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A Theoretical Model of Non-deforming Bullets Penetrating Ballistic Gelatin

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Highlights

- A new assumption of the pressure on the surface of the tumbling bullet is proposed.
- Correlations between the force coefficients, the moment coefficient and the attack angle, the shape parameters are revealed analytically.
- Initial angular velocities of the bullet are taken into account when solving the proposed ballistic model.
- Spatial motions of the 7.62mm rifle bullet penetrating ballistic are simulated with the ballistic model.

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