

Alper YESILCUBUK, PhD



Alper Yeşilçubuk completed his undergraduate studies at Istanbul Technical University (ITU, Turkey) in June 1997. Dr. Yeşilçubuk received his MSc and PhD. degrees from Istanbul Technical University-Turkey in Material Science and Engineering Department. He has extensive research experience in material synthesis and characterization of powder metallurgical applications, thin film coatings, surface treatments, ceramic based materials, magnetic materials, ferrous and non-ferrous materials. He works as Metals and Surface Technologies Team Leader in Central R&D at Arçelik since 2010.

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Title:

2D Materials and Industrial Applications

Authors & affiliations:

Alper Yeşilçubuk

Abstract: (Your abstract must use **Normal style** and must fit in this box. Your abstract should be no longer than 300 words. The box will 'expand' over 2 pages as you add text/diagrams into it.)

Starting with graphene, there are many experiments on 2 D materials such as BN, MoS₂ etc. 2D materials are providing a range of different properties by using them as single layer, multilayer or composites. It is possible to achieve a wide range of properties by combining different layers of these materials together. There are enormous applications related to 2D materials; electronics, production, health and environment, sensors, energy applications, membranes etc. From industrial point of view there are two main factors to determine if the technology scalable or not; maturity of the technology and feasibility. Near future market and scalable applications for 2D materials are driven by production limits, so the maturity of these technologies.