

Table of Contents

About the Special Issue Editors	v
Preface to "Crystal Indentation Hardness"	vii
Ronald W. Armstrong, Stephen M. Walley and Wayne L. Elban Crystal Indentation Hardness doi: 10.3390/cryst7010021	1
Mao Liu, Jhe-yu Lin, Cheng Lu, Kiet Anh Tieu, Kun Zhou and Toshihiko Koseki Progress in Indentation Study of Materials via Both Experimental and Numerical Methods doi: 10.3390/cryst7100258	10
Boris A. Galanov, Yuly V. Milman, Svetlana I. Chugunova, Irina V. Goncharova and Igor V. Voskoboinik Application of the Improved Inclusion Core Model of the Indentation Process for the Determination of Mechanical Properties of Materials doi: 10.3390/cryst7030087	48
Carlos J. Ruestes, Iyad Alabd Alhafez and Herbert M. Urbassek Atomistic Studies of Nanoindentation—A Review of Recent Advances doi: 10.3390/cryst7100293	61
Garani Ananthakrishna and Srikanth Krishnamoorthy A Novel Approach to Modelling Nanoindentation Instabilities doi: 10.3390/cryst8050200	76
George Z. Voyiadjis and Mohammadreza Yaghoobi Review of Nanoindentation Size Effect: Experiments and Atomistic Simulation doi: 10.3390/cryst7100321	102
Xiaowen Hu and Yushan Ni The Effect of the Vertex Angles of Wedged Indenters on Deformation during Nanoindentation doi: 10.3390/cryst7120380	130
Jiangjiang Hu, Yusheng Zhang, Weiming Sun and Taihua Zhang Nanoindentation-Induced Pile-Up in the Residual Impression of Crystalline Cu with Different Grain Size doi: 10.3390/cryst8010009	144
Kun Sun, Junqin Shi and Lifeng Ma Atomistic Insights into the Effects of Residual Stress during Nanoindentation doi: 10.3390/cryst7080240	154
Jian Song, Yue Liu, Zhe Fan and Xinghang Zhang Thickness-Dependent Strain Rate Sensitivity of Nanolayers via the Nanoindentation Technique doi: 10.3390/cryst8030128	169
Brian K. Tanner, David Allen, Jochen Wittge, Andreas N. Danilewsky, Jorge Garagorri, Eider Gorostegui-Colinas, M. Reyes Elizalde and Patrick J. McNally Quantitative Imaging of the Stress/Strain Fields and Generation of Macroscopic Cracks from Indents in Silicon doi: 10.3390/cryst7110347	178

Claudio Ferrari, Corneliu Ghica and Enzo Rotunno A Study of Extended Defects in Surface Damaged Crystals doi: 10.3390/cryst8020067	191
Koji Kosai, Hu Huang and Jiawang Yan Comparative Study of Phase Transformation in Single-Crystal Germanium during Single and Cyclic Nanoindentation doi: 10.3390/cryst7110333	198
Shiquan Feng, Xuerui Cheng, Xinlu Cheng, Jinsheng Yue and Junyu Li Theoretical Study on Electronic, Optical Properties and Hardness of Technetium Phosphides under High Pressure doi: 10.3390/cryst7060176	209
Sowjanya Mannepalli and Kiran S. R. N. Mangalampalli Indentation Plasticity and Fracture Studies of Organic Crystals doi: 10.3390/cryst7110324	218
Sergey Dub, Petro Lytvyn, Viktor Strelchuk, Andrii Nikolenko, Yuri Stubrov, Igor Petrusha, Takashi Taniguchi and Sergey Ivakhnenko Vickers Hardness of Diamond and cBN Single Crystals: AFM Approach doi: 10.3390/cryst7120369	257
Alexandra C. Burch, John D. Yeager and David F. Bahr Nanoindentation of HMX and Idoxuridine to Determine Mechanical Similarity doi: 10.3390/cryst7110335	270
Takeharu Kishi, Ryo Suzuki, Chika Shigemoto, Hidenobu Murata, Kenichi Kojima and Masaru Tachibana Microindentation Hardness of Protein Crystals under Controlled Relative Humidity doi: 10.3390/cryst7110339	279
Ashwin Jayaraman, M. S. R. N. Kiran and Upadrasta Ramamurty Mechanical Anisotropy in Austenitic NiMnGa Alloy: Nanoindentation Studies doi: 10.3390/cryst7080254	293
Indranil Basu, Herman Fidler, Václav Ocelík and Jeff Th.M de Hosson Local Stress States and Microstructural Damage Response Associated with Deformation Twins in Hexagonal Close Packed Metals doi: 10.3390/cryst8010001	303
Prem C. Jindal A New Method for Evaluating the Indentation Toughness of Hardmetals doi: 10.3390/cryst8050197	318