

PUBLICATIONS

A. Refereed Journal Papers

1. J. H. Kuang, Y. G. Tsuei, "A More General Method of Substructure Mode Synthesis for Dynamic Analysis," *Transaction of AIAA Journal*, Vol. 23, No. 4, pp. 619-623. (April, 1985) (SCI & EI)
2. J. H. Kuang, Y. T. Yang, "A Reconsideration of the Geometry Factor for the Standard and Profile Shifted Teeth," *Transaction of ASME, Journal of Mechanisms, Transmissions and Automation in Design*, Vol. 111, No. 3, pp. 402-413. (Sept. 1989) (SCI & EI)
3. J. H. Kuang, A. H. Liu, "A Study of the Stress Concentration Factor on Spot Welds," *Welding Journal*, Vol. 69, No. 12, pp. 468-474. (Dec. 1990), (SCI & EI)
4. J. H. Kuang, J. H. Tsai, "An Improved Branch Method for Gear-Coupled Systems," *Journal of the Chinese Society of Mechanical Engineering*, Vol. 12 No. 2, pp. 177-187, (April 1991)(EI)
5. L. S. Chen, J. H. Kuang, "A Modified Linear Extrapolation Formula for Determination of Stress Intensity Factors," *International Journal of Fracture*, Vol. 54, No. 1, pp. R3-R8. (March 1992) (SCI & EI)
6. L. S. Chen, J. H. Kuang, "A Displacement Extrapolation Method for Determining the Stress Intensity Factors along Flaw Border," *International Journal of Fracture*, Vol. 57, No. 4, pp. R51-R58. (Oct. 1992) (SCI & EI)
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11. J. H. Kuang, L. S. Chen, "A Single Strain Gage Method for Determining the Stress Intensity Factor K_I ," *Journal of Engineering Fracture Mechanics*, Vol. 51, No. 5, pp. 871-878. (1995)(SCI & EI)
12. J. H. Kuang, Y. C. Chen, "Crack Initiation Direction for a Crack under Mixed Mode Loading," *International Journal of Fracture*, Vol. 73, No. 2, pp. R33-37. (1995) (SCI & EI)
13. J. H. Kuang, Y. C. Chen, "Crack Initiation Load Characterization Using Critical Energy," *Journal of Engineering Fracture Mechanics*, Vol. 53, No.4, pp. 571-580. (1996)(SCI & EI)
14. J. H. Kuang, A. D. Lin, "Frequency Spectra of an Engaging Gear Pair," *Journal of Nondestructive Evaluation*, Vol. 14, No. 3, pp. 169-174. (1996) (EI)

15. J. H. Kuang, W. L. Chen, "Determination of Tip Parameters for the Protuberance Preshaving Cutters," **Journal of Mechanism and Machine Theory**, Vol. 7, pp. 839-849. (1996)(SCI & EI)
16. J. H. Kuang, Y. C. Chen, "The Values of J-Integral within Plastic Zone," **Journal of Engineering Fracture Mechanics**, Vol. 55, No. 6, pp. 869-981. (Nov.,1996) (SCI & EI).
17. J. H. Kuang, Y. C. Chen, "The Tip Plastic Energy Applied to Ductile Fracture Initiation under Mixed-Mode Loading," **Journal of Engineering Fracture Mechanics**, Vol. 58, Issue 1-2, pp. 61-70. (Sept. 1997)(SCI & EI)
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19. W. H. Cheng, Y. D. Yang, S. C. Wang, and J. H. Kuang, "Effect of Au Thickness on Laser Beam Penetration in Semiconductor Laser Packages," **IEEE Transactions on Components, Packaging and Manufacturing Technology**, Part B, Vol. 20, No. 4, pp. 396-402. (Nov. 1997) (SCI & EI)
20. W. H. Cheng, W. H. Wang, Y. D. Yang and J. H. Kuang, "Effects of Au Coating on Thermal Stresses in Stainless-to-Kovar Packages," **Int. J. of Optical and Quantum Electronics**, Vol. 29, pp 939-951 (1997) (SCI & EI)
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22. J. H. Kuang, C. K. Chen, "The Failure of Ligaments due to Multiple-Site Damage Using Interactions of Dugdale Type Cracks," **Fatigue & Fracture of Engineering Materials & Structures**, Vol. 21, No. 9, pp 1147-1157 (Sept. 1998) (SCI and EI)
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24. W. H. Cheng, M. T. Sheen, J. H. Kuang, and C. H. Chen, "The Principle Causes of Crack Defects in Optoelectronic Materials with Phosphorus-Containing Underlayer," **J. of Electronic Materials**, Vol. 28, No. 1, pp. 50-56, (Jan, 1999) (SCI, EI)
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26. J. H. Kuang, M. T. Sheen, S. C. Wang, C. H. Chen and W. H. Cheng, "Crack Formation Mechanism in Laser-Welded Au-Coated Invar Materials for Semiconductor Laser Packaging," **IEEE Transactions on Components, Packaging and Manufacturing Technology, Part B, Advanced Packaging**, Vol. 22, No. 1, pp 94-100 (Feb. 1999) (SCI & EI)
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28. J. H. Kuang, B. W. Huang, "Mode Localization of a Cracked Bladed Disk," **Transactions of ASME, Journal of Engineering for Gas Turbines and Power**, Vol. 121, No. 2, pp 335-341. (April 1999) (SCI and EI)

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30. J. H. Kuang, C. K. Chen, "Alternating Iteration Method for Interacting Multiple Crack Problems," **Fatigue & Fracture of Engineering Materials & Structures**, Vol. 22, No. 9, pp. 743-752, (Sept. 1999) (SCI and EI)
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33. W. H. Cheng, M. T. Sheen, C. P. Chien, H. L. Chang and J. H. Kuang, "Reduction of Fiber Alignment Shifts in Semiconductor Laser Module Packaging," **Joint IEEE/OSA Transactions, Journal of Lightwave Technology**, Vol. 18, No. 6, pp. 842-848. (June, 2000) (SCI, EI)
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35. J. H. Kuang, M. T. Sheen, S. C. Wang, G. L. Wang and W. H. Cheng, "Post-Weld-Shift in Dual-in-Line Package," **IEEE Transactions on Advanced Packaging**, Vol. 24, No. 1, pp 81-85. (Feb., 2001) (SCI, EI)
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37. J. H. Kuang, and A. D. Lin, " The Effect of Tooth Wear on the Vibration Spectrum of a Spur Gear Pair," **ASME Transactions, Journal of Vibration and Acoustics**, Vol. 123, No. 3, pp. 311-317 (July, 2001)(SCI, EI)
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39. J. H. Kuang, M. T. Sheen, C. H. Chang, C. C. Chen, G. L. Wang, and W. H. Cheng, "Effect of Temperature Cycling on Joint Strength of PbSn and AuSn Solders in Laser Packages," **IEEE Transactions on Advanced Packaging**, Vol. 24, No.4, pp. 563-568 (Nov., 2001)(SCI, EI)
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41. Jao-Hwa Kuang, Ah-Der Lin, "Theoretical Aspects of the Dynamic Responses in an engaging Spur Gear Pair," **Journal of the Chinese Society of Mechanical Engineers**, Vol. 23, No. 1,

- (June, 2002), pp. 213-221 (EI)
42. M. T. Sheen, C. M. Chang, H. C. Teng, J. H. Kuang, K. C. Hsich and W. H. Cheng, "The Influence of Thermal Aging on Joint Strength and Fracture Surface of Pb/Sn and Au/Sn Solders in Laser Diode Packages," **Journal of Electronic Materials**, Vol. 31, No. 8, pp. 895-905, (August, 2002) (SCI,EI)
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 56. Jao-Hwa Kuang and Chao-Jung Chen, "The Nonlinear Electrostatic Behavior for Shaped Electrode Actuators," **International Journal of Mechanical Sciences**, Vol. 47, Issue 8, pp. 1172-1190, (August, 2005) (SCI, EI)
 57. Yung-Chuan Chen and Jao-Hwa Kuang, "Elastic-Plastic Partial Slip Rolling Wheel-Rail Contact with an Oblique Rail Crack," **ASME Transactions, Journal of Tribology**, Vol. 127, pp. 705-712 (October 2005) (SCI, EI)
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 61. Yung-Chuan Chen, Jao-Hwa Kuang, Li-Wen Chen and Hua-Chun Chuang "Effect of plastic strain energy density on polymer optical fiber power losses," **Optics Letters**, Vol. 31, No.7, pp879-881(April 01,2006) (SCI, EI)
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- 73.

B. Conference Papers

(i) International Conference Paper

1. J. H. Kuang, A. H. Liu, "A Study on the Stress Concentration Effect of Spot Welds," *Proc. of the 68th A. W. S. Conf. and 18th International Brazing Conf.*, Chicago, Ill, U.S.A., AWS-223., (March 1987)
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13. J. H. Kuang, B. W. Chen, "Localization of Vibrations by Blade Cracks of a Rotating Blade-Disk," *The 15th International Modal Analysis Conference of SEM (IMAC XV)*, Orlando, U. S. A., pp. 1517-1524, (Feb. 1997)
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