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Part II: Graded and layered composites5 Functionally-graded ceramic composites; 5.1 Introduction; 5.2 Infiltration kinetics and characteristics; 5.3 Infiltration processing of LGMs; 5.4 Characterisation and properties of alumina matrix LGMs; 5.5 Concluding remarks; 5.6 Acknowledgements; 5.7 References; 6 SiAlON based functionally graded materials; 6.1 Introduction; 6.2 Functionally graded materials; 6.3 SiAlON ceramics; 6.4 Functionally graded SiAlON ceramics; 6.5 Production techniques of functionally graded SiAlON ceramics; 6.6 Concluding remarks; 6.7 References
7 Design of tough ceramic laminates by residual stresses control7.1 Introduction; 7.2 Laminate design for enhanced fracture toughness; 7.3 Processing of Si3N4-TiN and B4C-SiC ceramic laminates; 7.4 Si3N4 based laminates; 7.5 B4C based laminates; 7.6 Future trends; 7.7 Acknowledgements; 7.8 References; 8 Hardness of multilayered ceramics; 8.1 Introduction; 8.2 Behaviour of multilayer structures; 8.3 Hardening mechanisms in multilayers; 8.4 Microstructural changes due to making a multilayer; 8.5 Conclusions; 8.6 Future trends; 8.7 Further reading; 8.8 References
Part III: Nanostructured ceramic composites9 Nanophase ceramic composites; 9.1 Introduction; 9.2 Micro-nano type ceramic composites; 9.3 Nano-nano type ceramic composites; 9.4 Fabrication of nanoceramics; 9.5 Conclusions and future trends; 9.6 References; 10 Nanostructured coatings on advanced carbon materials; 10.1 Introduction; 10.2 Coating method of nanostructured SiC; 10.3 Applications of nanostructured SiC coatings in advanced composites; 10.4 Conclusions; 10.5 References; 11 Processing and microstructural control of metal-reinforced ceramic matrix nanocomposites; 11.1 Introduction
11.2 Processing

Sommario/riassunto

The advent of engineering-designed polymer matrix composites in the late 1940s has provided an impetus for the emergence of sophisticated ceramic matrix composites. The development of CMCs is a promising means of achieving lightweight, structural materials combining high temperature strength with improved fracture toughness, damage tolerance and thermal shock resistance. Considerable research effort is being expended in the optimisation of ceramic matrix composite systems, with particular emphasis being placed on the establishment of reliable and cost-effective fabrication procedures.Ceramic m