self-localized excitations

in conjugated organic polymers

Physical and chemical properties of conjugated organic polymers with \( \pi \)-electrons have been interpreted in terms of self-localized excitations, which are quasi-particles with structural changes over several repeating units. These excitations can be classified into solitons, polarons, bipolarons and excitons according to their charge and spin.

Source:
PAC, 2007, 79, 293 (Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)) on page 419