

Index of Keywords and Terms

Keywords are listed by the section with that keyword (page numbers are in parentheses). Keywords do not necessarily appear in the text of the page. They are merely associated with that section. *Ex.* apples, § 1.1 (1) **Terms** are referenced by the page they appear on. *Ex.* apples, 1

- 1** 12-16, § 8.2.2(269), § 8.2.4(288)
- A** absorbance, § 8.2.3(277)
 acac, § 6.2(194), § 6.7(234)
 acetic acid, § 4.1(115)
 acetylacetonate, § 6.2(194)
 acid, § 4.1(115), § 4.7(149), § 6.3.1(202)
 AFM, § 7.2(249), § 7.3(260), § 8.3(297), § 8.4(308), § 8.5(313)
 Al₂O₃, § 6.4.2(218)
 AlCl₃, § 6.5.3(227)
 ALD, § 5.2(171)
 ALE, § 5.2(171), § 6.3.2(204)
 alkaline, § 4.1(115)
 alkoxide, § 3.4(103), § 6.6(232)
 allowed state, § 1.1(3)
 alloy, § 1.5(38), § 4.9(162), § 5.1(165)
 AlMe₃, § 6.5.3(227)
 AlN, § 6.5.3(227)
 alumina, § 3.4(103), § 6.4.2(218)
 aluminum, § 1.4(20), § 1.5(38), § 2.5(66), § 3.2(89), § 3.4(103), § 4.9(162), § 5.4(186)
 aluminum nitride, § 6.5.3(227)
 aluminum silicate, § 6.4.2(218)
 ambipolar, § 1.3(16)
 amide, § 6.5.3(227)
 ammonia, § 6.3.1(202), § 6.4.1(210), § 6.5.1(224), § 6.5.2(224), § 6.5.3(227)
 amorphous, § 3.5(107), § 5.2(171), § 5.4(186)
 anisotropic, § 4.1(115)
 annealing, 132
 annular, § 4.1(115)
 anode, § 2.5(66)
 antimony, § 1.5(38), § 3.2(89)
 antisite, § 1.4(20)
 APCVD, § 6.4.1(210), § 6.4.2(218), § 6.5.2(224)
 AR, § 2.7(78)
 argon, § 4.9(162), § 6.2(194), § 6.4.1(210)
 Arrhenius, § 5.3(176)
 arsenic, § 2.4(62), § 2.6(75), § 3.1(85), § 3.2(89), § 3.3(101), § 5.1(165), § 6.3.1(202), § 6.3.2(204)
 arsenide, § 1.4(20), § 1.5(38), § 3.1(85), § 6.3.1(202)
 arsine, § 5.2(171), § 6.3.1(202), § 6.3.2(204), § 6.4.1(210)
 As, § 3.2(89), § 3.3(101)
 atom, § 1.4(20)
 atom density, § 1.4(20), § 1.5(38)
 atom positions, § 1.4(20)
 atomic force microscopy, § 7.3(260)
 atomic layer deposition, § 5.2(171)
 atomic layer epitaxy, § 5.2(171)
 Auger, § 5.1(165)
- B** band, § 1.1(3)
 band diagram, 14
 band gap, § 2.1(51), § 2.4(62), § 2.5(66), § 3.1(85), § 8.2.2(269), § 8.2.4(288)
 bang gap, § 1.1(3), § 1.2(9)
 base, § 2.1(51)
 battery, § 2.2(53), § 2.3(58)
 bauxite, § 3.1(85), § 3.2(89), § 3.4(103)
 Beer Lambert Law, § 8.2.3(277)
 Beer-Lambert, § 8.2.4(288)
 bias, § 2.1(51)
 binder, § 3.4(103)
 Bingel reaction, § 8.3(297)
 bipolar, § 2.1(51)
 bis-arylazide, § 4.7(149)
 bisazide, § 4.7(149)
 body-centered, § 1.4(20)
 boehmite, § 3.4(103)
 Bohr, § 8.2.2(269)
 boiling point, § 6.4.1(210)
 bond energy, § 5.2(171)
 boric acid, § 5.4(186)
 boron, § 3.1(85), § 3.2(89), § 3.3(101), § 4.8(155)
 boron nitride, § 5.1(165)
 borophosphosilicate, § 4.3(132)
 bottom-up, § 8.1(267)
 boundary layer, § 5.3(176)

- BPSG, § 4.3(132)
 Bravais lattice, § 1.4(20)
 Bridgman, § 3.1(85), § 3.3(101)
 bubbler, § 5.3(176), § 6.1(193)
 Buckyball, § 8.3(297)
 bulk, § 1.4(20)
 byproduct, § 3.2(89)
- C** C60, § 8.3(297), § 8.5(313)
 C70, § 8.3(297)
 cadmium, § 8.2.1(267), § 8.2.2(269),
 § 8.2.3(277), § 8.2.4(288)
 cadmium selenide, § 8.2.2(269), § 8.2.4(288)
 CaF₂, § 6.6(232)
 calcium, § 2.5(66), § 3.2(89), § 6.6(232)
 calcium fluoride, § 6.6(232)
 cantilever, § 7.3(260)
 carbon, § 3.2(89), § 7.3(260)
 carbon monoxide, § 3.2(89)
 Caro's acid, § 4.1(115)
 carrier, § 2.1(51), § 3.1(85)
 carrier density, § 3.1(85)
 carrier gas, § 6.7(234)
 cast, § 3.4(103)
 cathode, § 2.5(66)
 cation, § 5.4(186)
 CBD, § 5.4(186)
 CBE, § 5.1(165)
 CdS, § 8.2.3(277)
 CdSe, § 8.2.1(267), § 8.2.2(269), § 8.2.3(277)
 CdTe, § 8.2.3(277)
 cells, § 2.7(78)
 ceramic, § 3.4(103), § 3.5(107)
 ceramic processing, § 3.4(103)
 chalcogenide, § 6.2(194)
 chalcopyrite, § 1.4(20), § 1.5(38)
 chamber, § 4.9(162)
 channel, § 2.3(58)
 charcoal, § 3.2(89)
 charge, § 1.2(9), § 2.2(53), § 2.3(58)
 charge coefficient, § 3.5(107)
 chemical, § 9.1(323)
 chemical bath deposition, § 5.4(186)
 chemical beam epitaxy, § 5.1(165)
 chemical vapor deposition, § 4.4(136),
 § 5.2(171), § 5.3(176), § 6.1(193), § 6.2(194),
 § 6.3.2(204), § 6.4.1(210), § 6.4.2(218),
 § 6.5.2(224), § 6.5.3(227), § 6.6(232), § 6.7(234)
 chemically converted graphene, § 8.4(308)
 chemie duce, § 8.1(267)
 chemisorb, § 5.2(171)
 chemistry, § (1)
 chiral, § 6.3.1(202)
 chlorate, § 4.1(115)
 chromium, § 3.2(89)
 cinnabar, § 1.4(20)
 circuit, § 4.8(155)
 citric acid, § 4.1(115)
 Clausius-Clapeyron, § 6.2(194)
 cleaning, § 4.1(115)
 close packed, § 1.4(20)
 CMOS, § 4.3(132)
 CN-PPV, § 2.5(66)
 CO, § 3.2(89)
 coating, § 2.7(78), § 3.5(107)
 cobalt, § 3.2(89)
 coherence, § 2.6(75)
 coke, § 3.2(89)
 collector, § 2.1(51)
 color, § 2.5(66)
 complexe, § 6.2(194)
 compound, § 1.4(20), § 6.2(194)
 conduction, § 1.1(3)
 conduction band, § 1.2(9), § 4.4(136),
 § 8.2.2(269), § 8.2.4(288)
 conjugated, § 2.5(66)
 coordination number, § 1.4(20)
 copper, § 1.4(20), § 3.2(89), § 6.7(234)
 corundum, § 3.4(103), § 6.4.2(218)
 Coulomb, § 2.3(58)
 CPU, § 4.3(132)
 Cracker cell, § 5.1(165)
 critical dimension, § 4.6(145)
 cropping, § 4.1(115)
 cross-linking, § 4.7(149)
 crystal, § 1.4(20), § 3.1(85), § 3.3(101),
 § 3.5(107), § 5.1(165), § 5.2(171)
 crystal axes, § 1.4(20)
 crystal direction, § 1.4(20)
 crystal growth, § 3.1(85), § 3.3(101)
 crystal plane, § 1.4(20)
 crystal shaping, § 4.1(115)
 crystal stress, § 3.1(85)
 crystallography, § 1.4(20)
 Cu, § 6.7(234)
 cubane, § 6.2(194)
 cubic, § 1.4(20), § 1.5(38), § 3.2(89), § 3.3(101)
 Curie, § 3.5(107)
 Curie point, § 3.5(107)
 current, § 2.1(51), § 2.3(58)
 curvette, § 8.2.3(277)
 CVD, § 4.3(132), § 4.4(136), § 5.2(171),
 § 5.3(176), § 6.1(193), § 6.2(194), § 6.3.2(204),

- § 6.4.1(210), § 6.4.2(218), § 6.5.1(224),
 § 6.5.2(224), § 6.5.3(227), § 6.6(232), § 6.7(234)
 Cycloaddition, § 8.3(297)
 Czochralski, § 3.1(85), § 3.3(101), § 3.5(107),
 § 4.1(115)
- D** dangling bond, § 1.4(20), § 1.5(38)
 DC, § 2.1(51)
 de Boisbaudran, § 3.1(85)
 decomposition, § 6.1(193), § 6.2(194),
 § 6.3.2(204)
 defect, § 1.4(20), § 5.1(165)
 degradation, § 2.5(66)
 delocalization, § 2.5(66)
 deposition, § 5.3(176), § 5.4(186), § 6.3.2(204),
 § 6.7(234)
 depth resolution, § 7.1(241)
 desorption, § 5.3(176), § 6.3.2(204)
 detection limit, § 7.1(241)
 device, § 4.3(132)
 diamond, § 1.1(3), § 1.4(20), § 1.5(38),
 § 4.1(115)
 diborane, § 6.4.1(210)
 dielectric, § 4.3(132)
 dielectric constant, § 6.4.1(210)
 differential thermal analysis, § 6.2(194)
 diffusion, § 1.3(16), § 4.4(136), § 5.1(165),
 § 5.3(176)
 diffusion barrier, § 6.7(234)
 diffusion coefficient, § 1.3(16)
 diketonate, § 6.6(232)
 dinitrogen, § 6.5.2(224)
 diode, § 2.4(62)
 diphosphine, § 6.3.1(202)
 direct band gap, § 2.4(62)
 dislocation, § 1.4(20)
 dispersion, § 3.4(103)
 dopant, § 4.4(136), § 5.1(165), § 5.3(176),
 § 6.4.1(210)
 doped semiconductor, § 1.2(9)
 doping, § 1.2(9), § 4.2(131)
 drain, § 4.8(155)
 drive-in, § 4.8(155)
 drying, § 3.4(103)
 DTA, § 6.2(194)
- E** EDX, § 7.1(241)
 efficiency, § 2.5(66)
 effusion cell, § 5.1(165)
 eka-aluminum, § 3.1(85)
 electric field, § 2.2(53)
 electric moment, § 3.5(107)
 electrode, § 3.2(89)
 electroless deposition, § 5.4(186)
 electrolyte, § 3.4(103)
 electron, § 1.1(3), § 1.2(9), § 1.3(16), § 2.1(51),
 § 2.5(66), § 2.7(78), § 3.1(85), § 5.1(165),
 § 8.2.2(269)
 electron affinity, § 2.5(66)
 electron mobility, § 3.1(85)
 electron transport, § 1.3(16)
 electronic materials, § (1)
 element, § 1.4(20)
 emission, § 2.5(66), § 2.6(75)
 encapsulation, § 6.5.2(224)
 endohedral fullerene, § 8.3(297)
 energy, § 1.1(3), § 2.4(62), § 8.2.2(269)
 enthalpy, § 6.2(194)
 entropy, § 6.2(194)
 environmental health, § 9.1(323)
 epitaxial, § 6.4.2(218)
 epitaxy, § 1.4(20), § 5.1(165)
 etch, § 4.1(115), § 4.5(140), § 4.6(145),
 § 4.7(149), § 4.8(155)
 etching, § 4.1(115)
 Euler's theorem, § 8.3(297)
 excitation, § 1.1(3), § 8.2.4(288)
 exciton, § 2.5(66), § 8.2.2(269)
 exposure, § 4.5(140)
 eye, § 2.4(62)
- F** face-centered, § 1.4(20)
 facet, § 2.6(75)
 Fermi level, § 2.2(53)
 FET, § 4.3(132)
 fiber, § 3.5(107)
 Fick's First Law, § 1.3(16)
 field effect transistor, § 2.3(58), § 4.3(132)
 film, § 2.5(66)
 firing, § 3.4(103)
 fluidized bed, § 3.2(89)
 fluorescence, § 8.2.4(288)
 fluoride, § 6.6(232)
 fluorine, § 6.2(194)
 fluorosilicic acid, § 5.4(186)
 flux, § 6.1(193)
 frequency, § 2.4(62)
 Fullerene, § 8.3(297)
 furnace, § 3.2(89)
- G** Ga, § 3.2(89), § 3.3(101)
 GaAs, § 1.5(38), § 2.4(62), § 2.6(75), § 3.1(85),
 § 3.3(101), § 4.1(115), § 5.1(165), § 5.2(171),
 § 6.3.2(204), § 6.5.2(224)

- GaAsP, § 2.4(62)
 gallia, § 3.1(85)
 gallium, § 1.4(20), § 1.5(38), § 2.4(62),
 § 2.6(75), § 3.1(85), § 3.2(89), § 3.3(101),
 § 5.1(165), § 5.2(171), § 6.2(194), § 6.3.2(204)
 gallium arsenide, § 2.4(62), § 2.6(75),
 § 3.2(89), § 3.3(101), § 4.1(115), § 5.1(165),
 § 5.2(171), § 6.3.2(204)
 garnet, § 3.4(103)
 gas, § 6.2(194)
 gas constant, § 6.2(194)
 gate, § 2.2(53), § 2.3(58), § 4.3(132), § 4.8(155)
 Ge, § 1.5(38)
 gelation, § 3.4(103)
 germanium, § 1.4(20)
 germanium, § 1.5(38), § 3.5(107)
 gibbsite, § 3.4(103)
 GO, § 8.4(308)
 gold, § 2.5(66), § 3.2(89)
 graphene, § 8.4(308)
 graphite, § 8.3(297)
 graphite oxide, § 8.4(308)
 green body, § 3.4(103)
 grinding, § 4.1(115)
 Group 12, § 8.2.2(269), § 8.2.3(277),
 § 8.2.4(288)
 Group 12-16, § 1.4(20)
 Group 13-15, § 1.4(20)
 Group 14, § 1.1(3)
 Group 16, § 8.2.2(269), § 8.2.3(277),
 § 8.2.4(288)
 Group II-VI, § 1.4(20)
 Group III-V, § 1.4(20)
 Group IV, § 1.1(3)
 growth, § 5.2(171)
 growth rate, § 5.3(176), § 6.3.2(204)
- H** Hall-Heroult, § 3.4(103)
 He, § 7.1(241)
 helium, § 7.1(241)
 hemoglobin, § 6.3.1(202)
 heterojunction, § 2.5(66)
 hexagon, § 1.4(20)
 hexagonal, § 1.4(20)
 HF, § 4.1(115)
 hfac, § 6.2(194)
 high pressure, § 4.4(136)
 HIP, § 3.5(107)
 HNO₃, § 4.1(115)
 hole, § 1.1(3), § 1.2(9), § 2.2(53), § 2.5(66),
 § 5.1(165), § 8.2.2(269)
 holes, § 1.3(16)
- hopping, § 8.5(313)
 hot isostatic press, § 3.5(107)
 hydrofluoric acid, § 4.1(115), § 5.4(186)
 hydrogen, § 4.4(136), § 5.3(176), § 6.2(194),
 § 6.3.1(202), § 6.4.1(210)
 hydrogen peroxide, § 4.1(115)
 hydrolysis, § 5.4(186), § 6.4.2(218)
 hydrophobic, § 8.3(297)
 hydrothermal synthesis, § 3.5(107)
 hydroxide, § 3.4(103)
- I** IC, § 4.8(155)
 indirect band gap, § 2.4(62)
 II-VI, § 8.2.2(269), § 8.2.4(288)
 image, § 4.7(149)
 indices, § 1.4(20)
 indium, § 1.4(20), § 1.5(38), § 2.5(66)
 indium tin oxide, § 2.5(66)
 inert gas, § 3.2(89)
 inhibitor, § 4.7(149)
 InP, § 1.5(38)
 insulation, § 6.4.1(210)
 insulator, § 2.3(58)
 integrated circuit, § 4.6(145), § 4.8(155)
 inter-atomic, § 1.4(20)
 interconnect, § 4.9(162)
 internal efficiency, § 2.5(66)
 interstitial, § 1.4(20)
 intra-planar, § 1.4(20)
 ion implantation, 131
 ionization potential, § 2.5(66)
 ions, § 4.9(162)
 iron, § 3.2(89)
 isolation, § 4.3(132)
 isoprene, § 4.7(149)
 isothermal, § 6.2(194)
 ITO, § 2.5(66)
- J** junction, § 2.3(58), § 2.7(78)
- K** kinetics, § 6.2(194)
 Knudsen, § 5.1(165)
- L** LACVD, § 5.3(176)
 lapping, § 4.1(115)
 laser, § 2.6(75), § 4.6(145), § 5.2(171),
 § 5.3(176)
 lattice, § 1.4(20), § 5.1(165)
 lattice constant, § 1.5(38), § 3.1(85)
 lattice parameter, § 1.4(20), § 1.5(38)
 lead, § 3.2(89)
 lead metaniobate, § 3.5(107)
 lead zirconate titanate, § 3.5(107)

- LED, § 2.4(62), § 2.5(66), § 3.1(85)
 lens, § 4.5(140)
 Lewis base, § 6.7(234)
 lifetime, § 1.3(16)
 ligand, § 6.7(234)
 light, § 2.6(75), § 2.7(78), § 4.5(140)
 light amplification, § 2.6(75)
 light emitting diode, § 2.4(62)
 light emitting diodes, § 2.5(66)
 liquid, § 6.1(193)
 liquid phase deposition, § 5.4(186)
 lithium niobate, § 3.5(107)
 lithography, § 4.6(145)
 low pressure, § 5.3(176)
 LPCVD, § 6.4.1(210), § 6.4.2(218),
 § 6.5.2(224), § 6.5.3(227)
 LPD, § 5.4(186)
- M** magnesium, § 3.2(89)
 manganese, § 3.2(89)
 manufacturing, § 9.1(323)
 mask, § 4.4(136), § 4.5(140), § 4.6(145)
 mass transport, § 5.3(176)
 MBE, § 5.1(165)
 mean free path, § 1.1(3)
 mechanical quality factor, § 3.5(107)
 mechanism, § 6.3.2(204)
 Mendeleev, § 3.1(85)
 mercury, § 3.2(89)
 mercury sulfide, § 1.5(38)
 MESFET, § 6.5.2(224)
 metal, § 2.3(58), § 4.8(155), § 6.7(234)
 metal metallization, § 4.9(162)
 metal organic chemical vapor deposition,
 § 6.2(194), § 6.6(232)
 metal oxide, § 6.4.2(218)
 metal oxide semiconductor, § 2.2(53)
 metalization, § 4.3(132)
 metallization, § 6.7(234)
 microcircuit, § 4.3(132)
 Miller, § 1.4(20)
 mineral, § 3.4(103)
 minority carrier, § 1.3(16)
 mirror, § 2.5(66), § 2.6(75)
 mixed-metal oxide, § 3.4(103)
 mobility, § 1.2(9), § 3.1(85)
 MOCVD, § 5.2(171), § 5.3(176), § 6.2(194),
 § 6.3.2(204), § 6.5.2(224), § 6.5.3(227),
 § 6.6(232)
 molecular beam epitaxy, § 5.1(165)
 molecular weight, § 3.5(107)
 molecule, § 6.1(193)
 molybdenum, § 3.2(89)
 momentum, § 2.4(62)
 monoclinic, § 1.4(20)
 monolayer, § 5.1(165)
 monosilane, § 3.2(89)
 morphology, § 3.5(107), § 7.2(249), § 7.3(260)
 MOS, § 2.2(53), § 2.3(58), § 4.8(155)
 MOSFET, § 2.3(58), § 4.3(132), § 4.4(136)
 mullite, § 6.4.2(218)
 MWNT, § 8.3(297)
- N** n-type, § 2.1(51), § 2.2(53), § 2.3(58),
 § 2.7(78), § 4.1(115), § 5.1(165)
 N₂, § 6.5.1(224)
 N₂O, § 6.5.2(224)
 nano, § 7.3(260), § 8.2.2(269), § 8.2.4(288)
 nanocar, § 8.5(313)
 nanocrystal, § 8.2.1(267)
 nanomaterials, § 8.3(297)
 nanoparticle, § 8.1(267), § 8.2.1(267),
 § 8.2.2(269), § 8.2.3(277), § 8.2.4(288)
 nanosheet, § 8.4(308)
 nanotube, § 8.3(297)
 native oxide, § 3.1(85)
 Nb, § 7.1(241)
 negative, § 4.5(140)
 negative resist, § 4.7(149)
 NH₃, § 6.5.2(224), § 6.5.3(227)
 nickel, § 3.2(89)
 niobium, § 7.1(241)
 nitrene, § 4.7(149)
 nitric acid, § 4.1(115)
 nitride, § 1.5(38), § 4.5(140), § 4.8(155),
 § 6.5.1(224)
 nitrogen, § 4.1(115), § 4.7(149), § 6.2(194),
 § 6.4.1(210), § 6.5.1(224)
 nitrous oxide, § 6.4.1(210)
 non-centrosymmetric, § 3.5(107)
 novolak resins, § 4.7(149)
 npn, § 2.1(51), § 4.2(131)
- O** octahedral, § 1.4(20)
 ODCB, § 8.4(308)
 ohm, § 1.2(9)
 olefin, § 6.7(234)
 optical, § 8.2.2(269)
 organosilicon, § 6.5.2(224)
 orientation, § 1.4(20)
 orthorhombic, § 1.4(20)
 oxidation, § 2.5(66), § 4.4(136), § 4.8(155),
 § 6.4.2(218), § 8.3(297)
 oxide, § 2.2(53), § 2.3(58), § 4.5(140),

- § 4.8(155), § 5.4(186)
 oxygen, § 2.5(66), § 3.2(89), § 3.3(101),
 § 4.4(136), § 4.8(155), § 6.4.1(210),
 § 6.4.2(218)
- P**
- p-n junction, § 1.3(16)
 p-type, § 2.1(51), § 2.2(53), § 2.3(58),
 § 2.7(78), § 4.1(115), § 5.1(165), § 7.1(241)
 packaging, § 4.3(132)
 PACVD, § 5.3(176)
 passivation, § 4.3(132), § 6.5.2(224)
 pattern, § 4.6(145), § 4.7(149), § 4.8(155),
 § 4.9(162)
 Pauli, § 1.1(3)
 PECVD, § 5.3(176), § 6.4.1(210), § 6.4.2(218),
 § 6.5.1(224), § 6.5.2(224), § 6.5.3(227)
 perovskite, § 3.4(103)
 phase, § 2.6(75)
 phase diagram, § 6.4.2(218)
 phosphide, § 1.4(20), § 1.5(38), § 6.3.1(202)
 phosphine, § 6.3.1(202), § 6.4.1(210),
 § 6.7(234)
 phosphorous, § 3.2(89)
 phosphorous acid, § 6.3.1(202)
 phosphorus, § 3.1(85), § 6.3.1(202)
 photolithography, § 4.5(140), § 4.6(145),
 § 4.7(149)
 photoluminescence, § 2.5(66)
 photon, § 2.7(78), § 8.2.4(288)
 photoresist, § 4.5(140), § 4.7(149)
 physical vapor deposition, § 5.3(176)
 physisorbed, § 5.2(171)
 Piezoelectricity, § 3.5(107)
 pivoting, § 8.5(313)
 planarization, § 4.3(132), § 6.4.1(210)
 Planck, § 2.4(62)
 plasma, § 4.3(132), § 4.4(136), § 5.3(176),
 § 6.4.1(210), § 6.4.2(218), § 6.5.2(224)
 plastic, § 8.2.3(277)
 PMMA, § 4.6(145)
 pnictide, § 3.1(85)
 pnp, § 4.2(131)
 point, § 1.4(20)
 poling, § 3.5(107)
 polishing, § 4.1(115)
 polysilicon, § 3.2(89)
 polysilane, § 3.5(107)
 polyamide, § 3.5(107)
 polymer, § 2.5(66), § 4.6(145)
 polysilicon, § 3.2(89)
 polyurea, § 3.5(107)
 polyvinylidene difluoride, § 3.5(107)
 positive, § 4.5(140)
- positive resist, § 4.7(149)
 potassium, § 3.4(103)
 potassium hydroxide, § 4.1(115)
 powder, § 3.4(103)
 PPV, § 2.5(66)
 Prato reaction, § 8.3(297)
 precursor, § 5.3(176), § 6.1(193), § 6.7(234)
 projection, § 4.5(140)
 purification, § 3.2(89), § 3.3(101)
 PVD, § 5.3(176), § 6.7(234)
 pyrolysis, § 3.5(107)
 pyrolysis, § 5.3(176), § 6.3.2(204)
 PZT, § 3.5(107)
- Q**
- quantum device, § 2.5(66)
 quantum dot, § 8.2.1(267), § 8.2.2(269),
 § 8.2.3(277), § 8.2.4(288)
 quantum efficiency, § 2.5(66)
 quantum rod, § 8.2.1(267)
 quartz, § 3.2(89), § 3.5(107), § 8.2.3(277)
 quaternary, § 1.5(38)
- R**
- radiation diode, § 2.6(75)
 Raman, § 8.3(297)
 rate limiting step, § 4.1(115), § 5.3(176)
 RBS, § 7.1(241)
 recombination, § 1.3(16)
 reduction, § 6.3.1(202)
 refractive index, § 3.1(85), § 4.6(145),
 § 6.4.1(210)
 reliability, § 2.5(66)
 resin, § 4.3(132)
 resist, § 4.6(145)
 resistance, § 1.2(9)
 resistivity, § 3.1(85)
 RHEED, § 5.1(165), § 5.2(171), § 6.3.2(204)
 rhombohedral, § 1.4(20), § 3.2(89)
 rock salt, § 1.4(20)
 rolling, § 8.5(313)
 ruby, § 3.4(103)
 Rutherford, § 7.1(241)
- S**
- sacrificial, § 4.8(155)
 sand, § 3.2(89)
 sapphire, § 3.4(103)
 Schrödinger, § 8.2.2(269)
 Siemens, § 3.2(89)
 selenide, § 1.5(38), § 8.2.3(277)
 selenium, § 1.5(38), § 8.2.1(267), § 8.2.2(269),
 § 8.2.3(277), § 8.2.4(288)
 SEM, § 7.2(249), § 8.3(297)
 semi-insulating, § 3.1(85)

- semiconductor, § 1.1(3), § 1.2(9), § 1.4(20), § 1.5(38), § 2.2(53), § 2.7(78), § 3.1(85), § 3.2(89), § 3.3(101), § 4.1(115), § 4.3(132), § 4.4(136), § 4.5(140), § 4.6(145), § 4.7(149), § 5.2(171), § 6.3.2(204), § 6.7(234), § 8.2.1(267), § 8.2.2(269), § 8.2.3(277), § 8.2.4(288)
- semiconductors, § 4.2(131), § 9.1(323)
- sensitizer, § 4.7(149)
- Si, § 1.5(38), § 3.2(89), § 4.1(115), § 5.1(165)
- Si₂Cl₂, § 6.5.2(224)
- Si₃N₄, § 4.5(140), § 4.8(155), § 6.5.2(224)
- SiCl₂H₂, § 6.5.2(224)
- SiH₄, § 6.5.2(224)
- silane, § 6.4.1(210)
- silanol, § 5.4(186)
- silica, § 2.2(53), § 2.3(58), § 4.3(132), § 4.4(136), § 5.4(186), § 6.4.1(210)
- silicate, § 3.2(89)
- silicon, § 1.2(9), § 1.4(20), § 1.5(38), § 2.2(53), § 2.3(58), § 2.4(62), § 2.5(66), § 3.1(85), § 3.2(89), § 3.5(107), § 4.1(115), § 4.3(132), § 4.4(136), § 4.5(140), § 4.8(155), § 4.9(162), § 5.1(165), § 5.3(176), § 7.1(241)
- silicon chip, § 5.4(186)
- silicon dioxide, § 4.3(132), § 4.4(136), § 5.4(186)
- silicon nitride, § 6.5.1(224), § 6.5.2(224)
- silicon tetrachloride, § 3.2(89)
- single crystal, § 3.5(107)
- single source precursor, § 6.5.3(227)
- single stage accelerator, § 7.1(241)
- SiO₂, § 4.3(132), § 4.4(136), § 4.8(155), § 5.4(186)
- siver, § 3.2(89)
- sliding, § 8.5(313)
- slim rod, § 3.2(89)
- slurry, § 3.4(103)
- Smalley, § 8.3(297)
- Sn, § 1.5(38)
- sodium, § 3.4(103)
- sodium hydroxide, § 4.1(115)
- sol-gel, § 3.4(103), § 3.5(107)
- solar, § 2.7(78)
- solid, § 6.1(193)
- solid solution, § 1.5(38)
- solid state, § 1.4(20)
- solvent, § 3.4(103), § 4.7(149), § 8.2.3(277)
- source, § 4.8(155)
- spectroscopy, § 8.2.3(277), § 8.2.4(288)
- spectrum, § 7.1(241)
- spin-coat, § 4.7(149)
- sputtering, § 4.9(162)
- steady state, § 1.3(16)
- steam, § 4.4(136)
- step coverage, § 6.4.1(210), § 6.7(234)
- stepper, § 4.5(140)
- stimulated emission, § 2.6(75)
- STM, § 8.5(313)
- stoichiometric, § 1.5(38)
- stoichiometric ratio, § 7.1(241)
- structure, § 1.4(20), § 7.2(249)
- sublimation, § 6.2(194)
- sublime, § 3.2(89), § 6.2(194)
- substitution, § 1.4(20)
- substrate, § 5.1(165), § 5.3(176)
- sulfide, § 1.4(20), § 1.5(38)
- sulfur, § 1.5(38), § 8.2.1(267), § 8.2.2(269), § 8.2.3(277), § 8.2.4(288)
- sun, § 2.7(78)
- superacid, § 6.3.1(202)
- superconductor, § 5.2(171)
- supersaturation, § 5.4(186)
- surface, § 1.4(20), § 2.2(53), § 2.6(75), § 4.1(115), § 5.1(165), § 5.3(176), § 5.4(186), § 6.7(234), § 7.2(249), § 7.3(260), § 8.5(313)
- surface acoustic wave, § 3.5(107)
- SWNT, § 8.3(297)
- synthesis, § 3.2(89), § 8.1(267)
- T** tandem accelerator, § 7.1(241)
- tapping, § 7.3(260)
- target, § 4.9(162)
- tellurium, § 8.2.3(277), § 8.2.4(288)
- TEM, § 8.3(297), § 8.4(308), § 8.5(313)
- TEOS, § 6.4.1(210)
- ternary, § 1.5(38), § 3.4(103)
- tetragonal, § 1.4(20), § 1.5(38)
- tetrahedral, § 1.4(20)
- tfac, § 6.2(194)
- TGA, § 6.2(194)
- thermal, § 4.4(136)
- thermogravimetric analysis, § 6.2(194)
- thin film, § 4.3(132), § 5.1(165), § 5.2(171), § 5.3(176), § 5.4(186), § 6.4.1(210), § 6.5.1(224), § 6.7(234), § 7.1(241)
- threshold, § 2.2(53)
- tin, § 1.4(20)
- tip, § 7.3(260)
- titanium, § 3.2(89)
- toluene, § 4.7(149)
- top-down, § 8.1(267)
- topaz, § 3.4(103)

- toxic, § 6.3.1(202)
 - toxicity, § 6.1(193)
 - transamination, § 6.5.1(224), § 6.5.2(224), § 6.5.3(227)
 - transducer, § 3.5(107)
 - transistor, § 2.1(51), § 2.3(58)
 - transport, § 6.1(193)
 - triclinic, § 1.4(20)
 - trimethylgallium, § 5.2(171)
- U**
- UHF, § 3.5(107)
 - ULSI, § 4.8(155)
 - ultra high frequency, § 3.5(107)
 - ultrahigh vacuum, § 5.1(165)
 - ultraviolet, § 8.2.3(277)
 - umbrella, § 6.3.1(202)
 - unit cell, § 1.4(20)
 - UPS, § 5.2(171)
 - UV, § 4.6(145)
 - UV-vis, § 8.2.3(277)
- V**
- vacancies, § 1.4(20)
 - vacuum, § 4.9(162), § 6.2(194)
 - valance band, § 1.2(9)
 - valence, § 1.1(3)
 - valence band, § 4.4(136), § 8.2.2(269), § 8.2.4(288)
 - van der Waal, § 5.2(171), § 7.3(260)
 - vanadium, § 3.2(89)
 - vapor pressure, § 3.2(89), § 5.1(165), § 5.3(176), § 6.1(193), § 6.2(194)
 - Vergard's law, § 1.4(20)
 - Vertical Scanning Interferometry, § 7.2(249)
- VGF, § 8.3(297)
 - viscous-suspension-spinning, § 3.5(107)
 - visible, § 8.2.3(277)
 - VLSI, § 4.3(132), § 4.8(155), § 6.7(234)
 - volt, § 2.3(58)
 - voltage, § 2.1(51), § 2.2(53), § 2.3(58)
 - VSI, § 7.2(249)
 - VSSP, § 3.5(107)
- W**
- wafer, § 1.5(38), § 4.1(115), § 4.4(136), § 4.5(140), § 4.8(155), § 4.9(162)
 - wafering, § 4.1(115)
 - wafers, § 4.2(131)
 - wash, § 4.6(145)
 - water, § 4.4(136), § 5.4(186)
 - wave function, § 1.1(3)
 - wavelength, § 2.4(62), § 2.7(78), § 8.2.3(277), § 8.2.4(288)
 - well, § 4.8(155)
 - Wurtzite, § 1.4(20), § 1.5(38), § 3.1(85)
- X**
- X-ray, § 4.6(145)
 - XPS, § 5.2(171), § 6.3.2(204), § 7.1(241)
 - xylene, § 4.7(149)
- Y**
- YAG, § 3.4(103)
- Z**
- zero-order, § 6.2(194)
 - zinc, § 1.4(20), § 8.2.2(269), § 8.2.3(277), § 8.2.4(288)
 - zinc blende, § 1.4(20), § 1.5(38), § 3.1(85)
 - zirconium, § 3.2(89)
 - zone refining, § 3.2(89), § 3.3(101)

Attributions

Collection: *Chemistry of Electronic Materials*
Edited by: Andrew R. Barron
URL: <http://cnx.org/content/col10719/1.9/>
License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Preface to the Chemistry of Electronic Materials"
By: Andrew R. Barron
URL: <http://cnx.org/content/m25528/1.1/>
Page: 1
Copyright: Andrew R. Barron
License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Introduction to Semiconductors"
By: Andrew R. Barron
URL: <http://cnx.org/content/m33647/1.3/>
Pages: 3-8
Copyright: Andrew R. Barron
License: <http://creativecommons.org/licenses/by/3.0/>
Based on: Introduction to Semiconductors
By: Bill Wilson
URL: <http://cnx.org/content/m1001/2.13/>

Module: "Doped Semiconductors"
By: Andrew R. Barron
URL: <http://cnx.org/content/m33703/1.2/>
Pages: 9-16
Copyright: Andrew R. Barron
License: <http://creativecommons.org/licenses/by/3.0/>
Based on: Doped Semiconductors
By: Bill Wilson
URL: <http://cnx.org/content/m1002/2.15/>

Module: "Diffusion"
By: Andrew R. Barron
URL: <http://cnx.org/content/m33730/1.2/>
Pages: 16-20
Copyright: Andrew R. Barron
License: <http://creativecommons.org/licenses/by/3.0/>
Based on: Diffusion
By: Bill Wilson
URL: <http://cnx.org/content/m1010/2.14/>

Module: "Crystal Structure"
By: Andrew R. Barron, Carissa Smith
URL: <http://cnx.org/content/m16927/1.10/>
Pages: 20-37
Copyright: Andrew R. Barron, Carissa Smith
License: <http://creativecommons.org/licenses/by/2.0/>

Module: "Structures of Element and Compound Semiconductors"

By: Andrew R. Barron

URL: <http://cnx.org/content/m23905/1.6/>

Pages: 38-49

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Introduction to Bipolar Transistors"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33798/1.2/>

Pages: 51-53

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: Introduction to Bipolar Transistors

By: Bill Wilson

URL: <http://cnx.org/content/m1014/2.15/>

Module: "Basic MOS Structure"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33799/1.1/>

Pages: 53-58

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: Basic MOS Structure

By: Bill Wilson

URL: <http://cnx.org/content/m11351/1.2/>

Module: "Introduction to the MOS Transistor and MOSFETs"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33805/1.1/>

Pages: 58-62

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: MOS Transistor

By: Bill Wilson

URL: <http://cnx.org/content/m1023/2.15/>

Module: "Light Emitting Diode"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33801/1.1/>

Pages: 62-66

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: Light Emitting Diode

By: Bill Wilson

URL: <http://cnx.org/content/m1011/2.23/>

Module: "Polymer Light Emitting Diodes"

By: Andrew R. Barron

URL: <http://cnx.org/content/m25670/1.2/>

Pages: 66-75

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Laser"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33802/1.1/>

Pages: 75-77

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: LASER

By: Bill Wilson

URL: <http://cnx.org/content/m1012/2.16/>

Module: "Solar Cells"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33803/1.4/>

Pages: 78-83

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: Solar Cells

By: Bill Wilson

URL: <http://cnx.org/content/m1013/2.13/>

Module: "Properties of Gallium Arsenide"

By: Andrew R. Barron

URL: <http://cnx.org/content/m22970/1.7/>

Pages: 85-89

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Synthesis and Purification of Bulk Semiconductors"

By: Carissa Smith, Andrew R. Barron

URL: <http://cnx.org/content/m23936/1.7/>

Pages: 89-101

Copyright: Carissa Smith, Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Growth of Gallium Arsenide Crystals"

By: Andrew R. Barron

URL: <http://cnx.org/content/m40280/1.1/>

Pages: 101-103

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: Electronic Grade Gallium Arsenide

By: Carissa Smith, Andrew R. Barron

URL: <http://cnx.org/content/m32000/1.2/>

Module: "Ceramic Processing of Alumina"

By: Andrew R. Barron

URL: <http://cnx.org/content/m22376/1.6/>

Pages: 103-106

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Piezoelectric Materials Synthesis"

By: Andrew R. Barron

URL: <http://cnx.org/content/m25441/1.2/>

Pages: 107-113

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Formation of Silicon and Gallium Arsenide Wafers"

By: Andrew R. Barron

URL: <http://cnx.org/content/m16627/1.5/>

Pages: 115-131

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Doping"

By: Bill Wilson

URL: <http://cnx.org/content/m11364/1.2/>

Pages: 131-132

Copyright: Bill Wilson

License: http://creativecommons.org/licenses/by/1.0

Module: "Applications for Silica Thin Films"

By: Andrew R. Barron

URL: <http://cnx.org/content/m24883/1.5/>

Pages: 132-135

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Oxidation of Silicon"

By: Andrew R. Barron

URL: <http://cnx.org/content/m24908/1.3/>

Pages: 136-140

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Photolithography"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33811/1.1/>

Pages: 140-145

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: Photolithography

By: Bill Wilson

URL: <http://cnx.org/content/m1037/2.10/>

Module: "Optical Issues in Photolithography"

By: Andrew R. Barron

URL: <http://cnx.org/content/m25448/1.4/>

Pages: 145-149

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Composition and Photochemical Mechanisms of Photoresists"

By: Andrew R. Barron

URL: <http://cnx.org/content/m25525/1.2/>

Pages: 149-155

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Integrated Circuit Well and Gate Creation"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33810/1.1/>

Pages: 155-162

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: Integrated Circuit Well and Gate Creation

By: Bill Wilson

URL: <http://cnx.org/content/m1038/2.12/>

Module: "Applying Metallization by Sputtering"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33800/1.3/>

Pages: 162-164

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Based on: Introduction to MOSFETs

By: Bill Wilson

URL: <http://cnx.org/content/m1020/2.12/>

Module: "Molecular Beam Epitaxy"

By: Andrew R. Barron

URL: <http://cnx.org/content/m25712/1.2/>

Pages: 165-170

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Atomic Layer Deposition"

By: Andrew R. Barron

URL: <http://cnx.org/content/m25737/1.2/>

Pages: 171-175

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Chemical Vapor Deposition"

By: Andrew R. Barron

URL: <http://cnx.org/content/m25495/1.2/>

Pages: 176-186

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Liquid Phase Deposition"

By: Elizabeth Whitsitt, Andrew R. Barron

URL: <http://cnx.org/content/m29774/1.1/>

Pages: 186-191

Copyright: Elizabeth Whitsitt, Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Selecting a Molecular Precursor for Chemical Vapor Deposition"

By: Andrew R. Barron

URL: <http://cnx.org/content/m27846/1.1/>

Pages: 193-194

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Determination of Sublimation Enthalpy and Vapor Pressure for Inorganic and Metal-Organic Compounds by Thermogravimetric Analysis"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33649/1.2/>

Pages: 194-202

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Phosphine and Arsine"

By: Andrew R. Barron

URL: <http://cnx.org/content/m33043/1.5/>

Pages: 202-204

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Mechanism of the Metal Organic Chemical Vapor Deposition of Gallium Arsenide"

By: Andrew R. Barron

URL: <http://cnx.org/content/m25614/1.6/>

Pages: 204-210

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Chemical Vapor Deposition of Silica Thin Films"

By: Andrew R. Barron

URL: <http://cnx.org/content/m24897/1.4/>

Pages: 210-218

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Chemical Vapor Deposition of Alumina"

By: Andrew R. Barron

URL: <http://cnx.org/content/m24918/1.5/>

Pages: 218-223

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Introduction to Nitride Chemical Vapor Deposition"

By: Andrew R. Barron

URL: <http://cnx.org/content/m26117/1.1/>

Page: 224

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Chemical Vapor Deposition of Silicon Nitride and Oxynitride"

By: Andrew R. Barron

URL: <http://cnx.org/content/m26120/1.1/>

Pages: 224-227

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Chemical Vapor Deposition of Aluminum Nitride"

By: Andrew R. Barron

URL: <http://cnx.org/content/m26132/1.1/>

Pages: 227-232

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Metal Organic Chemical Vapor Deposition of Calcium Fluoride"

By: Andrew R. Barron

URL: <http://cnx.org/content/m26116/1.3/>

Pages: 232-234

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Precursors for Chemical Vapor Deposition of Copper"

By: Andrew R. Barron

URL: <http://cnx.org/content/m25428/1.4/>

Pages: 234-240

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Rutherford Backscattering of Thin Films"

By: Avishek Saha, Andrew R. Barron

URL: <http://cnx.org/content/m22411/1.3/>

Pages: 241-249

Copyright: Avishek Saha, Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "The Application of VSI (Vertical Scanning Interferometry) to the Study of Crystal Surface Processes"

By: Inna Kurganskaya, Andreas Luttmann, Andrew R. Barron

URL: <http://cnx.org/content/m22326/1.4/>

Pages: 249-260

Copyright: Inna Kurganskaya, Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Atomic Force Microscopy"

By: Ryan Thaner, Andrew R. Barron

URL: <http://cnx.org/content/m34664/1.1/>

Pages: 260-265

Copyright: Ryan Thaner, Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Introduction to Nanoparticle Synthesis"

By: Andrew R. Barron

URL: <http://cnx.org/content/m22372/1.2/>

Page: 267

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Semiconductor Nanoparticles"

Used here as: "Synthesis of Semiconductor Nanoparticles"

By: Andrew R. Barron

URL: <http://cnx.org/content/m22374/1.4/>

Pages: 267-269

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Optical Properties of Group 12-16 (II-VI) Semiconductor Nanoparticles"

By: Sravani Gullapalli, Andrew R. Barron

URL: <http://cnx.org/content/m34553/1.1/>

Pages: 269-277

Copyright: Sravani Gullapalli

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Characterization of Group 12-16 (II-VI) Semiconductor Nanoparticles by UV-visible Spectroscopy"

By: Sravani Gullapalli, Andrew R. Barron

URL: <http://cnx.org/content/m34601/1.1/>

Pages: 277-288

Copyright: Sravani Gullapalli

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Optical Characterization of Group 12-16 (II-VI) Semiconductor Nanoparticles by Fluorescence Spectroscopy"

By: Sravani Gullapalli, Andrew R. Barron

URL: <http://cnx.org/content/m34656/1.1/>

Pages: 288-297

Copyright: Sravani Gullapalli

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Carbon Nanomaterials"

By: Andrew R. Barron

URL: <http://cnx.org/content/m22580/1.4/>

Pages: 297-308

Copyright: Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Graphene"

By: Christopher E. Hamilton, Andrew R. Barron

URL: <http://cnx.org/content/m29187/1.4/>

Pages: 308-312

Copyright: Christopher E. Hamilton, Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "Rolling Molecules on Surfaces Under STM Imaging"

By: Pinn-Tsong Chiang, Andrew R. Barron

URL: <http://cnx.org/content/m22965/1.3/>

Pages: 313-322

Copyright: Pinn-Tsong Chiang, Andrew R. Barron

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "The Environmental Impact of the Manufacturing of Semiconductors"

By: Jason Holden, Christopher Kelty

URL: <http://cnx.org/content/m14503/1.3/>

Pages: 323-335

Copyright: Jason Holden, Christopher Kelty

License: <http://creativecommons.org/licenses/by/2.0/>

Chemistry of Electronic Materials

An overview of the processes for the fabrication of electronic and optoelectronic devices from a chemistry perspective.

About Connexions

Since 1999, Connexions has been pioneering a global system where anyone can create course materials and make them fully accessible and easily reusable free of charge. We are a Web-based authoring, teaching and learning environment open to anyone interested in education, including students, teachers, professors and lifelong learners. We connect ideas and facilitate educational communities.

Connexions's modular, interactive courses are in use worldwide by universities, community colleges, K-12 schools, distance learners, and lifelong learners. Connexions materials are in many languages, including English, Spanish, Chinese, Japanese, Italian, Vietnamese, French, Portuguese, and Thai. Connexions is part of an exciting new information distribution system that allows for **Print on Demand Books**. Connexions has partnered with innovative on-demand publisher QOOP to accelerate the delivery of printed course materials and textbooks into classrooms worldwide at lower prices than traditional academic publishers.