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Sculpting coherent x-ray light with visible lasers. When an atom is hit by a strong rosette-shaped laser field (purple) (a superposition of red and blue circularly polarized lasers with opposite helicities), an electron (green) is ripped from, and recoiled with, the parent ion. The result is the emission of bright, circularly polarized light at extreme ultraviolet wavelengths (blue). For more on cutting-edge advances in light and optics, see page 514. Image: The Kapteyn/Murnane Group and Steve Burrows, JILA; and the Cohen Group, Technion.

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