1.

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Autore	Kumar Vijay
Titolo	Metal Oxides for Next-Generation Optoelectronic, Photonic, and Photovoltaic Applications
Pubbl/distr/stampa	San Diego : , : Elsevier, , 2023 ©2024
ISBN	9780323993678 0323993672
Edizione	[1st ed.]
Descrizione fisica	1 online resource (676 pages)
Collana	Metal Oxides Series
Altri autori (Persone)	SharmaVishal (Associate professor) SwartHendrik C DasSubrata
Disciplina	621.381045
Soggetti	Metallic oxides Photovoltaic power generation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Metal Oxides for Next-Generation Optoelectronic, Photonic, and Photovoltaic Applications -- Copyright -- Contents -- Contributors -- Series editor biography -- Preface to the series -- Section A: Metal oxide-based transparent electronics -- Chapter 1: Optical transparency combined with electrical conductivity: Challenges and prospects -- Chapter outline -- 1. Introduction -- 2. Optical properties of metal oxides -- 2.1. SnO2 -- 2.2. CuO -- 2.3. ZnO -- 3. Electrical properties of metal oxides -- 3.1. SnO2 -- 3.2. CuO -- 3.3. ZnO -- 4. Application -- 4.1. Sensors -- 4.1.1. Carbon dioxide gas sensors -- 4.1.2. Carbon monoxide gas sensors -- 4.1.3. Oxygen gas sensors -- 4.1.4. Nitric oxide gas sensor -- 4.1.5. Ammonia gas sensors -- 4.1.6. Ozone gas sensors -- 4.2. Batteries -- 4.3. Solar cell -- 4.3.1. CuO solar cells -- 4.3.2. Binary heterojunction solar cells -- 4.3.3. Thin film solar cells -- 4.4. Antennas -- 4.5. Optoelectronic and electronics -- 5. Future challenges and aspects -- 6. Conclusion -- References -- Chapter 2: Transparent ceramics: The material of next generation -- Chapter outline -- 1. Introduction -- 2. What makes the ceramics transparent? -- 3. Classification of transparent ceramics --

layers -- 12. Charge transport dynamics at the metal oxide-perovskite interfaces -- 13. Conclusion, challenges ahead, and perspectives for future work -- References -- Chapter 12: Antireflective coatings and optical filters -- Chapter outline -- 1. Introduction -- 2. Metal oxides as an optical material -- 3. Antireflective coatings -- 3.1. Defining a perfect antireflective coating -- 3.2. Theory of antireflective coatings. 3.3. Types of antireflective coatings and surfaces.

Sommario/riassunto

This comprehensive volume explores the diverse applications and properties of metal oxides in photonic and photovoltaic technologies. Edited by Ghenadii Korotcenkov, the book delves into the use of metal oxides in various advanced technologies, including thin-film structures, solar cells, biomedical applications, heterogeneous catalysis, and sensors for toxic chemicals. It also covers the synthesis, properties, and applications of specific metal oxides like titanium dioxide and cerium oxide. Aimed at researchers and practitioners in the fields of materials science and engineering, this book provides insights into the challenges and future prospects of metal oxide applications in technology and industry. The volume highlights the role of metal oxides in energy technologies, optics-based medical applications, and the development of non-volatile memory and polymer-metal oxide composites.

2.	Record Nr.	UNINA9910965310503321
	Autore	Hammer Steven A
	Titolo	Lithops : joyaux du veld / / Steven A. Hammer ; traduction et coordination de l'edition francaise, Mickael Legrand ; photographies de Christopher Barnhill ; dessins de Gerhard Marx ; photographies complementaires de Gerhard Marx, John Trager et Andrew Young ; cle botanique de Jonathan Clark
	Pubbl/distr/stampa	Versailles : , : Editions Quæ, , c2010
	ISBN	9782759208517 2759208516
	Edizione	[Ed. francaise rev. et augm.]
	Descrizione fisica	1 online resource (195 pages)
	Collana	Beaux Livres Series
	Altri autori (Persone)	LegrandMickael BarnhillChristopher MarxGerhard TragerJohn YoungAndrew ClarkJonathan
	Soggetti	Lithops
	Lingua di pubblicazione	Francese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	"Edition anglaise originale: Lithops, treasures of the Veld"--t.p. verso.
	Nota di bibliografia	Includes bibliographical references.
	Nota di contenuto	""L. aucampiae subsp. aucampiae var. koelemanii (de Boer) Cole (1960)""""L. aucampiae subsp. euniceae var. eunice (de Boer) Cole (1966)""; ""L. aucampiae subsp. euniceae var.fluminalis Cole (1970)""; ""L. bromfieldii L. Bolus var. bromfieldii (1934)""; ""L. bromfieldii var. glaudinae (de Boer) Cole (1960)""; ""L. bromfieldii var. insularis (L. Bolus) Fearn (1937)""; ""L. bromfieldii var. mennellii (L. Bolus) Fearn (1937)""; ""L. coleorum S.A. Hammer & R. Uijs (1994)""; ""L. comptonii L. Bolus var. comptonii (1930)""; ""L. comptonii var. weberi (Nel) Cole (1940)"" ""L. dinteri Schwantes subsp. dinteri var.dinteri (1927)""""L. dinteri subsp. dinteri var. brevis (L. Bolus) Fearn (1932)""; ""L. dinteri subsp. frederici (Cole) Cole (1973)""; ""L. dinteri subsp. multipunctata (de Boer) Cole (1966)""; ""L. divergens L. Bolus var. divergens (1934)""; ""L. divergens var. amethystina de Boer (1961)""; ""L. dorotheae Nel (1939)

""; ""L. francisci (Dinter & Schwantes) N.E.Br(1925)""; ""L. fulviceps (N.E. Br.) N.E.Br. var. fulviceps (1914)""; ""L. fulviceps var. lactinea Cole (1973) ""; ""L. fulviceps var. laevigata D.T. Cole (2006)""
""L. gesinae de Boer var. gesinae (1955) """"L. gesinae de Boer var. annae (de Boer) Cole (1956)""; ""L. geyeri Nel (1943) ""; ""L. gracilidelineata Dinter subsp. gracilidelineata var. gracilidelineata (1928)""; ""L. gracilidelineata subsp. gracilidelineata var. waldroniae de Boer (1963)""; ""L. gracilidelineata subsp. brandbergensis (Schwantes ex-de Boer) Cole (1963)""; ""L. hallii de Boer var. hallii (1957) ""; ""L. hallii var. ochracea (de Boer) Cole (1962) ""; ""L. helmutii L. Bolus (1933) ""; ""L. hermetica D.T. Cole (2000)""; ""L. herrei L. Bolus (1932) ""
""L. hookeri (Berger) Schwantes var. hookeri (1908)""

Sommario/riassunto

Chaque automne, les cailloux du désert sud-africain fleurissent...C'est en réalité la saison où se trahissent les lithops, ces stupéfiants petits caméléons végétaux, qui imitent à la perfection les roches environnantes.