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| 1. Record Nr.           | UNISA996213204703316   |
| Autore                  | Alfassi Zeev B   |
| Titolo                  | Statistical treatment of analytical data [[electronic resource] /] / Zeev B. Alfassi, Zvi Boger, Yigal Ronen   |
| Pubbl/distr/stampa      | Oxford, : Blackwell Science, 2005  |
| ISBN                    | 9786610213399<br>1-280-21339-6<br>1-4443-0535-2<br>1-4051-4814-4   |
| Descrizione fisica      | 1 online resource (272 p.)   |
| Altri autori (Persone)  | BogerZvi<br>RonenYigal <1940->   |
| Disciplina              | 543.0015195<br>543.0727  |
| Soggetti                | Chemometrics<br>Chemistry - Statistical methods  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Description based upon print version of record.  |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | Statistical Treatment of Analytical Data; Contents; Preface; 1 Introduction; 1.1 Statistics and quality assurance, control and assessment; 1.2 References; 2 Statistical measures of experimental data; 2.1 Mean and standard deviation; 2.2 Graphical distributions of the data - bar charts or histograms; 2.3 Propagation of errors (uncertainties); 2.4 References; 3 Distribution functions; 3.1 Confidence limit of the mean; 3.2 Measurements and distribution functions; 3.3 Mathematical presentation of distribution and; 3.4 Continuous distribution functions; 3.5 Discrete distribution functions 3.6 References4 Confidence limits of the mean; 4.1 Confidence limits; 4.2 The Central Limit Theorem - the distribution of means; 4.3 Confidence limit of the mean; 4.4 Confidence limits of the mean of small samples; 4.5 Choosing the sample size; 5 Significance test; 5.1 Introduction; 5.2 Comparison of an experimental mean with an expected; 5.3 Comparison of two samples; 5.4 Paired t-test; 5.5 Comparing two variances - the F-test; 5.6 Comparison of several means; 5.7 The chi-squared (x2) test; 5.8 Testing for normal |

distribution - probability paper; 5.9 Non-parametric tests; 5.10  
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9.6 References; 10 Peak search and peak integration; 10.1 A statistical  
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10.3 Second derivative method10.4 Computer - visual separation of  
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11.3 Discrete Fourier Transforms; 11.4 Fast Fourier Transforms (FFT);  
11.5 References; 12 General and specific issues in uncertainty analysis;  
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and mass  
12.5 Statistical and systematic uncertainties

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## Sommario/riassunto

Statistical techniques have assumed an integral role in both the interpretation and quality assessment of analytical results. In this book the range of statistical methods available for such tasks are described in detail, with the advantages and disadvantages of each technique clarified by use of examples. With a focus on the essential practical application of these techniques the book also includes sufficient theory to facilitate understanding of the statistical principles involved. Statistical Treatment of Analytical Data is written for professional analytical chemists in

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