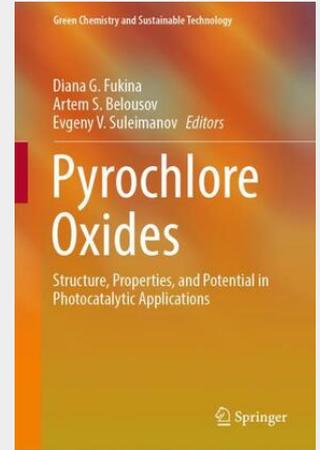


Pyrochlore Oxides

Structure, Properties, and Potential in Photocatalytic Applications

This book presents an in-depth exploration of complex metal oxides, focusing on their applications in photocatalysis and biomedical materials. It highlights the practical importance of complex metal oxides, which have gained significant attention in recent years due to their diverse range of properties. The book specifically delves into the most representative series of compounds based on stable structural types of minerals, such as perovskite, fluorite, pyrochlore, corundum, and rutile. It also emphasizes the scientific interest in the pyrochlore mineral structure, which has been shown to exhibit photocatalytic activity. Recent studies have revealed that some compounds with the pyrochlore structure can act as promising candidates for photocatalysis. Additionally, the book highlights the use of photocatalysis in producing biomedical materials based on natural polymers. These materials possess a unique combination of components assembled in a specific structure, which makes them highly attractive for regenerative medicine associated with cell/tissue regeneration stimulation. Overall, this book offers a comprehensive analysis of the potential of complex metal oxides, particularly those with the pyrochlore structure, and is particularly useful for those researchers working in the fields of green chemistry and biomedical materials science.

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