

SELEZIONE DI 20 PUBBLICAZIONI

J.M. Poate, J. Linnros, F. Priolo, D.C. Jacobson, J.L. Batstone, M.O. Thompson, *Nonequilibrium Segregation and Trapping Phenomena During Ion-Beam-Induced Crystallization of Amorphous Si*; Phys. Rev. Lett. **60**, 1322 (1988)

F. Priolo, E. Rimini, *Ion-Beam-Induced Epitaxial Crystallization and Amorphization in Silicon*; Materials Science Reports **5**, 319 (1990) (invited review paper)

J.S. Custer, A. Battaglia, M. Saggio, F. Priolo, *Growth-Site-Limited Crystallization of Amorphous Silicon*; Phys. Rev. Lett. **69**, 780 (1992)

S. Coffa, F. Priolo, A. Battaglia, *Defect Production and Annealing in Ion Implanted Amorphous Silicon*; Phys. Rev. Lett. **70**, 3756 (1993)

G. Franzò, F. Priolo, S. Coffa, A. Polman, A. Carnera; *Room Temperature Electroluminescence from Er-doped Crystalline Silicon*, Appl. Phys. Lett. 64, 2235 (1994)

C. Spinella, S. Lombardo, F. Priolo; *Crystal Grain Nucleation in amorphous Silicon*; J. Appl. Phys. 54, 5383 (1995); (invited review paper — Applied Physics Reviews)

K. Kyllesbech Larsen, V. Privitera, S. Coffa, F. Priolo, S.U. Campisano, A. Carnera, *Trap-Limited Migration of Si Self-Interstitials at Room Temperature*; Phys. Rev. Lett. **76**, 1493 (1996)

L. Pavesi, L. Dal Negro, C. Mazzoleni, G. Franzò, F. Priolo, *Optical Gain in Silicon Nanocrystals*; Nature 408, 440 (2000)

F. Priolo, G. Franzò, F. Iacona, D. Pacifici, V. Vinciguerra; *Role of Energy Transfer on the Optical Properties of Undoped and Er- Doped Interacting Silicon Nanocrystals*; J. Appl. Phys. 89, 264 (2001)

E. Napolitani, D. De Salvador, R. Storti, A. Carnera, S. Mirabella, F. Priolo, *Room Temperature Migration of Boron in Crystaline Silicon*, Phys. Rev. Lett. **93**, 055901 (2004)

De Salvador, E. Napolitani, S. Mirabella, G. Bisognin, G. Impellizzeri, A. Carnera, F. Priolo, *Atomistic mechanism of boron diffusion in silicon*, Phys. Rev. Lett. **97**, 255902 (2006)

M. Miritello, R. Lo Savio, F. Iacona, G. Franzò, A. Irrera, A.M. Piro, F. Priolo, *Efficient luminescence and energy transfer in erbium silicate thin films*, Advanced Materials **19**, 1582 (2007)

S. Mirabella, D. De Salvador, E. Bruno, E. Napolitani. E. Pecora, S. Boninelli, F. Priolo, *Mechanism of Boron Diffusion in Amorphous Silicon*, Phys. Rev. Lett. **100**, 155901 (2008)

A. Irrera, P. Artoni, R. Saija, P. Gucciardi, M. Iatì, F. Borghese, P. Denti, F. Iacona, F. Priolo, O. Marago, *Size-Scaling in Optical Trapping of Silicon Nanowires*, Nano Letters **11**, 4879 (2011)

A. Shakoor, R. Lo Savio, P. Cardile, S. Portalupi, D. Gerace, K. Welna, S. Boninelli, G. Franzò, F. Priolo, T.F. Krauss, M. Galli, L. O'Faolain; *Room-temperature all-silicon photonic crystal nanocavity light emitting diode at sub-bandgap wavelengths*, Laser & Photonics Reviews **7**, 114 (2013)

F. Priolo, T. Gregorkiewicz, M. Galli, T.F. Krauss, *Silicon Nanostructures for Photonics*; Nature Nanotechnology **9**, 19 (2014)

B. Fazio, ..., F. Priolo, A. Irrera, *Strongly enhanced light trapping in a two-dimensional silicon nanowire fractal array*; NPG Light Science & Applications, **5**, e16062 (2016)

A. Irrera, A. Magazzù, P. Aitoni, S.H. Simpson, S. Hanna, P.H. Jones, F. Priolo, P. Gucciardi, O. Maragò; *Photonic Torque Microscopy of the Nanoconservative Force Field for Optically Trapped Silicon Nanowires*; Nano Letters **16**, 4181 (2016)

B. Fazio, A. Irrera, S. Pirotta, C. D'Andrea, S. Del Sorbo, M.J. Lo Faro, P.G. Gucciardi, M.A. Iatì, R. Saija, M. Patrini, P. Musumeci, C.S. Vasi, D.S. Wiersma, M. Galli, F. Priolo, *Coherent Backscattering of Raman Light*, Nature Photonics **11**, 170 (2017)

M.J. Lo Faro, G. Ruello, A. Leonardi, D. Morganti, A. Irrera, F. Priolo, S. Gigan, G. Volpe, B. Fazio; *Visualization of Directional Beaming of Weakly Localized Raman from a Random Network of Silicon Nanowires*, Advanced Science, **S**, 2100139 (2021)