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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

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