

Literaturnachweise zum Beitrag

Nachhaltige Polymere gegen den Klimawandel: Künstliche Huminstoffe

- [1] Humic substance. https://en.wikipedia.org/wiki/Humic_substance. accessed at 17.06.2019.
- [2] Erickson, B. Regenerated Degraded Dirt, Chemical Engineering News March 2016, 40-45
- [3] Carbon Dioxide Information Analysis Center. Oak Ridge National Laboratory. 26 September 2012. Retrieved 12 February 2016
- [4] Shan J, Brune A, Ji R. Selective digestion of the proteinaceous component of humic substances by the geophagous earthworms *Metaphire guillelmi* and *Amyntas corrugatus*. Soil Biology and Biochemistry. 2010;42:1455-62.
- [5] <https://www.4p1000.org/>, accessed at 4.10.2019
- [6] Loomis W. Photosynthesis—an introduction. Photosynthesis in plants, ed by J Franck and WE Loomis. 1949:1-17.
- [7] Yang F, Zhang S, Cheng K, Antonietti M. A hydrothermal process to turn waste biomass into artificial fulvic and humic acids for soil remediation. Science of The Total Environment. 2019;686:1140-51.
- [8] Yang F, Zhang S, Fu Q, Antonietti M. Conjugation of Artificial Humic Acids with Inorganic Soil Matter to restore land for improved Conservation of Water and Nutrients Land Degradation&Development. 2019.
- [9] Yang, F; Zhang, SS; Song, JP; Du, Q; Li, GX; Tarakina, NV; Antonietti, M: Tackling the World's Phosphate Problem: Synthetic Humic Acids solubilize otherwise insoluble Phosphates for Fertilization" DOI: 10.1002/anie.201911060 and 10.1002/ange.201911060
- [10] Zhang SH, Du Q, Antonietti M, Yang F: Efficient Phosphorus Recycling and Heavy Metal Removal from Wastewater Sludge by a Novel Hydrothermal Humification-Technique Chem.Eng.J 124832 (2020)
- [11] Yang F, Antonietti M: Artificial humic substances highly improve the microbial activity in soils, submitted (2020)
- [12] Kappler A, Benz M, Schink B, Brune A. Electron shuttling via humic acids in microbial iron (III) reduction in a freshwater sediment. FEMS Microbiology Ecology. 2004;47:85-92.