

Contents

Vaporization Waves in Metals	1
<i>F.D. Bennett and G.D. Kahl</i>	
Initial Behavior of an Exploding Wire	27
<i>T.S. Chang and M.L. Chang</i>	
Similarities in Spark and Exploding Wire Discharges.	35
<i>Ihor M. Vitkovitsky</i>	
Exploding Wires as a Light Source for Quantitative Spectroscopy	41
<i>H. Jäger and W. Lochte-Holtgreven</i>	
An "Electrical Equation of State" of Metals Determined by an Exploding Wire Technique	51
<i>W.G. Chase, M.A. Levine, and C.V. Fish</i>	
Effect of Applied Magnetic Field on the Exploding Wire Phenomena-II	63
<i>A. Sakurai, T. Takao, and T. Taira</i>	
New Evidence for Standing Waves in Electrically Exploded Iron Wires	71
<i>Moody L. Coffman</i>	
Spectroscopic Investigation of the High-Density Plasma from Exploded Lithium Wires	87
<i>B. Ya'akobi</i>	
Faraday Rotation Measurements of the Precursor Ionization from an Exploding Wire Discharge	93
<i>Donald L. Jones</i>	

Time-Resolved Emission and Absorption Studies of Exploding Wire Spectra.	109
<i>Esther C. Cassidy and Stanley Abramowitz</i>	
Kerr-Cell Time-Resolved Spectra of an Exploding Wire.	125
<i>Robert P. DeSieno and Charles P. Nash</i>	
Interaction of High-Powered Focused Laser Beam with Exploding Wire	137
<i>Victor E. Scherrer, Philip W. Davis, Matthew J. Hillman, and Dick Manser</i>	
High Temperature Plasmas Produced by Exploding Wires	147
<i>David P. Ross and O.H. Zinke</i>	
Influence of Adsorbed Gases on the Emission of X-Rays from Exploding Tungsten Wires in Vacuum.	161
<i>S.K. Händel and B. Stenerhag</i>	
Current Distribution for Wire Exploded in Vacuo	173
<i>D.C. Chern and T. Korneff</i>	
Correlated X-Ray and Optical Streak Photographs of Exploding Wires	185
<i>K.S. Fansler and D.D. Shear</i>	
Time-Resolved Spectroscopy of Exploding Wires.	195
<i>Roger S. Case, Jr. and Arthur H. Guenther</i>	
Exploding Wire Detonators: Threshold Burst Current Dependence upon Detonator and Environmental Parameters	211
<i>T.J. Tucker</i>	
The Electrical Conductivity of Metals at Very High Temperatures	233
<i>H. Knoepfel and R. Luppi</i>	
A Thermal Model of Wire Explosions in Methane	253
<i>Bernard Siegel and Richard L. Johnson</i>	

Hydrocarbon Formation under Exploding Wire Conditions. . .	269
<i>Charles W. Spangler, Michael J. Joncich, and Stanley K. Lott</i>	
Exploding Wire Detonators for Use in Experimental Physics.	281
<i>Fritz Herlach</i>	
An Exploding Wire Self-Healing Fuse	299
<i>C.A. Renton and R.J. Manco</i>	
Deflagration of Secondary Explosives by Slowly Exploding Wires	305
<i>Robert J. Reithel</i>	
Capacitance-Voltage Relationships for the Initiation of PETN by Exploding Wires.	319
<i>Howard S. Leopold</i>	
Apparatus with Electronic Crowbar for Chemical Investigations of Exploding Wire Phenomena.	333
<i>M.J. Joncich, S.K. Lott, C.W. Spangler, and H.B. Giddings</i>	
Author Index.	343
Subject Index	347