harmonic frequency generation

Production of coherent radiation of frequency \( k \nu \) \((k = 2, 3, \ldots)\) from coherent radiation of frequency. In general, this effect is obtained through the interaction of laser light with a suitable optical medium with non-linear polarizability. The case \( k = 2 \) is referred to as frequency doubling, \( k = 3 \) is frequency tripling and \( k = 4 \) is frequency quadrupling. Even higher integer values of \( k \) are possible.

Source:
PAC, 1996, 68, 2223 (Glossary of terms used in photochemistry (IUPAC Recommendations 1996)) on page 2245