

John Campbell Brown
All Publications 1971-2006 by Subject Area

- A. Solar Physics/Plasma Physics**
- B. Inverse and Data Analysis Problems**
- C. Stellar Astrophysics**
- D. Meteors, Comets and Celestial Mechanics**
- E. Books/Chapters**
- F. Applications of Astrophysics to Other Sciences**
- G. Popular Articles and Book Reviews**

A. Solar Physics/Plasma Physics

- (I) Brown, J.C.: 1971, Solar Phys. 18, 489-502, "Deduction of Energy Spectra of Non Thermal Electrons in Flares from the Observed Dynamic Spectra of Hard X-Ray Bursts".
- (2) Brown, J.C.: 1972, Solar Phys. 25, I58-I77, "The Decay Characteristics of Models of Solar Hard X-Ray Bursts".
- (3) Brown, J.C.: 1972, Solar Phys. 26, 441-459, "The Directivity and Polarisation of Thick Target X-ray Bremsstrahlung from Solar Flares".
- (4) Brown, J.C.: 1972, Observatory 92, 210-211, "Hard X-Ray Polarisation as an Electron Beam Diagnostic".
- (5) Brown, J.C.: 1973, Solar Phys. 28, I51-I58, "Thick Target X-Ray Bremsstrahlung from Partially Ionised Targets in Solar Flares".
- (6) Brown, J.C.: 1973, Solar Phys. 29, 421-429, "On the Ionisation of Hydrogen in Optical Flares".
- (7) Brown, J.C.: 1973, Solar Phys. 31, I43-I69, "The Temperature Structure of Chromospheric Flares Heated by Non-Thermal Electrons".
- (8) Brown, J.C.: 1973, Solar Phys. 32, 227-229, "Temporal Fine Structure of X-rays from Trapped Electrons in Solar Flares".
- (9) Brown, J.C.: 1974, Proc. Leningrad Seminar on Solar Cosmic Rays (June 1973) p.35, "Solar Hard X-Ray and Gamma-Ray Bursts in the Interpretation of Solar Cosmic Ray Acceleration in Flares".
- (I0) Brown, J.C.: 1974, Solar Physics 36, 371-374, "Comments on the Role of Conduction in Optical Flare Heating".
- (II) Brown, J.C.: 1974, in G. Newkirk (ed.) Proc. I.A.U. Symp.57 on Coronal Disturbances (Surfers' Paradise, Queensland Sept.1973) 395-411 "On the Thermal Interpretation of Hard X-Ray Bursts from Solar Flares".
- (I2) Brown, J.C., McClymont, A.N., and McLean, I.S.: 1974, Nature 247, No.5441, 448-449, "Interpretation of Polarisation Measurements of Solar Hard X-Ray Bursts".
- (I3) Brown, J.C. and McClymont, A.N.: 1975, Solar Phys. 41, I35-151, "The Height Distribution of Flare Hard X-Rays in Thick and Thin Target Models".

- (I4) Brown, J.C. and Hoyng, P.: 1975, *Astrophys. J.* 200, 734-746,
"Betatron Acceleration in a large Solar Hard X-Ray Burst".
- (I5) Brown, J.C., van Beek, H.F. and McClymont, A.N.: 1975, *Astron. Astrophys.* 41, 345-402, "Determination of the Height of Solar Hard X-Ray Sources by Measurement of Photospheric Albedo Photons".
- (I6) Brown, J.C. and van Beek, H.F.: 1975, in S.R. Kane (ed.) *Solar, Gamma, X- and EUV Emission, I.A.U. Symposium 68* (Buenos Aires, June 1974) pp. 239-241, "Determination of the Height of Hard X-Ray Sources in the Solar Atmosphere".
- (I7) Hoyng, P., Brown, J.C. and van Beek, H.F.: 1976, *Solar Phys.* 48, 197-254, "High Time Resolution Analysis of Hard X-Ray Flares Observed by the T.D. -1A Satellite".
- (I8) Hoyng, P., Brown, J.C., van Beek, H.F. and Stevens, G.A.: 1975, in S.R. Kane (ed.) *Solar Gamma- X- and UV Radiation. I.A.U. Symp. 68*, 233-235. "High Time Resolution Analysis of Solar Flares Observed on the ESRO TD-IA Satellite".
- (I9) Brown, J.C.: 1975, in S.R. Kane (ed.) *Solar, Gamma, X- and EUV Radiation, Proc. IAU Symp. 68* (Buenos Aires, June 1974) - (Invited review Paper) p.245-282 "The Interpretation of Spectra, Polarisation and Directivity of Solar Hard X-Rays".
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- (23) Brown, J.C. and McClymont, A.N: 1976, *Solar Phys.* 49, 329-342, "Oscillations of Coronal Electron Traps Inferred from Solar Hard X-Ray Bursts".
- (24) Brown, J.C. and Melrose, D.B.: 1976, *Solar Phys.*, 52, II7-I3I, "Plasma Collective Effects and the Electron Number Problem in Solar Hard X-Ray Bursts".
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