Lasing Without Inversion

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References

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1 Abstract (∼100 words)

2 Introduction (∼300 words)

Edited this. In 1960, Theodore Maiman invented the world's first experimental example of light amplification by stimulated emission of radiation, today commonly known as the laser. The light
[1, 2, 3, 4, 5, 6, 7, 8, 9]

3 Theoretical Methodology (∼750)

3.1 Normal Laser with Inversion 2-level system) (∼250 words)

3.2 Amplification without Inversion (AwI) 3-level system (∼250 words)

3.3 Amplification without Inversion (AwI) Multi-level system (∼250 words)

4 Experimental Confirmation (∼750 words)

4.1 First confirmation of AwI, Zeeman coherence (∼250 words)

Nottelmann et al. 1993 [10]

4.2 2nd confirmation of AwI, D_1 line atomic sodium (∼250 words)

Fry et al. 1993 [11]

4.3 3rd confirmation of AwI, Cadmium Vapour (∼250 words)

van der Veer et al. 1993 [12]

5 Applications (∼750 words)

5.1 Short wavelength lasers

5.1.1 X-ray lasers (∼250 words)

5.1.2 γ - ray lasers (∼250 words)

5.2 Electromagnetically Induced Transparency (∼250 words)

6 State-of-the-art and Future Development (∼300 words)

7 Conclusion (∼100 words)

Word count: ∼3050