Cambridge University Press 978-1-108-79204-2 — Matrix Analysis and Entrywise Positivity Preservers Apoorva Khare Copyright information <u>More Information</u>

CAMBRIDGE UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org Information on this title: www.cambridge.org/9781108792042 DOI: 10.1017/9781108867122

© Apoorva Khare 2022

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2022

Printed in the United Kingdom by TJ Books Limited, Padstow Cornwall

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data Names: Khare, Apoorva, author.

Title: Matrix analysis and entrywise positivity preservers / Apoorva Khare.
Description: Cambridge ; New York, NY : Cambridge University Press, 2022. | Includes bibliographical references and index. | Contents: The cone of positive semidefinite matrices – The Schur product theorem and nonzero lower bounds – Totally positive (TP) and Totally non-negative (TN) matrices – TP matrices–generalized Vandermonde and Hankel moment matrices – Entrywise powers preserving positivity in fixed dimension – Mid-convex implies continuous, and 2 × 2 preservers – Entrywise preservers of positivity on matrices with zero patterns – Entrywise powers preserving positivity, monotonicity, superadditivity – Loewner convexity and single matrix encoders of preservers – Exercises – History–Schoenberg, Rudin, Vasudeva, and metric