

## **Jaroslav Cihlár**

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### **Citation Report:**

Sum of articles WoS: 25

Sum of articles WoS (2004 - 2008):

Sum of the Times Cited: 130

h-index : 6

Number of patents: 0

He studied physical chemistry at the Faculty of Science of Masaryk University in Brno and received MSc. degree in 1972. He defended his thesis from the field of polymer chemistry at the Czechoslovak Academy of Sciences in Prague and received PhD in 1978. He began his professional career as scientific worker at the Brno University of Technology in 1978, working in the area of physical chemistry of ceramic, polymeric and metallic materials. He habilitated in 1990. He was appointed professor of materials science and engineering in 1999.

Presently, he works as professor in the Institute of Materials Science and Engineering and in the Institute of Materials Chemistry. He is Director of the Institute of Materials Science and Engineering, Brno University of Technology.

In his research work he was focused on the study of advanced inorganic and composite materials (bioceramics, engineering ceramics, nanoceramics, electronic ceramics), on methods of preparation of ceramic materials (sol-gel synthesis and injection moulding, CIP, electrophoresis, extrusion) and on the study of high-temperature processes in ceramic materials and in reactive alloys. At the last ten years he is focused on chemistry of nanoparticle materials, namely "unconventional" syntheses of nanoparticle materials (ultrasonic sonochemical synthesis, microwave synthesis and colloidal mechanochemical synthesis) and on ceramic materials for SOFCs and electrochemical membrane reactors.

In the years 1993 to 2009 he was responsible researcher of 10 foreign and 14 national research projects. In addition to the above projects of fundamental research he was involved in several tens of applied research tasks for companies producing inorganic and polymeric materials.

From 1991 to 1997 he held the office of Vice-rector of the Brno University of Technology, for the sphere of science and research. In the years 1993 to 1998, he was national co-ordinator of the COST programme on behalf of the Czech Republic; presently he is the representative of the Czech Republic in the Senior Official Council of the COST programme in Brussels, a member of the Technical Committee for Chemistry of the COST programme. In 2000 to 2003 years he was chairman of the NanoSTAG of the COST programme. In 1994 to 2009 he worked as expert of the European Commission for evaluation of international projects of the Copernicus and INCO-Copernicus programmes and 5, 6 and 7 FPs. He is chairman of the Czech Ministry of Education Board for the COST programme.

He has authored over 100 scientific papers presented in journals and conferences, 6 patents, 55 research reports, and 20 projects of applied research. He is a member of five scientific societies (American Ceramic Society, Materials Research Society, Electrochemical Society, Czech Silicate Society and Czech Society for Advanced Materials).

### **Selected recent papers:**

- J. Cihlar, H. Hadraba, K. Maca, K. Castkova: Mechanochemical synthesis of gadolinia doped ceria powders, In: Grain boundary Engineering in Electronic Materials, s. 53-59, British Ceramic Proceedings, vol. 63, London 2003.
- Merna, J., Cihlar, J., Cramail, H. Deffieux, A., Kucera, M., Polymerization of hex-1-ene initiated by diimine complexes of nickel and palladium, Eur. Polym. J., 2005, 41, 303-312

- Hermanová S., Merna J., Cihlár J., Kučera M.: Titanium complex having two phenoxy-imine chelate ligands for living ethylene polymerization, Chem. Listy 99 (S), S450 (2005)
- Merna J., Hermanová S., Cihlár J., Kučera M., Cramail H., Deffieux A.: Living polymerization of olefins initiated by nickel catalysts, Chem. Listy 99 (S), S373 (2005)
- Trunec, M., Cihlar, J., Diethelm, S., Van Herle, J. Tubular  $\text{La}_{0.7}\text{Ca}_{0.3}\text{Fe}_{0.85}\text{Co}_{0.15}\text{O}_{3-d}$  perovskite membranes, Part I: Preparation and properties. J. Am. Ceram. Soc., 2006, Vol. 89, No. 3, pp. 949-954.
- Trunec, M., Cihlar, J., Diethelm, S., Van Herle, J. Tubular  $\text{La}_{0.7}\text{Ca}_{0.3}\text{Fe}_{0.85}\text{Co}_{0.15}\text{O}_{3-d}$  perovskite membranes, Part II: Performance and stability. J. Am. Ceram. Soc., 2006, Vol. 89, No. 3, pp. 955-959.
- Cihlar, J., Del Favero, D., Cihlar, J., Buchal, A., Van Herle, J. Synthesis, structure and oxygen thermally programmed desorption spectra of  $\text{La}_{1-x}\text{Ca}_x\text{Al}_y\text{Fe}_{1-y}\text{O}_{3-d}$ . J. Eur. Ceram. Soc., 2006, Vol. 26, No. 14, pp. 2999-3004.