Record Nr. UNINA9910733724203321 Progress in the Chemistry of Organic Natural Products 104 / / edited by Titolo A. Douglas Kinghorn, Heinz Falk, Simon Gibbons, Jun'ichi Kobayashi Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-45618-0 Edizione [1st ed. 2017.] 1 online resource (V, 246 p. 240 illus., 69 illus. in color.) Descrizione fisica Collana Progress in the Chemistry of Organic Natural Products, , 2192-4309;; 104 547 Disciplina Soggetti Chemistry, Organic Pharmaceutical chemistry Medicinal chemistry Organic Chemistry **Pharmaceutics** Medicinal Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references at the end of each chapters. Sommario/riassunto The first contribution describes apolar and polar molecular fossils and, in particular biomarkers, along the lines usually followed in organic chemistry textbooks, and points to their bioprecursors when available. Thus, the apolar compounds are divided in linear and branched alkanes followed by alicyclic compounds and aromatic and heterocyclic molecules, and, in particular, the geoporphyrins. The polar molecular fossils contain as functional groups or constituent units ethers. alcohols, phenols, carbonyl groups, flavonoids, quinones, and acids, or are polymers like kerogen, amber, melanin, proteins, or nucleic acids. The final sections discuss the methodology used and the fundamental processes encountered by the biomolecules described, including diagenesis, catagenesis, and metagenesis. The second contribution covers the distribution of phthalides in nature and the findings in the structural diversity, chemical reactivity, biotransformations, syntheses,

and bioactivity of natural and semisynthetic phthalides.