

1. Record Nr.	UNINA9910768188403321
Titolo	Mathematics of surfaces XI : 11th IMA international conference, Loughborough, UK, September 5-7, 2005 : proceedings // Ralph Martin, Helmut Bez , Malcolm Sabin (eds.)
Pubbl/distr/stampa	Berlin ; ; New York, : Springer, c2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (X, 478 p.)
Collana	Lecture notes in computer science, , 0302-9743 ; ; 3604
Altri autori (Persone)	MartinR. R (Ralph R.) BezHelmut SabinM. A (Malcolm Arthur)
Disciplina	516.3/52
Soggetti	Surfaces Geometry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Free-Form Surface Construction in a Commercial CAD/CAM System -- Polyhedral Gauss Maps and Curvature Characterisation of Triangle Meshes -- Manifold Embedding of Graphs Using the Heat Kernel -- Detection of Surface Creases in Range Data -- Efficient Linear System Solvers for Mesh Processing -- Smoothing of Time-Optimal Feedrates for Cartesian CNC Machines -- Plausible 3D Colour Surface Completion Using Non-parametric Techniques -- Determining the Topology of Real Algebraic Surfaces -- Level Sets of Functions and Symmetry Sets of Surface Sections -- An Heuristic Analysis of the Classification of Bivariate Subdivision Schemes -- Global Curve Analysis via a Dimensionality Lifting Scheme -- Conversion of Dupin Cyclide Patches into Rational Biquadratic Bézier Form -- Multi-sided Attribute Based Modeling -- On Normals and Control Nets -- Line Subdivision -- Euclidean Voronoi Diagrams of 3D Spheres: Their Construction and Related Problems from Biochemistry -- The Importance of Polynomial Reproduction in Piecewise-Uniform Subdivision -- A Hybrid Approach to Extracting Tooth Models from CT Volumes -- Bézier Surfaces of Minimal Internal Energy -- Positivity-Preserving Scattered Data Interpolation -- Artifacts in Box-Spline Surfaces -- Spatial Pythagorean Hodograph Quintics and the Approximation of Pipe Surfaces --

Modelling Surface Normal Distribution Using the Azimuthal Equidistant  
Projection -- New Trends in Digital Shape Reconstruction -- Backward  
Errors and Condition Numbers of Regular and Singular Points on  
Algebraic Curves -- Approximate Rational Parameterization of  
Implicitly Defined Surfaces -- Convergence Analysis of Discrete  
Differential Geometry Operators over Surfaces -- A Marching Method  
for Computing Intersection Curves of Two Subdivision Solids.

---