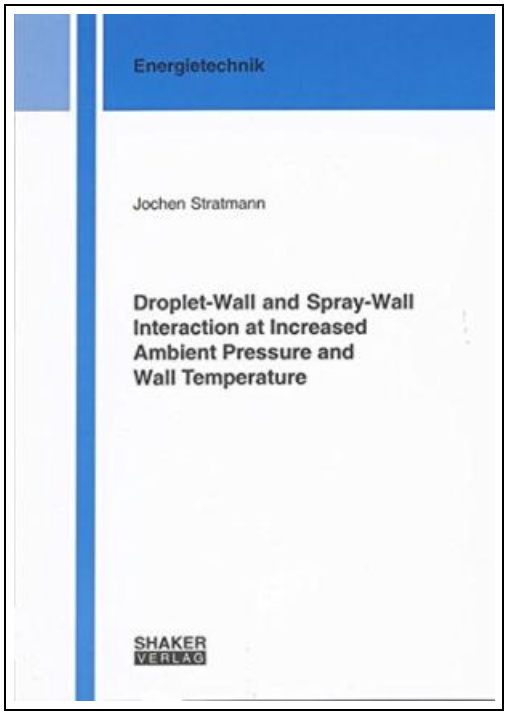
Droplet-Wall and Spray-Wall Interaction at Increased Ambient Pressure and Wall Temperature



Filesize: 1.85 MB

Reviews

It in a of my personal favorite book. It really is filled with wisdom and knowledge Your daily life period will likely be enhance the instant you total looking at this pdf.

(Mr. Rocio Schroeder Sr.)

DROPLET-WALL AND SPRAY-WALL INTERACTION AT INCREASED AMBIENT PRESSURE AND WALL TEMPERATURE

To get **Droplet-Wall and Spray-Wall Interaction at Increased Ambient Pressure and Wall Temperature** eBook, please access the button listed below and download the document or have access to additional information that are related to DROPLET-WALL AND SPRAY-WALL INTERACTION AT INCREASED AMBIENT PRESSURE AND WALL TEMPERATURE ebook.

Shaker Verlag Jul 2009, 2009. Buch. Book Condition: Neu. 21x14.8x cm. Neuware - In direct-injection gasoline engines, the interaction of the fuel spray with a wall of the combustion chamber may influence the mixture formation process and, as a consequence, the engine efficiency and emissions. Detailed knowledge of the fundamental phenomena occurring throughout this process is therefore a prerequisite for the development of such engines. Spray-wall interaction models employed in numerical tools for engine development are based on a limited number of experimental investigations, of which many are conducted with respect to applications other than fuel injection. This work aims at contributing to the clarification of the role of the wall temperature and the ambient gas pressure on the droplet-wall and spray-wall interaction process at gasoline engine-relevant conditions. The results of this study feature a classification of droplet-wall interaction regimes in dependence on the initial droplet Weber-number, the wall temperature as well as the ambient pressure. The properties of the secondary droplets resulting from droplet breakup are characterized as to their size, number, velocity, trajectory and diameter-velocity correlation using Phase-Doppler Anemometry. The secondary droplet diameter distribution is approximated by a suitable distribution function. The parameters of this function are formulated in terms of the influencing properties, leading to a statistical droplet-wall model. In addition, near-wall spray details, i.e. temporally and spatially resolved droplet size and velocity components, of an engine-like spray are determined at increased gas density and variable wall temperature. The results, which reveal the transient character of the wall spray, are suitable to develop an understanding of the process and may serve as a basis for the comparison with numerical simulations. It is acknowledged that parts of this study are a contribution to the EUproject 'Droplet Wall Interaction Phenomena of Relevance To Direct Injection Gasoline Engines' (DWDIE) financed...

You May Also Like

[PDF] Dog on It! - Everything You Need to Know about Life Is Right There at Your Feet
Follow the hyperlink beneath to read "Dog on It! - Everything You Need to Know about Life Is Right There at Your Feet" PDF file.
Save PDF »

[PDF] Because It Is Bitter, and Because It Is My Heart (Plume)
Follow the hyperlink beneath to read "Because It Is Bitter, and Because It Is My Heart (Plume)" PDF file.
Save PDF »

[PDF] Read Write Inc. Phonics: Purple Set 2 Non-Fiction 4 What is it?
Follow the hyperlink beneath to read "Read Write Inc. Phonics: Purple Set 2 Non-Fiction 4 What is it?" PDF file.
Save PDF »

[PDF] Way it is
Follow the hyperlink beneath to read "Way it is" PDF file.
Save PDF »

[PDF] Trucktown: It is Hot (Pink B)
Follow the hyperlink beneath to read "Trucktown: It is Hot (Pink B)" PDF file.
Save PDF »

[PDF] Is It Ok Not to Believe in God?: For Children 5-11
Follow the hyperlink beneath to read "Is It Ok Not to Believe in God?: For Children 5-11" PDF file.
Save PDF »