

## CV of Olga H Krafcsik

### Personal data

Name Olga H Krafcsik  
Position Associate professor  
Current institution Department of Atomic Physics,  
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Phone +36 1 463 1589  
Date of birth 1973

### Education

2002 PhD in Physics “Investigation of C diffusion by surface analytical tools”, BME  
Hungary  
1997 MSc degree in Physics, BME, Hungary

### Employment

2018-	associate professor	BME, Hungary
2012-2018	assistant professor	BME, Hungary
2005-2012	scientific advisor, project coordinator	EnergSolar Hungary Ltd
2000-2005	research fellow	(2007-2012 maternity leave) Institute of Technical Physics and Materials Science of the Hungarian Academy of Sciences (MTA MFA) (2002-2005 maternity leave)

### Research interest

- Surface Analytics (XPS, SIMS, AES)
- SiC nanocrystals
- Thin film PV technology

### Teaching activity

- Introduction to Surface Physics
- Surface Physics and Thin Films
- Analytical investigation methods for Materials Science (Lecture +Lab. course)
- Materials Science Laboratory
- Advanced Physics Laboratory for BSc students
- Physics Laboratory for MSc students

### Students supervised

- BSc students: Csepregi Ákos (2014)  
Ocskó-Sós Csaba (2015)
- MSc students: Németh Ágoston (2002),  
Rácz Adél (2016),  
Veres Dávid (2017),  
Bátki Zoltán (2017)

## Memberships and professional service

### Grants, fellowships, projects (since 2002)

2018-2021	CO2EXIDE (EU 2020 project, participant)
2016-2019	NVKP_16-1-2016-0043 Humán agydiagnosztika fejlesztése epilepszia céljából
2002-2006	PV technology Innovation Center (400 mFt, coordinator)

## Languages

English (intermediate), Russian (beginner)

### Scientific impact (as of 01/2019)

15 papers in refereed journals

1 Hungarian patent

Total number of independent citations: 65

H-index:

Complete list of publications:

<https://m2.mtmt.hu/gui2/?type=authors&mode=browse&sel=authors10042839>

### Five selected publications

1. Beke, D. ; Fučíková, A. ; Jánosi, T.Z. ; Károlyházy, G. ; Somogyi, B ; Lenk, S. ; Krafcsik, O. ; Czigány, Z. ; Erostyák, J. ; Kamarás, K. et al., Direct Observation of Transition from Solid-State to Molecular-Like Optical Properties in Ultrasmall Silicon Carbide Nanoparticles, JOURNAL OF PHYSICAL CHEMISTRY C **122** : **46** pp. 26713-26721 (2018)
2. Zs, J Horváth ; L, Dózsa ; O H, Krafcsik ; T, Mohácsy ; Gy, Vida ; P, Deák, Electrical Behaviour of Al/SiO<sub>2</sub>/Si Structures with SiC Nanocrystals, APPLIED SURFACE SCIENCE **234** : 1-4 pp. 67-71. , 5 p. (2004)
3. Krafcsik, OH ; Josepovits, KV ; Toth, L ; Pecz, B ; Deak, P, Growth of Epitaxial Beta-SiC at The SiO<sub>2</sub>/Si Interface as a Result of Annealing in CO, JOURNAL OF THE ELECTROCHEMICAL SOCIETY **149** : 4 pp. G297-G299. (2002)
4. Krafcsik, OH ; Vida, G ; Pocsik, I ; Josepovits, KV ; Deak, P, Carbon diffusion through SiO<sub>2</sub> from a hydrogenated amorphous carbon layer and accumulation at the SiO<sub>2</sub>/Si interface, JAPANESE JOURNAL OF APPLIED PHYSICS **40** : **4A** pp. 2197-2200. , 4 p. (2001)

5. Deák Péter; Homokiné Krafcsik Olga; Vargáné Josepovits Katalin; Pécz Béla; Bársony István, Reaktív hőkezelési eljárás köbös szilíciumkarbid (3C-SiC) epitaxiális előállítására szilícium felületi rétegében, Benyújtás éve (szabadalom): 2000 , Benyújtás száma: P0004418 , NSZO: H01L 29/02, H01L 29/04 , Ügyszám: P0004418 , Benyújtás országa: Magyarország