

## Research progress of sol-gel ceramic coating : A review

*Zanurin A.<sup>a</sup>; Johari N.A.<sup>a</sup>; Alias J.<sup>a</sup>; Ayu, H. Mas<sup>b</sup>; Redzuan N.<sup>c</sup>; Izman S.<sup>c</sup>*

<sup>a</sup> Department of Mechanical Engineering, College of Engineering, Universiti Malaysia Pahang, Gambang, Pahang, Kuantan, 26300, Malaysia

<sup>b</sup> Faculty of Manufacturing and Mechatronic Engineering Technology, Universiti Malaysia Pahang, Pekan, Pahang, 26600, Malaysia

<sup>c</sup> Department of Materials, Manufacturing and Industrial Engineering, School of Mechanical Engineering, Universiti Teknologi Malaysia, UTM Skudai, Johor Bahru, 81310, Malaysia

### ABSTRACT

The sol-gel method is a simple and low-cost technique that requires low temperature for the reaction process. Sol-gels can be made from a wide variety of ceramic materials, including alumina, chromium, silica, and zirconium. This technique has been used in a variety of applications, including corrosion prevention, biomedical applications, and electronic devices. The sol-gel technique has made significant progress in a variety of fabrication applications. Numerous papers have reported on the incorporation of ceramic materials with other materials to increase the performance of sol-gel coating. The ceramic sol-gel coating increased the corrosion resistance and thermal properties of the coated materials while remaining a low-cost approach. This paper highlights current reports on the various applications of sol-gel ceramic coatings.

### KEYWORDS

Application of ceramic coating; Ceramic coating; Graphene alumina coating; Sol-gel coating; Sol-gel method

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