

10 Passato, presente futuro degli approcci di fenotipizzazione agronomica nella ricerca e nello sviluppo di biostimolanti

BIBLIOGRAFIA INTEGRATIVA

Antonecchia E., Bäcker M., Cafolla D., Ciardiello M., Kühl C., Pagnani G., Wang J., Wang S., Zhou F., D'Ascenzo N., Gialanella L., Pisante M., Rose G., Xie Q. (2022) - Design study of a novel positron emission tomography system for plant imaging. *Frontiers in Plant Science*, 3118.

Antonucci G., Impollonia G., Croci M., Potenza E., Marcone A., Amaducci S. (2023) - Evaluating biostimulants via high-throughput field phenotyping: Biophysical traits retrieval through PROSAIL inversion. *Smart Agricultural Technology*, 3, 100067.

Basso B., Ritchie J.T., Cammarano D., Sartori L. (2011) - A strategic and tactical management approach to select optimal N fertilizer rates for wheat in a spatially variable field. *European Journal of Agronomy*, 35, 215-222.

Basso B., Dumont, B., Cammarano D., Pezzuolo A., Marinello F., Sartori L. (2016) - Environmental and economic benefits of variable rate nitrogen fertilization in a nitrate vulnerable zone. *Science of the Total Environment*, 545, 227-235.

Caldwell D., Iyer-Pascuzzi A.S. (2019) - A scanning electron microscopy technique for viewing plant- microbe interactions at tissue and cell-type resolution. *Phytopathology*, 109, 1302-1311.

Cardinale M. (2014) - Scanning a microhabitat: plant-microbe interactions revealed by confocal laser microscopy. *Frontiers in Microbiology*, 5, 94.

D'Ascenzo N., Zhang X., Xie Q. (2017) - Application of CMOS technology to silicon photomultiplier sensors. *Sensors*, 17, 2204.

D'Ascenzo N., Antonecchia E., Brensing A., Brockherde W., Dreiner S., Ewering J., Kuhn M., Schmidt A., vom Stein P., Wang W., Zhou Z., Xie Q. (2019) - A novel high photon detection efficiency silicon photomultiplier with shallow junction in $0.35\text{ }\mu\text{m}$ CMOS. *IEEE Electron Device Letters*, 40, 1471-1474.

D'Ascenzo N., Wang L., Zhang X., Lv Q., Antonecchia E., Lin, Y., Kattan M., Leinweber S., Xie Q. (2020) - The JOINBON SiPM for the readout of LySO crystals: a Multi Voltage Threshold approach. *Journal of Instrumentation*, 15, C07006.

10 Passato, presente futuro degli approcci di fenotipizzazione agronomica nella ricerca e nello sviluppo di biostimolanti

D'Ascenzo N., Xie Q., Antonecchia E., Ciardiello M., Pagnani G., Pisante M. (2022) - Kinetically consistent data assimilation for plant PET sparse Time Activity Curve signals. *Frontiers in Plant Science*, 2266.

De-Bashan L.E., Hernandez J.P., Bashan Y., Maier R.M. (2010) - *Bacillus pumilus* ES4: candidate plant growth-promoting bacterium to enhance establishment of plants in mine tailings. *Environmental and Experimental Botany*, 69, 343-352.

De Diego N., Fürst T., Humplík J.F., Ugena L., Podlešáková K., Spíchal L. (2017) - An automated method for high-throughput screening of Arabidopsis rosette growth in multi-well plates and its validation in stress conditions. *Frontiers in Plant Science*, 8, 1702.

Di Luigi M., Casorri L., Masciarelli E., Beni C. (2021) - Nanotechnologies: possible support for sustainable agriculture? <https://www.nanoinnovation2021.eu/>

Gebbers R., Adamchuk V.I. (2010) - Precision agriculture and food security. *Science*, 327, 828-831.

Giraldo J.P., Wu H., Newkirk G.M., Kruss S. (2019) - Nanobiotechnology approaches for engineering smart plant sensors. *Nature Nanotechnology*, 14, 541-553.

Hevesy G. (1923) - The absorption and translocation of lead by plants. *Biochemical Journal*, 17, 439-445.

Humplík J.F., Lazár D., Husičková A., Spíchal L. (2015) - Automated phenotyping of plant shoots using imaging methods for analysis of plant stress responses. A review. *Plant Methods*, 11, 1-10.

ISPA (2019) - Precision Ag Definition. Int. Soc. Precis. Agric. website. URL <https://www.ispag.org/about/definition> (accessed on 20 September 2019).

Jackson R.D., Kustas W.P., Choudhury B.J. (1988) - A reexamination of the crop water stress index. *Irrigation Science*, 9, 309-317.

Johnson C.K., Wienhold B.J., Doran J.W., Drijber R.A., Wright S.F. (2004) - Linking microbial-scale findings to farm-scale outcomes in a dryland cropping system. *Precision Agriculture*, 5, 311-328.

Jones H.G., Vaughan R.A. (2010) - Remote sensing of vegetation: principles, techniques, and applications. *Oxford University Press*.

Łangowski Ł., Goñi O., Ikuyinminu E., Feeney E., O'Connell S. (2022) - Investigation of the direct effect of a precision *Ascophyllum nodosum* biostimulant on nitrogen use efficiency in wheat seedlings. *Plant Physiology and Biochemistry*, 179, 44-57.

Leem H., Choi Y., Jung J., Park K., Kim Y., Jung J.H. (2022) - Optimized TOF-PET detector using scintillation crystal array for brain imaging. *Nuclear Engineering and Technology*, 54, 2592-2598.

Loignon-Houle F., Gundacker S., Toussaint M., Lemyre F.C., Auffray E., Fontaine, R., Lecomte R. (2021) - DOI estimation through signal arrival time distribution: a theoretical description including proof of concept measurements. *Physics in Medicine & Biology*, 66, 095015.

Ma Y. (2019) - Seed coating with beneficial microorganisms for precision agriculture. *Biotechnology Advances*, 37, 107423.

Maestrini B., Basso B. (2018) - Drivers of within-field spatial and temporal variability of crop yield across the US Midwest. *Scientific Reports*, 8, 14833.

- Mahlein A. K., Alisaac E., Al Masri A., Behmann J., Dehne H.W., Oerke E.C. (2019) - Comparison and combination of thermal, fluorescence, and hyperspectral imaging for monitoring fusarium head blight of wheat on spikelet scale. *Sensors*, 19, 2281.
- Meroni M., Rossini M., Guanter L., Alonso L., Rascher U., Colombo R., Moreno J. (2009) - Remote sensing of solar-induced chlorophyll fluorescence: Review of methods and applications. *Remote Sensing of Environment*, 113, 2037-2051.
- Miao Y., Mulla D.J., Robert P.C. (2018) - An integrated approach to site-specific management zone delineation. *Frontiers of Agricultural Science and Engineering*, 5, 432-441.
- Mouazen A.M., Kuang B. (2016) - On-line visible and near infrared spectroscopy for in-field phosphorous management. *Soil and Tillage Research*, 155, 471-477.
- Nawar S., Corstanje R., Halcro G., Mulla D., Mouazen A.M. (2017) - Delineation of soil management zones for variable-rate fertilization: A review. *Advances in Agronomy*, 143, 175-245.
- Pascucci S., Carfora M.F., Palombo A., Pignatti S., Casa R., Pepe M., Castaldi F. (2018) - A comparison between standard and functional clustering methodologies: Application to agricultural fields for yield pattern assessment. *Remote Sensing*, 10, 585.
- Pecchioni N. (2018) - Selezione varietale, tutti i vantaggi della tecnologia. *Terra e Vita* (<https://terraevida.edagricole.it/nova/nova-agricoltura-di-precisione/selezione-varietale-vantaggi-della-tecnologia/>).
- Pellegrini M., Spera D.M., Ercole C., Del Gallo M. (2021) - *Allium cepa* L. inoculation with a consortium of plant growth-promoting bacteria: Effects on plants, soil, and the autochthonous microbial community. *Microorganisms*, 9, 639.
- Pinter Jr P.J., Hatfield J.L., Schepers J.S., Barnes E.M., Moran M.S., Daughtry C.S., Upchurch D.R. (2003) - Remote sensing for crop management. *Photogrammetric Engineering and Remote Sensing*, 69, 647-664
- Pisante M., Galieni A., Stagnari F., Steppe K., Xie Q., D'Ascenzo N. (2022) - Digital imaging of plants. *Frontiers in Plant Science*, 3168.
- Priori S., Fantappiè M., Bianconi N., Ferrigno G., Pellegrini S., Costantini E. A. (2016) - Field-Scale Mapping of Soil Carbon Stock with Limited Sampling by Coupling Gamma-Ray and Vis-NIR Spectroscopy. *Soil Science Society of America Journal*, 80, 954-964.
- Rouphael Y., Spíchal L., Panzarová K., Casa R., Colla G. (2018) - High-throughput plant phenotyping for developing novel biostimulants: from lab to field or from field to lab? *Frontiers in Plant Science*, 9, 1197.
- Transon J., d'Andrimont R., Maugnard A., Defourny P. (2018) - Survey of hyperspectral earth observation applications from space in the sentinel-2 context. *Remote Sensing*, 10, 157.
- Tsoulias N., Parafos D.S., Fountas S., Zude-Sasse M. (2019) - "Calculating the water deficit spatially using LiDAR laser scanner in an apple orchard". In: *Precision agriculture* (pp. 78-90). Wageningen Academic Publishers.
- Viscarra Rossel R., Adamchuk V.I., Sudduth K.A., McKenzie N.J., Lobsey C. (2011) - Proximal soil sensing: An effective approach for soil measurements in space and time. *Advances in Agronomy*, 113, 243-291.
- Zarco-Tejada P.J., González-Dugo V., Berni J.A. (2012) - Fluorescence, temperature and narrow-band indices acquired from a UAV platform for water stress detection using a micro-hyperspectral imager and a thermal camera. *Remote Sensing of Environment*, 117, 322-337.