



Zhijun Lin received his B.S. in Chemistry from Fujian Normal University and was selected to continue his postgraduate study by Institute of Metal Research, Chinese Academy of Sciences without an entrance examination in 2002. He is currently a Ph.D. candidate concentrating on layered ternary ceramics. His research interests cover synthesis, chemical stability, physical properties, and microstructural characterizations of layered ternary ceramics.

Lin has been trained and is now qualified in operating a series of facilities including high-temperature hot-pressing furnace, thermal analyzer (TG/DSC), scanning electron microscope and transmission electron microscope *etc.* He has successfully synthesized some layered ternary ceramics (Cr_2AlC , Ta_4AlC_3 , Ta_2AlC , and Ti_2AlN) and carried

systematic investigations on their atomic scale microstructures. Using high-resolution transmission electron microscopy and *Z*-contrast scanning transmission electron microscopy, he has achieved exciting results in understanding the oxidation mechanism, formation mechanism, and atomic-scale microstructures of layered ternary ceramics. He also investigated the corrosion behavior of ternary Ti-Al-C carbides and improved their hot corrosion resistance using a simple pre-oxidation method.

Up to now, Lin has authored and co-authored about 20 SCI papers which were published in international journals such as *Acta Mater.*, *Scripta Mater.*, *J. Am. Ceram. Soc.*, *J. Mater. Res.*, *Appl. Phys. Lett.*, *Phys. Rev. B*, *etc.* He has also co-authored three Chinese patents. Lin has presented twice on international conferences, which were held in Chengdu, China and Sicily, Italy.

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Dr. Yanchun Zhou obtained his B.S. of ceramics from Tsinghua University in 1985, M.S. of ceramics in 1988 and Ph.D. of metallic materials and heat treatment in 1991, both from Institute of Metal Research, Chinese Academy of Sciences. Before joining IMR, he worked as a visiting scientist in Institute of Strength Physics and Materials, Russian Academy of Sciences during March to July 1991, and a post-doctoral associate at Material Research Center, University of Missouri-Rolla during 1992–1994. He was promoted an associate professor in 1993 and a full professor in 1994. He is now a professor and director of High-performance Ceramic Division, Shenyang National Laboratory for Materials Science, Institute of Metal Research, Chinese Academy of Sciences. His main research inter-

ests include processing, multi-scale structure-property relationship of ceramics and composites. Dr. Zhou has published more than 160 scientific papers in *Appl. Phys. Lett.*, *Acta Mater.*, *Chem. Mater.*, *J. Am. Ceram. Soc.*, *J. Mater. Res.*, *J. Mater. Chem.*, *Phys. Rev. B*, *J. Appl. Phys.*, *J. Phys. Condens. Matter.*, *Z. Metallkd.*, *Mater. Res. Innovat.* *etc.* His works have been cited more than 800 times. He holds 16 Chinese patents. He was awarded a number of prizes including “Special prize for outstanding graduate student from the president of CAS” in 1991, top prize of the “Technological Achievement” from CAS in 1998, third prize of “Natural Science” from CAS in 1999, “National outstanding young scientist foundation award in 1999”, the second prize of “Technical Invention” from CAS in 2001, and the top prize of Natural Science from Liaoning Province in 2005.



Meishuan Li was born in Inner Mongolia in 1963. He received his B.S. in Physics from Inner Mongolia University in 1985; M.S. in Corrosion and Protection from Institute of Corrosion and Protection of Metals (ICPM), Chinese Academy of Sciences (CAS) in 1988; and Ph.D. in Corrosion and Protection from Institute of Metal Research (IMR), CAS. In 1991, he began his research in the ICPM. In the period of 1994–2003, he worked in the State Key Laboratory for Corrosion and Protection; and from 2003 to present, worked in the High Performance Ceramic Division of Shenyang National Laboratory for Materials Science, IMR. He was promoted as a professor in 1995.

His major research activities cover high temperature oxidation of materials and protective coatings, mechanical properties (internal stress, fracture strain and adhesion) of thermal grown oxide scales, chemical stability of ternary layered-structure compounds and surface modification, effect of atomic oxygen attack on space materials and protective techniques in low earth orbit environment. He has developed a novel technique for *in-situ* determination of inner stress in oxide scales, investigated effects of reactive elements profoundly; prepared new polyimide/silica hybrid films for preventing space materials from atomic oxygen erosion; synthesized new $\text{Ti}_3\text{AlC}_2/\text{TiB}_2$ composites, successfully improved oxidation resistance of Ti_3SiC_2 by pack cementation of Si, Al or Al-La.

Up to now, he has authored one scientific book named by “High Temperature Corrosion of Metals” (in Chinese, Chinese Metallurgical Industry Press, Beijing, 2001); over 60 SCI papers, including some well-known journals, such as *Acta Mater.*, *Scripta Mater.*, *J. Eur. Ceram. Soc.*, *J. Am. Ceram. Soc.*, *J. Mater. Res.*, *J. Appl. Phys.*, *Oxid. Met.*, *Corros. Sci.*, and so on; and obtained 12 invention patents. Moreover, his papers have been cited over 40 times by other references.

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