Mitsutaro Umehara

List of Publications by Year
in descending order

16	514	933447 10	940533 16
papers	citations	h-index	g-index

16	16	16	803
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhanced Bulk Transport in Copper Vanadate Photoanodes Identified by Combinatorial Alloying. Matter, 2020, 3, 1601-1613.	10.0	8
2	Bi Alloying into Rare Earth Double Perovskites Enhances Synthesizability and Visible Light Absorption. ACS Combinatorial Science, 2020, 22, 895-901.	3.8	5
3	Multi-component background learning automates signal detection for spectroscopic data. Npj Computational Materials, 2019, 5, .	8.7	21
4	Multi-modal optimization of bismuth vanadate photoanodes via combinatorial alloying and hydrogen processing. Chemical Communications, 2019, 55, 489-492.	4.1	15
5	Analyzing machine learning models to accelerate generation of fundamental materials insights. Npj Computational Materials, 2019, 5, .	8.7	60
6	Alkaline-stable nickel manganese oxides with ideal band gap for solar fuel photoanodes. Chemical Communications, 2018, 54, 4625-4628.	4.1	2
7	Combinatorial alloying improves bismuth vanadate photoanodes via reduced monoclinic distortion. Energy and Environmental Science, 2018, 11, 2444-2457.	30.8	21
8	Cu₂ZnSnS₄ photovoltaic cell with improved efficiency fabricated by highâ€temperature annealing after CdS bufferâ€layer deposition. Progress in Photovoltaics: Research and Applications, 2017, 25, 14-22.	8.1	97
9	Band slope in CdS layer of ZnO:Ga/CdS/Cu2ZnSnS4photovoltaic cells revealed by hard X-ray photoelectron spectroscopy. Applied Physics Letters, 2016, 109, 203902.	3.3	6
10	Wide bandgap Cu2ZnSn1â^'Ge S4 fabricated on transparent conductive oxide-coated substrates for top-cells of multi-junction solar cells. Journal of Alloys and Compounds, 2016, 689, 713-717.	5.5	16
11	Cu₂Sn_{1â^'} _xGe_xS₃ solar cells fabricated with a graded bandgap structure. Applied Physics Express, 2016, 9, 072301.	2.4	71
12	Photovoltaic properties of Cu₂ZnSnS₄ cells fabricated using ZnSnO and ZnSnO/CdS buffer layers. Japanese Journal of Applied Physics, 2016, 55, 112302.	1.5	21
13	Improvement of red light response of Cu2Sn1â^'xGexS3 solar cells by optimization of CdS buffer layers. Journal of Applied Physics, 2015, 118, 154502.	2.5	10
14	Energy level diagram around Ge-rich grain boundaries in Cu2Sn1-xGexS3 (CTGS) thin-film solar cells. Solar Energy Materials and Solar Cells, 2015, 134, 1-4.	6.2	23
15	Cu₂Sn_{1-x}Ge_xS₃(x= 0.17) Thin-Film Solar Cells with High Conversion Efficiency of 6.0%. Applied Physics Express, 2013, 6, 045501.	2.4	132
16	Laser Annealing to Form High-Temperature Phase of FeS2. Japanese Journal of Applied Physics, 2012, 51, 02BP10.	1.5	6