DESCRIPTION

Vacuum is an international rapid publications journal with a focus on short communication. All papers are peer-reviewed, with the review process for short communication geared towards very fast turnaround times. The journal also published full research papers, thematic issues and selected papers from leading conferences.

A report in Vacuum should represent a major advance in an area that involves a controlled environment at pressures of one atmosphere or below.

The scope of the journal includes:
1. Vacuum; original developments in vacuum pumping and instrumentation, vacuum measurement, vacuum gas dynamics, gas-surface interactions, surface treatment for UHV applications and low outgassing, vacuum melting, sintering, and vacuum metrology. Technology and solutions for large-scale facilities (e.g., particle accelerators and fusion devices). New instrumentation (e.g., detectors and electron microscopes).
2. Plasma science; advances in PVD, CVD, plasma-assisted CVD, ion sources, deposition processes and analysis.
3. Surface science; surface engineering, surface chemistry, surface analysis, crystal growth, ion-surface interactions and etching, nanometer-scale processing, surface modification.

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Surface Scientists, Materials Scientists.

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INTRODUCTION

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2. Plasma science; advances in PVD, CVD, plasma-assisted CVD, ion sources, deposition processes and analysis.

3. Surface science; surface engineering, surface chemistry, surface analysis, crystal growth, ion-surface interactions and etching, nanometer-scale processing, surface modification.


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1 bar = 10⁵ Pa exactly
1 millibar (mbar) = 100 Pa exactly.

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1 m³ h⁻¹ = 1/3600 m³ s⁻¹ 0.000278 m³ s⁻¹).
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1 l s⁻¹ = 10⁻³ m³ s⁻¹.

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<table>
<thead>
<tr>
<th>Quantity measured in (2)</th>
<th>Multiply by (3) Resulting number in (4) Multiply column (3) by (5) Resulting number in (6)</th>
</tr>
</thead>
</table>
| torr 133.322 Pa 0.01 mbar mm Hg 133.322 Pa 0.01 mbar micron 0.133322 Pa 0.01 mbar technical atmospheres (kgf cm⁻²) 98.0665 kPa 10 mbar m⁻³ h⁻¹ 0.000278 m³ s⁻¹ ls⁻¹ 0.001 m³ s⁻¹ torr l s⁻¹ 0.133322 Pa m³ s⁻¹ 10 mbar l s⁻¹ standard atmosphere (cm³ s⁻¹) 0.101325 Pa m³ s⁻¹ 10 mbar l s⁻¹ torr l s⁻¹ cm⁻² 1333.22 Pa m³ s⁻¹ m⁻² 0.001 mbar l s⁻¹ cm⁻² Table of conversion factors
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