

1. Record Nr.	UNINA9910795205303321
Autore	Geck Paul <1982->
Titolo	Automotive lightweighting using advanced high-strength steels // by Paul Geck
Pubbl/distr/stampa	Warrendale, Pennsylvania (400 Commonwealth Dr., Warrendale PA USA) : , : Society of Automotive Engineers, , [2014]
ISBN	0-7680-8849-6 0-7680-8129-7
Descrizione fisica	1 online resource (xiii, 184 pages) : illustrations (mostly color)
Collana	Society of Automotive Engineers. Electronic publications
Disciplina	629.2/32
Soggetti	Steel, Automobile Lightweight steel Steel, High strength Automobiles - Materials - Research Automobiles - Design and construction Automobiles - Weight TECHNOLOGY & ENGINEERING / Materials Science / Metals & Alloys TECHNOLOGY & ENGINEERING / Automotive Materials science Automotive technology and trades
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"SAE Order Number R-431."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface -- Acknowledgments -- Introduction -- Chapter 1. Advanced high-strength steel technology -- Chapter 2. Impediments and enablers for advanced high-strength steels -- Chapter 3. Example applications of advanced high-strength steels -- Chapter 4. Comparison of advanced high-strength steels with alternative materials -- Chapter 5. Future direction of advanced high-strength steels -- Chapter 6. Conclusions and recommendations -- About the author.
Sommario/riassunto	"In support of the latest automotive challenges in terms of weight reduction, I wrote this book in an attempt to lay out the true opportunities for alternative material utility in automobiles and to offer the most up-to-date design guidance in efficient architectures

supported with the application of AHSS while exploring weight savings and resulting fuel economy advantages of this strategy. Realistic comparisons with other alternative materials are made through detailed analysis. Many projects that I have been part of will be explored to demonstrate how AHSS [advanced high-strength Steels] technology has developed and to get us to the foothills of the mountain that we, as automobile design people, now must climb."--Preface.
