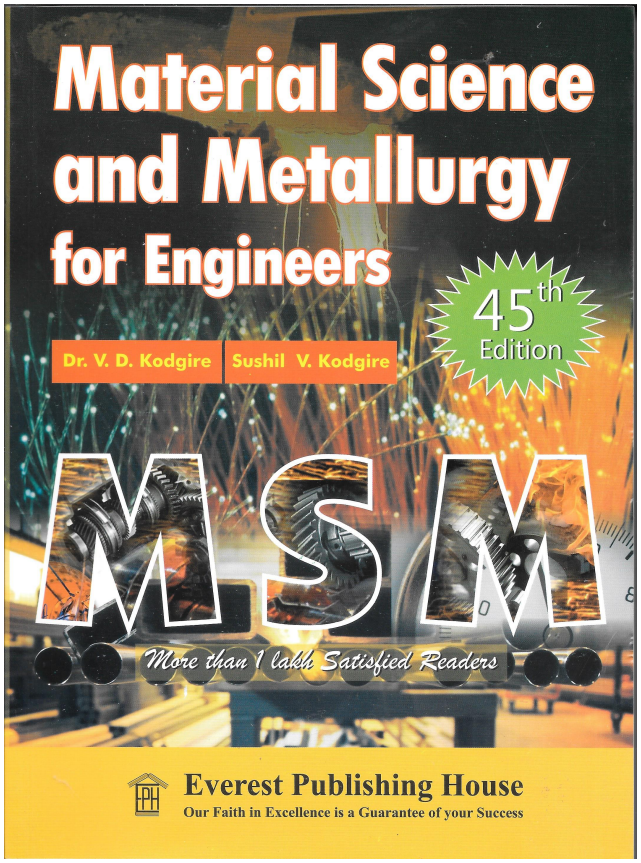
material science and metallurgy by kodgire pdf free 28



.23 MB 009081896 The two-tailed P value is the probability that two random samples, one from group A and one from group B, have means that differ more than the observed difference between the means of the groups. It is computed using the -based t distribution with n – 2 degrees of freedom. The sample-size correction for 2-tail probability is the same as for 1-tail probability. In a two-sample Z-test of 2 x 2 contingency tables, the Z-test value is the difference between the sample means (or ratios). It is computed using the -based t distribution with the degrees of freedom equal to the difference in the sample sizes. The sample-size correction for 2-tail probability is n – 1. When both samples are of size n, the value Z(n) is a standard normal random variable.1. Field of the Invention The present invention generally relates to a method of forming a field oxide layer, and more particularly to a method of forming a field oxide layer on a semiconductor substrate in which an inactive layer is formed between the semiconductor substrate and the field oxide layer. 2. Description of the Related Art As illustrated in FIG. 1A, a

conventional method of forming a field oxide layer includes steps of: a) coating a photoresist layer on a semiconductor substrate 10, and exposing the photoresist layer to a pattern of an exposure mask such that a photoresist layer is formed having a pattern with a desired dimension; b) etching the semiconductor substrate 10 using the photoresist layer as a mask to form a shallow trench; c) etching the semiconductor substrate 10 using the shallow trench as a mask to form a shallow trench with an increased depth; d) flowing a tetraethyl orthosilicate (TEOS) solution on the semiconductor substrate 10 to form an inactive layer 20 on the semiconductor substrate 10; e) forming a field oxide layer 30 on the inactive layer 20 and on the surface of the semiconductor substrate 10, wherein the thickness of the field oxide layer 30 is equal to the increased depth of the shallow trench; and f) removing the inactive layer 20 and the photoresist layer from the semiconductor substrate 10. As described above, the inactive layer 20 is formed to prevent the field oxide layer 30 from being contaminated by an acid during the etching process of the semiconductor substrate 10. However, as shown in FIG. 1B, when the inactive 82157476af