

}essentials{

Yvonne Tafelmaier · Guido Bataille
Viola Schmid · Andreas Taller
Manuel Will

Methods for the Analysis of Stone Artefacts

An Overview

 Springer

essentials

essentials liefern aktuelles Wissen in konzentrierter Form. Die Essenz dessen, worauf es als „State-of-the-Art“ in der gegenwärtigen Fachdiskussion oder in der Praxis ankommt. *essentials* informieren schnell, unkompliziert und verständlich.

- als Einführung in ein aktuelles Thema aus Ihrem Fachgebiet
- als Einstieg in ein für Sie noch unbekanntes Themenfeld
- als Einblick, um zum Thema mitreden zu können

Die Bücher in elektronischer und gedruckter Form bringen das Fachwissen von Springerautor*innen kompakt zur Darstellung. Sie sind besonders für die Nutzung als eBook auf Tablet-PCs, eBook-Readern und Smartphones geeignet. *essentials* sind Wissensbausteine aus den Wirtschafts-, Sozial- und Geisteswissenschaften, aus Technik und Naturwissenschaften sowie aus Medizin, Psychologie und Gesundheitsberufen. Von renommierten Autor*innen aller Springer-Verlagsmarken.

Yvonne Tafelmaier • Guido Bataille
Viola Schmid • Andreas Taller
Manuel Will

Methods for the Analysis of Stone Artefacts

An Overview



Springer

Yvonne Tafelmaier
State Office for Cultural Heritage
Baden-Württemberg
Esslingen, Germany

Guido Bataille
State Office for Cultural Heritage
Baden-Württemberg
Blaubeuren, Germany

Viola Schmid
Austrian Archaeological Institute
Austrian Academy of Sciences
Vienna, Austria

Andreas Taller
Ur- und Frühgeschichte & Archäologie
des Mittelalters
Eberhard Karls Universität Tübingen
Tübingen, Germany

Manuel Will
Ur- und Frühgeschichte & Archäologie
des Mittelalters
Eberhard Karls Universität Tübingen
Tübingen, Germany

ISSN 2197-6708
essentials

ISSN 2197-6716 (electronic)

ISBN 978-3-658-39090-7

ISBN 978-3-658-39091-4 (eBook)

<https://doi.org/10.1007/978-3-658-39091-4>

© The Editor(s) (if applicable) and The Author(s), under exclusive licence to Springer Fachmedien Wiesbaden GmbH, part of Springer Nature 2022

This book is a translation of the original German edition „Methoden zur Analyse von Steinartefakten“ by Tafelmaier, Yvonne, published by Springer Fachmedien Wiesbaden GmbH in 2020. The translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically differently from a conventional translation. Springer Nature works continuously to further the development of tools for the production of books and on the related technologies to support the authors.

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Fachmedien Wiesbaden GmbH, part of Springer Nature.

The registered company address is: Abraham-Lincoln-Str. 46, 65189 Wiesbaden, Germany

What You Can Find in This *Essential*

- A compact overview of different methods for the analysis of stone artefacts
- Well-understandable explanations of the procedures of analysis
- Precise explanations of terms and definitions
- A critical examination of the advantages and disadvantages of the respective methodological approaches
- Further literature, if a deepen understanding of the topic or for partial aspects is desired

Contents

1	Introduction	1
2	Attribute Analysis	5
2.1	Introduction	5
2.2	History of Research	6
2.3	Approach (Method)	7
2.3.1	Preparation and Processing	7
2.3.2	Collection/Recording of Data	9
2.3.3	Analysis of Data	10
2.3.4	Interpretation and Contextualisation of Results	13
2.4	Strengths and Weaknesses, When to Use, When Not to Use?	13
3	Transformation Analysis	15
3.1	Introduction	15
3.2	History of Research	16
3.3	Transformation Analysis: A Method for Reconstructing Past Activities	17
3.3.1	Raw Material Analysis and Workpiece Formation	18
3.3.2	Reconstruction of the Raw Material Transformation	22
3.4	Examples of Use and Possible Interpretations	24
3.5	Possible Applications and Criticism	25
4	Chaîne opératoire Approach	27
4.1	Introduction	27
4.2	History of Research	29
4.3	Procedure (Methodology)	30