2021
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[C1] M Gao, Z Lähner, J Thunberg, D Cremers and F Bernard,
Isometric Multi-Shape Matching,

2020
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[C1] R. Wang, N. Yang, J. Stueckler and D. Cremers,
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[C2] M. Eisenberger and D. Cremers,
Hamiltonian Dynamics for Real-World Shape Interpolation,
European Conference on Computer Vision (ECCV), 2020, Spotlight Presentation.

[C3] B Holzschuh, Z Lähner and D Cremers,
Simulated Annealing for 3D Shape Correspondence,

[C4] M Aygün, Z Lähner and D Cremers,
Unsupervised Dense Shape Correspondence using Heat Kernels,

2017
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Efficient Deformable Shape Correspondence via Kernel Matching,
International Conference on 3D Vision (3DV), Qingdao, China, October 2017, Oral Presentation.

2016
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[C1] Z. Lähner, E. Rodola, F. R. Schmidt, M. M. Bronstein and D. Cremers,
Efficient Globally Optimal 2D-to-3D Deformable Shape Matching,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), May 2016.

SHREC’16: Matching of Deformable Shapes with Topological Noise,
Proc. of Eurographics Workshop on 3D Object Retrieval (3DOR), May 2016.

[C3] L. Cosmo, E. Rodola, M. M. Bronstein, A. Torsello, D. Cremers and Y. Sahillioglu,
SHREC’16: Partial Matching of Deformable Shapes,
Proc. of Eurographics Workshop on 3D Object Retrieval (3DOR), May 2016.
Keywords: Shape

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2015

Journal Articles

[J1] A. Albarelli, E. Rodola and A. Torsello,  
Fast and Accurate Surface Alignment through an Isometry-Enforcing Game,  

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[C1] J. Stühmer and D. Cremers,  
A Fast Projection Method for Connectivity Constraints in Image Segmentation,  

2013

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[J1] E. Rodola, A. Albarelli, F. Bergamasco and A. Torsello,  
A Scale Independent Selection Process for 3D Object Recognition in Cluttered Scenes,  

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[C1] J. Stühmer, P. Schröder and D. Cremers,  
Tree Shape Priors with Connectivity Constraints using Convex Relaxation on General Graphs,  
IEEE International Conference on Computer Vision (ICCV), Sydney, Australia, December 2013, Oral Presentation.

2012

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[C1] E. Rodola, A.M. Bronstein, A. Albarelli, F. Bergamasco and A. Torsello,  
A game-theoretic approach to deformable shape matching,  

2011

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[BC1] D. Cremers,  
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A Non-Cooperative Game for 3D Object Recognition in Cluttered Scenes,  
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[C2] A. Torsello, E. Rodola and A. Albarelli,
Sampling Relevant Points for Surface Registration,

[C3] M. Aubry, U. Schlickewei and D. Cremers,
The Wave Kernel Signature: A Quantum Mechanical Approach To Shape Analysis,
*IEEE International Conference on Computer Vision (ICCV) - Workshop on Dynamic Shape Capture and Analysis (4DMOD)*, 2011.

2010
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[C1] A. Albarelli, E. Rodola and A. Torsello,
A Game-Theoretic Approach to Fine Surface Registration without Initial Motion Estimation,

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[J1] T. Brox, B. Rosenhahn, J. Gall and D. Cremers,
Combined region- and motion-based 3D tracking of rigid and articulated objects,

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[C1] F. R. Schmidt and D. Cremers,
A Closed-Form Solution for Image Sequence Segmentation with Dynamical Shape Priors,
*Pattern Recognition (Proc. DAGM)*, Jena, Germany, September 2009.

[C2] F. R. Schmidt, E. Toeppe and D. Cremers,
Efficient Planar Graph Cuts with Applications in Computer Vision,
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Miami, Florida, 351-356, jun 2009, Received a CVPR Doctoral Spotlight Award.

2008
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[J1] D. Cremers,
Nonlinear Dynamical Shape Priors for Level Set Segmentation,

Conference and Workshop Papers

[C1] D. Cremers, F. R. Schmidt and F. Barthel,
Shape Priors in Variational Image Segmentation: Convexity, Lipschitz Continuity and Globally Optimal Solutions,
Keywords: Shape

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[C2] B. Andres, C. Nieuwenhuis, D. Kondermann, U. Köthe and R. Hamprecht,
On Errors-In-Variables Regression with Arbitrary Covariance and its Application to Optical Flow Estimation,

2007
Journal Articles

[J1] D. Cremers, M. Rousson and R. Deriche,
A review of statistical approaches to level set segmentation: integrating color, texture, motion and shape,

Book Chapters

[BC1] D. Cremers and M. Rousson,
Efficient kernel density estimation of shape and intensity priors for level set segmentation,

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[C1] T. Schoenemann and D. Cremers,
Globally Optimal Image Segmentation with an Elastic Shape Prior,

[C2] F. R. Schmidt, D Farin and D. Cremers,
Fast Matching of Planar Shapes in Sub-cubic Runtime,

[C3] F. R. Schmidt, E. Toeppe, D. Cremers and Y. Boykov,
Intrinsic Mean for Semimetrical Shape Retrieval via Graph Cuts,

[C4] F. R. Schmidt, E. Toeppe, D. Cremers and Y. Boykov,
Efficient Shape Matching via Graph Cuts,

[C5] D. Cremers,
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[J1] D. Cremers,
Dynamical statistical shape priors for level set based tracking,

[J2] S. Manay, D. Cremers, B.-W. Hong, A. Yezzi and S. Soatto,
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[C1] F. R. Schmidt, M. Clausen and D. Cremers,
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[C2] D. Cremers and L. Grady,
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[C3] T. Kohlberger, D. Cremers, M. Rousson and R. Ramaraj,
4D shape priors for level set segmentation of the left myocardium in SPECT sequences,

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[C2] S. Manay, D. Cremers, A. J. Yezzi and S. Soatto,
One-shot integral invariant shape priors for variational segmentation,

[C3] M. Rousson and D. Cremers,
Efficient kernel density estimation of shape and intensity priors for level set segmentation,
2004
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[C1] T. Brox, A. Bruhn, N. Papenberg and J. Weickert,
High accuracy optical flow estimation based on a theory for warping,
T. Pajdla and J. Matas(Eds.), European Conference on Computer Vision (ECCV), Prague, Czech Republic, Springer, LNCS, Vol. 3024, 25-36, may 2004, Received 'The Longuet-Higgins Best Paper Award'.

[C2] D. Cremers, S. J. Osher and S. Soatto,
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[C3] D. Cremers, N. Sochen and C. Schnörr,
Multiphase dynamic labeling for variational recognition-driven image segmentation,

2003
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[J1] D. Cremers, T. Kohlberger and C. Schnörr,
Shape Statistics in Kernel Space for Variational Image Segmentation,

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[C1] D. Cremers and S. Soatto,
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[C2] D. Cremers, N. Sochen and C. Schnörr,
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2002
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Nonlinear shape statistics in Mumford–Shah based segmentation,
A. Heyden and others(Eds.), European Conference on Computer Vision (ECCV), Copen-

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[C1] D. Cremers, C. Schm"{o}rr, J. Weickert and C. Schellewald,
Learning of translation invariant shape knowledge for steering diffusion sna-
kes,
G. Baratoff and H. Neumann(Eds.), Dynamische Perzeption, Ulm Germany, Infix, Pro-

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Diffusion Snakes using statistical shape knowledge,
C. Sommer and Y.Y. Zeevi(Eds.), Algebraic Frames for the Perception-Action Cycle, Kiel,