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Nota di contenuto	About the Special Issue Editors -- Megumi Kawasaki and Jae-il Jang -- Micro-Mechanical Response of an Al-Mg Hybrid System Synthesized by High-Pressure Torsion doi: 10.3390/ma10060596 1 -- Pardhasaradhi Sudharshan Phani and Warren Carl Oliver -- Ultra High Strain Rate Nanoindentation Testing doi: 10.3390/ma10060663 16 -- Carla C. C. R. de Carvalho, Patrick L. Incio, Rosa M. Miranda and Telmo G. Santos -- Using Biotechnology to Solve Engineering Problems: Non-Destructive Testing of Microfabrication Components doi: 10.3390/ma10070788 28 -- Mingzhi Wang, Jianjun Wu, Hongfei Wu, Zengkun Zhang and He Fan -- A Novel Approach to Estimate the Plastic Anisotropy of Metallic Materials Using CrossSectional Indentation Applied to Extruded Magnesium Alloy AZ31B doi: 10.3390/ma10091065 43 -- Brandon B. Seo, Zeinab Jahed, Jennifer A. Coggan, Yeung Yeung Chau, Jacob L. Rogowski, Frank X. Gu, Weijia Wen, Mohammad R. K. Mofrad and Ting Yiu Tsui -- Mechanical Contact Characteristics of PC3 Human Prostate Cancer Cells on ComplexShaped Silicon Micropillars doi: 10.3390/ma10080892 57 -- Branko Savija, Hongzhi Zhang and Erik Schlangen -- Influence of Microencapsulated Phase Change Material (PCM) Addition on (Micro) -- Mechanical Properties of Cement Paste doi: 10.3390/ma10080863 73 -- Salim Barbhuiya and Benjamin Caracciolo -- Characterisation of Asphalt Concrete Using Nanoindentation doi: 10.3390/ma10070823 91 --

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Sommario/riassunto

This Special Issue "Advanced Nanoindentation in Materials" contains some of the latest developments in the field of small-scale contact mechanics for a wide range of materials and biological cells. The featured manuscript revealed a new ultra-high strain rate nanoindentation method that will enable new scientific understanding of time-dependent material properties. The book also presents unique material properties of super alloys and other structural materials characterized by indentation methods. In addition to engineering materials, deformation behaviors of live cancer cells on sharp pillar structures were discussed in this book with the hope to stimulate interest in the mechanical contact behaviors of biological cells.
