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В 2010 году окончил Тверской государственный университет.

В 2013 году защитил диссертацию на соискание ученой степени кандидата физико-математических наук по специальности 01.04.11 Физика магнитных явлений на тему: "Влияние температурных и механических воздействий на величину магнитокалорического эффекта в соединениях 3d- и 4f-металлов». Защита состоялась в Тверском государственном университете.

Круг научных интересов Д.Ю. Карпенкова охватывает следующие области: Магнитокалорический эффект микро- и нанокристаллических интерметаллических соединениях РЗМ-3d, сплавы Гейслера, транспортные свойства, магнитоэлектрический эффект в планарных гетероструктурах, постоянные магниты.

Автор более 40 научных работ.

Список основных публикаций:

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3. Radulov I.A., Skokov K.P., Karpenkov D.Y., Gottschall, T. Gutfleisch O. On the preparation of La(Fe,Mn,Si)(13)H-x polymer-composites with optimized magnetocaloric properties, JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, 396 (2015) 228-236, DOI: 10.1016/j.jmmm.2015.08.044, IF:1.970
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 8. Taskaev, S. Magnetocaloric properties of cold rolled Gd_{100-x}Zr_x (x= 0, 1, 2, 3) intermetallic alloys / S. Taskaev, K. Skokov, D. Karpenkov, V. Khovaylo, V. Buchelnikov, D. Zharebtsov, M. Ulyanov, D. Bataev, D. Galimov, A. Pellenen // Solid State Phenomena. – 2015. – V. 233-234. – P. 220-224.

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