

References

- [1] A. A. Griffith, “The Phenomena of Rupture and Flow in Solids,” *Philosophical Transactions of the Royal Society A*, **221**(1920)163-198
- [2] A. Agrawal and A. M. Karlsson, “On the Reference Length and Mode Mixity for a Bimaterial Interface,” *Journal of Engineering Materials and Technology*, (4),**129**(2007)580-587
- [3] A. B. Movchan and I. S. Jones, “Asymptotic and numerical study of a surface breaking crack subject to a transient thermal loading,” *Acta Mechanica Sinica*, (1),**22**(2006)22-27
- [4] A. Chadegani and R. C. Batra, “Analysis of Adhesive-Bonded Single-Lap Joint with an Interfacial Crack and a Void,” *International Journal of Adhesion and Adhesives*, **31**(2011)455-465
- [5] A. H. England, “A crack between dissimilar media,” *Journal of Applied Mechanics*, (2),**32**(1965)400-402
- [6] A. Lenwari and H. C. Ma , “Stress intensity factor for wide-flange steel member with crack surface interference,” *Journal of Constructional Steel Research*, **153**(2019)310-319

-
- [7] A. Memari, M. R. K. Azar and F. Vakili-Tahami, "Meshless fracture analysis of 3D planar cracks with generalized thermo-mechanical stress intensity factors," *Engineering Analysis with Boundary Elements*, **99**(2019)169-194
- [8] A. Piva, and E. Viola, "Crack propagation in an orthotropic medium," *Engineering Fracture Mechanics*, (5),**29**(1988)535-548
- [9] A. S. Kobayashi and W. L. Moss, "Stress intensity magnification factor for surface-flawed tension plate and notched round tension bar," 2nd International Conference on Fracture, Brighton, England (1969)31-45
- [10] A. Singh, P. K. Singh and S. Das, "Dynamic stress intensity factors of an interfacial crack in orthotropic elastic strips under impact loading conditions," *ZAMM - Journal of Applied Mathematics and Mechanics*, (8),**97**(2017)886-894
- [11] A. Singh, S. Das and E.-M. Craciun, "Thermal stress intensity factor for an edge crack in orthotropic composite media," *Composites Part B: Engineering*, **153**(2018)130-136
- [12] A. Y. Aköz and T. R. Tauchert, "Thermal Stresses in an Orthotropic Elastic Semispace," *Journal of Applied Mechanics*, (1),**39**(1972)87-90
- [13] B. M. Singh and R. S. Dhaliwal, "Closed Form Solutions to Dynamic Punch Problems by Integral Transform Method," *Journal of applied mathematics and mechanics*, (1),**64**(1984)31-34
- [14] C. Atkinson, "On stress singularities and interfaces in linear elastic fracture mechanics," *International Journal of Fracture*, (6),**13**(1977) 807-820
- [15] C. E. Inglis, "Stresses in Plates Due to the Presence of Cracks and Sharp Corners," *Transactions of the Institute of Naval Architects*, **55**(1913)219-241

- [16] C. Periasamy and H. V. Tippur, "Measurement of crack-tip and punch-tip transient deformations and stress intensity factors using Digital Gradient Sensing technique," *Engineering Fracture Mechanics*, **98**(2013)185-199
- [17] Ch. F. Markides, D. N. Pazis and S. K. Kourkoulis, "Stress intensity factors for the Brazilian disc with a short central crack: Opening versus closing cracks," *Applied Mathematical Modelling*, (12),**35**(2011)5636-5651
- [18] T. A. Cruse and W. Vanburen, "Three-Dimensional Elastic Stress Analysis of a Fracture Specimen with an Edge Crack," *International Journal of Fracture Mechanics*, (1),**7**(1971)1-15
- [19] D. N. Pazis, P. S. Theocaris and B. Konstantellos, "Elastic overlapping of the crack flanks under mixed-mode loading," *International Journal of Fracture*, (4),**37**(1988)303-319
- [20] D. P. Rooke and I. N. Sneddon, "The crack energy and the stress intensity factor for a cruciform crack deformed by internal pressure," *International Journal of Engineering Science*, (10),**7**(1969)1079-1089
- [21] E. G. Kirsch, "Die Theorie der Elastizität und die Bedürfnisse der Festigkeitslehre," *Zeitschrift des Vereines deutscher Ingenieure*, **42**(1898)797-807
- [22] E. M. Craciun, A. Rabaea, M. F. Popa and C. I. Mihailov, "Crack Propagation in the Human Bone. Mode I of Fracture," *Analele Stiintifice ale Universitatii Ovidius Constanta, Seria Matematica*, (2),**26**(2018)59-70
- [23] E. M. Craciun, T. Sadowski, and A. Răbăea, "Stress concentration in an anisotropic body with three equal collinear cracks in Mode II of fracture. I. Analytical study," *Journal of Applied Mathematics and Mechanics*, (9),**94**(2014)721-729

-
- [24] E. Viola and A. Piva, "Effect of orthotropy on elastodynamic crack behaviour," Proceedings of VIII AIMETA, Torino, **1**(1986)155-158
- [25] F. W. Smith, A. S. Kobayashi and A. F. Emery, "Stress Intensity Factors for Penny-Shaped Cracks: Part 1-Infinite Solid," *Journal of Applied Mechanics*, (4),**34**(1967)947-952
- [26] G. C. Sih, P. C. Paris and F. Erdogan "Crack-Tip, Stress-Intensity Factors for Plane Extension and Plate Bending Problems," *Journal of Applied Mechanics*, (2),**29**(1962)306-312
- [27] G. D. Gupta and F. Erdogan, "The Problem of Edge Cracks in an Infinite Strip," *Journal of Applied Mechanics*, (4),**41**(1974)1001-1006
- [28] G. R. Irwin "Analysis of Stresses and Strains Near the End of a Crack Traversing a Plate," *Journal of Applied Mechanics*, **24**(1957)361-364
- [29] G. A. Schneider and R. Danzer, "Calculation of the stress intensity factor of an edge crack in a finite elastic disc using the weight function method," *Engineering Fracture Mechanics*, (3),**34**(1989)547-552
- [30] H. J. Choi and G. H. Paulino, "Interfacial cracking in a graded coating/-substrate system loaded by a frictional sliding flat punch," *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, (2115),**466**(2009)853-880
- [31] H. Nisitani and Y. Murakami, "Stress intensity factors of an elliptical crack or a semi-elliptical crack subject to tension," *International Journal of Fracture*, (3),**10**(1974)353-368
- [32] I. N. Sneddon and M. Lowengrub, Crack problems in the classical theory of elasticity, John Wiley & Sons, New York, USA, (1969)

- [33] I. N. Sneddon and N. F. Mott, The distribution of stress in the neighbourhood of a crack in an elastic solid, Proceedings of the Royal Society of London. Series A. Mathematical and Physical Sciences, **187**(1946)
- [34] I. N. Sneddon and S. C. Das, Trends in Elasticity and Thermoelasticity: Witold Nowacki Anniversary Volume, Wolters—Noordhoff Publ. Co.(1971)235-247
- [35] J. De and B. Batra, “Thermoelastic problem of an orthotropic-elastic plane containing a cruciform crack,” *International Journal of Engineering Science*, (8),**30**(1992)1041-1048
- [36] J. H. Yue, T. Huang, J. Jin, J. J. Yang, T. Korakianitis and P. H. Wen, “Integral equation analysis for cracked strip of orthotropic functionally graded material,” *Engineering Fracture Mechanics*, **182**(2017)114-126
- [37] J. Qu and J. L. Bassani, “Interfacial Fracture Mechanics for Anisotropic Bimaterials,” *Journal of Applied Mechanics*, (2),**60**(1993)422-431
- [38] J. R. Rice, “Elastic Fracture Mechanics Concepts for Interfacial Cracks,” *Journal of Applied Mechanics*, (1),**55**(1988)98-103
- [39] J. R. Willis, “Fracture mechanics of interfacial cracks,” *Journal of the Mechanics and Physics of Solids*, (6),**19**(1971)353-368
- [40] J. Sladek and V. Sladek, “Evaluation of T-stresses and stress intensity factors in stationary thermoelasticity by the conservation integral method,” *International Journal of Fracture*, (3),**86**(1997)199-219
- [41] K. J. Miller, M. W. Brown and M. W. Brown, Multiaxial Fatigue: A Symposium, No. 853, ASTM International, 1985

-
- [42] K. R. Gaikwad and K. P. Ghadle, "Three Dimensional Non-Homogeneous Thermoelastic Problem in a Thick Rectangular Plate due to Internal Heat Generation," *Southern Africa Journal of Pure and Applied Mathematics*, **5**(2011)26-38
- [43] L. Banks-Sills, "Interface Fracture and Delaminations in Composite Materials," *Springer Briefs in Structural Mechanics*,(2017)9-17
- [44] L. Banks-Sills, "Interface fracture mechanics: theory and experiment," *International Journal of Fracture*, (1-2),**191**(2015)131-146
- [45] L. Liu and G. A. Kardomateas, "Thermal stress intensity factors for a crack in an anisotropic half plane," *International Journal of Solids and Structures*, (18-19),**42**(2005)5208-5223
- [46] L. M. Brock and Y. C. Deng, "Dynamic studies of running half-plane and cruciform cracks," *International Journal of Engineering Science*, (2),**23**(1985)163-171
- [47] L. M. Keer, S. Nemat-Nasser and A. Oranratnachai, "Spontaneous growth of interacting cracks in a cruciform pattern," *Engineering Fracture Mechanics*, (1),**13**(1980)15-29
- [48] L. Morini, E. Radi, A. B. Movchan and N. V. Movchan, "Stroh formalism in analysis of skew-symmetric and symmetric weight functions for interfacial cracks," *Mathematics and Mechanics of Solids*, (2),**18**(2013)135-152
- [49] L. R. F. Rose, "Microcrack interaction with a main crack," *International Journal of Fracture*, (3),**31**(1986)233-242
- [50] M. Comninou, "The Interface Crack," *Journal of Applied Mechanics*, (4),**44**(1977)631-636

-
- [51] M. K. Ong and R. P. Srivastav, "A cruciform crack opened by internal pressure varying with time," *International Journal of Engineering Science*, (10),**23**(1985)999-1007
- [52] M. L. Williams, "The stresses around a fault or crack in dissimilar media," *Bulletin of the Seismological Society of America*, (2),**49**(1959)199-204
- [53] M. Meyer and S. Schmauder, "Thermal stress intensity factors of interface cracks in bimetals," *International Journal of Fracture*, (4),**57**(1992)381-388
- [54] M. P. Stallybrass, "A pressurized crack in the form of a cross," *The Quarterly Journal of Mechanics and Applied Mathematics*, (1),**23**(1970)35-48
- [55] N.-A. Noda and C. Xu, "Controlling parameter of the stress intensity factors for a planar interfacial crack in three-dimensional bimetals," *International Journal of Solids and Structures*, **45**(2008)1017-1031
- [56] N. Noda and Z-H. Jin, "Steady thermal stresses in an infinite nonhomogeneous elastic solid containing a crack," *Journal of Thermal Stresses*, (2),**16**(1993)181-196
- [57] O. Ognjanović, K. Maksimović and D. Stamenković, "Effects of Thermal Gradients on Fracture Mechanics Parameters," *Scientific Technical Review*, (3),**63**(2013)17-21
- [58] P. Fedelinski, M. H. Aliabadi and D. P. Rooke, "The dual boundary element method: \hat{J} -integral for dynamic stress intensity factors," *International Journal of Fracture*, (4),**65**(1994)369-381

- [59] P. K. Mishra and S. Das, "Interaction between interfacial collinear Griffith cracks in composite media under thermal loading," *Zeitschrift für Naturforschung A*, (5),**71**(2016)465-473
- [60] P. K. Mishra and S. Das, "Two interfacial collinear Griffith cracks in thermo-elastic composite media," *Thermal Science*, (1),**22**(2018)423-433
- [61] P. K. Mishra and S. Das, "Interaction between interfacial collinear Griffith cracks in composite media under thermal loading," *Zeitschrift für Naturforschung A*, (5),**71**(2016)465-473
- [62] P. K. Mishra, S. Das and M. Gupta, "Interaction between interfacial and sub-interfacial cracks in a composite media - Revisited," *Journal of Applied Mathematics and Mechanics*, **96**(2016)1129-1136
- [63] P. Kumar, Elements of Fracture Mechanics, Wheeler Publishing, India, 1999
- [64] P. K. Mishra, P. Singh and S. Das, "Study of thermo-elastic cruciform crack with unequal arms in an orthotropic elastic plane," *Journal of Applied Mathematics and Mechanics*, (8),(**97**)(2017)886-894
- [65] Q. Wang, X. Ji and Y. Wang, "A note on edge cracks in an orthotropic infinite strip," *International Journal of Fracture*, (2),**75**(1996)R37-R41
- [66] R. Erdol and F. Erdogan, "A Thick-Walled Cylinder With an Axisymmetric Internal or Edge Crack," *Journal of Applied Mechanics*, (2),**45**(1978)281-286
- [67] R. J. Tait and T. B. Moodie, "Complex variable methods and closed form solutions to dynamic crack and punch problems in classical theory of elasticity," *International Journal of Engineering Science*, (2),**19**(1981)221-229

-
- [68] R. K. L. Su and H. Y. Sun “Numerical solution of cracked thin plates subjected to bending, twisting and shear loads” *International Journal of Fracture*, (4),**117**(2002)323-335
- [69] S Ueda, “Electromechanical response of a center crack in a functionally graded piezoelectric strip,” *Smart Materials and Structures*, **14**(2005)1133-1138
- [70] S. Yao, C. Cheng, Z. Niu, Z. Hu, “Evaluation of notch stress intensity factors by the asymptotic expansion technique coupled with the finite element method,” *Applied Mathematical Modelling*, **61**(2018)682-692
- [71] P. C. Singh, S. Das, B. Patra and T. N. Maulik, “Dynamic stress intensity factor around a Griffith Crack in an orthotropic layer with moving punch,” *Indian Journal of Pure and Applied Mathematics*, (10),**30**(1999)1003-1015
- [72] S. Mukherjee and S. Das, “Moving Griffith Crack in an Orthotropic Strip with Punches at boundary faces,” *International Journal of Mathematics and Mathematical Sciences*, (19),**2005**(2005)3157-3167
- [73] S. Das and L. Debnath, “Study of a static cruciform crack problem in an orthotropic elastic plane,” *Computers & Mathematics with Applications*, (4-5),**40**,(2000)569-575
- [74] S. Das, R. Prasad and S. Mukhopadhyay, “Stress Intensity Factor of an Edge Crack in Composite Media,” *International Journal of Fracture*, (2),**172**(2011)201-207
- [75] S. Das, S. Chakraborty, N. Srikanth and M. Gupta, “Symmetric edge cracks in an orthotropic strip under normal loading,” *International Journal of Fracture*, (1),**153**(2008)77-84

-
- [76] S. Das, S. Mukhopadhyay and R. Prasad, "Stress intensity factor of an edge crack in bonded orthotropic materials," *International Journal of Fracture*, (1),**168**(2011)117-123
- [77] S. Das, "Weight function for an edge crack in an infinite orthotropic strip under normal point loading," *Journal of Applied Mathematics and Mechanics*, (4),**90**(2010)271-277
- [78] S. H. Ding and Q. N. Liu, "A multi-layered model for heat conduction analysis of thermoelectric material strip," *Computer Modeling in Engineering & Sciences*, (3),**114**(2018)335-349
- [79] S. H. Song and G. H. Paulino, "Dynamic stress intensity factors for homogeneous and smoothly heterogeneous materials using the interaction integral method," *International Journal of Solids and Structures*, (16),**43**(2006)4830-4866
- [80] S. Itou, "Thermal stresses around two upper cracks placed symmetrically about a lower crack in an infinite orthotropic plane under uniform heat flux," *Journal of Theoretical and Applied Mechanics*, (3),**52**(2014)617-628
- [81] S. Kalluri and P. J. Bonacuse, "Multiaxial Fatigue and Deformation Testing Techniques," STP1280-EB, ASTM International, West Conshohocken, PA, (1997)
- [82] S. M. Nabavi and A. R. Shahani, "Thermal stress intensity factors for a cracked cylinder under transient thermal loading," *International Journal of Pressure Vessels and Piping*, (2),**86**(2009)153-163

-
- [83] S. Mukherjee and S. Das, "Interaction of three interfacial Griffith cracks between bonded dissimilar orthotropic half planes," *International Journal of Solids and Structures*, (17),**44**(2007)5437-5446
- [84] S. N. Atluri and M. Nakagaki, Analysis of two-dimensional fracture problems involving large-scale yielding: A displacement-hybrid finite element method, Proc. 12th Annual Meeting Soc. of Engng. Science, Austin, Texas., (1975)381-386
- [85] S. M. Kwon and K. Y. Lee, "Analysis of stress and electric fields in a rectangular piezoelectric body with a center crack under anti-plane shear loading," *International Journal of Solids and Structures*, (35),**37**(2000)4859-4869
- [86] T. Sadowski, L. Marsavina and E. M. Craciun, "Cracking of Two-phase Ceramics under Uniaxial Compression Deformation," *Engineering Transactions*, (1),**65**(2017)39-44
- [87] T. Huang, J. J. Yang, J. Jin, P. H. Wen and M. H. Aliabadi, "Evaluation of stress intensity factors and T-stress by finite block method: Static and dynamic," *Theoretical and Applied Fracture Mechanics*, **93**(2018)222-232
- [88] T. L. Anderson, Fracture Mechanics: Fundamental and applications, CRC Press; 3 edition 2004
- [89] T. Sadowski, E. M. Craciun, A. Răbăea and L. Marsavina, "Mathematical modeling of three equal collinear cracks in an orthotropic solid," *Meccanica*, (2),**51**(2016)329-339
- [90] V. V. Loboda and T. R. Tauchert, "The elastic contact problem for dissimilar orthotropic semi-infinite and infinite strips," *International Journal of Engineering Science*, (12),**23**(1985)1337-1349

- [91] W. T. Chow, H. G. Beom and S. N. Atluri, "Calculation of stress intensity factors for an interfacial crack between dissimilar anisotropic media, using a hybrid element method and the mutual integral" *Computational Mechanics*, (6),**15**(1995)546-557
- [92] W. Zhang and X. Deng, "Asymptotic fields around an interfacial crack with a cohesive zone ahead of the crack tip," *International Journal of Solids and Structures*, (10),**43**(2006)2989-3005
- [93] X. Cui, H. Li, G. Cheng, C. Tang and X. Gao, "Contour integral approaches for the evaluation of stress intensity factors using displacement discontinuity method," *Engineering Analysis with Boundary Elements*, **82**(2017)119-129
- [94] X.-F. Li, "T-stress near the tips of a cruciform crack with unequal arms," *Engineering Fracture Mechanics*, (6),**73** (2006)671-683
- [95] X. Hongmin, Y. Xuefeng, F. Xiqiao and H. Y. Yeh "Dynamic stress intensity factors of a semi-infinite crack in an orthotropic functionally graded material," *Mechanics of Materials*, (1),**40**(2008)37-47
- [96] X. R. Wu, D. H. Tong, X. C. Zhao and W. Xu, " Review and evaluation of weight functions and stress intensity factors for edge-cracked finite-width plate," *Engineering Fracture Mechanics*, **195** (2018)200-221
- [97] X. S. Zhang, "The general solution to an infinite orthotropic plate with a cruciform crack under arbitrary anti-plane shear stresses," *Engineering Fracture Mechanics*, (2),**39**(1991)229-233
- [98] Y. H. Cai and H. R. Chen, "The Dynamic Fracture Analysis of the Adhesively Bonded Materials under Shear Loading," *Key Engineering Materials*, **334-335**(2007)141-144

- [99] Y. Shuicheng, S. Li, L. Zhe and H. Songmei, "Experimental investigation on fracture toughness of interface crack for rock/concrete," *International Journal of Modern Physics B*, (31-32),**22**(2008)6141-6148
- [100] Z. C. Xia and J. W. Hutchinson, "Crack patterns in thin films," *Journal of the Mechanics and Physics of Solids*, (6-7),**48**(2000)1107-1131
- [101] Z. Jin, "Heat Conduction in a Functionally Graded Plate Subjected to Finite Cooling/Heating Rates: An Asymptotic Solution," *Materials*, (12),**4**(2011)2108-2118
- [102] Z.-H. Jin and G. H. Paulino, "Transient thermal stress analysis of an edge crack in a functionally graded material," *International Journal of Fracture*, (1),**107**(2001)73-98
- [103] Fracture Mechanics, <http://www.fracturemechanics.org/>
- [104] Titanic Newspaper Article: The Times, titanicuniverse.com
- [105] Stuff You Missed In History Class Titanic, imgcop.com
- [106] What Is Structural Mechanics? - An, comsol.jp
- [107] Mechanical Properties of Materials, www.uta.edu
- [108] Hooke's Law and Stress-strain Curve, toppr.com
- [109] Fracture Mechanics- Delft Academic press,
<https://www.delftacademicpress.nl/bij/m004extract.pdf>
- [110] MIT, <http://web.mit.edu/course/3/3.11/www/modules/frac.pdf>
- [111] Stress intensity factor,
https://en.wikipedia.org/wiki/Stress_intensity_factor

- [112] Orthogonal polynomials,
https://en.wikipedia.org/wiki/Orthogonal_polynomials

- [113] Orthogonal Polynomials,
<http://mathworld.wolfram.com/OrthogonalPolynomials.html>

- [114] Jacobi polynomials,
https://en.wikipedia.org/wiki/Jacobi_polynomials

- [115] Chebyshev polynomials,
https://en.wikipedia.org/wiki/Chebyshev_polynomials
