Changwon Suh

List of Publications by Year
in descending order

26 papers	2,310 citations	687363 13 h-index	713466 21 g-index
28 all docs	28 docs citations	28 times ranked	2975 citing authors

#	Article	IF	Citations
1	Evolving the Materials Genome: How Machine Learning Is Fueling the Next Generation of Materials Discovery. Annual Review of Materials Research, 2020, 50, 1-25.	9.3	49
2	What Is High-Throughput Virtual Screening? A Perspective from Organic Materials Discovery. Annual Review of Materials Research, 2015, 45, 195-216.	9.3	203
3	Analysis of governing factors for photovoltaic loss mechanism of n-CdS/p-CdTe heterojunction via multi-way data decomposition. Progress in Photovoltaics: Research and Applications, 2015, 23, 49-60.	8.1	4
4	Computational design of molecules for an all-quinone redox flow battery. Chemical Science, 2015, 6, 885-893.	7.4	341
5	A metal-free organicâ€"inorganic aqueous flow battery. Nature, 2014, 505, 195-198.	27.8	1,333
6	Photovoltaics Informatics: Harnessing Energy Science via Data-driven Approaches. Materials Research Society Symposia Proceedings, 2012, 1425, 7.	0.1	1
7	Application of principal component analysis to a full profile correlative analysis of FTIR spectra. Surface and Interface Analysis, 2012, 44, 365-371.	1.8	11
8	Exploring high-dimensional data space: Identifying optimal process conditions in photovoltaics. , 2011, , .		4
9	Data Mining-Aided Crystal Engineering for the Design of Transparent Conducting Oxides. Materials Research Society Symposia Proceedings, 2011, 1315, 1.	0.1	1
10	Step-stress accelerated lifetime testing for photovoltaic devices and cells. , 2010, , .		1
11	Data-mining-aided mapping of structure-property relationships for combinatorially generated Co-doped ZnO thin films. , 2010, , .		0
12	Step-stress accelerated lifetime testing for photovoltaic devices and cells. , 2010, , .		0
13	Multivariate Analysis for Chemistry-Property Relationships in Molten Salts. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2009, 64, 467-476.	1.5	2
14	Tools for Aggregating, Analyzing and Mining Combinatorial Data. Materials Research Society Symposia Proceedings, 2009, 1159, 3081.	0.1	0
15	Informatics for chemical crystallography. Jom, 2009, 61, 48-53.	1.9	5
16	Principal component analysis and dimensional analysis as materials informatics tools to reduce dimensionality in materials science and engineering. Statistical Analysis and Data Mining, 2009, 1, 361-371.	2.8	38
17	Visualization of High-Dimensional Combinatorial Catalysis Data. ACS Combinatorial Science, 2009, 11, 385-392.	3.3	15
18	Analyzing Sparse Data for Nitride Spinels Using Data Mining, Neural Networks, and Multiobjective Genetic Algorithms. Materials and Manufacturing Processes, 2008, 24, 2-9.	4.7	33

#	Article	IF	Citations
19	Principal Component Analysis of Catalytic Functions in the Composition Space of Heterogeneous Catalysts. QSAR and Combinatorial Science, 2007, 26, 528-535.	1.4	37
20	Extracting information from the molten salt database. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 3411-3414.	2.2	17
21	2006 Visualization Challenge Winners. Science, 2006, 313, 1730-1735.	12.6	3
22	Virtual Screening and QSAR Formulations for Crystal Chemistry. QSAR and Combinatorial Science, 2005, 24, 114-119.	1.4	43
23	Combinatorial design of semiconductor chemistry for bandgap engineering: â€œvirtualâ€•combinatorial experimentation. Applied Surface Science, 2004, 223, 148-158.	6.1	63
24	â€œSecondaryâ€•descriptor development for zeolite framework design: an informatics approach. Applied Catalysis A: General, 2003, 254, 147-160.	4.3	28
25	Combinatorial Materials Design through Database Science. Materials Research Society Symposia Proceedings, 2003, 804, 296.	0.1	9
26	The application of Principal Component Analysis to materials science data. Data Science Journal, 2002, 1, 19-26.	1.3	57