Lasing Without Inversion

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References

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1 Abstract (∼100 words)

2 Introduction (∼300 words)

Finally oit works. 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