

Insights: Publications

Unveiling Purple Bacteria Salt Tolerance Mechanisms for Environmental Monitoring in Photo-Bioelectrochemical Systems

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Photo-bioelectrochemical systems allow for the integration of photosynthetic bacteria at an electrode surface for the conversion of solar energy into electrical current. Among various applications, these systems open for the continuous monitoring of toxic compounds in the environment based on their cytotoxic effects on bacteria activity. However, a challenge for the on-field application is the exposure of bacterial cells to a diverse range of condition, requiring robust, versatile microorganisms capable of tolerating dynamic environments.