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Target. Static Model of Material Response; 3. Evolution of Thermal Stress in Time; 4. Summary; 5. Outlook; Acknowledgments; References; Why K-Factor in ILC Undulator Should Be Small Alexander A. Mikhailichenko; Overview; Some Technical Details [9]; Polarization and the Energy Separation; Calculations with Konn; Summary; References Status of Prototyping of the ILC Positron Target 1. Gronberg, Craig Brooksby, Tom Piggott, Ryan Abbott, Jay Javedani, Ed Cook 1. Positron Source Overview; 2. Prototyping of the Ferrofluidic Seal; 3. Prototyping of the Pulsed Flux Concentrator Magnet; 4. Future Work; Acknowledgments; References; Heat Load and Stress Studies for an Design of the Photon Collimator for the ILC Positron Source F. Staufenbiel, S. Riemann, O.S. Adeyemi, V. Kovalenko, L Malysheva, A. Ushakov, G. Moortgat-Pick; 1 Introduction; 2 Production of polarized positrons by helical undulator radiation 3 Heat load studies for photon collimators 3.1 Previous photon collimator design; 3.2 Moveable multistage collimators; 3.3 Optimized collimator design; 3.3.1 Dimensions of the first collimator with 2.0mm aperture; 3.3.2 Dimensions of the second collimator with 1.4mm aperture; 3.3.3 Dimensions of the third collimator with 1.0mm aperture; 4 Radial heat dissipation for cylindrical collimators; 5 Conclusion; Acknowledgments; References; Lithium Lens for ILC Alexander A. Mikhailichenko; OVERVIEW; THE LITHIUM LENS CONCEPT; 1. COMPARISON WITH FERMILAB LENSES; SOME TECHNICAL DETAILS; SUMMARY REFERENCES

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Sommario/riassunto

This volume is a collection of the contributions to the 6th Annual Workshop on Polarized Positron held in China. It provides updated information on polarized positron source R&D efforts for future high energy linear colliders and other research activities related to the polarized positron studies. The topics covered include: positron beams for linear colliders, but not limited to it, with the main items listed below: Polarized gamma ray generation High degree polarized positron generation from Compton scattering both ring and linac based High degree polarized positron generation from undulator

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