

Accepted Manuscript

Modelling the spread of malware with the influence of heterogeneous immunization

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PII: S0307-904X(15)00648-4
DOI: [10.1016/j.apm.2015.09.105](https://doi.org/10.1016/j.apm.2015.09.105)
Reference: APM 10813



To appear in: *Applied Mathematical Modelling*

Received date: 30 July 2014
Revised date: 19 June 2015
Accepted date: 30 September 2015

Please cite this article as: Wanping Liu, Chao Liu, Xiaoyang Liu, Shaoguo Cui, Xianying Huang, Modelling the spread of malware with the influence of heterogeneous immunization, *Applied Mathematical Modelling* (2015), doi: [10.1016/j.apm.2015.09.105](https://doi.org/10.1016/j.apm.2015.09.105)

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HIGHLIGHTS

- A novel compartmental mathematical model for malware spread is developed.
- User security awareness is considered in the model in terms of distinct levels of secure protection.
- We analyze the dynamics of the model and the sensitivity analysis of parameters on the threshold.
- A collection of effective measures is recommended for preventing malware spread across the Internet.

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