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Correspondence-Free Material Reconstruction using Sparse Surface Constraints,  
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[C33] C. Sommer, V. Usenko, D. Schubert, N. Demmel and D. Cremers,
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[C34] N. Yang, L. von Stumberg, R. Wang and D. Cremers,
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[C35] A. Fontan-Villacampa, J. Civera and R. Triebel,
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[C37] J. Wenger, H. Kjellström and R. Triebel,
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[C38] J. Lee, R. Balachandran, Y. Sarkisov, M. D Stefano, A. Coelho, K. Shinde, M. J. Kim, R. Triebel and K. Kondak,
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[C39] Z. Ye, T. Möllenhoff, T. Wu and D. Cremers,
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[C40] J Lee, M Humt, J Feng and R Triebel,
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[C41] J Liu, I Chiotellis, R Triebel and D Cremers,
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[C42] M Demninger and R Triebel,
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[C43] J. Du, R. Wang and D. Cremers,
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[C44] M Sewtz, T Bodenmüller and R Triebel,  
Robust MUSIC-Based Sound Source Localization in Reverberant and Echoic Environments,  

[C45] CL Gentil, M Vayugundla, R Giubilato, W Stürzl, TA. Vidal-Calleja and R Triebel,  
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[C47] L. Koestler, N. Yang, R. Wang and D. Cremers,  
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[C48] P. Wenzel, R. Wang, N. Yang, Q. Cheng, Q. Khan, L. von Stumberg, N. Zeller and D. Cremers,  
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[C50] M Aygün, Z Lähner and D Cremers,  
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[C53] M Stoiber, M Pfäme, K Strobl, R Triebel and A Albu-Schaeffer,  
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[C55] N Demmel, M Gao, E Laude, T Wu and D Cremers,  
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[C56] L. von Stumberg, P. Wenzel, N. Yang and D. Cremers,
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Convex Optimisation for Inverse Kinematics,

[C61] A. Vasilev, V. Golkov, M. Meissner, I. Lipp, E. Sgarlata, V. Tomassini, D. K. Jones and D. Cremers,
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[C64] M. Eisenberger, Z. Lähner and D. Cremers,
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[C65] E. Bylow, R. Maier, F. Kahl and C. Olsson,
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[C66] E. Laude, T. Wu and D. Cremers,
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[C67] T. Möllenhoff and D. Cremers,
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[C68] T. Möllenhoff and D. Cremers,
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[C69] T. Frerix and J. Bruna,
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[C71] E.Y. Puang, P. Lehner, Z.C. Marton, M. Durner, R. Triebel and A. Albu-Schäffer,
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[C74] S. Weiss, R. Maier, R. Westermann, D. Cremers and N. Thuerey,
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[C80] C. Hazirbas, S. G. Soyer, M. C. Staab, L. Leal-Taixe and D. Cremers, 
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[C94] D. Schubert, T. Goll, N. Demmel, V. Usenko, J. Stueckler and D. Cremers,  
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[C97] N. Yang, R. Wang, J. Stueckler and D. Cremers,  
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[C127] K. Kurach, S. Gelly, M. Jastrzebski, P. Haeusser, O. Teytaud, D. Vincent and O. Bousquet,
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[C128] P. Haeusser, T. Frerix, A. Mordvintsev and D. Cremers,
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[C131] R. Maier, R. Schaller and D. Cremers,
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[C132] J. Geiping, H. Dirks and D. Cremers,
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[C133] V. Golyanik, K. Kim, R. Maier, M. Niessner, D. Stricker and J. Kautz,
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[C137] T. Möllenhoff and D. Cremers,
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[C139] C Nissler, ZC Marton, H Kisner, U Thomas and R Triebel,
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*Semi-Supervised Deep Learning for Monocular Depth Map Prediction*,  

[C145] A. Kasyanov, F. Engelmann, J. Stueckler and B. Leibe,  
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[C147] L. Cosmo, A. Albarelli, F. Bergamasco, A. Torsello, E. Rodola and D. Cremers,  
*A game-theoretical approach for joint matching of multiple feature throughout unordered images*,  

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*A Large Dataset to Train Convolutional Networks for Disparity, Optical Flow, and Scene Flow Estimation*,  

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A Photometrically Calibrated Benchmark For Monocular Visual Odometry,

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[C161] E. Laude, T. Möllenhoff, M. Moeller, J. Lellmann and D. Cremers,
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q-Space Deep Learning for Twelve-Fold Shorter and Model-Free Diffusion MRI Scans,  
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[C184] A. Dosovitskiy, P. Fischer, E. Ilg, P. Haeusser, C. Hazirbas, V. Golkov, P. van der Smagt, D. Cremers and T. Brox,  
FlowNet: Learning Optical Flow with Convolutional Networks,  
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**SPENCER: A Socially Aware Service Robot for Passenger Guidance and Help in Busy Airports,**

[C186] D. Holz, A. Topalidou-Kyniazopoulou, J. Stueckler and S. Behnke,
**Real-Time Object Detection, Localization and Verification for Fast Robotic Depalletizing,**

[C187] J. Engel, J. Stueckler and D. Cremers,
**Large-Scale Direct SLAM with Stereo Cameras,**

[C188] D. Caruso, J. Engel and D. Cremers,
**Large-Scale Direct SLAM for Omnidirectional Cameras,**

[C189] Y. Tao, R. Triebel and D. Cremers,
**Semi-supervised Online Learning for Efficient Classification of Objects in 3D Data Streams,**

[C190] R. Maier, J. Stueckler and D. Cremers,
**Super-Resolution Keyframe Fusion for 3D Modeling with High-Quality Textures,**

[C191] V. Usenko, J. Engel, J. Stueckler and D. Cremers,
**Reconstructing Street-Scenes in Real-Time From a Driving Car,**

[C192] M. Jaimez, M. Souiai, J. Stueckler, J. Gonzalez-Jimenez and D. Cremers,
**Motion Cooperation: Smooth Piece-Wise Rigid Scene Flow from RGB-D Images,**

[C193] E. Rodola, M. Moeller and D. Cremers,
**Point-wise Map Recovery and Refinement from Functional Correspondence,**
*Proceedings Vision, Modeling and Visualization (VMV)*, Aachen, Germany, 2015, Received the Best Paper Award.

[C194] C. Kerl, J. Stueckler and D. Cremers,
**Dense Continuous-Time Tracking and Mapping with Rolling Shutter RGB-D Cameras,**
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[C195] M. Souiai, M. R. Oswald, Y. Kee, J. Kim, M. Pollefeys and D. Cremers,
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[C196] F. Stark, C. Hazirbas, R. Triebel and D. Cremers, 
**CAPTCHA Recognition with Active Deep Learning,**
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[C197] N. Nagaraja, F. R. Schmidt and T. Brox, 
**Video Segmentation with Just a Few Strokes,**
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[C199] J. Duran, M. Moeller, C. Sbert and D. Cremers, 
**A Novel Framework for Nonlocal Vectorial Total Variation Based on $\ell^{p,q,r}$ norms,**

**Novel Acquisition Scheme for Diffusion Kurtosis Imaging Based on Compressed-Sensing Accelerated DSI Yielding Superior Image Quality,**

**Total Variation-Regularized Compressed Sensing Reconstruction for Multi-Shell Diffusion Kurtosis Imaging,**

**Direct Reconstruction of the Average Diffusion Propagator with Simultaneous Compressed-Sensing-Accelerated Diffusion Spectrum Imaging and Image Denoising by Means of Total Generalized Variation Regularization,**

**Semi-Joint Reconstruction for Diffusion MRI Denoising Imposing Similarity of Edges in Similar Diffusion-Weighted Images,**

**Improved Diffusion Kurtosis Imaging and Direct Propagator Estimation Using 6-D Compressed Sensing,**

[C205] D. B. AD. CJ. C D. Weikersdorfer, 
**Event-based 3D SLAM with a depth-augmented dynamic vision sensor,**
[C206] F. Steinbruecker, J. Sturm and D. Cremers,
Volumetric 3D Mapping in Real-Time on a CPU,

[C207] E. Rodola, S. R Bulo, T. Windheuser, M. Vestner and D. Cremers,
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[C208] Y. Kee, M. Souiai, D. Cremers and J. Kim,
Sequential Convex Relaxation for Mutual-Information-Based Unsupervised
Figure-Ground Segmentation,
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[C209] H. Alvarez, L.M. Paz, J. Sturm and D. Cremers,
Collision Avoidance for Quadrotors with a Monocular Camera,

[C210] J. Engel, T. Schöps and D. Cremers,
LSD-SLAM: Large-Scale Direct Monocular SLAM,
*European Conference on Computer Vision (ECCV)*, September 2014, Oral Presentation.

[C211] T. Schöps, J. Engel and D. Cremers,
Semi-Dense Visual Odometry for AR on a Smartphone,

[C212] T. Windheuser, M. Vestner, E. Rodola, R. Triebel and D. Cremers,
Optimal Intrinsic Descriptors for Non-Rigid Shape Analysis,

[C213] M. Strobel, J. Diebold and D. Cremers,
Flow and Color Inpainting for Video Completion,
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[C214] R. Maier, J. Sturm and D. Cremers,
Submap-based Bundle Adjustment for 3D Reconstruction from RGB-D Data,
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[C215] T. Gurdan, M. R. Oswald, D. Gurdan and D. Cremers,
Spatial and Temporal Interpolation of Multi-View Image Sequences,
*German Conference on Pattern Recognition (GCPR)*, Münster, Germany, Vol. 36, sep 2014.

[C216] M. R. Oswald and D. Cremers,
Surface Normal Integration for Convex Space-time Multi-view Reconstruction,

[C217] C. Nieuwenhuis, S. Hawe, M. Kleinsteuber and D. Cremers,
Co-Sparse Textural Similarity for Interactive Segmentation,

[C218] M. R. Oswald, J. Stühmer and D. Cremers,
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[C219] E. Strekalovskiy and D. Cremers,
Real-Time Minimization of the Piecewise Smooth Mumford-Shah Functional,

[C220] A. Kanezaki, E. Rodola and T. Harada,
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[C221] A. Kanezaki, E. Rodola, D. Cremers and T. Harada,
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[C222] M. Andreux, E. Rodola, M. Aubry and D. Cremers,
Anisotropic Laplace-Beltrami Operators for Shape Analysis,
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[C223] O. Dunkley, J. Engel, J. Sturm and D. Cremers,
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[C224] R. Triebel, J. Stühmer, M. Souiai and D. Cremers,
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[C225] S. Debnath, S. S. Baishya, R. Triebel, V. Dutt and D. Cremers,
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[C226] A. Kanezaki, E. Rodola, D. Cremers and T. Harada,
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INS-Camera Calibration without Ground Control Points,
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Towards Illumination-invariant 3D Reconstruction using ToF RGB-D Cameras,
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[C229] J. Stueckler and S. Behnke,
Adaptive Tool-Use Strategies for Anthropomorphic Service Robots,
[C230] D. Droeschel, J. Stueckler and S. Behnke,
Local Multi-Resolution Surfel Grids for MAV Motion Estimation and 3D Mapping,

[C231] J. Stueckler, A. Gutt and S. Behnke,
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[C232] J. Stueckler and S. Behnke,
Efficient deformable registration of multi-resolution surfel maps for object manipulation skill transfer,

[C233] D. Droeschel, J. Stueckler and S. Behnke,
Local multi-resolution representation for 6D motion estimation and mapping with a continuously rotating 3D laser scanner,
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[C234] M. Schwarz, J. Stueckler and S. Behnke,
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[C235] F. R. Schmidt, T. Windheuser, U. Schlickewei and D. Cremers,
Dense Elastic 3D Shape Matching,

[C236] J Bergbauer and S Tari,
Wimmelbild Analysis with Approximate Curvature Coding Distance Images,

[C237] J Bergbauer and S Tari,
Top-down visual search in Wimmelbild,

[C238] F. Bergamasco, A. Albarelli, E. Rodola and A. Torsello,
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[C239] M. Souiai, C. Nieuwenhuis, E. Strekalovskiy and D. Cremers,
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ICCV Workshop on Graphical Models for Scene Understanding, 2013.


E. Toeppe, C. Nieuwenhuis and D. Cremers,  
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*Toward Automated Driving in Cities using Close-to-Market Sensors*,  

H. Grimmett, R. Paul, R. Triebe and I. Posner,  
*Knowing When We Don’t Know: Introspective Classification for Mission-Critical Decision Making*,  

A. SD. C D. Weikersdorfer,  
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R. Triebe, H. Grimmett and I. Posner,  
*Confidence Boosting: Improving the Introspectiveness of a Boosted Classifier for Efficient Learning*,  

R. Triebe, H. Grimmett, R. Paul and I. Posner,  
*Introspective Active Learning for Scalable Semantic Mapping*,  

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*Real-Time Camera Tracking and 3D Reconstruction Using Signed Distance Functions*,  

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*Direct Camera Pose Tracking and Mapping With Signed Distance Functions*,  
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J. Sturm and W. Burgard,  
*Learning Probabilistic Models for Mobile Manipulation Robots*,  
*Proc. of the International Joint Conference on Artificial Intelligence (IJCAI)*, Track on Best papers in Sister Conferences, 2013.

M. Souiai, E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,  
*A Co-occurrence Prior for Continuous Multi-Label Optimization*,  

F. Stangl, M. Souiai and D. Cremers,  
*Performance Evaluation of Narrow Band Methods for Variational Stereo*,  
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[C282] T. Fiolka, J. Stueckler, D. A. Klein, D. Schulz and S. Behnke,
Distinctive 3D surface entropy features for place recognition.,

[C283] A. Berner, J Li, D. Holz, J. Stueckler, S. Behnke and R. Klein,
Combining contour and shape primitives for object detection and pose estimation of prefabricated parts,

[C284] J. Stueckler and S. Behnke,
Hierarchical Object Discovery and Dense Modelling From Motion Cues in RGB-D Video,

[C285] M. Nieuwenhuisen, D. Droeschel, D. Holz, J. Stueckler, A. Berner, J Li, R. Klein and S. Behnke,
Mobile bin picking with an anthropomorphic service robot,

[C286] L. Gorelick, F. R. Schmidt and Y. Boykov,
Fast Trust Region for Segmentation,

[C287] L. Ma, T. Whelan, E. Bondarev, P. H. N. de With and J. McDonald,
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[C288] E. Rodola, A.M. Bronstein, A. Albarelli, F. Bergamasco and A. Torsello,
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[C289] F. Endres, J. Hess, N. Engelhard, J. Sturm, D. Cremers and W. Burgard,
An Evaluation of the RGB-D SLAM System,

[C290] T. Ruehr, J. Sturm, D. Pangercic, M. Beetz and D. Cremers,
A Generalized Framework for Opening Doors and Drawers in Kitchen Environments,

[C291] D Joho, GD Tipaldi, N Engelhard, C Stachniss and W Burgard,
Nonparametric Bayesian Models for Unsupervised Scene Analysis and Reconstruction,

[C292] M. Schikora, A. Gning, L. Mihaylova, D. Cremers, W. Koch and R. Streit,
Box-Particle Intensity Filter,
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[C293] M. Schikora, A. Gning, L. Mihaylova, D. Cremers and W. Koch,
Box-Particle PHD Filter for Multi-Target Tracking,
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[C294] L. Zhang, J. Sturm, D. Cremers and D. Lee,
Real-Time Human Motion Tracking using Multiple Depth Cameras,

[C295] E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,
Nonmetric Priors for Continuous Multilabel Optimization,

[C296] T. Windheuser, H. Ishikawa and D. Cremers,
Generalized Roof Duality for Multi-Label Optimization: Optimal Lower Bounds and Persistency,
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Meeting on Image Recognition and Understanding, Fukuoka, Japan, aug 2012.

[C298] M. R. Oswald, E. Toeppe and D. Cremers,
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A Convex Representation for the Vectorial Mumford-Shah Functional,
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[C300] J. Engel, J. Sturm and D. Cremers,
Camera-Based Navigation of a Low-Cost Quadrocopter,

[C301] J. Sturm, N. Engelhard, F. Endres, W. Burgard and D. Cremers,
A Benchmark for the Evaluation of RGB-D SLAM Systems,

[C302] J. Engel, J. Sturm and D. Cremers,
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[C303] J. Sturm, W. Burgard and D. Cremers,
Evaluating Egomotion and Structure-from-Motion Approaches Using the TUM RGB-D Benchmark,


[C314] G. M. Garcia, D. A. Klein, J. Stueckler, S. Frintrop and A. B. Cremers, 
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[C315] J. Stueckler and S. Behnke, 

[C316] M. Nieuwenhuisen, J. Stueckler, A. Berner, R. Klein and S. Behnke, 
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[C317] J. Kläś, J. Stueckler and S. Behnke, 
Efficient Mobile Robot Navigation using 3D Surfel Grid Maps, 

[C318] J. Stueckler and S. Behnke, 
Robust Real-Time Registration of RGB-D Images using Multi-Resolution Surfel Representations, 

[C319] V. Usenko, F. Seidel, Z. Marton, D. Pangercic and M. Beetz, 
Furniture Classification using WWW CAD Models, 

[C320] F. R. Schmidt and Y. Boykov, 
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[C321] L. Gorelick, F. R. Schmidt, Y. Boykov, A. Delong and A. Ward, 
Segmentation with non-linear regional constraints via line-search cuts, 

[C322] A. Torsello, E. Rodola and A. Albarelli, 
Multiview Registration via Graph Diffusion of Dual Quaternions, 

[C323] F. Bergamasco, A. Albarelli, E. Rodola and A. Torsello, 
RUNE-Tag: a High Accuracy Fiducial Marker with Strong Occlusion Resilience, 

[C324] A. Albarelli, E. Rodola and A. Torsello, 
A Non-Cooperative Game for 3D Object Recognition in Cluttered Scenes, 
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[C325] A. Torsello, E. Rodola and A. Albarelli, 
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[C327] M. Aubry, U. Schlickewei and D. Cremers,
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On a linear programming approach to the discrete Willmore boundary value problem and generalizations,

[C329] E. Strekalovskiy and D. Cremers,
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[C330] B. Goldluecke and D. Cremers,
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[C331] E. Strekalovskiy, B. Goldluecke and D. Cremers,
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[C332] M. Aubry, K. Kolev, B. Goldluecke and D. Cremers,
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*IEEE International Conference on Computer Vision (ICCV)*, 2011.

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[C334] J. Hess, J. Sturm and W. Burgard,
Learning the State Transition Model to Efficiently Clean Surfaces with Mobile Manipulation Robots,
*Proc. of the Workshop on Manipulation under Uncertainty at the IEEE Int. Conf. on Robotics and Automation (ICRA)*, Shanghai, China, May 2011.

[C335] N. Engelhard, F. Endres, J. Hess, J. Sturm and W. Burgard,
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[C337] C. Nieuwenhuis, E. Toeppe and D. Cremers,  
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[C339] M. Aubry, U. Schlickewei and D. Cremers,  
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[C340] F. Steinbruecker, J. Sturm and D. Cremers,  
Real-Time Visual Odometry from Dense RGB-D Images,  
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[C342] M. Schikora, M.Oispuu, W. Koch and D. Cremers,  
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[C343] S. Madhogaria, M. Schikora, W. Koch and D. Cremers,  
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[C344] M. Schikora, W. Koch, R.L. Streit and D. Cremers,  
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[C347] E. Toeppe, M. R. Oswald, D. Cremers and C. Rother,
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A Survey on Geometry Recovery from a Single Image with Focus on Curved Object Reconstruction,

[C349] J. Shin, R. Triebel and R. Siegwart,
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[C350] J. Maye, R. Triebel, L. Spinello and R. Siegwart,
Bayesian On-line Learning of Driving Behaviors,

[C351] B. Oehler, J. Stueckler, J. Welle, D. Schulz and S. Behnke,
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Following human guidance to cooperatively carry a large object,

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Compliant Task-Space Control with Back-Drivable Servo Actuators,

[C355] D. Droeschel, J. Stueckler, D. Holz and S. Behnke,
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[C363] E. Rodola, A. Albarelli and A. Torsello,
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[C364] A. Albarelli, E. Rodola and A. Torsello,
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[C365] A. Albarelli, E. Rodola and A. Torsello,
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Passive Multi-Object Localization and Tracking Using Bearing Data,
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[C374] B. Goldluecke and D. Cremers,
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[C375] C. Nieuwenhuis and D. Kondermann,
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[C376] C. Nieuwenhuis, B. Berkels and M. Rumpf,
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