

M.Munawar Chaudhri's twenty best articles

(a) Micro- and nano-indentation

1. Title: Indentation hardness of diamond single crystals, nanopolycrystals, and nanotwinned diamonds: A critical review

Author: CHAUDHRI, MM

Source: Diamond and Related Materials, volume 167, article number 108076 (2020)

DOI: 10.1016/j.diamond,2020.108076

2. Title: Some concerns about the current interpretation and analysis of indentation unloading $P-h$ curves highlighted with Young's modulus studies of single crystal of MgO (100).

Author: CHAUDHRI MM

Source: Journal of Applied Physics, volume 124, article number 095107 (2018)

3. Title: Dislocations and Indentations

Author: CHAUDHRI, MM

Source: DISLOCATIONS IN SOLIDS, Volume 12, Pages 447 – 550, (2004)

Editors: F. R. N. NABARRO AND J. P. HIRTH

4. Title: Nanohardness of high purity Cu (111) single crystals: The effect of indenter load and prior plastic sample strain

Author(s): Dub, S. N.; Lim, Y. Y.; Chaudhri, M. M.

Source: JO DOI: 10.1016/j.diamond,2020.108076

JOURNAL OF APPLIED PHYSICS, Volume: 107, Article Number: 043510 (2010) DOI: 10.1063/1.3290970

DOI: 10.1063/1,5021900

5. Title: The effect of the indenter load on the nanohardness of ductile metals: an experimental study on polycrystalline work-hardened and annealed oxygen-free copper

Author(s): Lim, YY; Chaudhri, MM

Source: PHILOSOPHICAL MAGAZINE A, Volume: 79 Issue: 12 Pages: 2979-3000 (1999).

DOI: 10.1080/01418619908212037

6. Title: Accurate determination of the mechanical properties of thin aluminium films deposited on sapphire flats using nanoindentations

Author(s): Lim, YY; Chaudhri, MM; Enomoto, Y

Source: JOURNAL OF MATERIALS RESEARCH, Volume: 14 Issue: 6 Pages: 2314-2327 (1999)

DOI: 10.1557/JMR.1999.0308

7. Title: Subsurface plastic strain distribution around spherical indentations in metals

Author(s): Chaudhri, MM

Source: PHILOSOPHICAL MAGAZINE A- Volume: 74 Issue: 5 Pages: 1213-1224 (1996).

DOI: 10.1018/01418619608239721

8. Title: Subsurface strain distribution around Vickers hardness indentations in annealed polycrystalline copper

Author(s): Chaudhri, MM

Source: ACTA MATERIALIA Volume: 46 Issue: 9 Pages: 3047-3056 (1998)

DOI: 10.1016/S1359-6454(98)00010-X

9. Title: Quenching of cathodoluminescence at the centre of hardness indentations on a (100) face of MgO

Author(s): BROWN, LM; KHAN, MY; CHAUDHRI, MM

Source: PHILOSOPHICAL MAGAZINE A Volume: 57 Issue: 2 Pages: 187-196 (1988)

DOI: 10.1080/01418618808204508

10. Title: Experimental investigations of the normal loading of elastic spherical and conical indenters on to elastic flats

Author(s): Lim, YY; Chaudhri, MM

Source: PHILOSOPHICAL MAGAZINE Volume: 83 Issue: 30 Pages: 3427-3462 (2003)

DOI: 10.1080/14786430310001608701

11. Title: Indentation of elastic solids with rigid cones

Author(s): Lim, YY; Chaudhri, MM

Source: PHILOSOPHICAL MAGAZINE, Volume: 84 Issue: 27 Pages: 2877-2903 (2004)

DOI: 10.1080/14786430410001716782

12. Title: Indentation of rigid cones into conical holes molded in elastic blocks

Author(s): Lim, YY; Chaudhri, MM

Source: JOURNAL OF APPLIED PHYSICS, Volume: 98 Article Number: 073518 (2005)

DOI: 10.1063/1.2060933

13. Title: Indentation of elastic solids with a rigid Vickers pyramidal indenter

Author(s): Lim, Yong Yee; Chaudhri, M. Munawar

Source: MECHANICS OF MATERIALS, Volume: 38, Pages: 1213-1228

(2006) DOI: 10.1016/j.mechmat.2006.04.006

14. Title: STM PROFILOMETRY OF LOW-LOAD VICKERS INDENTATIONS IN A SILICON CRYSTAL

Author(s): WALLS, MG; CHAUDHRI, MM; TANG, TB

Source: JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 25, Pages: 500-507 (1992)

DOI: 10.1088/0022-3727/25/3/025

(b) Explosives

15. Title: INITIATION OF EXPLOSION IN AGN3 AND BETA-PBN6 SINGLE CRYSTALS BY A COLLAPSING BUBBLE

Author(s): BOWDEN, FP; CHAUDHRI, MM

Source: NATURE Volume: 220 Issue: 5168 Pages: 690-694 (1968)

DOI: 10.1038/220690a0

16. Title: ROLE OF RAPIDLY COMPRESSED GAS POCKETS IN INITIATION OF CONDENSED EXPLOSIVES

Author(s): CHAUDHRI, MM; FIELD, JE

Source: PROCEEDINGS OF THE ROYAL SOCIETY OF LONDON SERIES A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES Volume: 340, Pages:

113- 125 (1974)

DOI: 10.1098/rspa.1974.0143

17. Title: ELECTRON-INDUCED DECOMPOSITION AND TIME-DEPENDENT BREAKDOWN OF IONIC SOLIDS - AN EXPERIMENTAL-STUDY ON SILVER AZIDE

Author(s): TANG, TB; CHAUDHRI, MM

Source: PHYSICAL REVIEW B Volume: 30, Pages: 6154-6164

(1984)

DOI: 10.1103/PhysRevB.30.6154

18. Title: THE ELECTRICAL-CONDUCTIVITY OF SILVER AZIDE (AGN₃) AT HIGH HYDROSTATIC PRESSURES

Author(s): REES, CS; CHAUDHRI, MM

Source: JOURNAL OF PHYSICS C-SOLID STATE PHYSICS, Volume: 20, Pages: 4097-

4104 (1987)

DOI: 10.1088/0022-3719/20/26/012

19. Title: THERMAL-DECOMPOSITION OF SILVER AZIDE

Author(s): TANG, TB; CHAUDHRI, MM

Source: PROCEEDINGS OF THE ROYAL SOCIETY OF LONDON SERIES A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES Volume: 369, Pages: 83- 104 (1979)

DOI: 10.1098/rspa.1979.0153

(c) Fracture

20. Title: Hertzian fracture of a borosilicate glass at room temperature and at 77 K.

Author: CHAUDHRI, MM

Source: Journal of Non-Crystalline solids, 657, article number 123452 (2025)

DOI: 10.1016/j.crystal.2025,123452

21. Title: DYNAMIC FRACTURE OF INORGANIC GLASSES BY HARD SPHERICAL AND CONICAL PROJECTILES

Author(s): CHAUDHRI, MM

Source: PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A Volume 373, article number 20140135 (2015)

DOI: 10.1098/rsta.2014.0135

22. Title: THE EXPLOSIVE DISINTEGRATION OF PRINCE-RUPERT-DROPS

Author(s): CHANDRASEKAR, S; CHAUDHRI, MM

Source: PHILOSOPHICAL MAGAZINE B-PHYSICS OF CONDENSED MATTER STATISTICAL MECHANICS ELECTRONIC OPTICAL AND MAGNETIC PROPERTIES Volume: 70, Pages: 1195-1218 (1994)

DOI: 10.1080/01418639408240284

23. Title: The role of residual stress in a Prince Rupert's drop of soda-lime glass undergoing a self-sustained and stable destruction/fracture wave

Author(s): Chaudhri, M. Munawar

Source: PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS
SCIENCE Volume: 206, Pages: 1410-1413 (2009)

DOI: 10.1002/pssa.200925006

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