

# Christopher Barreett

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8727232/publications.pdf>

Version: 2024-02-01

19  
papers

1,210  
citations

687363

13  
h-index

794594

19  
g-index

21  
all docs

21  
docs citations

21  
times ranked

825  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of grain boundaries on texture formation during dynamic recrystallization of magnesium alloys. Acta Materialia, 2017, 128, 270-283.	7.9	194
2	Why are $10\langle 10\bar{1} \rangle$ twins profuse in magnesium?. Acta Materialia, 2015, 85, 354-361.	7.9	187
3	Nucleation and preferential growth mechanism of recrystallization texture in high purity binary magnesium-rare earth alloys. Acta Materialia, 2017, 138, 27-41.	7.9	174
4	The roles of grain boundary dislocations and disclinations in the nucleation of $\{102\}$ twinning. Acta Materialia, 2014, 63, 1-15.	7.9	145
5	The effect of rare earth element segregation on grain boundary energy and mobility in magnesium and ensuing texture weakening. Scripta Materialia, 2018, 146, 46-50.	5.2	109
6	Dislocation induced twin growth and formation of basal stacking faults in $10\langle 10\bar{1} \rangle$ twins in pure Mg. Acta Materialia, 2018, 146, 1-15.	7.9	85
7	Unraveling Recrystallization Mechanisms Governing Texture Development from Rare-Earth Element Additions to Magnesium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 1809-1829.	7.9	79
8	Unraveling Recrystallization Mechanisms Governing Texture Development from Rare-Earth Element Additions to Magnesium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 1809-1829.	2.2	53
9	New interatomic potential for Mg-Al-Zn alloys with specific application to dilute Mg-based alloys. Modelling and Simulation in Materials Science and Engineering, 2018, 26, 045010.	2.0	40
10	The candidacy of shuffle and shear during compound twinning in hexagonal close-packed structures. Acta Materialia, 2013, 61, 7646-7659.	7.9	39
11	Fundamentals of mobile tilt grain boundary faceting. Scripta Materialia, 2014, 84-85, 15-18.	5.2	35
12	Effect of rare earth addition on $10\langle 10\bar{1} \rangle$ twinning in pure Mg. Acta Materialia, 2018, 146, 1-15.	5.6	21
13	Beyond initial twin nucleation in hcp metals: Micromechanical formulation for determining twin spacing during deformation. Acta Materialia, 2017, 133, 134-146.	7.9	15
14	Generalized interfacial fault energies. International Journal of Solids and Structures, 2017, 110-111, 106-112.	2.7	10
15	Unraveling Mg slip using neural network potential. Philosophical Magazine, 2022, 102, 651-673.	1.6	8
16	Analysis of twinning via automated atomistic post-processing methods. Philosophical Magazine, 2017, 97, 1102-1128.	1.6	7
17	An atomistic gateway into capturing twin nucleation in crystal plasticity. Philosophical Magazine Letters, 2020, 100, 375-385.	1.2	4
18	Comments on extended zonal dislocations mediating twinning in titanium. Philosophical Magazine, 2013, 93, 3491-3494.	1.6	3

#	ARTICLE	IF	CITATIONS
19	Martensitic microstructure evolution in austenitic steel: A thermomechanical polycrystalline phase field study. Journal of Materials Research, 2021, 36, 1376-1399.	2.6	2