

# Bertrand Devouard

## List of Publications by Year in descending order

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60  
papers

2,300  
citations

236925

25  
h-index

214800

47  
g-index

60  
all docs

60  
docs citations

60  
times ranked

2616  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetite from magnetotactic bacteria; size distributions and twinning. <i>American Mineralogist</i> , 1998, 83, 1387-1398.	1.9	338
2	Icosahedral packing of B12 icosahedra in boron suboxide (B <sub>6</sub> O). <i>Nature</i> , 1998, 391, 376-378.	27.8	242
3	Magnetite morphology and life on Mars. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 13490-13495.	7.1	154
4	High-Pressure, High-Temperature Synthesis and Characterization of Boron Suboxide (B <sub>6</sub> O). <i>Chemistry of Materials</i> , 1998, 10, 1530-1537.	6.7	121
5	Pseudotachylyte (Frictionite) at the Base of the Arequipa Volcanic Landslide Deposit (Peru): Implications for Emplacement Mechanisms. <i>Journal of Geology</i> , 2000, 108, 601-611.	1.4	81
6	Aqueous alteration in the Northwest Africa 817 (NWA 817) Martian meteorite. <i>Earth and Planetary Science Letters</i> , 2002, 203, 431-444.	4.4	71
7	Crystal structure of kanemite, NaHSi <sub>2</sub> O <sub>5</sub> ·3H <sub>2</sub> O, from the Aris Phonolite, Namibia. <i>American Mineralogist</i> , 1999, 84, 1170-1175.	1.9	65
8	Correlation among Structure, Microstructure, and Electrochemical Properties of NiAl <sub>2</sub> CO <sub>3</sub> Layered Double Hydroxide Thin Films. <i>Journal of Physical Chemistry C</i> , 2012, 116, 15646-15659.	3.1	64
9	Serpentinites from Central Cuba: petrology and HRTEM study. <i>European Journal of Mineralogy</i> , 2002, 14, 905-914.	1.3	62
10	Micro-drilling ID-TIMS U-Pb dating of single monazites: A new method to unravel complex poly-metamorphic evolutions. Application to the UHT granulites of Andriamena (North-Central) Tj ETQq0 0 0 rgBT /@verlock 10Tf 50 37		
11	Serpentinites in an Alpine convergent setting: Effects of metamorphic grade and deformation on microstructures. <i>European Journal of Mineralogy</i> , 2006, 18, 21-33.	1.3	60
12	Radiative heating of carbonaceous near-Earth objects as a cause of thermal metamorphism for CK chondrites. <i>Icarus</i> , 2012, 220, 65-73.	2.5	52
13	Atomistic calculations of structural and elastic properties of serpentine minerals: the case of lizardite. <i>Physics and Chemistry of Minerals</i> , 2006, 33, 266-275.	0.8	46
14	Geometrical Aspects of the Diffraction Space of Serpentine Rolled Microstructures: their Study by means of Electron Diffraction and Microscopy. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 1996, 52, 850-878.	0.3	43
15	Sectors in polygonal serpentine. A model based on dislocations. <i>Physics and Chemistry of Minerals</i> , 1994, 21, 330.	0.8	41
16	Nucleation and Growth of Icosahedral Boron Suboxide Clusters at High Pressure. <i>Journal of Solid State Chemistry</i> , 1999, 147, 281-290.	2.9	39
17	Separating Natural and Synthetic Rubies on the Basis of Trace-Element Chemistry. <i>Gems &amp; Gemology</i> , 1998, 34, 80-101.	0.6	38
18	REE and actinide microdistribution in Sahara 97072 and ALHA77295 EH3 chondrites: A combined cosmochemical and petrologic investigation. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 3269-3289.	3.9	36

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19	Topology and crystal growth of natural chrysotile and polygonal serpentine. <i>Journal of Crystal Growth</i> , 1996, 166, 952-960.	1.5	35
20	Multiple Ionic-Plasmon Resonances in Naturally Occurring Multiwall Nanotubes: Infrared Spectra of Chrysotile Asbestos. <i>Physical Review Letters</i> , 2002, 89, 177401.	7.8	34
21	Rapid synthesis of Ce <sup>3+</sup> -doped YAG nanoparticles by a solvothermal method using metal carbonates as precursors. <i>New Journal of Chemistry</i> , 2012, 36, 2493.	2.8	33
22	RECONCILING THE ORBITAL AND PHYSICAL PROPERTIES OF THE MARTIAN MOONS. <i>Astrophysical Journal</i> , 2016, 828, 109.	4.5	33
23	Formation of U-depleted rhyolite from a basanite at El Hierro, Canary Islands. <i>Contributions To Mineralogy and Petrology</i> , 2013, 165, 601-622.	3.1	29
24	Northwest Africa 5790: Revisiting nakhlite petrogenesis. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 190, 191-212.	3.9	28
25	MICROSTRUCTURES OF COMMON POLYGONAL SERPENTINES FROM AXIAL HRTEM IMAGING, ELECTRON DIFFRACTION, AND LATTICE-SIMULATION DATA. <i>Canadian Mineralogist</i> , 2005, 43, 513-542.	1.0	27
26	Relationship between nanostructure and optical absorption in fibrous pink opals from Mexico and Peru. <i>European Journal of Mineralogy</i> , 2004, 16, 743-751.	1.3	26
27	Axial diffraction of curved lattices: geometrical and numerical modeling. Application to chrysotile. <i>European Journal of Mineralogy</i> , 1995, 7, 835-846.	1.3	26
28	Rocklines as Cradles for Refractory Solids in the Protosolar Nebula. <i>Astrophysical Journal</i> , 2020, 901, 97.	4.5	26
29	The cosmochemical behavior of mercury. <i>Earth and Planetary Science Letters</i> , 1999, 171, 35-47.	4.4	25
30	Onion morphology and microstructure of polyhedral serpentine. <i>American Mineralogist</i> , 2007, 92, 687-690.	1.9	25
31	The Identification of Faceted Gemstones: From the Naked Eye to Laboratory Techniques. <i>Elements</i> , 2009, 5, 163-168.	0.5	25
32	The structure of Mn-rich taperssuatsiaite: A palygorskite-related mineral. <i>American Mineralogist</i> , 2002, 87, 1458-1463.	1.9	24
33	Metamorphosed calcium-aluminum-rich inclusions in <i>CK</i> carbonaceous chondrites. <i>Meteoritics and Planetary Science</i> , 2014, 49, 419-452.	1.6	23
34	First evidence of synthetic polygonal serpentines. <i>European Journal of Mineralogy</i> , 1997, 9, 539-546.	1.3	21
35	Magnetic properties of tektites and other related impact glasses. <i>Earth and Planetary Science Letters</i> , 2015, 432, 381-390.	4.4	20
36	Chondrules in <i>CK</i> carbonaceous chondrites and thermal history of the <i>CV</i> <i>CK</i> parent body. <i>Meteoritics and Planetary Science</i> , 2016, 51, 547-573.	1.6	20

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37	Formation and transformations of Fe-rich serpentines by asteroidal aqueous alteration processes: A nanoscale study of the Murray chondrite. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 158, 162-178.	3.9	18
38	Surface vitrification caused by natural fires in Late Pleistocene wetlands of the Atacama Desert. <i>Earth and Planetary Science Letters</i> , 2017, 469, 15-26.	4.4	17
39	Pyroxene microstructure in the Northwest Africa 856 martian meteorite. <i>Meteoritics and Planetary Science</i> , 2004, 39, 711-722.	1.6	16
40	Sazhinite-(La), Na <sub>3</sub> LaSi <sub>6</sub> O <sub>15</sub> (H <sub>2</sub> O) <sub>2</sub> , a new mineral from the Aris phonolite, Namibia: Description and crystal structure. <i>Mineralogical Magazine</i> , 2006, 70, 405-418.	1.4	15
41	Geological setting of the lower Pleistocene fossil deposits of Chillac (Haute-Loire, France). <i>Quaternary International</i> , 2010, 223-224, 107-115.	1.5	14
42	Impact glasses from Belize represent tektites from the Pleistocene Pantasma impact crater in Nicaragua. <i>Communications Earth &amp; Environment</i> , 2021, 2, 94.	6.8	14
43	Lead isotopes behavior in the fumarolic environment of the Piton de la Fournaise volcano (Réunion) <a href="#">Tj ETQq1 1 0,784314 rgBT /Overl</a>	3.9	13
44	The ungrouped chondrite El Mâdano 301 and its comparison with other reduced ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 218, 98-113.	3.9	13
45	Pantasma: Evidence for a Pleistocene circa 14 km diameter impact crater in Nicaragua. <i>Meteoritics and Planetary Science</i> , 2019, 54, 880-901.	1.6	13
46	Evolution of product phase assemblages during thermal decomposition of muscovite under strong disequilibrium conditions. <i>American Mineralogist</i> , 2006, 91, 413-424.	1.9	12
47	New SIMS Procedures for the Characterization of a Complex Silicate Matrix, Na <sub>3</sub> (REE,Th,Ca,U)Si <sub>6</sub> O <sub>15</sub> · 1/2.5H <sub>2</sub> O (Sazhinite), and Comparison with EMPA and SREF Results. <i>Mikrochimica Acta</i> , 2004, 145, 139-146.	5.0	8
48	Raman spectroscopy as suitable tool for the field study of recent volcanic environments. <i>Journal of Raman Spectroscopy</i> , 2016, 47, 740-742.	2.5	8
49	The low-temperature magnetic signature of Fe-rich serpentine in CM2 chondrites: Comparison with terrestrial cronstedtite and evolution with the degree of alteration. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	2.5	7
50	Caleta el Cobre 022 Martian meteorite: Increasing nakhlite diversity. <i>Meteoritics and Planetary Science</i> , 2020, 55, 1539-1563.	1.6	7
51	Why Are Some Crystals Gem Quality? Crystal Growth Considerations On the "Gem Factor". <i>Canadian Mineralogist</i> , 2017, 55, 521-533.	1.0	6
52	Lasnierite, (Ca,Sr)(Mg,Fe) <sub>2</sub> Al(PO <sub>4</sub> ) <sub>3</sub> , a new phosphate accompanying lazulite from Mt. Ibity, Madagascar: an example of structural characterization from dynamical refinement of precession electron diffraction data on submicrometre sample. <i>European Journal of Mineralogy</i> , 2019, 31, 379-388.	1.3	6
53	Fayalite oxidation processes in Obsidian Cliffs rhyolite flow, Oregon. <i>American Mineralogist</i> , 2015, 100, 1153-1164.	1.9	5
54	Solid Carbon Produced in an Inductively Coupled Plasma Torch with a Titan Like Atmosphere. <i>International Journal of Aerospace Engineering</i> , 2013, 2013, 1-8.	0.9	4

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55	A 650 km <sup>2</sup> Miocene strewnfield of splash-form impact glasses in the Atacama Desert, Chile. <i>Earth and Planetary Science Letters</i> , 2021, 569, 117049.	4.4	4
56	Refractory inclusions as Type IA chondrule precursors: Constraints from melting experiments. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 319, 30-55.	3.9	3
57	A <sc>TEM</sc> study of exsolution in Ca-rich pyroxenes from the Paris and Renazzo chondrites: Determination of type I chondrule cooling rates. <i>Meteoritics and Planetary Science</i> , 2018, 53, 482-492.	1.6	2
58	The Famenin fall and other ordinary chondrites intermediate between H and L groups. <i>Meteoritics and Planetary Science</i> , 2022, 57, 1038-1059.	1.6	1
59	Widespread glasses generated by cometary fireballs during the late Pleistocene in the Atacama Desert, Chile: COMMENT. <i>Geology</i> , 2022, 50, e550-e550.	4.4	1
60	Incorporation of Zn in the destabilization products of muscovite at 1175 Â°C under disequilibrium conditions, and implications for heavy metal sequestration. <i>American Mineralogist</i> , 2013, 98, 932-945.	1.9	0