Volume IV

SCIENTIFIC PAPERS OF C V RAMAN

OPTICS OF MINERALS AND DIAMOND

Scientific Papers of

C V RAMAN

Volume IV

OPTICS OF MINERALS AND DIAMOND

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Volume IV

1. Miscellaneous Papers

216. THE CURVATURE METHOD OF DETERMINING THE SURFACE TENSION OF LIQUIDS [1907 *Philos. Mag.* **14** 591]

217. SOME NEW METHODS IN KINEMATICAL THEORY [1912–13 *Bull. Calcutta Math. Soc.* **4** 1]

218. ON THE SUMMATION OF CERTAIN FOURIER SERIES INVOLVING DISCONTINUITIES [1913–14 *Bull. Calcutta. Math. Soc.* **5** 5]

219. THE VISCOSITY OF LIQUIDS [1923 *Nature (London)* **111** 600]

220. A THEORY OF THE VISCOSITY OF LIQUIDS [1923 *Nature (London)* **111** 532]
221. THE PHOTOGRAPHIC STUDY OF IMPACT AT MINIMAL VELOCITIES [1918 *Phys. Rev.* **12** 442]
222. PERCUSSION FIGURES IN ISOTROPIC SOLIDS [1919 *Nature (London)* **104** 113]
223. ON SOME APPLICATIONS OF HERTZ'S THEORY OF IMPACT [1920 *Phys. Rev.* **15** 277]
224. THE OPTICAL STUDY OF PERCUSSION FIGURES [1926 *J. Opt. Soc. Am.* **12** 387]
225. PERCUSSION FIGURES IN CRYSTALS [1958 *Proc. Indian Acad. Sci.* **A48** 307]
226. PERCUSSION FIGURES IN CRYSTALS [1959 *Curr. Sci.* **28** 1]
227. INDIA'S DEBT TO FARADAY [1931 *Nature (London)* **128** 362]
228. NEWTON AND THE HISTORY OF OPTICS [1942 *Curr. Sci.* **11** 453]
229. ASTRONOMICAL RESEARCH IN INDIA: I [1943 *Curr. Sci.* **12** 197]
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232. CENTENARY OF THE FARADAY EFFECT [1945 *Curr. Sci.* **14** 281]
233. SCIENCE IN EASTERN EUROPE: I [1958 *Curr. Sci.* **27** 371]
234. SCIENCE IN EASTERN EUROPE: II [1958 *Curr. Sci.* **27** 421]
235. ZONAL WINDS AND JET STREAMS IN THE ATMOSPHERE [1967 *Curr. Sci.* **36** 593]
236. THE ATMOSPHERE OF THE EARTH [1968 *Curr. Sci.* **37** 151]

2. Colour

237. THE ORIGIN OF THE COLOURS IN THE PLUMAGE OF THE BIRDS [1934 *Proc. Indian Acad. Sci.* **A1** 1]
238. ON IRIDESCENT SHELLS, PART I. INTRODUCTORY [1934 *Proc. Indian Acad. Sci.* **A1** 567]
239. ON IRIDESCENT SHELLS—PART II. COLOURS OF LAMINAR DIFFRACTION [1934 *Proc. Indian Acad. Sci.* **A1** 574]
240. ON IRIDESCENT SHELLS—PART III. BODY-COLOURS AND DIFFUSION-HALOES [1934 *Proc. Indian Acad. Sci.* **A1** 859]
241. THE STRUCTURE AND OPTICAL BEHAVIOUR OF IRIDESCENT SHELLS [1954 *Proc. Indian Acad. Sci.* **A39** 1; with D Krishnamurti]
242. THE STRUCTURE AND OPTICAL CHARACTERS OF IRIDESCENT GLASS [1939 *Proc. Indian Acad. Sci.* **A9** 371; with V S Rajagopalan]
243. COLOURS OF STRATIFIED MEDIA I: ANCIENT DECOMPOSED GLASS [1940 *Proc. Indian Acad. Sci.* **A11** 469; with V S Rajagopalan]
244. THE IRIDESCENT FELDSPARS [1950 *Curr. Sci.* **A19** 301]
245. THE STRUCTURE OF LABRADORITE AND THE ORIGIN OF ITS IRIDESCENCE [1950 *Proc. Indian Acad. Sci.* **A32** 1; with A Jayaraman]
246. THE STRUCTURE AND THE OPTICAL BEHAVIOUR OF THE CEYLON MOONSTONES [1950 *Proc. Indian Acad. Sci.* **A32** 123; with A Jayaraman and T K Srinivasan]
247. THE DIFFUSION HALOES OF THE IRIDESCENT FELDSPARS [1953 *Proc. Indian Acad. Sci.* **A37** 1; with A Jayaraman]
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252. The structure and optical behaviour of iridescent crystals of potassium chlorate [1953 *Proc. Indian Acad. Sci.* **A38** 261; with D Krishnamurti]
253. The structure of opal and the origin of its iridescence [1953 *Proc. Indian Acad. Sci.* **A38** 101; with A Jayaraman]
254. The structure of optical behaviour of iridescent opal [1953 *Proc. Indian Acad. Sci.* **A38** 343; with A Jayaraman]
255. The structure and optical behaviour of pearls [1954 *Proc. Indian Acad. Sci.* **A39** 215; with D Krishnamurti]
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260. The structure and optical behaviour of jadeite [1955 *Proc. Indian Acad. Sci.* **A41** 117; with A Jayaraman]
261. Crystals of quartz with iridescent faces [1950 *Proc. Indian Acad. Sci.* **A31** 275]

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262. The optical anisotropy and heterogeneity of vitreous silica [1950 *Proc. Indian Acad. Sci.* **A31** 141]
263. Structural birefringence in amorphous solids [1950 *Proc. Indian Acad. Sci.* **A31** 207]
264. The lamellar structure and birefringence of plate glass [1950 *Proc. Indian Acad. Sci.* **A31** 359]
265. The Smoky quartz [1921 *Nature (London)* **108** 81]
266. The structure of amethyst quartz and the origin of its pleochroism [1954 *Proc. Indian Acad. Sci.* **A40** 189; with A Jayaraman]
267. The birefringence patterns of crystal spheres [1956 *Proc. Indian Acad. Sci.* **A43** 1]
268. Amethyst—its nature and origin [1954 *Curr. Sci.* **23** 379]
269. On the structure of amethyst and its genesis in nature [1954 *Proc. Indian Acad. Sci.* **A40** 221; with A Jayaraman]
270. On the optical behaviour of crypto-crystalline quartz [1954 *Proc. Indian Acad. Sci.* **A41** 1; with A Jayaraman]
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272. On the polycrystalline forms of gypsum and their optical behaviour [1954 *Proc. Indian Acad. Sci.* **A39** 153; with A K Ramdas]
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275. The two species of fluorite [1962 *Curr. Sci.* **31** 445]

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277. THE STRUCTURE AND PROPERTIES OF DIAMOND [1943 *Curr. Sci.* **12** 33]
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281. BIREFRINGENCE PATTERNS IN DIAMONDS [1944 *Proc. Indian Acad. Sci.* **A19** 265; with G R Rendall]
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283. THE DIAMOND AND ITS TEACHINGS [1946 *Curr. Sci.* **15** 205]
284. NEW CONCEPTS OF CRYSTAL STRUCTURE [1946 *Curr. Sci.* **15** 329]
285. THE LUMINESCENCE OF DIAMOND AND ITS RELATION TO CRYSTAL STRUCTURE [1950 *Proc. Indian Acad. Sci.* **A32** 65; with A Jayaraman]
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