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Applications of Nuclear Physics Accelerators for Photon Science[1]

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Synchrotron radiation has been extensively developed as a source of high brightness light for materials science, chemistry and biology. Gains in brightness of 12 orders of magnitude have been achieved over conventional x-ray tubes. Now a new evolution is being enabled using superconducting linear accelerators to produce coherent light with a brightness another 8 orders of magnitude higher still. We will review the prospects of this development for photon science.

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