

Abstract Submitted
for the DPP20 Meeting of
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Photon Radiation-Pressure (R-P) in Laser Light Reflectivity off Liquid-Metals (L-M) through Solid Metals Melting-Points and Liquid Metals Vaporization Points PhotoAcoustics (P-A) of Burst-Acoustic Emission (BAE) : Laser-Light Vaporization of Liquid-Metals E-CARL LUDWIG SIEGEL, Retired — Plasma-production in laser melting/welding/cutting of metals/alloys via photon radiation-pressure in laser-light Drude-theory reflectivity off liquid-metals/alloys through solid/metals/alloys melting point and liquid metals/alloys vaporization-points with photo acoustics of Siegel BAE[BAE Measurement of Creep-Plasticity, Phys.Stat.Sol. (72)-2 papers;BAE Bauschinger-Effect Plasticity Hysteresis:IEEE Ultrasonics Symp., Monterrey (73);Acta Metalurgica (77)]BAE laser-light photo vaporization to plasma-state of liquid-metals/alloys into metal/alloy plasmas production computation via Siegel[J.Non-Xline Solids 40,453 (80)] (GP) ontology explicitly for optical-phonons/polaritons embodying Noethers-theorem (N-T) ontology within Siegel[Symp. on Fractals, MRS Fall Mtg., Boston (89)-6 papers] agree with experimental plasma-production during laser-melting/welding/cutting of metals/alloys via very first Siegel/Gregson/G.M.-Valcartier (70-73) CO2-TEA laser. Siegel-Percus-Yevick (SPY)[Phys./Chem. Liquids (75);ibid. (76) theory agrees with experiments in laser metal/alloy melting/welding/cutting as implemented in G.M. manufacturing-practices at several G.M. divisions!: Et Lux Perpetua Luceat Eis!

E-Carl Ludwig Siegel
Retired

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