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Nota di contenuto	Soluble bio-organic species obtained from urban wastes: SBO isolation and characterization -- Photochemical characteristics of SBO: implications in wastewater detoxification -- SBO in water detoxification I: photocatalysts -- SBO in water detoxification II: photo-Fenton processes at mild conditions -- SBO in material synthesis.
Sommario/riassunto	This brief gives a summary of the soluble bio-based substances (SBO) field. Urban bio-wastes of differing compositions and ageing conditions represent a promising source of soluble bio-based substances (SBO), potentially able to perform as chemical auxiliaries for applications in the chemical industry and in environmental remediation. In particular, SBO process development, characterization and scale-up is described and bioassay studies discussed. This brief also discusses

the use of SBOs in wastewater treatment in the context of 'green' processes, their role as humic-like substances, and their potential use as photocatalysts for the degradation of pollutants present in aqueous solutions (dyes, pharmaceuticals, chlorophenols). Furthermore, the role of SBOs as complexing agents for iron ions in the implementation of the photo-Fenton processes under mild pH conditions is also explored. Finally, SBOs are showcased in their capacity as organic component alternatives to petrochemical products for the synthesis of new materials.