

Publications

Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
Sumesh S, AR. Veerappan and S. Shanmugam	Assessment of Plastic Loads of Critical Throughwall Circumferentially Cracked Pipe Bends with Structural Distortions Under In-plane Bending	Thin Walled Structures	vol. 669	144-151	2016	1.749
Sumesh S, AR. Veerappan and S. Shanmugam,	Influence of Structural Distortions on Type 304 Stainless Steel 90° Pipe Bends with Critical Circumferential Throughwall Cracks under Bending Moment and Internal Pressure,	International Journal of Applied Engineering Research	Vol. 10 No.24	21200-21204	2015	0.16
T. Christo Michael, AR. Veerappan, S. Shanmugam,	Finite Element Analysis of Shape-Imperfect Pipe Bends under In-Plane Closing Moment	International Journal of Applied Engineering Research	Vol. 10 No.24		2015	0.16
G. Muthu, S. Shanmugam, AR.Veerappan	Numerical Modeling of Year-Round Performance of a Solar Parabolic Dish Thermoelectric Generator	Journal of Electronic Materials	Vol. 44 No. 8	2631 – 2637	2015	1.491
G. Muthu, S. Shanmugam, AR.Veerappan	Mathematical Modeling of Thermoelectric Generator with Solar Parabolic Dish	Applied Mechanics and Materials	vol-104	558-563	2015	0.16
A. Buckshumiyam, AR. Veerappan, S. Shanmugam	Determination of collapse loads in pipe bends with ovality and variable wall thickness under internal pressure and in-plane opening moment	Intl. Jl. of Pressure Vessels and Piping,	vol. 123-124,	1-9	2014	1.078
Sumesh. S., AR. Veerappan, and S. Shanmugam	A Study on the effect of shape irregularities on collapse loads of pipe bends with critical circumferential through wall crack under in-plane closing bending,	Applied Mechanics and Materials	vol. 592-594	980-984	2014	0.11
Buckshumiyam A.,	Effect of shape imperfections on thin-walled pipe	Applied Mechanics	vol.	1050-	2014	0.11

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
AR. Veerappan, and S. Shanmugam,	bends under out-of-plane moment and internal	and Materials pressure	592-594	1054		
G.Muthu, S. Shanmugam, and AR.Veerappan,	Energy and exergy analysis of solar parabolic dish thermoelectric generator	Applied Mechanics and Materials	vol. 592-594	2437-2441	2014	0.11
G. Muthu, S. Shanmugam, AR. Veerappan,	Solar parabolic dish thermoelectric generator with acrylic cover	Energy Procedia	vol.54	2–10	2014	1.13
M. Eswaramoorthy, and S. Shanmugam, AR. Veerappan,	Modeling and analysis of a solar parabolic dish thermoelectric generator	Energy Sources Part A: Recovery, Utilization, and Environmental Effects	vol.36, no.14	1531-1539	2014	0.358
S. Shanmugam, AR. Veerappan, and M. Eswaramoorthy	An experimental evaluation of energy and exergy efficiency of a solar parabolic dish thermoelectric power generator	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	vol.36, no.17	1865-1870	2014	0.358
S. Shanmugam, P. Kumar, and AR. Veerappan	Thermal performance of a solar dryer with oscillating bed for drying of non-parboiled paddy grains	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	vol.36, no.17	1877-1885	2014	0.358
S. Narayan, A. Rajesh Kannan, K. S. Pandey, S. Shanmugam	Workability behaviour of Fe-C-Mo steel preform during cold forging	Jl. of Iron and Steel Research International	vol.20, issue 9	126-130	2013	0.357
M. Eswaramoorthy, and S. Shanmugam	Solar parabolic dish thermoelectric generator: a technical study	Energy Sources, Part A: Recovery,	vol.35, no.5	487-494	2013	0.358

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		Utilization, and Environmental Effects				
S. Shanmugam, and P. Kumar	Performance of an oscillating bed solar dryer for sunflower seeds	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	vol. 35, Issue 3	282-289	2013	0.358
S. Shanmugam, P. Kumar, and AR. Veerappan	Modeling and experimental studies on oscillating inclined-bed solar dryer	Jl. of Solar energy Engineering, Transactions of the ASME,	vol.135	1-6	2013	1.132
T. Christo Michael, AR. Veerappan, S. Shanmugam	Effect of internal pressure and shape imperfections on plastic loads of pipe bends under in-plane closing moment	Engineering Fracture Mechanics	vol.105	1-15	2013	1.662
A. Buckshumiyam, AR. Veerappan, S. Shanmugam	Plastic collapse loads in shape-imperfect pipe bends under in-plane opening bending moment	Intl. Jl. of Pressure Vessels and Piping	vol. 111-112	12-26	2013	1.078
Rajeshkannan, A., Pandey K.S., and Shanmugam, S, and Narayan, S	Some studies on sintered cold deformed plain carbon alloy steels	Materials & Design;	vol. 33	115-120	2012	1.107
T. Christo Michael, AR. Veerappan, S. Shanmugam	Effect of ovality and variable wall thickness on collapse loads in pipe bends subjected to in-plane bending closing moment	Engineering Fracture Mechanics	vol.79	138-148	2012	1.413
T. Christo Michael, AR. Veerappan, S. Shanmugam	Comparison of plastic limit and collapse loads in pipe bends with shape imperfections under in-plane bending and an internal pressure	Int. Jl. of Pressure Vessels and Piping	99-100	23-33	2012	0.932
M. Eswaramoorthy,	Numerical model to compute the heat loss in focal	Energy Sources, Part	vol.34,	959-965	2012	0.516

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and S. Shanmugam	receiver of solar parabolic dish thermoelectric generator	A: Recovery, Utilization, and Environmental Effects	no.10			
Eswaramoorthy, M., and Shanmugam, S	The thermal performance of a low cost solar parabolic dish collector for process heat	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	, vol.34, no.18	1731-1736	2012	0.516
S. Shanmugam and P. Kumar	Performance of an oscillating bed solar dryer for sunflower seeds	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	vol.35, no.3	282-289	2012	0.516
Ramalingam Gurumani, and Subramaniam Shanmugam	Modeling and contact analysis of crowned spur gear teeth, <i>Engineering Mechanics-Int</i>	Jl. for Theoretical and Applied Mechanics	vol.18, no.1, pp.	65-78	2011	0.707
S. Sakthivel, S. Shanmugam , AR.Veerappan	Determination of Heating Surface Area in Small Capacity Wood-Fired Boilers	Int. Jl. of Applied Engineering Research	Vol. 6, No. 3,	401-408	2011	
T. Christo Michael, AR. Veerappan, S. Shanmugam	A Study on the Effect of Cross Section Approximation on the Behaviour of Pipe Bends with Ovality and Thinning	Int. Jl. of Advanced Engineering Sciences and Technologies	vol. 2, no. 2	133-139	2011	
S. Shanmugam , AR. Veerappan, S. Sakthivel	Determination of Furnace Temperature and Aspect Ratio of Dry Back Boilers using Computational Fluid Dynamics	Int. Jl. of Applied Engineering Research	Vol. 6, No. 7	935-945	2011	
T. Christo Michael, AR. Veerappan, S.	Comparison Between Elliptic and Semi Elliptic Cross Sections in Pipe Bend with Shape	Int. Jl. of Applied Engineering Research	Vol. 6, No. 7	881-889	2011	

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Shanmugam	Imperfections,					
AR. Veerappan, and S. Shanmugam	Correlation between pipe bend geometry and allowable pressure in pipe bends using artificial neural network	Int. Jl. of Engineering, Science and Technology	Vol. 3, No. 4	284-296	2011	
Christo Michael, T., AR. Veerappan, and S. Shanmugam	Effect of cross section on collapse load in pipe bends subjected to in-plane closing moment	Int. Jl. of Engineering, Science and Technology	vol.3, no.6	247-256	2011	
S. Shanmugam , M. Eswaramoorthy, and AR. Veerappan	Mathematical modeling of thermoelectric power generator driven by solar parabolic dish collector	Int. Jl. of Applied Solar Energy	vol. 147	31-35	2011	0.39
P. Kumar, S. Shanmugam ; and AR. Veerappan	An Experimental Study on drying of non-parboiled paddy grains using an oscillating bed solar dryer	Energy Engineering,	vol. 108 (2)	69–80	2011	4.292
S. Shanmugam , P. Kumar, and AR. Veerappan	Evaluation of thermal efficiency of oscillating-bed solar agricultural dryer	Jl. of Renewable and Sustainable Energy	vol.3	043116-1-043116-8	2011	1.214
Eswaramoorthy, M., Shanmugam, S. , and AR. Veerappan	Feasibility Analysis of Solar Parabolic Dish Thermoelectric Power Generator	Int. Jl. of Integrated Energy System	vol.2, no.1	63-67	2010	
Eswaramoorthy, M., Shanmugam, S. , and AR. Veerappan	A review on application for thermoelectric power generation	Int. Jl. of Integrated Energy System	vol.2, no.1	69-75	2010	
S. Shanmugam , P. Kumar, and AR. Veerappan	Pick-Up Efficiency of Air in Oscillating-Bed Solar Dryer for Sunflower Seeds	Int. Jl. of Industrial Engineering and Technology	vol. 2, No. 3a	373–382	2010	
Eswaramoorthy, M., and Shanmugam, S	Thermodynamic analysis of solar parabolic dish thermoelectric generator	Int. Jl. of Renewable Energy Technology	vol 1, no. 3	348-360	2010	
AR.Veerappan, S. Shanmugam , S.	The Accepting of pipe bends with ovality and thinning using finite element method	ASME Jl. of Pressure Vessel Technology	Vol. 132,	031204:1-9	2010	1.513

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Soundrapandian			No. 3			
Eswaramoorthy, M., and Shanmugam, S.	A techno-economic analysis of a solar thermoelectric power generator for a rural residential house energy demand	Int. Jl. of Applied Engineering Research	vol.4, no.10	1911-1919	2009	
Gurumani. R., and Shanmugam. S	Modeling and contact analysis of crowned external involute spur gears	Intl. Jl. of Theoretical and Applied Mechanics	vol.4, no.4	181-196	2009	
Shanmugam, S., Pandey, K. S., and Syed Ummer M.Thangal	Ring rupture strength and hardness of sintered hot—forged 1.5 Mo alloyed carbon steels	Jl. of Materials Processing Technology	vol 209, Issue 7	3426-3430	2009	1.42
Syed Ummer M.Thangal, Pandey, K. S., Natarajan, C., and S. Shanmugam	Effect of copper and silicon addition on the ring fracture strength and hardness of sintered-hot forged carbon steels	Int. Jl. of Materials and Product Technology	vol 34, no.3	312-322	2009	
AR Veerappan and Shanmugam, S	Transient thermo-mechanical analysis for life estimation of steam distribution pipes in thermal power plants	Jl. of Institution of Engineers	vol. 89	53 – 56	2009	
Rajeshkannan, A., Pandey K.S., Shanmugam, S., and Narayanasamy, R	Sintered eutectoid P/M steel behaviour during cold upsetting	Materials Research	vol.11, no.1	11-16	2008	1.743
Syed Ummer M.Thangal., Pandey, K.S., Natarajan, C., and Shanmugam, S	Ring fracture strength and hardness in sintered hot deformed high carbon steel preforms	Int. Jl. of Materials Science	vol.3, no.1	75-88	2008	
Rajeshkannan, A., Pandey K.S., and Shanmugam, S	Some investigation on the cold deformation behaviour of sintered iron – 0.8% Carbon alloy powder preforms	Jl. of Materials Processing Technology	vol.203	542-547	2008	1.143

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Rajeshkannan, A, Pandey K. S., Shanmugam, S. , and Narayanasamy, R	Deformation behaviour of sintered high carbon alloy powder metallurgy steel in powder preform forging	Jl. of Materials and Design	vol.29, no.9	1862-1867	2008	1.107
Rajeshkannan, A., Pandey K.S., Shanmugam, S. , and Narayanasamy, R	Sintered Fe-0.8%C-1.0%Si-0.4%Cu P/M steel perform behaviour during cold upsetting	Jl. of Iron and Steel Research International	vol.15, issue 5	81-87	2008	0.357
Rajeshkannan, A., Pandey K.S., Shanmugam, S. , and Narayanasamy, R	Evaluation of densification behaviour in Fe-0.8%C steel preforms during cold upsetting	Engineering Today	vol.2, issue 2	3-6	2008	
Veerappan AR., and Shanmugam, S	Analysis for flexibility in the ovality and thinning limits of pipe bends	Jl. of Engineering and Applied Sciences	vol.3, no.1	31-41	2008	
Gurumani, R and Shanmugam, S	Analysis on increase of contact ratio and its effects on involute spur gear teeth	Jl. of Manufacturing Technology today	vol.7, no.1	32-36	2008	
Hyacinth J Kennedy and Shanmugam S	Experimental study of roof integrated solar conservatory as an agricultural dryer	Hindustan Jl	vol.2	35-40	2008	
Hyacinth J Kennedy and Shanmugam S	Mathematical modeling of a solar system and prediction of ambient temperature using meteorological data	Hindustan Jl	vol.2	29-34	2008	
A. Rajeshkannan, K.S. Pandey, S. Shanmugam and R. Narayanasamy	Evaluation of densification behaviour in Fe-0.8%C steel preforms during cold upsetting	Engineering Today	vol.2, no.2	3-6	2008	
Syed Ummer M.Thangal., K.S. Pandey, C. Natarajan, and S. Shanmugam	Ring fracture strength and hardness behaviour on fractional density of sintered-hot forged 1.2% Cu and 1.0% Si alloyed carbon steels	Int. Jl. of Materials Science	vol.2, no.3	219-228	2007	

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Shanmugam, S., and Christ Raj W	A novel design of absorber to eliminate sun–traction mechanism in the east–west direction in paraboloidal dish concentrators	Int. Jl. of Applied Engineering Research	vol.2, no.4	609-623	2007	
Veerappan, AR., and Shanmugam, S	Effect of shape imperfections and geometry on the performance of pipe bends	Int. Jl. of Applied Engineering Research	vol.2, no.4	625-635	2007	
AR. Veerappan, S. Shanmugam, G. Jayaraman, and S. Nagamanickam	Life estimation of boiler straight pipes under creep and fatigue loads	Jl. of Central Power Research Institute,	vol.3, no.2	187-193	2007	
Rajeshkannan, A., Pandey, K.S., Shanmugam S., Narayanasamy, R	Some studies on sintered Fe-0.8%C powder metallurgy steel during cold upsetting,	Int. Jl. of Materials Science	vol.2, no.2	177-189	2006	
Rajeshkannan, A., Pandey, K.S., Shanmugam S	Some studies on barreling of powder performs during cold upsetting	Jl. of the Mechanical Behaviour of Materials	vol. 17, no. 6	415-430	2006	
Veerappan AR., and S Shanmugam	Stress analysis of pipe bends subjected to internal fluid pressure using the finite element technique	Jl. Strain Analysis	vol. 41 no. 8	561–573	2006	
S. Shanmugam and S. Sakthivel,	Efficient Utilisation of Wood as Boiler Fuel,	Energy and Fuel Users' Jl	vol. LV	11-18	2006	
Shanmugam, S, and Veerappan, AR,	Static and Transient analysis of Power Generating Boiler Tube Bends Subjected to Internal Fluid Pressure	Jl. of Institution of Engineers (India)	vol. 87	38-42	2006	
Shanmugam, S., and Christ Raj. W	The tracking of the sun in solar paraboloidal dish concentrators	Transactions of the American Society for Mechanical Engineers, Jl. of Solar Energy Engineering	vol. 127, no. 1	156-160	2005	

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Shanmugam, S and Sakthivel, S,	On the Modification of Spray Line in Pressure Reducing and Desuperheating Station at Thermal Power Stations	Jl. of Institution of Engineers (India)	vol. 86	145-148	2005	
Shanmugam, S, Govindarasu, V, Prabhu, G, Rex Sebastian, I and Palaniappan, R	Electronic Fuel Indicator for Powered Two Wheelers	Jl. of Institution of Engineers (India),	vol. 85	65-67	2002	
Shanmugam, S., and Krishnamurthy, R	Machinability study on pearlitic graphite cast iron	Int. Jl. of Production Research	vol. 30 no.1	189-197	1992	