Enhancing X-Ray Generation by Electron-Beam–Laser Interaction in an Optical Bragg Structure

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We demonstrate that x-ray radiation emitted by relativistic electrons scattered by a counter-propagating laser pulse guided by an adequate Bragg structure surpasses by about 2 orders of magnitude the energy generated by a conventional free-space Gaussian-beam configuration, given the same e beam and injected laser power in both configurations.

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