



International Journal of Engineering and Science Invention

e-ISSN: 2319 – 6734 p-ISSN: 2319 – 6726

CERTIFICATE

It is certify that the paper entitled by *“Energy-transfer enhanced mid-infrared luminescence at 2.75 μ m of Er³⁺/Pr³⁺ co-doped ZBLAY glass”* has been published in International Journal of Engineering and Science Invention (IJESI).

Your article has been published with following details:

Author's Name: Yueming Zhang

Journal Name: International Journal of Engineering and Science Invention (IJESI)

Journal Web: www.ijesi.org

Journal Type: Online & Offline

Review Type: Peer Review Refereed

Publication Year: 2023

Publication Month: April

Vol No.: 12

Issue No.: 04



Editor-In-Chief

International Journal of Engineering and Science Invention (IJESI)

E-mail ID: ijesi@invmails.com

Web: www.ijesi.org

Impact Factor : 5.96

UGC Approval Serial Number: 2573 & UGC Journal Number: 43302



International Journal of Engineering and Science Invention

e-ISSN: 2319 – 6734 p-ISSN: 2319 – 6726

CERTIFICATE

It is certify that the paper entitled by *“Energy-transfer enhanced mid-infrared luminescence at 2.75 μ m of Er³⁺/Pr³⁺ co-doped ZBLAY glass”* has been published in International Journal of Engineering and Science Invention (IJESI).

Your article has been published with following details:

Author's Name: Shaohua Wu
Journal Name: International Journal of Engineering and Science Invention (IJESI)
Journal Web: www.ijesi.org
Journal Type: Online & Offline
Review Type: Peer Review Refereed
Publication Year: 2023
Publication Month: April
Vol No.: 12
Issue No.: 04



Editor-In-Chief
International Journal of Engineering and Science Invention (IJESI)
E-mail ID: ijesi@invmails.com
Web: www.ijesi.org

Impact Factor : 5.96

UGC Approval Serial Number: 2573 & UGC Journal Number: 43302