

# Darryl P Butt

## List of Publications by Year in descending order

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82  
papers

2,960  
citations

279798

23  
h-index

168389

53  
g-index

83  
all docs

83  
docs citations

83  
times ranked

2851  
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxidation behavior of welded Zry-3, Zry-4, and Zrâ€“1Nb tubes. Nuclear Materials and Energy, 2019, 21, 100714.	1.3	3
2	Effects of sintering aides on the hydrothermal oxidation of silicon nitride spherical rolling elements. Corrosion Engineering Science and Technology, 2019, 54, 22-27.	1.4	0
3	Microgalvanic Corrosion Behavior of Cu-Ag Active Braze Alloys Investigated with SKPFM. Metals, 2016, 6, 91.	2.3	14
4	Sintering Behavior of Lanthanaâ€“Bearing Nanostructured Ferritic Steel Consolidated via Spark Plasma Sintering. Advanced Engineering Materials, 2016, 18, 324-332.	3.5	13
5	Stability and Decomposition of Caâ€“Substituted Lanthanum Ferrite in Reducing Atmospheres. Journal of the American Ceramic Society, 2015, 98, 2881-2886.	3.8	15
6	High temperature oxidation kinetics of dysprosium particles. Journal of Alloys and Compounds, 2015, 644, 211-222.	5.5	3
7	Microdomain Formation, Oxidation, and Cation Ordering in LaCa <sub>2</sub> Fe <sub>3</sub> O <sub>8+y</sub> . Journal of the American Ceramic Society, 2015, 98, 2248-2254.	3.8	6
8	Synthesis and sintering of UN-UO <sub>2</sub> fuel composites. Journal of Nuclear Materials, 2015, 466, 745-754.	2.7	48
9	In situ characterization of the nitridation of dysprosium during mechanochemical processing. Journal of Alloys and Compounds, 2015, 619, 253-261.	5.5	10
10	Kinetics of the nitridation of dysprosium during mechanochemical processing. Journal of Alloys and Compounds, 2015, 620, 413-420.	5.5	2
11	Simulation of the Relaxation Potential Profile of an ac-dc-ac Test. International Journal of Corrosion, 2014, 2014, 1-12.	1.1	3
12	Effect of Grain Boundaries on Krypton Segregation Behavior in Irradiated Uranium Dioxide. Jom, 2014, 66, 2562-2568.	1.9	7
13	Phase Transformations in Calciumâ€“Substituted Lanthanum Ferrite. Journal of the American Ceramic Society, 2014, 97, 2241-2248.	3.8	22
14	Mechanochemical Synthesis of Cerium Monosulfide. Journal of the American Ceramic Society, 2014, 97, 2357-2359.	3.8	13
15	Thin Ge-Se films as a sensing material for radiation doses. Physica Status Solidi (B): Basic Research, 2014, 251, 1347-1353.	1.5	5
16	Gamma radiation induced effects in floppy and rigid Ge-containing chalcogenide thin films. Journal of Applied Physics, 2014, 115, 043502.	2.5	16
17	Thermal Expansion of Alkalineâ€“Doped Lanthanum Ferrite Near the NÃ©el Temperature. Journal of the American Ceramic Society, 2014, 97, 228-234.	3.8	13
18	Mechanochemical synthesis of uranium sesquisilicide. Journal of Nuclear Materials, 2014, 451, 243-248.	2.7	10

#	ARTICLE	IF	CITATIONS
19	Recrystallization Kinetics of $3C$ Silicon Carbide Implanted with 400 keV Cesium Ions. <i>Journal of the American Ceramic Society</i> , 2013, 96, 3290-3295.	3.8	5
20	Simulation and process flow of radiation sensors based on chalcogenide glasses for in situ measurement capability. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 2415-2419.	0.8	4
21	Effect of Dysprosia Additive on the Consolidation of $CeO_2$ by Spark Plasma Sintering. <i>Journal of the American Ceramic Society</i> , 2012, 95, 1524-1529.	3.8	6
22	Microstructural characterization and pore structure analysis of nuclear graphite. <i>Journal of Nuclear Materials</i> , 2011, 415, 189-197.	2.7	96
23	In situ transmission electron microscopy of electron-beam induced damage process in nuclear grade graphite. <i>Journal of Nuclear Materials</i> , 2011, 412, 321-326.	2.7	85
24	Compatibility of ZrN and HfN with molten $LiCl-KCl-NaCl-UCl_3$ . <i>Journal of Nuclear Materials</i> , 2010, 405, 266-273.	2.7	5
25	Synthesis of dysprosium and cerium nitrides by a mechanically induced gas-solid reaction. <i>Journal of Nuclear Materials</i> , 2009, 392, 121-124.	2.7	9
26	Kinetics of thermal synthesis of cerium sulfides. <i>Journal of Nuclear Materials</i> , 2008, 378, 291-298.	2.7	7
27	Synthesis of uranium nitride by a mechanically induced gas-solid reaction. <i>Journal of Nuclear Materials</i> , 2008, 381, 309-311.	2.7	20
28	Novel anti-corrosion nano-sized vanadia-based thin films prepared by sol-gel method for aluminum alloys. <i>Journal of Materials Processing Technology</i> , 2007, 181, 76-80.	6.3	50
29	Electrochemical impedance studies of sol-gel based ceramic coatings systems in 3.5% NaCl solution. <i>Electrochimica Acta</i> , 2007, 52, 3310-3316.	5.2	56
30	Impedance of steels in new and degraded ester based lubricating oil. <i>Electrochimica Acta</i> , 2006, 51, 1497-1504.	5.2	21
31	Environmentally compliant silica conversion coatings prepared by sol-gel method for aluminum alloys. <i>Surface and Coatings Technology</i> , 2006, 201, 401-407.	4.8	68
32	Synthesis and pyrolysis of novel polysilazane to SiBCN ceramic. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 2995-3005.	3.1	41
33	Stability of the Perovskite Compounds in the $CeGaO$ and $PuGaO$ Systems.. <i>ChemInform</i> , 2003, 34, no.	0.0	0
34	Use of a Cobalt-Based Metallic Glass for Joining $MoSi_2$ to Stainless Steel. <i>Materials Science Forum</i> , 2002, 386-388, 535-540.	0.3	0
35	Kinetics and Products of Molybdenum Disilicide Powder Oxidation. <i>Journal of the American Ceramic Society</i> , 2002, 85, 507-509.	3.8	15
36	Stability of the Perovskite Compounds in the $CeGaO$ and $PuGaO$ Systems. <i>Journal of the American Ceramic Society</i> , 2002, 85, 2811-2816.	3.8	26

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37	Thermal removal of gallium from gallia-doped ceria. Journal of Nuclear Materials, 2000, 280, 285-294.	2.7	8
38	Review of liquid metal corrosion issues for potential containment materials for liquid lead and lead-bismuth eutectic spallation targets as a neutron source. Nuclear Engineering and Design, 2000, 196, 315-325.	1.7	68
39	Microstructural evolution, microhardness and thermal stability of HPT-processed Cu. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 290, 128-138.	5.6	309
40	Use of Metallic Glasses in Molybdenum Disilicide-Stainless Steel Joining. Journal of Materials Engineering and Performance, 2000, 9, 280-285.	2.5	2
41	The need and options available for permanent CO2 disposal. , 2000, , 41-49.		4
42	Thermal vaporization and deposition of gallium oxide in hydrogen. Journal of Nuclear Materials, 1999, 264, 71-77.	2.7	80
43	Mechanical properties of bone-shaped-short-fiber reinforced composites. Acta Materialia, 1999, 47, 1767-1781.	7.9	49
44	Durability of molybdenum disilicide in molten alkali borosilicate glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 261, 278-283.	5.6	8
45	Title is missing!. Oxidation of Metals, 1999, 51, 383-402.	2.1	28
46	A comparative study of the strain rate and temperature dependent compression behavior of Ti-46.5Al-3Nb-2Cr-0.2W and Ti-25Al-10Nb-3V-1Mo intermetallic alloys. Scripta Materialia, 1999, 41, 569-574.	5.2	12
47	A Method for Measuring the Corrosion Rate of Materials in Spallation Neutron Source Target/Blanket Cooling Loops. Materials Characterization, 1999, 43, 135-145.	4.4	7
48	Gallium Removal from Weapons-Grade Plutonium and Cerium Oxide Surrogate by a Thermal Technique. Materials Research Society Symposia Proceedings, 1999, 556, 129.	0.1	6
49	Oxidation Kinetics of Hexagonal-Shaped Single-Crystal Silicon Whiskers. Journal of the American Ceramic Society, 1999, 82, 2791-2795.	3.8	0
50	Thermal Oxidation Kinetics of MoSi <sub>2</sub> -Based Powders. Journal of the American Ceramic Society, 1999, 82, 2785-2790.	3.8	54
51	Thermodynamic considerations of using chlorides to accelerate the carbonate formation from magnesium silicates. , 1999, , 349-354.		4
52	High-Temperature Oxidation of Ti-48Al-2Nb-2Cr and Ti-25Al-10Nb-3V-1Mo. Oxidation of Metals, 1998, 50, 215-240.	2.1	22
53	Effect of pitting corrosion in NaCl solutions on the statistics of fracture of beryllium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 2753-2760.	2.2	8
54	The corrosion of materials in spallation neutron sources. Jom, 1998, 50, 56-59.	1.9	0

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55	The Nature of Oxide Films on Tungsten in Acidic and Alkaline Solutions. Journal of the Electrochemical Society, 1998, 145, 2718-2725.	2.9	107
56	Raman and Electrochemical Probes of the Dissolution Kinetics of Tungsten in Hydrogen Peroxide. Journal of Physical Chemistry B, 1998, 102, 9501-9507.	2.6	10
57	A Precise Method for Determining the CO <sub>2</sub> Content of Carbonate Materials. Journal of Chemical Education, 1998, 75, 1610.	2.3	7
58	Kinetics of Thermal, Passive Oxidation of Nicalon Fibers. Journal of the American Ceramic Society, 1998, 81, 655-660.	3.8	36
59	Endothermic Reactions between Mullite and Silicon Carbide in an Argon Plasma Environment. Journal of the American Ceramic Society, 1998, 81, 233-236.	3.8	4
60	Corrosion of 304 stainless steel exposed to nitric acid-chloride environments. Corrosion Science, 1997, 39, 2067-2093.	6.6	90
61	Progress on binding CO <sub>2</sub> in mineral substrates. Energy Conversion and Management, 1997, 38, S259-S264.	9.2	184
62	Oxidation kinetics and mechanisms of Ti-Ta alloys. Oxidation of Metals, 1997, 47, 317-353.	2.1	22
63	The effects of nitrogen on the kinetics and mechanisms of oxidation of Titanium-Tantalum alloys. Oxidation of Metals, 1997, 48, 41-58.	2.1	18
64	Mechanical Behavior of MoSi <sub>2</sub> Reinforced Si <sub>3</sub> N <sub>4</sub> Matrix Composites. Journal of the American Ceramic Society, 1997, 80, 3070-3076.	3.8	44
65	Kinetics of Thermal Dehydroxylation and Carbonation of Magnesium Hydroxide. Journal of the American Ceramic Society, 1996, 79, 1892-1898.	3.8	88
66	Kinetics of Thermal Oxidation of Silicon Nitride Powders. Journal of the American Ceramic Society, 1996, 79, 2809-2814.	3.8	24
67	Impression creep behavior of SiC particle-MoSi <sub>2</sub> composites. Journal of Materials Research, 1996, 11, 1528-1536.	2.6	27
68	Carbon dioxide disposal in carbonate minerals. Energy, 1995, 20, 1153-1170.	8.8	771
69	Hydrogen corrosion considerations of carbide fuels for nuclear thermal propulsion applications. Journal of Propulsion and Power, 1995, 11, 1338-1348.	2.2	12
70	A Review of Carbide Fuel Corrosion for Nuclear Thermal Propulsion Applications. , 1994, , .		3
71	Corrosion of diamond-like-carbon-coated nickel in 0.25 m sodium chloride. Philosophical Magazine Letters, 1994, 70, 385-387.	1.2	7
72	Laser Diagnostics of Zirconium Carbide Vaporization. Journal of the American Ceramic Society, 1994, 77, 1411-1417.	3.8	7

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73	A simple method for calculating two-phase equilibria in ternary systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1994, 18, 1-7.	1.6	2
74	Discontinuous Phase Formation and Selective Attack of SiC Materials Exposed to Low Oxygen Partial Pressure Environments. NATO Advanced Study Institutes Series Series E, Applied Sciences, 1994, , 153-164.	0.2	3
75	Vaporization Behavior of Non-Stoichiometric Refractory Carbide Materials and Direct Observations of the Vapor Phase Using Laser Diagnostics. NATO Advanced Study Institutes Series Series E, Applied Sciences, 1994, , 363-374.	0.2	2
76	The UZrC Ternary Phase Diagram above 2473 K. Journal of the American Ceramic Society, 1993, 76, 1409-1419.	3.8	33
77	Corrosion of Sic Materials in N2-H2-CO Gaseous Environments: I, Thermodynamics and Kinetics of Reactions. Journal of the American Ceramic Society, 1992, 75, 3257-3267.	3.8	24
78	Corrosion of SiC Mateials in N2-H2-CO Gaseous Environments: II, Durability and Mechanical Properties. Journal of the American Ceramic Society, 1992, 75, 3268-3277.	3.8	12
79	Etching of Silicon Carbide Materials at Elevated Temperatures in a Nitrogen-Based Gas. Journal of the American Ceramic Society, 1991, 74, 457-459.	3.8	3
80	Effects of Plasma-Sprayed Ceramic Coatings on the Strength Distribution of Silicon Carbide Materials. Journal of the American Ceramic Society, 1990, 73, 2690-2696.	3.8	18
81	Effects of Sodium Silicate Exposure at High Temperature on Sintered alpha-Silicon Carbide and Siliconized Silicon Carbide. Journal of the American Ceramic Society, 1989, 72, 1628-1635.	3.8	10
82	On the Statistical Strength of Nicalon Fibers and its Characterization. Ceramic Engineering and Science Proceedings, 0, , 119-126.	0.1	4