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List of Publications

International Journals:

1. Venkatachalam, G., Harichandran, R., **Rajakumar, S.**, Dharma raja, C.Pandivelan. C., “*Determination of J-integral and stress intensity factor using the commercial FE software ABAQUS in austenitic stainless steel (AISI 304) plates*”, Int J Adv Manuf Tech., Special Issue, pp. 1-4, 2008. **(Impact Factor:1.238)**
2. **Rajakumar, S.** and Ravindran, D. “*Performance Evaluation of Different NACA 4 Series Airfoils for Wind Turbines*”, International Journal of Fluids Engineering, Vol. 2, pp. 57-68, 2010.
3. **Rajakumar, S.** and Ravindran, D. “*Computational fluid dynamics of wind turbine blade at various angles of attack and low Reynolds number*”, International Journal of Engineering Science and Technology, Vol. 2, pp. 6474-6484, 2010.
4. M.Koilraj Gnanadason, P.Senthil Kumar, **S.Rajakumar**, M.H.Syed Yousuf, “ *Effect of Nanofluids in a vacuum single basin solar still*” International Journal of Advanced Engineering research and Studies, Vol.1, issue.1, pp.171-177, 2011.
5. **Rajakumar, S.** and Ravindran, D. “*Iterative approach for optimizing coefficient of power, coefficient of lift and drag of wind turbine rotor*”, Renew. Energy, Elsevier, Vol. 38, pp. 83-93, 2012. **(Impact Factor: 3.2)**
6. **Rajakumar, S.** and Ravindran, D. “*Optimization of wind turbine power coefficient parameters using hybrid technique*”, J. Inst. Eng. India Ser. C, Springer, Vol. 93, No. 2, pp. 141-149, 2012. **(SNIP Impact Factor 2011: 0.122)**
7. Abinaya Sorna Jothi, P. and **Rajakumar, S.**, “*Performance of PCM and Cooking Vessel in Solar Cooking System*”, International Journal of Engineering Inventions, Vol.2, No.6, pp.83-89, 2013.

8. Sowmini Priya and **Rajakumar, S.**, “*An Energy Storage System for Wind Turbine Generators-Battery and Supercapacitor*”, International Journal of Engineering Research and Applications, Vol.3, No.2, pp.1219 – 1223, March - April 2013.
9. Dhanusia and **Rajakumar, S.**, “*Thermal Analysis of PCM based building wall for cooling*”, International Journal of Science, Engineering and Technology Research, Vol.2., No.4., pp. 850-857, 2013.
10. Kokila, R.N. and **Rajakumar, S.**, “*Performance Evaluation of Solar Assisted Heat pump water heating system*”, IOSR Journal of Engineering, Vol.3, No.4., pp.12-17, 2013.
11. Prawyn Jeba.V.P. and **Rajakumar, S.**, “*Improving the Reliability in PMSM for Wind Turbine*”, International Journal of Engineering Research and Development, Vol.6, No.11., pp.55-61, 2013.
12. Esakkimuthu N and **Rajakumar, S.**, “*Structural Analysis of Composite Material Drive Shaft Using FEM*”, The International Journal of Science & Technoledge, Vol.2, No.4., pp. 140-146, 2014.
13. Muruganantham G and **Rajakumar, S.**, “*Finite Element Analysis of Torispherical Shell*”

The International Journal of Science & Technoledge, Vol.2, No.4., pp. 130135, 2014.
14. Kokila R N and **Rajakumar, S.**, “*Thermal performance analysis and optimization of solar Assisted heat pump water heater*”, Applied Mechanics and Materials, Vols. 592-594, pp 2416-2421, 2014.
15. Vishnu Prasad, G. Venkatachalam, Akshat Rathi, **Rajakumar, S.**, “*Finite Element Analysis of Jute Fibre Made Hybrid Polymer Matrix Composite*” Applied Mechanics and Materials, Vols. 592-594, pp 363-367, 2014.
16. Vishnu Prasad, Ajil Joy, G. Venkatachalam, S.Narayanan, **S.Rajakumar**, “*Finite Element analysis of jute and banana fibre reinforced hybrid polymer matrix composite and optimization of design parameters using ANOVA technique*”, Procedia Engineering, Vol. 97, pp.1116 – 1125, 2014.
17. N. Karthikeyan , K. Kalidasa Murugavel, S. Arun Kumar, **S. Rajakumar.**, “*Review of aerodynamic developments on small horizontal axis wind turbine blade*” Renewable and Sustainable Energy Reviews, Vol. 42 (2015), pp. 801–822. **(Impact factor :5.51)**

18. A.Sethu Ramalingam, **Rajakumar, S.**, “*Parametric modeling & study of structural characteristics of wind turbine blade*”, International journal of engineering and computer science”, Vol. 4, No. 5, pp. 141-149, 2015
19. P.Premalatha, **S.Rajakumar**, “*Design of the small horizontal axis wind turbine blade with and without winglet*”, International Journal of Research in Science & Technology, 6 (1) 40-50 (2016)
20. T.Vijay, **S.Rajakumar**, “*Generation of electric current from industrial exhaust by using turbocharger*”, International Journal of Research in Science & Technology, 6 (1) 67-72, (2016)
21. R.Immanual, **S.Rajakumar**, “*Performance evaluation and optimisation of cross flow cooling tower*”, International Journal of Research in Science & Technology, 6 (1) 81-89, (2016)
22. K.K. Dinesh Kumar, **S.Rajakumar**, “*Review on biogas production from co-digestion of cow dung and food waste with water hyacinth*”, International Journal of Research in Science & Technology, 6 (1) 119-124 (2016)
23. S.John Paul Devaseelan, **S. Rajakumar**, “*Review on mechanical & thermal properties of hybrid reinforcement polymer composite*”, International Journal of Research in Science & Technology, 6 (1) 125-139 (2016)
24. J.Jaisy , **Dr.S.Rajakumar**, “*Turbulence analysis on a 5kw horizontal axis wind turbine using CFD*”, International Journal of Research in Science & Technology, 6 (1) 148-157 (2016)
25. M.Annal Rajam, **S.Rajakumar**, “*Control of temperature in bio-digester using phase change material (PCM)*”, International journal of research in social sciences & humanities, 6 (1) 86-93 (2016)
26. **B. Paul Vinofer, S.Rajakumar**, “*Cooling load calculation and design of air conditioning system in automobile*”, International journal of research in social sciences & humanities, 6 (1) 94-103 (2016)

27. G.Sureshkumar, **S.Rajakumar**, “*Empirical review on car radiator by using nanofluids*”, International journal of research in social sciences & humanities, 6 (1) 118-124 (2016)
28. S.Premkumar, **S.Rajakumar**, “*A review paper on development of microwind turbine for automotives*”, International journal of advances in engineering research 10 (6) 139-144 (2015)
29. A Suresh, **S Rajakumar**, “*Design and experimental investigation of micro wind turbine*”, International journal of advances in engineering research, 10 (6) 216-224 (2015)
30. S. Daniel Selvakumar, R. Immanual, **S. Rajakumar**, “*Calculation of cooling load for mushroom cultivation*”, International journal of advances in engineering research, 10 (6) 196-202 (2015)
31. B.Paul Vinofer, **S.Rajakumar**, “*CFD evaluation on effect of double glazing over single glazing in a small utility vehicle*”, International journal of Research in Science & Technology, 6 (3) 82-89 (2016).
32. S.Daniel Selvakumar , R.Immanual , **S.Rajakumar**, “*Design and fabrication of photo voltaic refrigeration system for mushroom cultivation*”, International journal of Research in Science & Technology, 6 (3) 90-95 (2016).
33. S.Premkumar, **S.Rajakumar**, “*Development on microwind turbine for automotives*”, International journal of Research in Science & Technology, 6 (3) 96-102 (2016).
34. G.Sureshkumar, S.Rajakumar, **S.Ayyappan**, “*Experimental and numerical analysis on car radiator by using nanofluids*”, International journal of Research in Science & Technology, 6 (3) 103-111 (2016).
35. K.K.Dinesh Kumar, **S.Rajakumar**, S.Ayyappan, “*Kinetic study on the effect of water hyacinths in food waste biogas production*”, International journal of Research in Science & Technology, 6 (3) 112-117 (2016).

36. R.Immanual, **S.Rajakumar**, B.Ragupathi, S.P.Ramkumar, “*Decrease the outlet water temperature of cross flow cooling tower*”, International journal of advances in engineering research, 11 (6) 1-7 (2016)
37. C.Ashok, **S.Rajakumar**, Y.Balamurali, “*Finite element analysis of aluminum sandwich composite material*”, International journal of advances in engineering research, 11 (6) 8-14 (2016)
38. T.Vijay, **S.Rajakumar**, S.Ayyappan, “*CFD analysis on electric current generation from industrial exhaust by using turbocharger*”, International journal of advances in engineering research, 11 (6) 15-21 (2016)
39. S.John Paul Devaseelan, **S.Rajakumar**, “*Mechanical & Thermal properties of hybrid reinforcement polymer composite*”, International journal of advances in engineering research, 11 (6) 29-37 (2016)
40. P.Premalatha, **S.Rajakumar**, “*CFD analysis of the small horizontal axis wind turbine blade with and without winglets*”, International journal of advances in engineering research, 11 (6) 38-46 (2016)
41. J.Jaisy, **S.Rajakumar**, “*CFD analysis of 5kw horizontal axis wind turbine*”, International journal of advances in engineering research, 11 (6) 4755 (2016)
42. **S. Rajakumar**, D.Ravindran, M. Sivakumar, G.Venkatachalam, S. Muthukumar, “*Optimization of Power Coefficient of Wind Turbine Using Genetic Algorithm*”, J. Inst. Eng. India Ser. C, Vol. 98 No. 2 111–118 April (2017)
43. Vandana Vidyadhari, **S.Rajakumar**, “*Aerodynamic design of mach 5 nozzle in large hypersonic wind tunnel*”, International Journal of Research in Science and Technology, Vol.7, Issue No. III, Jul-Sep 2017.
44. L. Anantha Raman, **S. Rajakumar** “*CFD Modeling and experimental measurement of fluid flow characteristics, swirl motion, Tumble motion in compression ignition engines – A Review*”, Journal of Research Innovations in Engineering & Technology, Vol. II, Issue 2, pp 16-24, 2016
45. L. Anantha Raman, **S. Rajakumar**, Lokesh Paradeshi, “*Effect of thermal barrier coating on performance and emission characteristics of a diesel engine*”, International Journal of Advanced Engineering Technology, Vol. VII, Issue I/Jan.-March, 851-853, 2016

46. Anantha Raman, L., **Rajakumar S**, Deepanraj B, and Paradeshi L, “*Study on performance and emission characteristics of a single cylinder diesel engine using exhaust gas recirculation*” , THERMAL SCIENCE, Year 2017, Vol. 21, (2), pp. S435-S441, 2017
47. **Rajakumar.S** and Aumugasamy.M “*Design and performance improvement of darrieus type VAWT and solar hybrid system*”, SSRG International Journal of Electrical and Electronics Engineering (SSRGJEEE)-Special Issue ICCREST, pp 23-28, April 2018
48. E.Varadha and **Rajakumar.S** “*Design And Optimization of Piezoelectric Cantilever Beam for Improving Energy Harvesting using Taguchi’s Analysis*”, TAGA Journal, pp 502-513, 2018
49. E.Varadha and **Rajakumar.S** “Performance improvement of piezoelectric materials in energy harvesting in recent days – a review”, JOURNAL OF VIBROENGINEERING, pp 2632-2650, Vol. 20, Issue 7, NOVEMBER 2018
50. Gowtham and **Rajakumar**, “Investigation of Natural Fiber Composite Material for Building Cooling System”, International Journal of Science and Research, pp 1154 – 1156, Vol.8, No.1, January 2019.
51. L. Anantha Ramana, B. Deepanraj, **S. Rajakumar**, V. Sivasubramanian, “ Experimental investigation on performance, combustion and emission analysis of a direct injection diesel engine fuelled with rapeseed oil biodiesel”, FUEL, pp 69 – 74, Vol.246, February 2019.