1. Record Nr. UNINA9910455065703321

Autore	Grow Matthew J
Titolo	"Liberty to the downtrodden" [[electronic resource]] : Thomas L. Kane, romantic reformer / / Matthew J. Grow
Pubbl/distr/stampa	New Haven, : Yale University Press, c2009
ISBN	1-282-35246-6 9786612352461 0-300-15326-0 1-282-08963-3 9786612089633
Descrizione fisica	1 online resource (368 p.)
Collana	The Lamar series in western history
Disciplina	979.2/02092
Soggetti	Mormons - West (U.S.) - History - 19th century Mormon pioneers - Utah - History - 19th century Mormon Church - United States - History - 19th century Social reformers - United States Abolitionists - United States Soldiers - United States Electronic books. Utah History 19th century
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Published with assistance from the Charles Redd Center for Western Studies"--T.p. verso.
Nota di bibliografia	Includes bibliographical references (p. 289-336) and index.
Nota di contenuto	Frontmatter -- Contents -- Acknowledgments -- Introduction -- 1. Raising Kane -- 2. Europe -- 3. Beginnings of Reform -- 4. Meeting the Mormons -- 5. The Suffering Saints -- 6. Free Soil and Young America -- 7. Fugitive Slaves -- 8. Reforming Marriage -- 9. The Utah War, Act I -- 10. The Utah War, Act II -- 11. Honor, Reform, and War -- 12. Developing Kane -- 13. Anti-Anti-Polygamy -- Epilogue -- Appendix: Kane Family Chart -- Notes -- Index
Sommario/riassunto	Thomas L. Kane (1822-1883), a crusader for antislavery, women's rights, and the downtrodden, rose to prominence in his day as the most ardent and persuasive defender of Mormons' religious liberty. Though

	not a Mormon, Kane sought to defend the much-reviled group from the "Holy War" waged against them by evangelical America. His courageous personal intervention averted a potentially catastrophic bloody conflict between federal troops and Mormon settlers in the now nearly forgotten Utah War of 1857-58. Drawing on extensive, newly available archives, this book is the first to tell the full story of Kane's extraordinary life. The book illuminates his powerful Philadelphia family, his personal life and eccentricities, his reform achievements, his place in Mormon history, and his career as a Civil War general. Further, the book revises previous understandings of nineteenth-century reform, showing how Kane and likeminded others fused Democratic Party ideology, anti-evangelicalism, and romanticism.

2.

Record Nr.	UNINA9910130960703321
Autore	Klein Rolf
Titolo	Laser welding of plastics [[electronic resource] /] / Rolf Klein
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, c2012
ISBN	3-527-63697-8 3-527-63698-6 3-527-63696-X
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (200 p.)
Disciplina	668.41
Soggetti	Laser welding Plastics - Welding
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	Laser Welding of Plastics; Contents; Introduction; 1 Material Properties of Plastics; 1.1 Formation and Structure; 1.2 Types of Plastics; 1.2.1 Thermoplastic Resins; 1.2.1.1 Amorphous Thermoplastics; 1.2.1.2 Semicrystalline Thermoplastics; 1.2.2 Elastomers; 1.2.3 Thermosets; 1.2.4 Polymer Compounds; 1.2.4.1 Polymer Blends; 1.2.4.2 Copolymers; 1.2.4.3 Thermoplastic Elastomers; 1.2.5 Polymer Composites; 1.3 Thermal Properties; 1.3.1 Phase Transitions; 1.3.1.1

Glass Transition (Tg); 1.3.1.2 Flow Temperature (Tf); 1.3.1.3 Crystallite Melting Temperature (Tm); 1.3.1.4 Thermal Decomposition (Td)
1.3.2 Specific Volume1.3.3 Heat Capacity; 1.3.4 Heat Conduction; 1.3.5 Temperature Conduction; 1.3.5.1 Amorphous Thermoplastics; 1.3.5.2 Semicrystalline Thermoplastics; 1.4 Optical Properties; 1.4.1 Optical Constants; 1.4.2 Reflection, Transmission and Absorption Behavior; 1.4.3 Scattering of NIR- and IR-Radiation in Plastics; 1.4.4 Absorption of NIR-Laser Radiation (= 800 nm to 1200 nm); 1.4.4.1 Electronic Excitation; 1.4.4.2 Vibronic Excitation; 1.4.4.3 Summarizing Comment; 1.4.5 Absorption of NIR-Laser Radiation (= 1200 nm to 2500 nm)
1.4.6 Absorption of MIR-Laser Radiation (= 2.5 mm to 25 m)1.4.7 Adaptation of NIR-Radiation Absorption by Additives; 1.4.7.1 Carbon Black; 1.4.7.2 Inorganic Pigments; 1.4.7.3 Organic Dyes; 1.4.7.4 Summarizing Comment; References; 2 Laser Sources for Plastic Welding; 2.1 Properties of Laser Radiation; 2.1.1 Laser Wavelength; 2.1.2 Intensity Distribution; 2.1.3 Beam Propagation; 2.1.4 Focusing Properties; 2.2 Types of Lasers; 2.2.1 Diode Lasers (800 to 2000 nm); 2.2.2 Nd:YAG-Lasers (1064 nm); 2.2.3 Fiber Lasers; 2.2.4 CO2-Lasers (10.6 m); 2.2.5 Summary; 2.3 Beam Guiding and Focusing
2.3.1 Beam-Guiding Systems2.3.1.1 Glass-Fiber Systems; 2.3.1.2 Mirror Systems; 2.3.2 Focusing Systems; 2.3.2.1 Static Focusing Systems; 2.3.2.2 Dynamic Focusing Systems; 2.3.3 Beam-Shaping Optics; 2.4 Principle Setup of Laser Welding Systems; References; 3 Basics of Laser Plastic Welding; 3.1 Heat Generation and Dissipation; 3.1.1 Absorption of Laser Radiation; 3.1.1.1 Direct Absorption; 3.1.1.2 Indirect Absorption; 3.1.1.3 Hindered Absorption by Internal Scattering; 3.1.2 Transfer of Laser Energy into Process Heat; 3.1.3 Dissipation of Process Heat
3.1.4 Process Simulation by Complex Computation3.2 Theory of Fusion Process; 3.2.1 Interdiffusion Process (Reptation Model); 3.2.2 Interchange of Macromolecules by Squeeze Flow Process; 3.2.3 Mixing of Crystalline Phases; 3.3 Material Compatibility; References; 4 Process of Laser Plastic Welding; 4.1 Basic Process Principles; 4.1.1 Butt-Joint Welding; 4.1.2 Through-Transmission Welding; 4.2 Process Types; 4.2.1 Contour Welding; 4.2.2 Quasisimultaneous Welding; 4.2.3 Simultaneous Welding; 4.2.4 Special Processes; 4.2.4.1 Mask Laser Welding; 4.2.4.2 TWIST Laser Welding
4.2.4.3 Globo Laser Welding

Sommario/riassunto

This is the first detailed description in English of radiation and polymeric material interaction and the influences of thermal and optical material properties. As such, it provides comprehensive information on material and process characteristics as well as applications regarding plastic laser welding. The first part of this practical book introduces the structure and physical properties of plastics, before discussing the interaction of material and radiation in the NIR and IR spectral range. This is followed by an overview of the physical foundations of laser radiation and laser sources