

**VELALAR COLLEGE OF ENGINEERING & TECHNOLOGY-ERODE-12**  
**DEPARTMENT OF MECHANICAL ENGINEERING**  
**FACULTY JOURNAL PUBLICATION DETAILS**  
**ACADEMIC YEAR 2023-2024**

S.NO	NAME OF THE FACULTY	TITLE OF PUBLICATION	JOURNAL NAME	MONTH & YEAR OF PUBLICATION	VOL. No.	ISSUE No.	PAGE No.	ISSN / ISBN	doi
1.	Dr. M. Jayaraman	Fractographic Study on the Fatigue Failure Surfaces of Heat-Treated and Shot Peened EN- 8 Steel (080M40/AISI 1040)	Indian Journal of Engineering & Materials Sciences	AUG & 2023	30	4		0971-4588 (Print); 0975-1017 (Online)	<a href="https://doi.org/10.56042/ijems.v30i4.961">https://doi.org/10.56042/ijems.v30i4.961</a>
2.	G. Raja	Automatic LPG Gas Booking Using GSM Module	Gradiva Review Journal	OCT & 2023	9	10	558-567	0363-8057	10.37897.GRJ.2023
3.	G. Raja	Effect Of Zinc Oxide— Aluminium Oxide Mechanical Blends for Boosting the Polycrystalline Silicon Solar Cell Performance through Antireflection Properties	Silicon	OCT & 2023	15		6375-6386	ISSN: 1876-9918s	10.1007/s12633-023-02515-2
4.	G. Raja	Surface engineering of Sio2-Zro2 films for augmenting power conversion efficiency performance of silicon solar cells	Journal of Materials Research and Technology	DEC & 2023	28		1475-1482	Online ISSN: 2214-0697 Print ISSN: 2238-7854	<a href="https://doi.org/10.1016/j.jmrt.2023.12.119">https://doi.org/10.1016/j.jmrt.2023.12.119</a>
5.	T.C.R. Dinesh & S. Karvendhan	Advancements and Applications of Friction Stir Welding: A Comprehensive Review	International Journal of Scientific Research in Engineering and Management	FEB & 2024	8	2		2582-3930	<a href="https://www.doi.org/10.55041/IJSREM28740">https://www.doi.org/10.55041/IJSREM28740</a>

			(IJSREM)						
6.	G. Raja	Enhanced efficiency of mono-crystalline Si solar cells utilizing RF sputtered TiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> blended anti-reflection coating for optimal sunlight transmission and energy conversion	Ceramics International, Elsevier	FEB & 2024	50	9	14865-14877	Print ISSN: 0272-8842 Online ISSN: 1873-3956	<a href="https://doi.org/10.1016/j.ceramint.2024.01.402">https://doi.org/10.1016/j.ceramint.2024.01.402</a>
7.	G. Raja	Application of gahnite reinforced cyclic olefin copolymer cover sheets on Si solar cell for augmenting the Power conversion efficiency	Journal of Materials Science: Materials in Electronics, Springer	MARCH & 2024	35	10		ISSN: 1573-482X	<a href="https://doi.org/10.1007/s10854-024-12417-7">https://doi.org/10.1007/s10854-024-12417-7</a>
8.	G. Raja	Enhancing photovoltaic cell efficiency: A comprehensive study on BN-Si <sub>3</sub> N <sub>4</sub> blend antireflective coatings and their impact on power conversion	Ceramics International	APRIL & 2024	50	13	23958-23969	Print ISSN: 0272-8842 Online ISSN: 1873-3956	<a href="https://doi.org/10.1016/j.ceramint.2024.04.126">https://doi.org/10.1016/j.ceramint.2024.04.126</a>
9.	Dr. R. Kumaravelan	Effect of hybrid filler loading (Polyalthia longifolia seed and graphite) on the mechanical and thermal properties of vinyl ester composites	Polymer Composites	MAY & 2024	45	7	6318-6331	ISSN: 0272-8397	<a href="https://doi.org/10.1002/pc.28199">https://doi.org/10.1002/pc.28199</a>