

56. Sunrays is developed by Rolf Brendel, Max-Planck-Institut and is distributed by Garching Innovations GmbH.
57. Rohatgi A, Smith A, *Texture* is available from Georgia Institute of Technology, Atlanta, GA.
58. Sopori B, *PV Optics* is available from National Renewable Energy Laboratory, Golden, CO.
59. Sopori B, *Laser Focus World*, 159 (Feb. 1998).
60. Sopori B *et al.*, *MRS Proc.* **467**, 777 (1997).
61. Hegedus S, Sopori B, Paulson P, *Proc. 29<sup>th</sup> IEEE-Photovoltaic Specialist Conf.*, 1122 (May 2002).
62. Guha S, *Proc. 25<sup>th</sup> IEEE Photovoltaic Specialists Conf.*, 1017 (1996).
63. Hegedus S, Deng X, *Proc. 25<sup>th</sup> IEEE Photovoltaic Specialists Conf.*, 1061 (1996).
64. Basore P, *IEEE Trans. Electron Devices* **ED-37**, p. 337 (1990).
65. PCID is available from University of New South Wales.
66. AMPS is a software developed by Penn State University and is available through Prof. S. Fonash.
67. Sopori B, in Davies G, Nazare M, Eds, *Proc. ICDS-19*, 527–534, Trans. Tech. Publ., Aveiro, Portugal (1997).
68. Sopori B, Murphy R, *Proc. 12<sup>th</sup> European Photovoltaic Solar Energy Conference*, 1797 (1994).
69. Murphy R, Sopori B, Rose D, *Mat. Res. Soc. Symp. Proc.* **378**, 749–754 (1995).
70. Liou J, *Advanced Semiconductor Device Physics and Modeling*, Artech House, Boston, MA (1994).
71. Sopori B, Chen W, Symko M, in Gupta D, Batcher F, Hughes W, Eds, *Silicon Recombination Lifetime Characterization Methods*, ASTMSTP1340, 328, American Society for Testing and Materials, West Conshohocken, Pennsylvania US (1998).
72. Fossom J, Lindholm F, *IEEE Trans.* **ED-27**, 692 (1980).
73. Bergmann R *et al.*, *Semicond. Sci. Technol.* **12**, 224 (1997).
74. Schropp R, Zeman M, *Amorphous and Microcrystalline Silicon Solar Cells: Modeling, Materials and Device Technology*, Kluwer Academic Publications, Boston/Dordrecht (1988).
75. Baba T *et al.*, *MRS Proc.* **Fall** 1994, 895 (1995).
76. Haque M, Naseem H, Brown W, *J. Appl. Phys.* **75**, 3928 (1994).
77. Tu K, *Appl. Phys. Lett.* **27**, 221 (1975).
78. Ashtikar M, Sharma G, *J. Appl. Phys.* **78**, 913 (1995).
79. Masaki Y, Ogata T, Ogawa H, Jones D, *J. Appl. Phys.* **76**, 5225 (1994).
80. Sok-Woon Lee *et al.*, *IEEE Electron Device Lett.* **17**(8), 407 (1996).
81. Sopori B *et al.*, *Mat. Res. Soc. Symp. Proc.* **470**, 419 (1997).
82. Cullity B, *Elements of X-Ray Diffraction*, Addison-Wesley, Reading, MA (1956).
83. Chen W *et al.*, *MRS Meeting*, (April 2001).
84. Ishihara T *et al.*, *Mat. Res. Soc. Symp. Proc.* **485**, 3 (1997).
85. Cao M *et al.*, *IEEE Trans. Electron Devices* **ED-43**, 561 (1996).
86. Efremov M *et al.*, *Proc. SPIE* **2801**, 263 (1996).
87. Sopori B, *J. Electron. Mater.* **31**, 972 (2002).
88. Narayanan S, Wenham S, Green M, *IEEE Trans.* **ED-37**, 382 (1990).
89. Joshi S, Gosele U, Tan T, *J. Appl. Phys.* **77**, 3858 (1995).
90. Gilles D, Weber E, Hahn S, *Phys. Rev. Lett.* **64**, 196 (1990).
91. Sana P, Rohatgi A, Kalejs J, Bell R, *Appl. Phys. Lett.* **64**, 97 (1994).
92. Sopori B, Jastrzebski L, Tan T, Narayanan S, *Proc. 12<sup>th</sup> Photovoltaic Science and Engineering Conf.*, 1003 (1994).
93. Istratov A, Hieslmair H, Weber E, *Appl. Phys.* **A69**, 13 (1999).
94. Perichaud I, Martinuizi S, *Proc. 22<sup>nd</sup> IEEE Photovoltaic Specialists conf.*, 877 (1991).
95. Sopori B, Chen W, Tan T, Plekhanov P, *AIP Conf. /Proc.* **462**, 341 (1998).
96. Sopori B, Zhang Y, N Ravindra, *J. Electron. Mater.* **30**, 1616 (2001).
97. Sopori B *et al.*, *Sol. Energy Mater. Sol. Cells* **41/42**, 159 (1996).