

EVOLUTION OF LUMINESCENT EMISSION  
IN MEDIA WITH AMPLIFICATION  
AND MULTIPLE LIGHT  
SCATTERING

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S u m m a r y

We have carried out the experimental research and analysis of the new phenomenon of a stimulated radiation in media with amplification and multiple light scattering. It is shown that the strong multiple light scattering, at which the partial localization of photons occurs within the scope of a pumping area and the necessary amplification is realized, promotes the development of a stimulated radiation with all signs of superluminescence like that in ballistic modes for transparent laser media. The phenomenon runs without the catastrophes typical of resonator lasers. The localization light paradigms at multiple scattering and the light localization in resonator modes are discussed.