1. Record Nr. UNINA9910450182303321

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Titolo	Scale-isometric polytopal graphs in hypercubes and cubic lattices [[electronic resource] /] / Michel Deza, Viatcheslav Grishukhin, Mikhail Shtogrin
Pubbl/distr/stampa	London, : Imperial College Press, c2004
ISBN	1-281-86651-2 9786611866518 1-4237-0888-1 1-86094-548-1
Descrizione fisica	1 online resource (186 p.)
Altri autori (Persone)	GrishukhinViatcheslav ShtogrinMikhail
Disciplina	511/.5
Soggetti	Graph theory Polytopes Metric spaces Embeddings (Mathematics) Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	On t.p. "o<U+00cc><U+0083>n" is subscript.
Nota di bibliografia	Includes bibliographical references (p. 163-169) and index.
Nota di contenuto	Scale-Isometric Polytopal Graphs in Hypercubes and Cubic Lattices: Polytopes in Hypercubes and Zn; Preface; Contents; 1. Introduction: Graphs and their Scale-isometric Embedding; 2. An Example: Embedding of Fullerenes; 3. Regular Tilings and Honeycombs; 4. Semi-regular Polyhedra and Relatives of Prisms and Antiprisms; 5. Truncation, Capping and Chamfering; 6. 92 Regular-faced (not Semi-regular) Polyhedra; 7. Semi-regular and Regular-faced n-polytopes, n 4; 8. Polycycles and Other Chemically Relevant Graphs; 9. Plane Tilings; 10. Uniform Partitions of 3-space and Relatives 11. Lattices, Bi-lattices and Tiles12. Small Polyhedra; 13. Bifaced Polyhedra; 14. Special l1-graphs; 15. Some Generalization of l1-embedding; Bibliography; Index
Sommario/riassunto	This monograph identifies polytopes that are ""combinatorially l1-

embeddable"", within interesting lists of polytopal graphs, i.e. such that corresponding polytopes are either prominent mathematically (regular partitions, root lattices, uniform polytopes and so on), or applicable in chemistry (fullerenes, polycycles, etc.). The embeddability, if any, provides applications to chemical graphs and, in the first case, it gives new combinatorial perspective to ""l2-prominent"" affine polytopal objects. The lists of polytopal graphs in the book come from broad areas of geometry, crystallography an