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Autore	Ferrarese Lupi Federico
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Sommario/riassunto	The self-assembly process underlies a plethora of natural phenomena from the macro to the nano scale. Often, technological development has found great inspiration in the natural world, as evidenced by numerous fabrication techniques based on self-assembly (SA). One striking example is given by epitaxial growths, in which atoms represent the building blocks. In lithography, the use of self-assembling materials is considered an extremely promising patterning option to overcome the size scale limitations imposed by the conventional photolithographic methods. To this purpose, in the last two decades several supramolecular self-assembling materials have been investigated and successfully applied to create patterns at a nanometric scale. Although considerable progress has been made so far in the control of self-assembly processes applied to nanolithography, a number of unresolved problems related to the reproducibility and metrology of the self-assembled features are still open. Addressing these issues is mandatory in order to allow the widespread diffusion of SA materials for applications such as microelectronics, photonics, or biology. In this context, the aim of the present Special Issue is to gather original research papers and comprehensive reviews covering various aspects of the self-assembly processes applied to nanopatterning. Topics include the development of novel SA methods, the realization of nanometric structures and devices, and the improvement of their long-range order. Moreover,

metrology issues related to the nanoscale characterization of self-assembled structures are addressed.