

ZHENYA SHELOBOLINA
LIST OF MAIN PUBLICATIONS:

1. Haveman, S.A., DiDonato, R.J., Villanueva, L., **Shelobolina, E.S.**, Postier, B.L., Xu, B., Liu, A., and Lovley, D.R. **2008**. Genome-wide gene expression patterns and growth requirements suggest that *Pelobacter carbinolicus* reduces Fe(III) indirectly via sulfide production. *Appl. Environ. Microbiol*, 74 (14), pp. 4277 – 4284.
2. **Shelobolina, E.C.**, Vrionis, H., Findlay, R.H., Lovley, D.R. **2008**. *Geobacter uraniireducens* sp. nov., isolated from subsurface sediment undergoing uranium bioremediation. *Int. J. Syst. Evol. Microbiol.*, 58, pp.1075-1079.
3. Kashefi, K., **Shelobolina, E.S.**, Elliott, W.C., and Lovley, D.R. **2008**. Growth of Thermophilic and Hyperthermophilic Fe(III)-Reducing Microorganisms on a Ferruginous Smectite as the Sole Electron Acceptor. *Appl. Environ. Microbiol*, 74 (1), pp. 251 - 258.
4. **Shelobolina, E.S.**, Coppi, M.V., Korenevsky, A.A., DiDonato, L.N., Sullivan, S.A., Konishi, H., Xu, H., Leang C., Butler, J.E., Kim, B-C., and Lovley, D.R. **2007**. Importance of c-Type Cytochromes for U(VI) reduction by *Geobacter sulfurreducens*. *BMC Microbiology*, 7:16.
5. **Shelobolina, E.S.**, Nevin, K.P., Blakeney-Hayward, J.D., Johnsen, C.V., Plaia, T.W., Krader, P., Woodward, T., Holmes, D.E., VanPraagh, C.G. and Lovley, D.R. **2007**. *Geobacter pickeringii* sp. nov., *Geobacter argillaceus* sp. nov. and *Pelosinus fermentans* gen. nov., sp. nov., isolated from subsurface kaolin lenses. *Int J Syst Evol Microbiol*, 57, 126-135.
6. Butler, J.E., Glaven, R.H., Esteve-Núñez, A., Núñez, C., **Shelobolina, E.C.**, Bond, D.R., Lovley, D.R. **2006**. A Single Bifunctional Enzyme for Fumarate Reduction and Succinate Oxidation in *Geobacter sulfurreducens* and Induction of Fumarate Reduction in *Geobacter metallireducens*. *Journal of Bacteriology*, 188 (2), 450-455.
7. **Shelobolina, E.S.**, Pickering, S.M., Lovley, D.R. **2005**. Iron Cycle Bacteria from Industrial Clays Mined in Georgia, USA. *Clays and Clay Minerals*, 53 (6), 580-586.
8. **Shelobolina, E.S.**, Sullivan, S., O'Neill, K., Nevin, K.P., and Lovley, D.R. **2004**. Isolation, Characterization, and U(VI)-Reducing Potential of Facultatively Anaerobic Acid Resistant Bacterium from Low pH Nitrate- and U(VI)- Contaminated Subsurface Sediment and Description of *Salmonella subterranea* sp. nov. *Appl. Environ. Microbiol*, 70 (5), pp. 2959 - 2965.
9. **Shelobolina, E.S.**, Anderson, R.T., Vodyanitskii, Y.N., Sivtsov, A.M., Yuretich, R., and Lovley, D.R. **2004**. Importance of Clays Size Minerals for Fe(III) Respiration in a Petroleum-Contaminated Aquifer. *Geobiology*, 2(1), pp. 67-76.
10. **Shelobolina, E.S.**, O'Neill, K., Finneran, K.T., Hayes, L.A., and Lovley, D.R. **2003**. Potential for *in Situ* Bioremediation of a Low-pH, High-Nitrate Uranium-Contaminated Groundwater. *Soil and Sediment Contamination*, 12, pp. 865 – 884.

11. **Shelobolina, E.S., Gaw VanPraag, C., and Lovley, D.R. 2003.** Use of Ferric and Ferrous Iron Containing Minerals for Respiration by *Desulfitobacterium frappieri*. Geomicrobiology Journal, 20, pp. 143-156.
12. **Elzea Kogel, J, Pickering, S.M., Shelobolina, E.S., Chowns, T.M., Yuan, J., and Avant, D.M. 2002.** The Georgia Kaolins: Geology and Utilization. Published by Society for Mining, Metallurgy, and Exploration. 96p.
13. **Elzea Kogel, J, Pickering, S.M., Shelobolina, E.S., Yuan, J., Chowns, T.M., and Avant, D.M. 2000.** Geology of the Commercial Kaolin Mining District of Central and Eastern Georgia. Georgia Geological Society Guidbooks, v. 20, n.1, 92p.
14. **Shelobolina, E.S., Parfenova, E. Yu., Avakyan, Z.A. 1999.** Microorganisms of kaolins and their role in the processes of iron solubilization and transformation. In: Amils, R. and Ballester, A. (eds.) Biohydrometallurgy and the Environment Toward the Mining of the 21st Century, Part A. Elsevier, Amsterdam, The Netherlands, pp. 559-568.
15. **Maslennikova, G.N., Platov, Yu.T., Khaliullova, R.A., Avakyan, Z.A., Shelobolina, E.S., Karavaiko, G.I. 1999.** The Effect of Microorganisms on the Properties of Porcelain Mixtures in Maturing (Review), Glass and ceramics, v.9-10, pp. 312-319.
16. **Shelobolina, E.S., Avakyan, Z.A., Karavaiko, G.I. 1999.** Transformation of Iron-containing Minerals in Kaolin During Growth of a Mixed Bacterial Culture Derived from Kaolin. In: Berthelin, J., P. M. Huang, and J.-M. Bollag (eds.), Effect of Mineral-Organic-Microorganism Interactions on Soil and Freshwater Environments, Kluwer/Plenum Publ., New York, pp. 287 – 294.
17. **Shelobolina, E.S., Avakyan, Z.A., Bulygina, E.S., Turova, T.P., Lysenko, A.M., Osipov, G.A., Karavaiko, G.I. 1997.** Description of a New Species of Mucilaginous Bacteria, *Bacillus edaphicus* sp.nov., and Confirmation of the taxonomic Status of *Bacillus mucilaginosus* Avakyan et al. 1986 Based on Data from Phenotypic and Genotypic Analysis, Microbiology, vol.66, no. 6, pp. 813-822.
18. **Osipov G. A. and Turova (Shelobolina), E.S. 1997.** Studying Species Composition of Microbial Communities with the Use of Gas Chromatography-Mass Spectrometry. Microbial Community of Kaolin. FEMS Microbiology Review, 20, pp.437-446.
19. **Vodyanitskii, Yu.N., Turova (Shelobolina), E.S., Avakyan, Z.A., Karavaiko, G.I. 1997.** Studying Anaerobiosis in a Model Experiment with Kaolin, Eurasian Soil Science, vol 30, Iss 7, pp 747-757.
20. **Turova (Shelobolina), E.S., Avakyan, Z.A., Karavaiko, G.I. 1996.** The Role of a Bacterial Community in Transformation of Iron Minerals in Kaolin, Microbiology, vol.65, no. 6, pp. 837-843.
21. **Turova (Shelobolina), E.S. and Osipov, G.A. 1996.** Investigation of Microbial Community Capable of Biotransformation of Iron Minerals in Kaolin, Microbiology, vol. 65, no. 5, pp. 682-689.