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Laser Hyperdoped and/or Textured Silicon: Universal Response from UV till Far-IR Range

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Message from the Guest Editors

Dear Colleagues,

Silicon remains the basic reliable CMOS-compatible material platform for most multi-functional optoelectronic devices. Being IR-blind, it could become a universal UV–mid-IR photosensitive material via donor or acceptor hyperdoping and annealing procedures.

This Special Issue summarizes the recent advances in hyperdoping technologies, annealing regimes, chemical and structural characterization, electrical properties and spectral response of hyperdoped silicon, for its perspective optoelectronic applications.

Key topics:

- hyperdoping technologies;
- annealing regimes;
- chemical and structural characterization;
- electrical properties;
- spectral response;
- optoelectronic integration.

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Guest Editors



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Special Issue



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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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