-590 | 2.5 | 2 |
| 2079 | Thermally and optically induced metastabilities in doped hydrogenated amorphous silicon: ESR studies. 1987 , 35, 9735-9743 | | 34 |
| 2078 | Hydrogen microstructure in amorphous hydrogenated silicon. 1987 , 36, 3259-3267 | | 131 |
| 2077 | Weakly bound deuterium in a-Si:D,H. 1987 , 36, 9351-9354 | | 22 |

| | | | |
|------|--|-----|-----|
| 2076 | Properties of hydrogenated amorphous silicon prepared by biased activated reactive evaporation. <i>Journal of Applied Physics</i> , 1987 , 61, 604-613 | 2.5 | 6 |
| 2075 | Degradation and annealing characteristics of amorphous silicon-hydrogen alloys after a long-time test. <i>Journal of Applied Physics</i> , 1987 , 62, 1856-1860 | 2.5 | 10 |
| 2074 | Kinetic studies of the annealing behavior of a-Si:H p-i-n solar cells. <i>Journal of Applied Physics</i> , 1987 , 62, 3968-3975 | 2.5 | 9 |
| 2073 | Photoinduced change in the density of localized states near the conduction band of doped a-Si:H. 1987 , 36, 1706-1709 | | 12 |
| 2072 | Light-induced perturbation of the high-temperature equilibrium in phosphorus-doped a-Si:H. 1987 , 36, 9378-9380 | | 16 |
| 2071 | Doping and annealing effects on persistent photoconductivity in doping-modulated amorphous-silicon superlattices. 1987 , 36, 6479-6485 | | 18 |
| 2070 | Reversible structural changes in discharge-produced amorphous silicon. <i>Journal of Applied Physics</i> , 1987 , 61, 4593-4597 | 2.5 | 7 |
| 2069 | Metastable defects in hydrogenated amorphous silicon. 1987 , 36, 2645-2665 | | 44 |
| 2068 | Photothermal and photoconductive determination of surface and bulk defect densities in amorphous silicon films. <i>Applied Physics Letters</i> , 1987 , 50, 1521-1523 | 3.4 | 159 |
| 2067 | Thermal-equilibrium processes in amorphous silicon. 1987 , 35, 1316-1333 | | 309 |
| 2066 | Generalized rate equations governing the light-induced degradation and the thermal recovery of a-Si:H films. <i>Journal of Applied Physics</i> , 1987 , 62, 1989-1993 | 2.5 | 6 |
| 2065 | Band tails, entropy, and equilibrium defects in hydrogenated amorphous silicon. 1987 , 59, 688-691 | | 173 |
| 2064 | Stable photoinduced paramagnetic defects in hydrogenated amorphous silicon nitride. <i>Applied Physics Letters</i> , 1987 , 51, 608-610 | 3.4 | 55 |
| 2063 | Defect dynamics and the Staebler-Wronski effect in hydrogenated amorphous silicon. 1987 , 36, 3479-3482 | | 79 |
| 2062 | Space-charge-limited current diode model for amorphous silicon solar cells and their degradation. <i>Journal of Applied Physics</i> , 1987 , 61, 5458-5466 | 2.5 | 9 |
| 2061 | Changes of Drift Mobility in a-Si:H with Light Exposure and Doping. 1987 , 95, 571 | | 2 |
| 2060 | Stability in Amorphous Silicon. 1987 , 95, 551 | | 4 |
| 2059 | Application of a Low Frequency Technique to the Study of Amorphous Materials.. 1987 , 95, 77 | | |

| | | | |
|------|---|-----|-----|
| 2058 | Light And Electron Irradiation Effects In Sputtered A-Si:H. 1987 , 0763, 60 | | |
| 2057 | Dual-beam-modulated photoconductivity in hydrogenated amorphous silicon response-time and drift-mobility measurements. 1987 , 55, 599-614 | | 21 |
| 2056 | Charge transfer from adsorbates to the bulk in aSi:H. 1987 , 55, 313-340 | | 12 |
| 2055 | The density of states of sputtered a-Si: H studied by the space-charge-limited current technique The influence of deposition parameters, light and keV-electron irradiation. 1987 , 56, 321-333 | | 15 |
| 2054 | Electronic structure of hydrogenated amorphous silicon. 1987 , 90, 77-89 | | 5 |
| 2053 | Applications and defects in amorphous silicon. 1987 , 90, 219-227 | | 13 |
| 2052 | Increase of doping efficiency by light soaking in boron-doped hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1987 , 51, 1804-1806 | 3-4 | 24 |
| 2051 | Problems in the understanding of electronic properties of amorphous silicon. 1987 , 97-98, 1-14 | | 66 |
| 2050 | Dangling bond as a variable-U defect in a-Si:H. 1987 , 97-98, 83-86 | | |
| 2049 | Frequency dependent loss in glow discharge amorphous silicon. 1987 , 97-98, 623-626 | | 4 |
| 2048 | Subgap absorption in a-Si:H using photoluminescence absorption spectroscopy (PLAS). 1987 , 97-98, 707-710 | | 7 |
| 2047 | Stable and metastable states in phosphorus-doped a-Si:H by temperature-modulated space-charge-limited current (TM-SCLC) method. 1987 , 97-98, 811-814 | | 2 |
| 2046 | Instability of gap states in phosphorus doped a-Si:H, demonstrated in DLTS. 1987 , 97-98, 815-818 | | |
| 2045 | Glow-discharge amorphous silicon: Growth process and structure. 1987 , 2, 139-184 | | 161 |
| 2044 | The creation of metastable defects in a-Si:H films by high dose irradiation with keV-electrons. 1987 , 97-98, 795-798 | | 19 |
| 2043 | The temperature dependence of the photoconductivity of n-type a-Si:H and the effect of staebler-wronski defects. 1987 , 97-98, 823-826 | | 24 |
| 2042 | Photodegradation in hydrogenated amorphous silicon films at a high level of illumination. <i>Applied Physics Letters</i> , 1987 , 51, 2124-2126 | 3-4 | 4 |
| 2041 | Amorphous silicon solar cells. 1987 , 4, 7-15 | | 2 |

| | | |
|------|---|-----|
| 2040 | Physics of Amorphous SiliconCarbon Alloys. 1987 , 143, 345-418 | 417 |
| 2039 | Light-induced metastable defects in a-Si:H as elucidated by optically detected magnetic resonance measurements at 2K. 1987 , 63, 1083-1086 | 7 |
| 2038 | Optically induced changes in the sub-band gap absorption of hydrogenated amorphous silicon. 1987 , 62, 509-511 | 5 |
| 2037 | Criteria for the design of high efficiency thin film solar cells: Theory and practice. 1987 , 21, 1-14 | 6 |
| 2036 | Long-term stability of amorphous silicon solar cells and modules. 1987 , 21, 25-39 | 5 |
| 2035 | Metastability of hydrogenated amorphous silicon. 1987 , 21, 419-429 | |
| 2034 | Effects of dopant and impurity incorporation on metastable light-induced defect formation. 1987 , 21, 431-438 | 14 |
| 2033 | Utilization of solar and nuclear energy for hydrogen production. 1987 , 100, 501-517 | 1 |
| 2032 | Staebler-wronski effect: A solution. 1988 , 5, 601-604 | |
| 2031 | Equilibrium dangling bond densities and its related thin-film alloys. 1988 , 45, 103-107 | 13 |
| 2030 | Hydrogenated amorphous silicon films obtained by a low pressure dc glow discharge. 1988 , 46, 207-213 | 2 |
| 2029 | Temperature dependence of photodegradation in amorphous hydrogenated silicon. 1988 , 46, 5-8 | |
| 2028 | On the generation and annealing of dangling bond defects in hydrogenated amorphous silicon. 1988 , 45, 41-51 | 38 |
| 2027 | Staebler-wronski effect in a-Si:H films with different morphology. 1988 , 33-34, 719-727 | 4 |
| 2026 | An interesting unconventional photoinduced change in the dark conductivity of a-Si:F:H. 1988 , 164, 217-220 | |
| 2025 | Light-induced changes in magnetron-sputtered hydrogenated amorphous silicon films. 1988 , 164, 227-231 | 1 |
| 2024 | R.F. power dependence of the Staebler-Wronski effect. 1988 , 164, 233-237 | 2 |
| 2023 | Characterization of intrinsic and doped amorphous silicon through thermal hydrogen effusion. 1988 , 17, 227-234 | 6 |

| | | | |
|------|--|-----|----|
| 2022 | Hydrogen content, transport properties and light degradation of a-Si:H films containing artificially generated interfaces. 1988 , 17, 1-16 | | 6 |
| 2021 | The origin of metastable states in a-Si:H. 1988 , 24, 211-221 | | 33 |
| 2020 | Photoluminescence absorption spectroscopy in a-Si:H and related alloys. 1988 , 24, 257-262 | | 2 |
| 2019 | Amorphous silicon solar cells: Thermodynamic models for realistic performance characteristics. 1988 , 23, 201-215 | | 1 |
| 2018 | The effect of preparation conditions on the morphology of low-temperature silicon films. 1988 , 104, 237-248 | | 7 |
| 2017 | Theoretical calculation of the effective correlation energy of hydrogenated amorphous silicon dangling bond by the self-consistent-field X-alpha scattered-wave method. 1988 , 99, 394-403 | | 1 |
| 2016 | Theoretical investigation of the dangling bond defects in hydrogenated amorphous silicon (a-Si:H) by the self-consistent-field X-alpha scattered-wave cluster molecular-orbital method. 1988 , 99, 97-103 | | 1 |
| 2015 | Light-induced degradation of hydrogenated amorphous silicon films deposited at different rf powers. <i>Journal of Applied Physics</i> , 1988 , 64, 6452-6455 | 2.5 | 3 |
| 2014 | Comparison of the structural, electrical, and optical properties of amorphous silicon-germanium alloys produced from hydrides and fluorides. 1988 , 38, 6120-6136 | | 69 |
| 2013 | . 1988 , | | 3 |
| 2012 | . 1988 , | | |
| 2011 | . 1988 , | | |
| 2010 | . 1988 , | | 1 |
| 2009 | . 1988 , 35, 1842-1845 | | 13 |
| 2008 | . 1988 , | | |
| 2007 | Kinetics, energetics, and origins of defects in amorphous Si:H. <i>Applied Physics Letters</i> , 1988 , 52, 492-494 | 3.4 | 65 |
| 2006 | Effect of light-induced defects on the short wavelength quantum efficiencies of amorphous silicon solar cell structures. <i>Journal of Applied Physics</i> , 1988 , 64, 4219-4222 | 2.5 | 22 |
| 2005 | . 1988 , 9, 17-19 | | |

| | | | |
|------|---|-----|-----|
| 2004 | Production of high-quality amorphous silicon films by evaporative silane surface decomposition. <i>Journal of Applied Physics</i> , 1988 , 64, 3215-3223 | 2.5 | 183 |
| 2003 | Photoinduced degradation of reverse-biased small-area a-Si:H Schottky barriers. <i>Journal of Applied Physics</i> , 1988 , 63, 2681-2685 | 2.5 | 1 |
| 2002 | Laser irradiation of compensation doped hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1988 , 64, 718-720 | 2.5 | 1 |
| 2001 | Thermally and light-induced instabilities in phosphorus-doped hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1988 , 53, 1829-1831 | 3.4 | 7 |
| 2000 | Elimination of light-induced effect in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1988 , 53, 1277-1278 | 3.4 | 2 |
| 1999 | Evidence for the intrinsic nature of light-induced defects in undoped a-Si:H. 1988 , 37, 8465-8467 | | 9 |
| 1998 | Thermally induced metastability in amorphous silicon thin-film transistors. <i>Applied Physics Letters</i> , 1988 , 53, 2617-2619 | 3.4 | 1 |
| 1997 | Charge-trapping model of metastability in doped hydrogenated amorphous silicon. 1988 , 38, 7474-7479 | | 23 |
| 1996 | The effects of the glass substrate on the properties of rf glow discharge amorphous Si:H thin films. <i>Journal of Applied Physics</i> , 1988 , 63, 2443-2445 | 2.5 | 4 |
| 1995 | Light-induced effects on doped- and undoped-hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1988 , 64, 2107-2112 | 2.5 | 6 |
| 1994 | Windowless helium lamp assisted chemical vapor deposition of hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1988 , 53, 1314-1316 | 3.4 | 6 |
| 1993 | Kinetics of the generation and annealing of deep defects and recombination centers in amorphous silicon. <i>Applied Physics Letters</i> , 1988 , 53, 1644-1646 | 3.4 | 47 |
| 1992 | . 1988 , | | |
| 1991 | Reduced photoinduced degradation in chemical vapor deposited hydrogenated amorphous silicon films. <i>Applied Physics Letters</i> , 1988 , 52, 807-809 | 3.4 | 8 |
| 1990 | Effusion of deuterium from deuterated-fluorinated amorphous silicon under illumination. <i>Applied Physics Letters</i> , 1988 , 53, 2477-2479 | 3.4 | 18 |
| 1989 | Evidence for hydrogen motion in annealing of light-induced metastable defects in hydrogenated amorphous silicon. 1988 , 37, 1020-1023 | | 121 |
| 1988 | High-temperature light-induced effects in hydrogenated amorphous silicon. 1988 , 38, 13453-13455 | | 2 |
| 1987 | . 1988 , | | 4 |

| | | |
|------|---|----|
| 1986 | A new model for the Staebler-Wronski effect. 1988 , 57, 117-122 | 14 |
| 1985 | Optical Degradation of a-Si:H films with Different Morphology. 1988 , 27, L916-L918 | 8 |
| 1984 | Persistent Photoconductivity in Doping-Modulated a-Si:H Multilayers. 1988 , 27, 1787-1792 | 4 |
| 1983 | Saturation of Optical Degradation in a-Si:H Films with Different Morphologies. 1988 , 27, L2245-L2247 | 15 |
| 1982 | Preparation of a-Si:H Films Resistive to the Staebler-Wronski Effect. 1988 , 27, L1739-L1741 | 4 |
| 1981 | Charge-induced structural relaxation in hydrogenated amorphous silicon. 1988 , 1-20 | 3 |
| 1980 | Changes in the Density of States in a-Si:H with the Generation and Annealing of Light-Induced Defects. 1988 , 118, 147 | |
| 1979 | Equilibrium Between Charge Carriers, Charged Centers, and Dangling Bonds in Amorphous Silicon. 1988 , 118, 129 | 1 |
| 1978 | Light-Induced Defects in Medium and Low Gap a-Si,Ge:H,F Alloys. 1988 , 118, 167 | 4 |
| 1977 | General Explanation of Bias-Anneal Effects in a-Si:H. 1988 , 118, 179 | 1 |
| 1976 | Improved Stability of Amorphous Silicon by Post-Deposition Fluorine Implantation. 1988 , 118, 237 | |
| 1975 | Metastable Non-Equilibrium Conductance States in Doping-Modulated a-Si:H Multilayers. 1988 , 118, 275 | 3 |
| 1974 | Microstructural and Electronic Properties of Hydrogenated Amorphous Silicon Films Deposited by Magnetron Reactive Sputtering.. 1988 , 118, 537 | |
| 1973 | Propagation of Si-Network in Hr-Cvd and Spontaneous Chemical Deposition. 1988 , 118, 79 | 13 |
| 1972 | Physical Model and Optimization of a Heterostructure Vidicon Target Based on Amorphous Hydrogenated Silicon. 1988 , 74, 359-367 | |
| 1971 | Non-Ohmic conduction in glow-discharge a-Si:H films. 1988 , 58, 117-122 | |
| 1970 | Review of transport experiments. 1989 , 39-61 | 1 |
| 1969 | Amorphous Silicon Solar Cells. 1989 , 1-98 | 8 |

| | | | |
|------|--|-----|-----|
| 1968 | Photovoltaics today and tomorrow. 1989 , 244, 297-304 | | 42 |
| 1967 | Study on catalytic chemical vapor deposition method to prepare hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1989 , 65, 4396-4402 | 2.5 | 115 |
| 1966 | Hole trapping, light soaking, and secondary photocurrent transients in amorphous silicon. 1989 , 39, 1766-1771 | 43 | |
| 1965 | Brightness degradation and its mechanism in Tb-doped ZnS thin-film electroluminescent devices. <i>Journal of Applied Physics</i> , 1989 , 65, 1690-1693 | 2.5 | 5 |
| 1964 | Electrical properties of hydrogenated amorphous silicon layers on a polymer film substrate under tensile stress. <i>Applied Physics Letters</i> , 1989 , 54, 1678-1680 | 3-4 | 1 |
| 1963 | Characteristics of electron spin resonance in hydrogenated amorphous silicon-carbon/hydrogenated amorphous silicon heterojunctions. <i>Applied Physics Letters</i> , 1989 , 54, 807-809 | 4 | 1 |
| 1962 | Gamma-ray irradiation effect in amorphous hydrogenated silicon. <i>Journal of Applied Physics</i> , 1989 , 66, 4719-4722 | 2.5 | 10 |
| 1961 | Thermal recovery process of the midgap-state profile of light-soaked undoped hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1989 , 54, 344-346 | 3-4 | 6 |
| 1960 | Light-induced effects on the rapidly cooled state in hydrogenated amorphous silicon. 1989 , 39, 10251-10253 | | |
| 1959 | Reversible light-induced reactivation of acceptors in p-type hydrogenated GaAs. <i>Applied Physics Letters</i> , 1989 , 55, 1205-1207 | 3-4 | 22 |
| 1958 | Broken-dimer model in a-Si:H. 1989 , 39, 8768-8771 | | 10 |
| 1957 | Thermal relaxation of the electric conductivity in amorphous silicon-germanium alloys. 1989 , 40, 6424-6427 | 10 | |
| 1956 | Improvement of the stability of hydrogenated amorphous silicon films and solar cells by light pulse treatment. <i>Applied Physics Letters</i> , 1989 , 54, 1226-1228 | 3-4 | 15 |
| 1955 | Surface modification of a-Si:H with a scanning tunneling microscope operated in air. <i>Journal of Applied Physics</i> , 1989 , 65, 2064-2068 | 2.5 | 21 |
| 1954 | Light-induced changes of gap-state profile in phosphorus-doped hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1989 , 54, 439-441 | 3-4 | 4 |
| 1953 | Degradation of hydrogenated amorphous silicon films induced by irradiation of synchrotron radiation light. <i>Journal of Applied Physics</i> , 1989 , 65, 2552-2553 | 2.5 | 6 |
| 1952 | Drift mobility in hydrogenated amorphous silicon from photoconductivity decay. <i>Journal of Applied Physics</i> , 1989 , 65, 205-209 | 2.5 | 6 |
| 1951 | Effect of ultraviolet irradiation on the white light degraded electronic properties of hydrogenated amorphous silicon films. <i>Applied Physics Letters</i> , 1989 , 55, 1975-1977 | 3-4 | 7 |

| | | |
|------|---|-------|
| 1950 | Photochemical etching of silicon: The influence of photogenerated charge carriers. 1989 , 39, 10120-10132 | 40 |
| 1949 | Intense small wave-vector scattering from voids in amorphous silicon: A theoretical simulation. 1989 , 39, 5101-5106 | 38 |
| 1948 | Improved material properties of amorphous silicon from silane by fluorine implantation: Application to thin-film transistors. <i>Journal of Applied Physics</i> , 1989 , 65, 3706-3711 | 2.5 6 |
| 1947 | Towards understanding persistent photoconductance in doping modulated amorphous silicon. 1989 , 60, 171-175 | 9 |
| 1946 | Negative Staebler-Wronski Effect in Undoped a-Si:H. 1989 , 28, L2125-L2127 | |
| 1945 | Field-Effect Study of the Staebler-Wronski Effect in Hydrogenated Amorphous Silicon. 1989 , 28, 153-159 | 0 |
| 1944 | AC Conductivity of Undoped a-Si:H and μ c-Si:H in Connection with Morphology and Optical Degradation. 1989 , 28, 577-585 | 6 |
| 1943 | The Staebler-Wronski Effect on Defect Luminescence in Hydrogenated Amorphous Silicon. 1989 , 28, L1086-L1088 | 2 |
| 1942 | Light-induced degradation characteristics of MIS junction using hydrogenated amorphous silicon. 1989 , 72, 85-94 | |
| 1941 | Investigation of deep states in thin films of hydrogenated amorphous silicon by photo-induced current transient spectroscopy. 1989 , 333, 531-534 | |
| 1940 | Defect equilibrium thermodynamics in hydrogenated amorphous silicon: Consequences for solar cells. 1989 , 27, 159-168 | 23 |
| 1939 | Electrical and optical properties of amorphous silicon films deposited from fluorodisilanes. 1989 , 27, 391-401 | |
| 1938 | A new mechanism of light-induced reversible changes in a-Si:H p-i-n solar cells. 1989 , 26, 159-164 | 1 |
| 1937 | Photoconductivity self-recovery effect and self-annealing behaviour of undoped A-Si:H by homogeneous chemical vapour deposition. 1989 , 71, 595-597 | |
| 1936 | On the stability of amorphous silicon superlattices. 1989 , 72, 665-666 | 0 |
| 1935 | Hydrogenated amorphous silicon films deposited by reactive sputtering: The electronic properties, hydrogen bonding and microstructure. 1989 , 171, 217-233 | 94 |
| 1934 | Present status of the development of thin-film solar cells. 1989 , 39, 743-748 | 4 |
| 1933 | Persistent photoconductivity in a-Si:H/a-SiN _x :H multilayer films at low temperature. 1989 , 113, K223-K226 | 3 |

| | | | |
|------|--|-----|-----|
| 1932 | Structural, optical, and spin properties of hydrogenated amorphous silicon-germanium alloys. <i>Journal of Applied Physics</i> , 1989 , 66, 569-592 | 2.5 | 137 |
| 1931 | The preparation of hydrogenated amorphous silicon by plasma-enhanced reactive evaporation. 1989 , 108, 115-127 | | 12 |
| 1930 | Improvement of the stability of amorphous silicon solar cells by light pulse treatment. 1989 , 115, 48-50 | | 4 |
| 1929 | Light induced changes in the density of states of a-Si:H. 1989 , 107, 289-294 | | 4 |
| 1928 | Kinetics of metastable states in hydrogenated amorphous silicon. 1989 , 114, 591-596 | | 1 |
| 1927 | Optically and thermally induced reversible changes of midgap states in undoped a-Si:H. 1989 , 114, 609-611 | | 5 |
| 1926 | The relationship between hydrogen content, weak bond density and Staebler-Wronski defects in amorphous silicon. 1989 , 114, 624-626 | | 9 |
| 1925 | Light-induced conductivity changes in phosphorus-doped hydrogenated amorphous silicon. 1989 , 114, 636-638 | | 10 |
| 1924 | Thermally- and light-induced metastable states in p-doped a-Si:H. 1989 , 114, 669-671 | | 5 |
| 1923 | Role of hydrogen in the formation of metastable defects in hydrogenated amorphous silicon. 1989 , 39, 1164-1179 | | 161 |
| 1922 | Investigation of the light-induced effects in nitrogen-rich silicon nitride films. <i>Applied Physics Letters</i> , 1989 , 55, 1112-1114 | 3-4 | 40 |
| 1921 | Relaxation phenomena of image sensors made from a-Si:H. <i>Journal of Applied Physics</i> , 1989 , 66, 4466-4473 | | 5 |
| 1920 | The Influence of the Si-H ₂ Bond on the Light-Induced Effect in a-Si Films and a-Si Solar Cells. 1989 , 28, 1762-1768 | | 89 |
| 1919 | . | | |
| 1918 | Status and assessment of photovoltaic technologies. 1989 , 34, 185-210 | | 31 |
| 1917 | Preparation of Si Thin Films by Spontaneous Chemical Deposition. 1989 , 149, 11 | | 10 |
| 1916 | Defect Distribution and Defect Kinetics in Undoped and Boron-Doped A-Si:H Investigated by Modulated Photocurrents. 1989 , 149, 327 | | 1 |
| 1915 | Nature of the disordered state of hydrogenated amorphous silicon as revealed by the study of anelastic relaxation behavior. 1989 , 4, 612-615 | | |

| | | |
|------|---|----|
| 1914 | Carrier Transport Properties of DC Magnetron Reactive Sputtered a-Si:H Films. 1989 , 149, 205 | |
| 1913 | Advances In High-Efficiency, Multiple-Gap, Multijunction Amorphous Silicon-Based Alloy Thin-Film Solar Cells. 1989 , 149, 405 | 8 |
| 1912 | Light-Induced Changes in the Subgap Absorption of a-SiC:H. 1989 , 149, 577 | 1 |
| 1911 | Defect Relaxation in Disordered Materials: Stretched Exponentials, Meyer-Neldel Rule, and Staebler-Wronski Effect. 1989 , 149, 589 | 2 |
| 1910 | Stability Studies on A-Si:H Films. 1989 , 149, 601 | 3 |
| 1909 | Optical Degradation and Morphology in a-Si:H. 1989 , 149, 607 | 1 |
| 1908 | The transport properties of hydrogenated amorphous semiconductors. 1989 , 138-150 | 2 |
| 1907 | Optical Absorption in Amorphous Semiconductors. 1989 , T29, 157-161 | 5 |
| 1906 | Trapping and recombination in amorphous hydrogenated silicon studied by dual-beam-modulated photoconductivity. 1990 , 61, 413-424 | 3 |
| 1905 | Ab initio calculations on metastable defects in a-Si:H: The Staebler-Wronski effect. 1990 , 61, 881-894 | 22 |
| 1904 | Trace Impurities and Metastable States in a-Si:H. 1990 , 192, 719 | 1 |
| 1903 | Electronic Stimulation of Acceptor Reactivation IN p - Type Hydrogenated GaAs. 1990 , 184, 81 | 1 |
| 1902 | Molecular Dynamics Simulations of the Structural, Vibrational and Electronic Properties of Amorphous Silicon. 1990 , 192, 251 | 1 |
| 1901 | Light-Induced Metastable Effects in a-Ge:H. 1990 , 192, 769 | 1 |
| 1900 | Annealing of Irreversible Defects in Hydrogenated and Unhydrogenated Amorphous Silicon Thin Films. 1990 , 192, 775 | 1 |
| 1899 | Microscopic Model of Metastable Changes in Hydrogenated Amorphous Silicon. 1990 , 157, 101-105 | 2 |
| 1898 | On the Fermi-Level Position in aSi: H(P). 1990 , 160, K25-K28 | 2 |
| 1897 | Thin film module fabrication and reliability advances. 1990 , 28, 121-128 | |

| | | | |
|------|---|-----|-----|
| 1896 | Two year performance evaluation of a 4 kW amorphous-silicon photovoltaic system in Michigan. 1990 , 28, 163-176 | | 4 |
| 1895 | Unifying model of thermal and light-induced degradations of a-Si:H. 1990 , 20, 189-197 | | 12 |
| 1894 | On-Chip Bottom-Gate Polysilicon and Amorphous Silicon Thin-Film Transistors Using Excimer Laser Annealing. 1990 , 29, L1775-L1777 | | 50 |
| 1893 | Hydrogen-Radical Annealing of Chemical Vapor-Deposited Amorphous Silicon Films. 1990 , 29, L2171-L2173 | | 23 |
| 1892 | On the formation process of the Staebler-Wronski effect in a-Si:H deduced from its wavelength dependence. 1990 , 61, 403-412 | | 8 |
| 1891 | Stability of multijunction a-Si:H-based solar cells. <i>Journal of Applied Physics</i> , 1990 , 67, 4161-4166 | 2.5 | 6 |
| 1890 | Identification of defects in amorphous silicon. 1990 , 65, 464-467 | | 54 |
| 1889 | Optically induced restructuring of a hydrogenated amorphous silicon thin-film surface. <i>Applied Physics Letters</i> , 1990 , 57, 1227-1229 | 3.4 | 5 |
| 1888 | Structural, optical, and electrical characterization of improved amorphous hydrogenated germanium. <i>Journal of Applied Physics</i> , 1990 , 67, 7430-7438 | 2.5 | 90 |
| 1887 | Reduced Staebler-Wronski effect in reactively sputtered hydrogenated amorphous silicon thin films. <i>Applied Physics Letters</i> , 1990 , 56, 1685-1687 | 3.4 | 11 |
| 1886 | Effect of hydrogen content on the light induced defect generation in direct current magnetron reactively sputtered hydrogenated amorphous silicon thin films. <i>Journal of Applied Physics</i> , 1990 , 68, 2255-2264 | 2.5 | 28 |
| 1885 | Metastable effects in hydrogenated amorphous silicon-silicon nitride multilayers. 1990 , 42, 11862-11868 | | 2 |
| 1884 | Potential fluctuations due to inhomogeneity in hydrogenated amorphous silicon and the resulting charged dangling-bond defects. 1990 , 42, 7420-7428 | | 133 |
| 1883 | Reduced light-induced changes of photoconductivity in duterated amorphous silicon. <i>Journal of Applied Physics</i> , 1990 , 68, 3738-3740 | 2.5 | 34 |
| 1882 | . | | |
| 1881 | Defect creation by 10-keV electron irradiation in phosphorous-doped a-Si:H. <i>Journal of Applied Physics</i> , 1990 , 67, 2800-2805 | 2.5 | 5 |
| 1880 | Role of band-tail carriers in metastable defect formation and annealing in hydrogenated amorphous silicon. 1990 , 41, 1059-1075 | | 93 |
| 1879 | . | | |

| | | | |
|------|---|-----|----|
| 1878 | Light-induced defect studies in hydrogenated amorphous silicon by exoelectron emission. <i>Applied Physics Letters</i> , 1990 , 57, 1528-1530 | 3-4 | 5 |
| 1877 | . | | 1 |
| 1876 | References. 1990 , 525-681 | | |
| 1875 | . | | 4 |
| 1874 | . | | 1 |
| 1873 | Reversible photoinduced change of photoconductivity in amorphous chalcogenide films. 1990 , 42, 11857-11864 | | 1 |
| 1872 | . 1990 , 5, 232-238 | | 51 |
| 1871 | The Staebler-Wronski effect and laser annealing in a-Si:H. A negative-U model. 1990 , 125, 58-66 | | 2 |
| 1870 | Photo-induced metastability in amorphous semiconductors. 1991 , 137-138, 1-10 | | 43 |
| 1869 | Light-induced hydrogen diffusion in a-Si:H. 1991 , 137-138, 33-36 | | 2 |
| 1868 | Ab-initio molecular dynamics simulations of amorphous silicon. 1991 , 137-138, 135-140 | | 25 |
| 1867 | Evidence for the dominance of charged dangling bond defects in the photodegradation of hydrogenated amorphous silicon. 1991 , 137-138, 243-246 | | 4 |
| 1866 | The role of hydrogen clusters in the Staebler-Wronski effect of amorphous silicon as elucidated by optically detected electron nuclear double resonance. 1991 , 137-138, 247-250 | | 10 |
| 1865 | Persistent photoconductivity decay mechanism in compensated amorphous silicon. 1991 , 137-138, 283-286 | | 3 |
| 1864 | Weak bonds and atomic charge distribution in hydrogenated amorphous silicon. 1991 , 137-138, 295-298 | | 4 |
| 1863 | Investigation of a-Si:H thin films using the constant photocurrent method. 1991 , 137-138, 375-378 | | 6 |
| 1862 | Stability and hole-transport in a-Si:H prepared by "Chemical Annealing" 1991 , 137-138, 693-696 | | 5 |
| 1861 | Reversible photoinduced changes of optical and electronic transport properties in organopolysilanes. 1991 , 137-138, 915-918 | | 1 |

| | | | |
|------|--|-----|-----|
| 1860 | Photoinduced defects in amorphous chalcogenides: Similarity and dissimilarity to the staebler-wronski effect. 1991 , 137-138, 1017-1020 | | 11 |
| 1859 | Electronically induced modifications of a-Si:H(P) films by scanning tunneling microscopy. 1991 , 137-138, 1067-1070 | | 11 |
| 1858 | Correlation of light-induced changes with hydrogen content in hydrogenated amorphous silicon films. <i>Applied Physics Letters</i> , 1991 , 58, 2669-2671 | 3-4 | 6 |
| 1857 | Fast metastable defect-creation in amorphous silicon by femtosecond light pulses. 1991 , 67, 2347-2350 | | 46 |
| 1856 | Structural relaxation and defect annihilation in pure amorphous silicon. 1991 , 44, 3702-3725 | | 367 |
| 1855 | Light-induced metastability in a-Ge : H. 1991 , 128, 243-254 | | 19 |
| 1854 | Metastable defect in amorphous silicon solar cells investigated by junction recovery technique. 1991 , 128, 86-90 | | |
| 1853 | Defect relaxation in amorphous silicon: Stretched exponentials, the Meyer-Neldel rule, and the Staebler-Wronski effect. 1991 , 43, 4057-4070 | | 194 |
| 1852 | Improvement of the Vehicle Amenity with Compound Curved Solar Roof Panel. 1991 , | | |
| 1851 | Chapter 12 Hydrogen Diffusion in Amorphous Silicon. 1991 , 34, 381-445 | | 14 |
| 1850 | Charge-induced structural relaxation in amorphous semiconductors. 1991 , 63, 465-475 | | 2 |
| 1849 | Control of photodegradation in amorphous silicon: The effect of deuterium. 1991 , 63, 281-292 | | 18 |
| 1848 | An argument for potential fluctuations in amorphous-silicon-based alloys, and their effect on solar celi performance. 1991 , 63, 293-303 | | 24 |
| 1847 | Experimental tests of the autocompensation model of doping. 1991 , 63, 101-121 | | 27 |
| 1846 | Defect Creation by Forward Bias in Amorphous Silicon P-I-N Diodes. 1991 , 219, 135 | | 6 |
| 1845 | Effects of Fluorine Implantation into Hydrogenated Amorphous Silicon. 1991 , 235, 83 | | |
| 1844 | Improved Light Soaking Stability of R.F. Sputter Deposited Amorphous Silicon. 1991 , 219, 105 | | |
| 1843 | Degradation Study of single a-Si:H Alloy Solar Cells. 1991 , 219, 141 | | 2 |

| | | |
|------|---|----|
| 1842 | An Alternative Model for the Kinetics of Light-Induced Defects in A-Si:H. 1991 , 219, 15 | 4 |
| 1841 | Temperature Dependence of the Growth and Saturation of Light-Induced Defects in a-Si:H. 1991 , 219, 27 | 3 |
| 1840 | Control of Photo-Induced Degradation in a-Si:H Prepared from Xe-Diluted Silane. 1991 , 219, 3 | 3 |
| 1839 | The Effect of Light Soaking on Electron Mobilities in Hydrogenated Amorphous Silicon. 1991 , 219, 33 | |
| 1838 | Dice (Dynamic Inner Collection Efficiency) Characterization of Photovoltaic Performance in A-Si Solar Cells. 1991 , 219, 421 | 3 |
| 1837 | Effect of Light Exposure Conditions on the Light-Induced Degradation in Amorphous Silicon Alloy Solar Cells. 1991 , 219, 433 | 3 |
| 1836 | Reducing the Saturated Defect Density in a-Si:H by Post-Growth Anneals. 1991 , 219, 93 | 2 |
| 1835 | Highly Sensitive Absorption Measurements in Organic Thin Films: Charge Transfer Complexes and Light-Induced Changes. 1991 , 228, 85 | 1 |
| 1834 | Structural Studies, Surface Properties, and Photoluminescence Behaviour of Silicon Nanocrystals. 1991 , 256, 117 | 6 |
| 1833 | Study of persistent photoconductivity and Staebler-Wronski effects on a-Si : H/a-SiY : H semiconductor superlattice. 1991 , 78, 137-140 | |
| 1832 | Drift mobility and Staebler-Wronski effect in hydrogenated amorphous silicon. 1991 , 80, 807-809 | 5 |
| 1831 | Experimental studies of the light-induced effects in undoped hydrogenated amorphous silicon as a function of deposition conditions. 1991 , 204, 385-395 | 3 |
| 1830 | Studies of subgap absorption and related parameters by the constant photocurrent method of high rate deposited hydrogenated amorphous silicon films. 1991 , 203, 251-257 | 9 |
| 1829 | Conductivity and defects in amorphous silicon doping modulated multilayers. 1991 , 198, 43-51 | 2 |
| 1828 | Thin film technology based on hydrogenated amorphous silicon. 1991 , 139, 319-333 | 7 |
| 1827 | Needs of the amorphous silicon program with respect to stabilized module performance. 1991 , 30, 195-205 | 2 |
| 1826 | Distribution of the density of states of bonded hydrogen in amorphous hydrogenated silicon. 1991 , 30, 207-218 | 22 |
| 1825 | Three-year performance and reliability analysis of a 4 kW amorphous-silicon photovoltaic system in Michigan. 1991 , 30, 535-547 | 2 |

| | | |
|------|---|--------|
| 1824 | Hydrogen diffusion and electronic metastability in amorphous silicon. 1991 , 170, 69-81 | 85 |
| 1823 | Metastable states in Si:H. 1991 , 170, 181-187 | 46 |
| 1822 | Role of the hydrogen in the light-induced defects in undoped hydrogenated amorphous silicon. 1991 , 170, 265-268 | 1 |
| 1821 | Amorphous silicon-based superlattices. 1991 , 14, 1257-1278 | 4 |
| 1820 | Semiconductors for solar cell applications. 1991 , 35, 205-418 | 23 |
| 1819 | Electrical Conduction in Chalcogenide Glasses. Applicability of the Meyer-Neldel Rule. 1991 , 125, 273-278 | 39 |
| 1818 | The Equilibration Behavior of Defects in Boron Doped Hydrogenated Amorphous Silicon/Carbon Films during the Annealing Process. 1991 , 126, K99-K103 | |
| 1817 | Amorphous thin-film solar cells. 1991 , 53, 54-61 | 16 |
| 1816 | Autocompensation doping in light-soaked and in radiation-damaged a-Si:H. 1991 , 52, 335-338 | 5 |
| 1815 | Assessment of Weak Si-Si Bond Breaking Mechanisms of the Staebler-Wronski Effect. 1991 , 219, 99 | |
| 1814 | 2D and 1H Nuclear Magnetic Resonance Study of Deuterated Amorphous Silicon and Partially Deuterated Hydrogenated Amorphous Silicon. 1991 , 30, 1909-1914 | 6 |
| 1813 | Importance of Charged Dangling Bonds in Explaining the Photodegradation Behavior of Amorphous Silicon Films Prepared by Various Techniques. 1991 , 30, L1345-L1348 | 8 |
| 1812 | Structural Differences between Hydrogenated and Deuterated Amorphous Silicon Films Prepared by Plasma-Enhanced Chemical Vapor Deposition. 1991 , 30, L142-L144 | 7 |
| 1811 | Effects of Current Stress on the Characteristics of a Si Heterojunction Bipolar Transistor with a Hydrogenated Microcrystalline Si Emitter. 1991 , 30, 13-18 | |
| 1810 | Deep Level Transient Spectroscopy Study of Staebler-Wronski Effect in a-Si:H. 1991 , 30, L243-L245 | 3 |
| 1809 | 1H Nuclear Magnetic Resonance Study of Hydrogen Distribution in Partially Deuterated Hydrogenated Amorphous Silicon. 1991 , 30, L541-L543 | 4 |
| 1808 | Long-time transient conduction in a-Si:H p-i-n devices. 1991 , 63, 1343-1363 | 76 |
| 1807 | Unmonochromatized synchrotron radiation promoted silicon oxynitridation at room temperature. <i>Journal of Applied Physics</i> , 1991 , 70, 2387-2394 | 2.5 11 |

| | | | |
|------|--|-----|-----|
| 1806 | Excitons and light-induced degradation of amorphous hydrogenated silicon. <i>Applied Physics Letters</i> , 1991 , 58, 1620-1622 | 3-4 | 15 |
| 1805 | Light-induced changes in hydrogenated and deuterated amorphous silicon films and solar cells. <i>Applied Physics Letters</i> , 1991 , 59, 3294-3296 | 3-4 | 18 |
| 1804 | Random telegraph-switching noise in coplanar current measurements of amorphous silicon. 1991 , 44, 8391-8394 | | 58 |
| 1803 | Dispersive model for the kinetics of light-induced defects in a-Si:H. 1991 , 44, 10937-10940 | | 15 |
| 1802 | Mechanism for the Staebler-Wronski effect in a-Si:H. 1991 , 44, 3403-3406 | | 23 |
| 1801 | Enhancement of light-induced degradation in hydrogenated amorphous silicon due to carbon impurities. <i>Applied Physics Letters</i> , 1991 , 58, 723-725 | 3-4 | 16 |
| 1800 | Nonlinear 1/f noise in amorphous silicon. 1991 , 67, 2529-2532 | | 39 |
| 1799 | Light-enhanced hydrogen motion in a-Si:H. 1991 , 67, 2686-2689 | | 122 |
| 1798 | Photoinduced paramagnetic centers in amorphous silicon oxynitride. <i>Journal of Applied Physics</i> , 1991 , 70, 4969-4972 | 2-5 | 21 |
| 1797 | Electric-field-enhanced photoscission of the Si backbone in organopolysilane films. <i>Applied Physics Letters</i> , 1991 , 59, 1078-1080 | 3-4 | 8 |
| 1796 | Intensity and temperature dependence of the steady-state light-induced defect density in a-Si:H. 1991 , 44, 12800-12805 | | 21 |
| 1795 | Current-induced defect creation and recovery in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1991 , 59, 1084-1086 | 3-4 | 71 |
| 1794 | Optoelectronic properties of hydrogenated amorphous silicon films deposited under negative substrate bias. <i>Journal of Applied Physics</i> , 1991 , 69, 2942-2950 | 2-5 | 44 |
| 1793 | Optically induced metastability in untwinned single-domain YBa ₂ Cu ₃ O ₇ . 1991 , 67, 3728-3731 | | 63 |
| 1792 | Hydrogen dynamics in a-Si:H: Multiple trapping, structural relaxation, and the Meyer-Neldel relation. 1991 , 43, 1631-1636 | | 32 |
| 1791 | Kinetics of optically generated defects in hydrogenated amorphous silicon. 1991 , 44, 12748-12753 | | 26 |
| 1790 | Preparation of stable and photoconductive hydrogenated amorphous silicon from a Xe-diluted silane plasma. <i>Applied Physics Letters</i> , 1991 , 58, 2494-2496 | 3-4 | 36 |
| 1789 | Molecular-dynamics simulations of the stability of amorphous silicon. 1991 , 43, 1859-1862 | | 13 |

| | | | |
|------|--|-----|----|
| 1788 | . | | 1 |
| 1787 | Persistent photoconductance in doping-modulated and compensated a-Si:H. 1991 , 44, 5585-5602 | | 18 |
| 1786 | Cavity formation and plastic flow of aSi: H during heavy ion bombardment. 1991 , 6, 2109-2119 | | 8 |
| 1785 | . | | |
| 1784 | . | | |
| 1783 | Multijunction amorphous silicon solar cells. 1991 , 63, 305-313 | | 11 |
| 1782 | Vacuum-ultraviolet-light-induced defects in hydrogenated amorphous silicon films. 1992 , 66, 219-228 | | 8 |
| 1781 | Irradiation-Temperature Dependence of the Light-Induced Effect in a-Si Solar Cells. 1992 , 31, 1267-1271 | | 1 |
| 1780 | Light-Induced Degradation and Recovery of Visible Photoluminescence in Porous Silicon. 1992 , 31, L1577-L1579 | | 5 |
| 1779 | Stable, Metastable and Charged Dangling Bonds in Transient Light-Induced ESR of Undoped a-Si:H. 1992 , 31, 3801-3807 | | 7 |
| 1778 | ¹ H Nuclear Magnetic Resonance Study of Hydrogenated Amorphous Silicon Deposited from a Xe-diluted Silane Plasma. 1992 , 31, 989-994 | | 1 |
| 1777 | Analysis of Light-Induced Degradation in Amorphous Silicon Alloy Solar Cells and Its Application to Accelerated Test Method. 1992 , 31, 168-175 | | 6 |
| 1776 | Structural stability and vibrational properties of hydrogen complexes in silicon. 1992 , 4, 6443-6450 | | 4 |
| 1775 | Amorphous Silicon Electronics. 1992 , 17, 70-76 | | 34 |
| 1774 | Transport properties of nitrogen-doped hydrogenated amorphous germanium films. 1992 , 46, 2119-2125 | | 28 |
| 1773 | Conductance-noise power fluctuations in hydrogenated amorphous silicon. 1992 , 69, 1097-1100 | | 43 |
| 1772 | Temperature and intensity dependence of the saturated density of light-induced defects in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1992 , 60, 1462-1464 | 3-4 | 18 |
| 1771 | Molecular-dynamics simulations of defect formation in hydrogenated amorphous silicon. 1992 , 45, 3332-3339 | | 33 |

| | | | |
|------|--|------|----|
| 1770 | Influence of illumination during thermal quenching and relaxation in undoped amorphous silicon. 1992 , 45, 4524-4527 | | 2 |
| 1769 | Optical bleaching of metastable defects in amorphous silicon. <i>Applied Physics Letters</i> , 1992 , 60, 874-876 | 3-4 | 4 |
| 1768 | Using reverse bias currents to differentiate between bulk degradation and interfacial degradation in hydrogenated amorphous silicon p-i-n structures. <i>Journal of Applied Physics</i> , 1992 , 72, 4483-4485 | 2-5 | 20 |
| 1767 | Double-junction amorphous silicon-based solar cells with 11% stable efficiency. <i>Applied Physics Letters</i> , 1992 , 61, 2917-2919 | 3-4 | 45 |
| 1766 | Observation of stable room-temperature photoconductivity in hydrogenated amorphous silicon following long term light soaking. <i>Applied Physics Letters</i> , 1992 , 60, 1975-1977 | 3-4 | 5 |
| 1765 | Electron drift mobility measurements on annealed and light-soaked hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1992 , 60, 2791-2793 | 3-4 | 12 |
| 1764 | Systematic study of light-induced effects in hydrogenated amorphous silicon. 1992 , 45, 13314-13322 | | 8 |
| 1763 | Annealing of recombination centers in the deposition and light induced high defect amorphous silicon. <i>Applied Physics Letters</i> , 1992 , 61, 2305-2307 | 3-4 | 1 |
| 1762 | Mechanism of light-induced reactivation of acceptors in p-type hydrogenated gallium arsenide. 1992 , 45, 6497-6508 | | 7 |
| 1761 | Decay of photocurrent from the steady state in a-Si:H films. 1992 , 46, 12402-12410 | | 15 |
| 1760 | Posthydrogenation of low-pressure chemical-vapor-deposited amorphous silicon using a novel internal lamp system and its application to thin-film transistor fabrication. <i>Journal of Applied Physics</i> , 1992 , 72, 3150-3154 | 2-5 | 2 |
| 1759 | Atomistic origins of light-induced defects in a-Si. 1992 , 68, 1888-1891 | | 58 |
| 1758 | dc and ac photoconductivities in hydrogenated amorphous germanium. 1992 , 46, 12750-12752 | | 4 |
| 1757 | Effects of annealing on infrared and thermal-effusion spectra of sputtered a-Si:H alloys. <i>Journal of Applied Physics</i> , 1992 , 71, 403-409 | 2-5 | 11 |
| 1756 | Kinetics of light induced metastable defect creation in amorphous silicon: A dispersive excitonic model for the weak bond-dangling bond conversion. <i>Journal of Applied Physics</i> , 1992 , 71, 4196-4200 | 2-5 | 10 |
| 1755 | Reactive ion etch damages in inverted, trilayer thin-film transistor. <i>Applied Physics Letters</i> , 1992 , 61, 2790-2792 | 2-22 | |
| 1754 | Differences between light induced and native midgap states in intrinsic hydrogenated amorphous silicon obtained from detailed modeling of photoconductivities and subband-gap absorption. <i>Applied Physics Letters</i> , 1992 , 61, 678-680 | 3-4 | 27 |
| 1753 | First-principles calculations on adiabatic potential surfaces of hydrogen atoms in polysilane. 1992 , 65, 535-552 | | 7 |

- 1752 Effect of light soaking on the photoconductivity and recombination in hydrogenated amorphous silicon. **1992**, 66, 801-817 12
- 1751 Defect States and Structural Disorder in a-Si.. **1992**, 258, 263
- 1750 Defect Equilibration and Stabilization in Two Types of Low-Spin-Density a-Si:H. **1992**, 258, 325 1
- 1749 The Atomistic and Quantum Mechanical Origins of Light-Induced Defects in a-Si. **1992**, 258, 335 1
- 1748 Potential Role for Charged Dangling Bonds in Transient-Less of Light-Soaked a-Si:H. **1992**, 258, 359 3
- 1747 Light-Induced Effects in a-Si:H Films Fabricated by Intense Light-Flash Assisted Plasma CVD, and Its Application to the Stabilisation of a-Si:H Solar Cells. **1992**, 258, 371
- 1746 Observation of Metastability in Amorphous Silicon Containing 0.1 at.% Hydrogen. **1992**, 258, 389 2
- 1745 Annealing of Metastable Recombination Centers in Hydrogenated Amorphous Silicon. **1992**, 258, 413
- 1744 New Results on Enhanced Deuterium Diffusion Under Illumination in Amorphous Silicon. **1992**, 258, 431 1
- 1743 The Role of Charged Defects in Photo-Degradation of Hydrogenated Amorphous Silicon. **1992**, 258, 449
- 1742 Multi-Cycling of Staebler-Wronski Effect. **1992**, 258, 485
- 1741 Toward the Elimination of Light-Induced Degradation of Amorphous Si by Fluorine Incorporation. **1992**, 258, 491 2
- 1740 Photomking Determination of Mobility and Lifetime in Intrinsic a-Si:H. **1992**, 258, 735 5
- 1739 Non-Gaussian 1 / f Noise and Conductance Fluctuations in Hydrogenated Amorphous Silicon. **1992**, 258, 741
- 1738 Quasi-Fermi Energy and Steady-State Recombination Demarcation Level in a-Si:H. **1992**, 258, 759
- 1737 Loss Peaks in the AC Conductivity of a-Si:H. **1992**, 258, 801
- 1736 Film Morphology, Excess Shunt Current and Stability in Triple-Junction Cells. **1992**, 258, 941 5
- 1735 Charge-Defect Thermodynamic Equilibrium and Metastable Defects in Amorphous Silicon. **1992**, 258, 383

| | | | |
|------|---|-----|-----|
| 1734 | Photodegradation and Stability of a-Si Prepared at High Deposition Rates. 1992 , 258, 45 | | 4 |
| 1733 | Relation Between Defect Density and Conductivity Changes with Light-Soaking and Annealing in a-Si:H. 1992 , 258, 455 | | 10 |
| 1732 | The role of the quasi-Fermi energy in steady-state recombination in hydrogenated amorphous silicon. 1992 , 66, 85-89 | | 1 |
| 1731 | Photoinduced hydrogen loss from porous silicon. <i>Applied Physics Letters</i> , 1992 , 61, 1649-1651 | 3.4 | 114 |
| 1730 | Photoluminescence and laser-irradiation effect of siloxene compound. 1992 , 14, 343-346 | | 2 |
| 1729 | Reversibility of the light-induced saturation and annealing of defects in a-Si: H. 1992 , 13, 279-283 | | 3 |
| 1728 | Microwave detected transient photoconductivity measurements during plasma deposition of intrinsic hydrogenated amorphous silicon. 1992 , 55, 378-386 | | 10 |
| 1727 | Defects and impurities in amorphous semiconductors and in liquid electrolytes. 1992 , 54, 40-46 | | 2 |
| 1726 | AC electrical conductivity of a-Si:H. 1992 , 131, 151-160 | | 4 |
| 1725 | Light-induced defect generation in hydrogenated amorphous silicon under the constant photocurrent conditions. 1992 , 82, 283-286 | | 2 |
| 1724 | Evaluation of amorphous silicon module outdoor performances. <i>Solar Energy Materials and Solar Cells</i> , 1992 , 27, 59-68 | 6.4 | 7 |
| 1723 | Light-induced defects in thermal annealed hydrogenated amorphous silicon. <i>Solar Energy Materials and Solar Cells</i> , 1992 , 28, 49-57 | 6.4 | 1 |
| 1722 | Photoinduced oxynitride formation on semiconductors: NO on Si(111)2 \times 1. 1992 , 56-58, 802-810 | | 4 |
| 1721 | . 1992 , 39, 292-296 | | 37 |
| 1720 | . 1992 , 39, 325-330 | | 4 |
| 1719 | . 1992 , 39, 1350-1354 | | 28 |
| 1718 | Thin film solar cell materials. 1993 , 70-71, 650-659 | | 8 |
| 1717 | The role of substrate temperature and in-chamber annealing in H-Si bonding configurations in sputtered a-Si:H. 1993 , 226, 59-64 | | 12 |

| | | |
|------|---|----|
| 1716 | Enhancement of hydrogen diffusion in a-Si:H through intense illumination. 1993 , 88, 583-585 | 7 |
| 1715 | Photobleaching of paramagnetic defects in hydrogenated amorphous carbon films. 1993 , 86, 489-491 | 1 |
| 1714 | Power-law dependence of persistent photoconductivity on exposure time in compensated a-Si : H. 1993 , 86, 589-592 | 1 |
| 1713 | Metastability in P- and N-type a-Si:H investigated by keV-electron irradiation. 1993 , 85, 753-757 | 4 |
| 1712 | Aging phenomena of light emitting porous silicon. 1993 , 57, 331-339 | 27 |
| 1711 | The Influence of Bias on the Hydrogen Diffusion in an a-Si:H/a-Si Structure. 1993 , 135, K59-K61 | |
| 1710 | Photoelectrical properties of a-Si: H in dependence on growth conditions and degradation. 1993 , 138, 207-215 | 1 |
| 1709 | Light emission properties of porous silicon. 1993 , 35, 1-10 | 22 |
| 1708 | The contribution of ion-beam techniques to the physics and technology of amorphous semiconductors. 1993 , 80-81, 957-965 | 23 |
| 1707 | Adiabatic potentials for weak-bond/dangling-bond conversion model in a-Si:H. 1993 , 152, 237-245 | 1 |
| 1706 | Light-induced effects and stability in a-Si:H and related alloys. 1993 , 164-166, 163-168 | 19 |
| 1705 | Pulsed-ESR study of light-induced metastable defect in a-Si:H. 1993 , 164-166, 169-174 | 63 |
| 1704 | Light-induced states in a-As ₂ Se ₃ : comparison with a-Si:H. 1993 , 164-166, 207-210 | 4 |
| 1703 | Effect of the deposition variables on amorphous silicon stability. 1993 , 164-166, 259-262 | 4 |
| 1702 | Hydrogen diffusion in a-Si:H/a-Si structure under electrical bias. 1993 , 164-166, 305-308 | 1 |
| 1701 | Light and current degradation of a-Si:H pin, nin and pip diodes detected with CPM. 1993 , 164-166, 659-662 | 5 |
| 1700 | Photoinduced ESR in amorphous silicon alloyed with various amounts of nitrogen. 1993 , 164-166, 1065-1068 | 8 |
| 1699 | Tetrahedral amorphous carbon properties and applications. 1993 , 164-166, 1101-1106 | 53 |

| | | | |
|------|--|-----|----|
| 1698 | The high temperature Stöbber-Wronski effects in a-Si _{1-x} N _x :H. 1993 , 163, 297-302 | | 4 |
| 1697 | Computer-simulation methods in the study of noncrystalline materials. 1993 , 260, 635-40 | | 10 |
| 1696 | Observation of quantum confinement effects in strained Si _{0.84} Ge _{0.16} /Si quantum wells at room temperature. <i>Applied Physics Letters</i> , 1993 , 62, 2713-2715 | 3-4 | 7 |
| 1695 | Light Soaking of a-Si:H at 77 K. 1993 , 32, L371-L374 | | 20 |
| 1694 | Oscillation of photoconductivity in hydrogenated amorphous silicon. 1993 , 5, 6965-6970 | | 3 |
| 1693 | Investigation of Persistent Photoconductivity from Compensated Amorphous Hydrogenated Silicon. 1993 , 32, 722-725 | | 4 |
| 1692 | Trial to control hydrogen content in a-Si:H deposited using rare-gas-diluted silane plasmas. 1993 , 2, 23-25 | | 8 |
| 1691 | . | | 1 |
| 1690 | . | | 0 |
| 1689 | Electron-spin-echo envelope-modulation study of the distance between dangling bonds and hydrogen atoms in hydrogenated amorphous silicon. 1993 , 47, 7013-7024 | | 75 |
| 1688 | Correlation of preexisting diamagnetic defect centers with induced paramagnetic defect centers by ultraviolet or vacuum-ultraviolet photons in high-purity silica glasses. 1993 , 48, 15584-15594 | | 46 |
| 1687 | Conductance fluctuations in doped hydrogenated amorphous silicon. 1993 , 47, 12578-12589 | | 57 |
| 1686 | Effects of annealing on hydrogen microstructure in boron-doped and undoped rf-sputter-deposited amorphous silicon. 1993 , 48, 2175-2182 | | 10 |
| 1685 | Annealing kinetics of a-Si:H deposited by concentric-electrode rf glow discharge at room temperature. <i>Journal of Applied Physics</i> , 1993 , 73, 1826-1831 | 2.5 | 6 |
| 1684 | Origin of saturated light-induced defect density in hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1993 , 74, 1838-1843 | 2.5 | 7 |
| 1683 | Evidence for the hydrogen-glass model of metastability annealing in phosphorus-doped amorphous silicon. 1993 , 48, 17114-17120 | | 8 |
| 1682 | Carrier-dependent hydrogen migration in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1993 , 62, 720-722 | 3-4 | 23 |
| 1681 | Demonstration of a new tool for degradation of amorphous hydrogenated silicon and the importance of the Fermi level shift. <i>Applied Physics Letters</i> , 1993 , 62, 1082-1084 | 3-4 | 6 |

| | | | |
|------|---|-----|----|
| 1680 | Determination of drift mobility and lifetime for dominant charge carriers in polycrystalline CuInSe ₂ by photomixing. <i>Applied Physics Letters</i> , 1993 , 63, 2393-2395 | 3-4 | 15 |
| 1679 | Time dependence and optical quenching of photoluminescence in porous silicon. <i>Applied Physics Letters</i> , 1993 , 63, 275-277 | 3-4 | 18 |
| 1678 | Kinetics of recovery of the light-induced defects in hydrogenated amorphous silicon under illumination. <i>Applied Physics Letters</i> , 1993 , 62, 2063-2065 | 3-4 | 39 |
| 1677 | Hydrogen migration and electronic carriers in a-Si:H. 1993 , 47, 10244-10260 | | 27 |
| 1676 | Light-induced changes of the 1/f noise in hydrogenated amorphous silicon. 1993 , 47, 10903-10906 | | 15 |
| 1675 | Hydrogen and deuterium incorporation and release processes in r.f.-sputtered hydrogenated or deuterated amorphous germanium films. 1993 , 67, 691-704 | | 7 |
| 1674 | Stability of hydrogenated amorphous silicon deposited by plasma-enhanced chemical vapour deposition from helium-diluted silane. 1993 , 67, 497-511 | | 19 |
| 1673 | Creation process of thermally induced defects in boron-doped hydrogenated amorphous silicon-carbon films. 1993 , 67, 533-539 | | 1 |
| 1672 | Light Induced Changes in the Non-Gaussian Noise Statistics in Doped Hydrogenated Amorphous Silicon. 1993 , 297, 661 | | |
| 1671 | Electronic Structure and Dynamics of Defect in a-Si:H By AB-Initio Molecular Dynamics. 1993 , 297, 171 | | 1 |
| 1670 | Structural Equilibration in Pure and Hydrogenated Amorphous Silicon. 1993 , 297, 237 | | 6 |
| 1669 | The Effect of Post-Deuteration on Metastability in a-Si:H. 1993 , 297, 261 | | |
| 1668 | Hydrogen Dynamics in a-Si:H. 1993 , 297, 267 | | 1 |
| 1667 | 1 / f Noise Measurements of Interacting Current Filaments in Hydrogenated Amorphous Silicon. 1993 , 297, 309 | | |
| 1666 | Determination of Drift, Extended State Mobility and Recombination Lifetime in Compensated a-Si:H by Photomixing. 1993 , 297, 407 | | 4 |
| 1665 | Effect of Deposition-Induced Annealable Defects on Light- Induced Defect Generation in a-Si:H. 1993 , 297, 565 | | |
| 1664 | Annealing the Defects in a-Si:H Under Illumination. 1993 , 297, 589 | | 1 |
| 1663 | Dependence of a-Si:H Degradation on i-Layer Thickness and Photon Energy. 1993 , 297, 595 | | 1 |

| | | |
|------|---|----|
| 1662 | Role Of Photodegradation on the Product and Microstructure of the a-Si:H Pin Devices. 1993 , 297, 637 | 2 |
| 1661 | Conduction Mechanisms in Crystallized Silicon Films on Molybdenum Substrates. 1993 , 321, 695 | 1 |
| 1660 | Kinetics of Hydrogen Evolution and Crystallization in Hydrogenated Amorphous Silicon Films Studied by Thermal Analysis and Raman Scattering. 1993 , 321, 713 | 1 |
| 1659 | Dependence of Thermally Induced Metastability on Hydrogen Content in Amorphous Silicon. 1993 , 297, 255 | |
| 1658 | Relaxation of Electron Beam-Induced Metastable Defects in a-Si:H. 1993 , 297, 655 | 2 |
| 1657 | The Effect of Mesh Bias and Substrate Bias on the Properties of a-Si:H Deposited by Triode Plasma Chemical Vapour Deposition. 1994 , 33, 5663-5667 | 7 |
| 1656 | Charged and neutral defects in light-soaked a-Si:H. | |
| 1655 | Effect of different TCO interfaces on the performances presented by hydrogenated amorphous silicon p-i-n solar cells. | |
| 1654 | . 1994 , | 10 |
| 1653 | Thermal annealing of light-induced defects in hydrogenated amorphous silicon: Evidence for hole-induced annealing. 1994 , 69, 327-332 | 5 |
| 1652 | Photo-induced creation of metastable defects in a-Si: H at low temperatures and their effect on the photoconductivity. 1994 , 69, 121-139 | 90 |
| 1651 | Monitoring of photodegradation and recovery of a-Si: H p-i-n solar cells by capacitance measurements. 1994 , 49, 724-729 | 2 |
| 1650 | Correlation between light and current induced degradation in a-Si solar cells. 1994 , 30, 1802-1803 | 1 |
| 1649 | Substrate Temperature Dependence of Deuteron Bonding States in Deuterated Amorphous Silicon Studied by ² H Nuclear Magnetic Resonance. 1994 , 33, 5668-5670 | 3 |
| 1648 | Improvement of the Stability of Hydrogenated Amorphous Silicon by Hydrogen Plasma Treatment*. 1994 , 33, 4829-4832 | 2 |
| 1647 | Comparison of Defect Annealing Kinetics of a-Si:H Prepared by Pure Silane and Helium Diluted Silane by Triode Plasma Chemical Vapour Deposition. 1994 , 33, 6475-6480 | 4 |
| 1646 | Amorphous silicon technology: coming of age. | |
| 1645 | Rate equation for metastable defects in hydrogenated amorphous silicon: The form of the light-induced annealing term. 1994 , 49, 1716-1719 | 10 |

| | | | |
|------|---|-----|----|
| 1644 | Charge-defect thermodynamic equilibrium and metastable defects in amorphous silicon. <i>Journal of Applied Physics</i> , 1994 , 76, 768-772 | 2.5 | 13 |
| 1643 | Transferable tight-binding model for Si-H systems. 1994 , 50, 18090-18097 | | 26 |
| 1642 | Light-induced defect densities in hydrogenated and deuterated amorphous silicon deposited at different substrate temperatures. 1994 , 49, 10986-10990 | | 9 |
| 1641 | Metastable-defect generation in hydrogenated amorphous silicon. 1994 , 50, 1551-1556 | | 20 |
| 1640 | Creation of electrically active nanoscale structures in a-Si films with a scanning tunneling microscope: Electronically induced changes in atomic bonding configurations. 1994 , 50, 17172-17179 | | 1 |
| 1639 | Hydrogen diffusion in a-Si:H stimulated by intense illumination. 1994 , 50, 10644-10648 | | 11 |
| 1638 | Reversible photostructural change in oxygen-deficient YBa ₂ Cu ₃ O _y . 1994 , 49, 3655-3658 | | 29 |
| 1637 | Influence of light on individual defect noise in a-Si:H/a-SiN _x :H double barrier structures. <i>Journal of Applied Physics</i> , 1994 , 75, 2690-2694 | 2.5 | 1 |
| 1636 | On the correlation among photodegradation, charged dangling bonds and microstructure in hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1994 , 75, 1396-1400 | 2.5 | 14 |
| 1635 | Trapping effects in a-Si:H investigated by small-signal transient photoconductivity and the steady-state photocarrier-grating technique. 1994 , 49, 13394-13399 | | 19 |
| 1634 | Optimum design and preparation of a-Si/a-Si/a-SiGe triple-junction solar cells. <i>Journal of Applied Physics</i> , 1994 , 75, 588-595 | 2.5 | 16 |
| 1633 | Growth of high quality amorphous silicon films with significantly improved stability. <i>Applied Physics Letters</i> , 1994 , 64, 1862-1864 | 3.4 | 27 |
| 1632 | An alternative degradation method for amorphous hydrogenated silicon: The constant degradation method. <i>Journal of Applied Physics</i> , 1994 , 75, 2507-2515 | 2.5 | 7 |
| 1631 | Charged defect states in intrinsic hydrogenated amorphous silicon films. <i>Journal of Applied Physics</i> , 1994 , 76, 2260-2263 | 2.5 | 44 |
| 1630 | Field electron emission from hydrogenated amorphous silicon films on tungsten: Light-induced effects. <i>Applied Physics Letters</i> , 1994 , 64, 3437-3439 | 3.4 | 2 |
| 1629 | Amorphous semiconductors: deposition chemistry and bonding. 1994 , 241, 318-323 | | 2 |
| 1628 | Hydrogenated amorphous silicon: Hydrogen content, bonding configurations and morphology in sputter-deposited, in-chamber annealed thin films. 1994 , 251, 30-35 | | 16 |
| 1627 | Fabrication of stable hydrogenated amorphous silicon from SiH ₂ Cl ₂ by ECR-hydrogen-plasma. <i>Solar Energy Materials and Solar Cells</i> , 1994 , 34, 517-523 | 6.4 | 4 |

| | | | |
|------|---|-----|----|
| 1626 | Excimer-laser-assisted RF glow-discharge deposition of amorphous and microcrystalline silicon thin films. 1994 , 58, 507-512 | | 4 |
| 1625 | Effect of charge on bond strength in hydrogenated amorphous silicon. 1994 , 15, 644-652 | | 16 |
| 1624 | The influence of the microstructure on the thermal stability of a-Si _{1-x} N _x :H films. 1994 , 193, 195-200 | | 8 |
| 1623 | Current-induced degradation method for stabilization of a-Si solar cell. <i>Solar Energy Materials and Solar Cells</i> , 1994 , 34, 465-472 | 6.4 | 1 |
| 1622 | Light-induced defect kinetics in a-Si:H photovoltaic cells according to a non-dispersive carrier recombination model. <i>Solar Energy Materials and Solar Cells</i> , 1994 , 31, 525-533 | 6.4 | |
| 1621 | Effect of hydrogen dilution in silane on light induced degradation of hydrogenated amorphous silicon films for solar photovoltaic applications. <i>Solar Energy Materials and Solar Cells</i> , 1994 , 32, 21-28 | 6.4 | 4 |
| 1620 | Conditions for successful low-temperature growth of hydrogenated amorphous silicon film from silyl radicals conformed to layer-growth mode. 1994 , 79-80, 310-315 | | |
| 1619 | Phenomenological model for equilibrium and metastable defects in undoped hydrogenated amorphous silicon. 1994 , 89, 239-243 | | 7 |
| 1618 | Polycrystalline silicon thin-film solar cells: The future for photovoltaics?. <i>Progress in Photovoltaics: Research and Applications</i> , 1994 , 2, 153-162 | 6.8 | 29 |
| 1617 | A systematic investigation of the role of material parameters in metastability of hydrogenated amorphous silicon. 1994 , 170, 278-286 | | 15 |
| 1616 | Optical non-linearities and defect generation in a-Si:H thin films. 1994 , 176, 247-252 | | 4 |
| 1615 | Current induced drift mechanism in amorphous SiN _x :H thin film diodes. <i>Applied Physics Letters</i> , 1994 , 65, 2978-2980 | 3.4 | 43 |
| 1614 | High-efficiency a-Si/c-Si heterojunction solar cell. | | 29 |
| 1613 | . | | 1 |
| 1612 | Recovery Process for Light-Soaked A-Si:H. 1994 , 336, 269 | | 16 |
| 1611 | AD-Layer for Spatial Control of Light Induced Degradation on Pin Devices. 1994 , 336, 741 | | |
| 1610 | The Staebler-Wronski Effect and the Thermal Equilibration of Defect and Carrier Concentrations. 1994 , 336, 251 | | 1 |
| 1609 | Metastable Defect Kinetics in Hydrogen Passivated Polycrystalline Silicon. 1994 , 336, 257 | | |

| | | |
|------|--|--------|
| 1608 | New Model for Local H-Atom Bonding Re-Arrangements Associated with the Staebler-Wronski Effect in a-Si:H and a-Si:H-Based Alloys. 1994 , 336, 275 | 2 |
| 1607 | Charged Defect State Distributions Obtained from the Analysis of Photoconductivities in Intrinsic a-Si:H Films. 1994 , 336, 413 | 6 |
| 1606 | Electronic and Optical Properties of a-Si:H Films Alloyed with Sulfur. 1994 , 336, 559 | 11 |
| 1605 | Improvement of film Quality of A-Si:H Deposited by Photo-CVD using SiH ₂ Cl ₂ . 1994 , 336, 91 | 13 |
| 1604 | Back reflector texture and stability issues in high efficiency multijunction amorphous silicon alloy solar cells. | 2 |
| 1603 | Time-domain measurements of spin relaxation processes of dangling-bond defects in hydrogenated amorphous silicon. 1994 , 69, 263-275 | 20 |
| 1602 | Light-induced changes of the non-Gaussian 1/f noise statistics in doped hydrogenated amorphous silicon. 1994 , 69, 595-608 | 36 |
| 1601 | Defect creation in hydrogenated amorphous silicon films induced by vacuum ultraviolet light from synchrotron and undulator radiation. 1994 , 70, 133-139 | 2 |
| 1600 | Induced defects in a-Si:H and a-Ge:H calculated by molecular orbital theory. | |
| 1599 | Collective phonon interaction and annealing of metastable defects in amorphous semiconductors. 1994 , 70, 1003-1015 | 10 |
| 1598 | Nuclear magnetic resonance studies on hydrogenated amorphous silicon prepared by very high-frequency glow discharge. 1994 , 69, 169-176 | 1 |
| 1597 | The Future of Amorphous Silicon Photovoltaic Technology. <i>Progress in Photovoltaics: Research and Applications</i> , 1995 , 3, 315-332 | 6.8 18 |
| 1596 | Dangling-Bond Relaxation and Metastability in P-Type Hydrogenated Amorphous Silicon. 1995 , 377, 227 | |
| 1595 | Origin of Photodegradation in a-Si:H - Bond Breaking or Charge Trapping?. 1995 , 377, 239 | |
| 1594 | Light-Induced Metastable Changes in a-Si _x H. 1995 , 377, 307 | 6 |
| 1593 | Carrier-Induced Changes in The Gap States of Undoped a-Si:H Films. 1995 , 377, 379 | |
| 1592 | Telegraph Noise as A Probe of Microscopic Hydrogen Motion in Amorphous Silicon. 1995 , 377, 401 | 2 |
| 1591 | Fabrication of Boron Compensated Hydrogenated Amorphous Silicon Films with Significantly Improved Stability Using Plasma Enhanced Chemical Vapor Deposition Technique. 1995 , 377, 45 | |

| | | | |
|------|---|-----|-----|
| 1590 | Dopant Activation in Boron-Doped a-Si:H and a-SiC:H by Thermal Annealing and Light-Soaking. 1995 , 377, 541 | | 1 |
| 1589 | Analysis of Non-Uniform Creation of Light-Induced Defects in Schottky Barrier Solar Cell Structures. 1995 , 377, 687 | | |
| 1588 | Pulsed-Light-Induced Metastable Defect Creation in Hydrogenated Amorphous Silicon. 1995 , 377, 373 | | 3 |
| 1587 | . 1995 , 42, 1763-1768 | | 28 |
| 1586 | Hydrogenated amorphous silicon films deposited at high growth rates by the cathode heating technique: properties and light induced degradation. <i>Solar Energy Materials and Solar Cells</i> , 1995 , 36, 65-80 | 6.4 | 3 |
| 1585 | Seasonal variations in amorphous silicon solar module outputs and thin film characteristics. <i>Solar Energy Materials and Solar Cells</i> , 1995 , 36, 29-43 | 6.4 | 52 |
| 1584 | Thin-film silicon solar cells: A review and selected trends. <i>Solar Energy Materials and Solar Cells</i> , 1995 , 38, 501-520 | 6.4 | 83 |
| 1583 | Prism coupling in DMOP-PPV optical waveguides. 1995 , 114, 247-254 | | 22 |
| 1582 | Long-term degradation tests of amorphous silicon solar cells: Correlation between light- and current-induced degradation characteristics. 1995 , 35, 183-187 | | 4 |
| 1581 | Photo-induced structural changes associated with the Staebler-Wronski effect in hydrogenated amorphous silicon. 1995 , 94, 953-955 | | 101 |
| 1580 | Optical activation of inefficient sulfur dopants in hydrogenated amorphous silicon: A new metastable effect. 1995 , 95, 361-364 | | 16 |
| 1579 | Thermodynamics and kinetics of hydrogen evolution in hydrogenated amorphous silicon films. 1995 , 24, 1451-1459 | | 11 |
| 1578 | Electronic structure of amorphous semiconductors. 1995 , 18, 669-678 | | 8 |
| 1577 | Electrochemical insertion into and the detection of hydrogen in amorphous silicon solid electrolytes. 1995 , 1, 141-146 | | 1 |
| 1576 | Thin-film solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 1995 , 3, 3-24 | 6.8 | 43 |
| 1575 | Chemistry of Amorphous Silicon Deposition Processes: Fundamentals and Controversial Aspects. 1995 , 1-62 | | 9 |
| 1574 | POLYCRYSTALLINE AND AMORPHOUS SOLAR CELLS. 1995 , 339-362 | | |
| 1573 | Molecular-dynamics study of defect formation in a-Si:H. 1995 , 51, 1671-1679 | | 9 |

| | | | |
|------|--|-----|----|
| 1572 | Hydrogen rebonding and defect formation in a-Si:H. 1995 , 52, 10705-10708 | | 19 |
| 1571 | Annealing-induced effects on the stability of hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1995 , 78, 5959-5964 | 2.5 | 6 |
| 1570 | Electrical properties and degradation kinetics of compensated hydrogenated microcrystalline silicon deposited by very high-frequency-glow discharge. <i>Journal of Applied Physics</i> , 1995 , 77, 712-716 | 2.5 | 53 |
| 1569 | Energies and structural properties of hydrogen and related defects in molecular-dynamics-modeled a-Si:H. 1995 , 52, 1729-1737 | | 9 |
| 1568 | Model for the leakage instability in unprogrammed amorphous silicon antifuse devices. 1995 , | | 2 |
| 1567 | Polysilicon films of high photoresponse, obtained by vacuum annealing of aluminum capped hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1995 , 78, 7304-7312 | 2.5 | 4 |
| 1566 | Influence of light soaking on surface- and bulk-spin densities in hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1995 , 78, 1230-1234 | 2.5 | 10 |
| 1565 | Comprehensive numerical simulation of defect density and temperature-dependent transport properties in hydrogenated amorphous silicon. 1995 , 52, 14586-14597 | | 29 |
| 1564 | Substrate temperature effect on the stability of hydrogenated amorphous silicon films deposited at high rates. <i>Journal of Applied Physics</i> , 1995 , 78, 317-320 | 2.5 | 5 |
| 1563 | Analysis of the moving-photocurrent-grating technique for the determination of mobility and lifetime of photocarriers in semiconductors. 1995 , 51, 10579-10590 | | 42 |
| 1562 | Evidence for Light-Induced Increase of Si-H Bonds in Undoped a-Si:H. 1995 , 74, 558-561 | | 83 |
| 1561 | Optimization of a-SiGe:H Alloy Composition for Stable Solar Cells. 1995 , 34, 1741-1747 | | 42 |
| 1560 | Influence of Light-Soaking Temperature on the Distribution of Thermal-Annealing Activation Energies for Photocreated Dangling Bonds in Hydrogenated Amorphous Silicon. 1995 , 34, 5933 | | |
| 1559 | Fabrication of Highly Stable and Low Defect Density Amorphous Silicon Films at Low Substrate Temperature by Plasma Chemical Vapor Deposition Assisted with Piezoelectric Vibration. 1995 , 34, L97-L100 | | 2 |
| 1558 | Dark and Photoconductivity Behaviors of Amorphous and Crystalline C_{60} Films. 1995 , 34, 1958-1962 | | 16 |
| 1557 | Observation by infrared transmission spectroscopy and infrared ellipsometry of a new hydrogen bond during light-soaking of a-Si:H. 1995 , 72, 363-372 | | 36 |
| 1556 | Photo-induced changes of thermally stimulated conductivity spectra in undoped hydrogenated amorphous silicon. 1995 , 181, 116-122 | | |
| 1555 | Connection between dangling-bond relaxation and metastability in p-type hydrogenated amorphous silicon. 1995 , 190, 133-141 | | 6 |

| | | | |
|------|---|-----|----|
| 1554 | Long-range structural relaxation in the Staebler-Wronski effect. 1995 , 190, 151-156 | | 42 |
| 1553 | The structure of light-induced metastable defects in a-Si:H. 1995 , 190, 180-184 | | 14 |
| 1552 | The medium-range structure of amorphous hydrogenated silicon. 1995 , 192-193, 140-144 | | 2 |
| 1551 | The effect of light-soaking on the dc conductivity of a-Si:H. 1995 , 22, 271-274 | | 4 |
| 1550 | Gap states, doping and bonding in tetrahedral amorphous carbon. 1995 , 4, 637-640 | | 37 |
| 1549 | Dark current-voltage characteristics of transverse asymmetric hydrogenated amorphous silicon diodes. <i>Journal of Applied Physics</i> , 1995 , 78, 3481-3487 | 2.5 | 23 |
| 1548 | . 1995 , 4, 102-108 | | 88 |
| 1547 | Recombination and metastability in amorphous silicon p-i-n solar cells made with and without hydrogen dilution studied by electroluminescence. <i>Journal of Applied Physics</i> , 1996 , 80, 2475-2482 | 2.5 | 18 |
| 1546 | Hydrogen in silicon. 1996 , 198-200, 1-10 | | 36 |
| 1545 | The relationship between hydrogen and electronic defects in amorphous silicon. 1996 , 198-200, 295-299 | | 3 |
| 1544 | Mechanism of Staebler-Wronski effect: Negative effective-U and positive effective-U nature of the bistable dangling-bonds in a-Si, a-Si:H and c-Si by ab initio molecular-dynamics simulation. 1996 , 198-200, 347-350 | | 10 |
| 1543 | Stability of the mobility-lifetime product of holes in undoped a-Si:H under illumination. 1996 , 198-200, 423-427 | | 8 |
| 1542 | What causes the inverse Staebler-Wronski effect in p-type a-Si:H?. 1996 , 198-200, 453-457 | | 7 |
| 1541 | Comparative study of light-induced photoconductivity decay in hydrogenated amorphous silicon. 1996 , 198-200, 466-469 | | 2 |
| 1540 | Non-monotone kinetics of persistent photoconductivity in compensated a-Si:H films. 1996 , 198-200, 470-473 | | 3 |
| 1539 | Photo-induced structural change in amorphous organic polysilanes: comparison with hydrogenated amorphous silicon. 1996 , 198-200, 653-656 | | 7 |
| 1538 | Characteristics of the hot-wire CVD reactor on a-Si:H deposition. 1996 , 198-200, 1054-1057 | | 11 |
| 1537 | Material and device consideration for high efficiency a-Si alloy-based multijunction cells. 1996 , 198-200, 1076-1080 | | 12 |

| | | |
|------|--|----|
| 1536 | Electric field concentration at electrode edge with decreasing amorphous silicon defect density. 1996 , 198-200, 326-329 | 1 |
| 1535 | Comparison of thermal and light induced metastabilities in lithium doped a-Si:H. 1996 , 201, 163-166 | 10 |
| 1534 | Effect of light soaking on a-Si:H solar cells under reverse biased annealing treatment. 1996 , 204, 92-94 | 1 |
| 1533 | Progress in amorphous silicon based large-area multijunction modules. 1996 , | 2 |
| 1532 | Investigation of a-Si:H p-i-n Solar Cell Degradation. 1996 , 420, 221 | |
| 1531 | Photocreated Defects and Light-Induced ESR in a-Si:H and Related Alloy Films. 1996 , 420, 553 | 10 |
| 1530 | Effect Of EDoped Compensated Material on Stability of a-Si:H Solar Cells. 1996 , 420, 27 | 1 |
| 1529 | Light-induced Stability of Layered Amorphous Hydrogenated Silicon Grown with Alternating Substrate Temperature. 1996 , 420, 387 | |
| 1528 | Pulsed ESR Study of Light-Induced Metastable Defects in 17O and 13C Incorporated a-Si:H. 1996 , 420, 587 | 5 |
| 1527 | Hydrogen Distribution in High Stability a-Si:H Prepared by the Hot Wire Technique. 1996 , 420, 485 | 4 |
| 1526 | Nonlinear Dependence of η on Subgap Absorption in Pulse and Cw Light-Soaked a-Si:H. 1996 , 420, 575 | 4 |
| 1525 | Photoluminescence in Hydrogenated Amorphous Silicon with Sulfur. 1996 , 420, 605 | 2 |
| 1524 | Relaxation Measurements of the Persistent Photoconductivity in Sulfur-Doped a-Si:H. 1996 , 420, 611 | 1 |
| 1523 | Particle - Induced and Photo - Conductivities in Amorphous Si:H Under Proton Irradiation. 1996 , 439, 679 | 5 |
| 1522 | Mechanism of Defect Reactions in Semiconductors. 1996 , 442, 225 | 4 |
| 1521 | Microstructure of Thin Film Photoconductors and its Correlation with Optical and Electronic Properties. 1996 , 452, 925 | |
| 1520 | Fabrication of Polycrystalline Si Thin Film for Solar Cells. 1996 , 452, 965 | 3 |
| 1519 | Photoelectric properties and photoinduced changes in ann-GaAs-glass-metal structure. 1996 , 39, 706-711 | |

| | | | |
|------|---|-----|----|
| 1518 | Amorphous silicon as hydrogen glass. 1996 , 19, 39-50 | | 8 |
| 1517 | Photostimulated mesoscopic current fluctuations in a-Si based microstructures. 1996 , 64, 724-728 | | |
| 1516 | Electrical breakdown of amorphous hydrogenated silicon rich silicon nitride thin film diodes. 1996 , 43, 1592-1601 | | 6 |
| 1515 | Dispersive hydrogen diffusion in an illuminated undoped a-Si:H film as a function of annealing temperature. 1996 , 97, 109-114 | | 1 |
| 1514 | Photocurrent enhancement in light-soaked As ₂ S ₃ glass. 1996 , 97, 623-626 | | 10 |
| 1513 | Defect generation by hole injection in hydrogenated amorphous silicon. 1996 , 100, 377-380 | | |
| 1512 | Comparative study of properties of a-Si:H films produced by hot-filament CVD, glow discharge CVD and their hybrid version. 1996 , 283, 49-56 | | 7 |
| 1511 | Conductivity effects in hydrogenated amorphous silicon induced by gamma-ray irradiation. 1996 , 31, 107-109 | | |
| 1510 | Recent progress of amorphous silicon solar cell applications and systems. <i>Renewable Energy</i> , 1996 , 8, 390-395 | 8.1 | 6 |
| 1509 | Thin film photovoltaics. 1996 , 92, 606-616 | | 78 |
| 1508 | An infrared study of Si _n H cluster formation in a-Si:H thin films. 1996 , 37, 533-537 | | 6 |
| 1507 | Substrate temperature dependent photoelectrical and structural properties of a-Si:H deposited by hydrogen assisted chemical vapour deposition. 1996 , 288, 337-345 | | 4 |
| 1506 | Studies of photodegradation in hydrogenated amorphous silicon. 1996 , 288, 76-82 | | 13 |
| 1505 | Structural and electrical properties of low temperature polycrystalline silicon deposited using SiF ₄ ?SiH ₄ ?H ₂ . 1996 , 289, 227-233 | | 20 |
| 1504 | Recent developments in amorphous silicon-based solar cells. 1996 , 194, 41-53 | | 34 |
| 1503 | Solar cells from carbon. <i>Solar Energy Materials and Solar Cells</i> , 1996 , 44, 485-491 | 6.4 | 20 |
| 1502 | Structure of a-Si:H from Harris-functional molecular dynamics. 1996 , 53, 16265-16271 | | 24 |
| 1501 | Changes of the occupied density of defect states of a-Si:H upon illumination. 1996 , 53, 4522-4533 | | 2 |

| | | | |
|------|---|-----|----|
| 1500 | Amorphous silicon alloy solar cells and modules-opportunities and challenges. 1996, | | 7 |
| 1499 | Investigation of the spatial distribution of dangling bonds in light-soaked hydrogenated amorphous silicon. 1996, 53, 7267-7274 | | 12 |
| 1498 | Role of SiH ₃ bonding in a-Si:H metastability. <i>Journal of Applied Physics</i> , 1996, 80, 97-102 | 2.5 | 27 |
| 1497 | Improvement of the stability of hydrogenated amorphous silicon films by intermittent illumination treatment at elevated temperature. <i>Journal of Applied Physics</i> , 1996, 80, 3607-3609 | 2.5 | 2 |
| 1496 | Improved hydrogen depth profiles with in-chamber annealing of hydrogenated amorphous silicon thin films. <i>Journal of Applied Physics</i> , 1996, 79, 175-178 | 2.5 | 2 |
| 1495 | The Staebler-Wronski effect and the thermal equilibration of defect and free carrier concentrations. <i>Journal of Applied Physics</i> , 1996, 79, 3075-3081 | 2.5 | 3 |
| 1494 | Observation of time-varying photoconductivity and persistent photoconductivity in porous silicon. <i>Journal of Applied Physics</i> , 1996, 79, 1027 | 2.5 | 18 |
| 1493 | Continuous decay of drift mobility in intrinsic a-Si:H and a-SiC:H upon light soaking investigated by the photomixing technique. <i>Journal of Applied Physics</i> , 1996, 79, 850 | 2.5 | 15 |
| 1492 | Effect of deposition temperature on the structural and electrical properties of laser-crystallized hydrogenated amorphous silicon films. <i>Journal of Applied Physics</i> , 1996, 79, 1569-1577 | 2.5 | 5 |
| 1491 | Commercialization of multijunction amorphous silicon modules. 1996, | | 5 |
| 1490 | The Effect of Hydrogen Dilution Near the P/I Interface Region of A-Si:H P-I-N Solar Cells. 1996, 420, 63 | | 1 |
| 1489 | Analysis of LIPS III satellite a-Si:H alloy solar cell data. 1996, | | 2 |
| 1488 | Influence of Hydrogen Content and Si-H Bond Structure on Photocreated Dangling Bonds in Hydrogenated Amorphous Silicon Films. 1996, 35, 4409-4412 | | 6 |
| 1487 | Effect of the i-Layer Optical Gap on the Light-Induced Degradation of a-SiGe Solar Cells. 1996, 35, 5612-5617 | | 6 |
| 1486 | Contribution of Floating Bonds to Photocreation of Defects in a-Si:H. 1996, 35, L816-L817 | | 11 |
| 1485 | Electroluminescence from Deuterium Terminated Porous Silicon. 1997, 36, L1089-L1091 | | 6 |
| 1484 | Excimer Laser Induced Crystallization of Polycrystalline Silicon Films by Adding Oxygen. 1997, 36, 1473-1476 | | 2 |
| 1483 | Reversible Photo-Induced Structural Change in Hydrogenated Amorphous Silicon. 1997, 36, 29-32 | | 21 |

1482 Defect Creation in a-Si:H Thin Film Transistors by Bias-Stress. **1997**, 36, L536-L539

1481 Long-Term Performance Modelling of Amorphous Silicon Photovoltaic Module. **1997**, 36, 629-632 12

1480 Experimental evidence for negative correlation energy and valence alternation in amorphous selenium. **1997**, 56, R485-R488 34

1479 Time-varying phenomena in the photoelectric properties of porous silicon. *Journal of Applied Physics*, **1997**, 81, 6978-6985 2.5 7

1478 Technical evaluation of four amorphous silicon systems at NREL. 3

1477 Photodilatation Effect of Undoped a-Si:H Films. **1997**, 79, 4210-4213 11

1476 Hump-shaped internal collection efficiency of degraded a-Si:H p-i-n solar cells. *Journal of Applied Physics*, **1997**, 82, 878-882 2.5 0

1475 Light-induced defects in hydrogenated amorphous silicon studied by the constant-photocurrent method. **1997**, 55, 9621-9627 14

1474 UV-irradiation and thermal-annealing studies in amorphous hydrogenated boron nitride thin films. **1997**, 56, 994-996

1473 Electronic transport and metastabilities in P-doped a-Si:H. *Journal of Applied Physics*, **1997**, 81, 3214-3219.5 16

1472 Low-temperature admittance measurement in thin film amorphous silicon structures. *Journal of Applied Physics*, **1997**, 82, 733-741 2.5 17

1471 A possible mechanism for improved light-induced degradation in deuterated amorphous-silicon alloy. *Applied Physics Letters*, **1997**, 71, 1498-1500 3.4 39

1470 Weakly non-Gaussian processes in a-Si:H conductance noise. **1997**, 55, 7005-7013 17

1469 Stable amorphous-silicon thin-film transistors. *Applied Physics Letters*, **1997**, 70, 2681-2683 3.4 57

1468 Differences in the densities of charged defect states and kinetics of Staebler-Wronski effect in undoped (nonintrinsic) hydrogenated amorphous silicon thin films. *Journal of Applied Physics*, **1997**, 81, 3526-3536 2.5 38

1467 Can the Staebler-Wronski effect account for the long-term performance of a-Si PV arrays?. **1997**, 2

1466 Nitrogen-doping effects on electrical, optical, and structural properties in hydrogenated amorphous silicon. *Journal of Applied Physics*, **1997**, 81, 6729-6737 2.5 13

1465 Microscopic Aspects of the Staebler-Wronski Effect. **1997**, 467, 37 21

| | | |
|------|---|-------|
| 1464 | Deconvolution of ESR Spectra and Their Light-Induced Effect in a-Si:H. 1997 , 66, 1730-1740 | 17 |
| 1463 | Correlation of Stress with Photo-Degradation in Hydrogenated Amorphous Silicon Prepared by Hot-Wire CVD. 1997 , 505, 445 | 9 |
| 1462 | Growth Mechanism of Hydrogen Clusters. 1997 , 467, 153 | 1 |
| 1461 | An NMR Investigation of H Cluster Configurations in A-Si:H. 1997 , 467, 159 | 2 |
| 1460 | Search for Explaining the Staebler-Wronski Effect. 1997 , 467, 19 | 53 |
| 1459 | Optically Induced Conductivity Changes in Amorphous Silicon: A Historical Perspective. 1997 , 467, 3 | 3 |
| 1458 | Real-Time ESR Observation during Film Growth of a-Si:H. 1997 , 467, 507 | 2 |
| 1457 | Polarized Electroabsorption in Pulse and Continuous Light-Soaked a-Si:H - Structural Change other than Defect Creation. 1997 , 467, 61 | 8 |
| 1456 | The Light Induced Changes in A-Si: H Materials and Solar Cells-Where We are Now. 1997 , 467, 7 | 21 |
| 1455 | Persistent Photoconductivity, the Staebler-Wronski Effect, and Long-Range Disorder in a-Si:H. 1997 , 467, 73 | 1 |
| 1454 | The Effects of Hydrogen Dilution on VOC in a-Si:H Pin Solar Cells. 1997 , 467, 753 | |
| 1453 | Energy Dependence of Defects in a-Si:H Solar Cells During Degradation and Annealing Processes. 1997 , 467, 783 | 1 |
| 1452 | On the Compensation Mechanism of Amorphous Silicon Films: Study of Stability. 1997 , 467, 91 | 3 |
| 1451 | Light Induced Effects in A-Si:H Films Alloyed with Sulfur. 1997 , 467, 97 | 3 |
| 1450 | Radiation Damage of Amorphous and Microcrystalline Silicon Image Sensor Structure. 1997 , 487, 381 | |
| 1449 | Recent progress in amorphous silicon alloy leading to 13% stable cell efficiency. | 3 |
| 1448 | Electron-trapping-triggered anneal of defect states in silicon-rich hydrogenated amorphous silicon nitride. <i>Journal of Applied Physics</i> , 1997 , 82, 281-285 | 2.5 4 |
| 1447 | Chapter 4 Ion Beams in Amorphous Semiconductor Research. 1997 , 45, 85-127 | |

| | | | |
|------|---|-----|-----|
| 1446 | The reversal of light-induced degradation in amorphous silicon solar cells by an electric field. <i>Applied Physics Letters</i> , 1997 , 70, 2168-2170 | 3.4 | 23 |
| 1445 | Silicon network relaxation in amorphous hydrogenated silicon. 1997 , 56, R12710-R12713 | | 64 |
| 1444 | Saturation of the metastable defect density in amorphous silicon semiconductor. 1997 , 209, 193-199 | | 1 |
| 1443 | A study of the effects of annealing and outgassing on hydrogenated amorphous silicon. 1997 , 310, 156-160 | | 9 |
| 1442 | Recent progress in a-Si solar cells. 1997 , 113-114, 734-740 | | 6 |
| 1441 | Outdoor performance of amorphous silicon and polycrystalline silicon PV modules. <i>Solar Energy Materials and Solar Cells</i> , 1997 , 46, 209-218 | 6.4 | 92 |
| 1440 | Comparative study of defect states in light-soaked and high-temperature-annealed a-Si:H. <i>Solar Energy Materials and Solar Cells</i> , 1997 , 49, 75-80 | 6.4 | |
| 1439 | The source-gated amorphous silicon photo-transistor. 1997 , 44, 1789-1794 | | 18 |
| 1438 | Pre-exponential factor in semiconducting chalcogenide glasses. 1997 , 17, 233-235 | | 36 |
| 1437 | Metastable defects in hydrogenated amorphous silicon. 1997 , 20, 379-384 | | 1 |
| 1436 | Dependence of amorphous silicon solar cell performances on the lateral drift current. <i>Solar Energy Materials and Solar Cells</i> , 1997 , 45, 1-15 | 6.4 | 4 |
| 1435 | Optical modelling of a single-junction p-i-n type and tandem structure amorphous silicon solar cells with perfect current matching. <i>Solar Energy Materials and Solar Cells</i> , 1997 , 46, 271-288 | 6.4 | 5 |
| 1434 | Changes of infrared absorption by light soaking and thermal quenching in a-Si : H. <i>Solar Energy Materials and Solar Cells</i> , 1997 , 49, 13-18 | 6.4 | 8 |
| 1433 | Photovoltaics: A review of cell and module technologies. 1997 , 1, 71-170 | | 129 |
| 1432 | Micro strip gas chambers overcoated with carbon, hydrogenated amorphous silicon, and glass films. 1997 , 400, 233-242 | | 1 |
| 1431 | Estimation of the degradation of amorphous silicon solar cells. 1997 , 37, 549-554 | | 8 |
| 1430 | Determination of the bulk density of states in a-Si:H by steady-state SCLC. 1997 , 41, 81-86 | | 10 |
| 1429 | Relaxation of light-induced metastable state of boron-doped p-type a-Si:H. 1998 , 32, 105-108 | | |

| | | | |
|------|---|-----|-----|
| 1428 | Staebler-Wronski effect as a function of the Fermi level position and structure of nondoped, amorphous, hydrated silicon. 1998 , 32, 434-438 | | |
| 1427 | Long-term structural relaxation and photoinduced degradation in a-Si: H. 1998 , 32, 1128-1130 | | |
| 1426 | Interelectrode separation effects on a-SiGe:H films prepared by plasma chemical vapor deposition. 1998 , 322, 1-5 | | 1 |
| 1425 | Improved equivalent circuit and analytical model for amorphous silicon solar cells and modules. 1998 , 45, 423-429 | | 173 |
| 1424 | Advances in amorphous silicon alloy technology—the achievement of high-efficiency multijunction solar cells and modules. <i>Progress in Photovoltaics: Research and Applications</i> , 1998 , 6, 181-186 | 6.8 | 10 |
| 1423 | Terrestrial applications of amorphous silicon solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 1998 , 6, 207-217 | 6.8 | 4 |
| 1422 | XPS investigation of a-Si:H thin films after light soaking. 1998 , 80, 455-459 | | 6 |
| 1421 | Radiation resistance of amorphous silicon in optoelectric properties under proton bombardment. 1998 , 258-263, 1908-1913 | | 18 |
| 1420 | Effect of sulfur doping on electrical conductivity of a-Si:H. 1998 , 312, 170-175 | | 8 |
| 1419 | Hydrogen collision model of light-induced metastability in hydrogenated amorphous silicon. 1998 , 105, 387-391 | | 78 |
| 1418 | Light and thermally induced effects in porous silicon layers. 1998 , 107, 43-46 | | 9 |
| 1417 | Outdoor exposure tests of photovoltaic modules in Japan and overseas. <i>Renewable Energy</i> , 1998 , 14, 95-100 | 8.1 | 22 |
| 1416 | Tight-binding molecular-dynamics studies of defects and disorder in covalently bonded materials. 1998 , 12, 210-241 | | 23 |
| 1415 | Relation between photocreated and thermally-quenched defects in a-Si:H. 1998 , 227-230, 292-295 | | |
| 1414 | Anomalous relaxation of light-induced states of a-Si:H. 1998 , 227-230, 306-310 | | 3 |
| 1413 | New experimental facts on the Staebler-Wronski effect. 1998 , 227-230, 316-319 | | 10 |
| 1412 | Light-induced recombination centers in hydrogenated amorphous silicon-sulfur alloys. 1998 , 227-230, 324-327 | | 2 |
| 1411 | Electrically detected magnetic resonance of a-Si:H at low magnetic fields: the influence of hydrogen on the dangling bond resonance. 1998 , 227-230, 343-347 | | 38 |

| | | |
|------|---|--------|
| 1410 | Properties of amorphous carbon films characterized by laser desorption time of flight mass spectroscopy. 1998 , 227-230, 632-635 | 1 |
| 1409 | Photoinduced structural change and defect creation in hydrogenated amorphous silicon. 1998 , 227-230, 267-271 | 13 |
| 1408 | Relaxation of thermally induced defects in LPCVD amorphous silicon. 1998 , 227-230, 328-331 | 2 |
| 1407 | Reaction pathways for intrinsic and extrinsic defect metastability in light-soaked hydrogenated amorphous silicon—the Staebler-Wronski effect. 1998 , 227-230, 281-286 | 4 |
| 1406 | Mobility fluctuations in hydrogenated amorphous silicon associated with deep defects. 1998 , 227-230, 172-175 | 2 |
| 1405 | Inverted Staebler-Wronski effect in nanocrystalline silicon. 1998 , 227-230, 320-323 | 7 |
| 1404 | Defect formation mechanism during plasma enhanced chemical vapor deposition of undoped a-Si:H. 1998 , 227-230, 43-47 | 2 |
| 1403 | Non-bonded hydrogen in a-Si:H. 1998 , 227-230, 124-127 | 34 |
| 1402 | Metastability studies in silicon thin films: from short range ordered to medium and long range ordered materials. 1998 , 227-230, 276-280 | 28 |
| 1401 | Light soaking in thermally quenched hydrogenated amorphous silicon. 1998 , 227-230, 296-300 | |
| 1400 | Light induced phenomena in microcrystalline silicon. 1998 , 227-230, 1031-1035 | 23 |
| 1399 | Metastability effect in solar blind UV amorphous silicon carbide photodetector. 1998 , 227-230, 1316-1320 | 9 |
| 1398 | Amorphous silicon X-ray detectors. 1998 , 227-230, 1300-1305 | 18 |
| 1397 | Stable photoconductivity in metastable a-Si:H under high-energy proton irradiation. 1998 , 227-230, 238-242 | 15 |
| 1396 | Optical modelling of tandem structure amorphous silicon solar cells. 1998 , 231, 120-124 | 4 |
| 1395 | Study of the stability of hydrogenated amorphous silicon using tight-binding molecular dynamics. 1998 , 240, 29-34 | 11 |
| 1394 | Study of microstructure of high stability hydrogenated amorphous silicon films by Raman scattering and infrared absorption spectroscopy. <i>Applied Physics Letters</i> , 1998 , 73, 336-338 | 3-4 28 |
| 1393 | The improved stability of deuterated amorphous silicon thin film transistor. | |

| | | | |
|------|---|-----|----|
| 1392 | Damage mechanisms in radiation-tolerant amorphous silicon solar cells. 1998 , 45, 2624-2631 | | 37 |
| 1391 | Chapter 4. Dispersive Kinetics. 1998 , 94, 89 | | 27 |
| 1390 | In situ monitoring of Raman scattering and photoluminescence from silicon surfaces in HF aqueous solutions. <i>Applied Physics Letters</i> , 1998 , 72, 933-935 | 3-4 | 24 |
| 1389 | Correlation between Light-Induced Degradation and Structural Inhomogeneities in Hydrogenated Amorphous Silicon Prepared under High-Rate Deposition Conditions. 1998 , 37, 432-434 | | 4 |
| 1388 | The roles of deposition pressure and rf power in opto-electronic properties of a-SiO:H films. 1998 , 31, 1630-1641 | | 49 |
| 1387 | Change of Spin-Lattice Relaxation Time with Light Soaking for Defects in Hydrogenated Amorphous Silicon. 1998 , 37, 5470-5473 | | 1 |
| 1386 | A Unified Chemical Bonding Model for Defect Generation in a-SiH: Photo-Induced Defects in Photovoltaic Devices and Current-Induced Defects in TFTs. 1998 , 37, 1082-1090 | | 6 |
| 1385 | Investigation of Hydrogenated Amorphous Silicon Germanium Fabricated under High Hydrogen Dilution and Low Deposition Temperature Conditions for Stable Solar Cells. 1998 , 37, 6322-6327 | | 13 |
| 1384 | A Critical Assessment of Different Models of the Metastability in a-Si:H. 1998 , 37, 1736-1746 | | |
| 1383 | Metastable hydrogen atom trapping in hydrogenated amorphous silicon films: A microscopic model for metastable defect creation. 1998 , 77, 765-777 | | 16 |
| 1382 | Evidence for proton motion in the recovery of light-induced degradation in amorphous silicon solar cells. <i>Journal of Applied Physics</i> , 1998 , 83, 1726-1729 | 2.5 | 14 |
| 1381 | Structure and hydrogen content of stable hot-wire-deposited amorphous silicon. <i>Applied Physics Letters</i> , 1998 , 73, 3244-3246 | 3-4 | 19 |
| 1380 | Origin of the optical gap dependence of a-SiGe solar cell stability. <i>Journal of Applied Physics</i> , 1998 , 84, 4611-4616 | 2.5 | 9 |
| 1379 | Structural disorder induced in hydrogenated amorphous silicon by light soaking. <i>Applied Physics Letters</i> , 1998 , 73, 3093-3095 | 3-4 | 66 |
| 1378 | Negative correlation energy and valence alternation in amorphous selenium: An in situ optically induced ESR study. 1998 , 58, 12004-12010 | | 34 |
| 1377 | Microscopic nature of Staebler-Wronski defect formation in amorphous silicon. <i>Applied Physics Letters</i> , 1998 , 72, 371-373 | 3-4 | 53 |
| 1376 | Resistance fluctuations in hydrogenated amorphous silicon: Thermal equilibrium. 1998 , 58, 3904-3916 | | 31 |
| 1375 | Hydrogen energetics in aSi:H as determined by a combination of mean-field modeling and experimental evolution data. 1998 , 57, 3927-3938 | | 10 |

| | | | |
|------|--|-----|-----|
| 1374 | Dielectric response and its light-induced change in undoped a-Si:H films below 13 MHz. 1998 , 57, 2387-2392 | | 6 |
| 1373 | Improvement of the stability under illumination of a-Si:H films elaborated by ion-beam-assisted evaporation using a hydrogen-argon plasma. <i>Journal of Applied Physics</i> , 1998 , 83, 1103-1106 | 2-5 | 11 |
| 1372 | Improvement of hot carrier reliability with deuterium anneals for manufacturing multilevel metal/dielectric MOS systems. 1998 , 19, 444-446 | | 19 |
| 1371 | Polarized electroabsorption spectra and light soaking of solar cells based on hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 1998 , 72, 1060-1062 | 3-4 | 6 |
| 1370 | Experimental evidence of photoinduced expansion in hydrogenated amorphous silicon using bending detected optical lever method. <i>Applied Physics Letters</i> , 1998 , 72, 2978-2980 | 3-4 | 57 |
| 1369 | Enhanced stability of deuterium in silicon. <i>Applied Physics Letters</i> , 1998 , 72, 3500-3502 | 3-4 | 38 |
| 1368 | Light-Excited Structural Instability of a-Si:H. 1998 , 507, 697 | | 7 |
| 1367 | Formation of Silicon-Based Thin Films Prepared by Catalytic Chemical Vapor Deposition (Cat-CVD) Method. 1998 , 37, 3175-3187 | | 197 |
| 1366 | High stability amorphous-silicon nitride thin-film diode ring switch. <i>Applied Physics Letters</i> , 1998 , 72, 91-93 | 3-4 | 3 |
| 1365 | Development of Stable a-Si/a-SiGe Tandem Solar Cell Submodules Deposited by a Very High Hydrogen Dilution at Low Temperature. 1998 , 507, 145 | | 7 |
| 1364 | Hydrogenated Amorphous Silicon Alloyed with Selenium. 1998 , 507, 459 | | |
| 1363 | Internal Stress and Optical Degradation in a-Si:H Deposited on Glass Substrates. 1998 , 507, 487 | | |
| 1362 | Identification of Vacancy-Like Defects in High-Rate Grown a-Si Before and After Light Soaking by Vegas. 1998 , 507, 637 | | |
| 1361 | Degradation Kinetics of Hydrogenated Amorphous Silicon: The Effect of Embedded Microcrystallites. 1998 , 507, 729 | | |
| 1360 | Reduction of Neutral Dangling Bond Density by Light Soaking in Nanocrystalline Silicon. 1998 , 507, 747 | | |
| 1359 | New Tight-Binding Method for Simulation of Defect Configurations, Creation and Diffusion Mechanisms in Solids: Application to Silicon. 1998 , 532, 205 | | |
| 1358 | High Quality Hydrogenated Amorphous Silicon Films with Significantly Improved Stability. 1998 , 507, 969 | | |
| 1357 | Transistors with a Profiled Active Layer Made by Hot-Wire Cvd. 1998 , 507, 31 | | 9 |

| | | |
|------|--|-----|
| 1356 | Kinetics of Light-Induced Deffect Formation and Annealing in Hydrogenated Amorphous Silicon Alloyed with Sulfur. 1998 , 507, 453 | 1 |
| 1355 | Molecular Hydrogen in Hot-Wire Hydrogenated Amorphous Silicon. 1998 , 507, 595 | 6 |
| 1354 | The Role of Charged Defects In Current Transport Through Hydrogenated Amorphous Silicon Alloys. 1998 , 507, 655 | 5 |
| 1353 | Microscopic Nature of Nature Light Induced Defects. 1998 , 507, 667 | |
| 1352 | Hydrogen Collision Model of The Staebler-Wronski Effect: Microscopics and Kinetics. 1998 , 507, 709 | 4 |
| 1351 | Bonded Hydrogen Atom Participation in Metastable Defect Formation in Hydrogenated Amorphous Silicon. 1998 , 507, 715 | 1 |
| 1350 | Photoinduced Structural Changes in Hydrogenated Amorphous Silicon. 1998 , 507, 735 | 6 |
| 1349 | Changes in the Medium Range Order of Si:H Thin Films Observed by Variable Coherence Tem. 1998 , 507, 837 | 2 |
| 1348 | Transistors With a Profiled Active Layer Made by Hot-Wire CVD. 1998 , 508, 31 | 4 |
| 1347 | New Tight-Binding Method for Simulation of Defect Configurations, Creation and Diffusion Mechanisms in Solids: Application to Silicon. 1998 , 527, 369 | |
| 1346 | Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology. 1998 , | 156 |
| 1345 | Thermally enhanced quantum efficiency in hydrogenated amorphous silicon p-i-n photodiodes studied by intensity- modulated photocurrent spectroscopy. 1999 , 79, 291-318 | 1 |
| 1344 | Silicon-Hydrogen Bonds in Laser-Crystallized Polysilicon Thin Films and Their Effects on Electron Mobility. 1999 , 38, 1320-1325 | 7 |
| 1343 | New books on physics and related sciences. 1999 , 42, 1285-1286 | |
| 1342 | Rate Equations for the Creation of Various Metastable Dangling Bonds in a-Si:H Mediated by Floating Bonds. 1999 , 38, L911-L913 | 13 |
| 1341 | Electrical properties before and after light-soaking of hydrogenated amorphous silicon carbide films prepared by the hydrogen radical CVD method. 1999 , 32, 2448-2453 | |
| 1340 | F-doped and H ₂ -impregnated synthetic SiO ₂ glasses for 157 nm optics. 1999 , 17, 3280 | 19 |
| 1339 | Effect of light exposure on 1/f noise in a-Si:H. 1999 , 17, 73 | 6 |

| | | | |
|------|--|-----|-----|
| 1338 | Light-induced D diffusion measurements in hydrogenated amorphous silicon: Testing H metastability models. 1999 , 59, 5513-5520 | | 28 |
| 1337 | Hydrogen Flip Model for Light-Induced Changes of Amorphous Silicon. 1999 , 82, 2512-2515 | | 71 |
| 1336 | High energy-barrier for defect creation in thin-film transistors based on hot-wire amorphous silicon. <i>Applied Physics Letters</i> , 1999 , 75, 3674-3676 | 3.4 | 14 |
| 1335 | Anisotropic electrical conduction and reduction in dangling-bond density for polycrystalline Si films prepared by catalytic chemical vapor deposition. <i>Journal of Applied Physics</i> , 1999 , 86, 985-990 | 2.5 | 13 |
| 1334 | Deposition of ultrapure hydrogenated amorphous silicon. 1999 , 17, 113-120 | | 10 |
| 1333 | Ultraviolet-light-enhanced luminescence in SiC thin films grown on Si by hot filament chemical vapor deposition and ultraviolet-light-induced luminescence in anodized SiC. <i>Applied Physics Letters</i> , 1999 , 74, 923-925 | 3.4 | 21 |
| 1332 | Reversible photoinduced changes of electronic transport in narrow-gap amorphous Sb ₂ Se ₃ . 1999 , 59, 1579-1581 | | 20 |
| 1331 | Effect of embedded microcrystallites on the light-induced degradation of hydrogenated amorphous silicon. 1999 , 60, 4434-4437 | | 39 |
| 1330 | Wide band gap amorphous silicon thin films prepared by chemical annealing. <i>Journal of Applied Physics</i> , 1999 , 85, 812-818 | 2.5 | 37 |
| 1329 | Evolutionary phase diagrams for plasma-enhanced chemical vapor deposition of silicon thin films from hydrogen-diluted silane. <i>Applied Physics Letters</i> , 1999 , 75, 2286-2288 | 3.4 | 132 |
| 1328 | Hydrogen collision model: Quantitative description of metastability in amorphous silicon. 1999 , 59, 5498-5512 | | 206 |
| 1327 | Effects of fluorine dimer excimer laser radiation on the optical transmission and defect formation of various types of synthetic SiO ₂ glasses. <i>Applied Physics Letters</i> , 1999 , 74, 2755-2757 | 3.4 | 80 |
| 1326 | Improved stability of deuterated amorphous silicon thin film transistors. <i>Journal of Applied Physics</i> , 1999 , 85, 543-550 | 2.5 | 13 |
| 1325 | Hydrogen diffusion and mobile hydrogen in amorphous silicon. 1999 , 60, 7725-7727 | | 46 |
| 1324 | Electron-spin-resonance center of dangling bonds in undoped aSi:H. 1999 , 59, 4849-4857 | | 51 |
| 1323 | Tight-binding molecular-dynamics study of aSi:H: Preparation, structure, and dynamics. 1999 , 60, 5478-5484 | | 19 |
| 1322 | Renewable Energy: Rapidly Maturing Technology for the 21st Century. 1999 , 15, 163-174 | | 1 |
| 1321 | A combinatorial study of materials in transition from amorphous to microcrystalline silicon. 1999 , 113, 175-178 | | 33 |

| | | | |
|------|---|-----|-----|
| 1320 | Stability of low pressure chemical vapour deposition amorphous silicon. 1999 , 337, 78-81 | | 4 |
| 1319 | Recent developments of silicon thin film solar cells on glass substrates. 1999 , 351, 241-246 | | 66 |
| 1318 | Effect of annealing on the electrical, optical and structural properties of hydrogenated amorphous silicon films deposited in an asymmetric R.F. plasma CVD system at room temperature. <i>Solar Energy Materials and Solar Cells</i> , 1999 , 57, 373-391 | 6.4 | 24 |
| 1317 | Simulation of hydrogenated amorphous and microcrystalline silicon optoelectronic devices. 1999 , 49, 381-401 | | 44 |
| 1316 | Studies of field emission current from amorphous silicon deposited on a tungsten tip. 1999 , 79, 131-134 | | |
| 1315 | Scanning tunneling microscopy of hydrogenated amorphous silicon: high-resolution topography and local apparent barrier heights. 1999 , 151, 73-85 | | 6 |
| 1314 | Sinusoidal spectral correction for high precision outdoor module characterization. <i>Solar Energy Materials and Solar Cells</i> , 1999 , 58, 253-264 | 6.4 | 14 |
| 1313 | Degradation and annealing of amorphous silicon solar cells by current injection. <i>Solar Energy Materials and Solar Cells</i> , 1999 , 59, 289-298 | 6.4 | 11 |
| 1312 | Photovoltaic technology: the case for thin-film solar cells. 1999 , 285, 692-8 | | 968 |
| 1311 | Photo-Induced Microvoids Probing in Undoped a-Si:H by VEPAS. 1999 , 174, R13-R14 | | |
| 1310 | Strong and stable visible luminescence from Au-passivated porous silicon. <i>Applied Physics Letters</i> , 1999 , 75, 2560-2562 | 3-4 | 43 |
| 1309 | Localization of the Si-H stretch vibration in amorphous silicon. <i>Applied Physics Letters</i> , 1999 , 75, 2945-2947 | 3.4 | 19 |
| 1308 | Study of photoconductivity and persistent photoconductivity in sulphur-doped amorphous hydrogenated silicon. 1999 , 86, 1321-1332 | | 2 |
| 1307 | In situ observation of hydrogenated amorphous silicon surfaces in electron cyclotron resonance hydrogen plasma annealing. <i>Journal of Applied Physics</i> , 1999 , 85, 1172-1177 | 2.5 | 22 |
| 1306 | Design and fabrication of a high-dynamic-range image sensor in TFA technology. 1999 , 34, 704-711 | | 30 |
| 1305 | A model for the open circuit voltage relaxation in Cu(In,Ga)Se ₂ heterojunction solar cells. 1999 , 8, 43-52 | | 31 |
| 1304 | Hydrogen Interactions with Polycrystalline and Amorphous Silicon theory. 1999 , 61, 241-281 | | 3 |
| 1303 | Some electronic and metastability properties of a new nanostructured material: Hydrogenated polymorphous silicon. 1999 , 79, 1079-1095 | | 46 |

| | | |
|------|--|----|
| 1302 | A Comparison of the Degradation and Annealing Kinetics in Amorphous Silicon and Amorphous Silicon-Germanium solar Cells. 1999 , 557, 395 | 4 |
| 1301 | Amorphous Silicon Alloy Materials and Solar Cells Near the Threshold of Microcrystallinity. 1999 , 557, 239 | 27 |
| 1300 | Theory of Hydrogen Interactions with Amorphous Silicon. 1999 , 557, 275 | 8 |
| 1299 | Photoinduced Expansion in Hydrogenated Amorphous Silicon. 1999 , 557, 337 | 8 |
| 1298 | Slow Degradation of Hydrogenated Amorphous Silicon Photoconductivity Under Pulsed Illumination. 1999 , 557, 347 | 2 |
| 1297 | Low Temperature Kinetics for the Growth and Decay of Band-Tail Carriers and Dangling Bonds in Hydrogenated Amorphous Silicon. 1999 , 557, 353 | 3 |
| 1296 | Hydrogen Flip Model for Metastable Structural Changes in Amorphous Silicon. 1999 , 557, 371 | 1 |
| 1295 | Hydrogen Diffusion in the Hydrogen Collision Model of Amorphous Silicon Metastability. 1999 , 557, 377 | 1 |
| 1294 | Light-Induced Increase in Two-Level Tunneling States in Hydrogenated Amorphous Silicon. 1999 , 557, 389 | 1 |
| 1293 | Structural Changes in a-Si:H Studied by X-Ray Photoemission Spectroscopy. 1999 , 557, 359 | 6 |
| 1292 | Introduction to Hydrogen in Semiconductors II. 1999 , 61, 1-11 | 13 |
| 1291 | X-RAY Photoemission Spectroscopic Study of Light-Induced Structural Changes in Amorphous Silicon. 2000 , 609, 1011 | 4 |
| 1290 | Early Research On Amorphous Silicon: Errors and Missed Opportunities. 2000 , 609, 1711 | 4 |
| 1289 | Photodegradation in a-Si:H Prepared by Hot-Wire CVD as a Function of Substrate and Filament Temperatures. 2000 , 609, 2271 | |
| 1288 | Metastable defects by low-intensity pulsed illumination of hydrogenated amorphous silicon. 2000 , 609, 321 | 1 |
| 1287 | Temperature Dependence of the Photoinduced Degradation and Annealing in a-Si:H. 2000 , 609, 341 | 2 |
| 1286 | Mechanisms for Metastability in Hydrogenated Amorphous Silicon. 2000 , 609, 351 | 8 |
| 1285 | Recombination in Tritiated Amorphous Silicon. 2000 , 609, 3011 | 1 |

| | | | |
|------|---|-----|----|
| 1284 | Low Temperature growth of poly-crystalline film of Silicon-rich Silicon-Germanium by Reactive Thermal Chemical Vapor Deposition. 2000 , 638, 1 | | 6 |
| 1283 | Thermal equilibrium, the Staebler-Wronski effect and potential fluctuations in lithium-doped hydrogenated amorphous silicon. 2000 , 80, 1327-1346 | | 10 |
| 1282 | A Critical Test of Defect Creation Models in Hydrogenated Amorphous Silicon Alloys. 2000 , 609, 331 | | |
| 1281 | Amorphous silicon alloy photovoltaic research—present and future. <i>Progress in Photovoltaics: Research and Applications</i> , 2000 , 8, 141-150 | 6.8 | 31 |
| 1280 | Low-temperature growth of polycrystalline Si and Ge films by redox reactions of Si ₂ H ₆ and GeF ₄ . 2000 , 611, 531-536 | | 17 |
| 1279 | Light and annealing induced changes in Si-H bonds in undoped a-Si:H. 2000 , 116, 519-524 | | 6 |
| 1278 | Structural change and photo-response in porous poly-Si/Si. 2000 , 358, 259-263 | | 10 |
| 1277 | Light induced luminescence centers in porous SiC prepared from nano-crystalline SiC grown on Si by hot filament chemical vapor deposition. 2000 , 75, 180-183 | | 11 |
| 1276 | Gap states and stability of rapidly deposited hydrogenated amorphous silicon films. 2000 , 72, 197-199 | | 3 |
| 1275 | On light-related electrical properties of porous silicon/crystalline silicon structure. 2000 , 166, 67-71 | | |
| 1274 | Kinetics of light-induced degradation in a-Si:H films investigated by computer simulation. 2000 , 34, 717-722 | | 3 |
| 1273 | Nonequilibrium processes in capacitive sensors based on porous silicon. 2000 , 26, 778-780 | | |
| 1272 | Computer simulation of collection efficiency of a-Si:H tandem solar cells interconnected by transparent conductive oxide. <i>Solar Energy Materials and Solar Cells</i> , 2000 , 60, 1-9 | 6.4 | 11 |
| 1271 | Microscopic theory of hydrogen in silicon devices. 2000 , 47, 1779-1786 | | 44 |
| 1270 | Structural characterisation of hydrogenated a-Si using slow positron beam techniques. 2000 , 164-165, 1010-1015 | | 6 |
| 1269 | Correlation of Nanostructural Heterogeneity and Light Induced Degradation in a-Si:H Solar Cells. 2000 , 39, 2530-2535 | | 15 |
| 1268 | Amorphous silicon photovoltaics: order from disorder. | | 1 |
| 1267 | Molecular Beam Epitaxially Deposited Amorphous Silicon. 2000 , 609, 511 | | 5 |

| | | | |
|------|---|-----|----|
| 1266 | Performance of semi-transparent silicon strip sensors for high precision optical alignment monitoring systems. | | |
| 1265 | Phonon generation and decay in hydrogenated amorphous silicon. 2000 , 62, 8072-8081 | | 10 |
| 1264 | Structural and electronic differences between deuterated and hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 2000 , 88, 1684-1687 | 2.5 | 4 |
| 1263 | Hydrogen loss in aSi:C:H layers induced by MeV ion beam irradiation. 2000 , 61, 10133-10141 | | 20 |
| 1262 | Light-induced long-range hydrogen motion in hydrogenated amorphous silicon at room temperature. <i>Applied Physics Letters</i> , 2000 , 77, 2686-2688 | 3.4 | 17 |
| 1261 | First-principles electron-ion dynamics of excited systems: H-terminated Si(111) surfaces. 2000 , 62, 2039-2044 | | 17 |
| 1260 | Photoinduced dehydrogenation of defects in undoped a-si:H using positron annihilation spectroscopy. 2000 , 84, 769-72 | | 31 |
| 1259 | Nonradiative electron-hole recombination by a low-barrier pathway in hydrogenated silicon semiconductors. 2000 , 84, 967-70 | | 19 |
| 1258 | Light-induced structural changes and their correlation to metastable defect creation in intrinsic hydrogenated amorphous silicon films. 2000 , 62, 7169-7178 | | 33 |
| 1257 | Introduction. <i>Springer Series in Materials Science</i> , 2000 , 1-6 | 0.9 | 6 |
| 1256 | Isotopic effect between hydrogen and deuterium emission in silicon. 2000 , 266-269, 176-179 | | 6 |
| 1255 | Decrease of threshold energy in photo-stimulated processes in condensed media. 2000 , 115, 173-176 | | |
| 1254 | Luminescence as a tool for crosslinking determination in plasma polysilylenes prepared from organosilanes. 2000 , 109, 321-325 | | 9 |
| 1253 | Luminescence in plasma polysilylenes prepared from organosilanes. 2000 , 266-269, 989-993 | | 3 |
| 1252 | Charge-trapping metastability in doped hydrogenated amorphous silicon. 2000 , 266-269, 423-427 | | 4 |
| 1251 | Influence of variation of lithium concentration on metastabilities in a-Si:H(Li). 2000 , 266-269, 469-473 | | |
| 1250 | Low temperature internal friction study of light-induced structural instability in hydrogenated amorphous silicon. 2000 , 266-269, 501-505 | | 9 |
| 1249 | Spatial distribution of dangling bonds in undoped hydrogenated amorphous silicon observed by solid-state voltcoloumetry. 2000 , 266-269, 558-564 | | 2 |

| | | | |
|------|---|-----|-----|
| 1248 | Bond exchange, network restructuring and recrystallization in vacuum-ultraviolet-irradiated a-Si:H films. 2000 , 271, 73-78 | | 3 |
| 1247 | Photoluminescence behavior of SiO ₂ prepared by sol-gel processing. 2000 , 265, 61-67 | | 23 |
| 1246 | The hydrogen collision model: theory and experiment. 2000 , 266-269, 391-396 | | 8 |
| 1245 | Long-range disorder and metastability in amorphous silicon. 2000 , 266-269, 397-400 | | 2 |
| 1244 | Metastability in amorphous silicon from hydrogen flips. 2000 , 266-269, 401-404 | | 3 |
| 1243 | Effect of hole accumulation on photodegradation in a-Si:H. 2000 , 266-269, 428-431 | | 1 |
| 1242 | Generation and annealing kinetics of current induced metastable defects in amorphous silicon alloys. 2000 , 266-269, 432-436 | | 6 |
| 1241 | Persistent excited conductivity and the threshold fluence in a-Si:H under 17 MeV proton irradiation. 2000 , 266-269, 444-449 | | 6 |
| 1240 | The light-induced metastable lattice expansion in hydrogenated amorphous silicon. 2000 , 266-269, 474-480 | | 35 |
| 1239 | A study on the correlation between the photoinduced volume expansion and the internal stress in hydrogenated amorphous silicon. 2000 , 266-269, 481-485 | | 7 |
| 1238 | Photoinduced structural change and restoration of hydrogenated amorphous silicon. 2000 , 266-269, 486-490 | | 2 |
| 1237 | Effects of light soaking on amorphous silicon. | | 1 |
| 1236 | Evolution with light soaking of the conduction band tail of amorphous-silicon-like materials. <i>Applied Physics Letters</i> , 2000 , 77, 3604-3606 | 3.4 | 15 |
| 1235 | Stability Issues of Cu(In,Ga)Se ₂ -Based Solar Cells. 2000 , 104, 4849-4862 | | 204 |
| 1234 | Properties of a-SiC:H films and solar cells. 2000 , 77, 699-704 | | 0 |
| 1233 | Temperature dependence of amorphous silicon solar cell PV parameters. | | 17 |
| 1232 | Low-Temperature Fabrication of Si Thin-Film Transistor Microstructures by Soft Lithographic Patterning on Curved and Planar Substrates. <i>Chemistry of Materials</i> , 2000 , 12, 3306-3315 | 9.6 | 20 |
| 1231 | Elastic properties, intrinsic and photoinduced stress in hydrogenated amorphous-silicon thin films with different hydrogen content. <i>Journal of Applied Physics</i> , 2001 , 89, 4294-4300 | 2.5 | 28 |

| | | |
|------|---|-----|
| 1230 | Annealing and recrystallization of hydrogenated amorphous silicon. 2001 , 64, | 33 |
| 1229 | Development in Understanding and Controlling the Staebler-Wronski Effect in a-Si:H. 2001 , 31, 47-79 | 120 |
| 1228 | Heterogeneity in hydrogenated silicon: Evidence for intermediately ordered chainlike objects. 2001 , 63, | 29 |
| 1227 | Structural changes in amorphous silicon studied by X-ray photoemission spectroscopy: a phenomenon independent of the Staebler-Wronski effect?. 2001 , 282, 165-172 | 10 |
| 1226 | Assessment of the influence of charged dangling bonds on the short circuit current in amorphous silicon solar cells. 2001 , 288, 66-72 | 1 |
| 1225 | Optical dispersion relationships in amorphous silicon grown by molecular beam epitaxy. 2001 , 290, 57-63 | 25 |
| 1224 | Instability evolution within a-SiNx film assessed through MIS structure under bias and temperature stresses. 2001 , 296, 27-38 | 7 |
| 1223 | Optical and structural properties of SiC layers grown by an electron cyclotron resonance CVD technique. 2001 , 10, 1264-1267 | 5 |
| 1222 | Performance of semitransparent silicon strip sensors for high precision optical alignment monitoring systems. 2001 , 48, 262-267 | 5 |
| 1221 | Thin-film Transistors. 2001 , 9313-9318 | 1 |
| 1220 | PLASMA DEPOSITION OF MICROCRYSTALLINE SILICON: THE ROLE OF PLASMA-SURFACE INTERACTION ON THE MICROSTRUCTURE. 2001 , 509-543 | |
| 1219 | Photoinduced phenomena in amorphous chalcogenides: From phenomenology to nanoscale. 2001 , 47-90 | 31 |
| 1218 | The Staebler-Wronski Effect and 1/f Noise in Amorphous Silicon. 2001 , 664, 1451 | 1 |
| 1217 | Cluster-less Plasma CVD Reactor and Its Application to a-Si:H Film Deposition. 2001 , 664, 561 | 1 |
| 1216 | Technology transfer challenges in the manufacturing of a-Si tandem solar cells. 2001 , 664, 1141 | 3 |
| 1215 | New experiments on the relationship between light-induced defects and photoconductivity degradation. 2001 , 664, 1221 | 2 |
| 1214 | Light-induced Annealing of Deep Defects in Low Ge Fraction a-Si,Ge:H Alloys: Further Insights into the Fundamentals of Light-induced Degradation. 2001 , 664, 1251 | |
| 1213 | Network Rebonding Model for Metastability in Amorphous Silicon. 2001 , 664, 1411 | 1 |

| | | |
|------|--|----|
| 1212 | Investigation of Light-Induced Defect Depth Profile in Hydrogenated Amorphous Silicon Films. 2001 , 664, 1421 | |
| 1211 | Is interstitial hydrogen playing a role in the Staebler-Wronski effect ?. 2001 , 664, 1441 | 1 |
| 1210 | Defect Creation by Electron Beam Irradiation in Amorphous Silicon Nitride Films Compared with That by Light Soaking. 2001 , 664, 1461 | |
| 1209 | Structural Changes in Amorphous Silicon Annealed at Low Temperatures. 2001 , 664, 1991 | |
| 1208 | Control of Medium Range Order in Amorphous Silicon via Ion and Neutral Bombardment. 2001 , 664, 2731 | 3 |
| 1207 | Metastable changes of the electrical conductivity in microcrystalline silicon. 2001 , 664, 2831 | 1 |
| 1206 | Evidence for Long-range Hydrogen Motion in a-Si:H under Room-temperature Illumination Using Raman Scattering of Amorphous Tungsten Oxide Overlayer. 2001 , 664, 2851 | |
| 1205 | Structural Characterization of SiF ₄ , SiH ₄ and H ₂ Hot-Wire-Grown Microcrystalline Silicon Thin Films with Large Grains. 2001 , 664, 341 | 5 |
| 1204 | High rate growth of device grade silicon thin films for solar cells. 2001 , 664, 431 | 7 |
| 1203 | Changes in hydrogenated amorphous silicon upon extensive light-soaking at elevated temperature. 2001 , 664, 1261 | 3 |
| 1202 | Hydrogen Equilibration and Metastability in Amorphous Silicon. 2001 , 664, 1331 | 2 |
| 1201 | AMORPHOUS SILICON SOLAR CELLS. 2001 , 199-243 | 9 |
| 1200 | Silicon device processing in H-ambients: H-diffusion mechanisms and influence on electronic properties. 2001 , 30, 1616-1627 | 44 |
| 1199 | Semi-transparent silicon strip sensors for the precision alignment of tracking detectors. 2001 , 461, 213-215 | 2 |
| 1198 | Silicon carbide alloys produced by hot wire, hot wire plasma-assisted and plasma-enhanced CVD techniques. 2001 , 184, 8-19 | 15 |
| 1197 | Electronic and topographic properties of amorphous and microcrystalline silicon thin films. 2001 , 383, 57-60 | 43 |
| 1196 | Electronic states and the light-induced metastability in hydrogenated amorphous silicon prepared by hot-wire CVD. 2001 , 395, 134-137 | 3 |
| 1195 | Disorder and the optical properties of amorphous silicon grown by molecular beam epitaxy. 2001 , 120, 429-434 | 31 |

1194 Study of light-induced annealing effects in a-Si:H thin films. **2001**, 41, 913-917

1193 Quadruplevoids in amorphous Si:H. **2001**, 308-310, 155-158

3

1192 Distorted silicon hydrides—a comparative study with various density functionals. **2001**, 22, 151-161

12

1191 Protonic and Photoconductivity Studies on Heteropolyanion of $H_3+xPVxW_{12}O_{40}$ in H₂O Single Crystals. **2001**, 185, 231-246

9

1190 Evidence for light-induced long-range hydrogen motion in a-Si:H using Raman scattering of a-WO₃. **2001**, 46, 1963-1966

2

1189 Properties of amorphous silicon solar cells fabricated from SiH₂Cl₂. *Solar Energy Materials and Solar Cells*, **2001**, 66, 289-295

6.4 5

1188 Uncertainty in economical analysis of solar water heating and photovoltaic systems. **2001**, 70, 131-142

20

1187 Hydrogenated amorphous silicon-germanium PIN X-ray detector. **2001**, 48, 1564-1567

8

1186 Light-soaking effects on a-Si:H photodiodes deposited by the laminar-flow photo-CVD method. **2001**, 48, 2249-2254

2

1185 SURFACE AND INTERFACIAL RECOMBINATION IN SEMICONDUCTORS. **2001**, 217-284

4

1184 Photocreated Defects in Very Thin Hydrogenated Amorphous Silicon Films. **2001**, 40, 6327-6328

1

1183 Cu(In,Ga)Se₂ SOLAR CELLS. **2001**, 277-345

24

1182 Persistent photoconductivity in n- and p-type CuGaSe₂. **2001**, 34, 25-29

6

1181 Partial Recovery of Photodegradation at Room Temperature in Hydrogenated Amorphous Silicon. **2001**, 40, 1244-1245

2

1180 Si-H clusters, defects, and hydrogenated silicon. **2001**, 64,

16

1179 Analysis of the moving photocarrier grating technique for semiconductors of high defect density. **2001**, 64,

4

1178 Microstructure of local defects in amorphous Si:H: A quantum chemical study. **2001**, 64,

3

1177 Gap states of hydrogenated amorphous silicon near and above the threshold of microcrystallinity with subtle boron compensation. *Applied Physics Letters*, **2001**, 78, 2509-2511

3.4 18

| | | | |
|------|--|-----|----|
| 1176 | Hot-electron degradation in hydrogenated amorphous-silicon-nitride thin-film diodes. <i>Journal of Applied Physics</i> , 2001 , 89, 5491-5496 | 2.5 | 3 |
| 1175 | Experimental evidence indicating a global mechanism for light-induced degradation in hydrogenated amorphous silicon. 2001 , 63, | | 16 |
| 1174 | Light-induced increase in the open-circuit voltage of thin-film heterogeneous silicon solar cells. <i>Applied Physics Letters</i> , 2001 , 79, 3800-3802 | 3.4 | 34 |
| 1173 | Ultrafast vibrational dynamics and stability of deuterated amorphous silicon. 2002 , 89, 125504 | | 17 |
| 1172 | Direct role of hydrogen in the Staebler-Wronski effect in hydrogenated amorphous silicon. 2002 , 89, 015502 | | 42 |
| 1171 | Light-induced effects on transport in hydrogenated amorphous silicon-sulfur alloys at different temperatures. <i>Journal of Applied Physics</i> , 2002 , 91, 9878 | 2.5 | 1 |
| 1170 | Photoinduced stress in hydrogenated amorphous silicon films. <i>Applied Physics Letters</i> , 2002 , 80, 1734-1736 | | 22 |
| 1169 | Two-domain model of light-induced structural changes in hydrogenated amorphous silicon. 2002 , 66, | | 15 |
| 1168 | ac photoconductivity of hydrogenated amorphous silicon: Influence of long-range potential fluctuations. 2002 , 65, | | 32 |
| 1167 | Abstraction of atomic hydrogen by atomic deuterium from an amorphous hydrogenated silicon surface. 2002 , 117, 10805-10816 | | 44 |
| 1166 | Hot-wire plasma assisted chemical vapor deposition: A deposition technique to obtain silicon thin films. <i>Journal of Applied Physics</i> , 2002 , 91, 1644-1649 | 2.5 | 2 |
| 1165 | Studies of semitransparent optoelectronic position sensors. | | 2 |
| 1164 | Long-range disorder and the Staebler-Wronski effect in N-type amorphous silicon. 2002 , 66, | | 2 |
| 1163 | Metastability of amorphous silicon from silicon network rebonding. 2002 , 88, 205502 | | 29 |
| 1162 | Improved stability of hydrogenated amorphous-silicon photosensitivity by ultraviolet illumination. <i>Applied Physics Letters</i> , 2002 , 81, 3353-3355 | 3.4 | 8 |
| 1161 | Spectral dependence of lifetime of excited Si-H stretching vibration in hydrogenated amorphous silicon. 2002 , 66, | | 1 |
| 1160 | Temperature dependence of the optically induced production and annealing of silicon dangling bonds in hydrogenated amorphous silicon. 2002 , 65, | | 6 |
| 1159 | The performance of a fully-monitored, double-junction a-Si grid-connected BIPV system after four years of continuous operation in Brazil. | | 2 |

1158 BURST REACTION OF THIN FILMS EXCITED BY HIGH-FLUX SOFT X-RAYS. **2002**, 09, 401-405

1157 Wavelength response of thin-film optical position-sensitive detectors. **2002**, 4, 527-534 11

1156 Passivation of Defect States in Amorphous and Crystalline Si by use of Cyanide Treatment and Improvement of Solar Cell Characteristics. **2002**, 715, 1151 7

1155 Microstructure of the Silicon Film Prepared Near the Phase Transition Regime from Amorphous To Nanocrystalline. **2002**, 737, 658 18

1154 New trends in thin-film silicon solar cell technology. 1

1153 .

1152 Role of interstitial hydrogen and voids in light-induced metastable defect formation in hydrogenated amorphous silicon: A model. **2002**, 65, 43

1151 SEMICONDUCTING GLASSES. **2002**, 307-373 0

1150 Meyer-Neldel rule in charge-trapping metastability in p-type hydrogenated amorphous silicon. **2002**, 66, 13

1149 Correlation of the open-circuit voltage enhancement of heterogeneous silicon solar cells and the Staebler-Wronski effect. 1

1148 Microcrystalline silicon thin films studied by atomic force microscopy with electrical current detection. *Journal of Applied Physics*, **2002**, 92, 587-593 2.5 70

1147 Light-annealing effect on a-Si:H photodiode with the Ar laser-irradiation. **2002**, 297, 182-188

1146 Metastable defect kinetics in microcrystalline silicon. **2002**, 299-302, 502-506

1145 Defect kinetics in new model of metastability in a-Si:H. **2002**, 299-302, 507-510 6

1144 Photoconductivity of macroscopically inhomogeneous amorphous semiconductors: case example for a-Si:H. **2002**, 299-302, 339-345 1

1143 Metastability in tritiated amorphous silicon. **2002**, 299-302, 476-481 6

1142 Influence of light-soaking and annealing on the microstructure of a-Si:H deposited at 423 K. **2002**, 299-302, 511-515 5

1141 Lifetime and intensity of photoluminescence after light induced creation of dangling bonds in a-Si:H. **2002**, 299-302, 637-641 9

| | | |
|------|--|----|
| 1140 | Insights into the mechanisms of light-induced degradation from studies of defects in low Ge fraction a-Si _{1-x} Ge _x :H alloys. 2002 , 299-302, 449-454 | 8 |
| 1139 | Light-soaking and annealing kinetics of majority and minority carrier mobility lifetime products in a-Si:H. 2002 , 299-302, 471-475 | 5 |
| 1138 | Photoinduced volume expansion and contraction in a-Si:H films. 2002 , 299-302, 516-520 | 9 |
| 1137 | Narrow band gap, high photosensitivity a-SiGe:H films prepared by hot wire chemical vapor deposition (HW-CVD) method. 2002 , 52, 399-403 | 12 |
| 1136 | Methods of Deposition of Hydrogenated Amorphous Silicon for Device Applications. 2002 , 30, 1-215 | 10 |
| 1135 | Methods of deposition of hydrogenated amorphous silicon for device applications. 2002 , 1-102 | 0 |
| 1134 | The Role of Hydrogen for Disordered Silicon. 2002 , 715, 151 | 8 |
| 1133 | Photoconductivity Stability Improvement in Hydrogenated Amorphous Silicon by Ultraviolet Illumination. 2002 , 715, 19111 | |
| 1132 | Amorphous Silicon Films and Superlattices Grown by Molecular Beam Epitaxy: An Optical Analysis. 2002 , 715, 1911 | 2 |
| 1131 | Nature of Charged Metastable Defects in Network Rebonding Model. 2002 , 715, 1131 | |
| 1130 | Molecular Hydrogen in Amorphous Silicon. 2002 , 715, 111 | 2 |
| 1129 | Correlation of Light-induced Enhancement of Open-Circuit Voltage and Structural Change of Heterogeneous Silicon Solar Cells. 2002 , 715, 2611 | 6 |
| 1128 | Highly stable hydrogenated amorphous silicon germanium solar cells. 2002 , 49, 949-952 | 19 |
| 1127 | Memory effects in highly resistive p-n heterojunctions for optical applications. 2002 , 403-404, 363-367 | 2 |
| 1126 | Onset of microcrystallinity in silicon thin films. 2002 , 403-404, 81-85 | 15 |
| 1125 | Influence of the substrate temperature on the structure and the optical properties of amorphous Si:H thin films prepared by reactive evaporation. 2002 , 403-404, 153-156 | 8 |
| 1124 | Defects induced in amorphous silicon thin films by light soaking. 2002 , 403-404, 513-516 | 1 |
| 1123 | Hydrogenated amorphous silicon films with low defect density prepared by argon dilution: application to solar cells. 2002 , 403-404, 275-279 | 13 |

| | | | |
|------|---|-----|-----|
| 1122 | Light induced defects in sputtered amorphous silicon thin films. 2002 , 74, 251-257 | | 8 |
| 1121 | Effect of the Nature of the Hydrogen Bonding on the Light-Induced Metastable Defects in Hydrogenated Amorphous Silicon Prepared by Radiofrequency Magnetron Sputtering. 2002 , 231, 373-384 | | 1 |
| 1120 | The Dependence of Optical Constants on Selenium and Sulphur-Doping in a-Si:H. 2002 , 194, 216-225 | | 14 |
| 1119 | Influence of the intrinsic layer characteristics on a-Si:H p <i>n</i> n solar cell performance analysed by means of a computer simulation. <i>Solar Energy Materials and Solar Cells</i> , 2002 , 73, 151-162 | 6.4 | 28 |
| 1118 | Photovoltaic module quality in the Kenyan solar home systems market. 2002 , 30, 477-499 | | 67 |
| 1117 | Photovoltaic thin-film technology based on hydrogenated amorphous silicon. <i>Progress in Photovoltaics: Research and Applications</i> , 2002 , 10, 85-97 | 6.8 | 28 |
| 1116 | Optical absorption in an amorphous silicon superlattice grown by molecular beam epitaxy. 2002 , 122, 271-275 | | 21 |
| 1115 | Structural characterization of stable amorphous silicon films. 2002 , 122, 283-286 | | 5 |
| 1114 | Chemical prevention of light-induced degradation in amorphous silicon films. 2002 , 123, 151-154 | | 24 |
| 1113 | High-speed Si-based metal-semiconductor-metal photodetectors with an additional composition-graded i-a-Si _{1-x} Ge _x :H layer. 2002 , 46, 2027-2033 | | 2 |
| 1112 | Electron irradiation of a-Si:H films prepared from hydrogen-diluted silane. 2002 , 69, 79-82 | | 6 |
| 1111 | Large supercell molecular dynamics study of defect formation in hydrogenated amorphous silicon. 2002 , 63, 1691-1698 | | 1 |
| 1110 | Effect of electrical contact configuration on gap-states absorption spectra by photocurrent methods in hydrogenated amorphous silicon alloys. <i>Solar Energy Materials and Solar Cells</i> , 2002 , 70, 459-467 | 6.4 | 2 |
| 1109 | Spectral effects on amorphous silicon solar module fill factors. <i>Solar Energy Materials and Solar Cells</i> , 2002 , 71, 375-385 | 6.4 | 50 |
| 1108 | Solar cells: past, present, future. <i>Solar Energy Materials and Solar Cells</i> , 2002 , 74, 1-11 | 6.4 | 159 |
| 1107 | Light-induced effects in a-Si:H(Er). 2003 , 105, 153-156 | | 1 |
| 1106 | Dynamics of hydrogen in hydrogenated amorphous silicon. 2003 , 61, 121-129 | | 2 |
| 1105 | Tritiated amorphous silicon betavoltaic devices. 2003 , 150, 274 | | 26 |

| | | | |
|------|---|-----|----|
| 1104 | Stability of microcrystalline silicon for thin film solar cell applications. 2003 , 150, 300 | | 57 |
| 1103 | Distinguishing metastable changes in bulk CIGS defect densities from interface effects. 2003 , 431-432, 426-430 | | 53 |
| 1102 | Neutral dangling bonds may not be the dominant recombination centers for photoconductivity in hot-wire a-Si:H. 2003 , 430, 141-144 | | 2 |
| 1101 | Light induced changes in the defect structure of a-Si:H. 2003 , 430, 149-152 | | 4 |
| 1100 | Intrinsic microcrystalline silicon prepared by hot-wire chemical vapour deposition for thin film solar cells. 2003 , 430, 202-207 | | 93 |
| 1099 | Silicon thin films deposited at very low substrate temperatures. 2003 , 442, 163-166 | | 4 |
| 1098 | A structural study of CN treated amorphous silicon. 2003 , 126, 597-600 | | 4 |
| 1097 | UV light induced defects in amorphous silicon thin films. 2003 , 71, 135-139 | | 4 |
| 1096 | Status of the ALMY semitransparent, amorphous silicon sensors for optical position monitoring systems. 2003 , 504, 166-169 | | 1 |
| 1095 | Characterization of degradation in thin-film photovoltaic module performance parameters. <i>Renewable Energy</i> , 2003 , 28, 1455-1469 | 8.1 | 38 |
| 1094 | Light soaking effect in a-Si:H based n ⁺ i-p and p ⁺ i-n solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 76, 511-520 | 6.4 | 11 |
| 1093 | Structure of PECVD Si:H films for solar cell applications. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 77, 125-143 | 6.4 | 20 |
| 1092 | Control of plasma chemistry for preparing highly stabilized amorphous silicon at high growth rate. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 3-26 | 6.4 | 87 |
| 1091 | Photo- and electro-luminescence of a-Si:H and mixed-phase alloys. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 181-233 | 6.4 | 16 |
| 1090 | Metastable volume changes of hydrogenated amorphous silicon and silicon-germanium alloys produced by exposure to light. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 369-389 | 6.4 | 15 |
| 1089 | Light-induced defects in hydrogenated amorphous silicon germanium alloys. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 399-424 | 6.4 | 24 |
| 1088 | The hydrogen collision model of metastability after 5 years: experimental tests and theoretical extensions. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 425-445 | 6.4 | 21 |
| 1087 | Amorphous silicon based photovoltaics from earth to the final frontier. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 597-612 | 6.4 | 86 |

| | | | |
|------|---|-----|-----|
| 1086 | Monolithic amorphous silicon alloy solar modules. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 627-645 | 6.4 | 19 |
| 1085 | Photovoltaic materials, history, status and outlook. 2003 , 40, 1-46 | | 677 |
| 1084 | Tight-binding molecular dynamics simulation of Si-H bond dissociation in silicon clusters. 2003 , 93, 351-359 | | 5 |
| 1083 | Large Area Digital X-ray Imaging. 2003 , 12, 3-49 | | |
| 1082 | Intermediate order in tetrahedrally coordinated silicon: evidence for chainlike objects. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 115-141 | 6.4 | 16 |
| 1081 | Light-induced degradation in a-Si:H and its relation to defect creation. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 349-367 | 6.4 | 21 |
| 1080 | Mechanisms of metastability in hydrogenated amorphous silicon. <i>Solar Energy Materials and Solar Cells</i> , 2003 , 78, 447-467 | 6.4 | 17 |
| 1079 | Mechanisms of network rearrangement and compaction in a-SiN _x :H films exposed to synchrotron radiation. 2003 , 320, 113-124 | | 4 |
| 1078 | Stable protocrystalline silicon and unstable microcrystalline silicon at the onset of a microcrystalline regime. <i>Applied Physics Letters</i> , 2003 , 82, 1718-1720 | 3.4 | 34 |
| 1077 | Vibrational lifetimes of hydrogen in silicon. <i>Journal of Applied Physics</i> , 2003 , 93, 2317-2336 | 2.5 | 48 |
| 1076 | Independence of photoconductivity of p-type a-Si:H films on doping level and defect concentration. 2003 , 316, 217-227 | | 2 |
| 1075 | Metastability of two-hydrogen complexes in silicon. <i>Applied Physics Letters</i> , 2003 , 83, 3710-3712 | 3.4 | 11 |
| 1074 | Study of thermal equilibration in selenium- and sulphur-doped a-Si:H. 2003 , 90, 423-431 | | 5 |
| 1073 | Vacancies and voids in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 2003 , 82, 1547-1549 | 3.4 | 199 |
| 1072 | Photoinduced structural instability around the Si-H bond in undoped hydrogenated amorphous silicon. 2003 , 68, | | 9 |
| 1071 | A quantitative measure of medium-range order in amorphous materials from transmission electron micrographs. 2003 , 15, S2425-S2435 | | 28 |
| 1070 | Light-induced defect creation under pulsed subbandgap illumination in hydrogenated amorphous silicon. 2003 , 83, 341-349 | | 12 |
| 1069 | Semiconductors, Amorphous Electronic Properties. 2003 , | | |

| | | | |
|------|--|-----|----|
| 1068 | Properties and Applications of Amorphous Materials. 2003 , | | |
| 1067 | Room Temperature Recovery of Light Induced Changes in Amorphous Silicon Solar Cells. 2003 , 762, 791 | | |
| 1066 | Combinatorial Approach to Thin-Film Silicon Materials and Devices. 2003 , 762, 911 | | 4 |
| 1065 | Reaction Control in Amorphous Silicon Film Deposition by Hydrogen Chloride. 2003 , 762, 1521 | | |
| 1064 | Evolution of Charged Gap States in α -Si:H Under Light Exposure. 2003 , 762, 1261 | | 2 |
| 1063 | Amorphous Silicon Solar Cells. 2003 , 281-315 | | |
| 1062 | Spectral Effects of a Single-Junction Amorphous Silicon Solar Cell on Outdoor Performance. 2004 , 43, 2425-2431 | | 18 |
| 1061 | Piezoelectric Photothermal Study of the Optical Absorption Spectra of Microcrystalline Silicon. 2004 , 43, 2965-2968 | | 6 |
| 1060 | Hydrogen in SiBi bond center and platelet-like defect configurations in amorphous hydrogenated silicon. 2004 , 22, 2719 | | 17 |
| 1059 | Origin of charged gap states in α -Si:H and their evolution during light soaking. 2004 , 69, | | 29 |
| 1058 | Pulsed-illumination study of metastable defect creation time scales in hydrogenated amorphous silicon. 2004 , 69, | | 1 |
| 1057 | Sample dependence of the structural, vibrational, and electronic properties of α -Si:H: A density-functional-based tight-binding study. 2004 , 70, | | 18 |
| 1056 | Theory of hydrogen-related metastability in disordered silicon. 2004 , 93, 215504 | | 5 |
| 1055 | Light-induced modification of α -SiO _x :H. I: Metastability. <i>Journal of Applied Physics</i> , 2004 , 95, 4046-4059 | 2.5 | 4 |
| 1054 | Process issues with MoS ₂ -Si:H Schottky diode and thin film transistors integration for direct x-ray detection. 2004 , 22, 2091-2095 | | |
| 1053 | Site-dependent structural instability at the surroundings of the SiBi bond in hydrogenated amorphous silicon based wide-gap alloys. 2004 , 69, | | 4 |
| 1052 | Light-induced reversible conductivity changes in silicon-on-insulator nanowires. <i>Applied Physics Letters</i> , 2004 , 85, 5272-5274 | 3-4 | 13 |
| 1051 | Light-induced metastability in hydrogenated nanocrystalline silicon solar cells. <i>Applied Physics Letters</i> , 2004 , 85, 1925-1927 | 3-4 | 76 |

| | | |
|------|--|-----|
| 1050 | Optical Investigation of the Built-In Strain in 3C-SiC Epilayers. 2004 , 457-460, 657-660 | 3 |
| 1049 | Modelling of Staebler-Wronski Effect in Hydrogenated Amorphous Silicon under Moderate and Intense Illumination. 2004 , 230-232, 221-232 | 3 |
| 1048 | The Role of Charged Gap States in Light-Induced Degradation of Single-Junction a-Si:H Solar Cells. 2004 , 808, 338 | |
| 1047 | Reversible Ordering of a-Si _{1-x} Ge _x by the Combined Effect of Light and Temperature. 2004 , 808, 233 | 1 |
| 1046 | Understanding the structure of Si nanoclusters in a/nc-Si:H films using spherical aberration-corrected transmission electron microscopy. 2004 , 808, 437 | 3 |
| 1045 | Tritium Induced Defects in Amorphous Silicon. 2004 , 808, 89 | 4 |
| 1044 | Investigation of electrical, structural, and optical properties of very thin oxide/a-Si:H/c-Si interfaces passivated by cyanide treatment. 2004 , 5774, 481 | 1 |
| 1043 | Amorphous and Microcrystalline Silicon-based Photovoltaic. 2004 , 808, 362 | 6 |
| 1042 | Buffer-layer Effect on Mixed-Phase Cells Studied by Micro-Raman and Photoluminescence Spectroscopy. 2004 , 808, 227 | |
| 1041 | A theoretical study of light induced defect creation, annealing and photoconductivity degradation in a-Si:H. 2004 , 16, 3107-3116 | 5 |
| 1040 | First test of new semitransparent amorphous silicon sensors. | |
| 1039 | Reel-to-Reel Cassette Cluster Tool System for Thin Film Transistor and Four Terminal Solar Cell Fabrication. 2004 , 814, 192 | 3 |
| 1038 | Effect of thickness on the properties of vacuum deposited Cd _{0.75} Sn _{0.25} Se mixed chalcogenide thin films. 2004 , 88, 250-257 | 10 |
| 1037 | Assessing the reliability and degradation of photovoltaic module performance parameters. 2004 , 53, 83-92 | 219 |
| 1036 | Pre-exponential factor in a-Se ₇₅ In _{25-x} Pb _x thin films. 2004 , 27, 441-444 | 16 |
| 1035 | Electron trapping by excited microvoids (ETEM) – an explanation of the Staebler-Wronski effect. 2004 , 353, 263-277 | 7 |
| 1034 | Arresting photodegradation of porous silicon by a polymer coating. 2004 , 129, 183-186 | 10 |
| 1033 | Structural changes in nanocrystalline silicon deposited by rf-magnetron sputtering. 2004 , 79, 1813-1817 | 7 |

| | | | |
|------|--|-----|-----|
| 1032 | Analysis of the effect of parasitic resistances on the performance of photovoltaic modules. <i>Renewable Energy</i> , 2004 , 29, 333-344 | 8.1 | 127 |
| 1031 | Thin-film silicon solar cell technology. <i>Progress in Photovoltaics: Research and Applications</i> , 2004 , 12, 113-132 | 6.2 | 552 |
| 1030 | Thin-film solar cells: an overview. <i>Progress in Photovoltaics: Research and Applications</i> , 2004 , 12, 69-92 | 6.8 | 830 |
| 1029 | Kinetics of optically excited charge carriers and defects in hydrogenated amorphous silicon and related alloys. 2004 , 1, 1233-1247 | | |
| 1028 | Created defect under illumination in a-Si:H: hydrogenated or isolated dangling bond ?. 2004 , 75, 269-273 | | 1 |
| 1027 | TCO and light trapping in silicon thin film solar cells. 2004 , 77, 917-930 | | 827 |
| 1026 | Development of high efficiency large area silicon thin film modules using VHF-PECVD. 2004 , 77, 951-960 | | 79 |
| 1025 | Microcrystalline silicon films and solar cells deposited by PECVD and HWCVD. 2004 , 77, 893-908 | | 51 |
| 1024 | Highly stabilized protocrystalline silicon multilayer solar cell using a silicon-carbide double p-layer structure. <i>Solar Energy Materials and Solar Cells</i> , 2004 , | 6.4 | 2 |
| 1023 | Deposition of high quality amorphous silicon, germanium and silicon-germanium thin films by a hollow cathode reactive sputtering system. 2004 , 177-178, 676-681 | | 18 |
| 1022 | Scanning tunneling microscopy/spectroscopy observation of intrinsic hydrogenated amorphous silicon surface under light irradiation. 2004 , 572, 449-458 | | 5 |
| 1021 | Sensor element for a metal-insulator-semiconductor camera system (MISCam). 2004 , 115, 331-335 | | 3 |
| 1020 | UV degradability of aryl-substituted polysilylenes. 2004 , 84, 383-391 | | 19 |
| 1019 | Photoluminescence, structural and electrical properties of passivated a-Si:H based thin films and corresponding solar cells. 2004 , 235, 351-363 | | 4 |
| 1018 | Hybrid integration of GaAs-based VCSEL array with amorphous silicon sensor. 2004 , 25, 378-380 | | 4 |
| 1017 | Studies of semitransparent optoelectronic position sensors. 2004 , 4, 329-336 | | 2 |
| 1016 | Staebler-Wronski Effect in Hydrogenated Amorphous Silicon and Related Alloy Films. 2004 , 43, 3257-3268 | | 82 |
| 1015 | Electron-phonon coupling is large for localized states. 2004 , 69, | | 50 |

| | | |
|------|--|-------|
| 1014 | Hydrogen-plasma etching of hydrogenated amorphous silicon: a study by a combination of spectroscopic ellipsometry and trap-limited diffusion model. 2004 , 84, 595-609 | 35 |
| 1013 | Reversible crystallization of a-Si _{1-x} Ge _x alloys under the combined effect of light and temperature. <i>Journal of Applied Physics</i> , 2004 , 96, 155-163 | 2.5 7 |
| 1012 | Catalytic decomposition of HCN on heated W surfaces to produce CN radicals. 2004 , 338-340, 65-69 | 10 |
| 1011 | A hydrogen-related defect and the Staebler-Wronski effect in hydrogenated amorphous silicon. 2004 , 338-340, 357-360 | 2 |
| 1010 | Photoinduced structural instability around the Si-H bond in undoped a-Si:H and related wide-gap alloys. 2004 , 338-340, 361-364 | 1 |
| 1009 | A change of photoinduced dilation of a-Si:H by cyanide treatment. 2004 , 338-340, 365-368 | 2 |
| 1008 | The Staebler-Wronski effect in amorphous germanium. 2004 , 338-340, 374-377 | 4 |
| 1007 | Photoconductivity of a-Si:H and a-Ge:H: influence of potential fluctuations. 2004 , 338-340, 314-317 | 1 |
| 1006 | Influence of light-soaking and annealing on electron and hole mobility-lifetime products in a-Si:H. 2004 , 338-340, 386-389 | 3 |
| 1005 | Investigation of bandgap states using the modulated photocurrent technique in both high and low frequency regimes. 2004 , 338-340, 390-399 | 14 |
| 1004 | Light-soaking stability of silicon thin film solar cells using alternately hydrogenated dilution method. 2004 , 338-340, 698-701 | 4 |
| 1003 | UV-visible sensors based on polymorphous silicon. 2004 , 338-340, 749-753 | 1 |
| 1002 | Observation of Si nanocrystals in a/nc-Si:H films by spherical-aberration corrected transmission electron microscopy. 2004 , 343, 78-84 | 13 |
| 1001 | Role of H in hot-wire deposited a-Si:H films revisited: optical characterization and modeling. 2004 , 343, 131-142 | 8 |
| 1000 | Concept and performance of a field-effect amorphous silicon solar cell. 2004 , 19, 61-64 | 20 |
| 999 | Hybrid VCSEL modules with integrated amorphous silicon power monitors. 2004 , | |
| 998 | How much hydrogen and voids are energetically stable in silicon thin films?. 2004 , 813, 631 | |
| 997 | 18MeV electron irradiation-induced metastability in hydrogenated amorphous silicon. 2005 , 239, 370-374 | 11 |

| | | | |
|-----|---|-----|----|
| 996 | The influence of operation temperature on the output properties of amorphous silicon-related solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2005 , 85, 167-175 | 6.4 | 36 |
| 995 | Influence of process pressure on HW-CVD deposited a-Si:H films. <i>Solar Energy Materials and Solar Cells</i> , 2005 , 85, 301-312 | 6.4 | 4 |
| 994 | Suppression of photo-induced dilation in cyanide treated hydrogenated amorphous silicon films. <i>Solar Energy Materials and Solar Cells</i> , 2005 , 85, 177-187 | 6.4 | 2 |
| 993 | Influence of the layer thickness and hydrogen dilution on electrical properties of large area amorphous silicon p-i-n solar cell. <i>Solar Energy Materials and Solar Cells</i> , 2005 , 87, 349-355 | 6.4 | 5 |
| 992 | Flexible displays and stable high efficiency four terminal solar cells using thin film silicon technology. 2005 , 200, 1907-1912 | | 5 |
| 991 | Applicability of the Meyer-Rohrbaugh rule in a-Se ₉₀ Ge ₁₀ -In _x thin films in presence of light. 2005 , 351, 1577-1581 | | 14 |
| 990 | First results on the characterization of new semitransparent amorphous silicon sensors. 2005 , 54, 1422-1426 | | 3 |
| 989 | Preliminary radiation tests of 32-nm thick hydrogenated amorphous silicon films. 2005 , 552, 88-92 | | 1 |
| 988 | Electron trapping by excited microvoids does not give rise to a Staebler-Wronski effect. 2005 , 358, 181-184 | | 2 |
| 987 | Amorphous silicon solar cells. 2005 , 217-251 | | 2 |
| 986 | EVALUATION OF CONTRIBUTION OF HIGHER-ORDER SILANE RADICALS IN SILANE DISCHARGES TO Si-H ₂ BOND FORMATION IN A-Si:H FILMS. 2005 , 79-82 | | |
| 985 | Effect of electrical bias on metastability in hydrogenated nanocrystalline silicon solar cells. <i>Applied Physics Letters</i> , 2005 , 86, 092103 | 3.4 | 25 |
| 984 | A highly stabilized hydrogenated amorphous silicon film having very low hydrogen concentration and an improved Si bond network. <i>Journal of Applied Physics</i> , 2005 , 97, 033522 | 2.5 | 48 |
| 983 | Deposition of microcrystalline silicon prepared by hot-wire chemical-vapor deposition: The influence of the deposition parameters on the material properties and solar cell performance. <i>Journal of Applied Physics</i> , 2005 , 98, 024905 | 2.5 | 93 |
| 982 | Cluster-eliminating filter for depositing cluster-free a-Si:H films by plasma chemical vapor deposition. 2005 , 76, 113501 | | 16 |
| 981 | Atomistic analysis of the mechanism of hydrogen diffusion in plasma-deposited amorphous silicon thin films. <i>Applied Physics Letters</i> , 2005 , 87, 261911 | 3.4 | 9 |
| 980 | Thermally activated mechanisms of hydrogen abstraction by growth precursors during plasma deposition of silicon thin films. 2005 , 122, 54703 | | 32 |
| 979 | Enhancement of light-induced degradation under reverse bias in hydrogenated nanocrystalline silicon solar cells. <i>Journal of Applied Physics</i> , 2005 , 98, 074902 | 2.5 | 14 |

| | | |
|-----|--|-------|
| 978 | Photoinduced structural instability in a hydrogenated amorphous silicon-germanium alloy with high structural inhomogeneity. 2005 , 71, | 3 |
| 977 | Performance and reliability of a 1-kW amorphous silicon photovoltaic roofing system. | 10 |
| 976 | Performance test of amorphous silicon modules in different climates - year three: higher minimum operating temperatures lead to higher performance levels. | 3 |
| 975 | ON THE MICROSCOPIC BEHAVIOR OF HYDROGEN IN AMORPHOUS SILICON. 2005 , 19, 683-695 | 3 |
| 974 | Vertical integration of hydrogenated amorphous silicon devices on CMOS circuits. 2005 , 869, 111 | 11 |
| 973 | Comparison of the Effect of Light Soaking in Porous Silicon and a-Si:H. 2005 , 862, 981 | |
| 972 | Experimental Study of Silane Plasma Nanoparticle Formation in Amorphous Silicon Thin Films. 2005 , 862, 811 | |
| 971 | Electronic Properties of Improved Amorphous Silicon-Germanium Alloys Deposited by a Low Temperature Hot Wire Chemical Vapor Deposition Process. 2005 , 862, 721 | 4 |
| 970 | Improved Stability of Hydrogenated Amorphous Silicon Solar Cells Fabricated by Triode-Plasma CVD. 2005 , 862, 1111 | 1 |
| 969 | Effect of Fermi Level Position in Intrinsic a-Si:H on the Evolution of Defect States under Light Exposure. 2005 , 862, 1311 | 2 |
| 968 | Highly and Rapidly Stabilized Protocrystalline Silicon Multilayer Solar Cells. 2005 , 862, 1121 | 5 |
| 967 | Topological defects and the Staebler-Wronski effect in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 2005 , 87, 191903 | 3-4 9 |
| 966 | Interplay of hydrogen and deposition temperature in optical properties of hot-wire deposited a-Si:H Films: Ex situ spectroscopic ellipsometry studies. 2005 , 23, 1668-1675 | 6 |
| 965 | Metastable defect migration under high carrier injection in hydrogenated amorphous silicon p-i-n solar cells. <i>Journal of Applied Physics</i> , 2005 , 98, 044511 | 2.5 4 |
| 964 | Highly Stable a-Si:H Films Deposited by Using Multi-Hollow Plasma Chemical Vapor Deposition. 2005 , 44, L1430-L1432 | 48 |
| 963 | Progress in four-terminal nano-crystalline Si/amorphous Si solar cells. | |
| 962 | . 2005 , | 11 |
| 961 | Amorphous silicon solar cells with stable protocrystalline silicon and unstable microcrystalline silicon at the onset of a microcrystalline regime as i-layers. 2005 , 351, 748-753 | 6 |

| | | | |
|-----|---|-----|-----|
| 960 | Infrared detection of hydrogen-generated free carriers in polycrystalline ZnO thin films. <i>Journal of Applied Physics</i> , 2005 , 97, 043522 | 2.5 | 44 |
| 959 | Anion vacancies as a source of persistent photoconductivity in II-VI and chalcopyrite semiconductors. 2005 , 72, | | 495 |
| 958 | Studies of silicon dihydride and its potential role in light-induced metastability in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 2005 , 86, 241916 | 3.4 | 11 |
| 957 | Experimental investigations into the formation of nanoparticles in aSi:H thin films. <i>Journal of Applied Physics</i> , 2005 , 97, 034310 | 2.5 | 18 |
| 956 | Amorphous (Protocrystalline) and Microcrystalline Thin Film Silicon Solar Cells. 2006 , 131-166 | | 3 |
| 955 | Role of hydrogen diffusion on the growth of polymorphous and microcrystalline silicon thin films. 2006 , 35, 165-172 | | 15 |
| 954 | Amorphous Semiconductors: Structure, Optical, and Electrical Properties. 2006 , 565-580 | | |
| 953 | Influence of Light-Soaking in Undoped Polycrystalline Silicon Films from SiCl ₄ /H ₂ . 2006 , | | |
| 952 | Distribution of Local Open-Circuit Voltage on Amorphous and Nanocrystalline Mixed-Phase Si:H and SiGe:H Solar Cells. 2006 , | | |
| 951 | Analysis of Radiation Response and Recovery Characteristics of Amorphous Silicon Solar Cells. 2006 , | | 7 |
| 950 | Light-Soaking Behaviors of the Protocrystalline Silicon Multilayer : Origin of the Rapid Stabilized and Annealing Behavior. 2006 , | | |
| 949 | Improved stability of nanocrystalline porous silicon after coating with a polymer. <i>Journal of Applied Physics</i> , 2006 , 100, 024308 | 2.5 | 11 |
| 948 | Recovery of Light Induced Degradation in Amorphous Silicon Solar Cells and Modules. 2006 , | | 3 |
| 947 | Dielectric Conduction Mechanisms of Advanced Interconnects: Evidence for Thermally- Induced 3D /2 D Transition. 2006 , | | 4 |
| 946 | Incorporation of Higher-Order Silane Radicals Into A-Si:H Films of High Stability Against Light Exposure. 2006 , | | 1 |
| 945 | Optical characterization of polysilicon thin films for solar applications. 2006 , 80, 667-674 | | 23 |
| 944 | Advances in Microcrystalline Silicon Solar Cell Technologies. 2006 , 133-171 | | 13 |
| 943 | Advanced Amorphous Silicon Solar Cell Technologies. 2006 , 173-236 | | 13 |

| | | |
|-----|---|--------|
| 942 | Hydrogen dynamics and light-induced structural changes in hydrogenated amorphous silicon. 2006 , 74, | 17 |
| 941 | The similarities between amorphous silicon and germanium stretch mode dynamics. 2006 , 352, 1268-1271 | |
| 940 | Experimental evidence for extended hydrogen diffusion in silicon thin films during light-soaking. 2006 , 352, 1083-1086 | 19 |
| 939 | Laser crystallization of compensated hydrogenated amorphous silicon thin films. 2006 , 352, 1003-1007 | 1 |
| 938 | Medium range order and the radial distribution function. 2006 , 352, 116-122 | 11 |
| 937 | Fabrication of a n^+p tunnel junction for a protocrystalline silicon multilayer/amorphous silicon tandem solar cell. 2006 , 352, 1847-1850 | 17 |
| 936 | Light-induced creation of defects related to low energy photoluminescence in hydrogenated amorphous silicon. 2006 , 352, 1064-1067 | 9 |
| 935 | Influence of polystyrene coating on the photo-degradation of amorphous silicon. 2006 , 352, 2015-2018 | 1 |
| 934 | Characterization of the protocrystalline silicon multilayer. 2006 , 352, 1134-1137 | 6 |
| 933 | Advanced optical design of tandem micromorph silicon solar cells. 2006 , 352, 1892-1895 | 21 |
| 932 | Metastable photoexpansion of hydrogenated amorphous silicon produced by exposure to short laser pulses. 2006 , 352, 429-433 | |
| 931 | Defect-state engineering in a-Si:H: An effective tool for studying processes during light-induced degradation. 2006 , 352, 1059-1063 | 2 |
| 930 | A new instability phenomenon in microcrystalline silicon thin film transistors. 2006 , 352, 1715-1718 | 2 |
| 929 | The localization of electrons in amorphous semiconductors: A twenty-first century perspective. 2006 , 352, 839-850 | 13 |
| 928 | Improving stability of amorphous silicon using chemical annealing with helium. 2006 , 352, 1937-1940 | 7 |
| 927 | ???. 2006 , 57, 187-193 | |
| 926 | . 2006 , | 158 |
| 925 | Fluctuation microscopy evidence for enhanced nanoscale structural order in polymorphous silicon thin films. <i>Journal of Applied Physics</i> , 2006 , 100, 094319 | 2.5 15 |

| | | | |
|-----|--|-----|-----|
| 924 | Local structure reconstruction in hydrogenated amorphous silicon from angular correlation and synchrotron diffraction studies. 2006 , 252, 3194-3200 | | 6 |
| 923 | Solar photovoltaics R&D at the tipping point: A 2005 technology overview. 2006 , 150, 105-135 | | 216 |
| 922 | Study of the long-term behavior of the sensitivity of amorphous silicon photo detectors under illumination. 2006 , 568, 18-21 | | 4 |
| 921 | On a presence of SimHn clusters in a-Si:H/c-Si structures. 2006 , 252, 7722-7725 | | 6 |
| 920 | Light-induced anelastic change in a-Si(H). 2006 , 442, 302-306 | | 3 |
| 919 | Stability of microcrystalline silicon materials under light soaking. 2006 , 9, 300-303 | | 6 |
| 918 | Ab initio material design of CN for control of DB in a-Si. 2006 , 376-377, 240-244 | | |
| 917 | The nature of mobile hydrogen in a-Si:H electrochemical studies. 2006 , 80, 694-700 | | 3 |
| 916 | On the sensitivity of open-circuit voltage and fill factor on dangling bond density and Fermi level position in amorphous silicon p solar cell. <i>Solar Energy Materials and Solar Cells</i> , 2006 , 90, 1254-1272 | 6.4 | 10 |
| 915 | Silicon thin films prepared in the transition region and their use in solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2006 , 90, 3001-3008 | 6.4 | 16 |
| 914 | Reduction of light-induced defects by nano-structure tailored silicon solar cells using low-cost TCO substrates. <i>Solar Energy Materials and Solar Cells</i> , 2006 , 90, 3174-3178 | 6.4 | 10 |
| 913 | Microstructure, optical characterization and light induced degradation in a-Si:H deposited at different temperatures. 2006 , 501, 84-87 | | 2 |
| 912 | Crystallization of HWCVD amorphous silicon thin films at elevated temperatures. 2006 , 501, 98-101 | | 8 |
| 911 | Species responsible for Si 2 bond formation in a-Si:H films deposited using silane high frequency discharges. 2006 , 506-507, 17-21 | | 16 |
| 910 | Performances of an in-line PECVD system used to produce amorphous and nanocrystalline silicon solar cells. 2006 , 511-512, 238-242 | | 3 |
| 909 | CW laser crystallization of amorphous silicon; dependence of amorphous silicon thickness and pattern width on the grain size. 2006 , 511-512, 243-247 | | 11 |
| 908 | UV degradability of polysilanes for nanoresists examined by electron spectroscopies and photoluminescence. 2006 , 56, 41-50 | | 5 |
| 907 | Quantitative hydrogen measurements in PECVD and HWCVD a-Si:H using FTIR spectroscopy. 2006 , 41, 5287-5291 | | 15 |

| | | |
|-----|--|-------|
| 906 | Progress in single junction microcrystalline silicon solar cells deposited by Hot-Wire CVD. 2006 , 501, 247-251 | 9 |
| 905 | Highly stabilized hydrogenated amorphous silicon solar cells fabricated by triode-plasma CVD. 2006 , 502, 306-310 | 29 |
| 904 | Photoinduced phenomena in nanostructured porous silicon. 2006 , 510, 169-174 | 15 |
| 903 | Piezoelectric photothermal study of the optical properties of microcrystalline silicon near the bandgap. 2006 , 511-512, 112-116 | 4 |
| 902 | The enhancement of nanocrystallization in amorphous silicon thin films deposited on glass substrate. 2006 , 6, e54-e57 | 2 |
| 901 | Stability of thin films of microcrystalline silicon under light soaking. 2006 , 2, 15-17 | 1 |
| 900 | Estimating thermal stress in BIPV modules. 2006 , 30, 1264-1277 | 6 |
| 899 | Photon enhanced diffusion model for α -Si:H photo-degradation. 2006 , 21, 91-103 | 2 |
| 898 | Local Current Flow in Mixed-Phase Silicon Solar Cells and Correlation to Light-Induced Open-Circuit Voltage Enhancement. 2006 , 910, 6 | |
| 897 | The Influence of Thermophoresis Effects During Deposition of Hydrogenated Amorphous Silicon Thin Films with Nanocrystalline Silicon Inclusions. 2006 , 910, 7 | 3 |
| 896 | Metastability in Hydrogenated Nanocrystalline Silicon Solar Cells. 2006 , 910, 1 | 2 |
| 895 | Semi-quantitative study on the Staebler-Wronski effect of hydrogenated amorphous silicon films prepared with HW-ECR-CVD system. 2006 , 15, 813-817 | 2 |
| 894 | The role of hydrogen in hydrogenated microcrystalline silicon film and in deposition process with VHF-PECVD technique. 2006 , 15, 1374-1378 | 5 |
| 893 | Photon Detectors. 2006 , 281-343 | |
| 892 | Mechanisms for Defect Creation and Removal in Hydrogenated and Deuterated Amorphous Silicon Studied using Thin Film Transistors. 2006 , 910, 1 | 5 |
| 891 | Characterization of the Evolution in Metastable Defects Created by Recombination of Carriers Generated by Photo-generation and Injection in p-i-n α -Si:H Solar Cells. 2006 , 910, 2 | 8 |
| 890 | Electroactive Polysilanes: Metastability of Electronic States in Poly[methyl(phenyl)silylene]. 2006 , 447, 265/[583]-284/[602] | 4 |
| 889 | Charge deep-level transient spectroscopy study of high-energy-electron-beam-irradiated hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 2006 , 89, 022119 | 3-4 1 |

| | | | |
|-----|--|-----|----|
| 888 | Electronic characterization and effects of light-induced degradation on hydrogenated nanocrystalline silicon. <i>Applied Physics Letters</i> , 2006 , 88, 071920 | 3-4 | 11 |
| 887 | Modeling of annealing kinetics for hydrogenated-amorphous-silicon-based solar cells using two-component metastable defects. <i>Applied Physics Letters</i> , 2006 , 88, 243510 | 3-4 | 13 |
| 886 | How deposition parameters control growth dynamics of nc-Si deposited by hot-wire chemical vapor deposition. 2006 , 24, 95-102 | | 9 |
| 885 | DEVELOPMENT OF HIGHLY STABLE HYDROGENATED AMORPHOUS SILICON FILMS FOR APPLICATION IN SOLAR CELLS. 2006 , 20, 2035-2047 | | 6 |
| 884 | Atomistic simulation of light-induced changes in hydrogenated amorphous silicon. 2006 , 18, L1-L6 | | 14 |
| 883 | NANOCOMPOSITE THIN FILMS FOR SOLAR ENERGY CONVERSION. 2007 , 381-417 | | 1 |
| 882 | Flexible Solar Cells and Stable High-Efficiency Four-Terminal Solar Cells Using Thin-Film Silicon Technology. 2007 , 22, 412-418 | | 9 |
| 881 | Metastability in hydrogenated nanocrystalline silicon solar cells. 2007 , 22, 1128-1137 | | 12 |
| 880 | Recent progress in inorganic solar cells using quantum structures. 2007 , 1, 67-73 | | 15 |
| 879 | Structural Properties of Silicon Thin Films Prepared by Hot-Wire-Assisted Electron Cyclotron Resonance Chemical Vapor Deposition. 2007 , 46, 751-755 | | |
| 878 | The determinants of hydrogen concentrations in hydrogenated amorphous silicon films prepared using a triode deposition system. <i>Journal of Applied Physics</i> , 2007 , 101, 064911 | 2-5 | 8 |
| 877 | Modeling of light-induced defect creation in hydrogenated amorphous silicon. 2007 , 76, | | 13 |
| 876 | Effect of energetic ions on the stability of bond-center hydrogen in silicon. 2007 , 75, | | 5 |
| 875 | Absolute in situ measurement of surface dangling bonds during a-Si:H growth. <i>Applied Physics Letters</i> , 2007 , 90, 161918 | 3-4 | 15 |
| 874 | H1 NMR electron-nuclear cross relaxation in thin films of hydrogenated amorphous silicon. 2007 , 76, | | |
| 873 | Local current flow in amorphous and nanocrystalline mixed-phase silicon solar cells. <i>Journal of Applied Physics</i> , 2007 , 101, 033712 | 2-5 | 23 |
| 872 | High efficiency protocrystalline silicon/microcrystalline silicon tandem cell with zinc oxide intermediate layer. <i>Applied Physics Letters</i> , 2007 , 90, 263509 | 3-4 | 45 |
| 871 | Two characteristic photoluminescence states and their metastability in hydrogenated amorphous silicon and its alloys. <i>Journal of Applied Physics</i> , 2007 , 101, 053711 | 2-5 | 3 |

| | | |
|-----|---|-----|
| 870 | Si-H bond dynamics in hydrogenated amorphous silicon. 2007 , 76, | 2 |
| 869 | Light induced microstructure transformation in a-Si:H films. 2007 , 16, 1125-1128 | |
| 868 | Phase Control and Stability of Thin Silicon Films Deposited from Silane Diluted with Hydrogen. 2007 , 989, 1 | 5 |
| 867 | Light Soaking and Thermal Annealing Effects on the Micro-Electrical Properties of Amorphous and Nanocrystalline Mixed-phase Silicon Solar Cells. 2007 , 989, 5 | 4 |
| 866 | Temperature Dependence of Si-Based Thin-Film Solar Cells Fabricated on Amorphous to Microcrystalline Silicon Transition Phase. 2007 , 46, 7212-7216 | 15 |
| 865 | Metastable Defects in Tritiated Amorphous Silicon. 2007 , 989, 4 | |
| 864 | Temperature dependence of Si-based thin film solar cells near phase boundary. 2007 , | 3 |
| 863 | Silicon nanowires for photovoltaic applications: The progress and challenge. 2012 , 1, 654-673 | 98 |
| 862 | High-performance a-SiGe:H thin film prepared by plasma-enhanced chemical vapor deposition with high plasma power for solar-cell application. 2012 , 209, 2527-2531 | 6 |
| 861 | High efficiency a-Si:H/a-Si:H solar cell with a tunnel recombination junction and a n-type β -Si:H layer. 2012 , 520, 3684-3687 | 9 |
| 860 | Prospects for electron microscopy characterisation of solar cells: opportunities and challenges. 2012 , 119, 82-96 | 3 |
| 859 | Improved parametric empirical determination of module short circuit current for modelling and optimization of solar photovoltaic systems. 2012 , 86, 2240-2254 | 19 |
| 858 | Amorphous and nanocrystalline silicon thin film photovoltaic technology on flexible substrates. 2012 , 30, 04D108 | 28 |
| 857 | New insights in the nanostructure and defect states of hydrogenated amorphous silicon obtained by annealing. 2012 , | 1 |
| 856 | Microstructure analysis of n-doped β -SiO _x :H reflector layers and their implementation in stable a-Si:H p-i-n junctions. 2012 , | 4 |
| 855 | Multiscale transparent electrode architecture for efficient light management and carrier collection in solar cells. 2012 , 12, 1344-8 | 119 |
| 854 | Silicon grain boundary passivation for photovoltaics: A novel approach with small polar molecules. 2012 , | |
| 853 | Thin-film silicon technology for highly-efficient solar cells. 2012 , | 1 |

| | | | |
|-----|---|-----|-----|
| 852 | Contraction and expansion of the silicon scaffold of stable Si ₆ R ₆ isomers. 2012 , 134, 16008-16 | | 68 |
| 851 | Damage at hydrogenated amorphous/crystalline silicon interfaces by indium tin oxide overlayer sputtering. <i>Applied Physics Letters</i> , 2012 , 101, 171604 | 3-4 | 171 |
| 850 | Electric properties of undoped hydrogenated amorphous silicon semiconductors irradiated with self-ions. 2012 , 285, 107-111 | | 5 |
| 849 | Pulsed electrically detected magnetic resonance for thin film silicon and organic solar cells. 2012 , 14, 14418-38 | | 26 |
| 848 | Effect of ultraviolet light exposure to boron doped hydrogenated amorphous silicon oxide thin film. 2012 , 260, 17-22 | | 6 |
| 847 | Observation of Meyer-Weidel rule in CdS thin films. 2012 , 15, 181-186 | | 7 |
| 846 | Evaluations on Current-matching of Multi-junction Photovoltaics under Outdoor Conditions. 2012 , 15, 396-402 | | |
| 845 | The potential of building-integrated (BIPV) and building-applied photovoltaics (BAPV) in single-family, urban residences at low latitudes in Brazil. 2012 , 50, 290-297 | | 69 |
| 844 | Embedded metal nanopatterns for near-field scattering-enhanced optical absorption. 2012 , 209, 1829-1834 | | 6 |
| 843 | Solar Cell as an Energy Harvesting Device. 2012 , 463-539 | | 1 |
| 842 | Thin-Film Silicon PV Technology. 2012 , 389-398 | | 4 |
| 841 | Thin-Film Silicon Solar Cells. 2012 , 209-281 | | 3 |
| 840 | Open-source development of solar photovoltaic technology. 2012 , 16, 379-388 | | 35 |
| 839 | Irreversible light-induced degradation and stabilization of hydrogenated polymorphous silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 105, 208-212 | 6.4 | 27 |
| 838 | The effects of oxygen annealing on the electrical characteristics of hydrothermally grown zinc oxide thin-film transistors. 2012 , 77, 72-76 | | 11 |
| 837 | Effects of prolonged illumination with white light on the photo-response of carbon-doped hydrogenated amorphous silicon photo-detectors. 2012 , 693, 253-260 | | 2 |
| 836 | Anomalous enhancement in radiation induced conductivity of hydrogenated amorphous silicon semiconductors. 2012 , 286, 29-34 | | 5 |
| 835 | Relation of defects and grain boundaries to transport and photo-transport: Solved and unsolved problems in microcrystalline silicon. 2012 , 358, 1946-1953 | | 8 |

| | | | |
|-----|---|-----|----|
| 834 | Charge collection in amorphous silicon solar cells: Cell analysis and simulation of high-efficiency pin devices. 2012 , 358, 2187-2189 | | 5 |
| 833 | Enhanced spectral response by silicon nitride index matching layer in amorphous silicon thin-film solar cells. 2012 , 358, 2324-2326 | | 12 |
| 832 | Dangling bonds in amorphous silicon investigated by multifrequency EPR. 2012 , 358, 2067-2070 | | 3 |
| 831 | Temporal electric conductivity variations of hydrogenated amorphous silicon due to high energy protons. 2012 , 358, 2039-2043 | | 4 |
| 830 | Optical and structural proprieties of nc-Si:H prepared by argon diluted silane PECVD. 2012 , 358, 1978-1982 | | 16 |
| 829 | The nanostructural analysis of hydrogenated silicon films based on positron annihilation studies. 2012 , 358, 2015-2018 | | 19 |
| 828 | Metastability effects in hydrogenated microcrystalline silicon thin films investigated by the dual beam photoconductivity method. 2012 , 358, 2074-2077 | | 12 |
| 827 | Influence of helium dilution of silane on microstructure and opto-electrical properties of hydrogenated nanocrystalline silicon (nc-Si:H) thin films deposited by HW-CVD. 2012 , 47, 3445-3451 | | 4 |
| 826 | The (R)evolution of Thin-Film Transistors (TFTs). 2012 , 155-209 | | 0 |
| 825 | Performance and stability of solution-based cadmium sulfide thin film transistors: Role of CdS cluster size and film composition. <i>Applied Physics Letters</i> , 2012 , 101, 262103 | 3-4 | 13 |
| 824 | . 2012 , | | 0 |
| 823 | A scattering model for nano-textured interfaces and its application in opto-electrical simulations of thin-film silicon solar cells. <i>Journal of Applied Physics</i> , 2012 , 111, 083108 | 2.5 | 64 |
| 822 | The effect of hybrid photovoltaic thermal device operating conditions on intrinsic layer thickness optimization of hydrogenated amorphous silicon solar cells. 2012 , 86, 2673-2677 | | 22 |
| 821 | a membrane device for substrate-free photovoltaic characterization of quantum dot based p-i-n solar cells. 2012 , 24, 3124-9 | | 32 |
| 820 | Photoresponse and carrier transport of protocrystalline silicon multilayer films. 2012 , 57, 2624-2630 | | 3 |
| 819 | RETRACTED: Study of textured ZnO:Al thin film and its optical properties for thin film silicon solar cells. 2012 , 73, 52-56 | | 4 |
| 818 | Highly transparent ZnO bilayers by LP-MOCVD as front electrodes for thin-film micromorph silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 98, 331-336 | 6.4 | 33 |
| 817 | Effects on amorphous silicon photovoltaic performance from high-temperature annealing pulses in photovoltaic thermal hybrid devices. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 100, 199-203 | 6.4 | 32 |

| | | | |
|-----|---|-----|------|
| 816 | Selectively transparent and conducting photonic crystal solar spectrum splitters made of alternating sputtered indium-tin oxide and spin-coated silica nanoparticle layers for enhanced photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 102, 173-183 | 6.4 | 25 |
| 815 | Improved stability of amorphous silicon solar cells with p-type nanocrystalline silicon carbide window layer. 2012 , 520, 3096-3099 | | 6 |
| 814 | Analysis of single junction a-Si:H solar cells grown on different TCOs. 2012 , 86, 765-768 | | 3 |
| 813 | Determination of hydrogen concentration in a-Si and a-Ge layers by elastic recoil detection analysis. 2012 , 86, 711-713 | | 8 |
| 812 | Stability of polymer solar cells. 2012 , 24, 580-612 | | 1149 |
| 811 | Silicon filaments in silicon oxide for next-generation photovoltaics. 2012 , 24, 1182-6 | | 103 |
| 810 | Improved micromorph solar cells by means of mixed-phase n-doped silicon oxide layers. <i>Progress in Photovoltaics: Research and Applications</i> , 2013 , 21, 148-155 | 6.8 | 41 |
| 809 | Solar energy harvesting with the application of nanotechnology. 2013 , 26, 837-852 | | 137 |
| 808 | Three-dimensional imaging for precise structural control of Si quantum dot networks for all-Si solar cells. 2013 , 5, 7499-504 | | 19 |
| 807 | Surface Magnetism: Relativistic Effects at Semiconductor Interfaces and Solar Cells. 2013 , 129-143 | | |
| 806 | Introduction to Thin Film Transistors. 2013 , | | 66 |
| 805 | Fabrication of Ag Nanoparticles Embedded in Al:ZnO as Potential Light-Trapping Plasmonic Interface for Thin Film Solar Cells. 2013 , 8, 1485-1492 | | 18 |
| 804 | Improvement in the electrical properties of Se- and S-doped hydrogenated amorphous silicon thin films by annealing. 2013 , 62, 1269-1273 | | |
| 803 | Optimized short-circuit current mismatch in multi-junction solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 117, 120-125 | 6.4 | 52 |
| 802 | On the formation of blisters in annealed hydrogenated a-Si layers. 2013 , 8, 84 | | 6 |
| 801 | . <i>IEEE Journal of Photovoltaics</i> , 2013 , 3, 1140-1143 | 3.7 | 1 |
| 800 | Degradation Behavior of Flexible a-Si/a-SiGe/a-SiGe Triple-Junction Solar Cells Irradiated With Protons. <i>IEEE Journal of Photovoltaics</i> , 2013 , 3, 1415-1422 | 3.7 | 3 |
| 799 | Simulation of a-Si:H dual junction solar cells. 2013 , | | |

| | | | |
|-----|--|-----|-----|
| 798 | New Insights in the Nanostructure and Defect States of Hydrogenated Amorphous Silicon Obtained by Annealing. <i>IEEE Journal of Photovoltaics</i> , 2013 , 3, 65-71 | 3-7 | 33 |
| 797 | Monitoring the performance of single and triple junction amorphous silicon modules in two building integrated photovoltaic (BIPV) installations. 2013 , 109, 154-162 | | 41 |
| 796 | Evolution of the structure and hydrogen bonding configuration in annealed hydrogenated a-Si/a-Ge multilayers and layers. 2013 , 269, 12-16 | | 3 |
| 795 | Sustainable solar energy conversion to chemical and electrical energy. 2013 , 27, 494-504 | | 48 |
| 794 | Influence of argon dilution on the growth of amorphous to ultra nanocrystalline silicon films using VHF PECVD process. 2013 , 577, 710-716 | | 13 |
| 793 | The electrically detected magnetic resonance microscope: combining conductive atomic force microscopy with electrically detected magnetic resonance. 2013 , 84, 103911 | | 5 |
| 792 | Advanced materials processing for high-efficiency thin-film silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 119, 156-162 | 6.4 | 23 |
| 791 | Analysis of light-induced degradation mechanisms in $\text{Si:H}/\text{Si:H}$ solar photovoltaics. 2013 , 47, 1252-1257 | | |
| 790 | Substrate versus superstrate configuration for stable thin film silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 119, 124-128 | 6.4 | 22 |
| 789 | See-through amorphous silicon solar cells with selectively transparent and conducting photonic crystal back reflectors for building integrated photovoltaics. <i>Applied Physics Letters</i> , 2013 , 103, 221109 | 3-4 | 20 |
| 788 | Method for studying the light-induced degradation of $\text{Si:H}/\text{Si:H}$ tandem photovoltaic converters under increased illuminance. 2013 , 47, 1376-1381 | | |
| 787 | Remarkable progress in thin-film silicon solar cells using high-efficiency triple-junction technology. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 119, 26-35 | 6.4 | 146 |
| 786 | Behaviour of amorphous silicon solar modules: A parameter study. 2013 , 92, 206-213 | | 10 |
| 785 | Outdoor relations of an amorphous Silicon for small scale grid-connected photovoltaic system. 2013 , | | |
| 784 | Aerosol-jet printing of nanowire networks of zinc octaethylporphyrin and its application in flexible photodetectors. 2013 , 49, 2433-5 | | 29 |
| 783 | Research of nano-diamond film prepared on solar cell window. 2013 , | | |
| 782 | Quantitative analysis of hydrogen in amorphous silicon using Raman scattering spectroscopy. 2013 , 44, 1760-1764 | | 55 |
| 781 | Role of heterogeneities in Staebler-Wronski effect. 2013 , 93, 4213-4220 | | 5 |

| | | | |
|-----|---|-----|-----|
| 780 | Modeling Sub-Threshold Current-Voltage Characteristics in Thin Film Transistors. 2013 , 9, 883-889 | | 30 |
| 779 | Photovoltaic cells technology: principles and recent developments. 2013 , 45, 161-197 | | 40 |
| 778 | Investigation of nanocrystallization of a-Si _{1-x} Gex:H thin films diluted with argon in the PECVD system. 2013 , 365, 37-41 | | 9 |
| 777 | Structural and optical properties of silicon thin-films deposited by hot-wire chemical vapor deposition: The effects of silane concentrations. 2013 , 542, 139-143 | | 1 |
| 776 | Use of Amorphous Silicon for Active Photonic Devices. 2013 , 60, 1495-1505 | | 28 |
| 775 | Degradation behavior of hydrogenated amorphous/microcrystalline silicon tandem solar cells. 2013 , 210, 1137-1142 | | 2 |
| 774 | Improved light trapping in thin-film silicon solar cells via alternated n-type silicon oxide reflectors. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 119, 77-83 | 6.4 | 20 |
| 773 | Achievements and challenges in thin film silicon module production. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 119, 196-203 | 6.4 | 29 |
| 772 | Development of n- μ -SiOx:H as cost effective back reflector and its application to thin film amorphous silicon solar cells. 2013 , 97, 591-595 | | 13 |
| 771 | Atomic modeling of structural and optical properties of amorphous silicon. 2013 , 570, 95-99 | | 6 |
| 770 | Radiofrequency power effects on the optical and structural properties of hydrogenated silicon films prepared by radiofrequency magnetron sputtering. 2013 , 545, 245-250 | | 3 |
| 769 | Thin-Film Silicon Solar Cells. 2013 , 159-223 | | |
| 768 | Efficient light absorption with integrated nanopillar/nanowell arrays for three-dimensional thin-film photovoltaic applications. 2013 , 7, 2725-32 | | 96 |
| 767 | Broadband light-trapping enhancement in an ultrathin film a-Si absorber using whispering gallery modes and guided wave modes with dielectric surface-textured structures. 2013 , 25, 2617-23 | | 54 |
| 766 | High-efficiency microcrystalline silicon single-junction solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2013 , 21, 821-826 | 6.8 | 80 |
| 765 | Study of the light-induced degradation of tandem μ -Si:H/ μ -Si:H photovoltaic converters. 2013 , 47, 679-685 | | 7 |
| 764 | Non-vacuum processed next generation thin film photovoltaics: Towards marketable efficiency and production of CZTS based solar cells. 2013 , 94, 37-70 | | 109 |
| 763 | Dangling-bond defect in a-Si:H: Characterization of network and strain effects by first-principles calculation of the EPR parameters. 2013 , 87, | | 14 |

| | | | |
|-----|--|-----|----|
| 762 | Trap State Spectroscopy of $\text{LiMyMn}_{2-y}\text{O}_4$ (M = Mn, Ni, Co): Guiding Principles for Electrochemical Performance. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 3812-3817 | 3.8 | 5 |
| 761 | Revisiting the Dependence of the Optical and Mobility Gaps of Hydrogenated Amorphous Silicon on Hydrogen Concentration. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 23956-23963 | 3.8 | 17 |
| 760 | Structural, optical and photoelectric properties of hydrogenated polymorphous silicon. 2013 , | | |
| 759 | Ion irradiation effects on electric properties of hydrogenated amorphous silicon thin films. 2013 , | | |
| 758 | Characterizations and Analyses of Large-Area a-Si:H/ β -Si:H Thin-Film Solar Modules for Efficiency Optimization. <i>IEEE Journal of Photovoltaics</i> , 2013 , 3, 72-76 | 3.7 | |
| 757 | Comparative Analysis of Crystalline and Double-Junction Amorphous Silicon Modules Performance in Outdoor Conditions. 2013 , 135, | | 4 |
| 756 | Degradation kinetics of amorphous silicon solar cells processed at high pressure and its relation to the nanostructure. 2013 , | | 6 |
| 755 | A study of hydrogen microstructure in amorphous silicon via inversion of nuclear magnetic resonance spectra. 2013 , 25, 165801 | | 6 |
| 754 | Silicon-based heterogeneous photonic integrated circuits for the mid-infrared. 2013 , 3, 1523 | | 52 |
| 753 | Amorphous Silicon Solar Cells. 2013 , 721-738 | | |
| 752 | Optimization of absorber layers' thickness in a Si micromorph solar cell for current matching with intermediate ZnO reflector. 2013 , 5, 023121 | | 2 |
| 751 | Real-time transmission Mueller polarimetry on hydrogenated polymorphous silicon under current injection. 2013 , 46, 045304 | | 4 |
| 750 | Local junction voltages and radiative ideality factors of a-Si:H solar modules determined by electroluminescence imaging. 2013 , 1536, 105-111 | | 1 |
| 749 | Effect of the Substrate Temperature on the Transition from Amorphous to Microcrystalline Silicon with High Hydrogen Dilution. 2013 , 773, 520-523 | | |
| 748 | Low Cost Amorphous Silicon Intrinsic Layer for Thin-Film Tandem Solar Cells. 2013 , 2013, 1-5 | | |
| 747 | Influence of Substrate Temperature on Properties of Transition Materials from Amorphous to Microcrystalline Silicon Prepared by VHF-PECVD. 2013 , 750-752, 1906-1909 | | |
| 746 | Microstructure and Local Charge Distribution in Hydrogenated Nanocrystalline Silicon under Illumination Studied by Electrostatic Force Microscopy.. 2013 , 1493, 201-206 | | |
| 745 | Impact on Thin Film Silicon Properties and Solar Cell Parameters of Texture Generated by LaserAnnealing and Chemical Etching of ZnO:Al. 2013 , 1536, 45-50 | | |

| | | | |
|-----|--|-----|----|
| 744 | Deposition and Properties of Hydrogenated Microcrystalline Silicon (μ -Si:H) Films for Solar Cells. 2013 , 662, 173-176 | | |
| 743 | Photochemical Reactions. 2013 , 73-82 | | |
| 742 | Enhanced terahertz emission by coherent optical absorption in ultrathin semiconductor films on metals. 2013 , 21, 16784-98 | | 28 |
| 741 | Improvement of Minority Carrier Lifetime by HCN Treatments. 2013 , 2, Q127-Q130 | | 3 |
| 740 | Carrier Injection Related Stability of Intrinsic Hydrogenated Amorphous Silicon Film and Solar Cells. 2013 , 52, 10MB14 | | |
| 739 | A Review of Diffusion and Interfacial Reactions in Sandwich Thin-Film Couples. 2013 , 344, 107-128 | | 0 |
| 738 | Ethanol-enriched low-pressure chemical vapor deposition ZnO bilayers: Properties and growth potential electrode for thin film solar cells. <i>Journal of Applied Physics</i> , 2013 , 113, 024908 | 2.5 | 4 |
| 737 | A study of tunnel recombination junction on a-Si:H/HIT tandem structure solar cell. 2013 , | | |
| 736 | Temperature dependence of negative bias under illumination stress and recovery in amorphous indium gallium zinc oxide thin film transistors. <i>Applied Physics Letters</i> , 2013 , 102, 143506 | 3.4 | 47 |
| 735 | A comparative study of degradation and performance of thin film photovoltaic generators versus a multi-crystalline generator. 2013 , | | 2 |
| 734 | Design and photovoltaic performance of nanorod solar cells with amorphous silicon absorber layer thickness of only 25 nm. 2013 , | | 1 |
| 733 | Origins of structural hole traps in hydrogenated amorphous silicon. 2013 , 110, 146805 | | 17 |
| 732 | Comparison of amorphous silicon absorber materials: Light-induced degradation and solar cell efficiency. <i>Journal of Applied Physics</i> , 2013 , 114, 154509 | 2.5 | 46 |
| 731 | High-efficiency thin-film silicon solar cells with improved light-soaking stability. <i>Progress in Photovoltaics: Research and Applications</i> , 2013 , 21, 1363-1369 | 6.8 | 59 |
| 730 | Role of lone-pair electrons in Sb-doped amorphous InGaZnO ₄ : Suppression of the hole-induced lattice instability. <i>Applied Physics Letters</i> , 2013 , 102, 152101 | 3.4 | 7 |
| 729 | Origin and spectral degradation of the photoluminescence from a-SiO _x . <i>Journal of Applied Physics</i> , 2013 , 114, 193505 | 2.5 | 2 |
| 728 | Modeling A-Si module ageing using the concept of environmental dose. 2013 , | | |
| 727 | Seasonal performance comparison of different photovoltaic technologies installed in Cyprus and Germany. 2013 , 32, 466-488 | | 8 |

726 Silicon-Based Photovoltaics. **2013**, 749-812

725 FROM NANOVOIDS TO BLISTERS IN HYDROGENATED AMORPHOUS SILICON. **2013**,

724 Effect of grain boundary on nanoscale electronic properties of hydrogenated nanocrystalline silicon studied by Kelvin probe force microscopy. **2013**,

723 New insights in the nanostructure and defect states of hydrogenated amorphous silicon obtained by annealing. **2013**,

722 Colloidal quantum dot photodetectors. 173-198

3

721 Large Area Electronics. **2013**, 225-238

2

720 Solar Innovation and Market Feedback: Solar Photovoltaics in Rural Kenya. 244-256

719 THIN-FILM SOLAR CELLS BASED ON AMORPHOUS AND MICROCRYSTALLINE SILICON. **2014**, 139-207

1

718 Silicon versus the rest. **2014**, 92, 553-560

1

717 Plasma-surface interaction during low pressure microcrystalline silicon thin film growth. **2014**, 47, 224003

8

716 Cu(In,Ga)Se₂ AND RELATED SOLAR CELLS. **2014**, 245-305

2

715 High-Stable-Efficiency Tandem Thin-Film Silicon Solar Cell With Low-Refractive-Index Silicon-Oxide Interlayer. *IEEE Journal of Photovoltaics*, **2014**, 4, 1368-1373

3-7 45

714 Investigation of H₂/CH₄ mixed gas plasma post-etching process for ZnO:B front contacts grown by LP-MOCVD method in silicon-based thin-film solar cells. **2014**, 316, 508-514

4

713 Deep level centers and their role in photoconductivity transients of InGaAs/GaAs quantum dot chains. *Journal of Applied Physics*, **2014**, 116, 193707

2-5 16

712 A review on plasma-assisted VLS synthesis of silicon nanowires and radial junction solar cells. **2014**, 47, 393001

6-1

711 Colored ultrathin hybrid photovoltaics with high quantum efficiency. **2014**, 3, e215-e215

9-4

710 Solar Energy and Materials. **2014**, 104-146

709 Selected Solar Cell Types. **2014**, 163-200

| | | | |
|-----|--|-----|----|
| 708 | Reversible and irreversible effects after oxygen exposure in thick (>1 μm) silicon films deposited by VHF-PECVD on glass substrates investigated by dual beam photoconductivity. 2014 , 92, 778-782 | | 3 |
| 707 | Kinetic Study of the Thermal Crystallization Behavior of Hydrogenated Amorphous Silicon Prepared by ECRCVD. 2014 , 3, N75-N82 | | 5 |
| 706 | Nanopatterned Silicon Substrate Use in Heterojunction Thin Film Solar Cells Made by Magnetron Sputtering. 2014 , 2014, 1-10 | | 1 |
| 705 | Performance Improvement of Microcrystalline p-SiC/i-Si/n-Si Thin Film Solar Cells by Using Laser-Assisted Plasma Enhanced Chemical Vapor Deposition. 2014 , 2014, 1-5 | | |
| 704 | Investigation of meta- and in-stability effects in hydrogenated microcrystalline silicon thin films by the steady-state measurement methods. 2014 , 92, 768-773 | | 3 |
| 703 | Dispersive and BEMA investigation on optical properties of photovoltaic thin films. 2014 , | | 2 |
| 702 | Microstructure from joint analysis of experimental data and ab initio interactions: Hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 2014 , 116, 244305 | 2.5 | 14 |
| 701 | Roles of Hydrogen in Amorphous Oxide Semiconductor In-Ga-Zn-O: Comparison of Conventional and Ultra-High-Vacuum Sputtering. 2014 , 3, Q3085-Q3090 | | 43 |
| 700 | Hydrogenated amorphous silicon photonic device trimming by UV-irradiation. 2014 , 22, 12122-32 | | 13 |
| 699 | Supercontinuum generation in hydrogenated amorphous silicon waveguides at telecommunication wavelengths. 2014 , 22, 3089-97 | | 32 |
| 698 | Generation of coherent supercontinuum in a-Si:H waveguides: experiment and modeling based on measured dispersion profile. 2014 , 22, 28997-9007 | | 20 |
| 697 | Advancing tandem solar cells by spectrally selective multilayer intermediate reflectors. 2014 , 22 Suppl 5, A1270-7 | | 20 |
| 696 | Multi-resonant silver nano-disk patterned thin film hydrogenated amorphous silicon solar cells for Staebler-Wronski effect compensation. <i>Journal of Applied Physics</i> , 2014 , 116, 093103 | 2.5 | 28 |
| 695 | Light induced degradation of amorphous silicon containing nanocrystalline silicon. 2014 , 4, 047124 | | 3 |
| 694 | Photoelectrochemical and photovoltaic characteristics of amorphous-silicon-based tandem cells as photocathodes for water splitting. 2014 , 15, 4026-31 | | 25 |
| 693 | BACK MATTER. 2014 , 465-516 | | |
| 692 | Optimal Photovoltaic Inverter Sizing Considering Different Climate Conditions and Energy Prices. 2014 , 57, 226-234 | | 15 |
| 691 | Flexible n-i-p thin film silicon solar cells on polyimide foils with textured ZnO:Ga back reflector. 2014 , 571, 9-12 | | 10 |

| | | | |
|-----|---|-----|----|
| 690 | Light induced crystallization of an amorphous silicon film embedded between silicon oxide layers. 2014 , 251, 439-445 | | 2 |
| 689 | Etching of a-Si:H thin films by hydrogen plasma: a view from in situ spectroscopic ellipsometry. 2014 , 141, 084708 | | 6 |
| 688 | Inferior outdoor-exposed performances of encapsulated a-Si:H photovoltaic modules deposited with a high speed. 2014 , 2, 14-21 | | 6 |
| 687 | Light-induced Voc increase and decrease in high-efficiency amorphous silicon solar cells. <i>Journal of Applied Physics</i> , 2014 , 116, 094503 | 2.5 | 25 |
| 686 | Light-induced hydrogen evolution from hydrogenated amorphous silicon: Hydrogen diffusion by formation of bond centered hydrogen. <i>Journal of Applied Physics</i> , 2014 , 115, 073503 | 2.5 | 7 |
| 685 | A first principles analysis of the effect of hydrogen concentration in hydrogenated amorphous silicon on the formation of strained Si-Si bonds and the optical and mobility gaps. <i>Journal of Applied Physics</i> , 2014 , 115, 203711 | 2.5 | 11 |
| 684 | UV and air stability of high-efficiency photoluminescent silicon nanocrystals. 2014 , 323, 54-58 | | 13 |
| 683 | Origins of hole traps in hydrogenated nanocrystalline and amorphous silicon revealed through machine learning. 2014 , 89, | | 26 |
| 682 | Ultra-thin intrinsic amorphous silicon/organic hybrid structure for decorative photovoltaic applications. 2014 , | | 0 |
| 681 | Fifteen years and counting: The reliable long-term performance of the first grid-connected, building-integrated, thin-film photovoltaic installation in Brazil. 2014 , | | 1 |
| 680 | Post-hydrogenation of amorphous hydrogenated silicon films modified by femtosecond laser irradiation. 2014 , | | 1 |
| 679 | Study of Light-Induced Structural Changes Associated with Staebler-Wronski Photo-Degradation in Micro-Crystalline Silicon Thin Films. 2014 , 379-382 | | |
| 678 | Numerical simulation of the performance of dual junction a-Si:H/a-SiGe:H solar cell with AMPS-1D. 2014 , | | |
| 677 | Investigation of metastability and instability effects on the minority carrier transport properties of microcrystalline silicon thin films by using the steady-state photocarrier grating technique. 2014 , 92, 763-767 | | 3 |
| 676 | Parameter variation of the one-diode model of a-Si and a-Si/μ-Si solar cells for modeling light-induced degradation. 2014 , 559, 012017 | | 2 |
| 675 | Comparison of Performance Measurements of Photovoltaic Modules during Winter Months in Taxila, Pakistan. 2014 , 2014, 1-8 | | 39 |
| 674 | Amorphous and micromorph Si solar cells: current status and outlook. 2014 , 38, 526-542 | | 7 |
| 673 | Development of Thin Film Amorphous Silicon Tandem Junction Based Photocathodes Providing High Open-Circuit Voltages for Hydrogen Production. 2014 , 2014, 1-10 | | 36 |

| | | | |
|-----|--|-----|----|
| 672 | Development of a-SiC Thin Film Photoelectrodes and Hybrid PV/a-SiC Devices for Photoelectrochemical Water Splitting. 2014 , 1669, 13 | | |
| 671 | Improved metastability and performance of amorphous silicon solar cells. 2014 , 1666, 7 | | 2 |
| 670 | Preconditioning of thin-film PV module technologies for calibration. <i>Progress in Photovoltaics: Research and Applications</i> , 2014 , 22, 166-172 | 6.8 | 15 |
| 669 | Deposition of intrinsic hydrogenated amorphous silicon for thin-film solar cells in comparative study for layers grown statically by RF-PECVD and dynamically by VHF-PECVD. <i>Progress in Photovoltaics: Research and Applications</i> , 2014 , 22, 198-207 | 6.8 | 5 |
| 668 | Seasonal power fluctuations of amorphous silicon thin-film solar modules: distinguishing between different contributions. <i>Progress in Photovoltaics: Research and Applications</i> , 2014 , 22, 208-217 | 6.8 | 31 |
| 667 | H ₂ plasma treatment at the p/i interface of a hydrogenated amorphous Si absorption layer for high-performance Si thin film solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2014 , 22, 362-370 | 6.8 | 13 |
| 666 | Relationship between absorber layer defect density and performance of a-Si:H and μ c-Si:H solar cells studied over a wide range of defect densities generated by 2MeV electron bombardment. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 129, 17-31 | 6.4 | 9 |
| 665 | Quantum Monte Carlo for Ab Initio calculations of energy-relevant materials. 2014 , 114, 94-101 | | 29 |
| 664 | Influence of cw CO ₂ -laser radiation on the amorphous-to-microcrystalline phase transition in a-Si:H films: a Raman spectroscopic study. 2014 , 116, 303-310 | | 5 |
| 663 | Metastable defect formation at microvoids identified as a source of light-induced degradation in a-Si:H. 2014 , 112, 066403 | | 51 |
| 662 | Trions in silicon nanocrystals in an amorphous hydrogenated silicon matrix. 2014 , 48, 235-238 | | 2 |
| 661 | Amorphous and Microcrystalline Silicon Solar Cells. 2014 , 85-111 | | 1 |
| 660 | Performance loss rate of twelve photovoltaic technologies under field conditions using statistical techniques. 2014 , 103, 28-42 | | 66 |
| 659 | The effects of dispatch strategy on electrical performance of amorphous silicon-based solar photovoltaic-thermal systems. <i>Renewable Energy</i> , 2014 , 68, 459-465 | 8.1 | 8 |
| 658 | Solution-Processed Crystalline Silicon Thin-Film Solar Cells. 2014 , 1, 1300046 | | 17 |
| 657 | Antireflective coating using a WO ₃ /TiO ₂ nanoparticle photocatalytic composition for high efficiency thin-film Si photovoltaic modules. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 121, 108-113 | 6.4 | 17 |
| 656 | Applications of μ c-SiO _x :H as integrated n-layer and back transparent conductive oxide for a-Si:H/ μ c-Si:H tandem cells. 2014 , 53, 05FV08 | | 7 |
| 655 | Improved light trapping effect for thin-film silicon solar cells fabricated on double-textured white glass substrate. 2014 , 92, 920-923 | | 6 |

| | | | |
|-----|---|-----|----|
| 654 | Evolution of microstructure and opto-electrical properties in boron doped nc-Si:H films deposited by HW-CVD method. 2014 , 585, 523-528 | | 8 |
| 653 | Low-refractive-index and high-transmittance silicon oxide with a mixed phase of n-type microcrystalline silicon as intermediate reflector layers for tandem solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 121, 1-7 | 6.4 | 20 |
| 652 | High-Efficiency Solar Cells. <i>Springer Series in Materials Science</i> , 2014 , | 0.9 | 16 |
| 651 | Atmospheric aging and light-induced degradation of amorphous and nanostructured silicon using photoconductivity and electron spin resonance. 2014 , 92, 713-717 | | 4 |
| 650 | Towards understanding junction degradation in cadmium telluride solar cells. <i>Journal of Applied Physics</i> , 2014 , 115, 234502 | 2.5 | 16 |
| 649 | P-28: Study on One Infrequent Influencing Factor of TFT-LCD Life. 2014 , 45, 1047-1050 | | 1 |
| 648 | The Nature and the Kinetics of Light-Induced Defect Creation in Hydrogenated Amorphous Silicon Films and Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2014 , 4, 1331-1336 | 3.7 | 23 |
| 647 | Optimization of amorphous silicon double junction solar cells for an efficient photoelectrochemical water splitting device based on a bismuth vanadate photoanode. 2014 , 16, 4220-9 | | 39 |
| 646 | Numerical simulations for high efficiency HIT solar cells using microcrystalline silicon as emitter and back surface field (BSF) layers. 2014 , 110, 691-703 | | 25 |
| 645 | Analysis of measured photovoltaic module performance for Florida, Oregon, and Colorado locations. 2014 , 110, 736-744 | | 30 |
| 644 | Structural Order and Staebler-Wronski Effect in Hydrogenated Amorphous Silicon Films and Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2014 , 4, 4-9 | 3.7 | 7 |
| 643 | A hybrid resist hemispherical-pit array layer for light trapping in thin film silicon solar cells via UV nanoimprint lithography. 2014 , 2, 6140-6147 | | 9 |
| 642 | Changes in the serial resistance Of a- Si, a-/β-Si and mono-crystalline PV modules during the year. 2014 , | | |
| 641 | Influence of heterogeneities on the electronic properties of hydrogenated amorphous silicon. 2014 , 94, 1642-1660 | | 1 |
| 640 | . 2014 , 50, 515-521 | | 4 |
| 639 | Is light-induced degradation of a-Si:H/c-Si interfaces reversible?. <i>Applied Physics Letters</i> , 2014 , 104, 252108 | | 18 |
| 638 | Progress in photovoltaic module calibration: results of a worldwide intercomparison between four reference laboratories. 2014 , 25, 105005 | | 26 |
| 637 | Efficient flexible thin film silicon module on plastics for indoor energy harvesting. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 130, 490-494 | 6.4 | 21 |

- 636 Study of the effect of boron doping on the solid phase crystallisation of hydrogenated amorphous silicon films. **2014**, 568, 38-43 5
- 635 Class AAA LED-Based Solar Simulator for Steady-State Measurements and Light Soaking. *IEEE Journal of Photovoltaics*, **2014**, 4, 1282-1287 3.7 25
- 634 2-D Periodic and Random-on-Periodic Front Textures for Tandem Thin-Film Silicon Solar Cells. *IEEE Journal of Photovoltaics*, **2014**, 4, 1177-1184 3.7 17
- 633 High performance and high stability mechanisms of microcrystalline silicon-based thin-film solar cells deposited by laser-assisted plasma-enhancement chemical vapor deposition system. **2014**, 107, 365-371 4
- 632 Change in I_{sc} characteristics of thin-film photovoltaic (PV) modules induced by light soaking and thermal annealing effects. *Progress in Photovoltaics: Research and Applications*, **2014**, 22, 949-957 6.8 25
- 631 Light-Induced Degradation of Polymer:Fullerene Photovoltaic Devices: An Intrinsic or Material-Dependent Failure Mechanism?. **2014**, 4, 1400848 35
- 630 Structural peculiarities and aging effect in hydrogenated a-Si prepared by inductively coupled plasma assisted chemical vapor deposition technique. **2014**, 110, 114-120 10
- 629 Grain boundary engineering for improved thin silicon photovoltaics. **2014**, 14, 4943-50 21
- 628 Preillumination Induced change of electronic transport properties of TlGaSe₂ semiconductor. **2014**, 33, 49-52 2
- 627 Analysis of optical absorption and quantum efficiency due to light trapping in a n⁺p type amorphous silicon solar cell with textured back reflector. **2014**, 211, 924-931 18
- 626 Uncertainty in PV Module Measurement---Part II: Verification of Rated Power and Stability Problems. *IEEE Journal of Photovoltaics*, **2014**, 4, 991-1007 3.7 14
- 625 Development of plasma-enhanced chemical vapor deposition microcrystalline silicon oxide as a replacement for N-type or back transparent conducting oxide layers in amorphous silicon single-junction solar cells. **2014**, 92, 924-927 3
- 624 Zinc oxide nanowire arrays for silicon core/shell solar cells. **2014**, 22 Suppl 3, A622-32 15
- 623 Performance analysis and comparison of two silicon material based photovoltaic technologies under actual climatic conditions in Western India. **2014**, 80, 97-102 56
- 622 Reversible changes in temperature dependence of electric conductivity of hydrogenated amorphous silicon caused by proton irradiation. **2014**, 392-393, 11-18 2
- 621 Controlled growth of SiNPs by plasma synthesis. *Solar Energy Materials and Solar Cells*, **2014**, 124, 1-9 6.4 10
- 620 Thermo-chemistry guided synthesis of Cu₂ZnSnSe₄ compounds using solvo-thermal method. **2014**, 25, 1285-1291 3
- 619 Fast light-induced metastability and thermal recovery for protocrystalline silicon multilayers proved by sub-bandgap absorption spectra. **2014**, 106, 43-47 4

| | | | |
|-----|---|-----|------|
| 618 | Optimization of the back contact for 1.43 m ² a-Si:H photovoltaic module products based on the indoor light soaking test. 2014 , 102, 74-81 | | 6 |
| 617 | Single and multilayered a-SiO _x :H (x'. 2014 , 146, 425-430 | | 2 |
| 616 | Improved outdoor performance of a-Si:H photovoltaic modules fabricated using a high speed two-step deposition of absorbers. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 124, 138-142 | 6.4 | 3 |
| 615 | Degradation evaluation of crystalline-silicon photovoltaic modules after a few operation years in a tropical environment. 2014 , 103, 70-77 | | 103 |
| 614 | In situ manipulation of the sub gap states in hydrogenated amorphous silicon monitored by advanced application of Fourier transform photocurrent spectroscopy. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 129, 70-81 | 6.4 | 22 |
| 613 | Recovery of Indium-tin-oxide/silicon Heterojunction Solar Cells by Thermal Annealing. 2014 , 44, 3-9 | | 6 |
| 612 | Low-temperature plasma processing for Si photovoltaics. 2014 , 78, 1-29 | | 36 |
| 611 | Optical absorption of amorphous silicon on anodized aluminum substrates for solar cell applications. 2014 , 315, 17-25 | | 9 |
| 610 | Numerical simulation of the performance of the a-Si:H/a-SiGe:H/a-SiGe:H tandem solar cell. 2014 , 35, 034013 | | 6 |
| 609 | Organometallic Halide Perovskites: Sharp Optical Absorption Edge and Its Relation to Photovoltaic Performance. 2014 , 5, 1035-9 | | 1699 |
| 608 | Recent patent issues on intermediate reflectors for high efficiency thin-film silicon photovoltaic devices. 2014 , 37, 90-99 | | 4 |
| 607 | Fill factor related issues in hydrogenated amorphous Si solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 129, 64-69 | 6.4 | 9 |
| 606 | Effects of filter gap of cluster-eliminating filter on cluster eliminating efficiency. 2014 , 518, 012007 | | 5 |
| 605 | Outdoor degradation of thin film amorphous silicon based PV modules. 2014 , 558, 012047 | | 1 |
| 604 | Self-sustained cyclic tin induced crystallization of amorphous silicon. 2015 , 30, 3116-3124 | | 10 |
| 603 | Evolution of Structural and Optical Properties on PIN and NIP pm-Si:H Devices During 400 Hrs of Light-Soaking. 2015 , 1792, 1 | | |
| 602 | Preparation and measurement of highly efficient a-Si:H single junction solar cells and the advantages of $\bar{\mu}$ -SiO _x :H n-layers. <i>Progress in Photovoltaics: Research and Applications</i> , 2015 , 23, 939-948 | 6.8 | 37 |
| 601 | Stress effects on the Raman spectrum of an amorphous material: Theory and experiment on a-Si:H. 2015 , 92, | | 23 |

600 Solar Energy and Photovoltaics. **2015**, 1-10

| | | | |
|-----|--|-----|----|
| 599 | Light-induced metastability in pure and hydrogenated amorphous silicon. 2015 , 112, 26001 | | 3 |
| 598 | Light-induced degradation of native silicon oxide/silicon nitride bilayer passivated silicon. <i>Applied Physics Letters</i> , 2015 , 107, 151602 | 3-4 | 5 |
| 597 | Non-Arrhenius anomalous hopping electronic transport in hydrogenated amorphous silicon and composite amorphous/nanocrystalline thin films. <i>Journal of Applied Physics</i> , 2015 , 118, 215103 | 2-5 | 4 |
| 596 | Power change in amorphous silicon technology by low temperature annealing. 2015 , 6, 65304 | | |
| 595 | Separation of bulk and contact interface degradation in thin film silicon solar cells. 2015 , 7, 063115 | | 1 |
| 594 | Morphology and Hydrogen in Passivating Amorphous Silicon Layers. 2015 , 77, 791-798 | | 5 |
| 593 | Study of the possibility of use of $\mu\text{-Si:H}$ solar elements in photovoltaic thermal converters. 2015 , 51, 140-143 | | 2 |
| 592 | Defects in hydrogenated amorphous silicon created by intense pulsed illumination at low temperature and the decay of their density. 2015 , 619, 012016 | | 2 |
| 591 | Three-dimensional amorphous silicon solar cells on periodically ordered ZnO nanocolumns. 2015 , 212, 1823-1829 | | 6 |
| 590 | Characterisation of intrinsic silicon oxide absorber layers for use in silicon thin film solar cells. 2015 , 212, 2068-2073 | | 2 |
| 589 | Nanoscale structure of microvoids in $\alpha\text{-Si:H}$: a first-principles study. 2015 , 27, 435201 | | 9 |
| 588 | Analysis of bulk and interface defects in hydrogenated amorphous silicon solar cells by Fourier transform photocurrent spectroscopy. <i>Journal of Applied Physics</i> , 2015 , 118, 184506 | 2-5 | 9 |
| 587 | Enhancement of Spectral Response in $\mu\text{-Si}_1\text{-xGe}_x\text{:H}$ Thin-Film Solar Cells with $\alpha\text{-Si:H}/\mu\text{-Si:H}$ P-Type Window Layers. 2015 , 2015, 1-8 | | 1 |
| 586 | Recombination and thin film properties of silicon nitride and amorphous silicon passivated c-Si following ammonia plasma exposure. <i>Applied Physics Letters</i> , 2015 , 106, 041607 | 3-4 | 4 |
| 585 | Triple-junction thin-film silicon solar cell fabricated on periodically textured substrate with a stabilized efficiency of 13.6%. <i>Applied Physics Letters</i> , 2015 , 106, 213902 | 3-4 | 77 |
| 584 | Measurement of nc-Si:H film uniformity and diagnosis of plasma spatial structure produced by a very high frequency, differentially powered, multi-tile plasma source. 2015 , 119, 34-46 | | 6 |
| 583 | Randomly Textured Surfaces. 2015 , 91-116 | | |

| | | | |
|-----|--|-----|-----|
| 582 | Biomass and Biofuels from Microalgae. 2015, | | 25 |
| 581 | Role of electric field and electrode material on the improvement of the ageing effects in hydrogenated amorphous silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 141, 203-209 | 6.4 | 10 |
| 580 | Electric field assisted diffusion of hydrogen in a-Si:H thin films during hydrogen plasma etching. 2015 , 48, 275501 | | |
| 579 | Impact of front TCO layer in substrate-type thin-film microcrystalline silicon solar cells. 2015, | | 0 |
| 578 | Modeling the performance of amorphous silicon photovoltaic modules for different geographical locations in North-America. 2015, | | 3 |
| 577 | Persistent photoconductivity studies in a-Si:H/nc-Si:H thin film superlattices. 2015 , 85, 776-783 | | 6 |
| 576 | Study of prolonged light-soaking (~400 Hrs) effect on Pm-Si:H solar cell structures. 2015, | | |
| 575 | Effect of Front TCO Layer on Properties of Substrate-Type Thin-Film Microcrystalline Silicon Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 1528-1533 | 3.7 | 8 |
| 574 | Understanding Phenomena of Thin Silicon Film Crystallization on Aluminium Substrates. 2015 , 84, 156-164 | | 2 |
| 573 | Annealing Effects in Low Temperature Amorphous Silicon Flexible Solar Cells. 2015 , 84, 17-24 | | 14 |
| 572 | Changing in irradiation behavior and temperature-coefficient variation caused by light-induced degradation of a-Si/μ-Si solar cells. 2015, | | |
| 571 | Influence of Interface Textures on Light Management in Thin-Film Silicon Solar Cells With Intermediate Reflector. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 33-39 | 3.7 | 11 |
| 570 | Photo-stability of a-Si solar cells fabricated by liquid-Si printing method and treated with catalytic generated atomic hydrogen. 2015 , 575, 100-102 | | 2 |
| 569 | Pathways for solar photovoltaics. 2015 , 8, 1200-1219 | | 293 |
| 568 | Light management in thin film silicon solar cells. 2015 , 8, 824-837 | | 80 |
| 567 | Photo-induced electrical instability in hydrogenated amorphous silicon based thin-film transistors and the effect of its phase transition. 2015 , 15, 330-334 | | 3 |
| 566 | Computer modelling and analysis of the photodegradation effect in a-Si:H p-i-n solar cell. 2015 , 36, 014002 | | 5 |
| 565 | Photonic crystal microcrystalline silicon solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2015 , 23, 1475-1483 | 6.8 | 19 |

| | | | |
|-----|--|-----|----|
| 564 | Effect of hydrogen on low temperature epitaxial growth of polycrystalline silicon by hot wire chemical vapor deposition. 2015 , 36, 023004 | | |
| 563 | Novel ultrathin LiF interlayers for efficient light harvesting in thin-film Si tandem solar cells. 2015 , 114, 259-267 | | 1 |
| 562 | Mixed phase silicon thin films grown at high rate using 60 MHz assisted VHF-PECVD technique. 2015 , 40, 11-19 | | 11 |
| 561 | Data supporting the role of electric field and electrode material on the improvement of the ageing effects in hydrogenated amorphous silicon solar cells. 2015 , 4, 518-23 | | 6 |
| 560 | Quadruple-junction solar cells and modules based on amorphous and microcrystalline silicon with high stable efficiencies. 2015 , 54, 08KB03 | | 33 |
| 559 | Structural and electrical properties of metastable defects in hydrogenated amorphous silicon. 2015 , 91, | | 18 |
| 558 | Abnormal behavior of threshold voltage shift in bias-stressed a-Si:H thin film transistor under extremely high intensity illumination. 2015 , 7, 15442-6 | | 4 |
| 557 | 3C-SiC Polycrystalline Films on Si for Photovoltaic Applications. 2015 , 821-823, 189-192 | | 3 |
| 556 | Effect of heat treatments on the properties of hydrogenated amorphous silicon for PV and PVT applications. 2015 , 119, 225-232 | | 8 |
| 555 | Analysis of the light-induced degradation of differently matched tandem solar cells with and without an intermediate reflector using the Power Matching Method. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 143, 1-8 | 6.4 | 4 |
| 554 | Toward a model for a-Si modules performance behavior under real outdoor operating conditions. 2015 , 116, 388-398 | | 3 |
| 553 | High-efficiency amorphous silicon solar cells: Impact of deposition rate on metastability. <i>Applied Physics Letters</i> , 2015 , 106, 053901 | 3.4 | 81 |
| 552 | Optimization of annealing cycles for electric output in outdoor conditions for amorphous silicon photovoltaic thermal systems. 2015 , 148, 134-141 | | 11 |
| 551 | Effects of cluster incorporation into hydrogenated amorphous silicon films in initial discharge phase on film stability. 2015 , 587, 126-131 | | 8 |
| 550 | Global progress in photovoltaic technologies and the scenario of development of solar panel plant and module performance estimation Application in Nigeria. 2015 , 48, 112-139 | | 54 |
| 549 | Defects of a-Si Thin-Film Solar Cells Detected by Transmission Photothermal Radiometric Imaging. 2015 , 36, 829-834 | | |
| 548 | Perineostomy: the last opportunity. 2015 , 41, 91-8; discussion 99-100 | | 6 |
| 547 | Light-induced metastable defects in a-Se ₉₀ X ₁₀ (X = Sb, In and Ag) thin films. 2015 , 88, 939-949 | | 5 |

| | | | |
|-----|---|-----|----|
| 546 | A scalable and inexpensive surface-texturization method for advanced transparent front electrodes in microcrystalline and micromorph thin film silicon solar cells. 2015 , 212, 1916-1924 | | 1 |
| 545 | Performance of Si-based PV rooftop systems operated under distinct four seasons. <i>Renewable Energy</i> , 2015 , 81, 482-489 | 8.1 | 12 |
| 544 | The influence of an air atmosphere on the electrical properties of two-phase films of hydrogenated silicon. 2015 , 70, 277-281 | | |
| 543 | Estimation of Optical Properties of Multilayer Silicon Nano Films with Different Hydrogen Dilution. 2015 , 75, 2193-2198 | | 1 |
| 542 | Numerical simulation of the effect of the free carrier motilities on light-soaked a-Si:H p μ n solar cell. 2015 , 36, 074002 | | |
| 541 | Entire band absorption enhancement in double-side textured ultrathin solar cells by nanoparticle imprinting. <i>Journal of Applied Physics</i> , 2015 , 117, 223102 | 2.5 | 4 |
| 540 | High-efficiency thin-film silicon solar cells realized by integrating stable a-Si:H absorbers into improved device design. 2015 , 54, 08KB10 | | 43 |
| 539 | Atomic Pathways Underlying Light-Induced Changes in Organic Solar Cell Materials. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 20265-20271 | 3.8 | 20 |
| 538 | Directly patterned TiO ₂ nanostructures for efficient light harvesting in thin film solar cells. 2015 , 48, 365101 | | 9 |
| 537 | Experimental investigation of light induced defects in amorphous thin films of Se ₉₀ X ₁₀ (X = Sb, In, Ag). 2015 , 126, 5001-5007 | | 1 |
| 536 | A simple approach to model the performance of photovoltaic solar modules in operation. 2015 , 120, 439-449 | | 13 |
| 535 | Recent advances and remaining challenges in thin-film silicon photovoltaic technology. 2015 , 18, 378-384 | | 63 |
| 534 | A modeling method to enhance the conversion efficiency by optimizing light trapping structure in thin-film solar cells. 2015 , 120, 505-513 | | 17 |
| 533 | Effect of light-soaking on the hydrogen effusion mechanisms in polymorphous silicon thin film structures. 2015 , 163, 311-316 | | 0 |
| 532 | Enhanced Light Trapping in a-Si:H/ μ -Si:H Tandem Solar Cells via Nanopatterning Top Absorber and Embedding Wavelength-Selective Intermediate Reflectors. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 46-54 | 3.7 | 2 |
| 531 | Design, modeling and performance monitoring of a photovoltaic thermal (PVT) water collector. 2015 , 112, 85-99 | | 96 |
| 530 | Coupling Incident Light to Guided Modes in Thin-Film Tandem Solar Cells With Intermediate Reflector. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 3-8 | 3.7 | 1 |
| 529 | Analysis of photovoltaic system performance time series: Seasonality and performance loss. <i>Renewable Energy</i> , 2015 , 77, 51-63 | 8.1 | 47 |

| | | | |
|-----|---|-----|----|
| 528 | Optical characteristics of a-Si:H layers deposited by PACVD at various temperatures. 2015 , 39, 26-33 | | 4 |
| 527 | Decorative power generating panels creating angle insensitive transmissive colors. 2014 , 4, 4192 | | 71 |
| 526 | Development of a-SiO _x :H solar cells with very high Voc JFF product. <i>Progress in Photovoltaics: Research and Applications</i> , 2015 , 23, 671-684 | 6.8 | 20 |
| 525 | Investigations on phosphorus doped amorphous/nanocrystalline silicon films deposited by a filtered cathodic vacuum arc technique in the presence of hydrogen gas. 2015 , 31, 1-9 | | 10 |
| 524 | Amorphous silicon/germanium for triple and quadruple junction thin-film silicon based solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 133, 163-169 | 6.4 | 56 |
| 523 | Experimental and simulation study of thin film silicon solar cells with intermediate reflector. <i>Progress in Photovoltaics: Research and Applications</i> , 2015 , 23, 94-105 | 6.8 | 1 |
| 522 | Reduction of the plasmonic absorption in the nanotextured back contact of a-Si:H solar cells by employing an n-SiO ₂ :H/LiF interlayer. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 132, 372-376 | 6.4 | 3 |
| 521 | Nanocoaxes for optical and electronic devices. 2015 , 140, 39-58 | | 14 |
| 520 | Amorphous and Nanocrystalline Silicon Solar Cells and Modules. 2016 , | | 2 |
| 519 | Silicon Micro/Nanowire Solar Cells. 2016 , 94, 185-225 | | 5 |
| 518 | Neutral- and Multi-Colored Semitransparent Perovskite Solar Cells. 2016 , 21, 475 | | 46 |
| 517 | Hybrid dielectric light trapping designs for thin-film CdZnTe/Si tandem cells. 2016 , 24, A1008-20 | | 4 |
| 516 | Amorphous, Polymorphous, and Microcrystalline Silicon Thin Films Deposited by Plasma at Low Temperatures. 2016 , | | 4 |
| 515 | Challenges in advanced characterization techniques for high Voc thin-film tandem solar cells. 2016 , 213, 1983-1988 | | 1 |
| 514 | Light-Induced Degradation of Thin Film Silicon Solar Cells. 2016 , 682, 012002 | | 3 |
| 513 | Simulation of light-induced degradation of μ -Si in a-Si/ μ -Si tandem solar cells by the diode equivalent circuit. 2016 , 682, 012017 | | 1 |
| 512 | Microscopic mechanism for light-induced degradation of silicon solar cell in water vapor environment. 2016 , 30, 614-620 | | |
| 511 | Adjustment and Calibration Technique for a Solar Simulator Based on Measuring the Parameters of Multipass Thin-Film Photoelectric Modules. 2016 , 59, 46-51 | | 0 |

| | | | |
|-----|---|-----|----|
| 510 | Correlation between SiH ₂ /SiH and light-induced degradation of p ⁺ i hydrogenated amorphous silicon solar cells. 2016 , 55, 07LE03 | | 7 |
| 509 | Temperature dependency of the silicon heterojunction lifetime model based on the amphoteric nature of dangling bonds. 2016 , 6, 115118 | | 3 |
| 508 | Electronic and Optical Properties of Amorphous Silicon. 2016 , 61-155 | | |
| 507 | Electronic and Optical Properties of Amorphous Chalcogenides. 2016 , 157-229 | | |
| 506 | Very thin and stable thin-film silicon alloy triple junction solar cells by hot wire chemical vapor deposition. <i>Applied Physics Letters</i> , 2016 , 109, 093902 | 3-4 | 3 |
| 505 | Characterisation of sputtering deposited amorphous silicon films for silicon heterojunction solar cells. 2016 , | | 1 |
| 504 | In situ photoluminescence study of plasma-induced damage at the a-Si:H/c-Si interface. <i>Applied Physics Letters</i> , 2016 , 108, 051603 | 3-4 | 13 |
| 503 | An amorphous-to-crystalline phase transition within thin silicon films grown through ultra-high-vacuum evaporation on fused quartz substrates. 2016 , 1, 3257-3262 | | |
| 502 | Stabilized 14.0%-efficient triple-junction thin-film silicon solar cell. <i>Applied Physics Letters</i> , 2016 , 109, 183506 | 3-4 | 46 |
| 501 | High Stabilized Efficiency Single and Multi-junction Thin Film Silicon Solar Cells. 2016 , 102, 64-69 | | 6 |
| 500 | Carrier collection losses in interface passivated amorphous silicon thin-film solar cells. <i>Applied Physics Letters</i> , 2016 , 109, 043903 | 3-4 | 6 |
| 499 | An amorphous-to-crystalline phase transition within thin silicon films grown by ultra-high-vacuum evaporation and its impact on the optical response. <i>Journal of Applied Physics</i> , 2016 , 119, 065702 | 2-5 | 14 |
| 498 | Light-induced performance increase of silicon heterojunction solar cells. <i>Applied Physics Letters</i> , 2016 , 109, 153503 | 3-4 | 37 |
| 497 | On the way to enhance the optical absorption of a-Si in NIR by embedding Mg ₂ Si thin film. <i>Applied Physics Letters</i> , 2016 , 109, 043902 | 3-4 | 10 |
| 496 | Significant light absorption enhancement in silicon thin film tandem solar cells with metallic nanoparticles. 2016 , 27, 195401 | | 10 |
| 495 | Polymeric materials for long-term durability of photovoltaic systems. 2016 , 133, n/a-n/a | | 31 |
| 494 | - Two- and Three-Dimensional Optical Modeling. 2016 , 152-183 | | |
| 493 | Ultrathin tandem solar cells on nanorod morphology with 35-nm thick hydrogenated amorphous silicon germanium bottom cell absorber layer. <i>Solar Energy Materials and Solar Cells</i> , 2016 , 158, 209-213 | 6.4 | 8 |

| | | |
|-----|--|-------|
| 492 | Investigation of improved PV parameters through AMPS-1D in micromorph tandem solar cells with a microcrystalline tunnel recombination junction. 2016 , 627, 29-37 | 1 |
| 491 | Photon Tunneling in Tandem Solar Cells With Intermediate Reflector. <i>IEEE Journal of Photovoltaics</i> , 2016 , 6, 597-603 | 3-7 3 |
| 490 | High-efficiency p ⁺ superstrate amorphous Si solar cells on SiO _x periodic arrays of three-dimensional microstructure prepared by soft imprinting. 2016 , 9, 042301 | 2 |
| 489 | Efficient outdoor performance of esthetic bifacial a-Si:H semi-transparent PV modules. 2016 , 164, 312-320 | 21 |
| 488 | Time-resolved, nonequilibrium carrier dynamics in Si-on-glass thin films for photovoltaic cells. 2016 , 31, 045006 | 2 |
| 487 | Inorganic photovoltaics I Planar and nanostructured devices. 2016 , 82, 294-404 | 38 |
| 486 | Dual-Layer Nanostructured Flexible Thin-Film Amorphous Silicon Solar Cells with Enhanced Light Harvesting and Photoelectric Conversion Efficiency. 2016 , 8, 10929-36 | 43 |
| 485 | Amorphous/microcrystalline transition of thick silicon film deposited by PECVD. 2016 , 122, 1 | 8 |
| 484 | Study of degradation and evaluation of model parameters of micromorph silicon photovoltaic modules under outdoor long term exposure in Ja ⁿ , Spain. 2016 , 120, 109-119 | 31 |
| 483 | Comprehensive review on material requirements, present status, and future prospects for building-integrated semitransparent photovoltaics (BISTPV). 2016 , 4, 8512-8540 | 71 |
| 482 | BIPV-temp: A demonstrative Building Integrated Photovoltaic installation. 2016 , 173, 1-12 | 44 |
| 481 | Thermo-chemistry guided synthesis of Cu ₂ ZnSn(S _x Se _{1-x}) ₄ solid solutions using solvo-thermal method. 2016 , 27, 1380-1386 | 1 |
| 480 | Improvement of solar cell performance and reversibility of ageing effects in hydrogenated amorphous silicon solar cells under illumination and electric field stress: Role of TCO and substrate. 2016 , | 2 |
| 479 | Light-induced changes in silicon nanocrystal based solar cells: Modification of silicon-hydrogen bonding on silicon nanocrystal surface under illumination. 2016 , 55, 072302 | 5 |
| 478 | Optical scattering modeling of etched ZnO:Al superstrates and device simulation studies of a-Si:H solar cells with different texture morphologies. 2016 , 55, 6718-26 | 3 |
| 477 | Review of amorphous silicon based particle detectors: the quest for single particle detection. 2016 , 31, 103005 | 13 |
| 476 | Plasmonic enhancement of amorphous silicon solar photovoltaic cells with hexagonal silver arrays made with nanosphere lithography. 2016 , 3, 105034 | 9 |
| 475 | Design and simulation of a semispherical semiconductor to construct a beta-voltaic battery using c-Si and a-Si:H materials with different doping concentration. 2016 , 15, 1577-1592 | 3 |

| | | | |
|-----|--|-----|----|
| 474 | Study of the photoinduced degradation of tandem photovoltaic converters based on a-Si:H/ μ -Si:H. 2016 , 50, 1074-1078 | | |
| 473 | Introduction to Thin-Film Photovoltaics. 2016 , 1-40 | | 1 |
| 472 | Electron-Spin Resonance (ESR) in Hydrogenated Amorphous Silicon (a-Si:H). 2016 , 299-342 | | 1 |
| 471 | Development of wider bandgap n-type a-SiO _x :H and μ -SiO _x :H as both doped and intermediate reflecting layer for a-Si:H/a-Si _{1-x} Ge _x :H tandem solar cells. 2016 , 12, 445-450 | | 4 |
| 470 | Degradation analysis of thin film photovoltaic modules under outdoor long term exposure in Spanish continental climate conditions. 2016 , 139, 599-607 | | 32 |
| 469 | Morphology and micro-structural studies of distinct silicon thin films deposited using very high frequency plasma enhanced chemical vapor deposition process. 2016 , 619, 273-280 | | 10 |
| 468 | Ultra-low power threshold for laser induced changes in optical properties of 2D molybdenum dichalcogenides. 2016 , 3, 045008 | | 54 |
| 467 | Degradation in Different Solar Cell Technologies. 2016 , 55-72 | | 0 |
| 466 | Performance characterization of thin-film-silicon based solar modules under clouded and clear sky conditions in comparison to crystalline silicon modules. 2016 , 12, 468-471 | | 1 |
| 465 | Upscaling of integrated photoelectrochemical water-splitting devices to large areas. 2016 , 7, 12681 | | 76 |
| 464 | Formation of microcrystalline silicon layer for thin films silicon solar cells on aluminium substrates. 2016 , | | |
| 463 | Investigation of light-induced degradation of tandem photoconverters on a-Si:H/ μ -Si:H. 2016 , 769, 012038 | | |
| 462 | Solar Energy and Energy Storage Materials and Devices Research in Singapore. 2016 , 113-156 | | |
| 461 | Lifetime of excitons localized in Si nanocrystals in amorphous silicon. 2016 , 50, 627-631 | | |
| 460 | Electrons and phonons in amorphous semiconductors. 2016 , 31, 073002 | | 20 |
| 459 | Comparison of amorphous silicon absorber materials: Kinetics of light-induced degradation. <i>Progress in Photovoltaics: Research and Applications</i> , 2016 , 24, 446-457 | 6.8 | 14 |
| 458 | Characterization of degradation and evaluation of model parameters of amorphous silicon photovoltaic modules under outdoor long term exposure. 2016 , 96, 231-241 | | 50 |
| 457 | Influence of heat generated by a Raman excitation laser on the structural analysis of thin amorphous silicon film. 2016 , 364, 302-307 | | 5 |

| | | | |
|-----|---|-----|----|
| 456 | Addition of Small Electrophiles to N-Heterocyclic-Carbene-Stabilized Disilicon(0): A Revisit of the Isolobal Concept in Low-Valent Silicon Chemistry. 2016 , 138, 4589-600 | | 28 |
| 455 | Behavioral data of thin-film single junction amorphous silicon (a-Si) photovoltaic modules under outdoor long term exposure. 2016 , 7, 366-71 | | 4 |
| 454 | A new method of preparing highly conductive ultra-thin indium tin oxide for plasmonic-enhanced thin film solar photovoltaic devices. <i>Solar Energy Materials and Solar Cells</i> , 2016 , 149, 250-257 | 6.4 | 36 |
| 453 | . 2016 , 16, 255-262 | | |
| 452 | Design of CdZnTe and Crystalline Silicon Tandem Junction Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2016 , 6, 301-308 | 3.7 | 13 |
| 451 | Effect of soiling and sunlight exposure on the performance ratio of photovoltaic technologies in Santiago, Chile. 2016 , 114, 338-347 | | 68 |
| 450 | Measurement of intrinsic and laser heating-induced stress in microcrystalline silicon thin films. 2016 , 469-470, 65-71 | | 1 |
| 449 | Process controllability of inductively coupled plasma-enhanced reactive sputter deposition for the fabrication of amorphous InGaZnOx channel thin-film transistors. 2016 , 55, 01AA18 | | 9 |
| 448 | Nucleation of microcrystalline silicon: on the effect of the substrate surface nature and nano-imprint topography. 2016 , 49, 055205 | | 1 |
| 447 | UV-pretreatment- and near-infrared rapid thermal annealing-enhanced dehydrogenation for a-Si:H thin films at 400 °C. 2016 , 598, 226-229 | | 1 |
| 446 | Comparative study of photovoltaic technologies based on performance, cost and space requirement: Strategy for selection and application. 2016 , 13, 1352-1368 | | 11 |
| 445 | Effect of deposition temperature on polymorphous silicon thin films by PECVD: Role of hydrogen. 2016 , 41, 390-397 | | 15 |
| 444 | Influence of the operating temperature on the performance of silicon based photoelectrochemical devices for water splitting. 2016 , 42, 142-146 | | 17 |
| 443 | Characteristics of atomic layer deposited transparent aluminum-doped zinc oxide thin films at low temperature. 2016 , 35, 509-512 | | 5 |
| 442 | Migration of Open Volume Deficiencies in Hydrogenated Amorphous Silicon During Annealing. <i>IEEE Journal of Photovoltaics</i> , 2017 , 7, 421-429 | 3.7 | 14 |
| 441 | Structural characterization of the interface structure of amorphous silicon thin films after post-deposition argon or hydrogen plasma treatment. 2017 , 403, 200-205 | | 7 |
| 440 | Amorphous and Nanocrystalline Silicon Solar Cells. 2017 , 213-225 | | 2 |
| 439 | Flexible photovoltaic power systems: integration opportunities, challenges and advances. 2017 , 2, 013001 | | 30 |

| | | | |
|-----|--|-----|----|
| 438 | Current-induced and light-induced macroscopic changes in thin film solar cells: Device degradation mechanism. 2017 , 143, 86-92 | | 4 |
| 437 | Broadband anti-reflection coating using dielectric Si ₃ N ₄ nanostructures. Application to amorphous-Si-H solar cells. 2017 , 390, 130-136 | | 19 |
| 436 | Analysis of parasitic losses due to intermediate reflectors in silicon tandem solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 163, 185-190 | 6.4 | 3 |
| 435 | Semi-transparent solar cells. 2017 , 50, 093001 | | 43 |
| 434 | Review: Progress in solar cells from hydrogenated amorphous silicon. 2017 , 76, 1497-1523 | | 95 |
| 433 | Effect of illumination and electric field intensity on the efficiency improvement of amorphous silicon tandem solar cells. 2017 , 35, 01A106 | | 3 |
| 432 | Influence of SiH ₄ and pressure on PECVD preparation of silicon films with subwavelength structures. 2017 , 35, 011204 | | 1 |
| 431 | Influence of pin Amorphous Silicon Stack Deposition Sequence on Solar Cell Performance and Degradation. 2017 , 6, Q29-Q33 | | 4 |
| 430 | Review of state-of-the-art: Inverter-to-array power ratio for thin film sizing technique. 2017 , 74, 265-277 | | 13 |
| 429 | Pathway for recovery of photo-degraded polymer solar cells by post degradation thermal anneal. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 164, 70-79 | 6.4 | 12 |
| 428 | Funneling and guiding effects in ultrathin aSi-H solar cells using one-dimensional dielectric subwavelength gratings. 2017 , 7, 017002 | | 8 |
| 427 | On the mechanisms of hydrogen-induced blistering in RF-sputtered amorphous Ge. 2017 , 19, 1486-1494 | | 3 |
| 426 | Modelling the performance of amorphous and crystalline silicon in different typologies of building-integrated photovoltaic (BIPV) conditions. 2017 , 146, 113-118 | | 18 |
| 425 | Tuning the optical properties of RF-PECVD grown μ -Si:H thin films using different hydrogen flow rate. 2017 , 107, 172-177 | | 10 |
| 424 | PV performance modelling: A review in the light of quality assurance for large PV plants. 2017 , 78, 780-797 | | 43 |
| 423 | Treatment of Organic Pollutants Using a Solar Energy Driven Photo-Oxidation Device. 2017 , 1, 1700010 | | 1 |
| 422 | Modification of the thermal relaxation kinetics of the photoinduced (at T = 425 K) metastable dark conductivity of a-Si:H films by weak illumination during the initial stage of relaxation. 2017 , 51, 417-419 | | 1 |
| 421 | Thermal Behavior of Photovoltaic Devices. 2017 , | | 52 |

| | | |
|-----|---|--------|
| 420 | Thermal Issues in Photovoltaics and Existing Solutions. 2017 , 1-28 | 3 |
| 419 | Perovskite solar cells: An integrated hybrid lifecycle assessment and review in comparison with other photovoltaic technologies. 2017 , 80, 1321-1344 | 150 |
| 418 | Enhancement of hydrogenated amorphous silicon solar cells with front-surface hexagonal plasmonic arrays from nanoscale lithography. 2017 , 19, 075901 | 4 |
| 417 | Role of dual SiO _x :H based buffer at the p/i interface on the performance of single junction microcrystalline solar cells. 2017 , 66, 9-14 | 1 |
| 416 | Influence of μ -Si:H tunnel recombination junction on the performance of a-Si:H/ μ -Si:H tandem solar cell. 2017 , 139, 152-165 | 7 |
| 415 | Energetic ion induced desorption of hydrogen from porous silicon studied by on-line elastic recoil detection analysis. 2017 , 246, 81-88 | 2 |
| 414 | Light Sensing of a-Si:H p-i-n Diode Mechanism of Asymmetric Charge Carrier Transfer. 2017 , 1, 1-4 | |
| 413 | Manganese and chromium doping in atomically thin MoS ₂ . 2017 , 38, 033004 | 19 |
| 412 | First-principles simulations of vibrational decay and lifetimes in a-Si:H and a-Si:D. 2017 , 95, | 1 |
| 411 | Development of n-type microcrystalline SiO _x :H films and its application by innovative way to improve the performance of single junction μ c-Si:H solar cell. 2017 , 28, 5746-5753 | 4 |
| 410 | Light-Induced Effects on the a-Si:H/c-Si Heterointerface. <i>IEEE Journal of Photovoltaics</i> , 2017 , 7, 656-664 | 3.7 2 |
| 409 | Key Points in the Latest Developments of High-Efficiency Thin-Film Silicon Solar Cells. 2017 , 214, 1700544 | 10 |
| 408 | Recent Advances in Photoelectrochemical Applications of Silicon Materials for Solar-to-Chemicals Conversion. 2017 , 10, 4324-4341 | 57 |
| 407 | Compatibility study towards monolithic self-charging power unit based on all-solid thin-film solar module and battery. 2017 , 365, 303-307 | 12 |
| 406 | Atomic hydrogen induced defect kinetics in amorphous silicon. 2017 , 35, 05C307 | 5 |
| 405 | Analysis of thin film photovoltaic modules under outdoor long term exposure in semi-arid climate conditions. 2017 , 157, 587-595 | 18 |
| 404 | Performance stability of photovoltaic modules in different climates. <i>Progress in Photovoltaics: Research and Applications</i> , 2017 , 25, 968-981 | 6.8 19 |
| 403 | Substrate effect on ultra-thin hydrogenated amorphous silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 171, 222-227 | 6.4 5 |

| | | | |
|-----|---|-----|-----|
| 402 | Improved quality of flash-lamp-crystallized polycrystalline silicon films by using low defect density Cat-CVD a-Si films. 2017 , 108, 827-831 | | 0 |
| 401 | Degradation of micromorphous thin-film silicon (β Si/ β -Si) solar modules: Evaluation of seasonal efficiency based on the data of monitoring. 2017 , 51, 1180-1185 | | 1 |
| 400 | Increasing the efficiency of silicon heterojunction solar cells and modules by light soaking. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 173, 43-49 | 6.4 | 34 |
| 399 | Effect of field and pump light wavelength during DC stress on the efficiency improvement of amorphous silicon single junction and tandem solar cells. 2017 , | | 1 |
| 398 | Effect of oxide based graded buffer and bottom n-layer on the performance of the single junction amorphous silicon solar cells. 2017 , 28, 16165-16172 | | 1 |
| 397 | Absorption Amelioration of Amorphous Si Film by Introducing Metal Silicide Nanoparticles. 2017 , 12, 224 | | 4 |
| 396 | High deposition rate nanocrystalline and amorphous silicon thin film production via surface wave plasma source. 2017 , 325, 370-376 | | 6 |
| 395 | Polycrystalline silicon films obtained by crystallization of amorphous silicon on aluminium based substrates for photovoltaic applications. 2017 , 636, 150-157 | | 9 |
| 394 | Microscale Plasmas for Metal and Metal Oxide Nanoparticle Synthesis. 2017 , 89-108 | | |
| 393 | Performance assessment and degradation analysis of solar photovoltaic technologies: A review. 2017 , 78, 554-587 | | 132 |
| 392 | Effects of PECVD temperature and RF power on surface structure and refractive index of amorphous and polycrystalline silicon films. 2017 , 917, 032029 | | 2 |
| 391 | Analysis of thickness-dependent optical parameters of a-Si:H/nc-Si:H multilayer thin films. 2017 , 6, 1 | | 3 |
| 390 | Notice of Removal: Light-induced effects on the a-Si:H/c-Si heterointerface. 2017 , | | |
| 389 | . 2017 , | | 6 |
| 388 | High Mobility Thin Film Transistors Based on Amorphous Indium Zinc Tin Oxide. 2017 , 10, | | 19 |
| 387 | Extraction of Saturation Current and Ideality Factor from Measuring Voc and Isc of Photovoltaic Modules. 2017 , 2017, 1-9 | | 31 |
| 386 | Down Shifted Conversion for Enhanced HIT Solar Cell Efficiency. 2017 , | | |
| 385 | Development of a practical method of estimating electric power from various photovoltaic technologies with high precision. 2017 , 56, 08MD05 | | 2 |

| | | | |
|-----|---|-----|----|
| 384 | Computer Analysis and Optimization of Thin Film Amorphous Silicon Heterojunction Solar Cells with AFORS-HET. 2017 , | | |
| 383 | New Findings of Thermal Effect on pm-Si:H Solar Cells Optoelectronic Properties. 2017 , | | |
| 382 | Spectroscopic ellipsometry studies on microstructure evolution of a-Si:H to nc-Si:H films by H ₂ plasma exposure. 2018 , 15, 18-29 | | 14 |
| 381 | Flat plate hybrid photovoltaic- thermal (PV/T) system: A review on design and development. 2018 , 84, 111-130 | | 75 |
| 380 | Improving the Back Surface Field on an Amorphous Silicon Carbide Thin-Film Photocathode for Solar Water Splitting. 2018 , 11, 1797-1804 | | 5 |
| 379 | Light-Induced Reversible Optical Properties of Hydrogenated Amorphous Silicon: A Promising Optically Programmable Photonic Material. 2018 , 215, 1700754 | | 3 |
| 378 | Optical, structural evolution and surface morphology studies of hydrogenated silicon films synthesized by rf-magnetron sputtering: Effects of pressure and radio frequency power at low temperature. 2018 , 168, 65-76 | | 3 |
| 377 | High open circuit voltage c-Si/a-Si:H heterojunction solar cells: Influence of hydrogen plasma treatment studied by spectroscopic ellipsometry. 2018 , 166, 255-266 | | 14 |
| 376 | Optical Characteristics and Operational Principles of Hybrid Perovskite Solar Cells. 2018 , 215, 1700730 | | 31 |
| 375 | Creation and Annihilation of Charge Traps in Silicon Nanocrystals: Experimental Visualization and Spectroscopy. 2018 , 9, 710-716 | | 4 |
| 374 | Analysis of initial stabilization of cell efficiency in amorphous silicon photovoltaic modules under real outdoor conditions. <i>Renewable Energy</i> , 2018 , 120, 114-125 | 8.1 | 9 |
| 373 | Device physics underlying silicon heterojunction and passivating-contact solar cells: A topical review. <i>Progress in Photovoltaics: Research and Applications</i> , 2018 , 26, 241-260 | 6.8 | 39 |
| 372 | A Primer on Photovoltaic Generators. <i>Springer Series in Materials Science</i> , 2018 , 63-90 | 0.9 | 2 |
| 371 | Using the light scattering properties of multi-textured AZO films on inverted hemisphere textured glass surface morphologies to improve the efficiency of silicon thin film solar cells. 2018 , 447, 866-875 | | 11 |
| 370 | Investigation of the light-soaking effect in organic solar cells using dielectric permittivity and electric modulus approaches. 2018 , 52, 32-41 | | 9 |
| 369 | Thin-Film Silicon Solar Cells. 2018 , 235-307 | | 2 |
| 368 | The effects of argon and helium dilution in the growth of nc-Si:H thin films by plasma-enhanced chemical vapor deposition. 2018 , 53, 3672-3681 | | 11 |
| 367 | Effect of Gas Dilution Ratios and Substrate Temperature on the Structural Transition of a-Si/ μ -Si Thin-Film Solar Cell Using PECVD. 2018 , 786, 373-383 | | 1 |

| | | | | |
|-----|---|-----|--|----|
| 366 | . 2018, | | | 3 |
| 365 | Crystallizing amorphous silicon film by using femtosecond laser pulses. 2018, | | | 2 |
| 364 | Thin-film (CdTe) Photovoltaic modules Power Degradation. 2018, | | | |
| 363 | Sol-Gel Derived Dip Coated ZnO /La2O3 Thin Film Transistors. 2018, 7, Q206-Q210 | | | 1 |
| 362 | Experimental Investigation of the Change in the Efficiency of Hydrogenated Amorphous Silicon Solar Cells with Different Intrinsic Layer Thicknesses. 2018, 54, 270-272 | | | 3 |
| 361 | Implementation of Multijunction Solar Cells in Integrated Devices for the Generation of Solar Fuels. 2018, 349-384 | | | 1 |
| 360 | Analysis of Optical and Recombination Losses in Solar Cells. 2018, 29-82 | | | 2 |
| 359 | Optoelectronic Properties Improvement of pm-Si:H Films with Silane Flux Variation. 2018, | | | |
| 358 | Insights into the Degradation of Amorphous Silicon Passivation Layer for Heterojunction Solar Cells. 2018, 216, 1800705 | | | 4 |
| 357 | . 2018, | | | 16 |
| 356 | Materials Chemistry and Physics for Low-Cost Silicon Photovoltaics. 2018, 23-60 | | | |
| 355 | Synergistic Effects of Double Cation Substitution in Solution-Processed CZTS Solar Cells with over 10% Efficiency. 2018, 8, 1802540 | | | 81 |
| 354 | Performance increase of tandem amorphous/microcrystalline Si PV devices under variable illumination and temperature conditions. 2018, 88-90, 1025-1029 | | | 1 |
| 353 | Electrochemical Oxidation of Organic Pollutants Powered by a Silicon-Based Solar Cell. 2018, 3, 14392-14398 | | | 3 |
| 352 | Temperature and hydrogen diffusion length in hydrogenated amorphous silicon films on glass while scanning with a continuous wave laser at 532 nm wavelength. <i>Journal of Applied Physics</i> , 2018 , 124, 153103 | 2.5 | | 4 |
| 351 | Making glassy solids ductile at room temperature by imparting flexibility into their amorphous structure. 2018, 6, 570-583 | | | 11 |
| 350 | Photo-induced enhancement of the dark conductivity in nanocrystalline germanium/amorphous silicon composite thin films. <i>Journal of Applied Physics</i> , 2018, 124, 165102 | 2.5 | | 0 |
| 349 | Thermally Induced S-Sublattice Transition of LiPS for Fast Lithium-Ion Conduction. 2018, 9, 5592-5597 | | | 10 |

| | | |
|-----|---|--------|
| 348 | Multiphoton Microscopy of π -Conjugated Copolymers and Copolymer/Fullerene Blends for Organic Photovoltaic Applications. 2018 , 10, 31813-31823 | 4 |
| 347 | Low-Temperature Growth of Amorphous Silicon Films and Direct Fabrication of Solar Cells on Flexible Polyimide and Photo-Paper Substrates. 2018 , 47, 4710-4720 | 8 |
| 346 | Diminished band discontinuity at the p/i interface of narrow-gap a-SiGe:H solar cell by hydrogenated amorphous silicon oxide buffer layer. 2018 , 762, 616-620 | 11 |
| 345 | Thin Film Photovoltaics. 2018 , 361-370 | 5 |
| 344 | Outdoor comparison of rooftop grid-connected photovoltaic technologies in Marrakech (Morocco). 2018 , 173, 138-149 | 9 |
| 343 | Amorphous silicon/crystal silicon heterojunction double-junction tandem solar cell with open-circuit voltage above 1.5 V and high short-circuit current density. <i>Solar Energy Materials and Solar Cells</i> , 2018 , 185, 307-311 | 6.4 11 |
| 342 | 2.5 PV Materials. 2018 , 117-149 | 1 |
| 341 | Experimental study on a novel photovoltaic thermal system using amorphous silicon cells deposited on stainless steel. 2018 , 159, 786-798 | 13 |
| 340 | Variation in efficiency with change in band gap and thickness in thin film amorphous silicon tandem heterojunction solar cells with AFORS-HET. 2018 , 26, A626-A635 | 3 |
| 339 | Exploring the photo paper as flexible substrate for fabrication of a-Si:H based thin film solar cells at low temperature (110 °C): Influence of radio frequency power on opto-electronic properties. 2018 , 662, 155-164 | 3 |
| 338 | Analysis of the behaviour of cadmium telluride and crystalline silicon photovoltaic modules deployed outdoor under humid continental climate conditions. 2018 , 171, 681-691 | 18 |
| 337 | Performance degradation due to outdoor exposure and seasonal variation in amorphous silicon photovoltaic modules. 2018 , 661, 116-121 | 11 |
| 336 | Forty years of the Staebler-Wronski effect. 2018 , 98, 2512-2528 | 2 |
| 335 | Role of interface states on electron transport in a-Si:H/nc-Si:H multilayer structures. 2018 , | |
| 334 | Thin-film semiconductors From exploration to application. 2018 , 43, 617-624 | 6 |
| 333 | Progress and limitations of thin-film silicon solar cells. 2018 , 170, 486-498 | 23 |
| 332 | Two dimensional simulations of triode VHF SiH ₄ plasma. 2018 , 57, 06JG01 | |
| 331 | 4.15 Solar Cells. 2018 , 637-658 | 1 |

| | | |
|-----|---|-------|
| 330 | A review on the crystalline silicon bottom cell for monolithic perovskite/silicon tandem solar cells. 2019 , 7, 100045 | 31 |
| 329 | A study on the degradation rates and the linearity of the performance decline of various thin film PV technologies. 2019 , 188, 813-824 | 11 |
| 328 | Reversible Efficiency Variation of Tandem Amorphous/Microcrystalline Si Photovoltaic Modules in Outdoor Operation. 2019 , 12, 2876 | |
| 327 | Color Sensing by Optical Antennas: Approaching the Quantum Efficiency Limit. 2019 , 6, 2041-2048 | 6 |
| 326 | Oxygen annealed ZnO/a2O3 TFTs fabricated using CBD technique. 2019 , 1330, 012007 | |
| 325 | Identification and Suppression of Si-H2 Bond Formation at P/I Interface in a-Si:H Films Deposited by SiH4 Plasma CVD. <i>Plasma and Fusion Research</i> , 2019 , 14, 4406141-4406141 | 0.5 |
| 324 | Energy performance of 3 silicon-based PV module technologies in 20 sites of Morocco. 2019 , 53, 30-56 | 12 |
| 323 | Output power behavior of passivated emitter and rear cell photovoltaic modules during early installation stage: influence of light-induced degradation. 2019 , 58, 106510 | 1 |
| 322 | Ultrafast Carrier Recombination and Transient Lattice Temperature Changes in 25 nm Thin Hydrogenated Amorphous Silicon Films. 2019 , 1, 2396-2405 | 0 |
| 321 | High-performance UV detectors based on room-temperature deposited amorphous Ga2O3 thin films by RF magnetron sputtering. 2019 , 7, 11834-11844 | 22 |
| 320 | Maximum Efficiencies and Performance-Limiting Factors of Inorganic and Hybrid Perovskite Solar Cells. 2019 , 12, | 11 |
| 319 | Performance Study of the Micromorph Silicon Tandem Solar Cell Using Silvaco TCAD Simulator. 2019 , 20, 494-512 | 1 |
| 318 | Bias-dependent degradation of various solar cells: lessons for stability of perovskite photovoltaics. 2019 , 12, 550-558 | 56 |
| 317 | Performance enhancement of a proposed solar cell microstructure based on heavily doped silicon wafers. 2019 , 34, 035012 | 17 |
| 316 | Aging in Phase Change Materials: Getting Insight from Simulation. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019 , 13, 1800590 | 2.5 9 |
| 315 | Irradiance and temperature considerations in the design and deployment of high annual energy yield perovskite/CIGS tandems. 2019 , 3, 1841-1851 | 15 |
| 314 | Feasibility of an innovative amorphous silicon photovoltaic/thermal system for medium temperature applications. 2019 , 252, 113427 | 13 |
| 313 | Nanocrystalline Hydrogenated Silicon Solar Cells with RF-Magnetron Sputtered Absorbers. 2019 , 12, | 4 |

| | | |
|-----|---|-----|
| 312 | Performance and stability improvement of single junction a-Si:H solar cell by interface engineering. 2019 , 30, 12406-12415 | 3 |
| 311 | Electrical and Optical Characteristics of Si-Nanoparticle Films Deposited onto Substrates by High-Voltage Electro spraying from Ethanol Sols. 2019 , 53, 552-565 | 2 |
| 310 | Technology and Market Perspective for Indoor Photovoltaic Cells. 2019 , 3, 1415-1426 | 160 |
| 309 | Investigation of the power generation of organic photovoltaic modules connected to the power grid for more than three years. 2019 , 58, 052001 | 5 |
| 308 | Fault diagnosis of Photovoltaic Modules. 2019 , 7, 622-644 | 47 |
| 307 | Generation and combination of the solar cells: A current model review. 2019 , 7, 305-322 | 41 |
| 306 | Properties of Inorganic Films Prepared by Cat-CVD. 2019 , 105-177 | |
| 305 | Application of Cat-CVD Technologies. 2019 , 293-342 | |
| 304 | Advanced radial junction thin film photovoltaics and detectors built on standing silicon nanowires. 2019 , 30, 302001 | 8 |
| 303 | Negative photoconductivity in sulfur-hyperdoped silicon film. 2019 , 98, 106-112 | 6 |
| 302 | The progression of silicon technology acting as substratum for the betterment of future photovoltaics. 2019 , 43, 3959-3980 | 8 |
| 301 | Fuzzy Logic Inverter Controller in Photovoltaic Applications: Issues and Recommendations. 2019 , 7, 24934-24956 | 16 |
| 300 | Silicon Thin Films: Functional Materials for Energy, Healthcare, and IT Applications. 2019 , 216, 1800847 | 1 |
| 299 | Confirmation of the Degradation of Single Junction Amorphous Silicon Modules (a-Si:H). 2019 , 2019, 1-13 | 2 |
| 298 | Photoluminescence, Photoinduced Changes, and Electroluminescence in Noncrystalline Semiconductors. 2019 , 203-239 | |
| 297 | Inhibition of light emission from the metastable tetragonal phase at low temperatures in island-like films of lead iodide perovskites. 2019 , 11, 22378-22386 | 3 |
| 296 | Deposition of Amorphous and Microcrystalline Films of Silicon by the Gas-Jet Plasma-Chemical Method. 2019 , 53, 1712-1716 | |
| 295 | Reliable long-term performance assessment of commercial photovoltaic modules tested under field conditions over 5 years. 2019 , 11, 063501 | 5 |

| | | | |
|-----|---|-----|----|
| 294 | Nanostructuring Solar Cells Using Metallic Nanoparticles. 2019 , 197-221 | | 3 |
| 293 | Enhanced Photoelectric SrOCuSbS of a [SrO]-Intercalated CuSbS Structure. 2019 , 58, 69-72 | | 6 |
| 292 | Optimization of inverter loading ratio for grid connected photovoltaic systems. 2019 , 179, 106-118 | | 14 |
| 291 | Room temperature crystallization of amorphous silicon film by ultrashort femtosecond laser pulses. 2019 , 112, 363-367 | | 7 |
| 290 | Numerical simulation and validity of the surface photovoltage method in amorphous silicon with a Schottky contact. 2019 , 34, 015019 | | 1 |
| 289 | Optical processing and manipulation of wavelength division multiplexed signals. 2020 , 233-299 | | 0 |
| 288 | Characteristics change in organic photovoltaics by thermal recovery and photodegradation. 2020 , 59, SCCD04 | | 1 |
| 287 | Effect of hydrogen dilution on the silicon cluster volume fraction of a hydrogenated amorphous silicon film prepared using plasma-enhanced chemical vapor deposition. 2020 , 20, 191-195 | | 1 |
| 286 | Solar Cells and Modules. <i>Springer Series in Materials Science</i> , 2020 , | 0.9 | 2 |
| 285 | Photovoltaic cleaning frequency optimization under different degradation rate patterns. <i>Renewable Energy</i> , 2020 , 166, 136-146 | 8.1 | 9 |
| 284 | Light-induced defect creation processes and light-induced defects in hydrogenated amorphous silicon. 2020 , 90, 20101 | | |
| 283 | Potential of building integrated and attached/applied photovoltaic (BIPV/BAPV) for adaptive less energy-hungry building skin: A comprehensive review. 2020 , 276, 123343 | | 68 |
| 282 | Influence of the growth temperature on the spectral dependence of the optical functions associated with thin silicon films grown by ultra-high-vacuum evaporation on optical quality fused quartz substrates. 2020 , 31, 13186-13198 | | 1 |
| 281 | Combining Photosynthesis and Photovoltaics: A Hybrid Energy-Harvesting System Using Optical Antennas. 2020 , 12, 40261-40268 | | 3 |
| 280 | Quantification of Nanoscale Density Fluctuations in Hydrogenated Amorphous Silicon. 2020 , 125, 185501 | | 4 |
| 279 | Towards Quantitative Interpretation of Fourier-Transform Photocurrent Spectroscopy on Thin-Film Solar Cells. 2020 , 10, 820 | | 2 |
| 278 | Photovoltaic and impedance spectroscopy characterization of single-junction a-Si:H p-i-n solar cells deposited by simple shadow masking techniques using PECVD. 2020 , 10, 095315 | | 1 |
| 277 | Investigation of an innovative PV/T-ORC system using amorphous silicon cells and evacuated flat plate solar collectors. 2020 , 203, 117873 | | 7 |

| | | |
|-----|---|--------|
| 276 | Design of wave-optical structured substrates for ultra-thin perovskite solar cells. 2020 , 20, 100720 | 21 |
| 275 | Nonlinear Photovoltaic Degradation Rates: Modeling and Comparison Against Conventional Methods. <i>IEEE Journal of Photovoltaics</i> , 2020 , 10, 1112-1118 | 3-7 24 |
| 274 | The Technical and Economic Viability of Replacing n-type with p-type Wafers for Silicon Heterojunction Solar Cells. 2020 , 1, 100069 | 12 |
| 273 | A Bias-Free, Stand-Alone, and Scalable Photovoltaic-Electrochemical Device for Solar Hydrogen Production. 2020 , 4, 2000070 | 10 |
| 272 | Emerging Thin Film Solar Panels. 2020 , | 5 |
| 271 | Module Failure Modes. 2020 , 17-53 | 0 |
| 270 | Crystallization of Amorphous Silicon via Excimer Laser Annealing and Evaluation of Its Passivation Properties. 2020 , 13, 3335 | 2 |
| 269 | Quantifying Large Lattice Relaxations in Photovoltaic Devices. 2020 , 13, | 3 |
| 268 | Impact of Laser Treatment on Hydrogenated Amorphous Silicon Properties. 2020 , 22, 1901437 | 1 |
| 267 | Quantum Confinement in the Spectral Response of n-Doped Germanium Quantum Dots Embedded in an Amorphous Si Layer for Quantum Dot-Based Solar Cells. 2020 , 3, 2813-2821 | 2 |
| 266 | Performance Assessment of Four Different Photovoltaic Technologies in Poland. 2020 , 13, 196 | 27 |
| 265 | Evaluation of solar module equivalent models under real operating conditionsA review. 2020 , 12, 012701 | 12 |
| 264 | The effects of air, oxygen and water exposure on the sub-bandgap absorption, the electronic conductivity and the ambipolar diffusion length in highly crystalline microcrystalline silicon films for photovoltaic applications. 2020 , 31, 3960-3975 | |
| 263 | Metastable Refractive Index Manipulation in Hydrogenated Amorphous Silicon for Reconfigurable Photonics. 2020 , 8, 1901680 | 6 |
| 262 | Light soaking in metal halide perovskites studied via steady-state microwave conductivity. 2020 , 3, | 11 |
| 261 | Modification of the Photoelectric Properties of Undoped Hydrogenated Amorphous Silicon Films under Preliminary Illumination at Elevated Temperatures. 2020 , 54, 437-440 | 0 |
| 260 | Status of BIPV and BAPV System for Less Energy-Hungry Building in IndiaA Review. 2020 , 10, 2337 | 57 |
| 259 | Transferless Inverted Graphene/Silicon Heterostructures Prepared by Plasma-Enhanced Chemical Vapor Deposition of Amorphous Silicon on CVD Graphene. 2020 , 10, | 1 |

| | | | |
|-----|--|-----|-----|
| 258 | The History of Photovoltaics with Emphasis on CdTe Solar Cells and Modules. 2020 , 10, 344 | | 28 |
| 257 | Boosting ultrathin aSi-H solar cells absorption through a nanoparticle cross-packed metasurface. 2020 , 202, 10-16 | | 11 |
| 256 | Environmental impacts of solar energy systems: A review. 2021 , 754, 141989 | | 138 |
| 255 | Numerical Simulation and Optimization of the Performances of a Solar Cell (p-i-n) Containing Amorphous Silicon Using AMPS-1D. 2021 , 22, 531-535 | | 4 |
| 254 | Effects of Hydrogen Concentration and Cooling Speed on Fabrication of Hydrogenated Amorphous Silicon: Quantum Simulation. | | 1 |
| 253 | Das Hahn-Meitner-Institut [Grundlagenforschung für die Solarenergie. 2021 , 319-402 | | |
| 252 | Crystallite distribution analysis based on hydrogen content in thin-film nanocrystalline silicon solar cells by atom probe tomography. 2021 , 14, 016501 | | 1 |
| 251 | Ab Initio Hydrogen Dynamics and the Morphology of Voids in Amorphous Silicon. 2021 , 258, 2000494 | | |
| 250 | The rapidly reversible processes of activation and deactivation in amorphous silicon heterojunction solar cell under extensive light soaking. 2021 , 32, 4045-4052 | | 7 |
| 249 | Difficulties of Alternative Technologies to Silicon. 2021 , 129-167 | | |
| 248 | Resonant nano-dimer metasurface for ultra-thin a-Si:H solar cells. 2021 , 11, 7179 | | 2 |
| 247 | From Crystalline to Low-cost Silicon-based Solar Cells: a Review. <i>Silicon</i> , 1 | 2.4 | 13 |
| 246 | Crystalline Silicon vs. Amorphous Silicon: the Significance of Structural Differences in Photovoltaic Applications. 2021 , 726, 012001 | | 7 |
| 245 | Efficient Hybrid Amorphous Silicon/Organic Tandem Solar Cells Enabled by Near-Infrared Absorbing Nonfullerene Acceptors. 2021 , 11, 2100166 | | 3 |
| 244 | Crystal engineering and thin-film deposition strategies towards improving the performance of kesterite photovoltaic cell. 2021 , 12, 1252-1287 | | 4 |
| 243 | Growth of crystalline silicon by a seed layer approach using plasma enhanced chemical vapor deposition. 2021 , 609, 412817 | | 0 |
| 242 | Crystallinity, order, the thin-film silicon continuum, and the spectral dependence of the refractive index in thin silicon films grown through ultra-high-vacuum evaporation for a range of growth temperatures. 2021 , 559, 120657 | | 1 |
| 241 | Influence of Light Soaking on Silicon Heterojunction Solar Cells With Various Architectures. <i>IEEE Journal of Photovoltaics</i> , 2021 , 11, 575-583 | 3.7 | 9 |

| | | |
|-----|---|-------|
| 240 | From Femtoseconds to Gigaseconds: The SolDeg Platform for the Performance Degradation Analysis of Silicon Heterojunction Solar Cells. 2021 , 13, 32424-32434 | 0 |
| 239 | Low-cost Open-source 12-channel MPPT Data Logger for Solar Cell Research. 2021 , | |
| 238 | Fabrication and characterization of natural dye-sensitized solar cells based on tin sulfide nanoparticles. 1 | 1 |
| 237 | Thin-film optical function acquisition from experimental measurements of the reflectance and transmittance spectra: a case study. 2021 , 32, 17033-17060 | |
| 236 | Progress with Defect Engineering in Silicon Heterojunction Solar Cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021 , 15, 2100170 | 2.5 2 |
| 235 | Thin-Film Solar Cells. 2021 , 103-115 | 1 |
| 234 | Evaluation of Hydrogenated Amorphous Silicon Oxide Photo-Absorber from Quantum Efficiency in Thin-Film Solar Cell by Fourier Transform Photocurrent Spectroscopy. 2021 , 62, 1263-1269 | 1 |
| 233 | Photoinduced Dynamic Defects Responsible for the Giant, Reversible, and Bidirectional Light-Soaking Effect in Perovskite Solar Cells. 2021 , 12, 9328-9335 | 2 |
| 232 | Photovoltaic distribution on an amorphous-silicon solar cell in near-band-edge excitation observed by conductive-probe atomic force microscopy combined with a fine-wavelength-tunable light source. 2021 , 92, 095103 | |
| 231 | Comparative investigation of performance evaluation, degradation causes, impact and corrective measures for ground mount and rooftop solar PV plants [A review]. 2021 , 47, 101526 | 5 |
| 230 | The Different PV Technologies and How They Degrade. 1-16 | 2 |
| 229 | Defects in Amorphous Semiconductors: Amorphous Silicon. 245-268 | 3 |
| 228 | Solar energy conversion. 1984 , 203-244 | 4 |
| 227 | Luminescence in amorphous semiconductors. 1979 , 159-187 | 8 |
| 226 | Methodological Problems in the Calculations on Amorphous Hydrogenated Silicon, a-Si:H. 2002 , 950-955 | 1 |
| 225 | Theory of electronic structure. 1984 , 5-60 | 20 |
| 224 | Conductivity, localization, and the mobility edge. 1984 , 169-193 | 2 |
| 223 | The spectroscopy of localized states. 1984 , 195-259 | 17 |

| | | |
|-----|---|-------|
| 222 | Photovoltaic - Electrolysis Cells. 2008 , 485-516 | 1 |
| 221 | Encyclopedia of Sustainability Science and Technology. 2012 , 9240-9292 | 1 |
| 220 | The Thermal Equilibration Model for Persistent Photoconductivity in Doping Modulated Amorphous Silicon. 1987 , 529-539 | 7 |
| 219 | Hydrogen Motion and the Staebler-Wronski Effect in Amorphous Silicon. 1987 , 613-620 | 2 |
| 218 | Dangling Bonds and Metastability in Semiconductors. 1987 , 625-633 | 1 |
| 217 | Solar Energy. 2013 , 174-211 | 2 |
| 216 | Solar Energy. 2013 , 270-322 | 1 |
| 215 | a-Si:H TFT Thin Film and Substrate Materials. 2004 , 15-78 | 7 |
| 214 | Device Physics, Compact Modeling, and Circuit Applications of a-Si:H TFTs. 2004 , 79-181 | 10 |
| 213 | Metastability. 1998 , 99-113 | 7 |
| 212 | Synthesis of Ceramic Powders and Thin Films from Laser Heated Gases. 1987 , 95-120 | 2 |
| 211 | Amorphous Silicon Solar Cells. 1983 , 427-456 | 1 |
| 210 | Density of States in Noncrystalline Solids. 1985 , 313-341 | 4 |
| 209 | Light-Induced Effects in Hydrogenated Amorphous Silicon Alloys. 1985 , 423-438 | 2 |
| 208 | Fundamentals of Amorphous Materials. 1985 , 105-155 | 19 |
| 207 | Bonding in Amorphous Semiconductors; Beyond the 8-N Rule. 1985 , 177-186 | 1 |
| 206 | Staebler-Wronski Effect in Hydrogenated Amorphous Silicon. 1985 , 315-324 | 1 |
| 205 | High-Bandgap Silicon Nanocrystal Solar Cells: Device Fabrication, Characterization, and Modeling. <i>Springer Series in Materials Science</i> , 2014 , 165-194 | 0.9 3 |

| | | | |
|-----|---|-----|----|
| 204 | Hydrogenated Amorphous Silicon Thin-Film Transistors (a-Si:H TFTs). 2016 , 887-909 | | 2 |
| 203 | Amorphous Semiconductors: Structure, Optical, and Electrical Properties. 2017 , 1-1 | | 6 |
| 202 | Defects in Amorphous and Organic Semiconductors. 2018 , 781-812 | | 2 |
| 201 | Silicon Based Photovoltaic Materials. 2013 , 1-23 | | 0 |
| 200 | Fiber Solar Cells. 2013 , 145-200 | | 1 |
| 199 | Hydrogenated Amorphous Silicon Thin-Film Transistors (a-Si:H TFTs). 2014 , 1-18 | | 0 |
| 198 | ab initio Electronic Structure Calculation of Atomic Displacement of Defects in Semiconductors Induced by Electronic Excitation. 1997 , 220-228 | | 1 |
| 197 | Photovoltaic Power Generation. 1988 , 95-139 | | 1 |
| 196 | Defects in Covalent Amorphous Semiconductors. 1981 , 14-32 | | 2 |
| 195 | Surface Effects and Transport Properties in Thin films of Hydrogenated Silicon. 1981 , 33-39 | | 6 |
| 194 | Active-Matrix Liquid-Crystal Displays. <i>Springer Series in Materials Science</i> , 2000 , 7-93 | 0.9 | 30 |
| 193 | Large Area Image Sensor Arrays. <i>Springer Series in Materials Science</i> , 2000 , 147-221 | 0.9 | 28 |
| 192 | Multijunction Solar Cells and Modules. <i>Springer Series in Materials Science</i> , 2000 , 252-305 | 0.9 | 12 |
| 191 | Hydrogenated Amorphous Silicon, Its Alloys and Their Device Applications. 1992 , 96-126 | | 1 |
| 190 | Light-Induced Degradation in Amorphous Silicon Solar Cells. 1987 , 395-401 | | 1 |
| 189 | Crystalline vs. Amorphous Silicon: Comparison of their Respective Properties and their Significance in Photovoltaic Applications. 1987 , 521-527 | | 1 |
| 188 | Influence of a DC Electric Field on Hydrogen Incorporation and Doping Efficiency of a-Si:H Films. 1987 , 528-532 | | 2 |
| 187 | Optically Excited Defects. 1983 , 483-505 | | 2 |

| | | |
|-----|--|-------|
| 186 | Atomic Transport in and Stability of Amorphous Silicon Solar Cells. 1983 , 163-169 | 1 |
| 185 | The Nature of A Photoinduced Metastable State in α -Si:H. 1997 , 137-141 | 2 |
| 184 | Amorphous Silicon. 1997 , 437-468 | 4 |
| 183 | MICROSTRUCTURE CONSIDERATIONS IN HYDROGENATED AMORPHOUS SILICON THIN FILMS. 1986 , 299-314 | 1 |
| 182 | Amorphous Thin-Film Devices. 1980 , 175-207 | 3 |
| 181 | Metastable states in Si:H. 1991 , 181-187 | 1 |
| 180 | Demonstrating the Superior Performance of Thin-Film Amorphous Silicon for Building-Integrated Photovoltaic Systems in Warm Climates. 2000 , 217-222 | 2 |
| 179 | Defects and Properties. 2006 , 215-250 | 1 |
| 178 | Deposition Conditions and the Optoelectronic Properties of a-Si. 1995 , 131-176 | 4 |
| 177 | CHAPTER 1:Silicon Solar Cells. 2019 , 1-55 | 12 |
| 176 | Unusual infrared absorption increases in photo-degraded organic films. 2017 , 9, 8665-8673 | 6 |
| 175 | Photovoltaics. 2020 , 246, 00005 | 5 |
| 174 | Influence of interface charges on transport measurements in amorphous silicon films. 1978 , 39, 1241-1246 | 128 |
| 173 | Photo-induced changes in the coefficient of the temperature dependence of the Fermi level in discharge-produced amorphous silicon. 1982 , 43, 1419-1424 | 4 |
| 172 | The relation between contact potential and planar conduction as a-Si : H films undergo gas adsorption or temperature changes. 1983 , 44, 993-1003 | 25 |
| 171 | Standardising current-voltage measurements for metastable solar cells. 2020 , 2, 011002 | 4 |
| 170 | Quantum twin spectra in nanocrystalline silicon. <i>Physical Review Materials</i> , 2017 , 1, | 3.2 0 |
| 169 | Computational generation of voids in a-Si and a-Si:H by cavitation at low density. <i>Physical Review Materials</i> , 2020 , 4, | 3.2 1 |

| | | |
|-----|--|----|
| 168 | BASIC PROPERTIES OF HYDROGENATED AMORPHOUS SILICON (a-Si:H). 2010 , 17-96 | 1 |
| 167 | EXAMPLES OF SOLAR MODULE APPLICATIONS. 2010 , 369-399 | 1 |
| 166 | Solar harvesting based on perfect absorbing all-dielectric nanoresonators on a mirror. 2019 , 27, A967-A980 | 9 |
| 165 | Doped silicon oxide layers for tandem silicon solar cells. 2012 , | 1 |
| 164 | Variation in Efficiency with Respect to Change in Band Gap and Thickness in Thin Film Amorphous Silicon Tandem Heterojunction Solar Cells with AFORS-HET. 2017 , | 1 |
| 163 | Mechanism of Tin-Induced Crystallization in Amorphous Silicon. 2014 , 59, 1168-1176 | 9 |
| 162 | Magnetic Resonance Probes Of Band Tail States And Defects In Tetrahedrally Coordinated Amorphous Semiconductors. 2002 , 715, 231 | 2 |
| 161 | Kinetics of Light-Induced Effects in Mixed-Phase Hydrogenated Silicon Solar Cells. 2003 , 762, 1221 | 2 |
| 160 | Hydrogenated Amorphous Silicon Thin Films with Nanocrystalline Silicon Inclusions. 2003 , 762, 1441 | 2 |
| 159 | Light and Thermally Induced Metastabilities in Nanocrystalline Silicon. 2003 , 762, 17181 | 5 |
| 158 | Metastable Defects in the Amorphous Silicon-Germanium Alloys. 2003 , 762, 211 | 1 |
| 157 | Solar photovoltaics: current state and trends. 2016 , 186, 801-852 | 21 |
| 156 | Geometrical optimisation of core-shell nanowire arrays for enhanced absorption in thin crystalline silicon heterojunction solar cells. 2019 , 10, 322-331 | 7 |
| 155 | Simulation of n1-p2 Microcrystalline Silicon Tunnel Junction with AMPS-1D in a-Si :H/ μ -Si :H Tandem Solar Cells. 2011 , 11, 2932-2939 | 9 |
| 154 | Amorphous-Nanocrystalline Transition in Silicon Thin Films Obtained by Argon Diluted Silane PECVD. 2012 , 01, 57-61 | 7 |
| 153 | Low Temperature Growth of Hydrogenated Silicon Prepared by PECVD from Argon Diluted Silane Plasma. 2012 , 01, 62-67 | 5 |
| 152 | Effect of Hydrogen Content and Bonding Environment on Mechanical Properties of Hydrogenated Silicon Films Deposited by High-Frequency PECVD Process. 2012 , 2012, 1-9 | 7 |
| 151 | Present Status and Future Prospects of Silicon Thin-Film Solar Cells. 2011 , 50, 030001 | 69 |

- 150 The Effect of Carrier Injection Stress on Boron-Doped Amorphous Silicon Suboxide Layers Investigated by X-ray Photoelectron Spectroscopy. **2011**, 50, 095801 3
- 149 Large-Area Thin-Film Silicon: Synergy between Displays and Solar Cells. **2012**, 51, 03CA07 1
- 148 Optical Second-Harmonic Generation in Hydrogenated Amorphous Silicon Single- and Double-Junction Solar Cells. **2012**, 51, 070209 3
- 147 Amorphous-Silicon-Based Thin-Film Solar Cells Exhibiting Low Light-Induced Degradation. **2012**, 51, 10NB04 7
- 146 Time-dependent changes in copper indium gallium (di)selenide and cadmium telluride photovoltaic modules due to outdoor exposure. **2017**, 56, 08MD06 3
- 145 Thin-Film Silicon PV Technology. **2021**,
- 144 Numerical simulation and optimization of a-Si:H/a-SiGe:H/ μ c-Si:H triple junction thin film silicon solar cell designs for high conversion efficiency. **2021**, 53, 1 0
- 143 Analysis, Synthesis and Characterization of Thin Films of a-Si:H (n-type and p-type) Deposited by PECVD for Solar Cell Applications. **2021**, 14, 1
- 142 Effects of Climate Conditions on Amorphous Silicon Modules in Australia. **2000**, 1997-2000
- 141 Light Soaking Effect In a-Si:H Based n-i-p And p-i-n Solar Cells. **2002**, 265-268
- 140 ¹H NMR Evidence for a Change in the Local Hydrogen Environment of Sites Associated with the Staebler-Wronski Effect in a-Si:H. **2002**, 715, 1121
- 139 Photovoltaic Devices: A 2000 Overview. **2002**, 369-390
- 138 Optical Properties of Disordered Materials. **2002**, 353-406
- 137 Light-Induced Degradation in Solar Cells with Hydrogenated Amorphous Silicon-Sulfur Active Layers. **2002**, 715, 1141
- 136 Strategies in Photovoltaic Research and Development [Market Introduction Programs. **2003**, 243-254
- 135 Applications. **2003**, 306-324
- 134 Photon Detectors. **2006**, 281-343
- 133 Spatial Profile of Deposition Rate of a-Si:H Films in Multi-Hollow Discharge Plasma Chemical Vapor Deposition. **2007**, 32, 469-472 1

132 INTRODUCTION. **2010**, 1-16

131 Deposition of a-Si: H Films with High Stability against Light Exposure by Reducing Deposition of Nanoparticles Formed in SiH₄ Discharges. 247-257

130 Reconfigurable Field Programmable Gate Arrays: Hardening Solutions. **2011**, 85-175

129 References. **2010**,

128 Microscopic Electrical Characterization of Inorganic Semiconductor-Based Solar Cell Materials and Devices Using AFM-Based Techniques. *Nanoscience and Technology*, **2011**, 723-790 0.6

127 Effect of gamma irradiation on the shallow defect states of hydrogenated amorphous silicon films. **2011**, 53, 10502

126 Evaluation of Solar Cell Properties of Poly-Si Thin Film Fabricated with Novel Process Conditions for Solid Phase Crystallization. **2011**, 24, 766-772

125 Encyclopedia of Sustainability Science and Technology. **2012**, 7935-7972

124 Hydrogenated Amorphous Silicon Thin Film Transistors (a Si:H TFTs). **2012**, 627-646 2

123 Improving the light-soaking stability of a-Si: H/ β -Si: H tandem solar cells. *Wuli Xuebao/Acta Physica Sinica*, **2012**, 61, 138401 0.6

122 Deposition of Cluster-Free B-doped Hydrogenated Amorphous Silicon Films Using SiH₄+B₁₀H₁₄ Multi-Hollow Discharge Plasma Chemical Vapor Deposition. **2012**, 51, 01AD03 2

121 Luminescence of disordered semiconductors. **2012**, 242-262

120 Development of Casting Furnace for Directional Solidification Ingot. **2012**, 13, 808-816

119 Long-Term Performance of Amorphous Silicon Solar Cells with Stretched Exponential Defect Kinetics and AMPS-1D Simulation. **2012**, 21, 219-224 1

118 Hydrogenated Amorphous Silicon TFT Performance. **2013**, 141-184

117 Photovoltaik. **2013**, 191-255

116 Material Properties of Hydrogenated Amorphous Silicon.

115 New Materials: Semiconductors for Solar Cells.

114 Estimation of Directional Solidification Ingot with Heating Position. **2013**, 14, 1915-1920

113 Anti-reflective Silicon Oxide p-Layer for Thin-Film Silicon Solar Cells. *Springer Series in Materials Science*, **2014**, 475-496

0.9 1

112 Self-organization and Size Effects in Amorphous Silicon. *Springer Series in Materials Science*, **2014**, 29-45 0.9

111 INTRODUCTION TO BASIC ASPECTS OF PLASMA-DEPOSITED AMORPHOUS SEMICONDUCTOR ALLOYS IN PHOTOVOLTAIC CONVERSION. **1980**, 665-731

110 Hydrogenated Amorphous Silicon Schottcky Barriers Diodes. **1981**, 815-819

109 MICROCRYSTALLINE AND AMORPHOUS SILICON PREPARED BY LOW PRESSURE PLASMA CVD. **1982**, 87-92

108 Large Area Hydrogenated Amorphous Silicon for Photovoltaic Application. **1982**, 769-772

107 Effect of Oxygen on the Stability of A-Si:H. **1985**, 855-860

106 The Influence of Hydrogen on the Defects and Instabilities in Hydrogenated Amorphous Silicon. **1986**, 91-99

105 EFFECT OF THE SURFACE ON THE PROPERTIES OF AMORPHOUS SEMICONDUCTORS. **1986**, 315-324

104 Photovoltaische Stromerzeugung. **1986**, 94-135

103 Physics of Amorphous-Silicon Alloys. **1987**, 121-141

102 Temporal Behavior of Modulated Reflectance Signal in Silicon. **1987**, 237-244

101 Research on Hydrogenated Amorphous Silicon. **1987**, 195-215

100 Proton Processes on the Surfaces of Semiconductors and Insulators. **1987**, 214-247

99 Laser spectroscopy of amorphous semiconductors. **1989**, 257-298

2

98 Photovoltaische Stromerzeugung. **1989**, 104-145

97 IMPROVEMENT OF THE STABILITY OF HYDROGENATED AMORPHOUS SILICON BY LIGHT PULSE TREATMENT. **1990**, 182-186

96 AMORPHOUS SILICON PHOTOVOLTAICS. **1990**, 170-174

95 EFFICIENCY AND STABILITY OF AMORPHOUS SILICON TWO-STACKED TANDEM SOLAR CELLS. **1990**, 152-156

94 A New Amorphous Silicon-Based Alloy for Electronic Applications. **1991**, 64-65

93 Amorphous Photovoltaic Cells. **1991**, 206-210

92 Low Temperature Short Time Response of Light Induced Defects in a-Si:H. **1991**, 343-345

91 Role of the hydrogen in the light-induced defects in undoped hydrogenated amorphous silicon. **1991**, 265-268

90 Fundamentals of Amorphous Materials. **1991**, 307-323

89 Hydrogen diffusion and electronic metastability in amorphous silicon. **1991**, 69-81

1

88 The Shape of Disorder. **1991**, 280-286

87 Traditional and Ab-Initio Molecular Dynamics Simulations [Applications to Glass Transition and Amorphous SiH. **1992**, 41-52

86 Photoinduced Effects of YBa₂Cu₃O_y Thin Films. **1992**, 143-146

1

85 Writing of Local, Electrically Active Structures in Amorphous Silicon Films by Scanning Tunneling Microscopy. **1993**, 49-64

84 NMR studies of a-Si: H. **1993**, 312-317

83 Advanced Space Photovoltaic Technology. **1993**, 795-823

1

82 First principles of the molecular-dynamics study of light-induced defect formation in a-Si: H. **1993**, 329-333


81 Light-induced effects in a-Si solar cells. **1993**, 377-383

80 CONCLUDING THOUGHTS. **1995**, 363-396

79 Dünnschichtsolarzellen. **1995**, 155-233

- 78 Conductivity effects in hydrogenated amorphous silicon induced by gamma-ray irradiation. **1996**, 107-109
- 77 Photo-Induced Structural Changes in Amorphous Semiconductors. **1997**, 212-219
- 76 Non-Ingot and Novel Technologies. **1997**, 169-212
- 75 Deposition of Amorphous Silicon. **1997**, 125-136 0
- 74 Native and Light Induced Defect States in Wide Band Gap Hydrogenated Amorphous Silicon-Carbon(a-Si_{1-X}C_x:H) Alloy Thin Films. **1997**, 285-299
- 73 Power Systems and Generation. **1997**,
- 72 Recent developments of silicon thin film solar cells on glass substrates. **1999**, 349-354
- 71 Hydrogenated Microcrystalline Silicon. **2014**, 155-172
- 70 Strategies for Plug-in Electric Vehicle-to-Grid (V2G) and Photovoltaics (PV) for Peak Demand Reduction in Urban Regions in a Smart Grid Environment. **2015**, 179-219 2
- 69 Potential of Converting Solar Energy to Electricity and Chemical Energy. **2015**, 311-329
- 68 Low-Frequency Haptic Interface Developed for Electrical Safety Experience Education. **2015**, 8, 75-78
- 67 Inorganic Materials for Solar Cell Applications. **2015**, 57-82
- 66 Towards modelling realistic ageing rates of amorphous silicon devices in operational environment. **2015**, 54, 08KG03
- 65 Defects in Amorphous and Organic Semiconductors. **2016**, 1-32
- 64 Photovoltaik. **2017**, 193-278
- 63 Defects in Amorphous and Organic Semiconductors. **2017**, 1-32
- 62 Low-Cost Harvesting of Solar Energy: The Future of Global Photovoltaics. *Nanoscience and Technology*, **2017**, 215-261 0.6 0
- 61 Introduction. *Springer Series in Materials Science*, **2018**, 1-9 0.9 1

- 60 Hydrogenated Amorphous Silicon Thin Film. **2018**, 1-54
- 59 Hydrogenated Amorphous Silicon Thin Film. **2019**, 639-692
- 58 Study of Light-induced Degradation in Thin Film Silicon Solar Cells: Hydrogenated Amorphous Silicon Solar Cell and Nano-quantum Dot Silicon Thin Film Solar Cell. *Journal of the Korean Solar Energy Society*, **2019**, 39, 1-9 0.1
- 57 Effect of Higher-Order Silane Deposition on Spatial Profile of Si-H₂/Si-H Bond Density Ratio of a-Si:H Films. *Plasma and Fusion Research*, **2019**, 14, 4406144-4406144 0.5
- 56 Study of Degradation of Amorphous PV Module Performance under Different Climatic Conditions. *Algerian Journal of Renewable Energy and Sustainable Development*, **2019**, 01, 125-135 0.6 2
- 55 Atomic simulation of Si_yH_x structure configuration in a-Si:H thin films. *Wuli Xuebao/Acta Physica Sinica*, **2020**, 69, 076801 0.6
- 54 Proton radiation-induced enhancement of the dark conductivity of composite amorphous/nanocrystalline silicon thin films. *Physical Review Materials*, **2020**, 4, 3.2
- 53 Intense Pulsed Light in Back End Processing of Silicon Heterojunction Solar Cells. **2020**,
- 52 Inserting Hydrogen into Germanium Quantum Dots. *Journal of Physical Chemistry C*, 3.8
- 51 AMORPHOUS SILICON/LANGMUIRBLODGETT FILM FIELD EFFECT TRANSISTOR. **1983**, 297-304
- 50 Laser Induced Structural Changes in the Bulk and at Defect Sites in Semiconductors. **1983**, 345-365
- 49 Light-induced performance of SHJ solar modules under 2000 h illumination. *Solar Energy Materials and Solar Cells*, **2022**, 235, 111459 6.4 1
- 48 Record-High Continuous-Wave Nonlinear Performance of Amorphous Silicon Waveguides. **2020**, 1
- 47 Defects in Amorphous and Organic Semiconductors. **2020**, 1-32
- 46 Large-Scale Programmable Integrated Photonics. **2021**,
- 45 Carbon Nanotubes in Emerging Photovoltaics: Progress and Limitations. *IEEE Journal of Photovoltaics*, **2021**, 1-12 3.7 0
- 44 Amorphous silicon (a-Si) transport properties, general. 1-2
- 43 Amorphous silicon (a-Si) figures to electrical conductivity. 1-32

| | | | |
|----|---|------|---|
| 42 | Basic Characteristics of a-Si:H by dc Sputtering and Application to Bandpass Filter for Shortwave Near Infrared, and Durability Evaluation. <i>Vacuum and Surface Science</i> , 2020 , 63, 482-487 | 0 | 2 |
| 41 | Fabrication of Anisotropic Structures on the Surface of Amorphous Silicon by Femtosecond Laser Pulses. <i>Solid State Phenomena</i> , 312, 192-199 | 0.4 | |
| 40 | Introduction to Indoor Photovoltaics. 2020 , 25-37 | | |
| 39 | Interface and material properties of wide band gap a-SiCx:H thin films for solar cell applications. <i>Renewable Energy</i> , 2022 , 183, 781-790 | 8.1 | 1 |
| 38 | Quantifying the Local Structure of Nanocrystals, Glasses, and Interfaces Using TEM-Based Diffraction. <i>Chemistry of Materials</i> , | 9.6 | 0 |
| 37 | Ageing and seasonal effects on amorphous silicon photovoltaic modules in a Mediterranean climate. <i>Renewable Energy</i> , 2022 , 186, 74-88 | 8.1 | 2 |
| 36 | A Comprehensive Review on Thin Film Amorphous Silicon Solar Cells. <i>Silicon</i> , 1 | 2.4 | 2 |
| 35 | Experimental assessment of long-term performance degradation for a PV power plant operating in a desert maritime climate. <i>Renewable Energy</i> , 2022 , 187, 44-55 | 8.1 | 4 |
| 34 | Thin-Film Silicon in Photovoltaics: The Role of Structure and Microstructure. 2006 , 8, 5-9 | | 3 |
| 33 | Silisyum Ünce Filmlerde Taban Malzemelerin Elektronik Kusurlar Üzerine Etkisinin Belirlenmesi. <i>Journal of Natural and Applied Sciences</i> , 69-76 | 0 | |
| 32 | Photoinduced phenomena. 117-144 | | |
| 31 | Analysis of the degradation of amorphous silicon-based modules after 11 years of exposure by means of IEC60891:2021 procedure 3. <i>Progress in Photovoltaics: Research and Applications</i> , | 6.8 | 0 |
| 30 | Light-induced activation of boron doping in hydrogenated amorphous silicon for over 25% efficiency silicon solar cells. <i>Nature Energy</i> , | 62.3 | 2 |
| 29 |  1998 , | | |
| 28 | Thin-Film Silicon PV Technology. 2012 , 325-334 | | |
| 27 | Defects in Amorphous and Organic Semiconductors. 2022 , 1-35 | | |
| 26 | New model to study the outdoor degradation of thin film photovoltaic modules. <i>Renewable Energy</i> , 2022 , 193, 857-869 | 8.1 | 0 |
| 25 | Hopping charge transport in hydrogenated amorphous silicon/germanium alloy thin films. <i>Journal of Applied Physics</i> , 2022 , 131, 225110 | 2.5 | |

| | | | |
|----|--|-----|---|
| 24 | Light soaking-induced performance enhancement in a-Si:H/c-Si heterojunction solar cells. <i>Science China Materials</i> , | 7.1 | 0 |
| 23 | Gaussian approximation potential for amorphous Si:H. <i>Physical Review Materials</i> , 2022 , 6, | 3.2 | 2 |
| 22 | Integration of Kazakhstan Technologies for Silicon and Monosilane Production with the Suitable World Practices for the Production of Solar Cells and Panels. <i>Processes</i> , 2022 , 10, 1303 | 2.9 | 1 |
| 21 | Current Injection-induced Performance Enhancement in n-type Silicon Heterojunction Solar Cells. <i>Physica Status Solidi - Rapid Research Letters</i> , | 2.5 | |
| 20 | Power Supply Reliability Analysis on Floating Photovoltaic Systems through Exceedance Probability Approach. 2022 , 101, 138-146 | | |
| 19 | Intensive light soaking improves electricity generation of silicon heterojunction solar cells by the anomalous Staebler-Wronski effect. 2022 , 15, 091001 | | |
| 18 | Reassessment of silicon heterojunction cell performance under operating conditions. 2022 , 247, 111951 | | 0 |
| 17 | Extraction, characterization and energy investigation of Garcinia kola, Cola Nitida and Cola Accuminata for efficient light absorption in dye-sensitized solar cells. 2022 , 244, 386-400 | | 0 |
| 16 | Film structure and optical characteristics of a-Si:H prepared with a rotary table type layer-by-layer sputtering method for application in short-wave near-infrared filters. 2022 , 12, 4223 | | 0 |
| 15 | Light Soaking Induced Halide Doping of Evaporated Spiro-OMeTAD in Perovskite Solar Cells. 2200475 | | 0 |
| 14 | Bathocuproine:Ag Complex Functionalized Tunneling Junction for Efficient Monolithic Perovskite/TOPCon Silicon Tandem Solar Cell. 2200793 | | 0 |
| 13 | Effect of ageing on electrical properties of Fe-doped CuO thin films deposited by spin coating technique. | | 0 |
| 12 | Long-term examinations up to 20 years of performance ratio and degradation rate of different-type photovoltaic modules at central part of Japan. 2023 , 44, 98-105 | | 0 |
| 11 | Overview and Impact of Faults in Grid-Connected Photovoltaic Systems. 2022 , 1-42 | | 0 |
| 10 | On the kinetics of light-induced enhancement effect in silicon heterojunction solar cells. | | 0 |
| 9 | Defects in Amorphous and Organic Semiconductors. 2023 , 861-895 | | 0 |
| 8 | Design and analysis of Sb ₂ S ₃ /Si thin film tandem solar cell. 2023 , 253, 112210 | | 1 |
| 7 | On the metastability of silicon heterojunction solar photovoltaic modules. | | 0 |

- 6 The native and metastable defects and their joint density of states in hydrogenated amorphous silicon obtained from the improved dual beam photoconductivity method. **2023**, 133, 125702 ○
- 5 Aging evaluation of PEDOT:PSS films for high-efficient perovskite solar cells. **2023**, 34, ○
- 4 Hydrogen-induced degradation dynamics in silicon heterojunction solar cells via machine learning. **2023**, 4, ○
- 3 Operando Characterizations of Light-Induced Junction Evolution in Perovskite Solar Cells. ○
- 2 Development of Hetero-Junction Silicon Solar Cells with Intrinsic Thin Layer: A Review. **2023**, 13, 796 ○
- 1 Manipulation of liquid crystal droplets by optoelectronic tweezers. **2023**, 164, 109555 ○